Attachment M

Transportation/Circulation Reports

Vehicle Miles Traveled and Local Transportation Analysis

Solomon Hills Specific Plan
County of Santa Barbara, California

Revised October 10, 2025

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EXECUTIVE SUMMARY

This report documents the results of a transportation impact study completed for the Solomon Hills development (the "proposed Project," or "Project"). The Solomon Hills development is proposing to construct 4,000 residential dwelling units with 400 of those units that will be deed restricted affordable, Regional Housing Needs Allocation (RHNA) dwelling units. The Project will include 650,000 square-feet of commercial retail and office use, 29.8 acres of public and institutional uses, and 1,020.3 acres of recreational and open space uses. In addition, the Project proposes improvements to the existing adjacent New Love Park, adding 16 acres of regional park amenities including athletic fields and courts, playground structures, and green space. The Project is proposed to be developed in four distinct phases and this report analyzes the impact of each phase as the Project develops.

The Project is located south of Orcutt, California within unincorporated Santa Barbara County, California. The Project will include local roads to connect the various land uses within the Project area. The Project will connect to the regional roadway network via SR 135, Graciosa Road, and US 101.

This study includes a Vehicle Miles Traveled (VMT) analysis and a Local Transportation Analysis (LTA). The remaining sections of this report document the proposed Project, analysis methodologies, deficiencies and improvements, and general study conclusions.

Vehicle Miles Traveled

Based on the results of the VMT analysis, the following findings are made:

- Table 2 summarizes the VMT per service population for the proposed Project and compares it to the Unincorporated Santa Barbara County threshold. As shown in Table 2, Full Project buildout results in a VMT per service population less than the County's threshold under existing 2025 and future year 2035 conditions. Thus, full buildout of the Project is determined to result in a **less than significant transportation impact for both analysis scenarios**.
- As shown in Table 2, Full Project residential buildout, with no retail or office employment results in a VMT per service population greater than the County's threshold under existing 2025 and future year 2035 conditions. Thus, full residential buildout of the Project with no office or retail employment uses is determined to result in a **significant transportation impact**. Under this scenario the Project would need to reduce its VMT per service population by 2.7-percent for existing 2025 conditions and 4.4-percent for future year 2035 conditions to mitigate this deficiency.
- As shown in Table 2, Full Project residential buildout with 25-percent retail and office uses results in a VMT per service population that is less than or equal to the County's threshold under existing 2025 and future year 2035 conditions. Thus, full residential buildout of the Project with 25-percent retail and office uses is determined to result in a **less than significant transportation impact for both analysis scenarios**.

Local Transportation Analysis

Findings of this study related to the LTA include the following by analysis type and scenario:

Project Trip Generation

- Phase 1 of the Project is estimated to generate 11,099 new daily trips with 791 new trips occurring during the AM peak-hour and 659 new trips occurring during the PM peak-hour.
- Phase 2 of the Project is estimated to generate 15,682 new daily trips with 1,096 new trips occurring during the AM peak-hour and 886 new trips occurring during the PM peak-hour.
- Phase 3 of the Project is estimated to generate 28,566 new daily trips with 2,039 new trips occurring during the AM peak-hour and 2,765 new trips occurring during the PM peak-hour.

- Buildout of the Project is estimated to generate 33,320 new daily trips with 2,606 new trips occurring during the AM peak-hour and 3,312 new trips occurring during the PM peak-hour.
- Under the scenario in which Buildout of the Project does not include the commercial retail and office land uses, the Project is estimated to generate 26,604 new daily trips with 1,829 new trips occurring during the AM peak-hour and 2,605 new trips occurring during the PM peak-hour.

Intersection Level of Service

- No Project Conditions – the following intersections operate deficiently under this scenario:
  - Intersection #10 - E Stowell Road @ Nicholson Ave/US-101 NB Ramps
- Plus Project Conditions – the following intersections operate deficiently under this scenario:
  - Intersection #10 - E Stowell Road @ Nicholson Ave/US-101 NB Ramps

Recommended Improvements

Recommended improvements at study intersections are based on whether the deficient operations at a study intersection under plus Project scenarios is caused by Project traffic. Where a project induced deficiency is identified, and that deficiency is inconsistent with its jurisdiction's policy, recommendations are made to restore operations at the study intersection back to No Project operations.

The cost of any recommended improvements under Existing (2024) scenarios would be assessed entirely to the project and the anticipated development trigger for the needed improvement is identified. The cost of any recommended improvements under Cumulative (2035) scenarios would be assessed on a fair share basis where the Project would contribute funds towards the improvements proportional to the Project added entering vehicles when compared to the total increase in entering vehicles at the deficient intersection.

Existing (2024) and Cumulative (2035) plus Project Conditions

- Intersection #10 – E Stowell Road @ Nicholson Ave/US-101 NB Ramps
  - This intersection operates at unacceptable LOS for all analysis scenarios. However, the addition of Project Buildout traffic would reduce the average delay at the stop-controlled approach during the PM peak-hour. The reduction in average approach delay at this intersection with Project traffic added is due to Project trips only being added to the southbound right movement during both the AM and PM peak-hours. The southbound right movement is uncontrolled with a dedicated receiving lane meaning the Project trips do not experience delay at this intersection. As a result, the added Project trips are not increasing the delay experienced by other drivers at this intersection, **thus there is no Project induced deficiency at this intersection.**

Freeway Interchange Off-ramp Queueing

- All calculated 95th percentile queues under all phases for Existing and Cumulative scenarios fall within the existing ramp storage capacity. There are no anticipated safety concerns due to queue spill back onto freeway mainlines from the addition of Project traffic.

Site Access and Circulation

- Interchange Access
  - All Project access intersections will operate at acceptable LOS except for:
    - Intersection #22 US-101 Ramps @ Project Access Roadway
      - The Project is currently proposing a single lane roundabout at this intersection. This analysis determines that the demand volume at this intersection will exceed capacity under Project Buildout conditions.

Ultimate configuration and lane geometry at this intersection may be determined as the future design and layout of the new US-101 interchange is finalized in coordination with Caltrans.

- Circulation on Internal Roadways
  - Projected ADT on Project roads is compared against the policy capacity thresholds defined in the County's Circulation element. The Project roads all fall below their policy capacity thresholds and therefore are consistent with County policy and guidelines.

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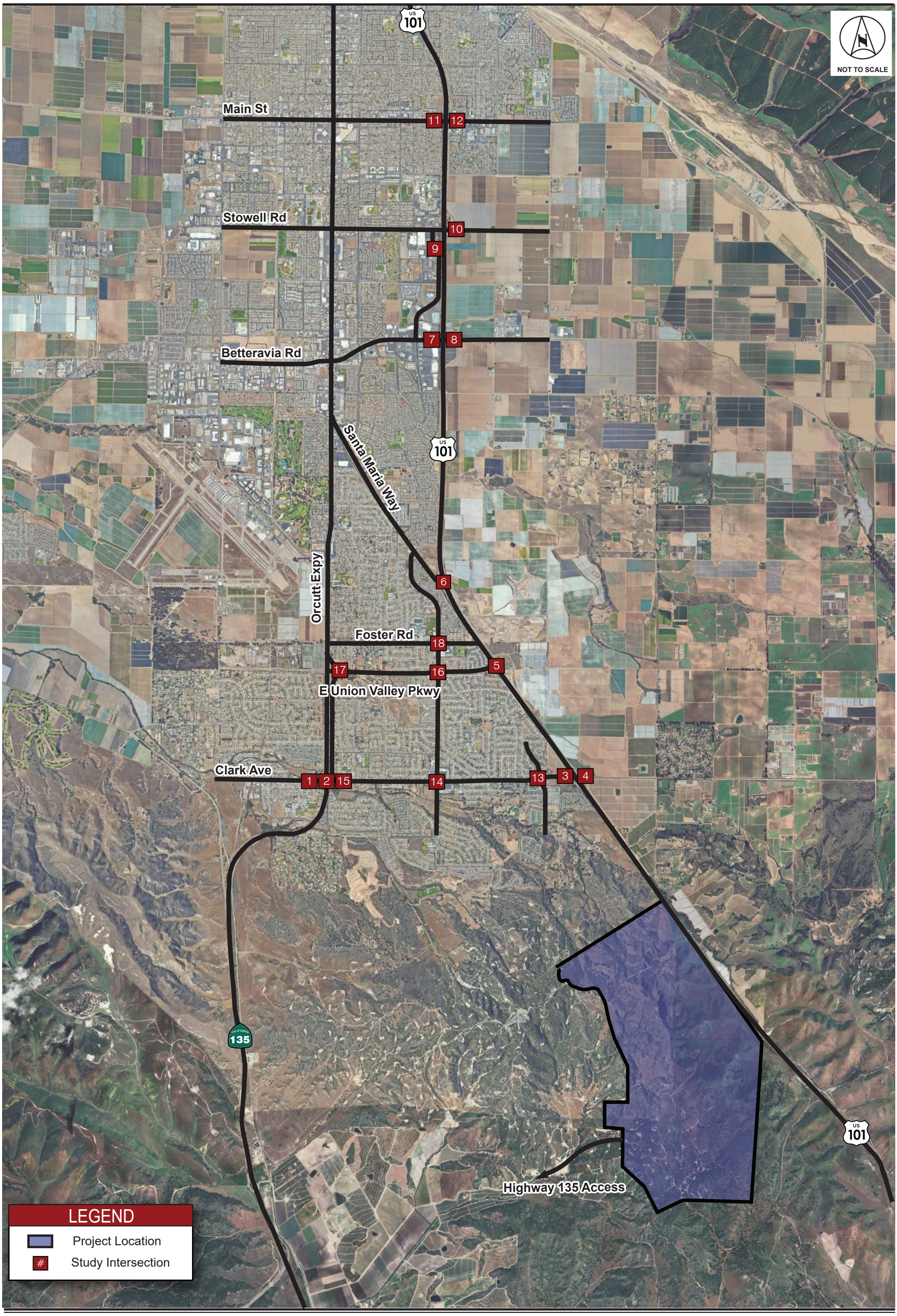
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INTRODUCTION

This report documents the results of a transportation impact study completed for the Solomon Hills development (the "proposed Project," or "Project"). The Solomon Hills development is proposing to construct 4,000 residential dwelling units with 400 of those units that will be deed restricted affordable, Regional Housing Needs Allocation (RHNA) dwelling units. The Project will include 650,000 square-feet of commercial retail and office use, 29.8 acres of public and institutional uses, and 1,020.3 acres of recreational and open space uses. In addition, the Project proposes improvements to the existing adjacent New Love Park, adding 16 acres of regional park amenities including athletic fields and courts, playground structures, and green space. Figure 1 shows the Project vicinity and Figure 2 shows the Project Land Use Plan.

The Project is located south of Orcutt, California within unincorporated Santa Barbara County, California. The Project will construct roadways to connect the various land uses within the Project area. The Project will connect to the regional roadway network via SR 135, Graciosa Road, and US 101.

This study includes a Vehicle Miles Traveled (VMT) analysis and a Local Transportation Analysis (LTA). The remaining sections of this report document the proposed Project, analysis methodologies, deficiencies and improvements, and general study conclusions.



Kimley»Horn

Figure 1
Project Site Vicinity Map

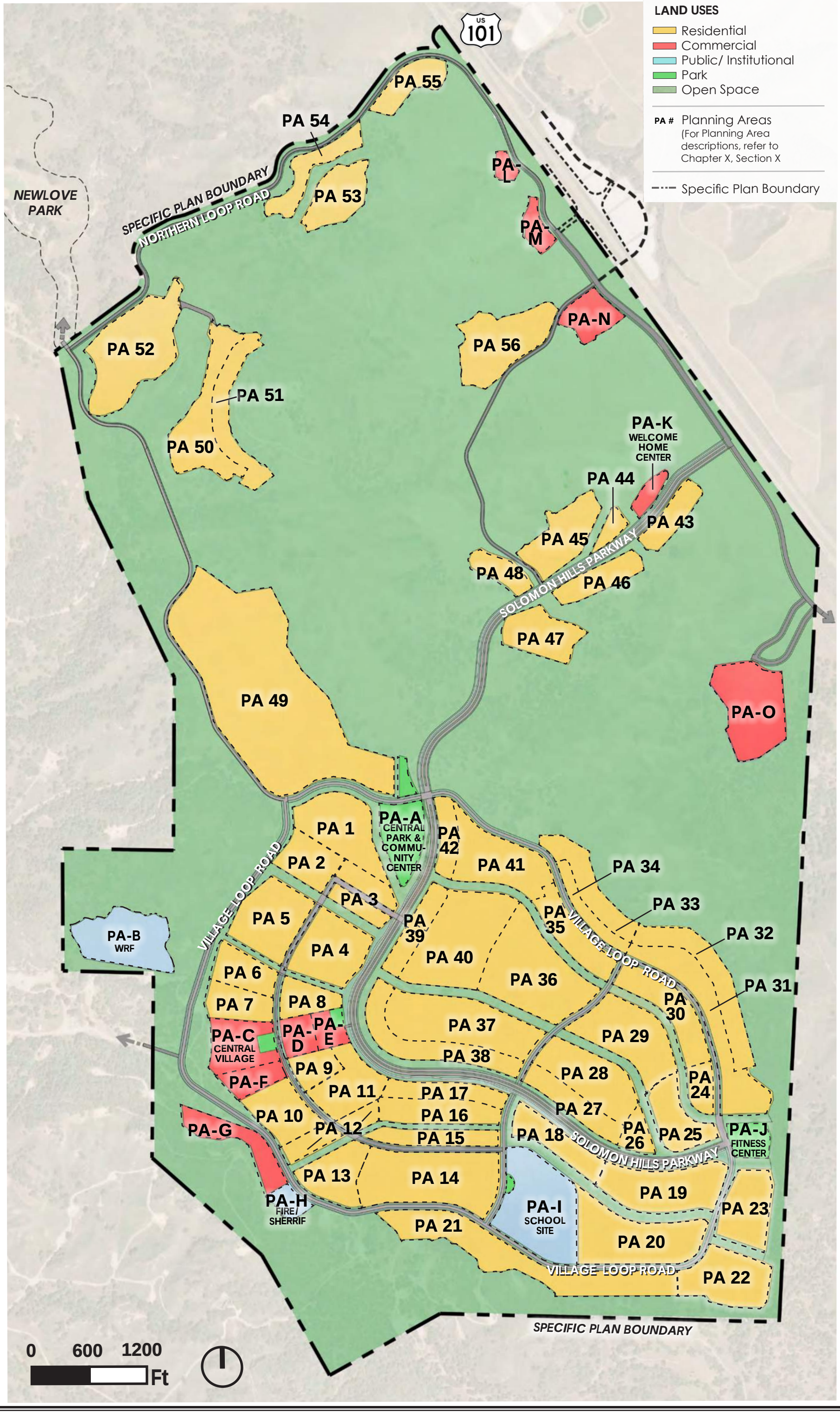


Figure 2
Representative Land Use Plan

VEHICLE MILES TRAVELED (VMT)

This section documents a Senate Bill 743 (SB 743) analysis completed for the Project. With the passage of SB 743, Vehicle Miles Traveled (VMT) has become an indicator for determining if a new development will result in a "significant transportation impact" under the California Environmental Quality Act (CEQA). This section summarizes the SB 743 VMT analysis and resultant findings for the proposed Project.

Context of Analysis

SB 743 is an effort by the California legislature to improve California's sustainability and reduce greenhouse gas emissions through denser infill development, a reduction in single occupancy vehicles, improved mass transit, and other actions. VMT is widely accepted as a reliable proxy for evaluating Greenhouse Gas (GHG) and other transportation related impacts that the State is actively trying to address.

In January 2019, the California Natural Resources Agency finalized updates to the CEQA Guidelines including the incorporation of SB 743 modifications. The Guidelines' changes were approved by the Office of Administrative Law and are now in effect. Specific to SB 743, Section 15064.3(c) states, "The provisions apply statewide as of July 1, 2020."

To aid lead agencies with SB 743 implementation, the Governor's Office of Planning and Research (OPR) produced a VMT Guidelines[1] document that included detailed guidance about the variety of implementation questions they face with respect to shifting to a VMT metric.

To help aid lead agencies with SB 743 implementation, the Governor's Office of Planning and Research (OPR) produced the Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) that provides guidance about the variety of implementation questions they face with respect to shifting to a VMT metric. Key guidance from this document includes:

- VMT is the most appropriate metric to evaluate a Project's transportation impact.
- OPR recommends tour- and trip-based travel models to estimate VMT, but ultimately defers to local agencies to determine the appropriate tools.
- OPR recommends measuring VMT for residential and office Projects on a "per rate" basis.
- OPR states that by adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Generally, retail development including stores smaller than 50,000 square feet might be considered local serving.
- Lead agencies have the discretion to set or apply their own significance thresholds.

Santa Barbara County's VMT thresholds consider the VMT performance of residential and employment-based non-residential components of a Project using the efficiency metric of VMT per capita and VMT per employee, respectively. Further, the County's VMT thresholds consider land use plans, including specific plans such as the Project, using the efficiency metric of VMT per service population. Service population is defined as the total employment and residential population within a specified geographic region. Santa Barbara County's VMT thresholds of significance are summarized below for each of these components:

- Residential – 15-percent below baseline (existing) unincorporated Santa Barbara County average VMT per capita
- Employment-based land uses (e.g., office) – 15-percent below baseline (existing) unincorporated Santa Barbara County average VMT per employee
- Land use plans and Specific plans – 15-percent below baseline (existing) unincorporated Santa Barbara County average VMT per service population

[1] *Technical Advisory on Evaluating Transportation Impacts in CEQA.* Governor's Office of Planning and Research, State of California. December 2018.

- Customer-based non-residential land uses (e.g., retail) – No net increase in VMT

Methodology and Assumptions

Based on the land use information provided by the Project applicant, for the purposes of the SB 743 analysis and the determination of transportation related significant impacts, the following land uses were analyzed as a part of the Project:

- Land use plan/specific plan

Analyzing the Project as a land use plan means the potential VMT impacts of the Project are determined by comparing the Project's VMT per service population to the VMT per service population threshold. As noted above, Santa Barbara's VMT per service population threshold is set at 15-percent below the average Existing (2025) VMT per service population for Unincorporated Santa Barbara County. To analyze the VMT efficiency of the Project's land uses, the 2012 Santa Barbara County Association of Governments travel demand model (SBCAG TDM) with a 2010 model base year was used. While an updated version of the model was in the process of being adopted at the onset of this analysis, because the County's VMT thresholds and policy were built upon the 2012 SBCAG TDM, SBCAG staff recommended the use of the 2012 SBCAG TDM to analyze the Project's VMT.

The SBCAG TDM was used to determine the Existing (2025) VMT per service population for the Unincorporated County by interpolating between the base year (2010) and future year (2035) scenarios under baseline (no-project) conditions. The same sequence was used to determine the Project's average VMT per service population for 2025 conditions after adding the Project to the base year and future year scenarios. The following SBCAG TDM scenario runs were completed for this analysis:

A. Base Year 2010 Baseline (No Project) Conditions
B. Future Year 2035 Baseline (No Project) Conditions
C. Base Year 2010 Plus Project Conditions
    i. Full Buildout Scenario
    ii. Full Residential Buildout Scenario with No Office or Retail Uses
    iii. Full Residential Buildout with 25-percent Office and Retail Uses
D. Future Year 2035 Plus Project Conditions
    i. Full Buildout Scenario
    ii. Full Residential Buildout Scenario with No Office or Retail Uses
    iii. Full Residential Buildout with 25-percent Office or Retail Uses

VMT per service population under each analysis scenario was calculated consistent with methodologies described in the development of the Santa Barbara County thresholds[2] using the SBCAG TDM origin-destination (O-D) output matrices for each traffic analysis zone (TAZ) within the County. Calculating VMT per service population for each TAZ follows the steps outlined below:

1. For the model AM peak period, the AM drive alone skim matrix (indexed to model TAZs) was multiplied by the AM O-D Trip Tables resulting in an AM peak period VMT O-D table.
2. For the model PM peak period, the PM drive alone skim matrix (indexed to model TAZs) was multiplied by the PM O-D Trip Tables resulting in a PM peak period VMT O-D table.
3. For all other model time periods, the off-peak drive alone skim matrix (indexed to model TAZs) was multiplied by the respective time period's O-D Trip Tables resulting in a VMT O-D table for each of the remaining six model time periods (late am, lunch, early pm, evening, late evening, and night time).

2 *Transportation Analysis Updates in Santa Barbara County*. County of Santa Barbara, Planning and Development Department. July 2020.

4. Every O-D time period VMT O-D matrix was summed to produce a total daily VMT by TAZ table for each model scenario.
5. The service population for each TAZ in a given model scenario was calculated as the sum of the "Population" and "Total_Employment" fields within the TAZData.bin file. The TAZData.bin file is a table where every row represents a TAZ in the SBCAG TDM and every column represents data field associated with a given TAZ (i.e., population living within a given TAZ or number of employees working within a given TAZ)
6. VMT per service population for a TAZ was then calculated using the sum of daily VMT for that TAZ divided by the total service population for that TAZ.

It should be noted that SBCAG TDM outputs include travel skims for high occupancy vehicle (HOV) travel where an auto has either two passengers (SOV2) or greater than two passengers (SOV3+) given that that the traveled path of these vehicles may diverge from single occupancy vehicles (SOV). Upon inspection, however, it was determined that the SOV, HOV2, and HOV3+ skims within a respective time period were identical, and therefore only the SOV or "drive alone" skim matrix was used in the VMT calculations. To convert VMT per service population by TAZ into County or Project specific metrics, TAZs for each geography (Unincorporated County and the Project) were tabulated and the weighted average VMT per service population for the entire geography was calculated. The relevant threshold for the Project can be found in **Table 2**.

Table 1 – Unincorporated Santa Barbara County Vehicle Miles Traveled (VMT) per Service Population

Scenario	VMT	Population	Employees	Service Population	VMT/Service Population
Base Year 2010	6,716,464	131,126	50,945	182,071	36.9
Future Year 2035	8,893,505	145,222	57,194	202,416	43.9
Existing 2025 Conditions[5]	8,022,688	139,584	54,694	194,278	41.3
2025 Unincorporated County Threshold (85% of Average)					**35.1**

Model Inputs for Plus Project Scenarios

The Project's land use characteristics were added to the SBCAG TDM and isolated within Project-specific TAZs. The Project was represented in the SBCAG TDM by the number of households and number of jobs, rather than the size of each non-residential land uses in square-feet, as the SBCAG TDM uses the number of households and the number of jobs to generate trips. The household demographic information used for the Project TAZs was pulled as an average of TAZs in the Orcutt Community area just north of the Project site. A conversion between square-feet and number of jobs was conducted using the relationship in trip generation for each land use based on trip generation rates found in the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE). This resulted in a conversion of 2 employees per 1,000 square-feet of retail based on the ITE Land Use Code for Shopping Center (820), 3 employees per 1,000 square-feet of office space, and 3 employees per 1,000 square-feet of public uses (fire/police).

In addition, the SBCAG TDM uses the number of students to represent schools rather than the size of the school building, but the number of employees at the school also needed to be added to the model. Thus, 70 employees were added to the model to represent the employment component of the Project's school at a rate of 1 employee for every 15 students. Finally, the proposed expansion of New Love Park was included in the SBCAG TDM as a special generator due to its unique trip-making characteristics. The ratio

5 Calculated as a linear interpolation between SBCAG TDM base year 2010 and future year 2035.

between size in acres and total attractions for other similar regional parks in the model was used to add attractions for the New Love Park expansion based on the added acreage of amenities.

The distribution of land uses added to the SBCAG TDM were used to represent the Project's overall trip generation and distribution characteristics rather than to represent the land use mix of the ultimate Project build out. The specific land uses of what is ultimately constructed as a part of the Project are unknown at this time, so a best effort was engaged to provide a representation of the ultimate Project through the land use mix added to the model. Specifically, the non-residential land uses that are summarized as "commercial retail" and "commercial office" can include a wide range of uses as permitted per the General Plan description for that land use type but are assumed to primarily be similar to general retail and office uses. The trip rates for each employment type were reviewed so the land use mix could match what is analyzed in the Local Transportation Analysis (LTA).

The Project's VMT per service population was calculated using an identical process to the one that was used to determine the comparison threshold. Averages from the TAZs representing the Project were used to determine the VMT per service population for the Project.

Analysis

Table 2 summarizes the VMT per service population under each analysis scenario. The first scenario called Unincorporated Santa Barbara County Baseline establishes the threshold for comparison against the proposed Project. The threshold for comparison was determined as 15-percent below the Unincorporated Santa Barbara County average of 40.9 VMT per service population, or a threshold of 34.7 VMT per service population.

Table 2 – Vehicle Miles Traveled (VMT) per Service Population by Scenario

	VMT	Population	Employees	Service Population	VMT/Service Population
Unincorporated Santa Barbara County Baseline					
Base Year 2010	6,716,464	131,126	50,945	182,071	36.9
Future Year 2035	8,893,505	145,222	57,194	202,416	43.9
Existing 2025	8,022,688	139,584	54,694	194,278	41.3
2025 Unincorporated County Threshold (85% of Average)					**35.1**
2035 Unincorporated County Threshold (85% of Average)					**37.3**
Solomon Hills (Project) Full Buildout					
Base Year 2010	363,437	11,580	1,910	13,490	26.9
Future Year 2035	449,705	11,580	1,910	13,490	33.3
Existing 2025	415,198	11,580	1,910	13,490	30.8
Percent VMT Mitigation Needed					0%
Solomon Hills (Project) Full Residential Buildout with No Office or Retail Uses					
Base Year 2010	370,045	11,580	85	11,665	31.7
Future Year 2035	454,358	11,580	85	11,665	39.0
Existing 2025	420,633	11,580	85	11,665	36.1
Percent VMT Mitigation Needed					2.7%
Solomon Hills (Project) Full Residential Buildout with 25 Percent Office and Retail Uses					
Base Year 2010	367,446	11,580	542	12,122	30.3
Future Year 2035	452,510	11,580	542	12,122	37.3
Existing 2025	418,485	11,580	542	12,122	34.5
Percent VMT Mitigation Needed					0%

As shown in Table 2, three general Project scenario alternatives were evaluated for the base year and future year of the model. The first Project scenario includes full project buildout including all residential, employment, and recreational uses that are a part of the Project specific plan. Full Project buildout results in a VMT per service population less than the County's threshold under existing 2025 and future year 2035 conditions. Thus, full buildout of the Project is determined to result in a **less than significant transportation impact for both analysis scenarios**.

Given that the Project's non-residential components may be developed after the construction of the residential components, a conservative scenario with no office or commercial retail land uses was analyzed. Under this scenario it was assumed that the TK-8 school, and public safety employment for police and fire services remain while all other retail and office employment uses were removed from the Project specific plan area. As shown in Table 2, the Project would result in a VMT per service population above the County's threshold in both existing 2025 and future year 2035 conditions were none of the retail or office components of the Project to be built by completion of full buildout of the residential portion of the Project. This increase in VMT per service population is attributed to less supportive land uses surrounding the residential development. This results in more trips needing to travel longer distances outside of the Project site to fulfill their trip purposes.

Thus, a third scenario was evaluated where only 25-percent of the ultimate retail and office uses were constructed by completion of full buildout of the residential and recreational uses within the Project plan area. As shown in Table 2, this 25-percent retail and office scenario results in a Project VMT per service population that is less than or equal to the County's threshold under existing 2025 and future year 2035 conditions. Thus, full buildout of the Project residential component, with as little as 25-percent of the retail and office components constructed is determined to result in a **less than significant transportation impact for both analysis scenarios**.

Findings

Based on the results of the VMT analysis, the following findings are made:

- Table 2 summarizes the VMT per service population for the proposed Project and compares it to the Unincorporated Santa Barbara County threshold. As shown in Table 2, Full Project buildout results in a VMT per service population less than the County's threshold under existing 2025 and future year 2035 conditions. Thus, full buildout of the Project is determined to result in a **less than significant transportation impact for both analysis scenarios**.
- As shown in Table 2, Full Project residential buildout, with no retail or office employment results in a VMT per service population greater than the County's threshold under existing 2025 and future year 2035 conditions. Thus, full residential buildout of the Project with no office or retail employment uses is determined to result in a **significant transportation impact**. Under this scenario the Project would need to reduce its VMT per service population by 2.7-percent for existing 2025 conditions and 4.4-percent for future year 2035 conditions to mitigate this deficiency.
- As shown in Table 2, Full Project residential buildout with 25-percent retail and office uses results in a VMT per service population that is less than or equal to the County's threshold under existing 2025 and future year 2035 conditions. Thus, full residential buildout of the Project with 25-percent retail and office uses is determined to result in a **less than significant transportation impact for both analysis scenarios**.

LOCAL TRANSPORTATION ANALYSIS (LTA)

Project Description

The Solomon Hills development is proposing to construct 4,000 residential dwelling units with 400 of those units that will be deed restricted affordable, Regional Housing Needs Allocation (RHNA) dwelling units. The Project will include 650,000 square-feet of commercial retail and office use, 29.8 acres of public and institutional uses, and 1,020.3 acres of recreational and open space uses. In addition, the Project proposes improvements to the existing adjacent New Love Park, adding 16 acres of regional park amenities including athletic fields and courts, playground structures, and green space. Figure 1 shows the Project vicinity and Figure 2 shows the Project Land Use Plan.

The Project is located south of Orcutt, California within unincorporated Santa Barbara County, California. The Project will include local roads to connect the various land uses within the Project area. The Project will connect to the regional roadway network via SR 135, Graciosa Road, and US 101.

LTA Methodology

This LTA was performed to determine consistency with the County's General Plan guidelines[6] and relevant Community Plans such as the Orcutt Community Plan and the Santa Maria Community Plan.

Study Facilities

The following transportation facilities are included in this evaluation:

Intersections:

1. Clark Avenue @ SR-135 southbound ramps
2. Clark Avenue @ SR-135 northbound ramps
3. Clark Avenue @ US-101 southbound ramps
4. Clark Avenue @ US-101 northbound ramps
5. E Union Valley Parkway @ US-101 southbound ramps
6. Santa Maria Way @ US-101 southbound ramps
7. Betteravia Road @ US-101 southbound ramps
8. Betteravia Road @ US-101 northbound ramps
9. S Bradley Road @ US-101 southbound ramps
10. E Stowell Road @ Nicholson Ave/US-101 northbound ramps
11. E Main Street @ US-101 southbound ramps
12. E Main Street @ US-101 northbound ramps
13. Clark Avenue @ Stillwell Road
14. Clark Avenue @ S Bradley Road
15. Clark Avenue @ Orcutt Frontage Road
16. Union Valley Parkway @ S Bradley Road
17. Union Valley Parkway @ Orcutt Frontage Road
18. S Bradley Road @ E Foster Road

Level of Service Definitions

The level of service (LOS) of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A, which represents free unobstructed flow and little to no delays, to F, which represents forced flow and a facility that is operating at or above its functional capacity. Metrics and definitions for these LOS letter grades vary based on facility type and jurisdiction as described in the following sections. However, the general principle that LOS A represents conditions with the least traffic and congestion while

[6] *Santa Barbara County Comprehensive Plan Circulation Element*. County of Santa Barbara Planning and Development. 2014.

LOS F would represent oversaturated traffic conditions with the most traffic congestion remains consistent across facilities and location.

Signalized Intersection Analysis

Signalized intersections were analyzed using the Intersection Capacity Utilization (ICU) 2003 method for determining intersection capacity. This method compares the current volume to the intersection's ultimate capacity. This method has several advantages including the ability to; identify critical movements contributing to congestion, ignore sensitivities to delay resulting from inefficient signal timing, and it is relatively simple and repeatable across many planning scenarios. Synchro® software incorporates the ICU methodology into its workflows and was used to determine ICU at signalized study intersections under each analysis scenario. **Table 3** presents intersection LOS definitions as defined by the County of Santa Barbara, the City of Santa Maria and the Planning area of Orcutt.

Table 3 – Signalized Intersection Level of Service Criteria

Level of Service (LOS)	Intersection Capacity Utilization (V/C)
A	< 0.6
B	≥ 0.6 – 0.7
C	≥ 0.7 – 0.8
D	≥ 0.8 – 0.9
E	≥ 0.9 – 1.0
F	≥ 1.0

Unsignalized Intersection Analysis

The Highway Capacity Manual (HCM) includes procedures for analyzing unsignalized intersections including side-street stop controlled (SSSC) and all-way stop controlled (AWSC) intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement. Conversely, the AWSC procedure defines LOS as a function of average control delay for the intersection. **Table 4** presents intersection LOS definitions as defined in the HCM.

Table 4 – Un-Signalized Intersection Level of Service Criteria

Level of Service (LOS)	Un-Signalized
	Average Control Delay* (sec/veh)
A	≤ 10
B	> 10 – 15
C	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

Source: HCM 7th Exhibit 21-8

LOS for the un-signalized study intersections was determined using the Synchro® Simtraffic® analysis software. Simtraffic® uses HCM 7 methodology inputs to develop a microsimulation of vehicles at each study intersection and tracks vehicle delay to summarize and assign LOS based on multiple runs of randomly seeded simulations.

Standards of Deficiency and Assessment of Proposed Project

California Department of Transportation (Caltrans)

Per state guidelines, as of July 2020, Caltrans no longer defines an operational level of service threshold at Caltrans facilities including on-ramps, off-ramps and Caltrans maintained intersections at freeway interchanges or along state routes. Study intersections at freeway interchanges are still evaluated and LOS is reported based on the LOS definitions above. Where intersections operate below LOS D, improvements are recommended that would bring the operations of the intersection up to an LOS D standard under project conditions.

Santa Barbara County Comprehensive Plan Circulation Element

All study intersection fall within the City of Santa Maria or the Orcutt Community Plan areas. Per Santa Barbara County Guidelines:

> "The roadway classifications, intersection levels of service, and capacity levels adopted in this Element shall apply to all roadways and intersections within the unincorporated area of the County, with the exception of those roadways and intersections located within an area included in an adopted community area plan. Roadway classifications, intersection levels of service, and capacity levels adopted as part of any community or area plan subsequent to the adoption of this Element shall supersede any standards included as part of this Element."

Therefore, intersections that fall within the City of Santa Maria are evaluated against the City's standards and similarly, intersections that fall within the Orcutt Community Plan Area are evaluated against the Community Plan's standards.

City of Santa Maria General Plan Circulation Element

Per the City of Santa Maria GP CE Policy *C.1.a, Acceptable Levels of Service*:

> "The City shall maintain an acceptable peak-hour level of service on all arterials and collectors and at signalized intersections. Service Level "D" on all roadways and at all signalized intersections shall be the levels maintained.
>
> For long-range development plans, Level of Service D need not be strictly maintained if other policies and action plans indicate that a lesser level of service may be acceptable on a short-term basis providing there are sufficient over-riding considerations.
>
> With regard to property within the boundaries of the Downtown Specific Plan, a Project which exceeds vehicle trip generation thresholds determined by the City of Santa Maria shall complete a traffic study in accordance with the requirements of the Public Works Director/City Engineer. The Project shall implement the recommendations of the study so that all intersections operate at a Level of Service (LOS) D or better. If the Director of the Community Development Department and the Director of the Public Works Department/City Engineer determine that the recommendations of the study are not consistent with the goals of the Downtown Specific Plan; the recommended improvements may not be required provided that equivalent, feasible mitigation is approved and implemented. By way of example, equivalent, feasible mitigation may include the preparation, approval and implementation of a deficiency plan pursuant to Government Code Section 65089.4. (Resolution 2008-163)"

In addition, Objective C.1.a.1 Improved Level of Service states:

> "Arterials and collectors with peak hour levels of service worse than D, and all intersections with peak hour levels of service worse than D shall be improved to operate at an acceptable peak-hour level of service within the planning period."

Therefore, intersections within the City of Santa Maria found to operate worse than LOS D (LOS E or LOS F) are identified as deficient. Where the Project causes the LOS operations at an intersection to go from acceptable LOS A, LOS B, LOS C, or LOS D under no-Project conditions to deficient LOS E or LOS F under Project conditions, a Project induced deficiency is identified.

Orcutt Community Plan

Per the Orcutt Community Plan[7] the standards of deficiency are:

> "The acceptable level of service for roadways and intersections in the Orcutt Planning Area is Level of Service C. The minimum LOS shall be "D" or better for the following roadway segments and intersections:
>
> - The Foster Road and Highway 135 intersection;
> - The Lakeview Road and Skyway Drive intersection;
> - Stillwell Road;
> - Lakeview Road;
> - All the Clark Avenue roadway segments and intersections between Blosser Road on the west and Foxenwood Lane on the east (Old Town)."

Therefore, study intersections within the Orcutt Community Plan that operate at worse than LOS C (LOS D, LOS E, and LOS F) are identified as deficient. No study intersections are identified by the plan to acceptably operate at LOS D.

For determining whether the effects of a Project on an intersection are inconsistent with the Orcutt Community Plan, thresholds are separated by intersection type. For signalized intersections:

1) Projects contributing Peak Hour Trips to intersections that operate at an Estimated Future Level of Service A shall be found consistent with this section of the Community Plan unless the Project results in a change in V/C ratio greater than 0.20.
   - For intersections operating at an Estimated Future Level of Service B, no Project shall result in a change in V/C ratio greater than 0.15.
   - For intersections operating at an Estimated Future Level of Service C, no Project shall result in a change of V/C ratio greater than 0.10.
   - For intersections operating at an Estimated Future Level of Service D, no Project shall result in a change of V/C ratio greater than 0.03.
   - For intersections operating at an Estimated Future Level of Service E, no Project shall result in a change of V/C ratio greater than 0.02.
   - For intersections operating at an Estimated Future Level of Service F, no Project shall result in a change of V/C ratio greater than 0.01.

2) Where a Project's traffic contribution does result in a measurable change in V/C ratio and also results in a finding of inconsistency with the above intersection standards, intersection improvements that are sufficient to offset Project changes in V/C ratio, in excess of the applicable intersection standards above, shall be required in order to make a finding of consistency with the Community Plan.

3) These intersection standards shall also apply to Projects which generate Peak Hour Trips to intersections within incorporated cities that are operating at levels of service worse than those allowed by the city's Circulation Element.

[7] *Orcutt Community Plan.* Santa Barbara County. May 2002.

Therefore, a signalized intersection operating at, for example, LOS B under no Project conditions, that increases in volume-to-capacity ratio by greater than 0.15 under Project conditions would be identified as a Project induced deficiency.

For unsignalized Intersections:

1) Projects contributing peak hour trips to unsignalized intersections that operate at an Estimated Future Level of Service A shall be found consistent with this section of the Community Plan unless the Project results in a change of two levels of service or an equivalent amount of delay.
2) Projects contributing peak hour trips to intersections that operate better than Estimated Future Level of Service C shall be found consistent with this section of the Community Plan.
3) Unsignalized intersections that do not trigger traffic signal warrant criteria shall be found consistent with this section of the Community Plan.

Therefore, an unsignalized study intersection in the Orcutt Community Plan that operates at acceptable LOS A, LOS B, or LOS C under no Project conditions, but operates at unacceptable LOS D, LOS E, or LOS F under Project conditions AND meets the CA-MUTCD Peak Hour Signal Warrant for the same deficient time period is identified as a Project induced deficiency.

Analysis Scenarios

The study facilities were evaluated for the AM and PM peak-hours for the following analysis scenarios:

- Existing Conditions
- Existing Conditions Plus Project Phase 1
- Existing Conditions Plus Project Phase 2
- Existing Conditions Plus Project Phase 3
- Existing Conditions Plus Project Buildout
- Existing Conditions Plus Project Buildout (Residential Only)
- Cumulative Conditions
- Cumulative Conditions Plus Project Conditions

Project Trip Generation, Distribution, and Assignment

Project trips are estimated using data included in the *ITE Trip Generation Manual, 11th Edition*. The Project proposes a phased construction where the following land uses to be completed after Phase 1:

- 891 Single-Family Dwelling Units
- 311 Multifamily Dwelling Units
- 135 Deed-restricted Affordable Dwelling Units
- 55 Senior Single-Family Dwelling Units
- 75 Senior Multifamily Dwelling Units
- 5,000 square-feet of Office
- 10,000 square-feet of Retail

The following land uses to be completed after Phase 2:

- 1,025 Single-Family Dwelling Units
- 311 Multifamily Dwelling Units
- 205 Deed-restricted Affordable Dwelling Units
- 350 Senior Single-Family Dwelling Units
- 375 Senior Multifamily Dwelling Units
- 30,000 square-feet of Office
- 25,000 square-feet of Retail
- 3 Soccer and Baseball Fields
- 4 Pickleball Courts

- 3.5 acres of Public Park

The following land uses to be completed after Phase 3:

- 2,183 Single-Family Dwelling Units
- 616 Multifamily Dwelling Units
- 350 Deed-restricted Affordable Dwelling Units
- 350 Senior Single-Family Dwelling Units
- 375 Senior Multifamily Dwelling Units
- 160,000 square-feet of Office
- 55,000 square-feet of Retail
- 1,011 square feet TK-8 School
- 3 Soccer and Baseball Fields
- 4 Pickleball Courts
- 3.5 acres of Public Park

The Project proposes the following land uses at full buildout:

- 2,259 Single-Family Dwelling Units
- 616 Multifamily Dwelling Units
- 400 Deed-restricted Affordable Dwelling Units
- 350 Senior Single-Family Dwelling Units
- 375 Senior Multifamily Dwelling Units
- 525,000 square-feet of Office
- 125,000 square-feet of Retail
- 1,051 Student TK-8 School
- 3 Soccer and Baseball Fields
- 4 Pickleball Courts
- 3.5 acres of Public Park

The proposed Project trip generation for each phase is presented in Table 8-12. Table 13 summarizes the trips for all the scenarios analyzed in this study. Output details for each phase are presented in Appendix A.

Internal Capture

Internal capture trips are defined as trips that occur between project land uses on the project site and do not leave the development. For single-site mixed-use developments, ITE has developed recommended methodology and rates for calculating internal capture. When internal capture trips are calculated, a trip-end is taken from both the origin and destination land use. For example, an AM peak-hour trip from the Project's single-family residential housing to the Project's general office building would reduce the external trip generation of the Project by one "out" trip and one "in" trip for the residential and office land uses, respectively. For this analysis, internal capture trips are defined as trips between Project land uses that remain with the Solomon Hills Plan area.

ITE's methodology is used to estimate internal capture for complementary land uses. Under Project Buildout Conditions, ITE's Internal Capture methodology is used to estimate the Project's internal capture between residential and office land uses. The retail uses adjacent to US-101 are assumed to have no internal capture under Buildout conditions (pass-by reductions were applied as described below), however, the remaining retail located at the center of the Project area is assumed to be internally captured. This means these trips are still assigned to the Project internal roadway network and considered when evaluating Project plan area road sizing and circulation, but they are not assigned to the study intersections located outside of the Project plan area.

Pass-by and Diverted Link Trips

Pass-by and diverted link trips are defined as existing trips that make stops at the Project on the way to their ultimate destination. While these trips must still be evaluated for site circulation and driveway operations, they are not new trips on the transportation network, and therefore have a reduced effect on the surrounding network facilities.

Project traffic was distributed and assigned to the roadway network and study facilities based on SBCAG travel demand model forecasts for Project trips under all project scenarios. Forecasts from the travel demand model were adjusted based on existing traffic conditions and engineering judgement. The proposed Project trip distribution is provided in **Figure 3**. **Figure 4-8** depict the Project trip assignment for each phase.

Table 5 – Project Phase 1 Trip Generation

ITE LUC	Land Use	Scale	ITE Unit	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Project Phase 1										
210	Single-Family Detached Housing	891	DU	7,547	136	409	545	490	287	777
220	Multifamily Housing (Low-Rise) Not Close to Rail Transit	311	DU	2,069	29	90	119	97	57	154
223	Affordable Housing - Income Limits	135	DU	643	20	48	68	37	25	62
251	Senior Adult Housing-Detached	55	DU	356	8	17	25	17	11	28
252	Senior Adult Housing-Attached	75	DU	243	5	10	15	11	8	19
710	General Office Building	5	KSF	86	11	2	13	2	12	14
822	Strip Retail Plaza (<40k)	10	LKSF	652	17	12	29	39	39	78
Project Phase 1 Baseline Trips				**11,596**	226	588	**814**	693	439	**1,132**
	Residential Internal Capture	*1% Daily 1% AM PH 2% PM PH*		*-137*	*-2*	*-3*	*-5*	*-12*	*-6*	*-18*
	Office Internal Capture	*17% Daily 15% AM PH 36% PM PH*		*-15*	*-1*	*-1*	*-2*	*-2*	*-3*	*-5*
	Retail Internal Capture	*21% Daily 24% AM PH 27% PM PH*		*-140*	*-4*	*-3*	*-7*	*-8*	*-13*	*-21*
	Total Internal Capture	***3% Daily 2% AM PH 4% PM PH***		***-292***	***-7***	***-7***	***-14***	***-22***	***-22***	***-44***
	Pass-by Trips (40% of Retail Trips)			*-205*	*-5*	*-4*	*-9*	*-12*	*-11*	*-23*
Project Phase 1 New External Vehicular Trips				**11,099**	214	577	**791**	659	406	**1,065**

Table 6 – Project Phase 2 Trip Generation

ITE LUC	Land Use	Scale	ITE Unit	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Project Phase 2										
210	Single-Family Detached Housing	1,025	DU	8,586	155	464	619	558	328	886
220	Multifamily Housing (Low-Rise) Not Close to Rail Transit	311	DU	2,069	29	90	119	97	57	154
223	Affordable Housing - Income Limits	205	DU	904	30	73	103	55	39	94
251	Senior Adult Housing-Detached	350	DU	1,719	33	68	101	72	46	118
252	Senior Adult Housing-Attached	375	DU	1,215	26	49	75	53	41	94
710	General Office Building	30	KSF	407	52	7	59	10	51	61
822	Strip Retail Plaza (<40k)	10	LKSF	652	17	12	29	39	39	78
821	Shopping Plaza (40k - 150k)	15	LKSF	2,567	33	20	53	112	122	234
488	Soccer and Baseball Fields	3	FLD	214	2	1	3	51	26	77
490	Pickleball Courts	4	COURT	121	10	7	17	11	6	17
411	Public Park	3.5	ACRE	91	0	0	0	0	0	0
Project Phase 2 Baseline Trips				**18,545**	387	791	**1,178**	1,058	755	**1,813**
	Residential Internal Capture	*6% Daily 2% AM PH 8% PM PH*		*-879*	*-12*	*-12*	*-24*	*-80*	*-28*	*-108*
	Office Internal Capture	*19% Daily 10% AM PH 39% PM PH*		*-76*	*-4*	*-2*	*-6*	*-11*	*-13*	*-24*
	Retail Internal Capture	*21% Daily 22% AM PH 27% PM PH*		*-687*	*-11*	*-7*	*-18*	*-30*	*-54*	*-84*
	Park and Recreational Internal Capture	*49% Daily 40% AM PH 34% PM PH*		*-208*	*-1*	*-7*	*-8*	*-3*	*-29*	*-32*
	Total Internal Capture	***10% Daily 5% AM PH 14% PM PH***		***-1,850***	***-28***	***-28***	***-56***	***-124***	***-124***	***-248***
	Pass-by Trips (40% of Retail Trips)			*-1,013*	*-15*	*-11*	*-26*	*-48*	*-43*	*-91*
Project Phase 2 New External Vehicular Trips				**15,682**	344	752	**1,096**	886	588	**1,474**

Table 7 – Project Phase 3 Trip Generation

ITE LUC	Land Use	Scale	ITE Unit	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Project Phase 3										
210	Single-Family Detached Housing	2,183	DU	17,212	308	924	1,232	1,136	667	1,803
220	Multifamily Housing (Low-Rise) Not Close to Rail Transit	616	DU	4,024	51	163	214	180	105	285
223	Affordable Housing - Income Limits	350	DU	1,445	51	124	175	95	66	161
251	Senior Adult Housing-Detached	350	DU	1,719	33	68	101	72	46	118
252	Senior Adult Housing-Attached	375	DU	1,215	26	49	75	53	41	94
710	General Office Building	160	KSF	1,747	221	30	251	42	203	245
822	Strip Retail Plaza (<40k)	10	LKSF	652	17	12	29	39	39	78
821	Shopping Plaza (40k - 150k)	45	LKSF	4,876	99	60	159	223	241	464
520	K-8 School	1011	STU	2,295	404	344	748	75	87	162
488	Soccer and Baseball Fields	3	FLD	214	2	1	3	51	26	77
490	Pickleball Courts	4	COURT	121	10	7	17	11	6	17
411	Public Park	3.5	ACRE	91	0	0	0	0	0	0
Project Phase 3 Baseline Trips				**35,611**	1,222	1,782	**3,004**	1,977	1,527	**3,504**
	Residential Internal Capture	*10% Daily 24% AM PH 10% PM PH*		*-2,478*	*-206*	*-227*	*-433*	*-186*	*-63*	*-249*
	Office Internal Capture	*18% Daily 12% AM PH 27% PM PH*		*-323*	*-19*	*-10*	*-29*	*-36*	*-30*	*-66*
	Retail Internal Capture	*23% Daily 26% AM PH 28% PM PH*		*-1,285*	*-26*	*-22*	*-48*	*-56*	*-94*	*-150*
	School Internal Capture	*46% Daily 52% AM PH 40% PM PH*		*-1,049*	*-202*	*-189*	*-391*	*0*	*-65*	*-65*
	Park and Recreational Internal Capture	*50% Daily 40% AM PH 34% PM PH*		*-213*	*-1*	*-7*	*-8*	*-3*	*-29*	*-32*
	Total Internal Capture	***15% Daily 30% AM PH 16% PM PH***		***-5,348***	***-454***	***-455***	***-909***	***-281***	***-281***	***-562***
	Pass-by Trips (40% of Retail Trips)			*-1,697*	*-36*	*-20*	*-56*	*-82*	*-75*	*-157*
Project Phase 3 New External Vehicular Trips				**28,566**	732	1,307	**2,039**	1,614	1,171	**2,785**

Table 8 – Project Buildout Trip Generation

ITE LUC	Land Use	Scale	ITE Unit	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Project Phase 4 Buildout										
210	Single-Family Detached Housing	2,259	DU	17,763	318	953	1,271	1,173	689	1,862
220	Multifamily Housing (Low-Rise) Not Close to Rail Transit	616	DU	4,024	51	163	214	180	105	285
223	Affordable Housing - Income Limits	400	DU	1,631	58	142	200	109	75	184
251	Senior Adult Housing-Detached	350	DU	1,719	33	68	101	72	46	118
252	Senior Adult Housing-Attached	375	DU	1,215	26	49	75	53	41	94
710	General Office Building	525	KSF	4,911	613	84	697	112	546	658
822	Strip Retail Plaza (<40k)	10	LKSF	652	17	12	29	39	39	78
821	Shopping Plaza (40k - 150k)	115	LKSF	10,263	252	154	406	480	521	1,001
520	K-8 School	1051	STU	2,386	420	358	778	77	91	168
488	Soccer and Baseball Fields	3	FLD	214	2	1	3	51	26	77
490	Pickleball Courts	4	COURT	121	10	7	17	11	6	17
411	Public Park	3.5	ACRE	91	0	0	0	0	0	0
Project Phase 4 Buildout Baseline Trips				**44,990**	1,800	1,991	**3,791**	2,357	2,185	**4,542**
	Residential Internal Capture	*14% Daily 25% AM PH 16% PM PH*		*-3,677*	*-216*	*-250*	*-466*	*-285*	*-111*	*-396*
	Office Internal Capture	*15% Daily 11% AM PH 19% PM PH*		*-715*	*-51*	*-28*	*-79*	*-59*	*-63*	*-122*
	Retail Internal Capture	*25% Daily 20% AM PH 28% PM PH*		*-2,683*	*-45*	*-41*	*-86*	*-112*	*-188*	*-300*
	School Internal Capture	*46% Daily 52% AM PH 40% PM PH*		*-1,090*	*-210*	*-197*	*-407*	*0*	*-68*	*-68*
	Park and Recreational Internal Capture	*50% Daily 40% AM PH 34% PM PH*		*-213*	*-1*	*-7*	*-8*	*-3*	*-29*	*-32*
	Total Internal Capture	***19% Daily 28% AM PH 20% PM PH***		***-8,378***	***-523***	***-523***	***-1,046***	***-459***	***-459***	***-918***
	Pass-by Trips (40% of Retail Trips)			*-3,292*	*-90*	*-49*	*-139*	*-162*	*-150*	*-312*
Project Phase 4 Buildout New External Vehicular Trips				**33,320**	1,187	1,419	**2,606**	1,736	1,576	**3,312**

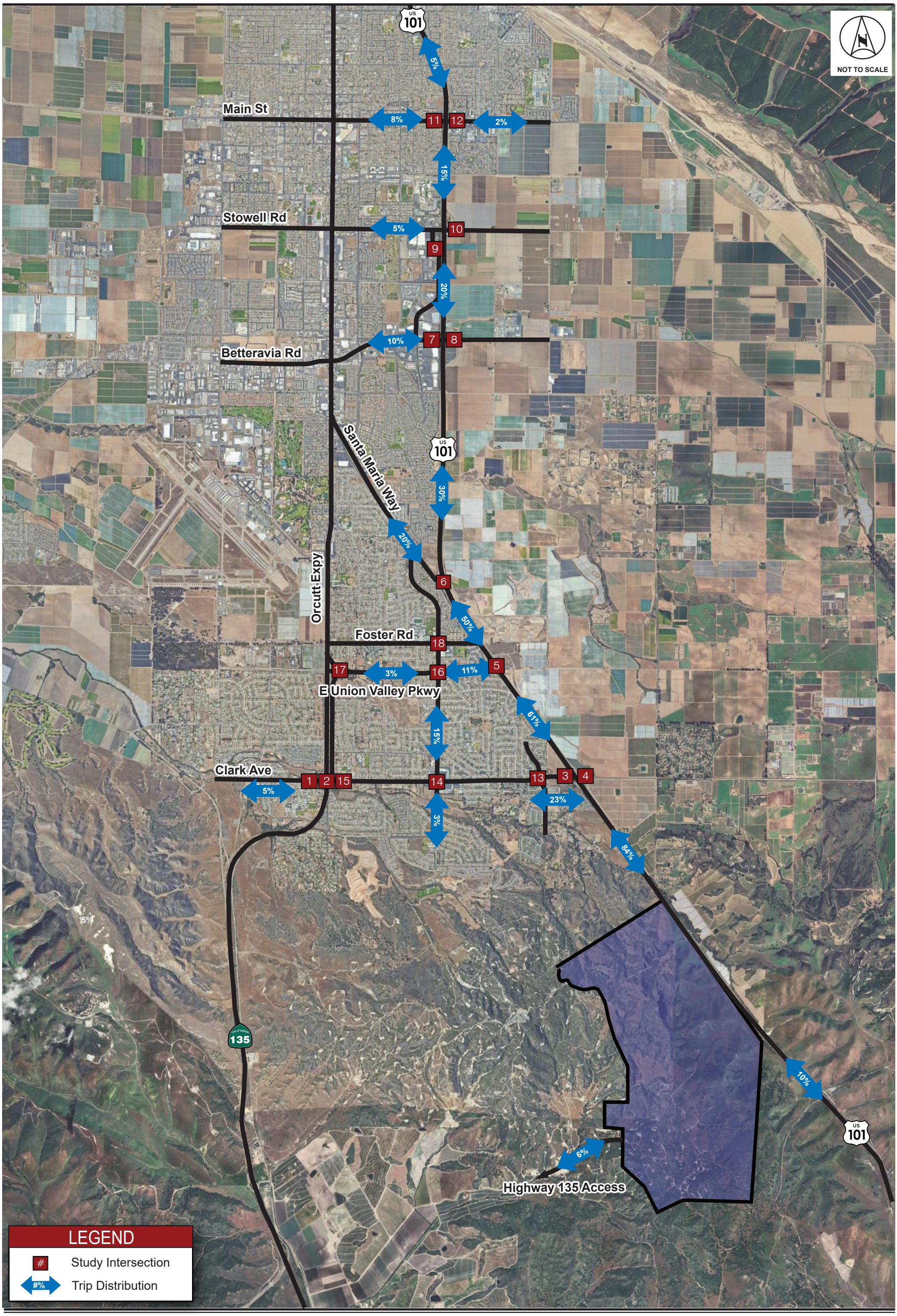
Table 9 – Project Buildout (Residential Only) Trip Generation

ITE LUC	Land Use	Scale	ITE Unit	Daily Total	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Project Phase 4 Buildout without non-residential uses										
210	Single-Family Detached Housing	2,259	DU	17,763	318	953	1,271	1,173	689	1,862
220	Multifamily Housing (Low-Rise) Not Close to Rail Transit	616	DU	4,024	51	163	214	180	105	285
223	Affordable Housing - Income Limits	400	DU	1,631	58	142	200	109	75	184
251	Senior Adult Housing-Detached	350	DU	1,719	33	68	101	72	46	118
252	Senior Adult Housing-Attached	375	DU	1,215	26	49	75	53	41	94
520	K-8 School	1051	STU	2,386	420	358	778	77	91	168
488	Soccer and Baseball Fields	3	FLD	214	2	1	3	51	26	77
490	Pickleball Courts	4	COURT	121	10	7	17	11	6	17
411	Public Park	3.5	ACRE	91	0	0	0	0	0	0
Project Phase 4 Buildout without non-residential uses Baseline Trips				**29,164**	918	1,741	**2,659**	1,726	1,079	**2,805**
	Residential Internal Capture	*5% Daily 22% AM PH 4% PM PH*		*-1,275*	*-204*	*-211*	*-415*	*-97*	*-3*	*-100*
	School Internal Capture	*45% Daily 52% AM PH 40% PM PH*		*-1,078*	*-210*	*-197*	*-407*	*0*	*-68*	*-68*
	Park and Recreational Internal Capture	*49% Daily 40% AM PH 34% PM PH*		*-207*	*-1*	*-7*	*-8*	*-3*	*-29*	*-32*
	Total Internal Capture	***9% Daily 31% AM PH 7% PM PH***		***-2,560***	***-415***	***-415***	***-830***	***-100***	***-100***	***-200***
Project Phase 4 Buildout without non-residential uses New External Vehicular Trips				**26,604**	503	1,326	**1,829**	1,626	979	**2,605**

Table 10 – Project Trip Generation Summary

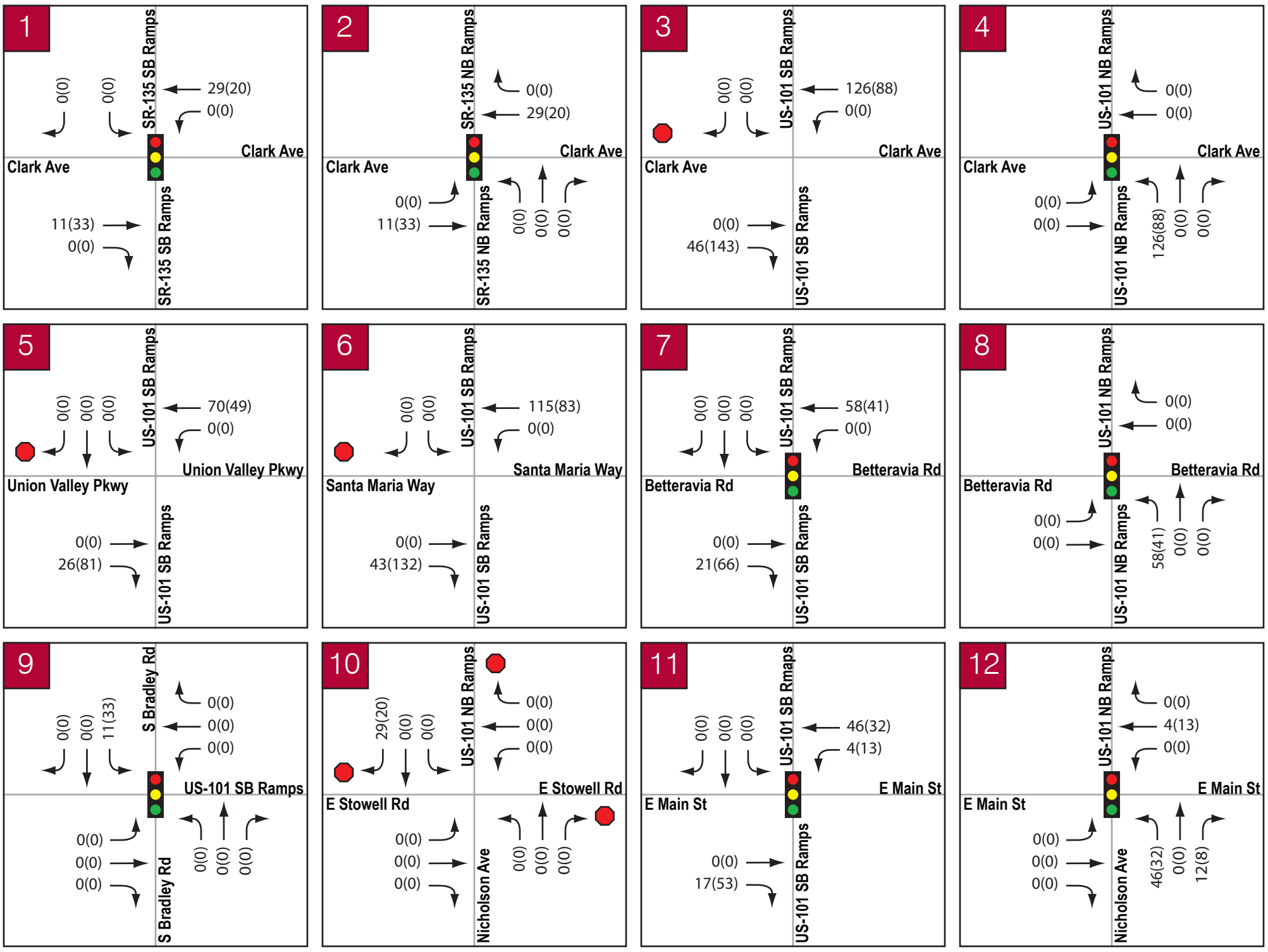
Project Build Scenario	Daily Total	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Project Phase 1	11,099	214	577	791	659	406	1,065
Project Phase 2	15,682	344	752	1,096	886	588	1,474
Project Phase 3	28,566	732	1,307	2,039	1,614	1,171	2,785
Project Phase 4 Buildout	33,320	1,187	1,419	2,606	1,736	1,576	3,312
Project Phase 4 Buildout (no non-residential)	26,604	503	1,326	1,829	1,626	979	2,605

Solomon Hills LTA and VMT



Kimley»Horn

Figure 3
Project Trip Distribution



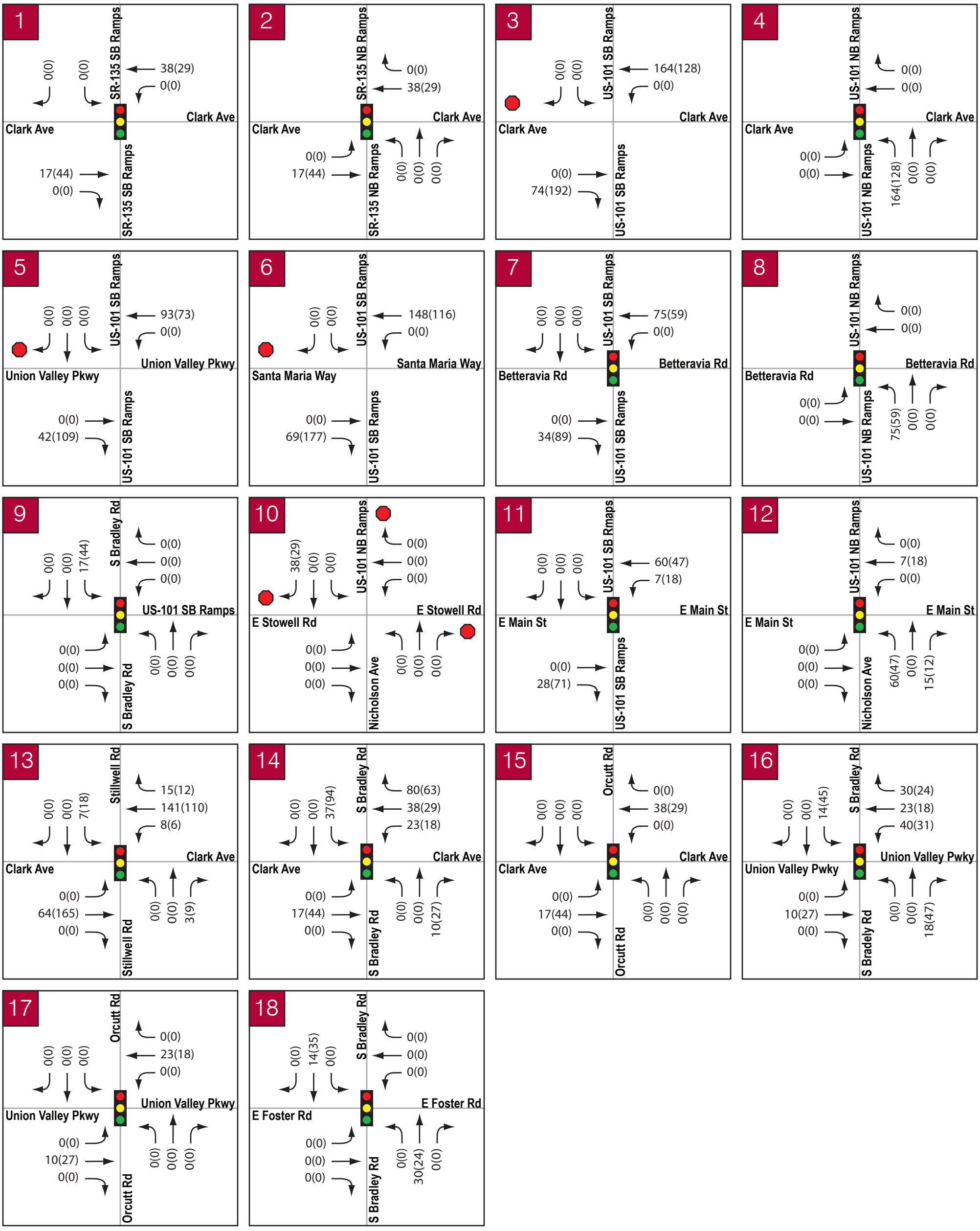
NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

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Figure 4
Project Phase 1 Trip Assignment



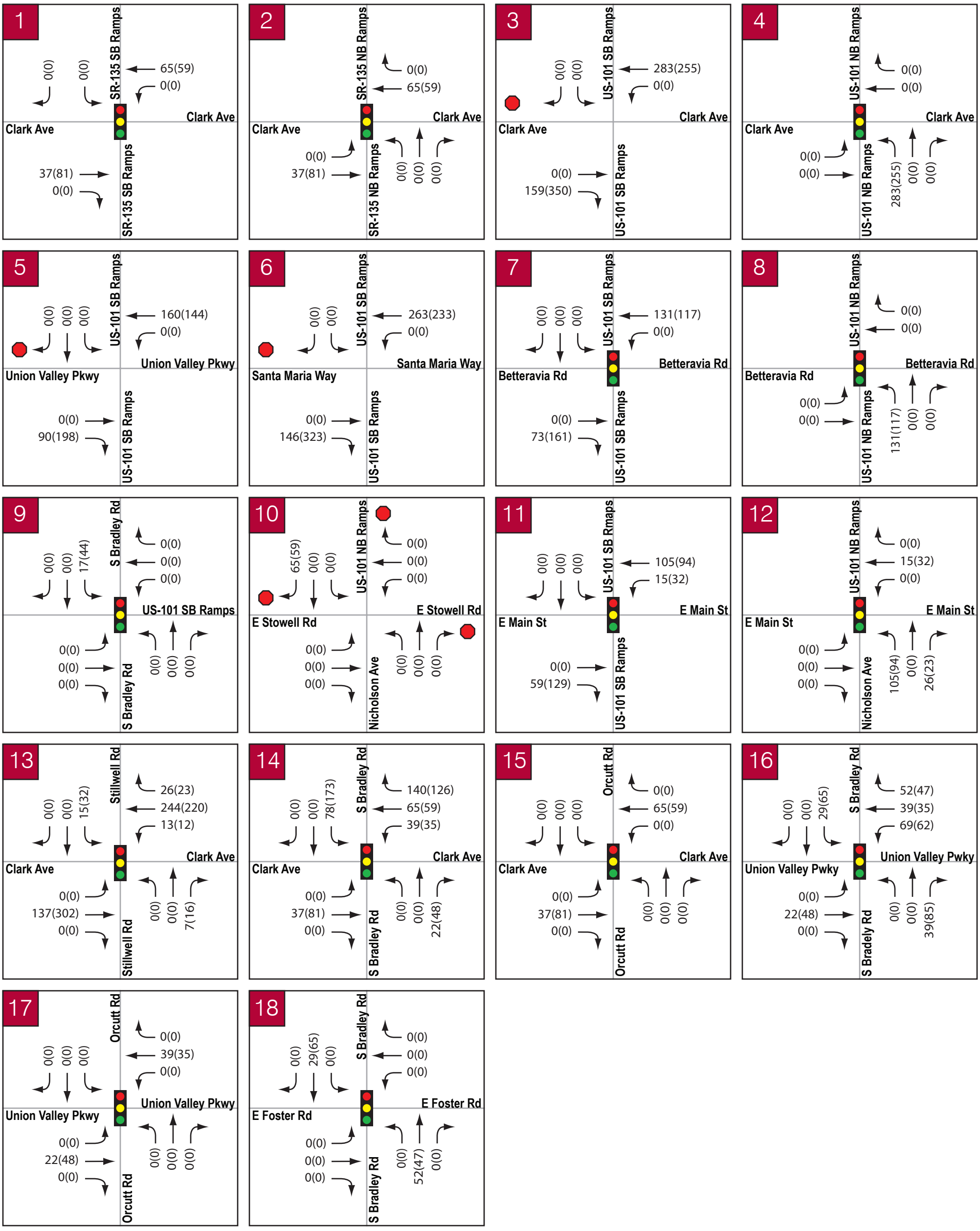
NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 5
Project Phase 2 Trip Assignment



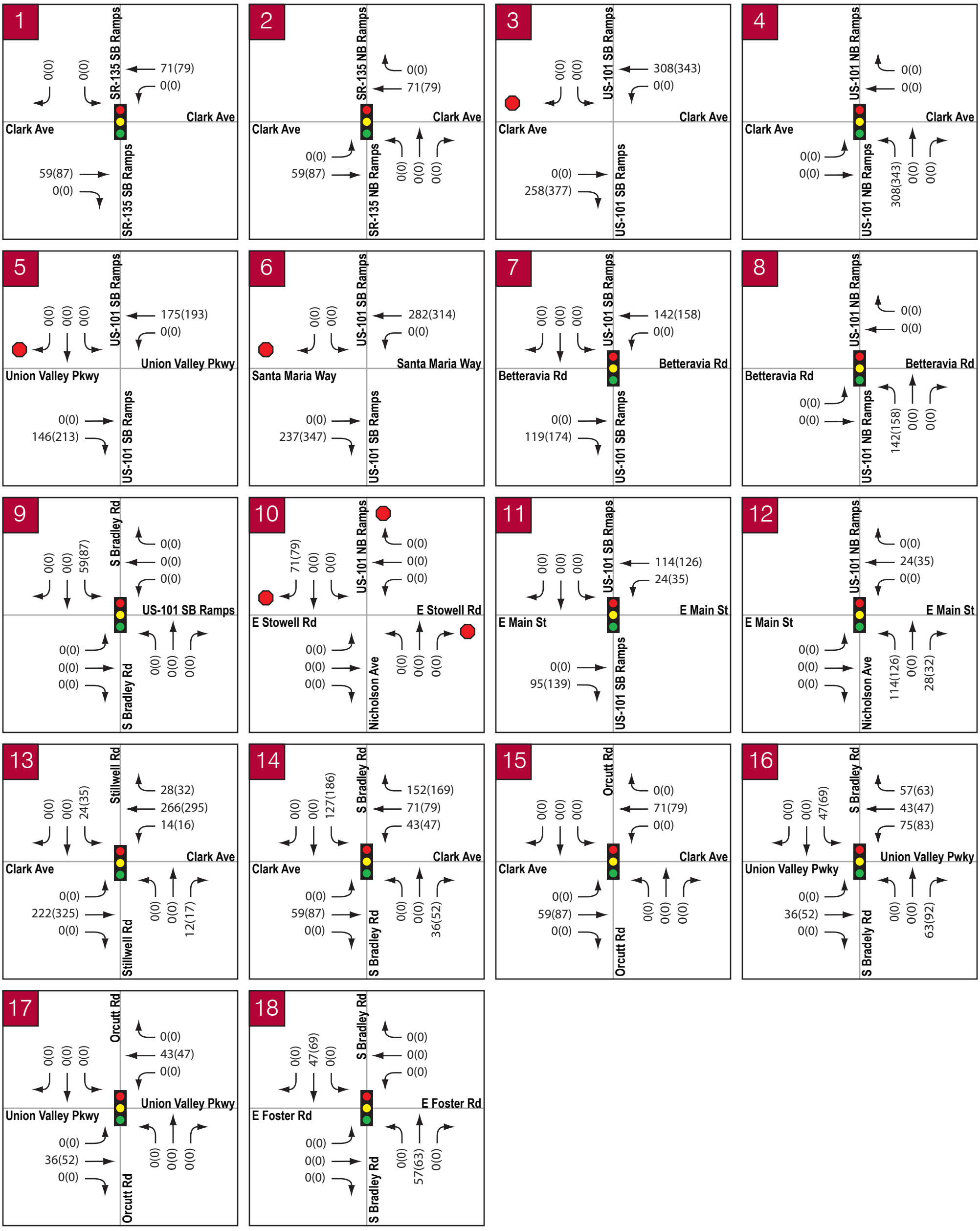
NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

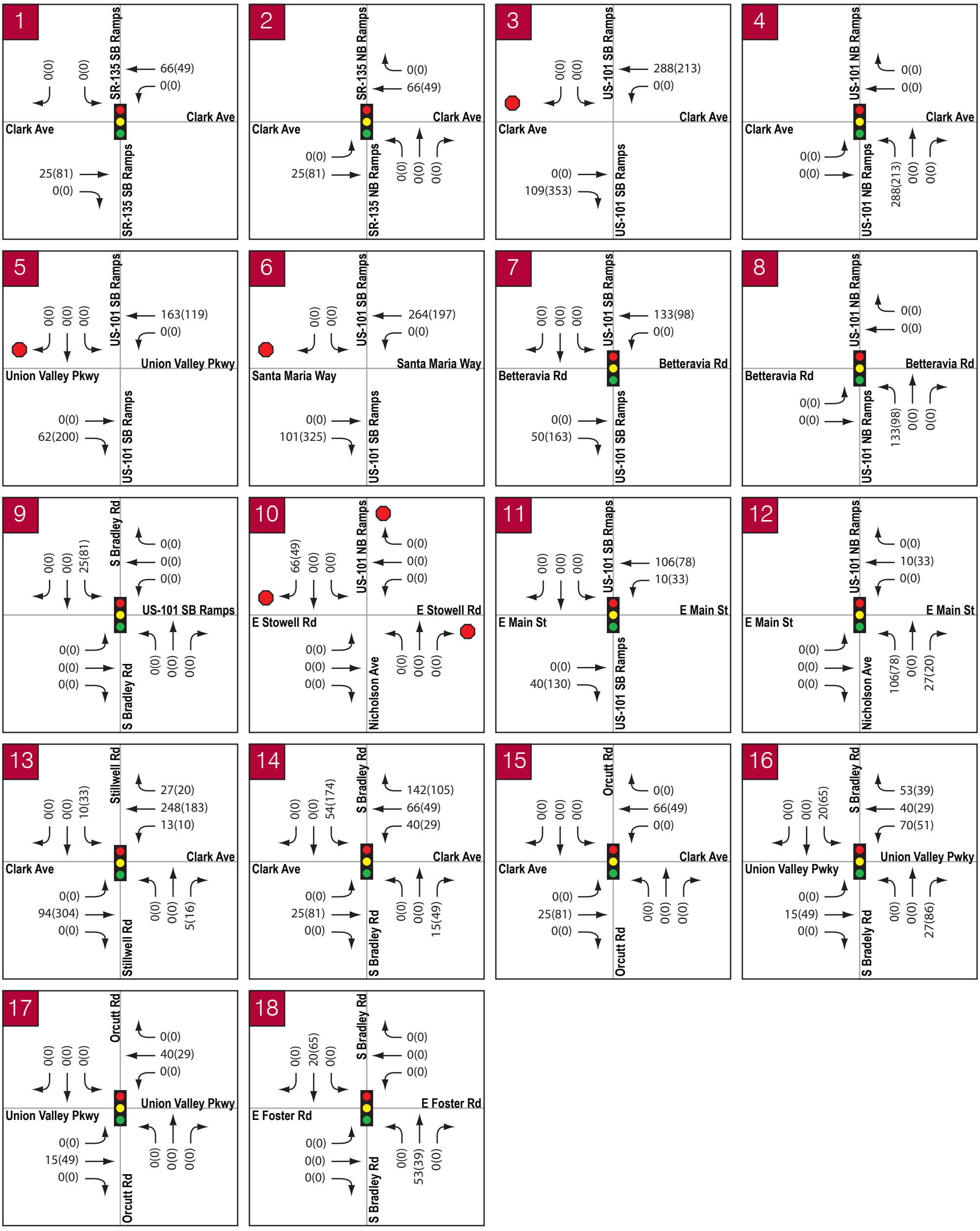
Kimley»Horn

Figure 6
Project Phase 3 Trip Assignment



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Figure 7
Project Buildout Trip Assignment



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Existing (2024) Conditions

Existing traffic counts were collected to establish the existing conditions of the study area intersections. Counts were performed in February 2024 between 7-9 AM and 4-6 PM during typical weekdays (Tuesday-Thursday) with a particular emphasis on capturing conditions during normal peak periods.

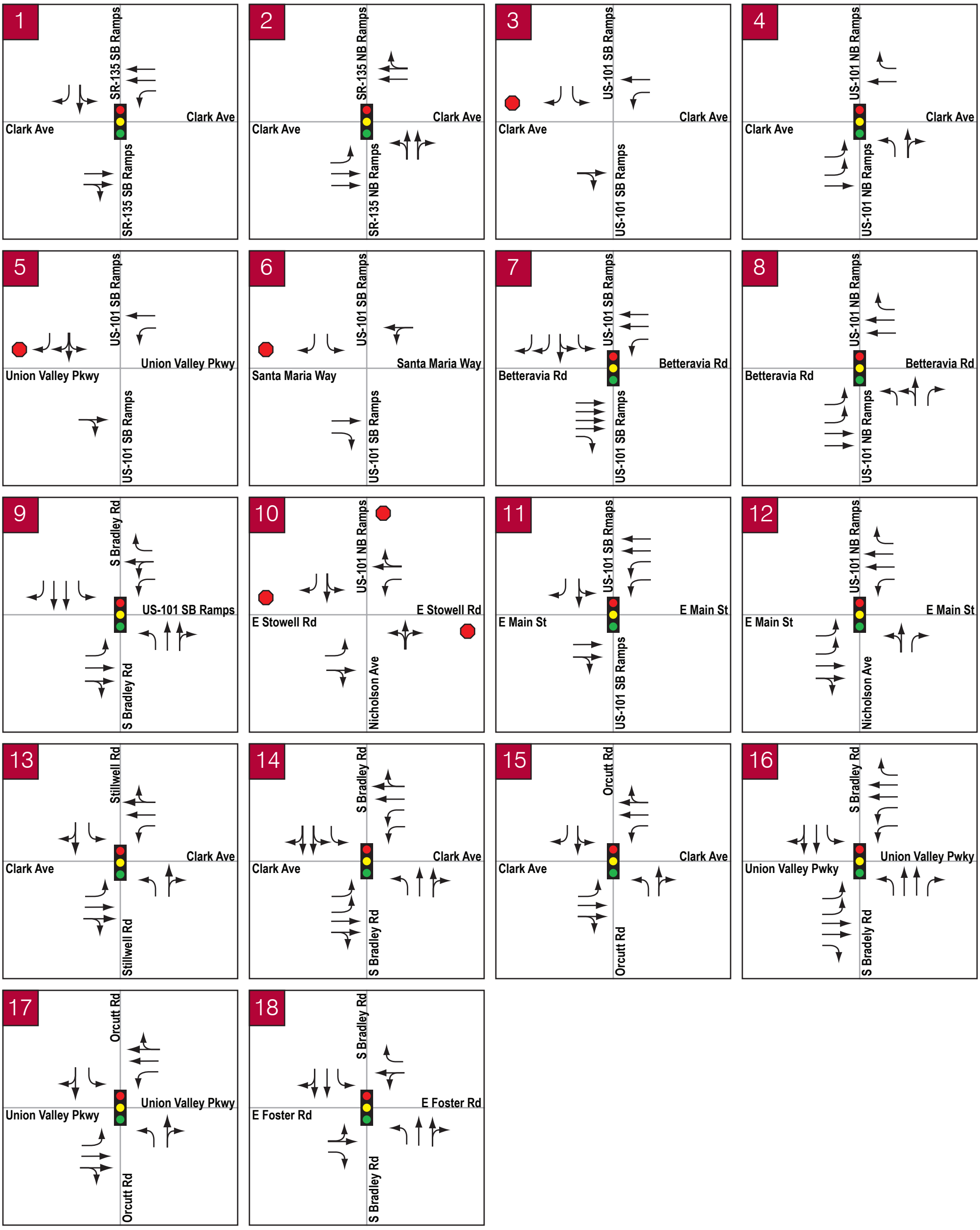
Existing (2024) Conditions intersection lane geometry and traffic control is presented in Figure 9. AM and PM peak-hour turning movement volumes are presented in Figure 10. Traffic count data sheets are provided in Appendix B. Analysis worksheets for this scenario are included in Appendix C.

Table 11 presents the intersection operating conditions for this scenario. As indicated in Table 11, all study intersections operate at acceptable LOS except for Intersection #10.

Table 11 – Existing (2024) Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Existing (2024) Conditions		
					Hour	Delay [sec]	V/C	LOS
1	Clark Avenue @ SR-135 SB Ramps	Orcutt	Signal	C	AM	-	0.45	A
					PM	-	0.45	A
2	Clark Avenue @ SR-135 NB Ramps	Orcutt	Signal	C	AM	-	0.52	A
					PM	-	0.48	A
3	Clark Avenue @ US-101 SB Ramps	Orcutt	SSSC	C	AM	6.8	-	A
					PM	5.6	-	A
4	Clark Avenue @ US-101 NB Ramps	Orcutt	Signal	C	AM	-	0.46	A
					PM	-	0.44	A
5	E Union Valley Parkway @ US-101 SB Ramps	Orcutt	SSSC	C	AM	8.9	-	A
					PM	9.8	-	A
6	Santa Maria Way @ US-101 SB Ramps	Orcutt	SSSC	C	AM	5.9	-	A
					PM	5.1	-	A
7	Betteravia Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.53	A
					PM	-	0.54	A
8	Betteravia Road @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.42	A
					PM	-	0.60	B
9	S Bradley Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.51	A
					PM	-	0.70	C
10	E Stowell Road @ Nicholson Ave/US-101 NB Ramps	Santa Maria	SSSC	D	AM	14.4	-	B
					PM	49.1	-	E
11	E Main Street @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.78	C
					PM	-	0.64	B
12	E Main Street @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.57	A
					PM	-	0.67	B
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.45	A
					PM	-	0.44	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.58	A
					PM	-	0.57	A
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.52	A
					PM	-	0.51	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.59	A
					PM	-	0.59	A
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.49	A
					PM	-	0.47	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.57	A
					PM	-	0.50	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Ammended May 2022 and the City of Santa Maria General Plan. 1994. Ammended Sept 2011
Intersection Capacity Utlilzation (ICU) methodology used for signal controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



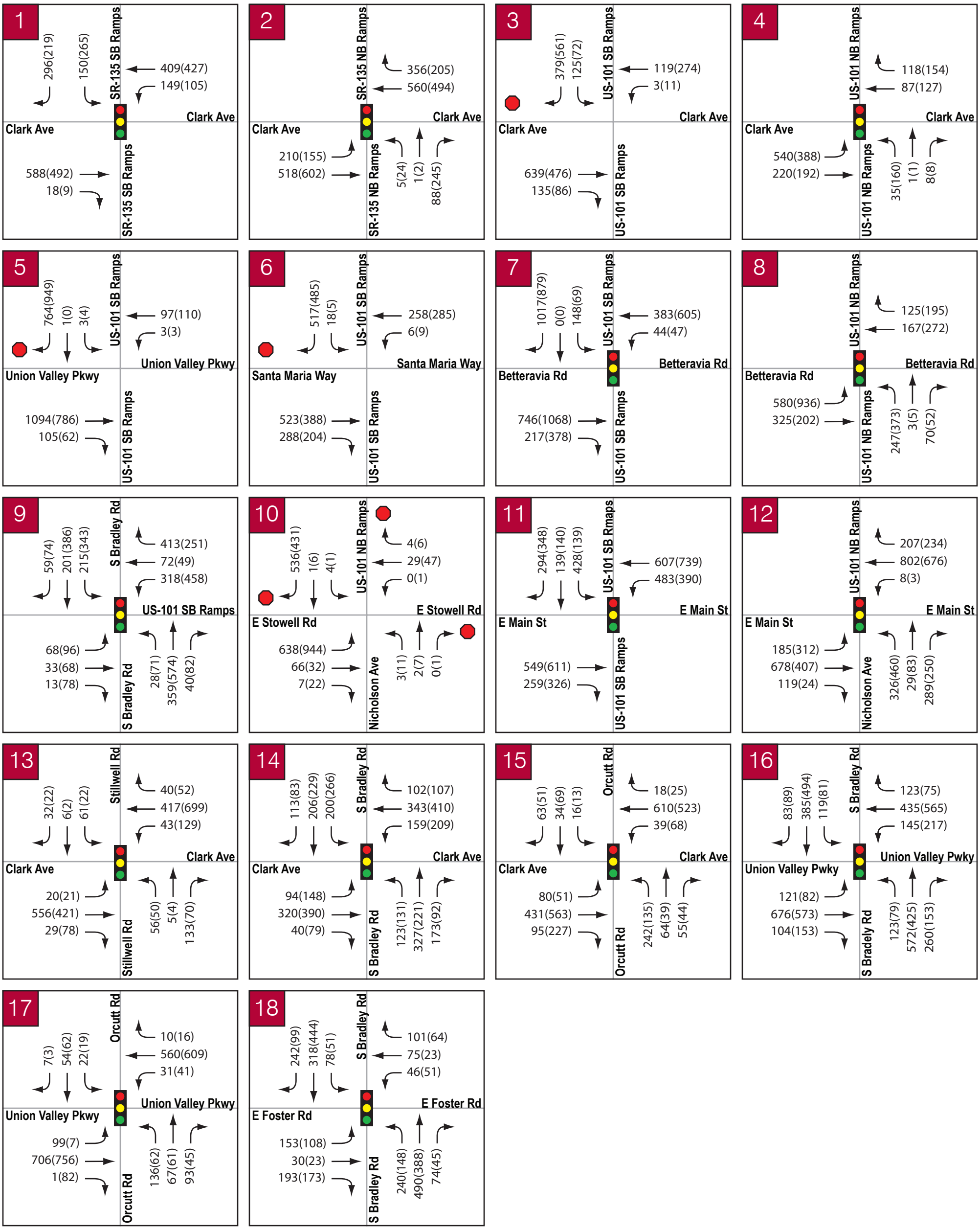
NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout

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Figure 9
Study Intersection Lane Geometry and Traffic Control



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 10
Existing (2024) Conditions Turning Movement Volumes

Existing (2024) Plus Project Phase 1 Conditions

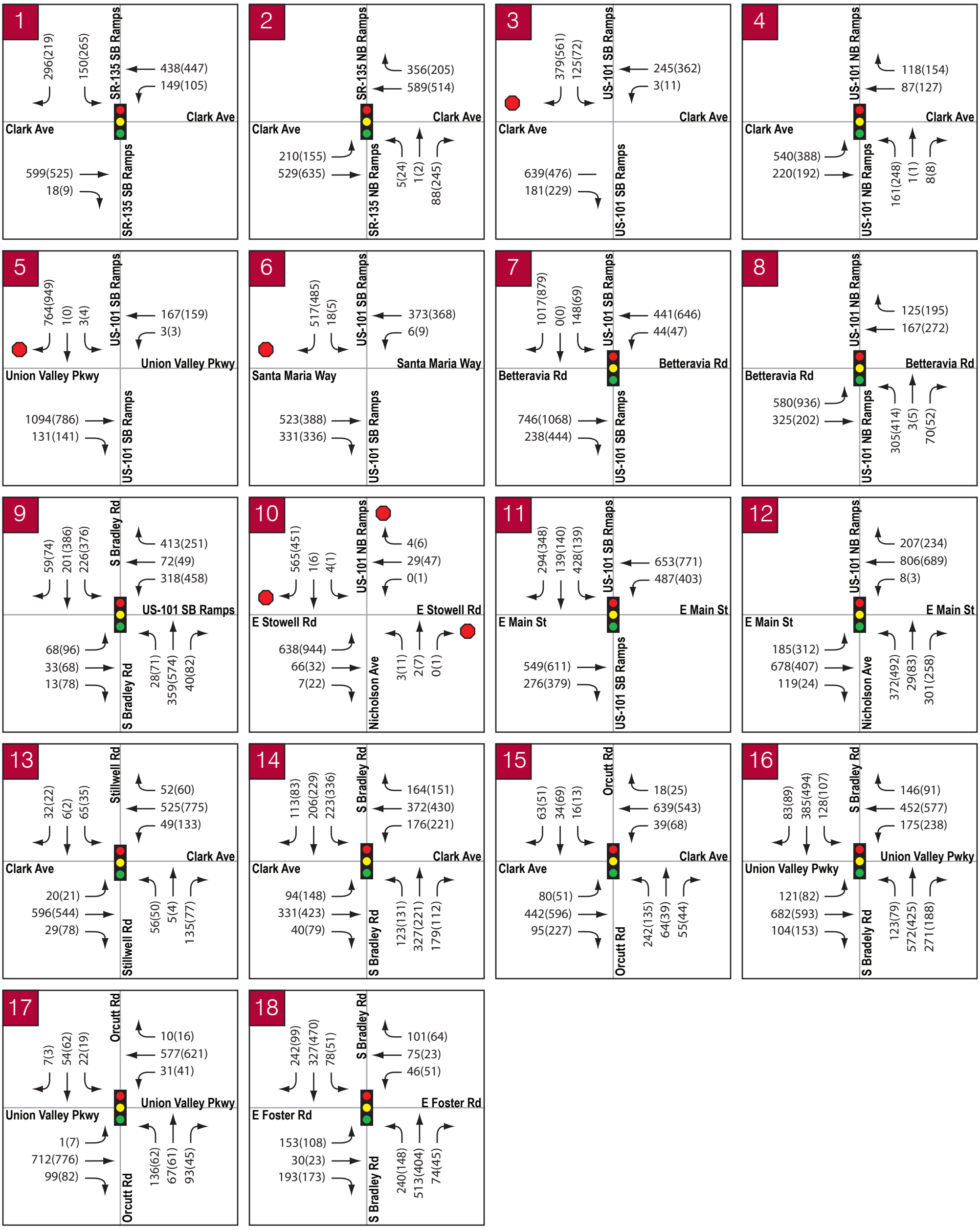
Project Phase 1 trips were distributed and assigned to study intersections by adding them to Existing (2024) Conditions traffic volumes. Using these volumes, LOS was determined at the study facilities. Existing (2024) plus Project Phase 1 peak-hour traffic volumes are presented in Figure 11 for the AM and PM peak-hours. Analysis worksheets for the scenario are included in Appendix D.

Table 12 presents the intersection operating conditions for this analysis scenario. As indicated in Table 12, all study intersections operate at acceptable LOS except for Intersection #10.

Table 12 – Existing (2024) plus Project Phase 1 Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Existing (2024) Conditions			Existing (2024) Plus Phase 1 Conditions				
					Hour	Delay [sec]	V/C	LOS	Delay [sec]	Δ Delay [sec]	V/C	Δ V/C	LOS
1	Clark Avenue @ SR-135 SB Ramps	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.45	0.00	A
					PM	-	0.45	A	-	-	0.46	0.01	A
2	Clark Avenue @ SR-135 NB Ramps	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.53	0.01	A
					PM	-	0.48	A	-	-	0.48	0.00	A
3	Clark Avenue @ US-101 SB Ramps	Orcutt	SSSC	C	AM	6.8	-	A	7.1	0.3	-	-	A
					PM	5.6	-	A	5.4	-0.2	-	-	A
4	Clark Avenue @ US-101 NB Ramps	Orcutt	Signal	C	AM	-	0.46	A	-	-	0.46	0.00	A
					PM	-	0.44	A	-	-	0.44	0.00	A
5	E Union Valley Parkway @ US-101 SB Ramps	Orcutt	SSSC	C	AM	8.9	-	A	9.8	0.9	-	-	A
					PM	9.8	-	A	10.3	0.5	-	-	B
6	Santa Maria Way @ US-101 SB Ramps	Orcutt	SSSC	C	AM	5.9	-	A	4.7	-1.2	-	-	A
					PM	5.1	-	A	5.0	-0.1	-	-	A
7	Betteravia Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.53	A	-	-	0.54	0.01	A
					PM	-	0.54	A	-	-	0.55	0.01	A
8	Betteravia Road @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.42	A	-	-	0.43	0.01	A
					PM	-	0.60	B	-	-	0.61	0.01	B
9	S Bradley Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.51	A	-	-	0.51	0.00	A
					PM	-	0.70	C	-	-	0.72	0.02	C
10	E Stowell Road @ Nicholson Ave/US-101 NB Ramps	Santa Maria	SSSC	D	AM	14.4	-	B	13.9	-0.5	-	-	B
					PM	49.1	-	**E**	46.0	-3.1	-	-	**E**
11	E Main Street @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.78	C	-	-	0.79	0.01	C
					PM	-	0.64	B	-	-	0.66	0.02	B
12	E Main Street @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.57	A	-	-	0.60	0.03	B
					PM	-	0.67	B	-	-	0.70	0.03	C
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.46	0.01	A
					PM	-	0.44	A	-	-	0.46	0.02	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.58	A	-	-	0.61	0.03	B
					PM	-	0.57	A	-	-	0.60	0.03	B
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.53	0.01	A
					PM	-	0.51	A	-	-	0.52	0.01	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.59	A	-	-	0.61	0.02	B
					PM	-	0.59	A	-	-	0.60	0.01	B
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.49	A	-	-	0.49	0.00	A
					PM	-	0.47	A	-	-	0.48	0.01	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.57	A	-	-	0.57	0.00	A
					PM	-	0.50	A	-	-	0.51	0.01	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Ammended May 2022 and the City of Santa Maria General Plan. 1994. Ammended Sept 2011
Intersection Capacity Utlilzation (ICU) methodology used for signal controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 11

Existing (2024) plus Project Phase 1 AM and PM Peak-Hour Traffic Volumes

Existing (2024) Plus Project Phase 2 Conditions

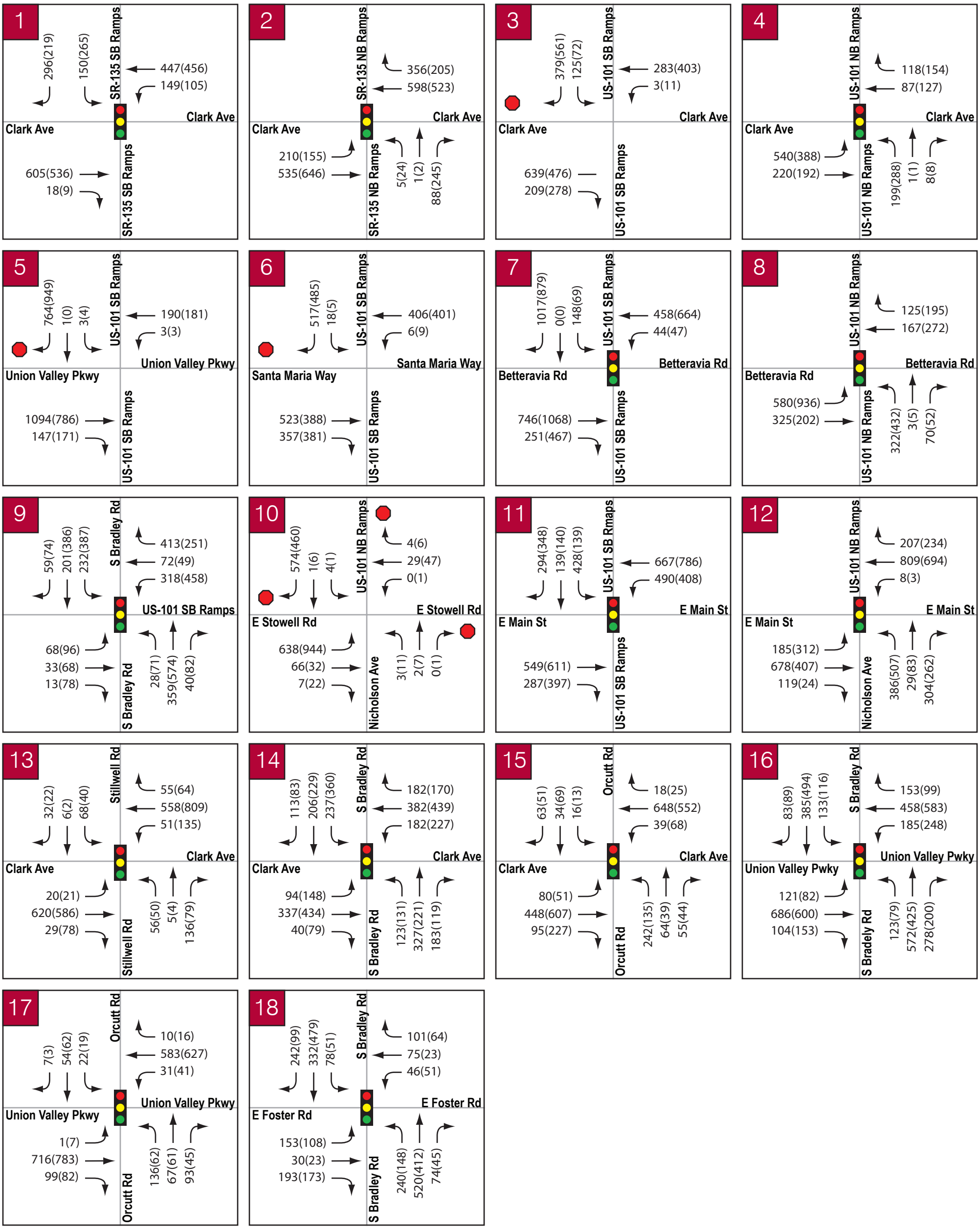
Project Phase 2 trips were distributed and assigned to study intersections by adding them to Existing (2024) Conditions traffic volumes. Using these volumes, LOS was determined at the study facilities. Existing (2024) plus Project Phase 2 peak-hour traffic volumes are presented in Figure 12 for the AM and PM peak-hours. Analysis worksheets for the scenario are included in Appendix E.

Table 13 presents the intersection operating conditions for this analysis scenario. As indicated in Table 13, all study intersections operate at acceptable LOS except for Intersection #10.

Table 13 – Existing (2024) plus Project Phase 2 Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Existing (2024) Conditions			Existing (2024) Plus Phase 2 Conditions				
					Hour	Delay [sec]	V/C	LOS	Delay [sec]	Δ Delay [sec]	V/C	Δ V/C	LOS
1	Clark Avenue @ SR-135 SB Ramps	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.45	0.00	A
					PM	-	0.45	A	-	-	0.46	0.01	A
2	Clark Avenue @ SR-135 NB Ramps	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.53	0.01	A
					PM	-	0.48	A	-	-	0.49	0.01	A
3	Clark Avenue @ US-101 SB Ramps	Orcutt	SSSC	C	AM	6.8	-	A	7.2	0.4	-	-	A
					PM	5.6	-	A	5.9	0.3	-	-	A
4	Clark Avenue @ US-101 NB Ramps	Orcutt	Signal	C	AM	-	0.46	A	-	-	0.46	0.00	A
					PM	-	0.44	A	-	-	0.44	0.00	A
5	E Union Valley Parkway @ US-101 SB Ramps	Orcutt	SSSC	C	AM	8.9	-	A	9.1	0.2	-	-	A
					PM	9.8	-	A	11.6	1.8	-	-	B
6	Santa Maria Way @ US-101 SB Ramps	Orcutt	SSSC	C	AM	5.9	-	A	5.6	-0.3	-	-	A
					PM	5.1	-	A	5.1	0.0	-	-	A
7	Betteravia Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.53	A	-	-	0.55	0.02	A
					PM	-	0.54	A	-	-	0.56	0.02	A
8	Betteravia Road @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.42	A	-	-	0.44	0.02	A
					PM	-	0.60	B	-	-	0.61	0.01	B
9	S Bradley Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.51	A	-	-	0.51	0.00	A
					PM	-	0.70	C	-	-	0.73	0.03	C
10	E Stowell Road @ Nicholson Ave/US-101 NB Ramps	Santa Maria	SSSC	D	AM	14.4	-	B	13.0	-1.4	-	-	B
					PM	49.1	-	**E**	36.0	-13.1	-	-	**E**
11	E Main Street @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.78	C	-	-	0.80	0.02	D
					PM	-	0.64	B	-	-	0.67	0.03	B
12	E Main Street @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.57	A	-	-	0.61	0.04	B
					PM	-	0.67	B	-	-	0.71	0.04	C
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.47	0.02	A
					PM	-	0.44	A	-	-	0.47	0.03	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.58	A	-	-	0.62	0.04	B
					PM	-	0.57	A	-	-	0.62	0.05	B
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.53	0.01	A
					PM	-	0.51	A	-	-	0.52	0.01	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.59	A	-	-	0.61	0.02	B
					PM	-	0.59	A	-	-	0.60	0.01	B
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.49	A	-	-	0.49	0.00	A
					PM	-	0.47	A	-	-	0.48	0.01	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.57	A	-	-	0.58	0.01	A
					PM	-	0.50	A	-	-	0.51	0.01	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Ammended May 2022 and the City of Santa Maria General Plan. 1994. Ammended Sept 2011
Intersection Capacity Utlilzation (ICU) methodology used for signal controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 12

Existing (2024) plus Project Phase 2 AM and PM Peak-Hour Traffic Volumes

Existing (2024) Plus Project Phase 3 Conditions

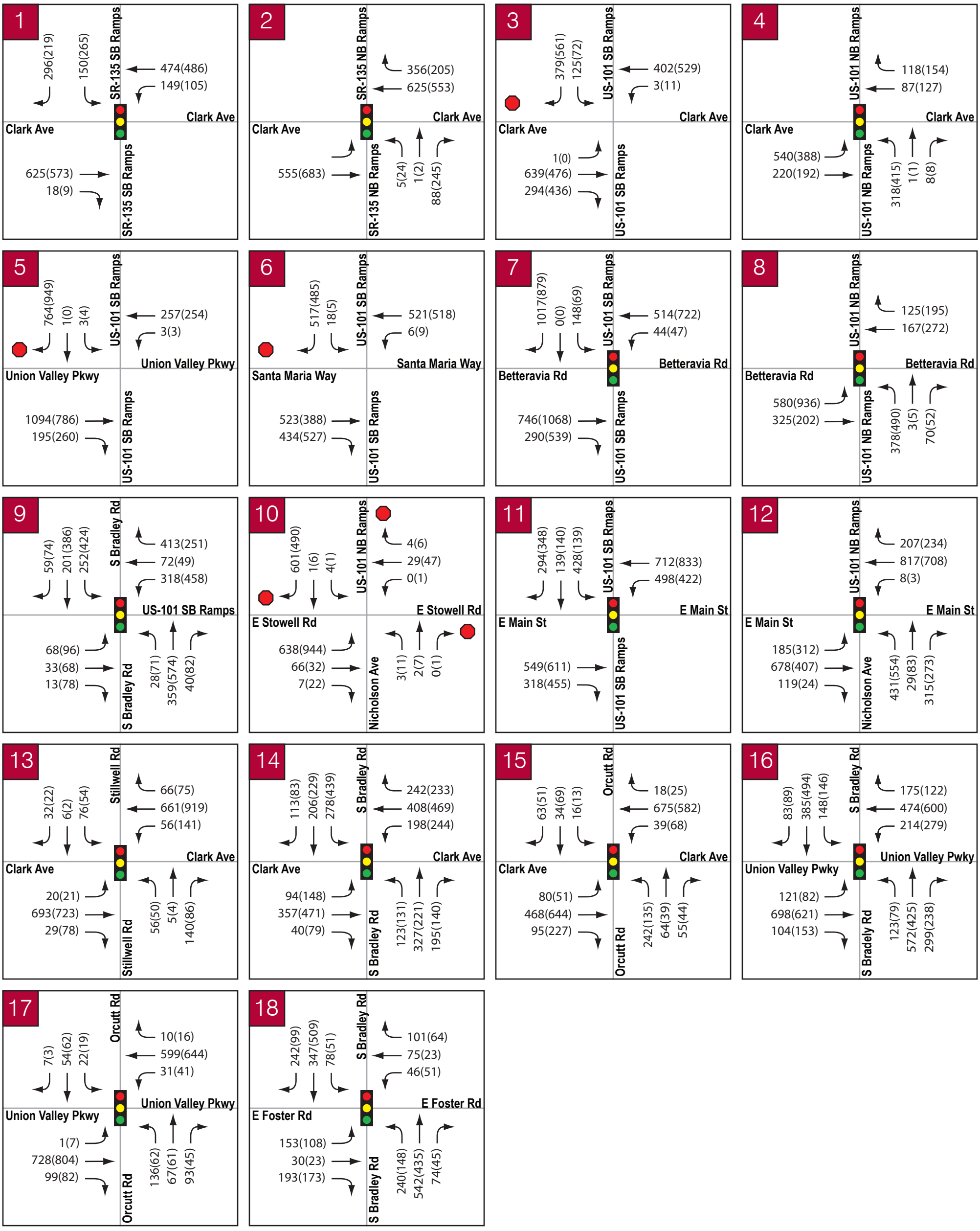
Project Phase 3 trips were distributed and assigned to study intersections by adding them to Existing (2024) Conditions traffic volumes. Using these volumes, LOS was determined at the study facilities. Existing (2024) plus Project Phase 3 peak-hour traffic volumes are presented in Figure 13 for the AM and PM peak-hours. Analysis worksheets for the scenario are included in Appendix F.

Table 14 presents the intersection operating conditions for this analysis scenario. As indicated in Table 14, all study intersections operate at acceptable LOS except for Intersection #10.

Table 14 – Existing (2024) plus Project Phase 3 Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Existing (2024) Conditions			Existing (2024) Plus Phase 3 Conditions				
					Hour	Delay [sec]	V/C	LOS	Delay [sec]	Δ Delay [sec]	V/C	Δ V/C	LOS
1	Clark Avenue @ SR-135 SB Ramps	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.46	0.01	A
					PM	-	0.45	A	-	-	0.47	0.02	A
2	Clark Avenue @ SR-135 NB Ramps	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.54	0.02	A
					PM	-	0.48	A	-	-	0.49	0.01	A
3	Clark Avenue @ US-101 SB Ramps	Orcutt	SSSC	C	AM	6.8	-	A	8.1	1.3	-	-	A
					PM	5.6	-	A	6.0	0.4	-	-	A
4	Clark Avenue @ US-101 NB Ramps	Orcutt	Signal	C	AM	-	0.46	A	-	-	0.46	0.00	A
					PM	-	0.44	A	-	-	0.51	0.07	A
5	E Union Valley Parkway @ US-101 SB Ramps	Orcutt	SSSC	C	AM	8.9	-	A	15.5	6.6	-	-	C
					PM	9.8	-	A	12.2	2.4	-	-	B
6	Santa Maria Way @ US-101 SB Ramps	Orcutt	SSSC	C	AM	5.9	-	A	6.2	0.3	-	-	A
					PM	5.1	-	A	5.2	0.1	-	-	A
7	Betteravia Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.53	A	-	-	0.57	0.04	A
					PM	-	0.54	A	-	-	0.57	0.03	A
8	Betteravia Road @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.42	A	-	-	0.45	0.03	A
					PM	-	0.60	B	-	-	0.63	0.03	B
9	S Bradley Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.51	A	-	-	0.53	0.02	A
					PM	-	0.70	C	-	-	0.75	0.05	C
10	E Stowell Road @ Nicholson Ave/US-101 NB Ramps	Santa Maria	SSSC	D	AM	14.4	-	B	14.5	0.1	-	-	B
					PM	49.1	-	**E**	36.1	-13.0	-	-	**E**
11	E Main Street @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.78	C	-	-	0.80	0.02	D
					PM	-	0.64	B	-	-	0.69	0.05	B
12	E Main Street @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.57	A	-	-	0.63	0.06	B
					PM	-	0.67	B	-	-	0.74	0.07	C
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.50	0.05	A
					PM	-	0.44	A	-	-	0.51	0.07	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.58	A	-	-	0.66	0.08	B
					PM	-	0.57	A	-	-	0.66	0.09	B
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.54	0.02	A
					PM	-	0.51	A	-	-	0.53	0.02	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.59	A	-	-	0.63	0.04	B
					PM	-	0.59	A	-	-	0.62	0.03	B
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.49	A	-	-	0.49	0.00	A
					PM	-	0.47	A	-	-	0.49	0.02	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.57	A	-	-	0.58	0.01	A
					PM	-	0.50	A	-	-	0.52	0.02	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Ammended May 2022 and the City of Santa Maria General Plan. 1994. Ammended Sept 2011
Intersection Capacity Utlilzation (ICU) methodology used for signal controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 13
Existing (2024) plus Project Phase 3 AM and PM Peak-Hour Traffic Volumes

Existing (2024) Plus Project Buildout Conditions

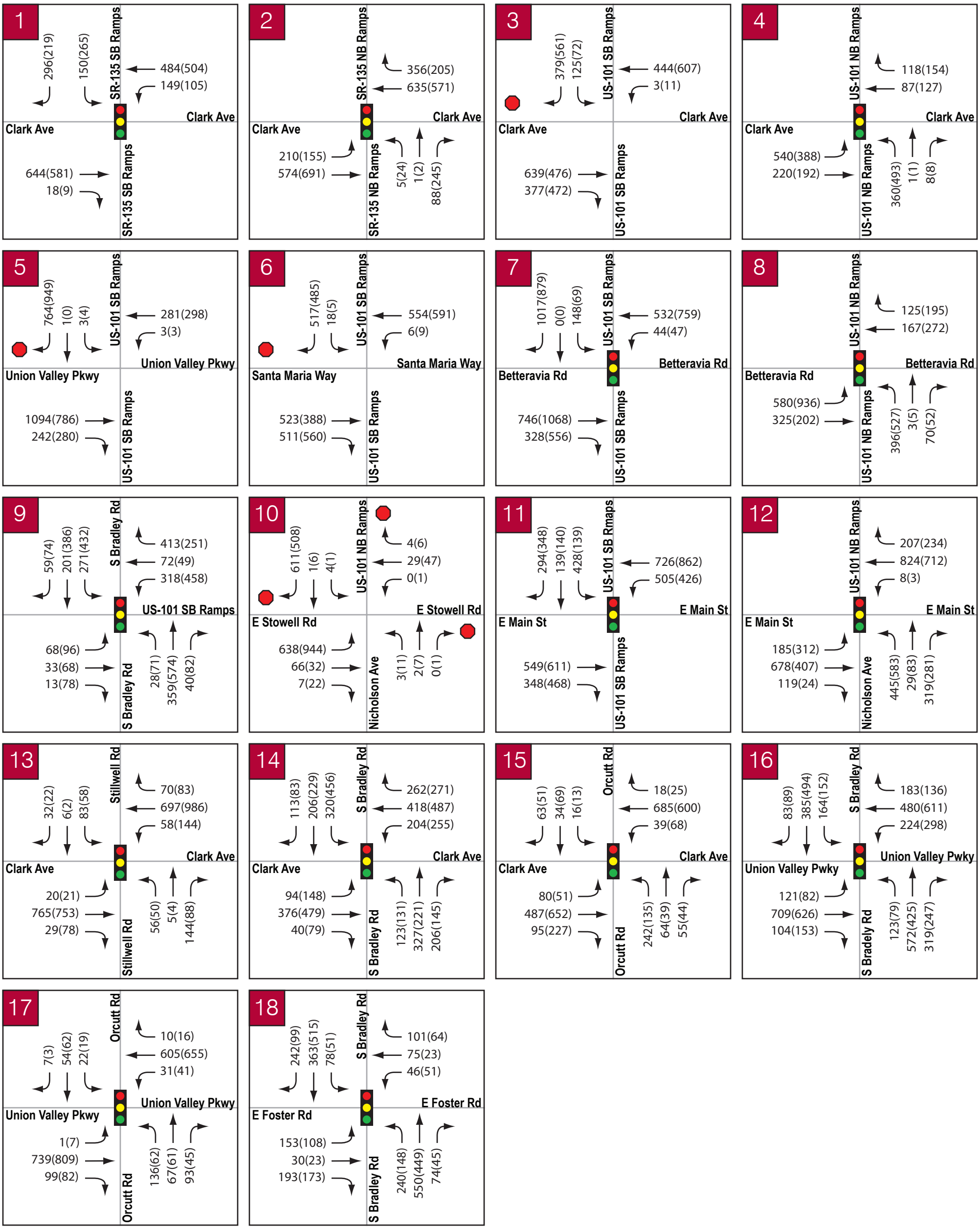
Project Buildout trips were distributed and assigned to study intersections by adding them to Existing (2024) Conditions traffic volumes. Using these volumes, LOS was determined at the study facilities. Existing (2024) plus Project Buildout peak-hour traffic volumes are presented in Figure 14 for the AM and PM peak-hours. Analysis worksheets for the scenario are included in Appendix G.

Table 15 presents the intersection operating conditions for this analysis scenario. As indicated in Table 15, all study intersections operate at acceptable LOS except Intersection #10.

Table 15 – Existing (2024) plus Project Buildout Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Existing (2024) Conditions			Existing (2024) Plus Project Buildout Conditions				
					Hour	Delay [sec]	V/C	LOS	Delay [sec]	Δ Delay [sec]	V/C	Δ V/C	LOS
1	Clark Avenue @ SR-135 SB Ramps	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.46	0.01	A
					PM	-	0.45	A	-	-	0.47	0.02	A
2	Clark Avenue @ SR-135 NB Ramps	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.54	0.02	A
					PM	-	0.48	A	-	-	0.50	0.02	A
3	Clark Avenue @ US-101 SB Ramps	Orcutt	SSSC	C	AM	6.8	-	A	9.5	2.7	-	-	A
					PM	5.6	-	A	6.6	1.0	-	-	A
4	Clark Avenue @ US-101 NB Ramps	Orcutt	Signal	C	AM	-	0.46	A	-	-	0.48	0.02	A
					PM	-	0.44	A	-	-	0.56	0.12	A
5	E Union Valley Parkway @ US-101 SB Ramps	Orcutt	SSSC	C	AM	8.9	-	A	17.8	8.9	-	-	C
					PM	9.8	-	A	17.2	7.4	-	-	C
6	Santa Maria Way @ US-101 SB Ramps	Orcutt	SSSC	C	AM	5.9	-	A	6.2	0.3	-	-	A
					PM	5.1	-	A	5.1	0.0	-	-	A
7	Betteravia Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.53	A	-	-	0.57	0.04	A
					PM	-	0.54	A	-	-	0.57	0.03	A
8	Betteravia Road @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.42	A	-	-	0.46	0.04	A
					PM	-	0.60	B	-	-	0.64	0.04	B
9	S Bradley Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.51	A	-	-	0.54	0.03	A
					PM	-	0.70	C	-	-	0.75	0.05	C
10	E Stowell Road @ Nicholson Ave/US-101 NB Ramps	Santa Maria	SSSC	D	AM	14.4	-	B	13.3	-1.1	-	-	B
					PM	49.1	-	**E**	36.0	-13.1	-	-	**E**
11	E Main Street @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.78	C	-	-	0.82	0.04	D
					PM	-	0.64	B	-	-	0.70	0.06	C
12	E Main Street @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.57	A	-	-	0.64	0.07	B
					PM	-	0.67	B	-	-	0.75	0.08	C
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.53	0.08	A
					PM	-	0.44	A	-	-	0.53	0.09	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.58	A	-	-	0.67	0.09	B
					PM	-	0.57	A	-	-	0.69	0.12	B
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.54	0.02	A
					PM	-	0.51	A	-	-	0.53	0.02	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.59	A	-	-	0.65	0.06	B
					PM	-	0.59	A	-	-	0.62	0.03	B
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.49	A	-	-	0.49	0.00	A
					PM	-	0.47	A	-	-	0.49	0.02	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.57	A	-	-	0.58	0.01	A
					PM	-	0.50	A	-	-	0.52	0.02	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Ammended May 2022 and the City of Santa Maria General Plan. 1994. Ammended Sept 2011
Intersection Capacity Utlilzation (ICU) methodology used for signal controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 14

Existing (2024) plus Project Buildout AM and PM Peak-Hour Traffic Volumes

Existing (2024) Plus Project Buildout (Residential Only) Conditions

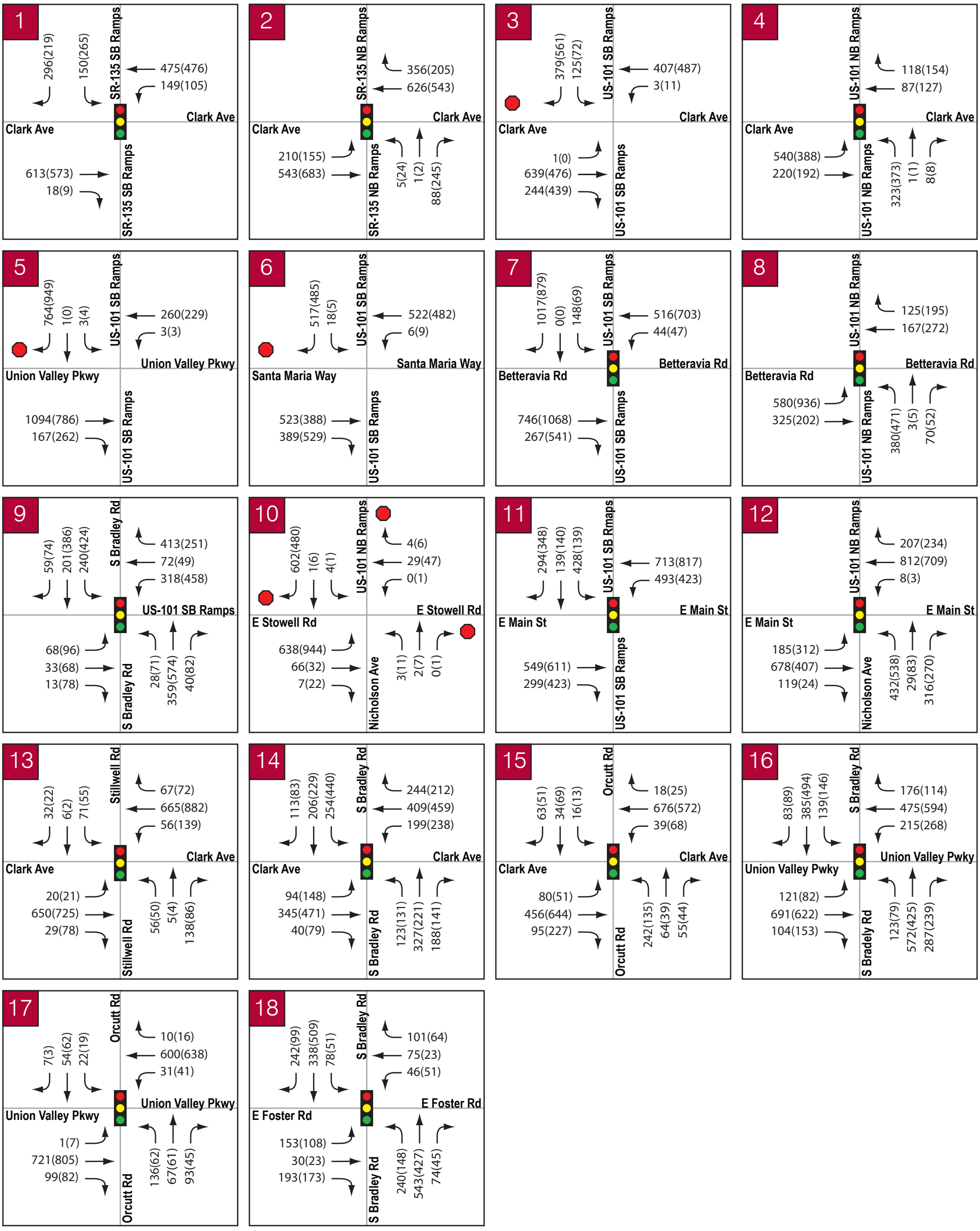
Project Buildout (residential only) trips were distributed and assigned to study intersections by adding them to Existing (2024) Conditions traffic volumes. Using these volumes, LOS was determined at the study facilities. Existing (2024) plus Project Buildout (Residential Only) peak-hour traffic volumes are presented in Figure 15 for the AM and PM peak-hours. Analysis worksheets for the scenario are included in Appendix H.

Table 16 presents the intersection operating conditions for this analysis scenario. As indicated in Table 16, all study intersections operate at acceptable LOS except Intersection #10.

Table 16 – Existing (2024) plus Project Buildout (Residential Only) Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Existing (2024) Conditions			Existing (2024) Plus Project Buildout (Residential Only) Conditions				
					Hour	Delay [sec]	V/C	LOS	Delay [sec]	Δ Delay [sec]	V/C	Δ V/C	LOS
1	Clark Avenue @ SR-135 SB Ramps	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.45	0.00	A
					PM	-	0.45	A	-	-	0.47	0.02	A
2	Clark Avenue @ SR-135 NB Ramps	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.54	0.02	A
					PM	-	0.48	A	-	-	0.49	0.01	A
3	Clark Avenue @ US-101 SB Ramps	Orcutt	SSSC	C	AM	6.8	-	A	8.0	1.2	-	-	A
					PM	5.6	-	A	6.4	0.8	-	-	A
4	Clark Avenue @ US-101 NB Ramps	Orcutt	Signal	C	AM	-	0.46	A	-	-	0.47	0.01	A
					PM	-	0.44	A	-	-	0.48	0.04	A
5	E Union Valley Parkway @ US-101 SB Ramps	Orcutt	SSSC	C	AM	8.9	-	A	14.5	5.6	-	-	B
					PM	9.8	-	A	10.4	0.6	-	-	B
6	Santa Maria Way @ US-101 SB Ramps	Orcutt	SSSC	C	AM	5.9	-	A	6.0	0.1	-	-	A
					PM	5.1	-	A	5.0	-0.1	-	-	A
7	Betteravia Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.53	A	-	-	0.57	0.04	A
					PM	-	0.54	A	-	-	0.57	0.03	A
8	Betteravia Road @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.42	A	-	-	0.45	0.03	A
					PM	-	0.60	B	-	-	0.62	0.02	B
9	S Bradley Road @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.51	A	-	-	0.52	0.01	A
					PM	-	0.70	C	-	-	0.75	0.05	C
10	E Stowell Road @ Nicholson Ave/US-101 NB Ramps	Santa Maria	SSSC	D	AM	14.4	-	B	13.6	-0.8	-	-	B
					PM	49.1	-	**E**	32.0	-17.1	-	-	D
11	E Main Street @ US-101 SB Ramps	Santa Maria	Signal	D	AM	-	0.78	C	-	-	0.80	0.02	D
					PM	-	0.64	B	-	-	0.69	0.05	B
12	E Main Street @ US-101 NB Ramps	Santa Maria	Signal	D	AM	-	0.57	A	-	-	0.63	0.06	B
					PM	-	0.67	B	-	-	0.73	0.06	C
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.45	A	-	-	0.50	0.05	A
					PM	-	0.44	A	-	-	0.50	0.06	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.58	A	-	-	0.65	0.07	B
					PM	-	0.57	A	-	-	0.65	0.08	B
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.52	A	-	-	0.54	0.02	A
					PM	-	0.51	A	-	-	0.53	0.02	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.59	A	-	-	0.63	0.04	B
					PM	-	0.59	A	-	-	0.61	0.02	B
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.49	A	-	-	0.49	0.00	A
					PM	-	0.47	A	-	-	0.49	0.02	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.57	A	-	-	0.58	0.01	A
					PM	-	0.50	A	-	-	0.52	0.02	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Ammended May 2022 and the City of Santa Maria General Plan. 1994. Ammended Sept 2011
Intersection Capacity Utlilzation (ICU) methodology used for signal controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 15

Existing (2024) plus Project Buildout(Residential Only) AM and PM Peak-Hour Traffic Volumes

Cumulative (2035) Conditions

Peak-hour traffic volumes for Cumulative (2035) Conditions were obtained from the most recent version of the Santa Barbara County Association of Governments' (SBCAG) travel demand model (SBCAG TDM). Volumes at the study intersections were developed adding the growth from the SBCAG TDM between the base year and future year to the Existing (2024) traffic counts.

Using the volumes developed for Cumulative (2035) conditions, LOS was determined at the study facilities. Cumulative (2035) Conditions peak-hour traffic volumes are presented in Figure 16 for the AM and PM peak-hours. Detailed calculations are included in Appendix I.

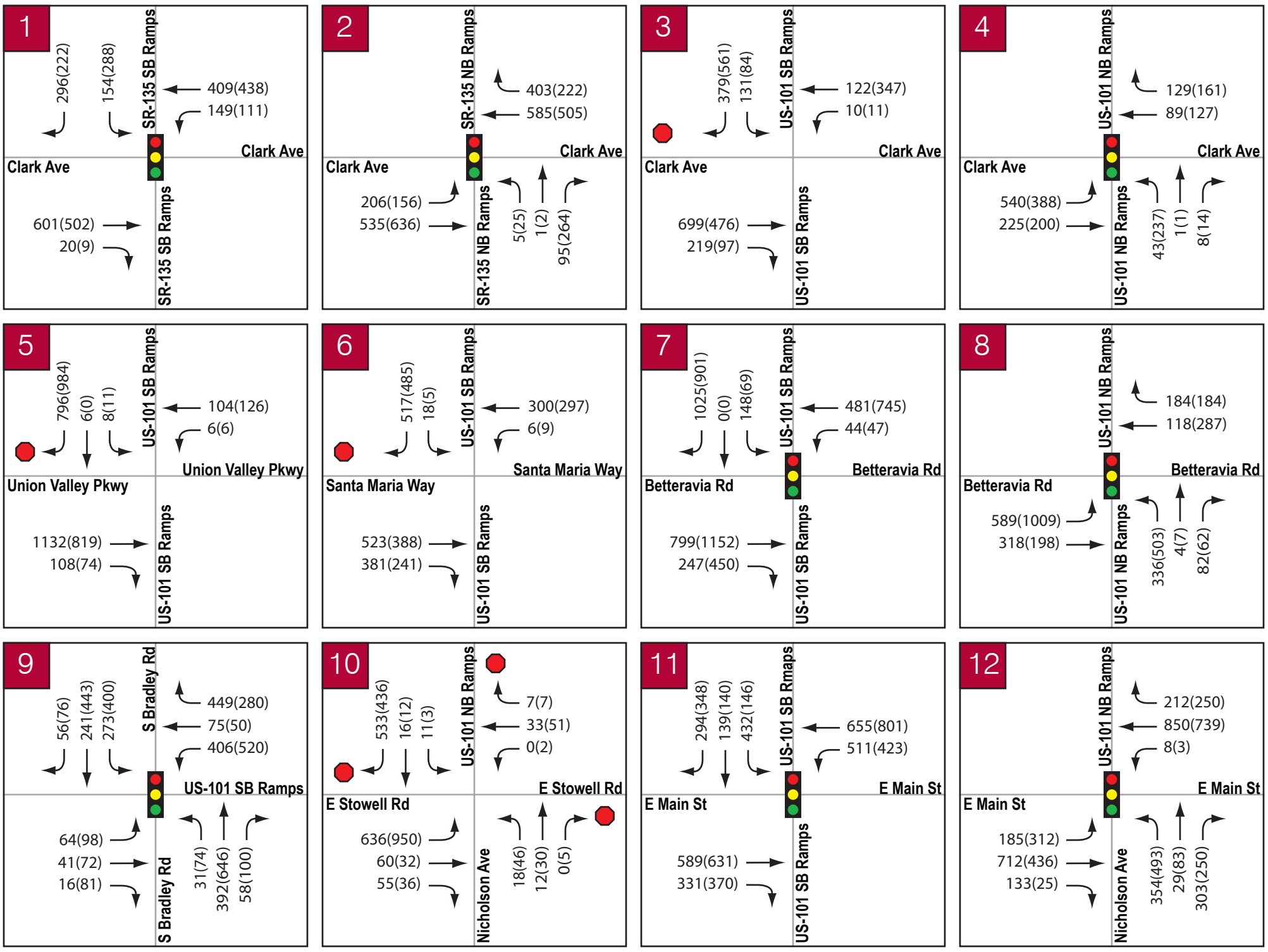
Table 17 presents the intersection operating conditions for this scenario. As indicated in Table 17, the following intersections operate deficiently under this scenario:

- Intersection #10 - E Stowell Road @ Nicholson Ave/US-101 NB Ramps

Table 17 – Cumulative (2035) Conditions Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Cumulative Conditions (2035)		
					Hour	Delay [sec]	V/C	LOS
1	Clark Avenue @ SR-135 southbound ramps	Orcutt	Signal	C	AM	-	0.47	A
					PM	-	0.46	A
2	Clark Avenue @ SR-135 northbound ramps	Orcutt	Signal	C	AM	-	0.54	A
					PM	-	0.49	A
3	Clark Avenue @ US-101 southbound ramps	Orcutt	SSSC	C	AM	8.6	-	A
					PM	6.0	-	A
4	Clark Avenue @ US-101 northbound ramps	Orcutt	Signal	C	AM	-	0.47	A
					PM	-	0.45	A
5	E Union Valley Parkway @ US-101 southbound ramps	Orcutt	SSSC	C	AM	18.8	-	C
					PM	11.0	-	B
6	Santa Maria Way @ US-101 southbound ramps	Orcutt	SSSC	C	AM	5.8	-	A
					PM	5.2	-	A
7	Betteravia Road @ US-101 southbound ramps	Santa Maria	Signal	D	AM	-	0.56	A
					PM	-	0.59	A
8	Betteravia Road @ US-101 northbound ramps	Santa Maria	Signal	D	AM	-	0.44	A
					PM	-	0.65	B
9	S Bradley Road @ US-101 southbound ramps	Santa Maria	Signal	D	AM	-	0.58	A
					PM	-	0.78	C
10	E Stowell Road @ Nicholson Ave/US-101 northbound ramps	Santa Maria	SSSC*	D	AM	12.1	0.57	B
					PM	**51.3**	**0.77**	**F**
11	E Main Street @ US-101 southbound ramps	Santa Maria	Signal	D	AM	-	0.83	D
					PM	-	0.67	B
12	E Main Street @ US-101 northbound ramps	Santa Maria	Signal	D	AM	-	0.60	B
					PM	-	0.71	C
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.48	A
					PM	-	0.45	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.61	B
					PM	-	0.61	B
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.55	A
					PM	-	0.55	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.64	B
					PM	-	0.62	B
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.54	A
					PM	-	0.49	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.58	A
					PM	-	0.51	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Amended May 2022 and the City of Santa Maria General Plan. 1994. Amended Sept 2011
Intersection Capacity Utilization (ICU) methodology used for signal-controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 16
Cumulative (2035) Conditions AM and PM Peak-Hour Traffic Volumes

Cumulative (2035) Plus Proposed Project Buildout Conditions

Project Buildout trips were distributed and assigned to study intersections by adding them to Cumulative (2035) Conditions traffic volumes. Using these volumes, LOS was determined at the study facilities. Cumulative (2035) plus Project Buildout peak-hour traffic volumes are presented in Figure 17 for the AM and PM peak-hours. Analysis worksheets for this scenario are included in Appendix J.

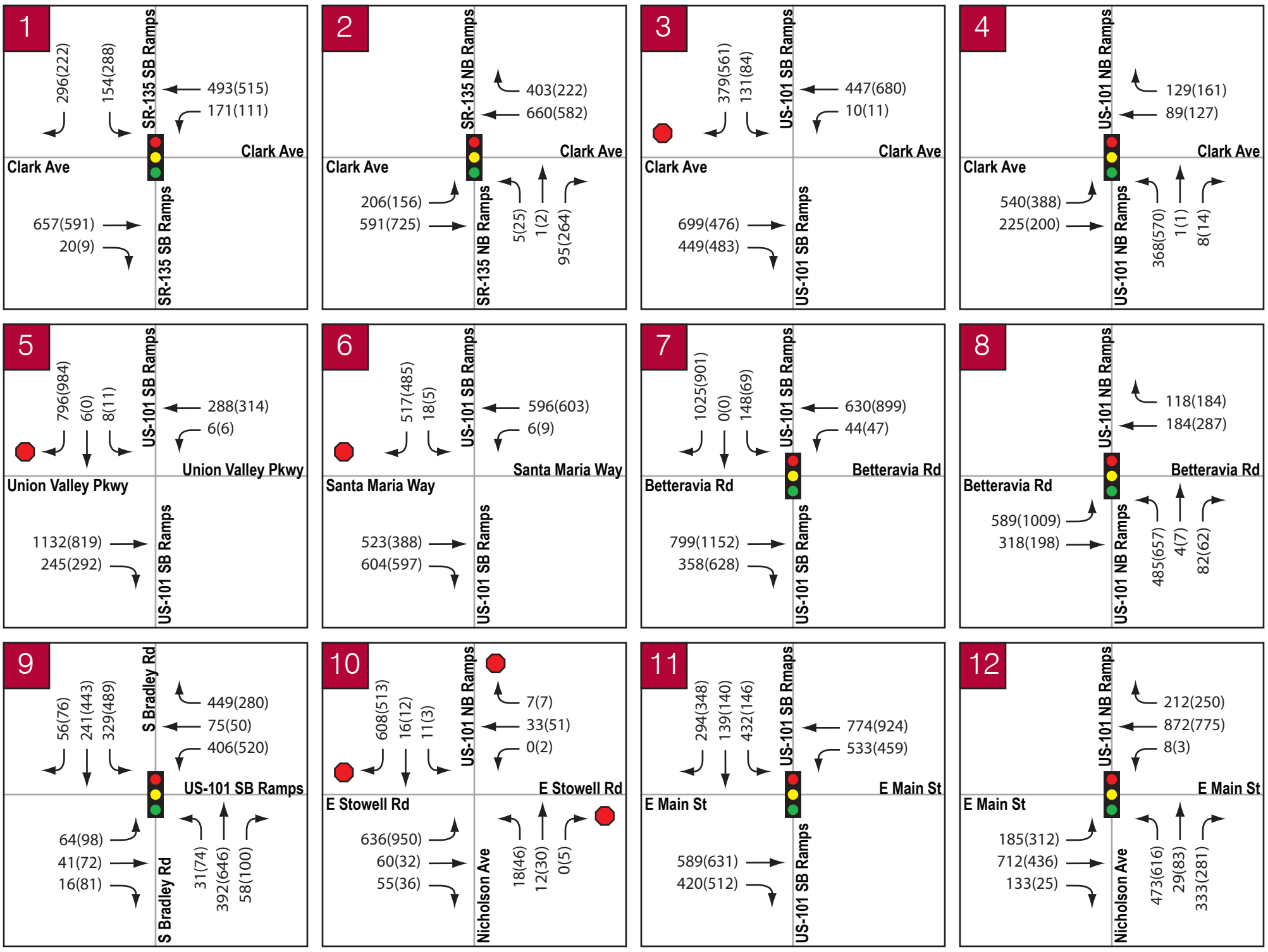
Table 18 presents the intersection operating conditions for this scenario. As indicated in Table 18, the following intersections operate deficiently under this scenario:

- Intersection #10 - E Stowell Road @ Nicholson Ave/US-101 NB Ramps

Table 18 – Cumulative (2035) plus Proposed Project Buildout Intersection Levels of Service

ID	Intersection	Jurisdiction	Control	Threshold	Peak	Cumulative Conditions (2035)			Cumulative Conditions Plus Project: Build Out (2035)				
					Hour	Delay [sec]	V/C	LOS	Delay [sec]	Δ Delay [sec]	V/C	Δ V/C	LOS
1	Clark Avenue @ SR-135 southbound ramps	Orcutt	Signal	C	AM	-	0.47	A	-	-	0.48	0.01	A
					PM	-	0.46	A	-	-	0.49	0.03	A
2	Clark Avenue @ SR-135 northbound ramps	Orcutt	Signal	C	AM	-	0.54	A	-	-	0.56	0.02	A
					PM	-	0.49	A	-	-	0.51	0.02	A
3	Clark Avenue @ US-101 southbound ramps	Orcutt	SSSC	C	AM	8.6	-	A	14.5	5.9	-	-	B
					PM	6	-	A	7.2	1.2	-	-	A
4	Clark Avenue @ US-101 northbound ramps	Orcutt	Signal	C	AM	-	0.47	A	-	-	0.49	0.02	A
					PM	-	0.45	A	-	-	0.59	0.14	A
5	E Union Valley Parkway @ US-101 southbound ramps	Orcutt	SSSC	C	AM	18.8	-	C	23.0	4.2	-	-	C
					PM	11	-	B	17.7	6.7	-	-	C
6	Santa Maria Way @ US-101 southbound ramps	Orcutt	SSSC	C	AM	5.8	-	A	5.8	0.0	-	-	A
					PM	5.2	-	A	5.2	0.0	-	-	A
7	Betteravia Road @ US-101 southbound ramps	Santa Maria	Signal	D	AM	-	0.56	A	-	-	0.60	0.04	B
					PM	-	0.59	A	-	-	0.63	0.04	B
8	Betteravia Road @ US-101 northbound ramps	Santa Maria	Signal	D	AM	-	0.44	A	-	-	0.48	0.04	A
					PM	-	0.65	B	-	-	0.69	0.04	B
9	S Bradley Road @ US-101 southbound ramps	Santa Maria	Signal	D	AM	-	0.58	A	-	-	0.61	0.03	B
					PM	-	0.78	C	-	-	0.83	0.05	D
10	E Stowell Road @ Nicholson Ave/US-101 northbound ramps	Santa Maria	SSSC	D	AM	12.1	0.57	B	11.1	-1.0	-	-	B
					PM	**51.3**	**0.77**	**F**	**49.5**	**-1.8**	**-**	**-**	**E**
11	E Main Street @ US-101 southbound ramps	Santa Maria	Signal	D	AM	-	0.83	D	-	-	0.86	0.03	D
					PM	-	0.67	B	-	-	0.73	0.06	C
12	E Main Street @ US-101 northbound ramps	Santa Maria	Signal	D	AM	-	0.60	B	-	-	0.67	0.07	B
					PM	-	0.71	C	-	-	0.79	0.08	C
13	Clark Avenue @ Stillwell Road	Orcutt	Signal	C	AM	-	0.48	A	-	-	0.56	0.08	A
					PM	-	0.45	A	-	-	0.54	0.09	A
14	Clark Avenue @ S Bradley Road	Orcutt	Signal	C	AM	-	0.61	B	-	-	0.70	0.09	C
					PM	-	0.61	B	-	-	0.72	0.11	C
15	Clark Avenue @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.55	A	-	-	0.57	0.02	A
					PM	-	0.55	A	-	-	0.57	0.02	A
16	Union Valley Parkway @ S Bradley Road	Orcutt	Signal	C	AM	-	0.64	B	-	-	0.70	0.06	C
					PM	-	0.62	B	-	-	0.66	0.04	B
17	Union Valley Parkway @ Orcutt Frontage Road	Orcutt	Signal	C	AM	-	0.54	A	-	-	0.55	0.01	A
					PM	-	0.49	A	-	-	0.50	0.01	A
18	S Bradley Road @ E Foster Road	Orcutt	Signal	C	AM	-	0.58	A	-	-	0.59	0.01	A
					PM	-	0.51	A	-	-	0.53	0.02	A

SSSC = Side Street Stop Controlled.
Thresholds identified from the Orcutt Community Plan. 1997. Amended May 2022 and the City of Santa Maria General Plan. 1994. Amended Sept 2011
Intersection Capacity Utilization (ICU) methodology used for signal-controlled intersections.
Highway Capacity Manual 7th Edition (HCM7) delay methodology used for unsignalized intersections.



NOT TO SCALE

LEGEND

- # Study Intersection
- Stop Controlled Approach
- Signalized Intersection
- Roundabout
- XX(YY) AM(PM) Peak Hour Volume

Kimley»Horn

Figure 17

Cumulative (2035) plus Project Buildout Conditions AM and PM Peak-Hour Traffic Volumes

Deficiencies and Improvements

Recommended improvements at study intersections are based on whether the deficient operations at a study intersection under plus Project scenarios is caused by Project traffic. Where a project induced deficiency is identified, and that deficiency is inconsistent with its jurisdiction's policy, recommendations are made to restore operations at the study intersection back to no-project operations.

The cost of any recommended improvements under Existing (2024) scenarios would be assessed entirely to the Project and the anticipated development trigger for the needed improvement is identified. The cost of any recommended improvements under Cumulative (2035) scenarios would be assessed on a fair share basis where the Project would contribute funds towards the improvements proportional to the Project added entering vehicles when compared to the total increase in entering vehicles at the deficient intersection.

Existing (2024) and Cumulative (2035) Conditions

- Intersection #10 – E Stowell Road @ Nicholson Ave/US-101 NB Ramps
  - This intersection operates at unacceptable LOS for all scenarios. However, the addition of Project Buildout traffic would reduce average delay at the stop-controlled approach during the PM peak-hour. The reduction in average approach delay at this intersection with Project traffic added is due to Project trips only being added to the southbound right movement during both the AM and PM peak-hours. The southbound right movement is uncontrolled with a dedicated receiving lane meaning the Project trips do not experience delay at this intersection. As a result, the added Project trips are not increasing the delay experienced by other drivers at this intersection, **thus there is no Project induced deficiency at this intersection.**

Freeway Interchange Off-Ramp Queuing Evaluation

A queuing study was conducted to evaluate the queueing that occurs at study intersection freeway off-ramps. Synchro reports were used to conduct the queuing analysis. The 95th percentile vehicle queues were compared against the existing off-ramp storage lengths from stop bar to end of gore point to determine if the queues are anticipated to back onto the freeway mainline and potentially create unsafe freeway operations. Results of the queuing evaluation are presented in **Table 19**. Analysis sheets that include the anticipated vehicle queues are presented in **Appendix K.**

As presented in **Table 19**, all queues with the addition of the proposed Project fall within the existing ramp storage capacity.

Table 19 – Intersection Queuing Evaluation Results

ID	Intersection	Control	Traffic Movement	Peak Hour	Available Storage [ft]	Existing Plus Project (Build Out)	Cumulative Year Plus Project (Build Out)
1	Clark Avenue @ SR-135 southbound ramps	Signal	SBT	AM	1015	125	125
				PM		175	200
			SBR	AM		75	75
				PM		50	50
2	Clark Avenue @ SR-135 northbound ramps	Signal	NBT	AM	880	25	25
				PM		50	50
3	Clark Avenue @ US-101 southbound ramps	SSSC	SBL	AM	845	75	100
				PM		50	50
			SBR	AM		225	225
				PM		675	775
4	Clark Avenue @ US-101 northbound ramps	Signal	NBL	AM	880	225	250
				PM		375	425
			NBT	AM		25	25
				PM		25	25
5	E Union Valley Parkway @ US-101 southbound ramps	SSSC	SBT/SBL	AM	1035	75	100
				PM		75	100
			SBR	AM		225	275
				PM		325	375
6	Santa Maria Way @ US-101 southbound ramps	SSSC	SBL	AM	1330	25	25
				PM		25	25
7	Betteravia Road @ US-101 southbound ramps	Signal	SBL	AM	925	50	50
				PM		25	25
			SBT	AM		50	50
				PM		25	25
			SBR	AM		250	325
				PM		200	200
8	Betteravia Road @ US-101 northbound ramps	Signal	NBL	AM	860	125	150
				PM		175	250
			NBT	AM		125	175
				PM		175	275
			NBR	AM		25	50
				PM		25	25
9	S Bradley Road @ US-101 southbound ramps	Signal	WBL	AM	775	175	250
				PM		250	300
			WBT	AM		175	250
				PM		250	300
			WBR	AM		100	125
				PM		50	50
10	E Stowell Road @ Nicholson Ave/US-101 northbound ramps	SSSC*	SBT/SBL	AM	1470	25	75
				PM		50	75
11	E Main Street @ US-101 southbound ramps	Signal	SBT	AM	1050	425	425
				PM		150	175
			SBR	AM		125	150
				PM		175	175

Internal Project Circulation

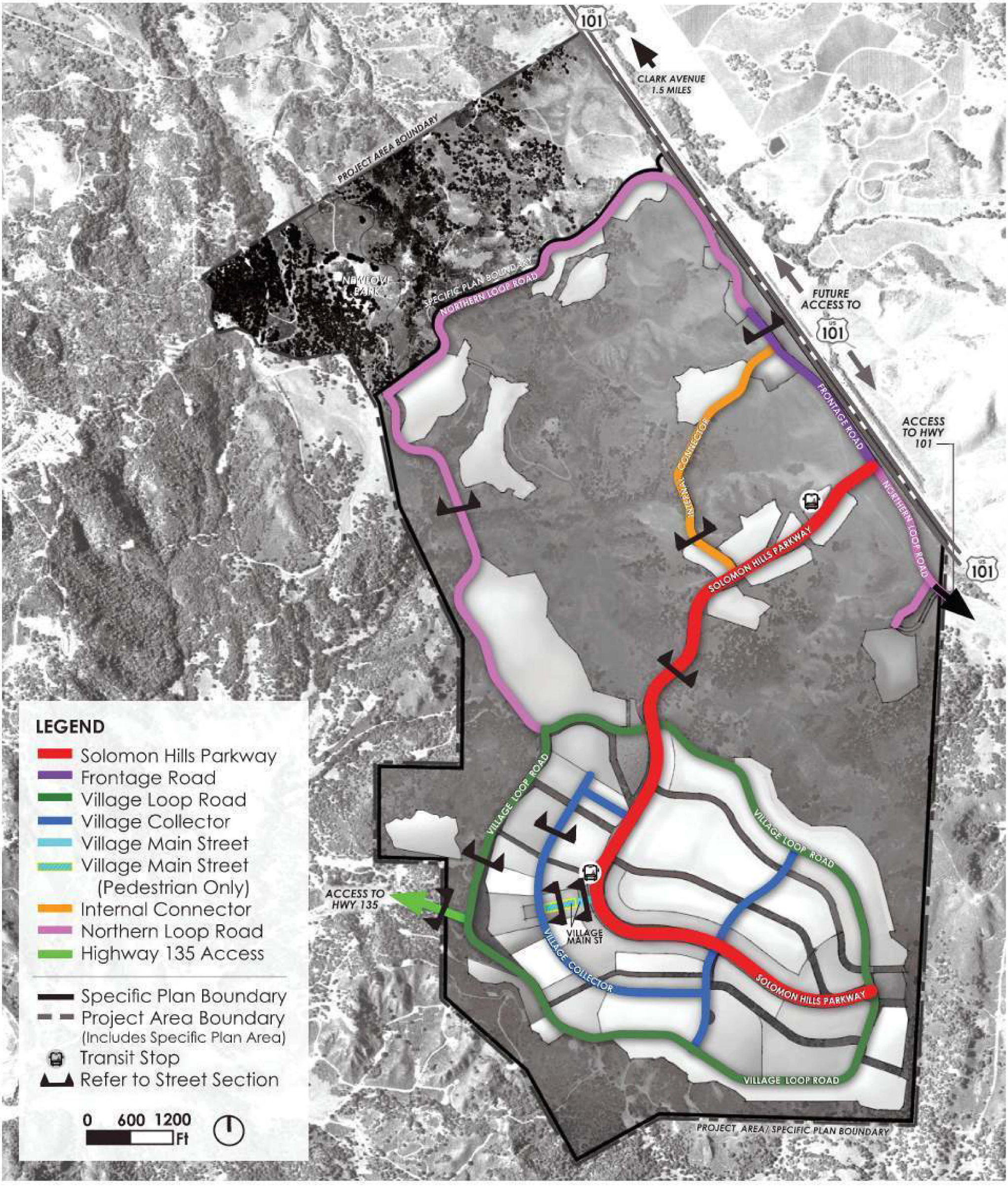
The Project proposes multiple internally circulating roads within the Project area to accommodate on-site traffic. **Figure 18** shows the proposed locations for each road type. Proposed roadway cross sections from the specific plan are included in **Appendix L**. Project average daily traffic (ADT) on Project roadways was estimated using ITE trip generation rates and distributed using the SBCAG TDM. Roadways analyzed include:

- Solomon Hills Parkway – a divided four-lane arterial with adjacent greenbelt including an off-street Class I bike facility and sidewalk running through the center of the development area to US 101.
- Frontage Road – an undivided four-lane arterial that travels parallel to US-101 providing access between the freeway interchange and the Village Boulevard.
- Village Loop Road – an undivided two-lane arterial with on-street Class IV buffered bike facilities and sidewalk that circulates in a ring around the major residential development connecting to the Village Boulevard.
- Village Collector – an undivided two-lane major collector with a Class I bike/ped facility and sidewalks running between and parallel to the Village Loop Road and Village Boulevard through the Village core commercial, office, and retail land uses.
- Local Road (Internal Connector) – an undivided two-lane local road.
- Northern Loop Road – an undivided two-lane arterial with elevated Class I bike/ped facility that provides access to plan areas 22-28 along the northwest side of the Project.

Table 20 summarizes the results for internal Project roads daily traffic operation based on thresholds described in the *County of Santa Barbara Circulation Element Chapter III. Roadway Classification System*. Projected ADT on Project roadways was compared against the policy capacity thresholds defined in the County's Circulation element. As shown in **Table 20**, the Project roadways all fall below their policy capacity thresholds and therefore are consistent with County policy and guidelines.

Table 20 – Internal Roadway Average Daily Traffic Level of Service

Roadway	Extent		ADT	Road Classification	Number of Lanes	Policy Capacity	Below Threshold?
	Between…	and…					
Solomon Hills Parkway	Frontage Rd	Internal Connector	22,960	Four Lane Arterial	4	30,000	Yes
	Internal Connector	Village Loop Rd	23,130				Yes
	Village Loop Rd	Village Main St	15,800				Yes
	Village Main St	Village Collector	9,380				Yes
	Village Collector	Village Loop Rd	3,120				Yes
Frontage Rd	Solomon Hills Parkway	Internal Connector	19,720	Four Lane Arterial	4	30,000	Yes
	Internal Connector	US 101 Southbound Ramps	11,250				Yes
Village Loop Rd	Northern Loop Rd	Highway 135 Access	2,730	Two Lane Major Road	2	10,000	Yes
	Highway 135 Access	Village Collector	1,430				Yes
	Village Collector (Southern)	Solomon Hills Parkway	1,990				Yes
	Solomon Hills Parkway	Village Collector (Northern)	530				Yes
	Village Collector (Northern)	Solomon Hills Parkway	7,030				Yes
	Solomon Hills Parkway	Northern Loop Rd	4,230				Yes
Village Collector (West to East Segment)	Solomon Hills Parkway	Village Main St	6,050	Two Lane Major Road	2	10,000	Yes
	Village Main St	Village Core Collector (Area 13)	2,380				Yes
Village Collector (North to South Segment)	Village Loop Rd	Solomon Hills Parkway	3,670	Two Lane Major Road	2	10,000	Yes
	Solomon Hills Parkway	Village Loop Rd	5,710				Yes
Northen Loop Rd (East)	Solomon Hills Parkway	US 101 Access	3,830	Two Lane Major Road	2	10,000	Yes
Northen Loop Rd (North)	Village Loop Rd	Frontage Rd	2,230		2	10,000	Yes
Internal Connector	Frontage Rd	Solomon Hills Parkway	1,330	Collector Rd	2	5,000	Yes



Kimley»Horn

Figure 18
Proposed Project Internal Roadway Network

Supporting Memorandums

San Antonio Road Traffic Analysis

The *San Antonio Road Traffic Analysis Memorandum*[8] (**Appendix M**) is a supplementary memorandum to the *Vehicle Miles Traveled and Local Transportation Analysis* that evaluated the effect of the Project trips assigned to SR-135 and San Anonio Road/Graciosa Road as they travel between the Project and Vanderberg Space Force base and the surrounding area. Project trips assigned to SR-135 would access the roadway from the Project at the existing intersection with San Antonio Road. The following intersections were examined during the AM and PM peak-hours under Existing (2024) and Existing (2024) plus Project Conditions:

1. SR-135 @ San Antonio Road/Graciosa Road
2. Highway @ at San Anonio Road

Note that this memorandum was completed using a land use mix included in the previous Transportation Impact Study Report[9]. Under the previous analysis, the proposed Project's trip generation under buildout conditions was 31,650 new daily trips with 2,487 new trips occurring during the AM peak-hour and 3,088 new trips occurring during the PM peak-hour. Of these trips, 6-percent were trips distributed to/from the West via SR-135/Highway 1, consistent with the current analysis. The current trip generation for the proposed Project is 36,612 new daily trips with 2,745 new trips occurring during the AM peak-hour and 3,633 new trips occurring during the PM peak-hour. Using the current trip distribution, which is unchanged from the previously used trip distribution, the change in trip assignment totals from the *San Antonio Road Traffic Analysis Memorandum* to current trip generation is summarized in **Table 21** below.

Table 21 – Trip Assignment Comparison

Scenario	Intersection ID	AM Peak Hour Project Trips	PM Peak Hour Project Trips
San Antonio Road Trip Assignment	1	150	188
	2	75	94
Current Trip Assignment	1	164	218
	2	82	109
Change in Project Trips	1	14	30
	2	7	15

Results from the analysis conducted in the memorandum can be found in **Appendix M**. Based on the analysis results summarized in the memorandum, the following findings were made:

- The SR-135 intersection with San Antonio Road (Intersection #1) operates at acceptable LOS B or better under Existing and Existing plus Project conditions. Capacity at this intersection can accommodate 100-percent of Project buildout.
- The Highway 1 intersection with San Antonio Road (Intersection #2) operates at unacceptable LOS D under Existing Conditions and degrades to LOS E with addition of Project traffic. Because the intersection currently operates unacceptably, any addition of Project traffic would trigger a deficiency.
    - Operations at the Intersection #2 may be improved to acceptable LOS A under Existing plus Project Conditions by installing a traffic signal and providing left- and right-turn pockets to

[8] *San Antonio Road Traffic Analysis Memorandum*. Kimley-Horn. September 18, 2024.
[9] *Solomon Hills Specific Plan Vehicle Miles Traveled and Local Transportation Analysis*. Kimley-Horn. February 3, 2025.

provide vehicles traveling from Highway 1 onto San Antonio Road a separate lane from through traffic.

- All queues are accommodated by existing queue storage under Existing and Existing plus Project Conditions. Improved signalized conditions at Intersection #2 assume a right- and left-turn storage pocket of 100-feet is constructed to accommodate vehicles turning from Highway 1 onto San Antonio Road.

Given the slight increase in project trips and relatively low delay in the once a traffic signal is installed to address the identified deficiency at the Highway 1 intersection with San Antonio Road (Intersection #2), it can be assumed that the additional Project trips shown in Table 21 will not add delay to the study intersections such that the findings would change. Therefore, it is determined that the findings identified in the memorandum would also be consistent with the current trip generation summarized in this report.

CONCLUSIONS

Vehicle Miles Traveled

Findings of this study related to the VMT evaluation include:

- Table 2 summarizes the VMT per service population for the proposed Project and compares it to the Unincorporated Santa Barbara County threshold. As shown in Table 2, when the affordable housing units are not factored in, the Project results in a VMT per service population of 20.2 VMT per service population versus a threshold of 21.1 VMT per service population, which is 0.9 VMT per service population below the Unincorporated Santa Barbara County threshold.
- Further, using the trip reductions summarized in and to better represent the trip making characteristics of the Project's 400 affordable housing units and the 725 age-restricted units, the VMT per service population for the proposed Project is reduced from 20.2 to 18.0, or 14.7-percent less than the Unincorporated Santa Barbara County threshold, as shown in . Therefore, the Project is determined to result in a less than significant transportation impact.
- Under the assumption the proposed Project's non-residential components may be developed after the completion of the residential components, an analysis was performed assuming the commercial retail and office land uses were not developed. Under this scenario the Project results in a VMT per service population of 23.1 compared to a threshold of 21.1 VMT per service population. Using the trip reductions summarized in and , the VMT per service population decrease from 23.1 to 20.6, or 2.4-percent less than the Unincorporated Santa Barbara County threshold, as shown in .

Local Transportation Analysis

Findings of this study related to the LTA include the following by analysis type and scenario:

Project Trip Generation

- Phase 1 of the Project is estimated to generate 11,099 new daily trips with 791 new trips occurring during the AM peak-hour and 659 new trips occurring during the PM peak-hour.
- Phase 2 of the Project is estimated to generate 15,682 new daily trips with 1,096 new trips occurring during the AM peak-hour and 886 new trips occurring during the PM peak-hour.
- Phase 3 of the Project is estimated to generate 28,566 new daily trips with 2,039 new trips occurring during the AM peak-hour and 2,765 new trips occurring during the PM peak-hour.
- Buildout of the Project is estimated to generate 33,320 new daily trips with 2,606 new trips occurring during the AM peak-hour and 3,312 new trips occurring during the PM peak-hour.
- Buildout of the Project residential only is estimated to generate 26,604 new daily trips with 1,829 new trips occurring during the AM peak-hour and 2,605 new trips occurring during the PM peak-hour.

Intersection Level of Service

- No Project Conditions – the following intersections operate deficiently under this scenario:
  - Intersection #10 - E Stowell Road @ Nicholson Ave/US-101 NB Ramps
- Plus Project Conditions – the following intersections operate deficiently under this scenario:
  - Intersection #10 - E Stowell Road @ Nicholson Ave/US-101 NB Ramps

Recommended Improvements

Recommended improvements at study intersections are based on whether the deficient operations at a study intersection under plus Project scenarios is caused by Project traffic. Where a project induced deficiency is identified, and that deficiency is inconsistent with its jurisdiction's policy, recommendations are made to restore operations at the study intersection back to no-project operations.

The cost of any recommended improvements under Existing (2024) scenarios would be assessed entirely to the project and the anticipated development trigger for the needed improvement is identified. The cost of any recommended improvements under Cumulative (2035) scenarios would be assessed on a fair share basis where the Project would contribute funds towards the improvements proportional to the Project added entering vehicles when compared to the total increase in entering vehicles at the deficient intersection.

Existing (2024) and Cumulative (2035) plus Project Conditions

- Intersection #10 – E Stowell Road @ Nicholson Ave/US-101 NB Ramps
  - This intersection operates at unacceptable LOS for all analysis scenarios. However, the addition of Project Buildout traffic would reduce average delay at the stop-controlled approach during the PM peak-hour. The reduction in average approach delay at this intersection with Project traffic added is due to Project trips only being added to the southbound right movement during both the AM and PM peak-hours. The southbound right movement is uncontrolled with a dedicated receiving lane meaning the Project trips do not experience delay at this intersection. As a result, the added Project trips are not increasing the delay experienced by other drivers at this intersection, **thus there is no Project induced deficiency at this intersection.**

Freeway Interchange Off-ramp Queueing

- All calculated 95th percentile queues under all phases for Existing and Cumulative scenarios fall within the existing ramp storage capacity. There are no anticipated safety concerns due to queue spill back onto freeway mainlines from the addition of Project traffic.

Site Access and Circulation

- Interchange Access
  - All Project access intersections will operate at acceptable LOS except for:
    - Intersection #22 US-101 Ramps @ Project Access Roadway
      - The Project is currently proposing a single lane roundabout at this intersection. This analysis determines that the demand volume at this intersection will exceed capacity under Project Buildout conditions. Ultimate configuration and lane geometry at this intersection may be determined as the future design and layout of the new US-101 interchange is finalized in coordination with Caltrans.
- Circulation on Internal Roadways
  - Projected ADT on Project roads is compared against the policy capacity thresholds defined in the County's Circulation element. The Project roads all fall below their policy capacity thresholds and therefore are consistent with County policy and guidelines.

Appendix A

Trip Generation Output Details

Project Phase 1 Weekday Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	891	DU	Ln(T) = 0.92 Ln(X) + 2.68	50%	50%	3,774	3,773	7,547	1.3%	95	3,720	3,732	7,452	0.0%	0	3,720	3,732	7,452
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	311	DU	T = 6.41(X) + 75.31	50%	50%	1,035	1,034	2,069	1.3%	26	1,020	1,023	2,043	0.0%	0	1,020	1,023	2,043
3	(223) Affordable Housing	Income Limits	135	DU	T = 3.73(X) + 139.35	50%	50%	322	321	643	1.3%	9	317	317	634	0.0%	0	317	317	634
4	(251) Senior Adult Housing	All Sites	55	DU	Ln(T) = 0.85 Ln(X) + 2.47	50%	50%	178	178	356	1.3%	4	176	176	352	0.0%	0	176	176	352
5	(252) Senior Adult Housing	All Sites	75	DU	T = 3.24(X)	50%	50%	122	121	243	1.3%	3	120	120	240	0.0%	0	120	120	240
6	(710) General Office Building	All Sites	5	KSF	Ln(T) = 0.87 Ln(X) + 3.05	50%	50%	43	43	86	17.4%	15	33	38	71	0.0%	0	33	38	71
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	T = 42.20(X) + 229.68	50%	50%	326	326	652	21.5%	140	268	244	512	40.0%	205	161	146	307
					Total:			5,800	5,796	11,596	2.5%	292	5,654	5,650	11,304	1.8%	205	5,547	5,552	11,099

Project Phase 1 AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	891	DU	Ln(T) = 0.91 Ln(X) + 0.12	25%	75%	136	409	545	0.6%	4	134	407	541	0.0%	0	134	407	541
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	311	DU	T = 0.31(X) + 22.85	24%	76%	29	90	119	0.6%	1	29	89	118	0.0%	0	29	89	118
3	(223) Affordable Housing	Income Limits	135	DU	T = 0.5(X)	29%	71%	20	48	68	0.6%	0	20	48	68	0.0%	0	20	48	68
4	(251) Senior Adult Housing	All Sites	55	DU	Ln(T) = 0.76 Ln(X) + 0.16	33%	67%	8	17	25	0.6%	0	8	17	25	0.0%	0	8	17	25
5	(252) Senior Adult Housing	All Sites	75	DU	T = 0.2(X)	34%	66%	5	10	15	0.6%	0	5	10	15	0.0%	0	5	10	15
6	(710) General Office Building	All Sites	5	KSF	Ln(T) = 0.86 Ln(X) + 1.16	88%	12%	11	2	13	15.4%	2	10	1	11	0.0%	0	10	1	11
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.66 Ln(X) + 1.84	60%	40%	17	12	29	24.1%	7	13	9	22	40.0%	9	8	5	13
					Total:			226	588	814	1.7%	14	219	581	800	1.1%	9	214	577	791

Project Phase 1 PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	891	DU	Ln(T) = 0.94 Ln(X) + 0.27	63%	37%	490	287	777	1.7%	14	481	282	763	0.0%	0	481	282	763
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	311	DU	T = 0.43(X) + 20.55	63%	37%	97	57	154	1.7%	3	95	56	151	0.0%	0	95	56	151
3	(223) Affordable Housing	Income Limits	135	DU	T = 0.46(X)	59%	41%	37	25	62	1.7%	1	36	25	61	0.0%	0	36	25	61
4	(251) Senior Adult Housing	All Sites	55	DU	Ln(T) = 0.78 Ln(X) + 0.20	61%	39%	17	11	28	1.7%	0	17	11	28	0.0%	0	17	11	28
5	(252) Senior Adult Housing	All Sites	75	DU	T = 0.25(X)	56%	44%	11	8	19	1.7%	0	11	8	19	0.0%	0	11	8	19
6	(710) General Office Building	All Sites	5	KSF	Ln(T) = 0.83 Ln(X) + 1.29	17%	83%	2	12	14	35.7%	5	0	9	9	0.0%	0	0	9	9
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.71 Ln(X) + 2.72	50%	50%	39	39	78	26.9%	21	31	26	57	40.0%	23	19	15	34
					Total:			693	439	1,132	3.9%	44	671	417	1,088	2.1%	23	659	406	1,065

Project Phase 2 Weekday Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	1,025	DU	Ln(T) = 0.92 Ln(X) + 2.68	50%	50%	4,293	4,293	8,586	6.1%	520	3,951	4,115	8,066	0.0%	0	3,951	4,115	8,066
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	311	DU	T = 6.41(X) + 75.31	50%	50%	1,035	1,034	2,069	6.1%	126	952	991	1,943	0.0%	0	952	991	1,943
3	(223) Affordable Housing	Income Limits	205	DU	T = 3.73(X) + 139.35	50%	50%	452	452	904	6.1%	55	416	433	849	0.0%	0	416	433	849
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.85 Ln(X) + 2.47	50%	50%	860	859	1,719	6.1%	105	791	823	1,614	0.0%	0	791	823	1,614
5	(252) Senior Adult Housing	All Sites	375	DU	T = 3.24(X)	50%	50%	608	607	1,215	6.1%	73	560	582	1,142	0.0%	0	560	582	1,142
6	(710) General Office Building	All Sites	30	KSF	Ln(T) = 0.87 Ln(X) + 3.05	50%	50%	204	203	407	18.7%	76	156	175	331	0.0%	0	156	175	331
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	T = 42.20(X) + 229.68	50%	50%	326	326	652	21.3%	140	268	244	512	40.0%	205	161	146	307
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	15	LKSF	T = 76.96(X) + 1412.79	50%	50%	1,284	1,283	2,567	21.3%	547	1,058	962	2,020	40.0%	808	635	577	1,212
9	(488) Soccer Complex	All Sites	3	FLD	T = 71.33(X)	50%	50%	107	107	214	48.8%	105	99	10	109	0.0%	0	99	10	109
10	(490) Tennis Courts	All Sites	4	COURT	T = 30.32(X)	50%	50%	61	60	121	48.8%	59	57	5	62	0.0%	0	57	5	62
11	(411) Public Park	All Sites	3.5	ACRE	T = 0.64(X) + 88.46	50%	50%	46	45	91	48.8%	44	43	4	47	0.0%	0	43	4	47
							Total:	9,276	9,269	18,545	10.0%	1,850	8,351	8,344	16,695	6.1%	1,013	7,821	7,861	15,682

Project Phase 2 AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	1,025	DU	Ln(T) = 0.91 Ln(X) + 0.12	25%	75%	155	464	619	2.4%	15	148	456	604	0.0%	0	148	456	604
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	311	DU	T = 0.31(X) + 22.85	24%	76%	29	90	119	2.4%	2	28	89	117	0.0%	0	28	89	117
3	(223) Affordable Housing	Income Limits	205	DU	T = 0.5(X)	29%	71%	30	73	103	2.4%	2	29	72	101	0.0%	0	29	72	101
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.76 Ln(X) + 0.16	33%	67%	33	68	101	2.4%	3	31	67	98	0.0%	0	31	67	98
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.2(X)	34%	66%	26	49	75	2.4%	2	25	48	73	0.0%	0	25	48	73
6	(710) General Office Building	All Sites	30	KSF	Ln(T) = 0.86 Ln(X) + 1.16	88%	12%	52	7	59	10.2%	6	48	5	53	0.0%	0	48	5	53
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.66 Ln(X) + 1.84	60%	40%	17	12	29	22.0%	7	13	9	22	40.0%	9	8	5	13
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	15	LKSF	T = 3.53(X)	62%	38%	33	20	53	22.0%	11	26	16	42	40.0%	17	16	9	25
9	(488) Soccer Complex	All Sites	3	FLD	T = 0.99(X)	61%	39%	2	1	3	40.0%	1	2	0	2	0.0%	0	2	0	2
10	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	61%	39%	10	7	17	40.0%	7	9	1	10	0.0%	0	9	1	10
11	(411) Public Park	All Sites	3.5	ACRE	T = 0.02(X)	59%	41%	0	0	0	40.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	387	791	1,178	4.8%	56	359	763	1,122	2.3%	26	344	752	1,096

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	1,025	DU	Ln(T) = 0.94 Ln(X) + 0.27	63%	37%	558	328	886	8.0%	72	504	310	814	0.0%	0	504	310	814
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	311	DU	T = 0.43(X) + 20.55	63%	37%	97	57	154	8.0%	12	88	54	142	0.0%	0	88	54	142
3	(223) Affordable Housing	Income Limits	205	DU	T = 0.46(X)	59%	41%	55	39	94	8.0%	7	50	37	87	0.0%	0	50	37	87
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.78 Ln(X) + 0.20	61%	39%	72	46	118	8.0%	10	65	43	108	0.0%	0	65	43	108
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.25(X)	56%	44%	53	41	94	8.0%	7	48	39	87	0.0%	0	48	39	87
6	(710) General Office Building	All Sites	30	KSF	Ln(T) = 0.83 Ln(X) + 1.29	17%	83%	10	51	61	39.3%	24	-1	38	37	0.0%	0	-1	38	37
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.71 Ln(X) + 2.72	50%	50%	39	39	78	26.9%	21	31	26	57	40.0%	23	19	15	34
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	15	LKSF	T = 7.67(X) + 118.86	48%	52%	112	122	234	26.9%	63	90	81	171	40.0%	68	54	49	103
9	(488) Soccer Complex	All Sites	3	FLD	T = 13.92(X) + 35.13	66%	34%	51	26	77	34.0%	26	49	2	51	0.0%	0	49	2	51
10	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	66%	34%	11	6	17	34.0%	6	10	1	11	0.0%	0	10	1	11
11	(411) Public Park	All Sites	3.5	ACRE	T = 0.11(X)	55%	45%	0	0	0	34.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	1,058	755	1,813	13.7%	248	934	631	1,565	5.8%	91	886	588	1,474

Project Phase 3 Weekday Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,183	DU	Ln(T) = 0.92 Ln(X) + 2.68	50%	50%	8,606	8,606	17,212	9.7%	1,665	7,527	8,020	15,547	0.0%	0	7,527	8,020	15,547
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 6.41(X) + 75.31	50%	50%	2,012	2,012	4,024	9.7%	389	1,760	1,875	3,635	0.0%	0	1,760	1,875	3,635
3	(223) Affordable Housing	Income Limits	350	DU	T = 3.73(X) + 139.35	50%	50%	723	722	1,445	9.7%	140	632	673	1,305	0.0%	0	632	673	1,305
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.85 Ln(X) + 2.47	50%	50%	860	859	1,719	9.7%	167	752	800	1,552	0.0%	0	752	800	1,552
5	(252) Senior Adult Housing	All Sites	375	DU	T = 3.24(X)	50%	50%	608	607	1,215	9.7%	117	532	566	1,098	0.0%	0	532	566	1,098
6	(710) General Office Building	All Sites	160	KSF	Ln(T) = 0.87 Ln(X) + 3.05	50%	50%	874	873	1,747	18.5%	323	662	762	1,424	0.0%	0	662	762	1,424
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	T = 42.20(X) + 229.68	50%	50%	326	326	652	23.2%	152	261	239	500	40.0%	200	157	143	300
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	45	LKSF	T = 76.96(X) + 1412.79	50%	50%	2,438	2,438	4,876	23.2%	1,133	1,954	1,789	3,743	40.0%	1,497	1,172	1,074	2,246
9	(520) Elementary School	All Sites	1,011	STU	T = 2.27(X)	50%	50%	1,148	1,147	2,295	45.7%	1,049	861	385	1,246	0.0%	0	861	385	1,246
10	(488) Soccer Complex	All Sites	3	FLD	T = 71.33(X)	50%	50%	107	107	214	50.0%	107	97	10	107	0.0%	0	97	10	107
11	(490) Tennis Courts	All Sites	4	COURT	T = 30.32(X)	50%	50%	61	60	121	50.0%	61	55	5	60	0.0%	0	55	5	60
12	(411) Public Park	All Sites	3.5	ACRE	T = 0.64(X) + 88.46	50%	50%	46	45	91	50.0%	45	42	4	46	0.0%	0	42	4	46
							Total:	17,809	17,802	35,611	15.0%	5,348	15,135	15,128	30,263	5.6%	1,697	14,249	14,317	28,566

Project Phase 3 AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,183	DU	Ln(T) = 0.91 Ln(X) + 0.12	25%	75%	308	924	1,232	24.2%	294	172	766	938	0.0%	0	172	766	938
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 0.31(X) + 22.85	24%	76%	51	163	214	24.2%	50	29	135	164	0.0%	0	29	135	164
3	(223) Affordable Housing	Income Limits	350	DU	T = 0.5(X)	29%	71%	51	124	175	24.2%	43	29	103	132	0.0%	0	29	103	132
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.76 Ln(X) + 0.16	33%	67%	33	68	101	24.2%	27	18	56	74	0.0%	0	18	56	74
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.2(X)	34%	66%	26	49	75	24.2%	19	15	41	56	0.0%	0	15	41	56
6	(710) General Office Building	All Sites	160	KSF	Ln(T) = 0.86 Ln(X) + 1.16	88%	12%	221	30	251	11.6%	29	202	20	222	0.0%	0	202	20	222
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.66 Ln(X) + 1.84	60%	40%	17	12	29	25.5%	8	13	8	21	40.0%	8	8	5	13
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	45	LKSF	T = 3.53(X)	62%	38%	99	60	159	25.5%	40	77	42	119	40.0%	48	46	25	71
9	(520) Elementary School	All Sites	1,011	STU	T = 0.74(X)	54%	46%	404	344	748	52.3%	391	202	155	357	0.0%	0	202	155	357
10	(488) Soccer Complex	All Sites	3	FLD	T = 0.99(X)	61%	39%	2	1	3	40.0%	1	2	0	2	0.0%	0	2	0	2
11	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	61%	39%	10	7	17	40.0%	7	9	1	10	0.0%	0	9	1	10
12	(411) Public Park	All Sites	3.5	ACRE	T = 0.02(X)	59%	41%	0	0	0	40.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	1,222	1,782	3,004	30.3%	909	768	1,327	2,095	2.7%	56	732	1,307	2,039

Project Phase 3 PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,183	DU	Ln(T) = 0.94 Ln(X) + 0.27	63%	37%	1,136	667	1,803	10.1%	183	998	622	1,620	0.0%	0	998	622	1,620
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 0.43(X) + 20.55	63%	37%	180	105	285	10.1%	29	158	98	256	0.0%	0	158	98	256
3	(223) Affordable Housing	Income Limits	350	DU	T = 0.46(X)	59%	41%	95	66	161	10.1%	16	84	61	145	0.0%	0	84	61	145
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.78 Ln(X) + 0.20	61%	39%	72	46	118	10.1%	12	63	43	106	0.0%	0	63	43	106
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.25(X)	56%	44%	53	41	94	10.1%	9	47	38	85	0.0%	0	47	38	85
6	(710) General Office Building	All Sites	160	KSF	Ln(T) = 0.83 Ln(X) + 1.29	17%	83%	42	203	245	26.9%	66	6	173	179	0.0%	0	6	173	179
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.71 Ln(X) + 2.72	50%	50%	39	39	78	27.7%	21	31	26	57	40.0%	23	19	15	34
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	45	LKSF	T = 7.67(X) + 118.86	48%	52%	223	241	464	27.7%	129	175	160	335	40.0%	134	105	96	201
9	(520) Elementary School	All Sites	1,011	STU	T = 0.16(X)	46%	54%	75	87	162	40.1%	65	75	22	97	0.0%	0	75	22	97
10	(488) Soccer Complex	All Sites	3	FLD	T = 13.92(X) + 35.13	66%	34%	51	26	77	34.0%	26	49	2	51	0.0%	0	49	2	51
11	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	66%	34%	11	6	17	34.0%	6	10	1	11	0.0%	0	10	1	11
12	(411) Public Park	All Sites	3.5	ACRE	T = 0.11(X)	55%	45%	0	0	0	34.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	1,977	1,527	3,504	16.0%	562	1,696	1,246	2,942	5.3%	157	1,614	1,171	2,785

Project Phase 4 Buildout Weekday Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,259	DU	Ln(T) = 0.92 Ln(X) + 2.68	50%	50%	8,882	8,881	17,763	14.0%	2,478	7,336	7,949	15,285	0.0%	0	7,336	7,949	15,285
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 6.41(X) + 75.31	50%	50%	2,012	2,012	4,024	14.0%	561	1,662	1,801	3,463	0.0%	0	1,662	1,801	3,463
3	(223) Affordable Housing	Income Limits	400	DU	T = 3.73(X) + 139.35	50%	50%	816	815	1,631	14.0%	228	674	729	1,403	0.0%	0	674	729	1,403
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.85 Ln(X) + 2.47	50%	50%	860	859	1,719	14.0%	240	710	769	1,479	0.0%	0	710	769	1,479
5	(252) Senior Adult Housing	All Sites	375	DU	T = 3.24(X)	50%	50%	608	607	1,215	14.0%	170	502	543	1,045	0.0%	0	502	543	1,045
6	(710) General Office Building	All Sites	525	KSF	Ln(T) = 0.87 Ln(X) + 3.05	50%	50%	2,456	2,455	4,911	14.6%	715	2,046	2,150	4,196	0.0%	0	2,046	2,150	4,196
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	T = 42.20(X) + 229.68	50%	50%	326	326	652	24.6%	161	256	235	491	40.0%	196	154	141	295
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	115	LKSF	T = 76.96(X) + 1412.79	50%	50%	5,132	5,131	10,263	24.6%	2,522	4,035	3,706	7,741	40.0%	3,096	2,421	2,224	4,645
9	(520) Elementary School	All Sites	1,051	STU	T = 2.27(X)	50%	50%	1,193	1,193	2,386	45.7%	1,090	895	401	1,296	0.0%	0	895	401	1,296
10	(488) Soccer Complex	All Sites	3	FLD	T = 71.33(X)	50%	50%	107	107	214	50.0%	107	97	10	107	0.0%	0	97	10	107
11	(490) Tennis Courts	All Sites	4	COURT	T = 30.32(X)	50%	50%	61	60	121	50.0%	61	55	5	60	0.0%	0	55	5	60
12	(411) Public Park	All Sites	3.5	ACRE	T = 0.64(X) + 88.46	50%	50%	46	45	91	50.0%	45	42	4	46	0.0%	0	42	4	46
							Total:	22,499	22,491	44,990	18.6%	8,378	18,310	18,302	36,612	9.0%	3,292	16,594	16,726	33,320

Project Phase 4 Buildout AM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,259	DU	Ln(T) = 0.91 Ln(X) + 0.12	25%	75%	318	953	1,271	25.0%	314	177	780	957	0.0%	0	177	780	957
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 0.31(X) + 22.85	24%	76%	51	163	214	25.0%	53	28	133	161	0.0%	0	28	133	161
3	(223) Affordable Housing	Income Limits	400	DU	T = 0.5(X)	29%	71%	58	142	200	25.0%	52	32	116	148	0.0%	0	32	116	148
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.76 Ln(X) + 0.16	33%	67%	33	68	101	25.0%	27	18	56	74	0.0%	0	18	56	74
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.2(X)	34%	66%	26	49	75	25.0%	20	15	40	55	0.0%	0	15	40	55
6	(710) General Office Building	All Sites	525	KSF	Ln(T) = 0.86 Ln(X) + 1.16	88%	12%	613	84	697	11.3%	79	562	56	618	0.0%	0	562	56	618
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.66 Ln(X) + 1.84	60%	40%	17	12	29	19.8%	6	14	9	23	40.0%	9	8	6	14
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	115	LKSF	T = 3.53(X)	62%	38%	252	154	406	19.8%	80	210	116	326	40.0%	130	126	70	196
9	(520) Elementary School	All Sites	1,051	STU	T = 0.74(X)	54%	46%	420	358	778	52.3%	407	210	161	371	0.0%	0	210	161	371
10	(488) Soccer Complex	All Sites	3	FLD	T = 0.99(X)	61%	39%	2	1	3	40.0%	1	2	0	2	0.0%	0	2	0	2
11	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	61%	39%	10	7	17	40.0%	7	9	1	10	0.0%	0	9	1	10
12	(411) Public Park	All Sites	3.5	ACRE	T = 0.02(X)	59%	41%	0	0	0	40.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	1,800	1,991	3,791	27.6%	1,046	1,277	1,468	2,745	5.1%	139	1,187	1,419	2,606

Project Phase 4 Buildout PM Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,259	DU	Ln(T) = 0.94 Ln(X) + 0.27	63%	37%	1,173	689	1,862	15.6%	291	962	609	1,571	0.0%	0	962	609	1,571
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 0.43(X) + 20.55	63%	37%	180	105	285	15.6%	44	148	93	241	0.0%	0	148	93	241
3	(223) Affordable Housing	Income Limits	400	DU	T = 0.46(X)	59%	41%	109	75	184	15.6%	29	89	66	155	0.0%	0	89	66	155
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.78 Ln(X) + 0.20	61%	39%	72	46	118	15.6%	18	59	41	100	0.0%	0	59	41	100
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.25(X)	56%	44%	53	41	94	15.6%	14	44	36	80	0.0%	0	44	36	80
6	(710) General Office Building	All Sites	525	KSF	Ln(T) = 0.83 Ln(X) + 1.29	17%	83%	112	546	658	18.5%	122	53	483	536	0.0%	0	53	483	536
7	(822) Strip Retail Plaza (<40k)	All Sites	10	LKSF	Ln(T) = 0.71 Ln(X) + 2.72	50%	50%	39	39	78	27.8%	21	31	26	57	40.0%	23	19	15	34
8	(821) Shopping Plaza (40-150k)	Supermarket - Yes	115	LKSF	T = 7.67(X) + 118.86	48%	52%	480	521	1,001	27.8%	279	376	346	722	40.0%	289	226	207	433
9	(520) Elementary School	All Sites	1,051	STU	T = 0.16(X)	46%	54%	77	91	168	40.5%	68	77	23	100	0.0%	0	77	23	100
10	(488) Soccer Complex	All Sites	3	FLD	T = 13.92(X) + 35.13	66%	34%	51	26	77	34.0%	26	49	2	51	0.0%	0	49	2	51
11	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	66%	34%	11	6	17	34.0%	6	10	1	11	0.0%	0	10	1	11
12	(411) Public Park	All Sites	3.5	ACRE	T = 0.11(X)	55%	45%	0	0	0	34.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	2,357	2,185	4,542	20.2%	918	1,898	1,726	3,624	8.6%	312	1,736	1,576	3,312

Project Phase 4 Buildout without non-residential uses Weekday Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,259	DU	Ln(T) = 0.92 Ln(X) + 2.68	50%	50%	8,882	8,881	17,763	4.8%	860	8,231	8,672	16,903	0.0%	0	8,231	8,672	16,903
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 6.41(X) + 75.31	50%	50%	2,012	2,012	4,024	4.8%	194	1,865	1,965	3,830	0.0%	0	1,865	1,965	3,830
3	(223) Affordable Housing	Income Limits	400	DU	T = 3.73(X) + 139.35	50%	50%	816	815	1,631	4.8%	79	756	796	1,552	0.0%	0	756	796	1,552
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.85 Ln(X) + 2.47	50%	50%	860	859	1,719	4.8%	83	797	839	1,636	0.0%	0	797	839	1,636
5	(252) Senior Adult Housing	All Sites	375	DU	T = 3.24(X)	50%	50%	608	607	1,215	4.8%	59	563	593	1,156	0.0%	0	563	593	1,156
6	(520) Elementary School	All Sites	1,051	STU	T = 2.27(X)	50%	50%	1,193	1,193	2,386	45.2%	1,078	895	413	1,308	0.0%	0	895	413	1,308
7	(488) Soccer Complex	All Sites	3	FLD	T = 71.33(X)	50%	50%	107	107	214	48.6%	104	99	11	110	0.0%	0	99	11	110
8	(490) Tennis Courts	All Sites	4	COURT	T = 30.32(X)	50%	50%	61	60	121	48.6%	59	56	6	62	0.0%	0	56	6	62
9	(411) Public Park	All Sites	3.5	ACRE	T = 0.64(X) + 88.46	50%	50%	46	45	91	48.6%	44	43	4	47	0.0%	0	43	4	47
							Total:	14,585	14,579	29,164	8.8%	2,560	13,305	13,299	26,604	0.0%	0	13,305	13,299	26,604

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,259	DU	Ln(T) = 0.91 Ln(X) + 0.12	25%	75%	318	953	1,271	22.3%	280	184	807	991	0.0%	0	184	807	991
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 0.31(X) + 22.85	24%	76%	51	163	214	22.3%	46	30	138	168	0.0%	0	30	138	168
3	(223) Affordable Housing	Income Limits	400	DU	T = 0.5(X)	29%	71%	58	142	200	22.3%	46	34	120	154	0.0%	0	34	120	154
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.76 Ln(X) + 0.16	33%	67%	33	68	101	22.3%	24	19	58	77	0.0%	0	19	58	77
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.2(X)	34%	66%	26	49	75	22.3%	19	15	41	56	0.0%	0	15	41	56
6	(520) Elementary School	All Sites	1,051	STU	T = 0.74(X)	54%	46%	420	358	778	52.3%	407	210	161	371	0.0%	0	210	161	371
7	(488) Soccer Complex	All Sites	3	FLD	T = 0.99(X)	61%	39%	2	1	3	40.0%	1	2	0	2	0.0%	0	2	0	2
8	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	61%	39%	10	7	17	40.0%	7	9	1	10	0.0%	0	9	1	10
9	(411) Public Park	All Sites	3.5	ACRE	T = 0.02(X)	59%	41%	0	0	0	40.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	918	1,741	2,659	31.2%	830	503	1,326	1,829	0.0%	0	503	1,326	1,829

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1	(210) Single-Family Detached Housing	All Sites	2,259	DU	Ln(T) = 0.94 Ln(X) + 0.27	63%	37%	1,173	689	1,862	3.9%	74	1,101	687	1,788	0.0%	0	1,101	687	1,788
2	(220) Multifamily Housing (Low-Rise)	Not Close to Rail Transit	616	DU	T = 0.43(X) + 20.55	63%	37%	180	105	285	3.9%	12	169	104	273	0.0%	0	169	104	273
3	(223) Affordable Housing	Income Limits	400	DU	T = 0.46(X)	59%	41%	109	75	184	3.9%	7	102	75	177	0.0%	0	102	75	177
4	(251) Senior Adult Housing	All Sites	350	DU	Ln(T) = 0.78 Ln(X) + 0.20	61%	39%	72	46	118	3.9%	4	68	46	114	0.0%	0	68	46	114
5	(252) Senior Adult Housing	All Sites	375	DU	T = 0.25(X)	56%	44%	53	41	94	3.9%	3	50	41	91	0.0%	0	50	41	91
6	(520) Elementary School	All Sites	1,051	STU	T = 0.16(X)	46%	54%	77	91	168	40.5%	68	77	23	100	0.0%	0	77	23	100
7	(488) Soccer Complex	All Sites	3	FLD	T = 13.92(X) + 35.13	66%	34%	51	26	77	34.0%	26	49	2	51	0.0%	0	49	2	51
8	(490) Tennis Courts	All Sites	4	COURT	T = 4.21(X)	66%	34%	11	6	17	34.0%	6	10	1	11	0.0%	0	10	1	11
9	(411) Public Park	All Sites	3.5	ACRE	T = 0.11(X)	55%	45%	0	0	0	34.0%	0	0	0	0	0.0%	0	0	0	0
							Total:	1,726	1,079	2,805	7.1%	200	1,626	979	2,605	0.0%	0	1,626	979	2,605

	TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Subcategory	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	Net New In	Out	Total
1																				
2																				

Appendix B

Traffic Count Data Sheets

Prepared by National Data & Surveying Services

SR 135 SB Ramps & Clark Ave

Peak Hour Turning Movement Count

ID: 24-050006-001
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND — SR 135 SB Ramps

AM	296	0	150	0	0	AM
NOON	0	0	0	0	0	NOON
PM	219	0	265	0	0	PM
	1	0.5	0.5	0		

EASTBOUND — Clark Ave

AM	NOON	PM	
705	0	646	⇦
0	0	0	0 ↶
0	0	0	0 ↱
588	0	492	2 →
18	0	9	0 ↷

WESTBOUND — Clark Ave

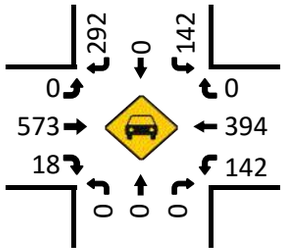
PM	NOON	AM	
0	0	0	0 ↶
427	0	409	2 ←
105	0	149	1 ↰
0	0	0	0 ↷
757	0	738	⇨

NORTHBOUND — SR 135 SB Ramps

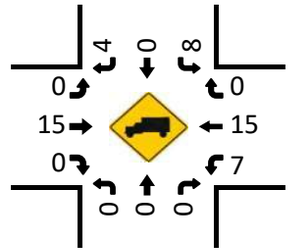
PM	114	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	167	0	0	0	0	AM
		0	0	0	0	

CONTROL			
Signalized			
TEV	1610 AM	0 NOON	1517 PM
PHF	0.83		0.93

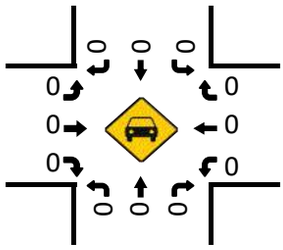
Cars (AM)



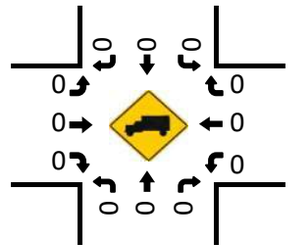
HT (AM)



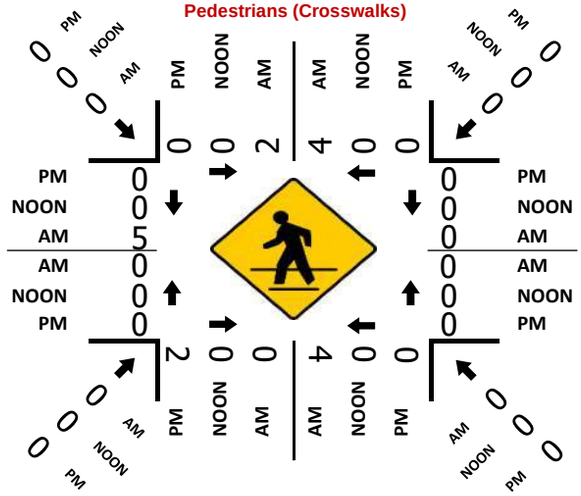
Cars (NOON)



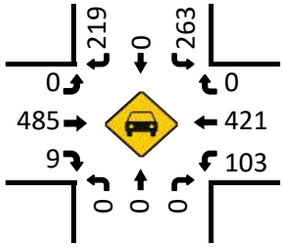
HT (NOON)



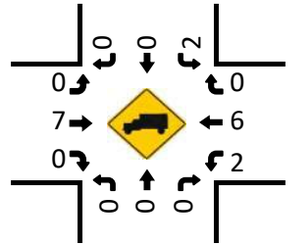
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

SR 135 NB Ramps & Clark Ave

Peak Hour Turning Movement Count

ID: 24-050006-002
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	1738	0	1727
PHF	0.89		0.94

SOUTHBOUND (SR 135 NB Ramps)

AM	0	0	0	0	567	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	362	PM

EASTBOUND (Clark Ave)

AM	NOON	PM	
565	0	518	
0	0	0	0
210	0	155	1
518	0	602	2
0	0	0	0
AM	NOON	PM	

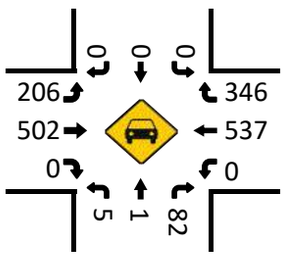
WESTBOUND (Clark Ave)

PM	NOON	AM	
205	0	356	0
494	0	560	2
0	0	0	0
0	0	0	0
847	0	606	
PM	NOON	AM	

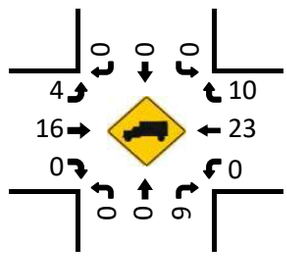
NORTHBOUND (SR 135 NB Ramps)

PM	0	0	24	2	245	PM
NOON	0	0	0	0	0	NOON
AM	0	0	5	1	88	AM

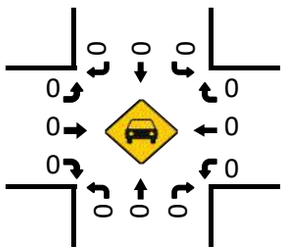
Cars (AM)



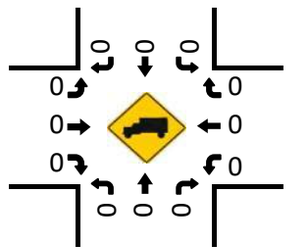
HT (AM)



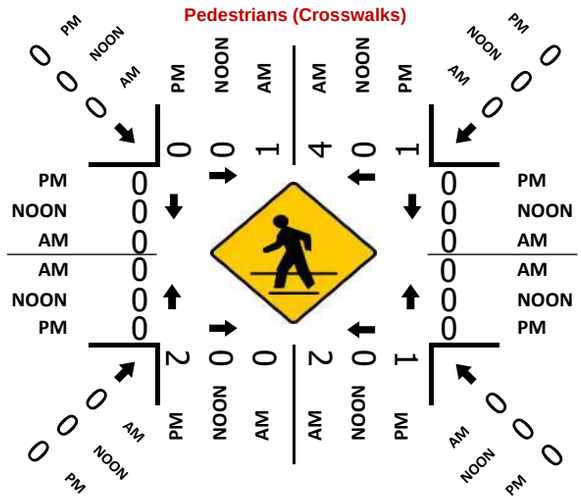
Cars (NOON)



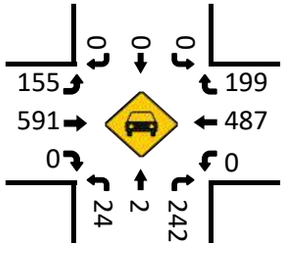
HT (NOON)



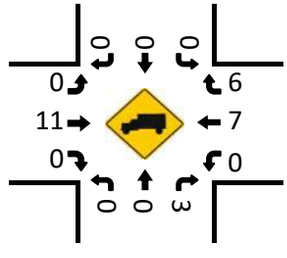
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

US 101 SB Ramps & Clark Ave

Peak Hour Turning Movement Count

ID: 24-050006-003
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:30 PM - 05:30 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND — US 101 SB Ramps

AM	379	0	125	0	0	AM
NOON	0	0	0	0	0	NOON
PM	561	0	72	0	0	PM

EASTBOUND — Clark Ave

AM	NOON	PM	
499	0	835	
1	0	0	0
0	0	0	0
639	0	476	2
135	0	86	0
AM	NOON	PM	

WESTBOUND — Clark Ave

PM	NOON	AM	
0	0	0	0
274	0	119	1
11	0	3	1
0	0	0	0
548	0	764	
PM	NOON	AM	

NORTHBOUND — US 101 SB Ramps

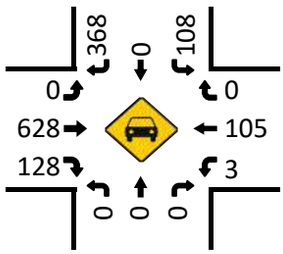
PM	97	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	138	0	0	0	0	AM

	SOUTHBOUND	WESTBOUND	NORTHBOUND
	1	0	1	0	0	0	0	0

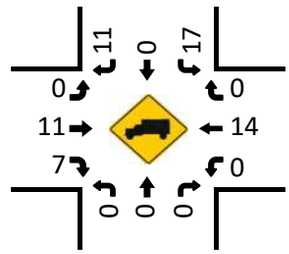
CONTROL: 1-Way Stop (SB)

TEV	1401 AM	0 NOON	1480 PM
PHF	0.83		0.93

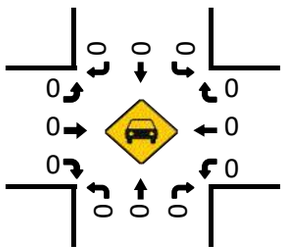
Cars (AM)



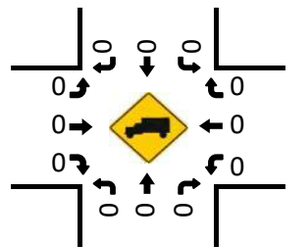
HT (AM)



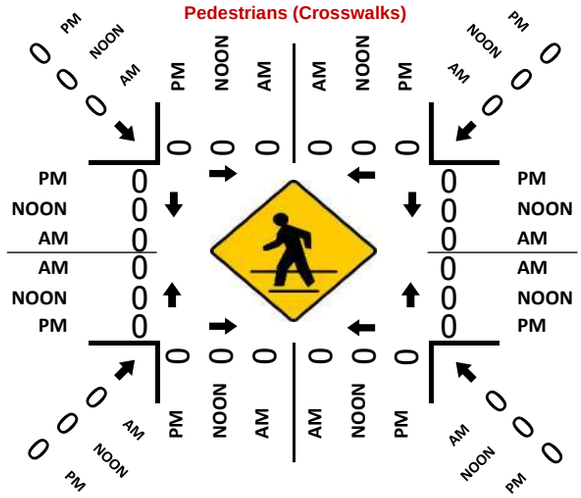
Cars (NOON)



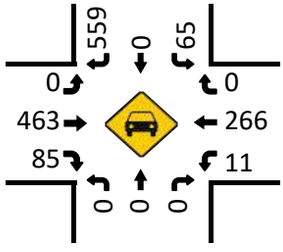
HT (NOON)



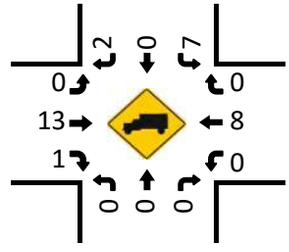
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

US 101 NB Ramps & Clark Ave

Peak Hour Turning Movement Count

ID: 24-050006-004
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	1009	0	1030
PHF	0.78		0.95

SOUTHBOUND (US 101 NB Ramps)

AM	0	0	0	0	659	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	543	PM

EASTBOUND (Clark Ave)

AM	NOON	PM		
122	0	287	⇦	
0	0	0	↶	0
540	0	388	↱	2
220	0	192	→	1
0	0	0	↷	0
AM	NOON	PM		

WESTBOUND (Clark Ave)

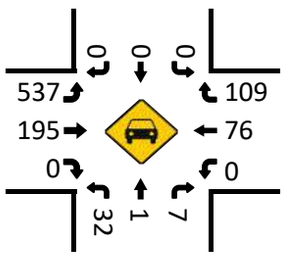
PM	NOON	AM		
154	0	118	↰	1
127	0	87	←	1
0	0	0	↰	0
0	0	0	↶	0
200	0	228	⇨	
PM	NOON	AM		

NORTHBOUND (US 101 NB Ramps)

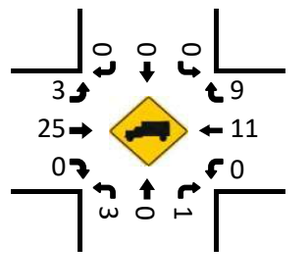
PM	0	0	160	1	8	PM
NOON	0	0	0	0	0	NOON
AM	0	0	35	1	8	AM

0 0 0 0 — 0 1 0.5 0.5

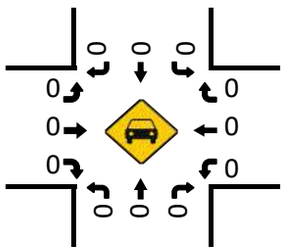
Cars (AM)



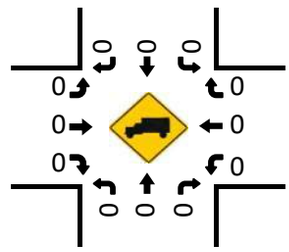
HT (AM)



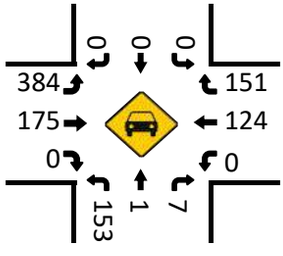
Cars (NOON)



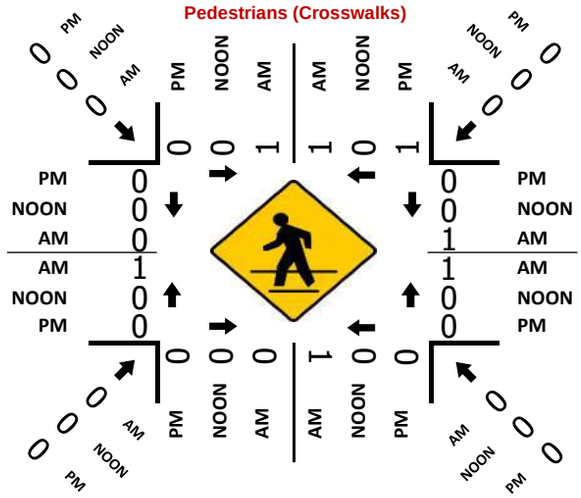
HT (NOON)



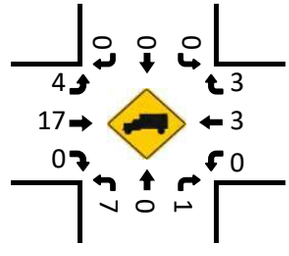
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

US 101 SB Ramps & E Union Valley Pkwy

Peak Hour Turning Movement Count

ID: 24-050006-005
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS
AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS
AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND — US 101 SB Ramps

AM	764	1	3	0	0	AM
NOON	0	0	0	0	0	NOON
PM	949	0	4	0	0	PM

EASTBOUND — E Union Valley Pkwy

AM	NOON	PM		
861	0	1059	⇦	
0	0	0	↶	0
0	0	0	↱	0
1094	0	786	→	1
105	0	62	↷	0
AM	NOON	PM		

WESTBOUND — E Union Valley Pkwy

PM	NOON	AM		
0	0	0	↶	0
110	0	97	←	1
3	0	3	↰	1
0	0	0	↱	0
790	0	1097	⇨	
PM	NOON	AM		

NORTHBOUND — US 101 SB Ramps

PM	65	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	109	0	0	0	0	AM

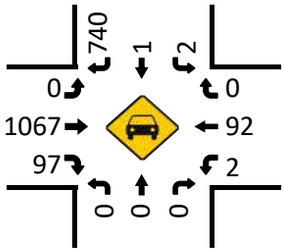
↶	↰	↑	↱	
1.3	0.3	0.3	0	
0	0	0	0	⇩

CONTROL

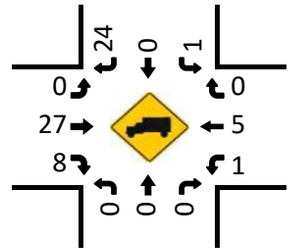
1-Way Stop (SB)

TEV	2067 AM	0 NOON	1914 PM
PHF	0.86		0.95

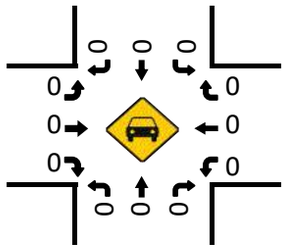
Cars (AM)



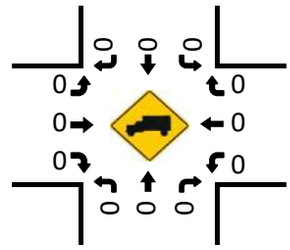
HT (AM)



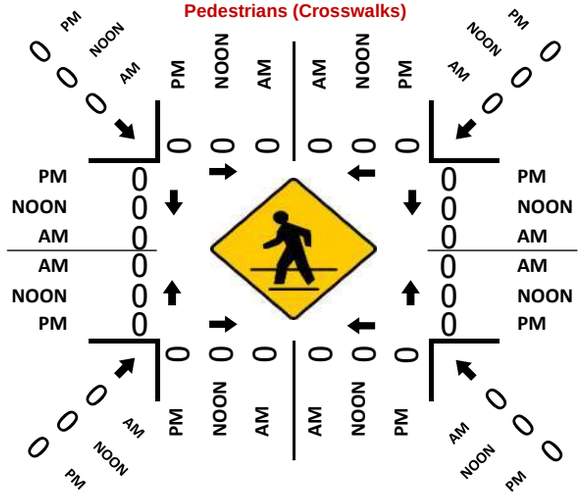
Cars (NOON)



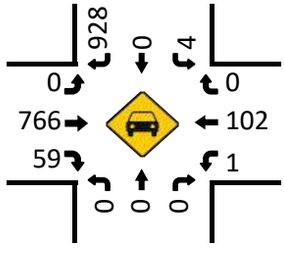
HT (NOON)



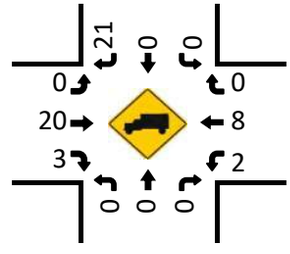
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

US 101 SB Ramps & Santa Maria Way

Peak Hour Turning Movement Count

ID: 24-050006-006
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

CONTROL: 1-Way Stop (SB)

TEV	1610	0	1376
	AM	NOON	PM
PHF	0.85		0.94

SOUTHBOUND (US 101 SB Ramps)

	Left	Thru	Right	U-Turn	
AM	517	0	18	0	0
NOON	0	0	0	0	0
PM	485	0	5	0	0

EASTBOUND (Santa Maria Way)

	Left	Thru	Right	
AM	775	0	770	
NOON	0	0	0	0
PM	0	0	0	0
AM	523	0	388	1
NOON	288	0	204	1

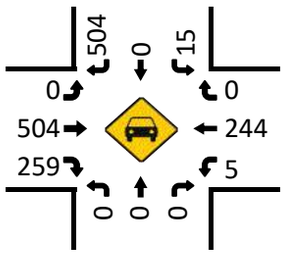
WESTBOUND (Santa Maria Way)

	Left	Thru	Right	
PM	0	0	0	0
NOON	285	0	258	1
AM	9	0	6	0
PM	0	0	0	0
NOON	393	0	541	

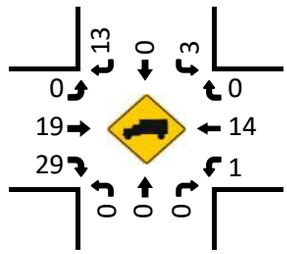
NORTHBOUND (US 101 SB Ramps)

	Left	Thru	Right	U-Turn	
PM	213	0	0	0	0
NOON	0	0	0	0	0
AM	294	0	0	0	0

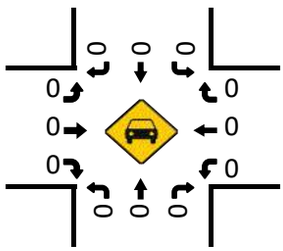
Cars (AM)



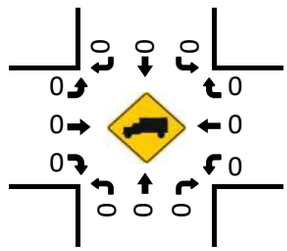
HT (AM)



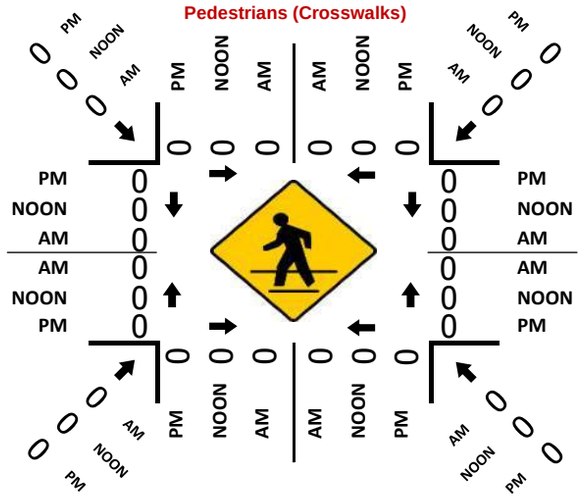
Cars (NOON)



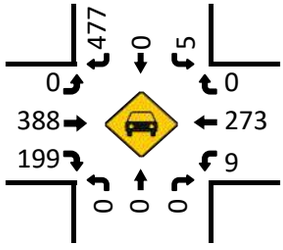
HT (NOON)



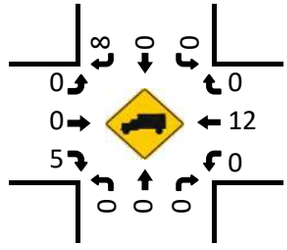
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

US 101 SB Ramps & Betteravia Rd

Peak Hour Turning Movement Count

ID: 24-050006-007
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS
AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS
AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	2555	0	3046
PHF	0.81		0.97

SOUTHBOUND (US 101 SB Ramps)

	Left	Thru	Right	Peds	Total
AM	1017	0	148	0	0
NOON	0	0	0	0	0
PM	879	0	69	0	0

EASTBOUND (Betteravia Rd)

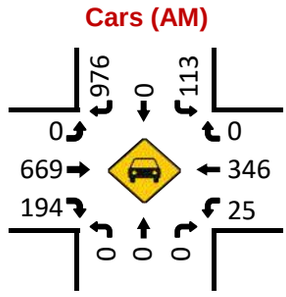
	AM	NOON	PM
Left	0	0	0
Thru	746	0	1068
Right	217	0	378
Peds	0	0	0
Total	1400	0	1484

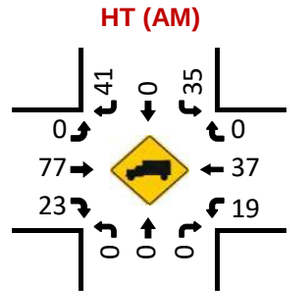
WESTBOUND (Betteravia Rd)

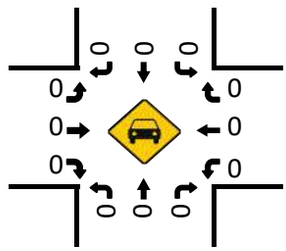
	PM	NOON	AM
Left	0	0	0
Thru	605	0	383
Right	47	0	44
Peds	0	0	0
Total	1137	0	894

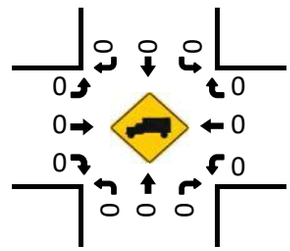
NORTHBOUND (US 101 SB Ramps)

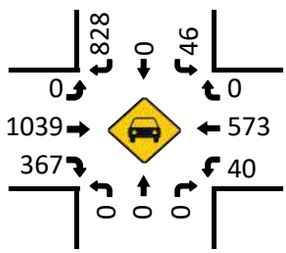
	Left	Thru	Right	Peds	Total
PM	425	0	0	0	0
NOON	0	0	0	0	0
AM	261	0	0	0	0

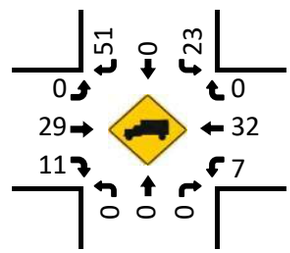


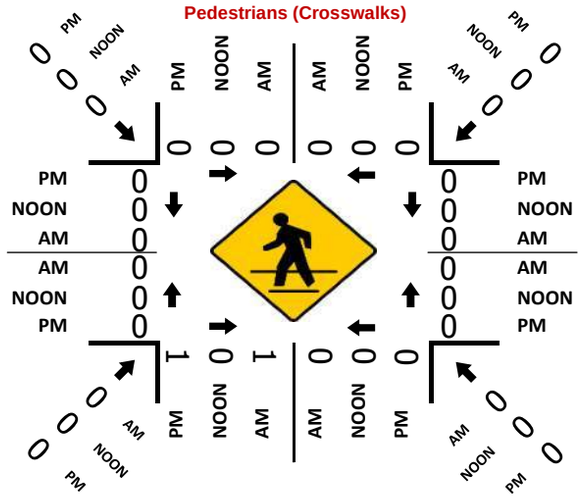












Prepared by National Data & Surveying Services

US 101 NB Ramps & Betteravia Rd

Peak Hour Turning Movement Count

ID: 24-050006-008
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (US 101 NB Ramps)

AM	0	0	0	0	708	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	1136	PM

EASTBOUND (Betteravia Rd)

AM	NOON	PM		
414	0	645	⇦	
0	0	0	↶	0
580	0	936	↱	2
325	0	202	→	2
0	0	0	↷	0
AM	NOON	PM		

WESTBOUND (Betteravia Rd)

PM	NOON	AM		
195	0	125	↶	0
272	0	167	←	3
0	0	0	↰	0
0	0	0	↷	0
254	0	395	⇨	
PM	NOON	AM		

NORTHBOUND (US 101 NB Ramps)

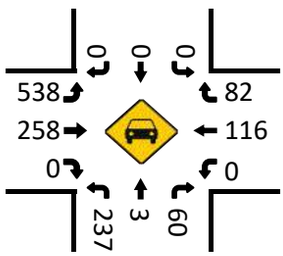
PM	0	0	373	5	52	PM
NOON	0	0	0	0	0	NOON
AM	0	0	247	3	70	AM

CONTROL

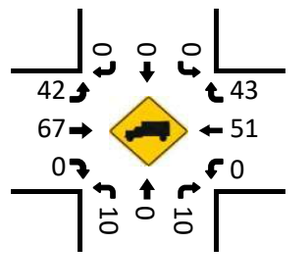
Signalized

TEV	1517 AM	0 NOON	2035 PM
PHF	0.92		0.94

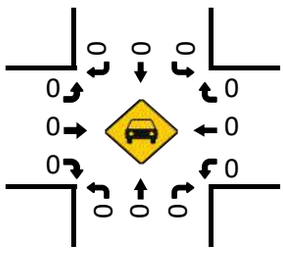
Cars (AM)



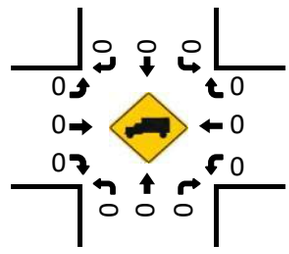
HT (AM)



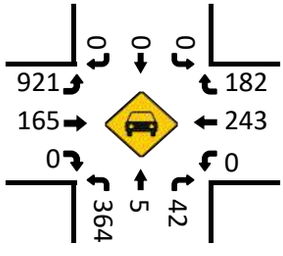
Cars (NOON)



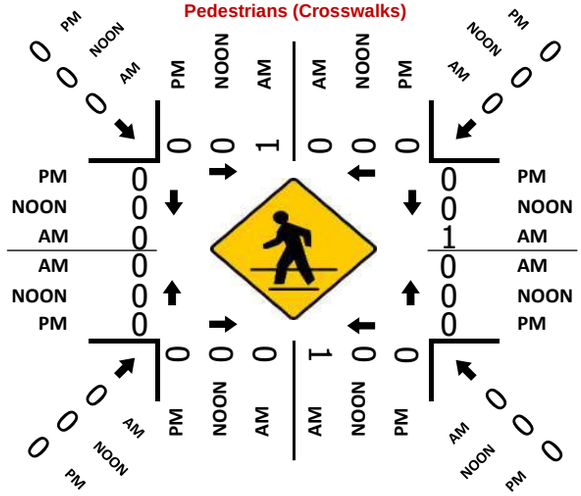
HT (NOON)



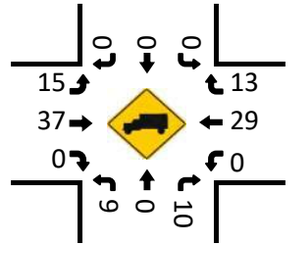
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

S Bradley Rd & US 101 SB Ramps

Peak Hour Turning Movement Count

ID: 24-050006-009
City: Santa Maria

Day: Thursday
Date: 2/22/2024

	PEAK HOURS	COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (S Bradley Rd)

	Right	Through	Left	U-Turn	Departing
Lanes	1	2	1	0	
AM	59	201	215	0	840
NOON	0	0	0	0	0
PM	74	386	343	0	921

WESTBOUND (US 101 SB Ramps)

	Lanes	PM	NOON	AM
Right	1	251	0	413
Through	0.5	49	0	72
Left	1.5	458	0	318
U-Turn	0	0	0	0
Departing		493	0	288

EASTBOUND (US 101 SB Ramps)

	Lanes	AM	NOON	PM
Departing		159	0	194
U-Turn	0	0	0	0
Left	0	68	0	96
Through	1.5	33	0	68
Right	0.5	13	0	78

NORTHBOUND (S Bradley Rd)

	Departing	U-Turn	Left	Through	Right
Lanes		0	1	2	0
PM	922	0	71	574	82
NOON	0	0	0	0	0
AM	532	0	28	359	40

CONTROL: Signalized

	AM	NOON	PM
TEV	1819	0	2530
PHF	0.78		0.97

Cars and HT

	Cars (AM)	Cars (NOON)	Cars (PM)	HT (AM)	HT (NOON)	HT (PM)
SB Right	58	0	74	1	0	0
SB Through	194	0	384	7	0	2
SB Left	200	0	335	15	0	8
EB Left	68	0	95	0	0	1
EB Through	30	0	67	3	0	1
EB Right	12	0	77	1	0	1
WB Right	407	0	248	6	0	3
WB Through	69	0	48	3	0	1
WB Left	313	0	451	5	0	7
NB Left	28	0	71	0	0	0
NB Through	351	0	569	8	0	5
NB Right	39	0	80	1	0	2

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North	→	0	0	0
North	←	0	0	1
West	↓	0	0	4
West	↑	1	0	0
East	↓	0	0	0
East	↑	0	0	0
South	→	0	0	0
South	←	0	0	0
NW diagonal		0	0	0
NE diagonal		0	0	0
SW diagonal		0	0	0
SE diagonal		0	0	0

Prepared by National Data & Surveying Services

US 101 NB Ramps/Nicholson Ave & E Stowell Rd

Peak Hour Turning Movement Count

ID: 24-050006-010
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND — US 101 NB Ramps/Nicholson Ave

AM	536	1	4	0	644	AM
NOON	0	0	0	0	0	NOON
PM	431	6	1	0	957	PM
	1	0.5	0.5	0		

EASTBOUND — E Stowell Rd

AM	NOON	PM	
568	0	489	
0	0	0	0
638	0	944	1
66	0	32	1
7	0	22	0

WESTBOUND — E Stowell Rd

	PM	NOON	AM
0	6	0	4
1	47	0	29
1	1	0	0
0	0	0	0
	34	0	70

CONTROL

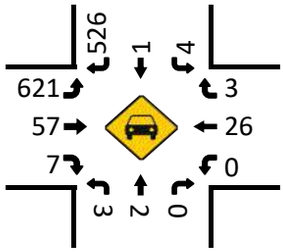
3-Way Stop (NB/SB/WB)

	AM	NOON	PM
TEV	1290	0	1509
PHF	0.85		0.93

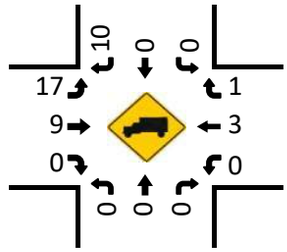
NORTHBOUND — US 101 NB Ramps/Nicholson Ave

	0	0	1	0		
PM	29	0	11	7	1	PM
NOON	0	0	0	0	0	NOON
AM	8	0	3	2	0	AM

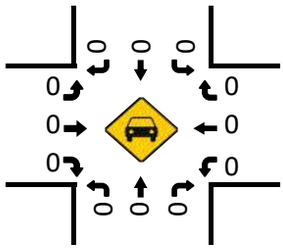
Cars (AM)



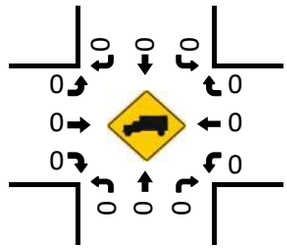
HT (AM)



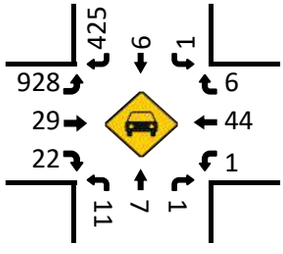
Cars (NOON)



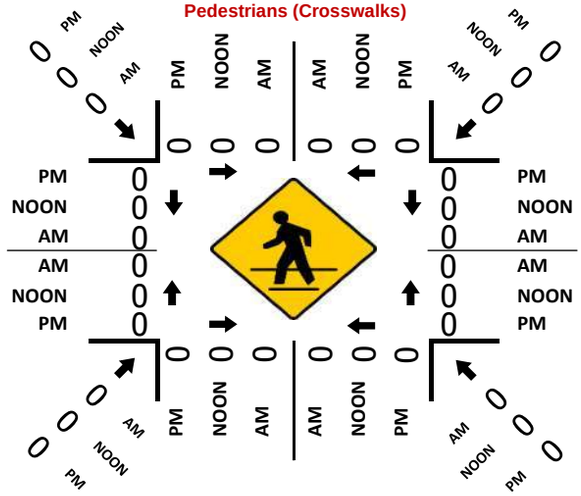
HT (NOON)



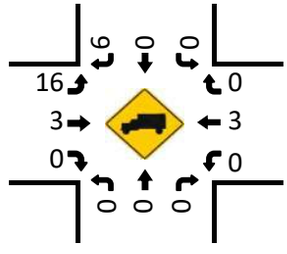
Cars (PM)



Pedestrians (Crosswalks)



HT (PM)



Prepared by National Data & Surveying Services

US 101 SB Ramps/S Bradley Rd & E Main St

Peak Hour Turning Movement Count

ID: 24-050006-011
City: Santa Maria

Day: Thursday
Date: 2/22/2024

	PEAK HOURS	COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (US 101 SB Ramps/S Bradley Rd)

	Right	Through	Left	U-Turn	Departing
AM	294	139	428	0	0
NOON	0	0	0	0	0
PM	348	140	139	0	0
Lanes	1	0.5	0.5	0	

EASTBOUND (E Main St)

	AM	NOON	PM	Lanes
Departing	901	0	1087	
U-Turn	0	0	0	0
Left	0	0	0	0
Through	549	0	611	2
Right	259	0	326	0

WESTBOUND (E Main St)

	PM	NOON	AM	Lanes
Right	0	0	0	0
Through	739	0	607	2
Left	390	0	483	2
U-Turn	0	0	0	0
Departing	750	0	977	

NORTHBOUND (US 101 SB Ramps/S Bradley Rd)

	Departing	U-Turn	Left	Through	Right
Lanes		0	0	0	0
PM	856	0	0	0	0
NOON	0	0	0	0	0
AM	881	0	0	0	0

CONTROL

Signalized

	AM	NOON	PM
TEV	2759	0	2693
PHF	0.91		0.92

Cars / HT

	SB Right	SB Through	SB Left	EB Left	EB Through	EB Right	WB Right	WB Through	WB Left	NB U-Turn	NB Through	NB Right
Cars (AM)	281	135	423	0	526	244	0	590	482	0	0	0
Cars (NOON)	0	0	0	0	0	0	0	0	0	0	0	0
Cars (PM)	341	139	135	0	595	322	0	729	388	0	0	0
HT (AM)	13	4	5	0	23	15	0	17	1	0	0	0
HT (NOON)	0	0	0	0	0	0	0	0	0	0	0	0
HT (PM)	7	1	4	0	16	4	0	10	2	0	0	0

Pedestrians (Crosswalks)

Crosswalk		PM	NOON	AM
North	Eastbound direction	6	0	6
North	Westbound direction	14	0	2
West	Southbound direction	4	0	2
West	Northbound direction	1	0	10
East	Southbound direction	0	0	0
East	Northbound direction	0	0	0
South	Eastbound direction	0	0	4
South	Westbound direction	3	0	0
Diagonals (all four)		0	0	0

Prepared by National Data & Surveying Services

US 101 NB Ramps/Nicholson Ave & E Main St

Peak Hour Turning Movement Count

ID: 24-050006-012
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND — US 101 NB Ramps/Nicholson Ave

AM	0	0	0	0	421	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	629	PM

EASTBOUND — E Main St

AM	NOON	PM		
1128	0	1136	⇦	
0	0	0	↶	0
185	0	312	↱	2
678	0	407	→	2
119	0	24	↳	0
AM	NOON	PM		

WESTBOUND — E Main St

PM	NOON	AM		
234	0	207	↰	1
676	0	802	←	2
3	0	8	↰	1
0	0	0	↷	0
657	0	967	⇨	
PM	NOON	AM		

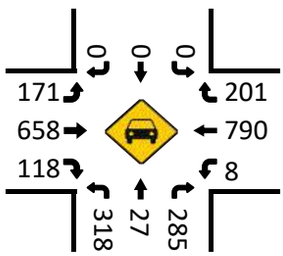
NORTHBOUND — US 101 NB Ramps/Nicholson Ave

PM	27	0	460	83	250	PM
NOON	0	0	0	0	0	NOON
AM	127	0	326	29	289	AM

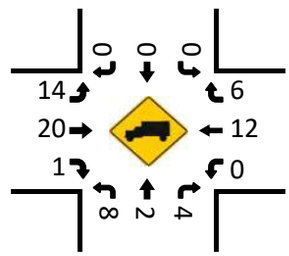
⇩	0	0.5	0.5	1

CONTROL			
Signalized			
TEV	2643 AM	0 NOON	2449 PM
PHF	0.95		0.89

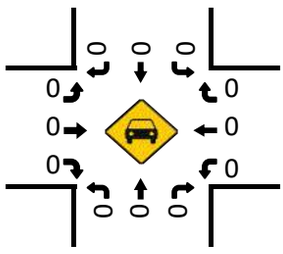
Cars (AM)



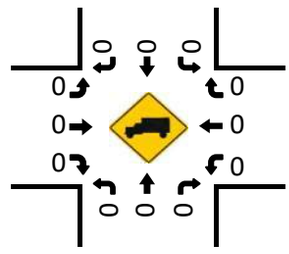
HT (AM)



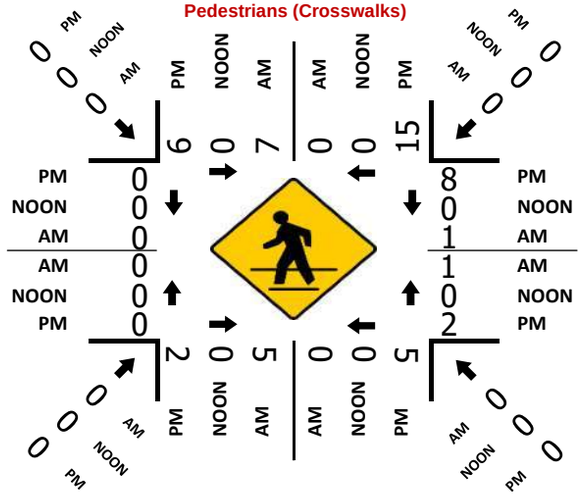
Cars (NOON)



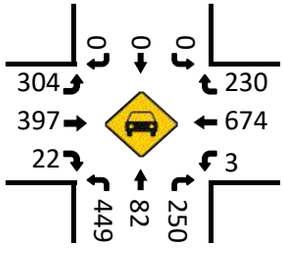
HT (NOON)



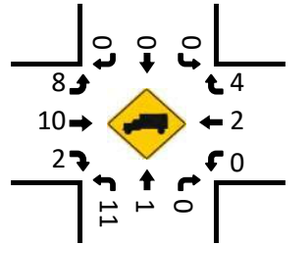
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Stillwell Rd & Clark Ave

Peak Hour Turning Movement Count

ID: 24-050006-013
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Stillwell Rd)

AM	32	6	61	0	65	AM
NOON	0	0	0	0	0	NOON
PM	22	2	22	0	77	PM
	0.5	0.5	1	0		

EASTBOUND (Clark Ave)

AM	NOON	PM	
505	0	771	
0	0	0	0
20	0	21	1
556	0	421	2
29	0	78	0

WESTBOUND (Clark Ave)

	PM	NOON	AM
0	52	0	40
2	699	0	417
1	129	0	43
0	0	0	0
	513	0	750

NORTHBOUND (Stillwell Rd)

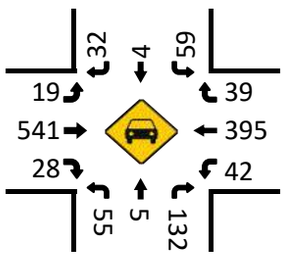
	0	1	0.5	0.5		
PM	209	0	50	4	70	PM
NOON	0	0	0	0	0	NOON
AM	78	0	56	5	133	AM

CONTROL

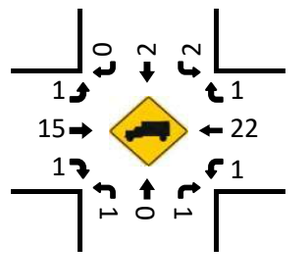
Signalized

TEV	1398 AM	0 NOON	1570 PM
PHF	0.86		0.86

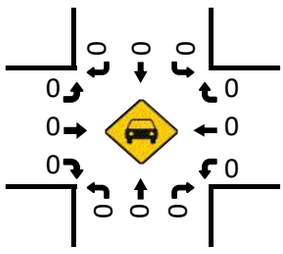
Cars (AM)



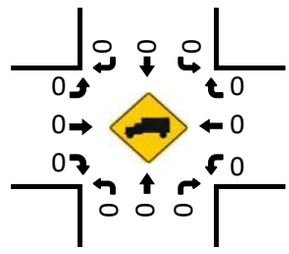
HT (AM)



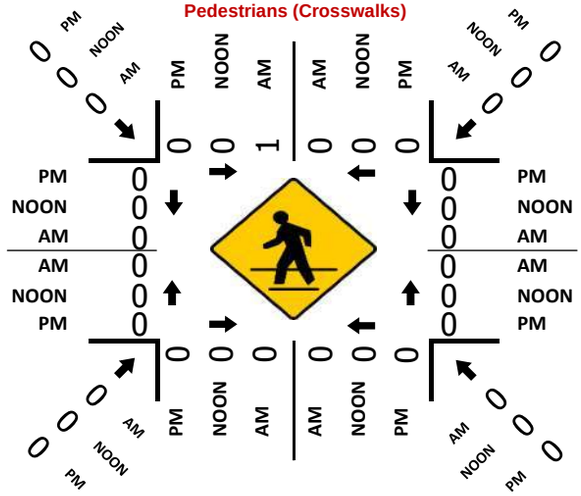
Cars (NOON)



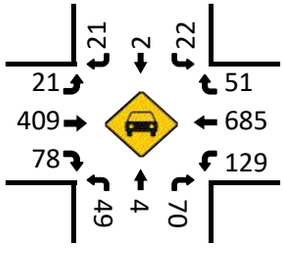
HT (NOON)



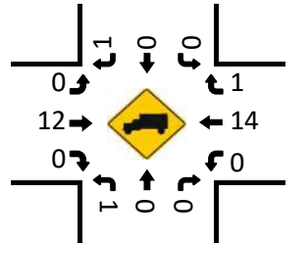
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

S Bradley Rd & Clark Ave

Peak Hour Turning Movement Count

ID: 24-050006-014
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (S Bradley Rd)

AM	113	206	175	25	539	AM
NOON	0	0	0	0	0	NOON
PM	83	229	236	30	496	PM
	0	1.5	1.5	0		

EASTBOUND (Clark Ave)

AM	NOON	PM	
566	0	631	
9	0	10	0
85	0	138	2
320	0	390	2
40	0	79	0
AM	NOON	PM	

WESTBOUND (Clark Ave)

PM	NOON	AM	
107	0	102	0
410	0	343	2
206	0	158	2
3	0	1	0
721	0	669	
PM	NOON	AM	

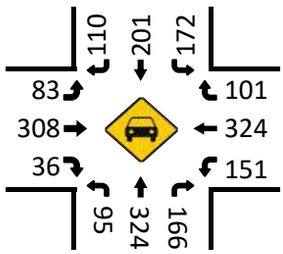
NORTHBOUND (S Bradley Rd)

PM	517	3	128	221	92	PM
NOON	0	0	0	0	0	NOON
AM	426	22	101	327	173	AM
		0	1	2	0	

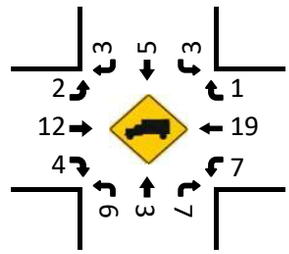
CONTROL: Signalized

TEV	2200 AM	0 NOON	2365 PM
PHF	0.79		0.96

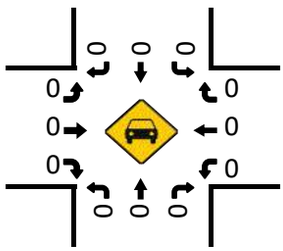
Cars (AM)



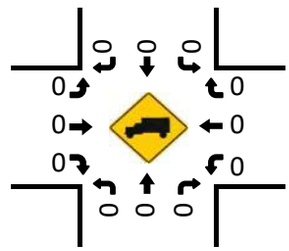
HT (AM)



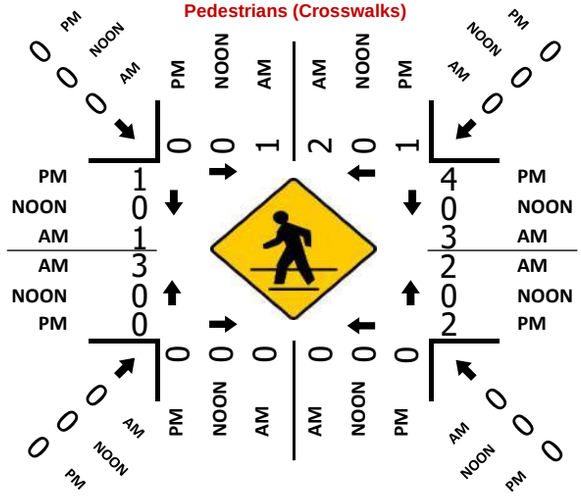
Cars (NOON)



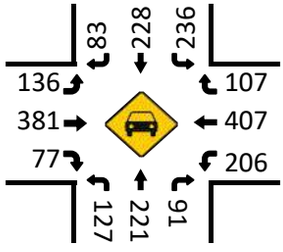
HT (NOON)



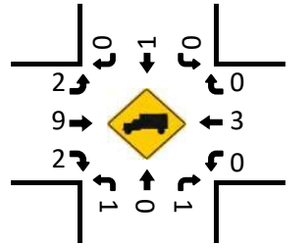
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Orcutt Rd & Clark Ave

Peak Hour Turning Movement Count

ID: 24-050006-015
City: Santa Maria

Day: Thursday
Date: 2/22/2024

	PEAK HOURS	COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:30 PM - 05:30 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Orcutt Rd)

	Right	Through	Left	U-Turn	Departing
AM	63	34	16	0	161
NOON	0	0	0	0	0
PM	51	69	13	0	115
Lanes	0	1	0	0	

EASTBOUND (Clark Ave)

	AM	NOON	PM	Lanes
Departing	916	0	709	
U-Turn	1	0	0	0
Left	79	0	51	1
Through	431	0	563	2
Right	95	0	227	0

WESTBOUND (Clark Ave)

	PM	NOON	AM	Lanes
Right	25	0	18	0
Through	523	0	610	2
Left	66	0	37	1
U-Turn	2	0	2	0
Departing	622	0	504	

NORTHBOUND (Orcutt Rd)

	Departing	U-Turn	Left	Through	Right
Lanes		0	1	0.5	0.5
PM	362	0	135	39	44
NOON	0	0	0	0	0
AM	166	0	242	64	55

CONTROL: Signalized

	AM	NOON	PM
TEV	1747	0	1808
PHF	0.85		0.95

Cars / HT

	SB Right	SB Through	SB Left	EB Left	EB Through	EB Right	WB Right	WB Through	WB Left	NB Left	NB Through	NB Right
Cars (AM)	62	34	15	77	415	91	17	582	35	238	61	53
Cars (NOON)	0	0	0	0	0	0	0	0	0	0	0	0
Cars (PM)	50	68	12	49	555	223	25	514	66	131	39	42
HT (AM)	1	0	1	2	16	4	1	28	2	4	3	2
HT (NOON)	0	0	0	0	0	0	0	0	0	0	0	0
HT (PM)	1	1	1	2	8	4	0	9	0	4	0	2

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North	→ (west half)	1	0	0
North	← (east half)	3	0	0
South	→ (west half)	1	0	3
South	← (east half)	0	0	0
West	↓ (upper)	0	0	0
West	↑ (lower)	1	0	0
East	↓ (upper)	1	0	0
East	↑ (lower)	0	0	2
NW diagonal		0	0	0
NE diagonal		0	0	0
SW diagonal		0	0	0
SE diagonal		0	0	0

Prepared by National Data & Surveying Services

S Bradley Rd & E Union Valley Pkwy

Peak Hour Turning Movement Count

ID: 24-050006-016
City: Santa Maria

Day: Thursday
Date: 2/22/2024

	PEAK HOURS	COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:00 PM - 05:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (S Bradley Rd)

	Right	Thru	Left	U-Turn	Out
AM	83	385	119	0	816
NOON	0	0	0	0	0
PM	89	494	81	0	582
Lanes	0	2	1	0	

WESTBOUND (E Union Valley Pkwy)

	Lanes	PM	NOON	AM
Right	1	75	0	123
Thru	2	565	0	435
Left	2	217	0	145
U-Turn	0	0	0	0
Out		807	0	1055

EASTBOUND (E Union Valley Pkwy)

	AM	NOON	PM	Lanes
Out	641	0	733	
U-Turn	0	0	0	0
Left	121	0	82	2
Thru	676	0	573	2
Right	104	0	153	1

NORTHBOUND (S Bradley Rd)

	Out	U-Turn	Left	Thru	Right
Lanes		0	1	2	1
PM	864	0	79	425	153
NOON	0	0	0	0	0
AM	634	0	123	572	260

CONTROL

Signalized

	AM	NOON	PM
TEV	3146	0	2986
PHF	0.87		0.94

Cars and HT

Approach	Movement	Cars (AM)	Cars (NOON)	Cars (PM)	HT (AM)	HT (NOON)	HT (PM)
SB	Right	83	0	88	0	0	1
SB	Thru	374	0	490	11	0	4
SB	Left	118	0	79	1	0	2
EB	Left	120	0	81	1	0	1
EB	Thru	651	0	561	25	0	12
EB	Right	101	0	152	3	0	1
WB	Right	121	0	72	2	0	3
WB	Thru	416	0	543	19	0	22
WB	Left	140	0	214	5	0	3
NB	Left	121	0	77	2	0	2
NB	Thru	569	0	422	3	0	3
NB	Right	255	0	149	5	0	4

Pedestrians (Crosswalks)

Crosswalk	AM	NOON	PM
North leg (west half)	0	0	0
North leg (east half)	1	0	0
West leg (north half)	0	0	7
West leg (south half)	9	0	3
East leg (north half)	0	0	4
East leg (south half)	2	0	0
South leg (west half)	0	0	1
South leg (east half)	1	0	0
NW diagonal	0	0	0
NE diagonal	0	0	0
SW diagonal	0	0	0
SE diagonal	0	0	0

Prepared by National Data & Surveying Services

Orcutt Rd & E Union Valley Pkwy

Peak Hour Turning Movement Count

ID: 24-050006-017
City: Santa Maria

Day: Thursday
Date: 2/22/2024

	PEAK HOURS	COUNT PERIODS
AM	07:30 AM - 08:30 AM	7:00 AM - 09:00 AM
NOON	NONE	NONE
PM	04:15 PM - 05:15 PM	4:00 PM - 06:00 PM

SOUTHBOUND – Orcutt Rd

	Right	Thru	Left	U-Turn	Departing (NB)
AM	7	54	22	0	78
NOON	0	0	0	0	0
PM	3	62	19	0	83
Lanes	0	1	1	0	

EASTBOUND – E Union Valley Pkwy

	AM	NOON	PM	Lanes
Departing (WB)	703	0	675	
U-Turn	0	0	1	0
Left	1	0	6	1
Thru	706	0	756	2
Right	99	0	82	0

WESTBOUND – E Union Valley Pkwy

	Lanes	PM	NOON	AM
Right	0	16	0	10
Thru	2	609	0	560
Left	1	41	0	31
U-Turn	0	0	0	0
Departing (EB)		820	0	821

NORTHBOUND – Orcutt Rd

	Departing (SB)	U-Turn	Left	Thru	Right
Lanes		0	1	1	0
PM	185	0	62	61	45
NOON	0	0	0	0	0
AM	184	0	136	67	93

CONTROL

Signalized

	AM	NOON	PM
TEV	1786	0	1763
PHF	0.85		0.88

Cars / HT

Movement	Cars (AM)	Cars (NOON)	Cars (PM)	HT (AM)	HT (NOON)	HT (PM)
SB Right	7	0	3	0	0	0
SB Thru	51	0	59	3	0	3
SB Left	21	0	19	1	0	0
EB Left	1	0	6	0	0	0
EB Thru	680	0	743	26	0	13
EB Right	98	0	81	1	0	1
WB Right	9	0	15	1	0	1
WB Thru	541	0	590	19	0	19
WB Left	30	0	41	1	0	0
NB Left	134	0	60	2	0	2
NB Thru	62	0	60	5	0	1
NB Right	91	0	43	2	0	2

Pedestrians (Crosswalks)

Crosswalk	Direction	AM	NOON	PM
North leg	Westbound	0	0	0
North leg	Eastbound	0	0	0
West leg	Southbound	0	0	0
West leg	Northbound	0	0	1
East leg	Southbound	0	0	2
East leg	Northbound	2	0	0
South leg	Eastbound	0	0	1
South leg	Westbound	0	0	0
NW corner		0	0	0
NE corner		0	0	0
SW corner		0	0	0
SE corner		0	0	0

Prepared by National Data & Surveying Services

S Bradley Rd & E Foster Rd

Peak Hour Turning Movement Count

ID: 24-050006-018
City: Santa Maria

Day: Thursday
Date: 2/22/2024

PEAK HOURS

AM: 07:45 AM - 08:45 AM
NOON: NONE
PM: 04:00 PM - 05:00 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

SOUTHBOUND (S Bradley Rd)

AM	242	318	78	0	744	AM
NOON	0	0	0	0	0	NOON
PM	99	444	51	0	560	PM
	0	2	1	0		

EASTBOUND (E Foster Rd)

AM	NOON	PM	
557	0	270	
0	0	0	0
153	0	108	0.5
30	0	23	0.5
193	0	173	1

WESTBOUND (E Foster Rd)

PM	NOON	AM	
64	0	101	1
23	0	75	0.5
51	0	46	0.5
0	0	0	0
119	0	182	

NORTHBOUND (S Bradley Rd)

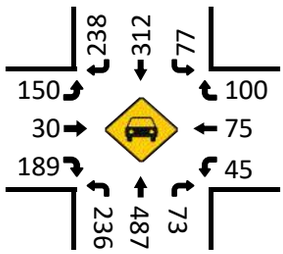
PM	668	0	148	388	45	PM
NOON	0	0	0	0	0	NOON
AM	557	0	240	490	74	AM
	0	1	2	0		

CONTROL

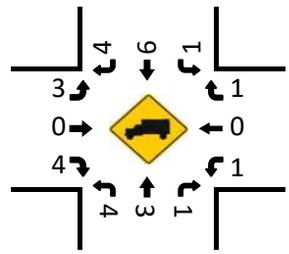
Signalized

TEV	2040 AM	0 NOON	1617 PM
PHF	0.84		0.78

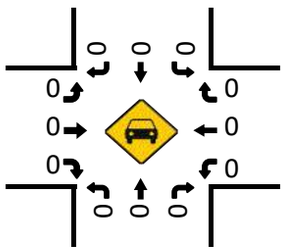
Cars (AM)



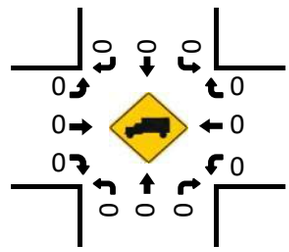
HT (AM)



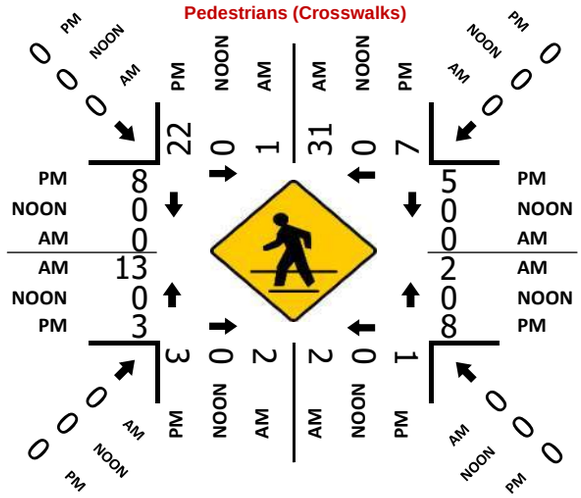
Cars (NOON)



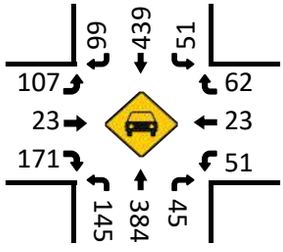
HT (NOON)



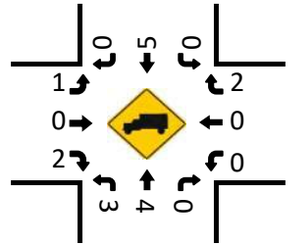
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Appendix C

Analysis Worksheets for Existing (2024) Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	588	18	149	409	0	0	0	0	150	0	296
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	606	0	149	409	0	0	0	0	0	150	296
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3601	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	20.2	0.0	9.9	13.6	0.0			0.0			22.6
Adj Reference Time (s)	0.0	24.2	0.0	13.9	17.6	0.0			0.0			26.6
Permitted Option												
Adj Saturation A (vph)	0	1801		120	1809		0	0		0	120	
Reference Time A (s)	0.0	20.2		148.6	13.6		0.0	0.0		0.0	149.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		18.0	18.0	
Reference Time (s)		20.2			148.6			0.0			18.0	
Adj Reference Time (s)		24.2			152.6			8.0			22.3	
Split Option												
Ref Time Combined (s)	0.0	20.2		9.9	13.6		0.0	0.0		0.0	10.0	
Ref Time Seperate (s)	0.0	19.6		9.9	13.6		0.0	0.0		10.0	0.0	
Reference Time (s)	20.2	20.2		13.6	13.6		0.0	0.0		10.0	10.0	
Adj Reference Time (s)	24.2	24.2		17.6	17.6		0.0	0.0		15.5	15.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.1	NA	
Permitted Option (s)	152.6	22.3	
Split Option (s)	41.8	15.5	
Minimum (s)	38.1	15.5	53.6

Right Turns	SBR
Adj Reference Time (s)	26.6
Cross Thru Ref Time (s)	17.6
Oncoming Left Ref Time (s)	0.0
Combined (s)	44.2

Intersection Summary			
Intersection Capacity Utilization	44.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	518	0	0	560	356	5	1	88	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	210	518	0	0	916	0	0	94	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3407	0	0	3101	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	14.0	17.2	0.0	0.0	32.5	0.0			0.0			0.0
Adj Reference Time (s)	18.0	21.2	0.0	0.0	36.5	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1703		0	514		0	0	
Reference Time A (s)	209.4	17.2		0.0	32.5		0.0	8.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1541		0	0	
Reference Time B (s)	NA	NA		NA	NA		8.3	7.7		0.0	0.0	
Reference Time (s)		209.4			32.5			8.3			0.0	
Adj Reference Time (s)		213.4			36.5			12.3			8.0	
Split Option												
Ref Time Combined (s)	14.0	17.2		0.0	32.5		0.0	3.6		0.0	0.0	
Ref Time Seperate (s)	14.0	17.2		0.0	20.0		0.3	0.0		0.0	0.0	
Reference Time (s)	17.2	17.2		32.5	32.5		3.6	3.6		0.0	0.0	
Adj Reference Time (s)	21.2	21.2		36.5	36.5		8.0	8.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.5	NA	
Permitted Option (s)	213.4	12.3	
Split Option (s)	57.7	8.0	
Minimum (s)	54.5	8.0	62.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	52.1%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	639	135	3	119	0	0	0	0	125	0	379
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	774	0	3	119	0	0	0	0	125	0	379
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3523	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	26.4	0.0	0.2	7.5	0.0	0.0	0.0	0.0	8.3	0.0	28.2
Adj Reference Time (s)	0.0	30.4	0.0	8.0	11.5	0.0	0.0	0.0	0.0	12.3	0.0	32.2
Permitted Option												
Adj Saturation A (vph)	0	1761		120	1900		0	0		120	0	
Reference Time A (s)	0.0	26.4		3.0	7.5		0.0	0.0		124.7	0.0	
Adj Saturation B (vph	0	3523		NA	NA		0	0		0	0	
Reference Time B (s)	0.0	26.4		NA	NA		0.0	0.0		16.3	0.0	
Reference Time (s)		26.4			7.5			0.0			16.3	
Adj Reference Time (s)		30.4			11.5			8.0			20.3	
Split Option												
Ref Time Combined (s)	0.0	26.4		0.2	7.5		0.0	0.0		8.3	0.0	
Ref Time Seperate (s)	0.0	21.8		0.2	7.5		0.0	0.0		8.3	0.0	
Reference Time (s)	26.4	26.4		7.5	7.5		0.0	0.0		8.3	8.3	
Adj Reference Time (s)	30.4	30.4		11.5	11.5		0.0	0.0		12.3	12.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.4	12.3	
Permitted Option (s)	30.4	20.3	
Split Option (s)	41.9	12.3	
Minimum (s)	30.4	12.3	42.7

Right Turns	SBR
Adj Reference Time (s)	32.2
Cross Thru Ref Time (s)	11.5
Oncoming Left Ref Time (s)	0.0
Combined (s)	43.7

Intersection Summary			
Intersection Capacity Utilization	36.4%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	220	0	0	87	118	35	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	540	220	0	0	87	118	35	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.5	13.9	0.0	0.0	5.5	9.0	2.3	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	22.5	17.9	0.0	0.0	9.5	13.0	8.0	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	277.3	13.9		0.0	5.5		34.9	0.9		0.0	0.0	
Adj Saturation B (vph	0	1900		NA	NA		0	1647		0	0	
Reference Time B (s)	26.5	13.9		NA	NA		10.3	0.9		0.0	0.0	
Reference Time (s)		26.5			5.5			10.3			0.0	
Adj Reference Time (s)		30.5			9.5			20.0			8.4	
Split Option												
Ref Time Combined (s)	18.5	13.9		0.0	5.5		2.3	0.9		0.0	0.0	
Ref Time Seperate (s)	18.5	13.9		0.0	5.5		2.3	0.3		0.0	0.0	
Reference Time (s)	18.5	18.5		5.5	5.5		2.3	2.3		0.0	0.0	
Adj Reference Time (s)	22.5	22.5		9.5	9.5		20.0	20.0		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.0	20.0	
Permitted Option (s)	30.5	20.0	
Split Option (s)	32.0	28.4	
Minimum (s)	30.5	20.0	50.5

Right Turns	WBR
Adj Reference Time (s)	13.0
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	22.5
Combined (s)	55.5

Intersection Summary			
Intersection Capacity Utilization	46.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1094	105	3	97	0	0	0	0	3	1	764
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1199	0	3	97	0	0	0	0	0	259	509
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1875	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	76.7	0.0	0.2	6.1	0.0			0.0			37.8
Adj Reference Time (s)	0.0	80.7	0.0	8.0	10.1	0.0			0.0			41.8
Permitted Option												
Adj Saturation A (vph)	0	1875		120	1900		0	0		0	1391	
Reference Time A (s)	0.0	76.7		3.0	6.1		0.0	0.0		0.0	22.3	
Adj Saturation B (vph	0	1875		NA	NA		NA	NA		0	0	
Reference Time B (s)	0.0	76.7		NA	NA		NA	NA		8.2	27.2	
Reference Time (s)		76.7			6.1			0.0			22.3	
Adj Reference Time (s)		80.7			10.1			8.0			26.3	
Split Option												
Ref Time Combined (s)	0.0	76.7		0.2	6.1		0.0	0.0		0.0	19.2	
Ref Time Seperate (s)	0.0	70.0		0.2	6.1		0.0	0.0		0.2	0.1	
Reference Time (s)	76.7	76.7		6.1	6.1		0.0	0.0		19.2	19.2	
Adj Reference Time (s)	80.7	80.7		10.1	10.1		0.0	0.0		23.2	23.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	88.7	NA	
Permitted Option (s)	80.7	26.3	
Split Option (s)	90.9	23.2	
Minimum (s)	80.7	23.2	103.9

Right Turns	SBR
Adj Reference Time (s)	41.8
Cross Thru Ref Time (s)	10.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	52.0

Intersection Summary			
Intersection Capacity Utilization	86.6%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	523	288	6	258	0	0	0	0	18	0	517
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	523	288	0	264	0	0	0	0	18	0	517
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1898	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			21.4			0.0	0.0	0.0	0.0	1.2	0.0	38.4
Adj Reference Time (s)			25.4			0.0	0.0	0.0	0.0	8.0	0.0	42.4
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1435		0	0		120	0	
Reference Time A (s)	0.0	33.0		0.0	22.1		0.0	0.0		18.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		9.2	0.0	
Reference Time (s)		33.0			22.1			0.0			9.2	
Adj Reference Time (s)		37.0			26.1			8.0			13.2	
Split Option												
Ref Time Combined (s)	0.0	33.0		0.0	16.7		0.0	0.0		1.2	0.0	
Ref Time Seperate (s)	0.0	33.0		0.4	16.3		0.0	0.0		1.2	0.0	
Reference Time (s)	33.0	33.0		16.7	16.7		0.0	0.0		1.2	1.2	
Adj Reference Time (s)	37.0	37.0		20.7	20.7		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	37.0	13.2	
Split Option (s)	57.7	8.0	
Minimum (s)	37.0	8.0	45.0

Right Turns	EBR	SBR
Adj Reference Time (s)	25.4	42.4
Cross Thru Ref Time (s)	0.0	20.7
Oncoming Left Ref Time (s)	20.7	0.0
Combined (s)	46.1	63.1

Intersection Summary			
Intersection Capacity Utilization	52.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	746	217	44	383	0	0	0	0	148	0	1017
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	746	217	44	383	0	0	0	0	0	148	1017
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	13.0	16.3	2.9	12.7	0.0			0.0			42.7
Adj Reference Time (s)	0.0	17.0	20.3	8.0	16.7	0.0			0.0			46.7
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	13.0		43.9	12.7		0.0	0.0		0.0	73.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.9	12.9	
Reference Time (s)		13.0			43.9			0.0			12.9	
Adj Reference Time (s)		17.0			47.9			8.0			16.9	
Split Option												
Ref Time Combined (s)	0.0	13.0		2.9	12.7		0.0	0.0		0.0	4.9	
Ref Time Seperate (s)	0.0	13.0		2.9	12.7		0.0	0.0		4.9	0.0	
Reference Time (s)	13.0	13.0		12.7	12.7		0.0	0.0		4.9	4.9	
Adj Reference Time (s)	17.0	17.0		16.7	16.7		0.0	0.0		8.9	8.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.0	NA	
Permitted Option (s)	47.9	16.9	
Split Option (s)	33.7	8.9	
Minimum (s)	25.0	8.9	33.9

Right Turns	EBR	SBR
Adj Reference Time (s)	20.3	46.7
Cross Thru Ref Time (s)	8.9	16.7
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	37.2	63.4

Intersection Summary			
Intersection Capacity Utilization	52.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	580	325	0	0	167	125	247	3	70	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	580	325	0	0	167	125	0	250	70	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	19.9	10.8	0.0	0.0	5.5	9.4			5.3			0.0
Adj Reference Time (s)	23.9	14.8	0.0	0.0	9.9	13.6			9.7			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	243		0	0	
Reference Time A (s)	297.8	10.8		0.0	5.5		0.0	123.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		16.2	16.3		0.0	0.0	
Reference Time (s)		297.8			5.5			16.3			0.0	
Adj Reference Time (s)		301.8			9.9			20.3			8.0	
Split Option												
Ref Time Combined (s)	19.9	10.8		0.0	5.5		0.0	8.3		0.0	0.0	
Ref Time Seperate (s)	19.9	10.8		0.0	5.5		8.2	0.2		0.0	0.0	
Reference Time (s)	19.9	19.9		5.5	5.5		8.3	8.3		0.0	0.0	
Adj Reference Time (s)	23.9	23.9		9.9	9.9		12.6	12.6		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	NA	
Permitted Option (s)	301.8	20.3	
Split Option (s)	33.7	12.6	
Minimum (s)	33.7	12.6	46.3

Right Turns	WBR	NBR
Adj Reference Time (s)	13.6	9.7
Cross Thru Ref Time (s)	12.6	14.8
Oncoming Left Ref Time (s)	23.9	0.0
Combined (s)	50.0	24.5

Intersection Summary			
Intersection Capacity Utilization	41.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	33	13	318	72	413	28	359	40	215	201	59
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	68	46	0	0	390	413	28	399	0	215	201	59
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3464	0	0	3645	1615	1805	3563	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			30.7	1.9	13.4	0.0	14.3	6.7	4.5
Adj Reference Time (s)			0.0			34.7	8.0	17.4	0.0	18.3	11.0	8.9
Permitted Option												
Adj Saturation A (vph)	120	1732		0	280		120	1782		120	1809	
Reference Time A (s)	67.8	1.6		0.0	167.2		27.9	13.4		214.4	6.7	
Adj Saturation B (vph	0	3464		0	0		NA	NA		NA	NA	
Reference Time B (s)	12.5	1.6		18.6	20.8		NA	NA		NA	NA	
Reference Time (s)		12.5			20.8			27.9			214.4	
Adj Reference Time (s)		16.5			24.8			31.9			218.4	
Split Option												
Ref Time Combined (s)	4.5	1.6		0.0	12.8		1.9	13.4		14.3	6.7	
Ref Time Seperate (s)	4.5	1.1		10.6	4.5		1.9	12.1		14.3	6.7	
Reference Time (s)	4.5	4.5		12.8	12.8		13.4	13.4		14.3	14.3	
Adj Reference Time (s)	8.5	8.5		16.8	16.8		17.4	17.4		18.3	18.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	35.7	
Permitted Option (s)	24.8	218.4	
Split Option (s)	25.4	35.8	
Minimum (s)	24.8	35.7	60.6

Right Turns	WBR	SBR
Adj Reference Time (s)	34.7	8.9
Cross Thru Ref Time (s)	17.4	16.8
Oncoming Left Ref Time (s)	8.5	8.0
Combined (s)	60.6	33.7

Intersection Summary			
Intersection Capacity Utilization	50.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	638	66	7	0	29	4	3	2	0	4	1	536
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	638	73	0	0	33	0	0	5	0	0	5	536
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.96	0.85
Saturated Flow (vph)	1805	1873	0	1805	1865	0	0	1843	0	0	1824	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	42.4	4.7	0.0	0.0	2.1	0.0			0.0			39.8
Adj Reference Time (s)	46.4	8.7	0.0	8.0	8.0	0.0			0.0			43.8
Permitted Option												
Adj Saturation A (vph)	120	1873		120	1865		0	181		0	1352	
Reference Time A (s)	636.2	4.7		0.0	2.1		0.0	3.3		0.0	0.4	
Adj Saturation B (vph	0	1873		0	1865		0	0		0	0	
Reference Time B (s)	50.4	4.7		8.0	2.1		8.2	8.3		8.3	8.3	
Reference Time (s)		50.4			2.1			3.3			0.4	
Adj Reference Time (s)		54.4			8.0			8.0			8.0	
Split Option												
Ref Time Combined (s)	42.4	4.7		0.0	2.1		0.0	0.3		0.0	0.3	
Ref Time Seperate (s)	42.4	4.2		0.0	1.9		0.2	0.1		0.3	0.1	
Reference Time (s)	42.4	42.4		2.1	2.1		0.3	0.3		0.3	0.3	
Adj Reference Time (s)	46.4	46.4		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.4	NA	
Permitted Option (s)	54.4	8.0	
Split Option (s)	54.4	16.0	
Minimum (s)	54.4	8.0	62.4

Right Turns	SBR
Adj Reference Time (s)	43.8
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	59.8

Intersection Summary			
Intersection Capacity Utilization	52.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	549	259	483	607	0	0	0	0	428	139	294
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	808	0	483	607	0	0	0	0	0	567	294
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.96	0.85
Saturated Flow (vph)	0	3444	0	3505	3618	0	0	0	0	0	1828	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	28.3	0.0	16.5	20.1	0.0			0.0			23.3
Adj Reference Time (s)	0.0	32.3	0.0	20.5	24.1	0.0			0.0			27.3
Permitted Option												
Adj Saturation A (vph)	0	1722		117	1809		0	0		0	149	
Reference Time A (s)	0.0	28.3		248.0	20.1		0.0	0.0		0.0	457.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		36.5	45.2	
Reference Time (s)		28.3			248.0			0.0			45.2	
Adj Reference Time (s)		32.3			252.0			8.0			49.2	
Split Option												
Ref Time Combined (s)	0.0	28.3		16.5	20.1		0.0	0.0		0.0	37.2	
Ref Time Seperate (s)	0.0	19.3		16.5	20.1		0.0	0.0		28.5	8.8	
Reference Time (s)	28.3	28.3		20.1	20.1		0.0	0.0		37.2	37.2	
Adj Reference Time (s)	32.3	32.3		24.1	24.1		0.0	0.0		41.2	41.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	52.9	NA	
Permitted Option (s)	252.0	49.2	
Split Option (s)	56.5	41.2	
Minimum (s)	52.9	41.2	94.1

Right Turns	SBR
Adj Reference Time (s)	27.3
Cross Thru Ref Time (s)	24.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	51.4

Intersection Summary			
Intersection Capacity Utilization	78.4%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	678	119	8	802	207	326	29	289	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	185	797	0	8	802	207	0	355	289	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3537	0	1805	3618	1615	0	1813	1615	0	0	0
Ped Intf Time (s)	0.0	0.1	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	6.3	27.1	0.0	0.5	26.6	16.3			21.7			0.0
Adj Reference Time (s)	10.3	31.1	0.0	8.0	30.6	20.3			25.9			0.0
Permitted Option												
Adj Saturation A (vph)	117	1768		120	1809		0	128		0	0	
Reference Time A (s)	95.0	27.1		8.0	26.6		0.0	333.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		29.7	31.5		0.0	0.0	
Reference Time (s)		95.0			26.6			31.5			0.0	
Adj Reference Time (s)		99.0			30.6			35.5			8.0	
Split Option												
Ref Time Combined (s)	6.3	27.1		0.5	26.6		0.0	23.5		0.0	0.0	
Ref Time Seperate (s)	6.3	23.1		0.5	26.6		21.7	1.8		0.0	0.0	
Reference Time (s)	27.1	27.1		26.6	26.6		23.5	23.5		0.0	0.0	
Adj Reference Time (s)	31.1	31.1		30.6	30.6		27.6	27.6		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.9	NA	
Permitted Option (s)	99.0	35.5	
Split Option (s)	61.7	27.6	
Minimum (s)	40.9	27.6	68.5

Right Turns	WBR	NBR
Adj Reference Time (s)	20.3	25.9
Cross Thru Ref Time (s)	27.6	31.1
Oncoming Left Ref Time (s)	10.3	0.0
Combined (s)	58.2	57.1

Intersection Summary			
Intersection Capacity Utilization	57.1%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	556	29	43	417	40	56	5	133	61	6	32
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	20	585	0	43	457	0	56	138	0	61	38	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.87	0.85
Saturated Flow (vph)	1805	3591	0	1805	3570	0	1805	1625	0	1805	1660	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.3	19.6	0.0	2.9	15.4	0.0	3.7	10.2	0.0	4.1	2.7	0.0
Adj Reference Time (s)	8.0	23.6	0.0	8.0	19.4	0.0	8.0	14.2	0.0	8.1	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1795		120	1785		120	1625		120	1660	
Reference Time A (s)	19.9	19.6		42.9	15.4		55.8	10.2		60.8	2.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1625		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		11.7	10.2		NA	NA	
Reference Time (s)		19.9			42.9			11.7			60.8	
Adj Reference Time (s)		23.9			46.9			15.7			64.8	
Split Option												
Ref Time Combined (s)	1.3	19.6		2.9	15.4		3.7	10.2		4.1	2.7	
Ref Time Seperate (s)	1.3	18.6		2.9	14.0		3.7	0.4		4.1	0.4	
Reference Time (s)	19.6	19.6		15.4	15.4		10.2	10.2		4.1	4.1	
Adj Reference Time (s)	23.6	23.6		19.4	19.4		14.2	14.2		8.1	8.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	31.6	22.2	
Permitted Option (s)	46.9	64.8	
Split Option (s)	42.9	22.2	
Minimum (s)	31.6	22.2	53.8

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	44.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	320	40	159	343	102	123	327	173	200	206	113
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	94	360	0	159	445	0	123	500	0	0	519	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.95	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3557	0	3505	3493	0	1805	3430	0	0	5148	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.2	12.1	0.0	5.4	15.4	0.0			0.0			0.0
Adj Reference Time (s)	8.0	16.1	0.0	9.4	20.3	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1779		117	1747		120	1715		0	172	
Reference Time A (s)	48.3	12.1		81.6	15.4		122.7	17.7		0.0	140.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		48.3			81.6			122.7			140.0	
Adj Reference Time (s)		52.3			85.6			126.7			144.0	
Split Option												
Ref Time Combined (s)	3.2	12.1		5.4	15.4		8.2	17.7		0.0	12.2	
Ref Time Seperate (s)	3.2	10.8		5.4	11.9		8.2	11.7		6.6	7.3	
Reference Time (s)	12.1	12.1		15.4	15.4		17.7	17.7		12.2	12.2	
Adj Reference Time (s)	16.1	16.1		20.3	20.3		23.1	23.1		18.1	18.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	28.3	NA	
Permitted Option (s)	85.6	144.0	
Split Option (s)	36.4	41.2	
Minimum (s)	28.3	41.2	69.5

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	431	95	39	610	18	242	64	55	16	34	63
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	80	526	0	39	628	0	242	119	0	0	50	63
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	0.93	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3520	0	1805	3602	0	1805	1768	0	0	1870	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.3	18.0	0.0	2.6	20.9	0.0			0.0			4.8
Adj Reference Time (s)	9.3	22.0	0.0	8.0	24.9	0.0			0.0			9.2
Permitted Option												
Adj Saturation A (vph)	120	1760		120	1801		120	1768		0	314	
Reference Time A (s)	79.8	18.0		38.9	20.9		241.3	8.1		0.0	19.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1768		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.1	8.1		9.1	11.2	
Reference Time (s)		79.8			38.9			24.1			11.2	
Adj Reference Time (s)		83.8			42.9			28.1			15.4	
Split Option												
Ref Time Combined (s)	5.3	18.0		2.6	20.9		16.1	8.1		0.0	3.2	
Ref Time Seperate (s)	5.3	14.7		2.6	20.3		16.1	4.4		1.1	2.1	
Reference Time (s)	18.0	18.0		20.9	20.9		16.1	16.1		3.2	3.2	
Adj Reference Time (s)	22.0	22.0		24.9	24.9		20.1	20.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.3	NA	
Permitted Option (s)	83.8	28.1	
Split Option (s)	46.9	28.5	
Minimum (s)	34.3	28.1	62.3

Right Turns	SBR
Adj Reference Time (s)	9.2
Cross Thru Ref Time (s)	24.9
Oncoming Left Ref Time (s)	20.1
Combined (s)	54.2

Intersection Summary			
Intersection Capacity Utilization	52.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	121	676	104	145	435	123	123	572	260	119	385	83
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	121	676	104	145	435	123	123	572	260	119	468	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3521	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	4.1	22.4	7.9	5.0	14.4	9.3	8.2	19.0	19.6	7.9	16.1	0.0
Adj Reference Time (s)	8.1	26.4	12.3	9.0	18.7	13.7	12.2	23.7	24.3	11.9	23.7	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1761	
Reference Time A (s)	62.1	22.4		74.5	14.4		122.7	19.0		118.7	16.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		62.1			74.5			122.7			118.7	
Adj Reference Time (s)		66.1			78.5			126.7			122.7	
Split Option												
Ref Time Combined (s)	4.1	22.4		5.0	14.4		8.2	19.0		7.9	16.1	
Ref Time Seperate (s)	4.1	22.4		5.0	14.4		8.2	19.0		7.9	13.3	
Reference Time (s)	22.4	22.4		14.4	14.4		19.0	19.0		16.1	16.1	
Adj Reference Time (s)	26.4	26.4		18.7	18.7		23.7	23.7		23.7	23.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.4	35.9	
Permitted Option (s)	78.5	126.7	
Split Option (s)	45.1	47.4	
Minimum (s)	35.4	35.9	71.3

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	12.3	13.7	24.3
Cross Thru Ref Time (s)	23.7	23.7	26.4
Oncoming Left Ref Time (s)	9.0	8.1	11.9
Combined (s)	45.0	45.5	62.6

Intersection Summary			
Intersection Capacity Utilization	59.4%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	706	99	31	560	10	136	67	93	22	54	7
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	1	805	0	31	570	0	136	160	0	22	61	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3551	0	1805	3608	0	1805	1734	0	1805	1867	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.1	27.2	0.0	2.1	19.0	0.0	9.0	11.2	0.0	1.5	3.9	0.0
Adj Reference Time (s)	8.0	31.2	0.0	8.0	23.0	0.0	13.0	15.5	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1775		120	1804		120	1734		120	1867	
Reference Time A (s)	1.0	27.2		30.9	19.0		135.6	11.2		21.9	3.9	
Adj Saturation B (vph	NA	NA		NA	NA		0	1734		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		17.0	11.2		NA	NA	
Reference Time (s)		27.2			30.9			17.0			21.9	
Adj Reference Time (s)		31.2			34.9			21.0			25.9	
Split Option												
Ref Time Combined (s)	0.1	27.2		2.1	19.0		9.0	11.2		1.5	3.9	
Ref Time Seperate (s)	0.1	23.9		2.1	18.6		9.0	4.8		1.5	3.5	
Reference Time (s)	27.2	27.2		19.0	19.0		11.2	11.2		3.9	3.9	
Adj Reference Time (s)	31.2	31.2		23.0	23.0		15.5	15.5		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.2	23.5	
Permitted Option (s)	34.9	25.9	
Split Option (s)	54.2	23.5	
Minimum (s)	34.9	23.5	58.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	153	30	193	46	75	101	240	490	74	78	318	242
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	183	193	0	121	101	240	564	0	78	560	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.98	0.85	0.95	0.98	0.85	0.95	0.94	0.85
Saturated Flow (vph)	0	1821	1615	0	1864	1615	1805	3546	0	1805	3383	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.7	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			14.9			10.9	16.0	19.1	0.0	5.2	20.5	0.0
Adj Reference Time (s)			19.5			20.9	20.0	23.1	0.0	9.2	24.5	0.0
Permitted Option												
Adj Saturation A (vph)	0	137		0	270		120	1773		120	1692	
Reference Time A (s)	0.0	160.0		0.0	53.8		239.3	19.1		77.8	20.5	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	18.2	20.1		11.1	15.8		NA	NA		NA	NA	
Reference Time (s)		20.1			15.8			239.3			77.8	
Adj Reference Time (s)		24.1			22.6			243.3			81.8	
Split Option												
Ref Time Combined (s)	0.0	12.1		0.0	7.8		16.0	19.1		5.2	20.5	
Ref Time Seperate (s)	10.2	1.9		3.1	4.7		16.0	16.6		5.2	12.0	
Reference Time (s)	12.1	12.1		7.8	7.8		19.1	19.1		20.5	20.5	
Adj Reference Time (s)	17.1	17.1		19.8	19.8		23.1	23.1		24.5	24.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	44.5	
Permitted Option (s)	24.1	243.3	
Split Option (s)	36.9	47.7	
Minimum (s)	24.1	44.5	68.6

Right Turns	EBR	WBR
Adj Reference Time (s)	19.5	20.9
Cross Thru Ref Time (s)	24.5	23.1
Oncoming Left Ref Time (s)	19.8	17.1
Combined (s)	63.8	61.0

Intersection Summary			
Intersection Capacity Utilization	57.1%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	492	9	105	427	0	0	0	0	265	0	219
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	501	0	105	427	0	0	0	0	0	265	219
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3608	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	16.7	0.0	7.0	14.2	0.0			0.0			16.9
Adj Reference Time (s)	0.0	20.7	0.0	11.0	18.2	0.0			0.0			21.4
Permitted Option												
Adj Saturation A (vph)	0	1804		120	1809		0	0		0	120	
Reference Time A (s)	0.0	16.7		104.7	14.2		0.0	0.0		0.0	264.3	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		25.6	25.6	
Reference Time (s)		16.7			104.7			0.0			25.6	
Adj Reference Time (s)		20.7			108.7			8.0			29.6	
Split Option												
Ref Time Combined (s)	0.0	16.7		7.0	14.2		0.0	0.0		0.0	17.6	
Ref Time Seperate (s)	0.0	16.4		7.0	14.2		0.0	0.0		17.6	0.0	
Reference Time (s)	16.7	16.7		14.2	14.2		0.0	0.0		17.6	17.6	
Adj Reference Time (s)	20.7	20.7		18.2	18.2		0.0	0.0		22.0	22.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	31.7	NA	
Permitted Option (s)	108.7	29.6	
Split Option (s)	38.8	22.0	
Minimum (s)	31.7	22.0	53.6

Right Turns	SBR
Adj Reference Time (s)	21.4
Cross Thru Ref Time (s)	18.2
Oncoming Left Ref Time (s)	0.0
Combined (s)	39.6

Intersection Summary			
Intersection Capacity Utilization	44.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	602	0	0	494	205	24	2	245	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	155	602	0	0	699	0	0	271	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3458	0	0	3113	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.3	20.0	0.0	0.0	24.4	0.0			0.0			0.0
Adj Reference Time (s)	14.3	24.0	0.0	0.0	28.4	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1729		0	298		0	0	
Reference Time A (s)	154.6	20.0		0.0	24.4		0.0	35.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		9.6	14.5		NA	NA	
Reference Time (s)		154.6			24.4			14.5			0.0	
Adj Reference Time (s)		158.6			28.4			18.5			8.0	
Split Option												
Ref Time Combined (s)	10.3	20.0		0.0	24.4		0.0	10.4		0.0	0.0	
Ref Time Seperate (s)	10.3	20.0		0.0	17.3		1.6	0.1		0.0	0.0	
Reference Time (s)	20.0	20.0		24.4	24.4		10.4	10.4		0.0	0.0	
Adj Reference Time (s)	24.0	24.0		28.4	28.4		14.4	14.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.7	NA	
Permitted Option (s)	158.6	18.5	
Split Option (s)	52.4	14.4	
Minimum (s)	42.7	14.4	57.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	47.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	86	11	274	0	0	0	0	72	0	561
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	562	0	11	274	0	0	0	0	72	0	561
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3535	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	19.1	0.0	0.7	17.3	0.0	0.0	0.0	0.0	4.8	0.0	41.7
Adj Reference Time (s)	0.0	23.1	0.0	8.0	21.3	0.0	0.0	0.0	0.0	8.8	0.0	45.7
Permitted Option												
Adj Saturation A (vph)	0	1767		120	1900		0	0		120	0	
Reference Time A (s)	0.0	19.1		11.0	17.3		0.0	0.0		71.8	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.8	0.0	
Reference Time (s)		19.1			17.3			0.0			12.8	
Adj Reference Time (s)		23.1			21.3			8.0			16.8	
Split Option												
Ref Time Combined (s)	0.0	19.1		0.7	17.3		0.0	0.0		4.8	0.0	
Ref Time Seperate (s)	0.0	16.2		0.7	17.3		0.0	0.0		4.8	0.0	
Reference Time (s)	19.1	19.1		17.3	17.3		0.0	0.0		4.8	4.8	
Adj Reference Time (s)	23.1	23.1		21.3	21.3		0.0	0.0		8.8	8.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	31.1	8.8	
Permitted Option (s)	23.1	16.8	
Split Option (s)	44.4	8.8	
Minimum (s)	23.1	8.8	31.9

Right Turns	SBR
Adj Reference Time (s)	45.7
Cross Thru Ref Time (s)	21.3
Oncoming Left Ref Time (s)	0.0
Combined (s)	67.0

Intersection Summary			
Intersection Capacity Utilization	55.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	192	0	0	127	154	160	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	388	192	0	0	127	154	160	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	13.3	12.1	0.0	0.0	8.0	11.7	10.6	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	17.3	16.1	0.0	0.0	12.0	15.7	14.6	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	199.2	12.1		0.0	8.0		159.6	0.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1647		0	0	
Reference Time B (s)	NA	NA		NA	NA		18.6	0.9		0.0	0.0	
Reference Time (s)		199.2			8.0			18.6			0.0	
Adj Reference Time (s)		203.2			12.0			22.6			8.4	
Split Option												
Ref Time Combined (s)	13.3	12.1		0.0	8.0		10.6	0.9		0.0	0.0	
Ref Time Seperate (s)	13.3	12.1		0.0	8.0		10.6	0.3		0.0	0.0	
Reference Time (s)	13.3	13.3		8.0	8.0		10.6	10.6		0.0	0.0	
Adj Reference Time (s)	17.3	17.3		12.0	12.0		20.0	20.0		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	29.3	20.0	
Permitted Option (s)	203.2	22.6	
Split Option (s)	29.3	28.4	
Minimum (s)	29.3	20.0	49.3

Right Turns	WBR
Adj Reference Time (s)	15.7
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	17.3
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	44.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	786	62	3	110	0	0	0	0	4	0	949
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	848	0	3	110	0	0	0	0	0	320	633
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1879	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	54.2	0.0	0.2	6.9	0.0			0.0			47.0
Adj Reference Time (s)	0.0	58.2	0.0	8.0	10.9	0.0			0.0			51.0
Permitted Option												
Adj Saturation A (vph)	0	1879		120	1900		0	0		0	1375	
Reference Time A (s)	0.0	54.2		3.0	6.9		0.0	0.0		0.0	28.0	
Adj Saturation B (vph	0	1879		NA	NA		NA	NA		0	0	
Reference Time B (s)	0.0	54.2		NA	NA		NA	NA		8.3	31.8	
Reference Time (s)		54.2			6.9			0.0			28.0	
Adj Reference Time (s)		58.2			10.9			8.0			32.0	
Split Option												
Ref Time Combined (s)	0.0	54.2		0.2	6.9		0.0	0.0		0.0	23.8	
Ref Time Seperate (s)	0.0	50.2		0.2	6.9		0.0	0.0		0.3	0.0	
Reference Time (s)	54.2	54.2		6.9	6.9		0.0	0.0		23.8	23.8	
Adj Reference Time (s)	58.2	58.2		10.9	10.9		0.0	0.0		27.8	27.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	66.2	NA	
Permitted Option (s)	58.2	32.0	
Split Option (s)	69.1	27.8	
Minimum (s)	58.2	27.8	85.9

Right Turns	SBR
Adj Reference Time (s)	51.0
Cross Thru Ref Time (s)	10.9
Oncoming Left Ref Time (s)	0.0
Combined (s)	62.0

Intersection Summary			
Intersection Capacity Utilization	71.6%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	388	204	9	285	0	0	0	0	5	0	485
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	388	204	0	294	0	0	0	0	5	0	485
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1897	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			15.2			0.0	0.0	0.0	0.0	0.3	0.0	36.0
Adj Reference Time (s)			19.2			0.0	0.0	0.0	0.0	8.0	0.0	40.0
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1321		0	0		120	0	
Reference Time A (s)	0.0	24.5		0.0	26.7		0.0	0.0		5.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		8.3	0.0	
Reference Time (s)		24.5			26.7			0.0			5.0	
Adj Reference Time (s)		28.5			30.7			8.0			9.0	
Split Option												
Ref Time Combined (s)	0.0	24.5		0.0	18.6		0.0	0.0		0.3	0.0	
Ref Time Seperate (s)	0.0	24.5		0.6	18.0		0.0	0.0		0.3	0.0	
Reference Time (s)	24.5	24.5		18.6	18.6		0.0	0.0		0.3	0.3	
Adj Reference Time (s)	28.5	28.5		22.6	22.6		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	30.7	9.0	
Split Option (s)	51.1	8.0	
Minimum (s)	30.7	8.0	38.7

Right Turns	EBR	SBR
Adj Reference Time (s)	19.2	40.0
Cross Thru Ref Time (s)	0.0	22.6
Oncoming Left Ref Time (s)	22.6	0.0
Combined (s)	41.8	62.6

Intersection Summary			
Intersection Capacity Utilization	52.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1068	378	47	605	0	0	0	0	69	0	879
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1068	378	47	605	0	0	0	0	0	69	879
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	18.6	28.2	3.1	20.1	0.0			0.0			36.9
Adj Reference Time (s)	0.0	22.6	32.2	8.0	24.1	0.0			0.0			40.9
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	18.6		46.9	20.1		0.0	0.0		0.0	34.4	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		10.3	10.3	
Reference Time (s)		18.6			46.9			0.0			10.3	
Adj Reference Time (s)		22.6			50.9			8.0			14.3	
Split Option												
Ref Time Combined (s)	0.0	18.6		3.1	20.1		0.0	0.0		0.0	2.3	
Ref Time Seperate (s)	0.0	18.6		3.1	20.1		0.0	0.0		2.3	0.0	
Reference Time (s)	18.6	18.6		20.1	20.1		0.0	0.0		2.3	2.3	
Adj Reference Time (s)	22.6	22.6		24.1	24.1		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	30.6	NA	
Permitted Option (s)	50.9	14.3	
Split Option (s)	46.6	8.0	
Minimum (s)	30.6	8.0	38.6

Right Turns	EBR	SBR
Adj Reference Time (s)	32.2	40.9
Cross Thru Ref Time (s)	8.0	24.1
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	48.2	65.0

Intersection Summary			
Intersection Capacity Utilization	54.1%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	936	202	0	0	272	195	373	5	52	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	936	202	0	0	272	195	0	378	52	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3613	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	32.0	6.7	0.0	0.0	9.0	14.6			4.0			0.0
Adj Reference Time (s)	36.0	10.7	0.0	0.0	13.3	18.7			8.4			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	243		0	0	
Reference Time A (s)	480.6	6.7		0.0	9.0		0.0	186.8		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		20.4	20.6		0.0	0.0	
Reference Time (s)		480.6			9.0			20.6			0.0	
Adj Reference Time (s)		484.6			13.3			24.6			8.0	
Split Option												
Ref Time Combined (s)	32.0	6.7		0.0	9.0		0.0	12.6		0.0	0.0	
Ref Time Seperate (s)	32.0	6.7		0.0	9.0		12.4	0.3		0.0	0.0	
Reference Time (s)	32.0	32.0		9.0	9.0		12.6	12.6		0.0	0.0	
Adj Reference Time (s)	36.0	36.0		13.3	13.3		16.7	16.7		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	49.3	NA	
Permitted Option (s)	484.6	24.6	
Split Option (s)	49.3	16.7	
Minimum (s)	49.3	16.7	66.0

Right Turns	WBR	NBR
Adj Reference Time (s)	18.7	8.4
Cross Thru Ref Time (s)	16.7	10.7
Oncoming Left Ref Time (s)	36.0	0.0
Combined (s)	71.4	19.1

Intersection Summary			
Intersection Capacity Utilization	59.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	68	78	458	49	251	71	574	82	343	386	74
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	96	146	0	0	507	251	71	656	0	343	386	74
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3328	0	0	3628	1615	1805	3550	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			18.7	4.7	22.2	0.0	22.8	12.8	5.6
Adj Reference Time (s)			0.0			22.7	8.7	26.2	0.0	26.8	16.9	10.0
Permitted Option												
Adj Saturation A (vph)	120	1664		0	259		120	1775		120	1809	
Reference Time A (s)	95.7	5.3		0.0	235.1		70.8	22.2		342.0	12.8	
Adj Saturation B (vph	0	3328		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	14.4	5.3		NA	NA		NA	NA		NA	NA	
Reference Time (s)		14.4			235.1			70.8			342.0	
Adj Reference Time (s)		18.4			239.1			74.8			346.0	
Split Option												
Ref Time Combined (s)	6.4	5.3		0.0	16.8		4.7	22.2		22.8	12.8	
Ref Time Seperate (s)	6.4	2.5		15.2	3.1		4.7	19.4		22.8	12.8	
Reference Time (s)	6.4	6.4		16.8	16.8		22.2	22.2		22.8	22.8	
Adj Reference Time (s)	10.4	10.4		20.8	20.8		26.2	26.2		26.8	26.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	53.0	
Permitted Option (s)	239.1	346.0	
Split Option (s)	31.2	53.0	
Minimum (s)	31.2	53.0	84.1

Right Turns	WBR	SBR
Adj Reference Time (s)	22.7	10.0
Cross Thru Ref Time (s)	26.2	20.8
Oncoming Left Ref Time (s)	10.4	8.7
Combined (s)	59.2	39.5

Intersection Summary			
Intersection Capacity Utilization	70.1%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	944	32	22	1	47	6	11	7	1	1	6	431
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	944	54	0	1	53	0	0	19	0	0	7	431
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	1784	0	1805	1868	0	0	1830	0	0	1886	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	62.8	3.6	0.0	0.1	3.4	0.0			0.0			32.0
Adj Reference Time (s)	66.8	8.0	0.0	8.0	8.0	0.0			0.0			36.0
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1868		0	185		0	1890	
Reference Time A (s)	941.4	3.6		1.0	3.4		0.0	12.3		0.0	0.4	
Adj Saturation B (vph	0	1784		0	1868		0	0		0	0	
Reference Time B (s)	70.8	3.6		8.1	3.4		8.7	9.2		8.1	8.4	
Reference Time (s)		70.8			3.4			9.2			0.4	
Adj Reference Time (s)		74.8			8.0			13.2			8.0	
Split Option												
Ref Time Combined (s)	62.8	3.6		0.1	3.4		0.0	1.2		0.0	0.4	
Ref Time Seperate (s)	62.8	2.2		0.1	3.0		0.7	0.5		0.1	0.4	
Reference Time (s)	62.8	62.8		3.4	3.4		1.2	1.2		0.4	0.4	
Adj Reference Time (s)	66.8	66.8		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	74.8	NA	
Permitted Option (s)	74.8	13.2	
Split Option (s)	74.8	16.0	
Minimum (s)	74.8	13.2	88.0

Right Turns	SBR
Adj Reference Time (s)	36.0
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	52.0

Intersection Summary			
Intersection Capacity Utilization	73.3%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	611	326	390	739	0	0	0	0	139	140	348
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	937	0	390	739	0	0	0	0	0	279	348
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	3429	0	3505	3618	0	0	0	0	0	1853	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	33.0	0.0	13.4	24.5	0.0			0.0			27.3
Adj Reference Time (s)	0.0	37.0	0.0	17.4	28.5	0.0			0.0			31.3
Permitted Option												
Adj Saturation A (vph)	0	1714		117	1809		0	0		0	212	
Reference Time A (s)	0.0	33.0		200.3	24.5		0.0	0.0		0.0	157.6	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		17.2	26.1	
Reference Time (s)		33.0			200.3			0.0			26.1	
Adj Reference Time (s)		37.0			204.3			8.0			30.1	
Split Option												
Ref Time Combined (s)	0.0	33.0		13.4	24.5		0.0	0.0		0.0	18.1	
Ref Time Seperate (s)	0.0	21.6		13.4	24.5		0.0	0.0		9.2	8.8	
Reference Time (s)	33.0	33.0		24.5	24.5		0.0	0.0		18.1	18.1	
Adj Reference Time (s)	37.0	37.0		28.5	28.5		0.0	0.0		22.7	22.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.3	NA	
Permitted Option (s)	204.3	30.1	
Split Option (s)	65.5	22.7	
Minimum (s)	54.3	22.7	77.0

Right Turns	SBR
Adj Reference Time (s)	31.3
Cross Thru Ref Time (s)	28.5
Oncoming Left Ref Time (s)	0.0
Combined (s)	59.8

Intersection Summary			
Intersection Capacity Utilization	64.2%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	312	407	24	3	676	234	460	83	250	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	312	431	0	3	676	234	0	543	250	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.96	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3587	0	1805	3618	1615	0	1820	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.7	14.5	0.0	0.2	22.4	18.3			18.8			0.0
Adj Reference Time (s)	14.7	18.5	0.0	8.0	26.4	22.3			23.2			0.0
Permitted Option												
Adj Saturation A (vph)	117	1794		120	1809		0	136		0	0	
Reference Time A (s)	160.2	14.5		3.0	22.4		0.0	479.7		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		38.6	43.8		0.0	0.0	
Reference Time (s)		160.2			22.4			43.8			0.0	
Adj Reference Time (s)		164.2			26.4			47.8			8.0	
Split Option												
Ref Time Combined (s)	10.7	14.5		0.2	22.4		0.0	35.8		0.0	0.0	
Ref Time Seperate (s)	10.7	13.7		0.2	22.4		30.6	5.2		0.0	0.0	
Reference Time (s)	14.5	14.5		22.4	22.4		35.8	35.8		0.0	0.0	
Adj Reference Time (s)	18.5	18.5		26.4	26.4		39.8	39.8		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.1	NA	
Permitted Option (s)	164.2	47.8	
Split Option (s)	44.9	39.8	
Minimum (s)	41.1	39.8	80.9

Right Turns	WBR	NBR
Adj Reference Time (s)	22.3	23.2
Cross Thru Ref Time (s)	39.8	18.5
Oncoming Left Ref Time (s)	14.7	0.0
Combined (s)	76.8	41.7

Intersection Summary			
Intersection Capacity Utilization	67.4%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	421	78	129	699	52	50	4	70	22	2	22
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	21	499	0	129	751	0	50	74	0	22	24	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.86	0.85
Saturated Flow (vph)	1805	3533	0	1805	3580	0	1805	1630	0	1805	1639	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.4	16.9	0.0	8.6	25.2	0.0	3.3	5.4	0.0	1.5	1.8	0.0
Adj Reference Time (s)	8.0	20.9	0.0	12.6	29.2	0.0	8.0	9.4	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1766		120	1790		120	1630		120	1639	
Reference Time A (s)	20.9	16.9		128.6	25.2		49.9	5.4		21.9	1.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	1630		0	1639	
Reference Time B (s)	NA	NA		NA	NA		11.3	5.4		9.5	1.8	
Reference Time (s)		20.9			128.6			11.3			9.5	
Adj Reference Time (s)		24.9			132.6			15.3			13.5	
Split Option												
Ref Time Combined (s)	1.4	16.9		8.6	25.2		3.3	5.4		1.5	1.8	
Ref Time Seperate (s)	1.4	14.3		8.6	23.4		3.3	0.3		1.5	0.1	
Reference Time (s)	16.9	16.9		25.2	25.2		5.4	5.4		1.8	1.8	
Adj Reference Time (s)	20.9	20.9		29.2	29.2		9.4	9.4		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	37.2	17.4	
Permitted Option (s)	132.6	15.3	
Split Option (s)	50.1	17.4	
Minimum (s)	37.2	15.3	52.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	43.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	148	390	79	209	410	107	131	221	92	266	229	83
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	148	469	0	209	517	0	131	313	0	0	578	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	0.97	0.85	0.95	0.96	0.85	0.95	0.96	0.85
Saturated Flow (vph)	3505	3526	0	3505	3505	0	1805	3458	0	0	5187	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.1	16.0	0.0	7.2	17.8	0.0			0.0			0.0
Adj Reference Time (s)	9.1	20.0	0.0	11.2	22.5	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1763		117	1753		120	1729		0	173	
Reference Time A (s)	76.0	16.0		107.3	17.8		130.6	11.1		0.0	184.7	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		76.0			107.3			130.6			184.7	
Adj Reference Time (s)		80.0			111.3			134.6			188.7	
Split Option												
Ref Time Combined (s)	5.1	16.0		7.2	17.8		8.7	11.1		0.0	13.4	
Ref Time Seperate (s)	5.1	13.3		7.2	14.1		8.7	7.9		8.8	8.0	
Reference Time (s)	16.0	16.0		17.8	17.8		11.1	11.1		13.4	13.4	
Adj Reference Time (s)	20.0	20.0		22.5	22.5		17.5	17.5		19.1	19.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	31.5	NA	
Permitted Option (s)	111.3	188.7	
Split Option (s)	42.4	36.6	
Minimum (s)	31.5	36.6	68.2

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	56.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	563	227	68	523	25	135	39	44	13	69	51
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	51	790	0	68	548	0	135	83	0	0	82	51
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.99	0.85	0.95	0.92	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3462	0	1805	3593	0	1805	1749	0	0	1885	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.4	27.4	0.0	4.5	18.3	0.0			0.0			3.9
Adj Reference Time (s)	8.0	31.4	0.0	8.5	22.3	0.0			0.0			8.4
Permitted Option												
Adj Saturation A (vph)	120	1731		120	1796		120	1749		0	557	
Reference Time A (s)	50.9	27.4		67.8	18.3		134.6	5.8		0.0	17.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1749		0	0	
Reference Time B (s)	NA	NA		NA	NA		17.0	5.8		8.9	13.2	
Reference Time (s)		50.9			67.8			17.0			13.2	
Adj Reference Time (s)		54.9			71.8			21.0			17.3	
Split Option												
Ref Time Combined (s)	3.4	27.4		4.5	18.3		9.0	5.8		0.0	5.2	
Ref Time Seperate (s)	3.4	19.6		4.5	17.5		9.0	2.7		0.9	4.4	
Reference Time (s)	27.4	27.4		18.3	18.3		9.0	9.0		5.2	5.2	
Adj Reference Time (s)	31.4	31.4		22.3	22.3		13.2	13.2		9.6	9.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.9	NA	
Permitted Option (s)	71.8	21.0	
Split Option (s)	53.8	22.8	
Minimum (s)	39.9	21.0	60.9

Right Turns	SBR
Adj Reference Time (s)	8.4
Cross Thru Ref Time (s)	22.3
Oncoming Left Ref Time (s)	13.2
Combined (s)	43.9

Intersection Summary			
Intersection Capacity Utilization	50.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	573	153	217	565	75	79	425	153	81	494	89
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	82	573	153	217	565	75	79	425	153	81	583	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3535	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	2.8	19.0	11.5	7.4	18.7	5.7	5.3	14.1	11.6	5.4	20.0	0.0
Adj Reference Time (s)	8.0	23.1	15.8	11.4	22.8	10.2	9.3	19.1	16.8	9.4	26.6	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1767	
Reference Time A (s)	42.1	19.0		111.4	18.7		78.8	14.1		80.8	20.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		42.1			111.4			78.8			80.8	
Adj Reference Time (s)		46.1			115.4			82.8			84.8	
Split Option												
Ref Time Combined (s)	2.8	19.0		7.4	18.7		5.3	14.1		5.4	20.0	
Ref Time Seperate (s)	2.8	19.0		7.4	18.7		5.3	14.1		5.4	16.9	
Reference Time (s)	19.0	19.0		18.7	18.7		14.1	14.1		20.0	20.0	
Adj Reference Time (s)	23.1	23.1		22.8	22.8		19.1	19.1		26.6	26.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.5	35.8	
Permitted Option (s)	115.4	84.8	
Split Option (s)	46.0	45.7	
Minimum (s)	34.5	35.8	70.4

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	15.8	10.2	16.8
Cross Thru Ref Time (s)	26.6	19.1	23.1
Oncoming Left Ref Time (s)	11.4	8.0	9.4
Combined (s)	53.8	37.4	49.3

Intersection Summary			
Intersection Capacity Utilization	58.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	756	82	41	609	16	62	61	45	19	62	3
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	7	838	0	41	625	0	62	106	0	19	65	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3565	0	1805	3604	0	1805	1779	0	1805	1887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.5	28.2	0.0	2.7	20.8	0.0	4.1	7.3	0.0	1.3	4.1	0.0
Adj Reference Time (s)	8.0	32.2	0.0	8.0	24.8	0.0	8.1	11.8	0.0	8.0	8.1	0.0
Permitted Option												
Adj Saturation A (vph)	120	1782		120	1802		120	1779		120	1887	
Reference Time A (s)	7.0	28.2		40.9	20.8		61.8	7.3		18.9	4.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1779		0	1887	
Reference Time B (s)	NA	NA		NA	NA		12.1	7.3		9.3	4.1	
Reference Time (s)		28.2			40.9			12.1			9.3	
Adj Reference Time (s)		32.2			44.9			16.4			13.3	
Split Option												
Ref Time Combined (s)	0.5	28.2		2.7	20.8		4.1	7.3		1.3	4.1	
Ref Time Seperate (s)	0.5	25.5		2.7	20.3		4.1	4.2		1.3	3.9	
Reference Time (s)	28.2	28.2		20.8	20.8		7.3	7.3		4.1	4.1	
Adj Reference Time (s)	32.2	32.2		24.8	24.8		11.8	11.8		8.1	8.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.2	19.8	
Permitted Option (s)	44.9	16.4	
Split Option (s)	57.0	20.0	
Minimum (s)	40.2	16.4	56.6

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	47.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	23	173	51	23	64	148	388	45	51	444	99
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	131	173	0	74	64	148	433	0	51	543	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.97	0.85	0.95	0.98	0.85	0.95	0.97	0.85
Saturated Flow (vph)	0	1822	1615	0	1835	1615	1805	3561	0	1805	3519	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.3	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			13.4			8.2	9.8	14.6	0.0	3.4	18.8	0.0
Adj Reference Time (s)			18.2			19.9	13.8	18.7	0.0	8.0	22.8	0.0
Permitted Option												
Adj Saturation A (vph)	0	139		0	160		120	1781		120	1759	
Reference Time A (s)	0.0	113.3		0.0	55.4		147.6	14.6		50.9	18.8	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	15.2	16.6		11.4	12.8		NA	NA		NA	NA	
Reference Time (s)		16.6			12.8			147.6			50.9	
Adj Reference Time (s)		21.1			21.5			151.6			54.9	
Split Option												
Ref Time Combined (s)	0.0	8.6		0.0	4.8		9.8	14.6		3.4	18.8	
Ref Time Seperate (s)	7.2	1.5		3.4	1.5		9.8	13.1		3.4	15.4	
Reference Time (s)	8.6	8.6		4.8	4.8		14.6	14.6		18.8	18.8	
Adj Reference Time (s)	14.0	14.0		18.8	18.8		18.7	18.7		22.8	22.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	36.6	
Permitted Option (s)	21.5	151.6	
Split Option (s)	32.8	41.5	
Minimum (s)	21.5	36.6	58.2

Right Turns	EBR	WBR
Adj Reference Time (s)	18.2	19.9
Cross Thru Ref Time (s)	22.8	18.7
Oncoming Left Ref Time (s)	18.8	14.0
Combined (s)	59.8	52.7

Intersection Summary			
Intersection Capacity Utilization	49.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Appendix D

Analysis Worksheets for
Existing (2024) plus Project Phase 1 Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	599	18	149	438	0	0	0	0	150	0	296
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	617	0	149	438	0	0	0	0	0	150	296
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3602	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	20.6	0.0	9.9	14.5	0.0			0.0			22.6
Adj Reference Time (s)	0.0	24.6	0.0	13.9	18.5	0.0			0.0			26.6
Permitted Option												
Adj Saturation A (vph)	0	1801		120	1809		0	0		0	120	
Reference Time A (s)	0.0	20.6		148.6	14.5		0.0	0.0		0.0	149.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		18.0	18.0	
Reference Time (s)		20.6			148.6			0.0			18.0	
Adj Reference Time (s)		24.6			152.6			8.0			22.3	
Split Option												
Ref Time Combined (s)	0.0	20.6		9.9	14.5		0.0	0.0		0.0	10.0	
Ref Time Seperate (s)	0.0	20.0		9.9	14.5		0.0	0.0		10.0	0.0	
Reference Time (s)	20.6	20.6		14.5	14.5		0.0	0.0		10.0	10.0	
Adj Reference Time (s)	24.6	24.6		18.5	18.5		0.0	0.0		15.5	15.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.5	NA	
Permitted Option (s)	152.6	22.3	
Split Option (s)	43.1	15.5	
Minimum (s)	38.5	15.5	54.0

Right Turns	SBR
Adj Reference Time (s)	26.6
Cross Thru Ref Time (s)	18.5
Oncoming Left Ref Time (s)	0.0
Combined (s)	45.2

Intersection Summary			
Intersection Capacity Utilization	45.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	529	0	0	589	356	5	1	88	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	210	529	0	0	945	0	0	94	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3413	0	0	3101	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	14.0	17.5	0.0	0.0	33.5	0.0			0.0			0.0
Adj Reference Time (s)	18.0	21.5	0.0	0.0	37.5	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1707		0	514		0	0	
Reference Time A (s)	209.4	17.5		0.0	33.5		0.0	8.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1541		0	0	
Reference Time B (s)	NA	NA		NA	NA		8.3	7.7		0.0	0.0	
Reference Time (s)		209.4			33.5			8.3			0.0	
Adj Reference Time (s)		213.4			37.5			12.3			8.0	
Split Option												
Ref Time Combined (s)	14.0	17.5		0.0	33.5		0.0	3.6		0.0	0.0	
Ref Time Seperate (s)	14.0	17.5		0.0	21.0		0.3	0.0		0.0	0.0	
Reference Time (s)	17.5	17.5		33.5	33.5		3.6	3.6		0.0	0.0	
Adj Reference Time (s)	21.5	21.5		37.5	37.5		8.0	8.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	55.4	NA	
Permitted Option (s)	213.4	12.3	
Split Option (s)	59.0	8.0	
Minimum (s)	55.4	8.0	63.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	52.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	639	181	3	245	0	0	0	0	125	0	379
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	821	0	3	245	0	0	0	0	125	0	379
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3498	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			0.0	0.0	0.0	0.0	8.3	0.0	28.2
Adj Reference Time (s)			0.0			0.0	0.0	0.0	0.0	12.3	0.0	32.2
Permitted Option												
Adj Saturation A (vph)	0	1691		120	1900		0	0		120	0	
Reference Time A (s)	0.0	29.0		3.0	15.5		0.0	0.0		124.7	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		16.3	0.0	
Reference Time (s)		29.0			15.5			0.0			16.3	
Adj Reference Time (s)		33.0			19.5			8.0			20.3	
Split Option												
Ref Time Combined (s)	0.0	28.2		0.2	15.5		0.0	0.0		8.3	0.0	
Ref Time Seperate (s)	0.1	21.9		0.2	15.5		0.0	0.0		8.3	0.0	
Reference Time (s)	28.2	28.2		15.5	15.5		0.0	0.0		8.3	8.3	
Adj Reference Time (s)	32.2	32.2		19.5	19.5		0.0	0.0		12.3	12.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	12.3	
Permitted Option (s)	33.0	20.3	
Split Option (s)	51.6	12.3	
Minimum (s)	33.0	12.3	45.3

Right Turns	SBR
Adj Reference Time (s)	32.2
Cross Thru Ref Time (s)	19.5
Oncoming Left Ref Time (s)	0.0
Combined (s)	51.6

Intersection Summary			
Intersection Capacity Utilization	43.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	220	0	0	87	118	161	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	540	220	0	0	87	118	161	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.5	13.9	0.0	0.0	5.5	9.0	10.7	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	22.5	17.9	0.0	0.0	9.5	13.0	14.7	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	277.3	13.9		0.0	5.5		160.6	0.9		0.0	0.0	
Adj Saturation B (vph	0	1900		NA	NA		0	1647		0	0	
Reference Time B (s)	26.5	13.9		NA	NA		18.7	0.9		0.0	0.0	
Reference Time (s)		26.5			5.5			18.7			0.0	
Adj Reference Time (s)		30.5			9.5			22.7			8.4	
Split Option												
Ref Time Combined (s)	18.5	13.9		0.0	5.5		10.7	0.9		0.0	0.0	
Ref Time Seperate (s)	18.5	13.9		0.0	5.5		10.7	0.3		0.0	0.0	
Reference Time (s)	18.5	18.5		5.5	5.5		10.7	10.7		0.0	0.0	
Adj Reference Time (s)	22.5	22.5		9.5	9.5		20.0	20.0		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.0	20.0	
Permitted Option (s)	30.5	22.7	
Split Option (s)	32.0	28.4	
Minimum (s)	30.5	20.0	50.5

Right Turns	WBR
Adj Reference Time (s)	13.0
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	22.5
Combined (s)	55.5

Intersection Summary			
Intersection Capacity Utilization	46.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1094	131	3	167	0	0	0	0	3	1	764
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1225	0	3	167	0	0	0	0	0	259	509
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1870	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	78.6	0.0	0.2	10.5	0.0			0.0			37.8
Adj Reference Time (s)	0.0	82.6	0.0	8.0	14.5	0.0			0.0			41.8
Permitted Option												
Adj Saturation A (vph)	0	1870		120	1900		0	0		0	1391	
Reference Time A (s)	0.0	78.6		3.0	10.5		0.0	0.0		0.0	22.3	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.2	27.2	
Reference Time (s)		78.6			10.5			0.0			22.3	
Adj Reference Time (s)		82.6			14.5			8.0			26.3	
Split Option												
Ref Time Combined (s)	0.0	78.6		0.2	10.5		0.0	0.0		0.0	19.2	
Ref Time Seperate (s)	0.0	70.2		0.2	10.5		0.0	0.0		0.2	0.1	
Reference Time (s)	78.6	78.6		10.5	10.5		0.0	0.0		19.2	19.2	
Adj Reference Time (s)	82.6	82.6		14.5	14.5		0.0	0.0		23.2	23.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	90.6	NA	
Permitted Option (s)	82.6	26.3	
Split Option (s)	97.2	23.2	
Minimum (s)	82.6	23.2	105.8

Right Turns	SBR
Adj Reference Time (s)	41.8
Cross Thru Ref Time (s)	14.5
Oncoming Left Ref Time (s)	0.0
Combined (s)	56.4

Intersection Summary			
Intersection Capacity Utilization	88.2%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	523	331	6	373	0	0	0	0	18	0	517
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	523	331	0	379	0	0	0	0	18	0	517
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1898	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			24.6			0.0	0.0	0.0	0.0	1.2	0.0	38.4
Adj Reference Time (s)			28.6			0.0	0.0	0.0	0.0	8.0	0.0	42.4
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1551		0	0		120	0	
Reference Time A (s)	0.0	33.0		0.0	29.3		0.0	0.0		18.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		9.2	0.0	
Reference Time (s)		33.0			29.3			0.0			9.2	
Adj Reference Time (s)		37.0			33.3			8.0			13.2	
Split Option												
Ref Time Combined (s)	0.0	33.0		0.0	24.0		0.0	0.0		1.2	0.0	
Ref Time Seperate (s)	0.0	33.0		0.4	23.6		0.0	0.0		1.2	0.0	
Reference Time (s)	33.0	33.0		24.0	24.0		0.0	0.0		1.2	1.2	
Adj Reference Time (s)	37.0	37.0		28.0	28.0		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	37.0	13.2	
Split Option (s)	65.0	8.0	
Minimum (s)	37.0	8.0	45.0

Right Turns	EBR	SBR
Adj Reference Time (s)	28.6	42.4
Cross Thru Ref Time (s)	0.0	28.0
Oncoming Left Ref Time (s)	28.0	0.0
Combined (s)	56.6	70.4

Intersection Summary			
Intersection Capacity Utilization	58.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	746	238	44	441	0	0	0	0	148	0	1017
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	746	238	44	441	0	0	0	0	0	148	1017
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	13.0	17.8	2.9	14.6	0.0			0.0			42.7
Adj Reference Time (s)	0.0	17.0	21.8	8.0	18.6	0.0			0.0			46.7
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	13.0		43.9	14.6		0.0	0.0		0.0	73.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.9	12.9	
Reference Time (s)		13.0			43.9			0.0			12.9	
Adj Reference Time (s)		17.0			47.9			8.0			16.9	
Split Option												
Ref Time Combined (s)	0.0	13.0		2.9	14.6		0.0	0.0		0.0	4.9	
Ref Time Seperate (s)	0.0	13.0		2.9	14.6		0.0	0.0		4.9	0.0	
Reference Time (s)	13.0	13.0		14.6	14.6		0.0	0.0		4.9	4.9	
Adj Reference Time (s)	17.0	17.0		18.6	18.6		0.0	0.0		8.9	8.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.0	NA	
Permitted Option (s)	47.9	16.9	
Split Option (s)	35.6	8.9	
Minimum (s)	25.0	8.9	33.9

Right Turns	EBR	SBR
Adj Reference Time (s)	21.8	46.7
Cross Thru Ref Time (s)	8.9	18.6
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	38.7	65.3

Intersection Summary			
Intersection Capacity Utilization	54.4%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	580	325	0	0	167	125	305	3	70	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	580	325	0	0	167	125	0	308	70	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	19.9	10.8	0.0	0.0	5.5	9.4			5.3			0.0
Adj Reference Time (s)	23.9	14.8	0.0	0.0	9.9	13.6			9.7			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	297.8	10.8		0.0	5.5		0.0	152.5		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		18.1	18.2		0.0	0.0	
Reference Time (s)		297.8			5.5			18.2			0.0	
Adj Reference Time (s)		301.8			9.9			22.2			8.0	
Split Option												
Ref Time Combined (s)	19.9	10.8		0.0	5.5		0.0	10.2		0.0	0.0	
Ref Time Seperate (s)	19.9	10.8		0.0	5.5		10.1	0.2		0.0	0.0	
Reference Time (s)	19.9	19.9		5.5	5.5		10.2	10.2		0.0	0.0	
Adj Reference Time (s)	23.9	23.9		9.9	9.9		14.4	14.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	NA	
Permitted Option (s)	301.8	22.2	
Split Option (s)	33.7	14.4	
Minimum (s)	33.7	14.4	48.2

Right Turns	WBR	NBR
Adj Reference Time (s)	13.6	9.7
Cross Thru Ref Time (s)	14.4	14.8
Oncoming Left Ref Time (s)	23.9	0.0
Combined (s)	51.9	24.5

Intersection Summary			
Intersection Capacity Utilization	43.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	33	13	318	72	413	28	359	40	226	201	59
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	68	46	0	0	390	413	28	399	0	226	201	59
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3464	0	0	3645	1615	1805	3563	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			30.7	1.9	13.4	0.0	15.0	6.7	4.5
Adj Reference Time (s)			0.0			34.7	8.0	17.4	0.0	19.0	11.0	8.9
Permitted Option												
Adj Saturation A (vph)	120	1732		0	280		120	1782		120	1809	
Reference Time A (s)	67.8	1.6		0.0	167.2		27.9	13.4		225.4	6.7	
Adj Saturation B (vph	0	3464		0	0		NA	NA		NA	NA	
Reference Time B (s)	12.5	1.6		18.6	20.8		NA	NA		NA	NA	
Reference Time (s)		12.5			20.8			27.9			225.4	
Adj Reference Time (s)		16.5			24.8			31.9			229.4	
Split Option												
Ref Time Combined (s)	4.5	1.6		0.0	12.8		1.9	13.4		15.0	6.7	
Ref Time Seperate (s)	4.5	1.1		10.6	4.5		1.9	12.1		15.0	6.7	
Reference Time (s)	4.5	4.5		12.8	12.8		13.4	13.4		15.0	15.0	
Adj Reference Time (s)	8.5	8.5		16.8	16.8		17.4	17.4		19.1	19.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	36.5	
Permitted Option (s)	24.8	229.4	
Split Option (s)	25.4	36.5	
Minimum (s)	24.8	36.5	61.3

Right Turns	WBR	SBR
Adj Reference Time (s)	34.7	8.9
Cross Thru Ref Time (s)	17.4	16.8
Oncoming Left Ref Time (s)	8.5	8.0
Combined (s)	60.6	33.7

Intersection Summary			
Intersection Capacity Utilization	51.1%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	638	66	7	0	29	4	3	2	0	4	1	565
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	638	73	0	0	33	0	0	5	0	0	5	565
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.96	0.85
Saturated Flow (vph)	1805	1873	0	1805	1865	0	0	1843	0	0	1824	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	42.4	4.7	0.0	0.0	2.1	0.0			0.0			42.0
Adj Reference Time (s)	46.4	8.7	0.0	8.0	8.0	0.0			0.0			46.0
Permitted Option												
Adj Saturation A (vph)	120	1873		120	1865		0	181		0	1352	
Reference Time A (s)	636.2	4.7		0.0	2.1		0.0	3.3		0.0	0.4	
Adj Saturation B (vph	0	1873		0	1865		0	0		0	0	
Reference Time B (s)	50.4	4.7		8.0	2.1		8.2	8.3		8.3	8.3	
Reference Time (s)		50.4			2.1			3.3			0.4	
Adj Reference Time (s)		54.4			8.0			8.0			8.0	
Split Option												
Ref Time Combined (s)	42.4	4.7		0.0	2.1		0.0	0.3		0.0	0.3	
Ref Time Seperate (s)	42.4	4.2		0.0	1.9		0.2	0.1		0.3	0.1	
Reference Time (s)	42.4	42.4		2.1	2.1		0.3	0.3		0.3	0.3	
Adj Reference Time (s)	46.4	46.4		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.4	NA	
Permitted Option (s)	54.4	8.0	
Split Option (s)	54.4	16.0	
Minimum (s)	54.4	8.0	62.4

Right Turns	SBR
Adj Reference Time (s)	46.0
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	62.0

Intersection Summary			
Intersection Capacity Utilization	52.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	549	276	487	653	0	0	0	0	428	139	294
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	825	0	487	653	0	0	0	0	0	567	294
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.96	0.85
Saturated Flow (vph)	0	3436	0	3505	3618	0	0	0	0	0	1828	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	29.0	0.0	16.7	21.7	0.0			0.0			23.3
Adj Reference Time (s)	0.0	33.0	0.0	20.7	25.7	0.0			0.0			27.3
Permitted Option												
Adj Saturation A (vph)	0	1718		117	1809		0	0		0	149	
Reference Time A (s)	0.0	29.0		250.1	21.7		0.0	0.0		0.0	457.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		36.5	45.2	
Reference Time (s)		29.0			250.1			0.0			45.2	
Adj Reference Time (s)		33.0			254.1			8.0			49.2	
Split Option												
Ref Time Combined (s)	0.0	29.0		16.7	21.7		0.0	0.0		0.0	37.2	
Ref Time Seperate (s)	0.0	19.3		16.7	21.7		0.0	0.0		28.5	8.8	
Reference Time (s)	29.0	29.0		21.7	21.7		0.0	0.0		37.2	37.2	
Adj Reference Time (s)	33.0	33.0		25.7	25.7		0.0	0.0		41.2	41.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	53.7	NA	
Permitted Option (s)	254.1	49.2	
Split Option (s)	58.6	41.2	
Minimum (s)	53.7	41.2	94.9

Right Turns	SBR
Adj Reference Time (s)	27.3
Cross Thru Ref Time (s)	25.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	79.1%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	678	119	8	806	207	372	29	301	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	185	797	0	8	806	207	0	401	301	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3537	0	1805	3618	1615	0	1812	1615	0	0	0
Ped Intf Time (s)	0.0	0.1	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	6.3	27.1	0.0	0.5	26.7	16.3			22.6			0.0
Adj Reference Time (s)	10.3	31.1	0.0	8.0	30.7	20.3			26.8			0.0
Permitted Option												
Adj Saturation A (vph)	117	1768		120	1809		0	127		0	0	
Reference Time A (s)	95.0	27.1		8.0	26.7		0.0	379.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		32.7	34.6		0.0	0.0	
Reference Time (s)		95.0			26.7			34.6			0.0	
Adj Reference Time (s)		99.0			30.7			38.6			8.0	
Split Option												
Ref Time Combined (s)	6.3	27.1		0.5	26.7		0.0	26.6		0.0	0.0	
Ref Time Seperate (s)	6.3	23.1		0.5	26.7		24.7	1.8		0.0	0.0	
Reference Time (s)	27.1	27.1		26.7	26.7		26.6	26.6		0.0	0.0	
Adj Reference Time (s)	31.1	31.1		30.7	30.7		30.6	30.6		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.1	NA	
Permitted Option (s)	99.0	38.6	
Split Option (s)	61.9	30.6	
Minimum (s)	41.1	30.6	71.6

Right Turns	WBR	NBR
Adj Reference Time (s)	20.3	26.8
Cross Thru Ref Time (s)	30.6	31.1
Oncoming Left Ref Time (s)	10.3	0.0
Combined (s)	61.2	57.9

Intersection Summary			
Intersection Capacity Utilization	59.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	596	29	49	525	52	56	5	135	65	6	32
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	20	625	0	49	577	0	56	140	0	65	38	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.87	0.85
Saturated Flow (vph)	1805	3592	0	1805	3569	0	1805	1625	0	1805	1660	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.3	20.9	0.0	3.3	19.4	0.0	3.7	10.3	0.0	4.3	2.7	0.0
Adj Reference Time (s)	8.0	24.9	0.0	8.0	23.4	0.0	8.0	14.3	0.0	8.3	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1796		120	1784		120	1625		120	1660	
Reference Time A (s)	19.9	20.9		48.9	19.4		55.8	10.3		64.8	2.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1625		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		11.7	10.3		NA	NA	
Reference Time (s)		20.9			48.9			11.7			64.8	
Adj Reference Time (s)		24.9			52.9			15.7			68.8	
Split Option												
Ref Time Combined (s)	1.3	20.9		3.3	19.4		3.7	10.3		4.3	2.7	
Ref Time Seperate (s)	1.3	19.9		3.3	17.7		3.7	0.4		4.3	0.4	
Reference Time (s)	20.9	20.9		19.4	19.4		10.3	10.3		4.3	4.3	
Adj Reference Time (s)	24.9	24.9		23.4	23.4		14.3	14.3		8.3	8.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.9	22.7	
Permitted Option (s)	52.9	68.8	
Split Option (s)	48.3	22.7	
Minimum (s)	32.9	22.7	55.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	46.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	331	40	176	372	164	123	327	179	223	206	113
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	94	371	0	176	536	0	123	506	0	0	542	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3559	0	3505	3452	0	1805	3426	0	0	5149	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.2	12.5	0.0	6.0	18.8	0.0			0.0			0.0
Adj Reference Time (s)	8.0	16.5	0.0	10.0	23.3	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1780		117	1726		120	1713		0	172	
Reference Time A (s)	48.3	12.5		90.4	18.8		122.7	18.0		0.0	156.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		48.3			90.4			122.7			156.0	
Adj Reference Time (s)		52.3			94.4			126.7			160.0	
Split Option												
Ref Time Combined (s)	3.2	12.5		6.0	18.8		8.2	18.0		0.0	12.7	
Ref Time Seperate (s)	3.2	11.2		6.0	13.1		8.2	11.7		7.4	7.3	
Reference Time (s)	12.5	12.5		18.8	18.8		18.0	18.0		12.7	12.7	
Adj Reference Time (s)	16.5	16.5		23.3	23.3		23.3	23.3		18.5	18.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	31.3	NA	
Permitted Option (s)	94.4	160.0	
Split Option (s)	39.9	41.9	
Minimum (s)	31.3	41.9	73.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	61.0%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	442	95	39	639	18	242	64	55	16	34	63
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	80	537	0	39	657	0	242	119	0	0	50	63
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	0.93	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3522	0	1805	3603	0	1805	1768	0	0	1870	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.3	18.3	0.0	2.6	21.9	0.0			0.0			4.8
Adj Reference Time (s)	9.3	22.3	0.0	8.0	25.9	0.0			0.0			9.2
Permitted Option												
Adj Saturation A (vph)	120	1761		120	1801		120	1768		0	314	
Reference Time A (s)	79.8	18.3		38.9	21.9		241.3	8.1		0.0	19.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1768		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.1	8.1		9.1	11.2	
Reference Time (s)		79.8			38.9			24.1			11.2	
Adj Reference Time (s)		83.8			42.9			28.1			15.4	
Split Option												
Ref Time Combined (s)	5.3	18.3		2.6	21.9		16.1	8.1		0.0	3.2	
Ref Time Seperate (s)	5.3	15.1		2.6	21.3		16.1	4.4		1.1	2.1	
Reference Time (s)	18.3	18.3		21.9	21.9		16.1	16.1		3.2	3.2	
Adj Reference Time (s)	22.3	22.3		25.9	25.9		20.1	20.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.2	NA	
Permitted Option (s)	83.8	28.1	
Split Option (s)	48.2	28.5	
Minimum (s)	35.2	28.1	63.3

Right Turns	SBR
Adj Reference Time (s)	9.2
Cross Thru Ref Time (s)	25.9
Oncoming Left Ref Time (s)	20.1
Combined (s)	55.2

Intersection Summary			
Intersection Capacity Utilization	52.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	121	682	104	175	452	146	123	572	271	128	385	83
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	121	682	104	175	452	146	123	572	271	128	468	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3521	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	4.1	22.6	7.9	6.0	15.0	11.0	8.2	19.0	20.4	8.5	16.1	0.0
Adj Reference Time (s)	8.1	26.6	12.3	10.0	19.2	15.3	12.2	23.7	25.0	12.5	23.7	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1761	
Reference Time A (s)	62.1	22.6		89.9	15.0		122.7	19.0		127.6	16.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		62.1			89.9			122.7			127.6	
Adj Reference Time (s)		66.1			93.9			126.7			131.6	
Split Option												
Ref Time Combined (s)	4.1	22.6		6.0	15.0		8.2	19.0		8.5	16.1	
Ref Time Seperate (s)	4.1	22.6		6.0	15.0		8.2	19.0		8.5	13.3	
Reference Time (s)	22.6	22.6		15.0	15.0		19.0	19.0		16.1	16.1	
Adj Reference Time (s)	26.6	26.6		19.2	19.2		23.7	23.7		23.7	23.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.6	36.2	
Permitted Option (s)	93.9	131.6	
Split Option (s)	45.8	47.4	
Minimum (s)	36.6	36.2	72.8

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	12.3	15.3	25.0
Cross Thru Ref Time (s)	23.7	23.7	26.6
Oncoming Left Ref Time (s)	10.0	8.1	12.5
Combined (s)	46.1	47.2	64.2

Intersection Summary			
Intersection Capacity Utilization	60.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	712	99	31	577	10	136	67	93	22	54	7
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	1	811	0	31	587	0	136	160	0	22	61	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3551	0	1805	3608	0	1805	1734	0	1805	1867	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.1	27.4	0.0	2.1	19.5	0.0	9.0	11.2	0.0	1.5	3.9	0.0
Adj Reference Time (s)	8.0	31.4	0.0	8.0	23.5	0.0	13.0	15.5	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1776		120	1804		120	1734		120	1867	
Reference Time A (s)	1.0	27.4		30.9	19.5		135.6	11.2		21.9	3.9	
Adj Saturation B (vph	NA	NA		NA	NA		0	1734		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		17.0	11.2		NA	NA	
Reference Time (s)		27.4			30.9			17.0			21.9	
Adj Reference Time (s)		31.4			34.9			21.0			25.9	
Split Option												
Ref Time Combined (s)	0.1	27.4		2.1	19.5		9.0	11.2		1.5	3.9	
Ref Time Seperate (s)	0.1	24.1		2.1	19.2		9.0	4.8		1.5	3.5	
Reference Time (s)	27.4	27.4		19.5	19.5		11.2	11.2		3.9	3.9	
Adj Reference Time (s)	31.4	31.4		23.5	23.5		15.5	15.5		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.4	23.5	
Permitted Option (s)	34.9	25.9	
Split Option (s)	54.9	23.5	
Minimum (s)	34.9	23.5	58.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	153	30	193	46	75	101	240	513	74	78	327	242
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	183	193	0	121	101	240	587	0	78	569	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.98	0.85	0.95	0.98	0.85	0.95	0.94	0.85
Saturated Flow (vph)	0	1821	1615	0	1864	1615	1805	3549	0	1805	3387	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.7	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			14.9			10.9	16.0	19.9	0.0	5.2	20.8	0.0
Adj Reference Time (s)			19.5			20.9	20.0	23.9	0.0	9.2	24.8	0.0
Permitted Option												
Adj Saturation A (vph)	0	137		0	270		120	1775		120	1693	
Reference Time A (s)	0.0	160.0		0.0	53.8		239.3	19.9		77.8	20.8	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	18.2	20.1		11.1	15.8		NA	NA		NA	NA	
Reference Time (s)		20.1			15.8			239.3			77.8	
Adj Reference Time (s)		24.1			22.6			243.3			81.8	
Split Option												
Ref Time Combined (s)	0.0	12.1		0.0	7.8		16.0	19.9		5.2	20.8	
Ref Time Seperate (s)	10.2	1.9		3.1	4.7		16.0	17.4		5.2	12.3	
Reference Time (s)	12.1	12.1		7.8	7.8		19.9	19.9		20.8	20.8	
Adj Reference Time (s)	17.1	17.1		19.8	19.8		23.9	23.9		24.8	24.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	44.8	
Permitted Option (s)	24.1	243.3	
Split Option (s)	36.9	48.7	
Minimum (s)	24.1	44.8	68.9

Right Turns	EBR	WBR
Adj Reference Time (s)	19.5	20.9
Cross Thru Ref Time (s)	24.8	23.9
Oncoming Left Ref Time (s)	19.8	17.1
Combined (s)	64.1	61.8

Intersection Summary			
Intersection Capacity Utilization	57.4%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	525	9	105	447	0	0	0	0	265	0	219
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	534	0	105	447	0	0	0	0	0	265	219
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3608	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	17.8	0.0	7.0	14.8	0.0			0.0			16.9
Adj Reference Time (s)	0.0	21.8	0.0	11.0	18.8	0.0			0.0			21.4
Permitted Option												
Adj Saturation A (vph)	0	1804		120	1809		0	0		0	120	
Reference Time A (s)	0.0	17.8		104.7	14.8		0.0	0.0		0.0	264.3	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		25.6	25.6	
Reference Time (s)		17.8			104.7			0.0			25.6	
Adj Reference Time (s)		21.8			108.7			8.0			29.6	
Split Option												
Ref Time Combined (s)	0.0	17.8		7.0	14.8		0.0	0.0		0.0	17.6	
Ref Time Seperate (s)	0.0	17.5		7.0	14.8		0.0	0.0		17.6	0.0	
Reference Time (s)	17.8	17.8		14.8	14.8		0.0	0.0		17.6	17.6	
Adj Reference Time (s)	21.8	21.8		18.8	18.8		0.0	0.0		22.0	22.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.7	NA	
Permitted Option (s)	108.7	29.6	
Split Option (s)	40.6	22.0	
Minimum (s)	32.7	22.0	54.7

Right Turns	SBR
Adj Reference Time (s)	21.4
Cross Thru Ref Time (s)	18.8
Oncoming Left Ref Time (s)	0.0
Combined (s)	40.2

Intersection Summary			
Intersection Capacity Utilization	45.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	635	0	0	514	205	24	2	245	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	155	635	0	0	719	0	0	271	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3463	0	0	3113	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.3	21.1	0.0	0.0	25.1	0.0			0.0			0.0
Adj Reference Time (s)	14.3	25.1	0.0	0.0	29.1	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1731		0	298		0	0	
Reference Time A (s)	154.6	21.1		0.0	25.1		0.0	35.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		9.6	14.5		NA	NA	
Reference Time (s)		154.6			25.1			14.5			0.0	
Adj Reference Time (s)		158.6			29.1			18.5			8.0	
Split Option												
Ref Time Combined (s)	10.3	21.1		0.0	25.1		0.0	10.4		0.0	0.0	
Ref Time Seperate (s)	10.3	21.1		0.0	18.0		1.6	0.1		0.0	0.0	
Reference Time (s)	21.1	21.1		25.1	25.1		10.4	10.4		0.0	0.0	
Adj Reference Time (s)	25.1	25.1		29.1	29.1		14.4	14.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	43.4	NA	
Permitted Option (s)	158.6	18.5	
Split Option (s)	54.2	14.4	
Minimum (s)	43.4	14.4	57.8

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	229	11	362	0	0	0	0	72	0	561
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	705	0	11	362	0	0	0	0	72	0	561
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3441	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	24.6	0.0	0.7	22.9	0.0	0.0	0.0	0.0	4.8	0.0	41.7
Adj Reference Time (s)	0.0	28.6	0.0	8.0	26.9	0.0	0.0	0.0	0.0	8.8	0.0	45.7
Permitted Option												
Adj Saturation A (vph)	0	1721		120	1900		0	0		120	0	
Reference Time A (s)	0.0	24.6		11.0	22.9		0.0	0.0		71.8	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.8	0.0	
Reference Time (s)		24.6			22.9			0.0			12.8	
Adj Reference Time (s)		28.6			26.9			8.0			16.8	
Split Option												
Ref Time Combined (s)	0.0	24.6		0.7	22.9		0.0	0.0		4.8	0.0	
Ref Time Seperate (s)	0.0	16.6		0.7	22.9		0.0	0.0		4.8	0.0	
Reference Time (s)	24.6	24.6		22.9	22.9		0.0	0.0		4.8	4.8	
Adj Reference Time (s)	28.6	28.6		26.9	26.9		0.0	0.0		8.8	8.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.6	8.8	
Permitted Option (s)	28.6	16.8	
Split Option (s)	55.4	8.8	
Minimum (s)	28.6	8.8	37.4

Right Turns	SBR
Adj Reference Time (s)	45.7
Cross Thru Ref Time (s)	26.9
Oncoming Left Ref Time (s)	0.0
Combined (s)	72.5

Intersection Summary			
Intersection Capacity Utilization	60.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	192	0	0	127	154	248	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	388	192	0	0	127	154	248	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	13.3	12.1	0.0	0.0	8.0	11.7	16.5	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	17.3	16.1	0.0	0.0	12.0	15.7	20.5	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	199.2	12.1		0.0	8.0		247.3	0.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1647		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.5	0.9		0.0	0.0	
Reference Time (s)		199.2			8.0			24.5			0.0	
Adj Reference Time (s)		203.2			12.0			28.5			8.4	
Split Option												
Ref Time Combined (s)	13.3	12.1		0.0	8.0		16.5	0.9		0.0	0.0	
Ref Time Seperate (s)	13.3	12.1		0.0	8.0		16.5	0.3		0.0	0.0	
Reference Time (s)	13.3	13.3		8.0	8.0		16.5	16.5		0.0	0.0	
Adj Reference Time (s)	17.3	17.3		12.0	12.0		20.5	20.5		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	29.3	20.5	
Permitted Option (s)	203.2	28.5	
Split Option (s)	29.3	28.9	
Minimum (s)	29.3	20.5	49.8

Right Turns	WBR
Adj Reference Time (s)	15.7
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	17.3
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	44.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	786	143	3	159	0	0	0	0	4	0	949
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	929	0	3	159	0	0	0	0	0	320	633
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1856	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	60.1	0.0	0.2	10.0	0.0			0.0			47.0
Adj Reference Time (s)	0.0	64.1	0.0	8.0	14.0	0.0			0.0			51.0
Permitted Option												
Adj Saturation A (vph)	0	1856		120	1900		0	0		0	1375	
Reference Time A (s)	0.0	60.1		3.0	10.0		0.0	0.0		0.0	28.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.3	31.8	
Reference Time (s)		60.1			10.0			0.0			28.0	
Adj Reference Time (s)		64.1			14.0			8.0			32.0	
Split Option												
Ref Time Combined (s)	0.0	60.1		0.2	10.0		0.0	0.0		0.0	23.8	
Ref Time Seperate (s)	0.0	50.8		0.2	10.0		0.0	0.0		0.3	0.0	
Reference Time (s)	60.1	60.1		10.0	10.0		0.0	0.0		23.8	23.8	
Adj Reference Time (s)	64.1	64.1		14.0	14.0		0.0	0.0		27.8	27.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	72.1	NA	
Permitted Option (s)	64.1	32.0	
Split Option (s)	78.1	27.8	
Minimum (s)	64.1	27.8	91.8

Right Turns	SBR
Adj Reference Time (s)	51.0
Cross Thru Ref Time (s)	14.0
Oncoming Left Ref Time (s)	0.0
Combined (s)	65.1

Intersection Summary			
Intersection Capacity Utilization	76.5%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	388	336	9	368	0	0	0	0	5	0	485
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	388	336	0	377	0	0	0	0	5	0	485
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1898	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			25.0			0.0	0.0	0.0	0.0	0.3	0.0	36.0
Adj Reference Time (s)			29.0			0.0	0.0	0.0	0.0	8.0	0.0	40.0
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1417		0	0		120	0	
Reference Time A (s)	0.0	24.5		0.0	31.9		0.0	0.0		5.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		8.3	0.0	
Reference Time (s)		24.5			31.9			0.0			5.0	
Adj Reference Time (s)		28.5			35.9			8.0			9.0	
Split Option												
Ref Time Combined (s)	0.0	24.5		0.0	23.8		0.0	0.0		0.3	0.0	
Ref Time Seperate (s)	0.0	24.5		0.6	23.2		0.0	0.0		0.3	0.0	
Reference Time (s)	24.5	24.5		23.8	23.8		0.0	0.0		0.3	0.3	
Adj Reference Time (s)	28.5	28.5		27.8	27.8		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	35.9	9.0	
Split Option (s)	56.3	8.0	
Minimum (s)	35.9	8.0	43.9

Right Turns	EBR	SBR
Adj Reference Time (s)	29.0	40.0
Cross Thru Ref Time (s)	0.0	27.8
Oncoming Left Ref Time (s)	27.8	0.0
Combined (s)	56.8	67.9

Intersection Summary			
Intersection Capacity Utilization	56.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1068	444	47	646	0	0	0	0	69	0	879
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1068	444	47	646	0	0	0	0	0	69	879
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	18.6	33.1	3.1	21.4	0.0			0.0			36.9
Adj Reference Time (s)	0.0	22.6	37.1	8.0	25.4	0.0			0.0			40.9
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	18.6		46.9	21.4		0.0	0.0		0.0	34.4	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		10.3	10.3	
Reference Time (s)		18.6			46.9			0.0			10.3	
Adj Reference Time (s)		22.6			50.9			8.0			14.3	
Split Option												
Ref Time Combined (s)	0.0	18.6		3.1	21.4		0.0	0.0		0.0	2.3	
Ref Time Seperate (s)	0.0	18.6		3.1	21.4		0.0	0.0		2.3	0.0	
Reference Time (s)	18.6	18.6		21.4	21.4		0.0	0.0		2.3	2.3	
Adj Reference Time (s)	22.6	22.6		25.4	25.4		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	30.6	NA	
Permitted Option (s)	50.9	14.3	
Split Option (s)	48.0	8.0	
Minimum (s)	30.6	8.0	38.6

Right Turns	EBR	SBR
Adj Reference Time (s)	37.1	40.9
Cross Thru Ref Time (s)	8.0	25.4
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	53.1	66.3

Intersection Summary			
Intersection Capacity Utilization	55.3%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	936	202	0	0	272	195	414	5	52	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	936	202	0	0	272	195	0	419	52	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	32.0	6.7	0.0	0.0	9.0	14.6			4.0			0.0
Adj Reference Time (s)	36.0	10.7	0.0	0.0	13.3	18.7			8.4			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	243		0	0	
Reference Time A (s)	480.6	6.7		0.0	9.0		0.0	207.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		21.8	21.9		0.0	0.0	
Reference Time (s)		480.6			9.0			21.9			0.0	
Adj Reference Time (s)		484.6			13.3			25.9			8.0	
Split Option												
Ref Time Combined (s)	32.0	6.7		0.0	9.0		0.0	13.9		0.0	0.0	
Ref Time Seperate (s)	32.0	6.7		0.0	9.0		13.8	0.3		0.0	0.0	
Reference Time (s)	32.0	32.0		9.0	9.0		13.9	13.9		0.0	0.0	
Adj Reference Time (s)	36.0	36.0		13.3	13.3		18.0	18.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	49.3	NA	
Permitted Option (s)	484.6	25.9	
Split Option (s)	49.3	18.0	
Minimum (s)	49.3	18.0	67.3

Right Turns	WBR	NBR
Adj Reference Time (s)	18.7	8.4
Cross Thru Ref Time (s)	18.0	10.7
Oncoming Left Ref Time (s)	36.0	0.0
Combined (s)	72.7	19.1

Intersection Summary			
Intersection Capacity Utilization	60.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	68	78	458	49	251	71	574	82	376	386	74
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	96	146	0	0	507	251	71	656	0	376	386	74
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3328	0	0	3628	1615	1805	3550	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			18.7	4.7	22.2	0.0	25.0	12.8	5.6
Adj Reference Time (s)			0.0			22.7	8.7	26.2	0.0	29.0	16.9	10.0
Permitted Option												
Adj Saturation A (vph)	120	1664		0	259		120	1775		120	1809	
Reference Time A (s)	95.7	5.3		0.0	235.1		70.8	22.2		375.0	12.8	
Adj Saturation B (vph	0	3328		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	14.4	5.3		NA	NA		NA	NA		NA	NA	
Reference Time (s)		14.4			235.1			70.8			375.0	
Adj Reference Time (s)		18.4			239.1			74.8			379.0	
Split Option												
Ref Time Combined (s)	6.4	5.3		0.0	16.8		4.7	22.2		25.0	12.8	
Ref Time Seperate (s)	6.4	2.5		15.2	3.1		4.7	19.4		25.0	12.8	
Reference Time (s)	6.4	6.4		16.8	16.8		22.2	22.2		25.0	25.0	
Adj Reference Time (s)	10.4	10.4		20.8	20.8		26.2	26.2		29.0	29.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	55.2	
Permitted Option (s)	239.1	379.0	
Split Option (s)	31.2	55.2	
Minimum (s)	31.2	55.2	86.3

Right Turns	WBR	SBR
Adj Reference Time (s)	22.7	10.0
Cross Thru Ref Time (s)	26.2	20.8
Oncoming Left Ref Time (s)	10.4	8.7
Combined (s)	59.2	39.5

Intersection Summary			
Intersection Capacity Utilization	71.9%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	944	32	22	1	47	6	11	7	1	1	6	451
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	944	54	0	1	53	0	0	19	0	0	7	451
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	1784	0	1805	1868	0	0	1830	0	0	1886	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	62.8	3.6	0.0	0.1	3.4	0.0			0.0			33.5
Adj Reference Time (s)	66.8	8.0	0.0	8.0	8.0	0.0			0.0			37.5
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1868		0	185		0	1890	
Reference Time A (s)	941.4	3.6		1.0	3.4		0.0	12.3		0.0	0.4	
Adj Saturation B (vph	0	1784		0	1868		0	0		0	0	
Reference Time B (s)	70.8	3.6		8.1	3.4		8.7	9.2		8.1	8.4	
Reference Time (s)		70.8			3.4			9.2			0.4	
Adj Reference Time (s)		74.8			8.0			13.2			8.0	
Split Option												
Ref Time Combined (s)	62.8	3.6		0.1	3.4		0.0	1.2		0.0	0.4	
Ref Time Seperate (s)	62.8	2.2		0.1	3.0		0.7	0.5		0.1	0.4	
Reference Time (s)	62.8	62.8		3.4	3.4		1.2	1.2		0.4	0.4	
Adj Reference Time (s)	66.8	66.8		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	74.8	NA	
Permitted Option (s)	74.8	13.2	
Split Option (s)	74.8	16.0	
Minimum (s)	74.8	13.2	88.0

Right Turns	SBR
Adj Reference Time (s)	37.5
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	53.5

Intersection Summary			
Intersection Capacity Utilization	73.3%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	611	379	403	771	0	0	0	0	139	140	348
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	990	0	403	771	0	0	0	0	0	279	348
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	3410	0	3505	3618	0	0	0	0	0	1853	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	35.0	0.0	13.8	25.6	0.0			0.0			27.3
Adj Reference Time (s)	0.0	39.0	0.0	17.8	29.6	0.0			0.0			31.3
Permitted Option												
Adj Saturation A (vph)	0	1705		117	1809		0	0		0	212	
Reference Time A (s)	0.0	35.0		206.9	25.6		0.0	0.0		0.0	157.6	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		17.2	26.1	
Reference Time (s)		35.0			206.9			0.0			26.1	
Adj Reference Time (s)		39.0			210.9			8.0			30.1	
Split Option												
Ref Time Combined (s)	0.0	35.0		13.8	25.6		0.0	0.0		0.0	18.1	
Ref Time Seperate (s)	0.0	21.7		13.8	25.6		0.0	0.0		9.2	8.8	
Reference Time (s)	35.0	35.0		25.6	25.6		0.0	0.0		18.1	18.1	
Adj Reference Time (s)	39.0	39.0		29.6	29.6		0.0	0.0		22.7	22.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	56.8	NA	
Permitted Option (s)	210.9	30.1	
Split Option (s)	68.6	22.7	
Minimum (s)	56.8	22.7	79.5

Right Turns	SBR
Adj Reference Time (s)	31.3
Cross Thru Ref Time (s)	29.6
Oncoming Left Ref Time (s)	0.0
Combined (s)	60.9

Intersection Summary			
Intersection Capacity Utilization	66.3%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	312	407	24	3	689	234	492	83	258	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	312	431	0	3	689	234	0	575	258	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.96	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3587	0	1805	3618	1615	0	1819	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.7	14.5	0.0	0.2	22.9	18.3			19.4			0.0
Adj Reference Time (s)	14.7	18.5	0.0	8.0	26.9	22.3			23.8			0.0
Permitted Option												
Adj Saturation A (vph)	117	1794		120	1809		0	135		0	0	
Reference Time A (s)	160.2	14.5		3.0	22.9		0.0	511.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		40.7	45.9		0.0	0.0	
Reference Time (s)		160.2			22.9			45.9			0.0	
Adj Reference Time (s)		164.2			26.9			49.9			8.0	
Split Option												
Ref Time Combined (s)	10.7	14.5		0.2	22.9		0.0	37.9		0.0	0.0	
Ref Time Seperate (s)	10.7	13.7		0.2	22.9		32.7	5.2		0.0	0.0	
Reference Time (s)	14.5	14.5		22.9	22.9		37.9	37.9		0.0	0.0	
Adj Reference Time (s)	18.5	18.5		26.9	26.9		41.9	41.9		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.5	NA	
Permitted Option (s)	164.2	49.9	
Split Option (s)	45.3	41.9	
Minimum (s)	41.5	41.9	83.5

Right Turns	WBR	NBR
Adj Reference Time (s)	22.3	23.8
Cross Thru Ref Time (s)	41.9	18.5
Oncoming Left Ref Time (s)	14.7	0.0
Combined (s)	78.9	42.2

Intersection Summary			
Intersection Capacity Utilization	69.6%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	544	78	133	775	60	50	4	77	35	2	22
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	21	622	0	133	835	0	50	81	0	35	24	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.86	0.85
Saturated Flow (vph)	1805	3550	0	1805	3579	0	1805	1629	0	1805	1639	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.4	21.0	0.0	8.8	28.0	0.0	3.3	6.0	0.0	2.3	1.8	0.0
Adj Reference Time (s)	8.0	25.0	0.0	12.8	32.0	0.0	8.0	10.0	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1775		120	1789		120	1629		120	1639	
Reference Time A (s)	20.9	21.0		132.6	28.0		49.9	6.0		34.9	1.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	1629		0	1639	
Reference Time B (s)	NA	NA		NA	NA		11.3	6.0		10.3	1.8	
Reference Time (s)		21.0			132.6			11.3			10.3	
Adj Reference Time (s)		25.0			136.6			15.3			14.3	
Split Option												
Ref Time Combined (s)	1.4	21.0		8.8	28.0		3.3	6.0		2.3	1.8	
Ref Time Seperate (s)	1.4	18.4		8.8	26.0		3.3	0.3		2.3	0.1	
Reference Time (s)	21.0	21.0		28.0	28.0		6.0	6.0		2.3	2.3	
Adj Reference Time (s)	25.0	25.0		32.0	32.0		10.0	10.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.0	18.0	
Permitted Option (s)	136.6	15.3	
Split Option (s)	57.0	18.0	
Minimum (s)	40.0	15.3	55.3

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	46.1%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	148	423	79	221	430	151	131	221	112	336	229	83
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	148	502	0	221	581	0	131	333	0	0	648	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.95	0.85	0.95	0.96	0.85
Saturated Flow (vph)	3505	3532	0	3505	3477	0	1805	3435	0	0	5184	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.1	17.1	0.0	7.6	20.2	0.0			0.0			0.0
Adj Reference Time (s)	9.1	21.1	0.0	11.6	24.6	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1766		117	1738		120	1718		0	173	
Reference Time A (s)	76.0	17.1		113.5	20.2		130.6	11.8		0.0	233.4	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		76.0			113.5			130.6			233.4	
Adj Reference Time (s)		80.0			117.5			134.6			237.4	
Split Option												
Ref Time Combined (s)	5.1	17.1		7.6	20.2		8.7	11.8		0.0	15.1	
Ref Time Seperate (s)	5.1	14.4		7.6	14.9		8.7	7.9		11.2	8.0	
Reference Time (s)	17.1	17.1		20.2	20.2		11.8	11.8		15.1	15.1	
Adj Reference Time (s)	21.1	21.1		24.6	24.6		18.2	18.2		20.6	20.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	NA	
Permitted Option (s)	117.5	237.4	
Split Option (s)	45.7	38.7	
Minimum (s)	33.7	38.7	72.4

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	60.3%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	596	227	68	543	25	135	39	44	13	69	51
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	51	823	0	68	568	0	135	83	0	0	82	51
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.99	0.85	0.95	0.92	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3468	0	1805	3594	0	1805	1749	0	0	1885	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.4	28.5	0.0	4.5	19.0	0.0			0.0			3.9
Adj Reference Time (s)	8.0	32.5	0.0	8.5	23.0	0.0			0.0			8.4
Permitted Option												
Adj Saturation A (vph)	120	1734		120	1797		120	1749		0	557	
Reference Time A (s)	50.9	28.5		67.8	19.0		134.6	5.8		0.0	17.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1749		0	0	
Reference Time B (s)	NA	NA		NA	NA		17.0	5.8		8.9	13.2	
Reference Time (s)		50.9			67.8			17.0			13.2	
Adj Reference Time (s)		54.9			71.8			21.0			17.3	
Split Option												
Ref Time Combined (s)	3.4	28.5		4.5	19.0		9.0	5.8		0.0	5.2	
Ref Time Seperate (s)	3.4	20.7		4.5	18.2		9.0	2.7		0.9	4.4	
Reference Time (s)	28.5	28.5		19.0	19.0		9.0	9.0		5.2	5.2	
Adj Reference Time (s)	32.5	32.5		23.0	23.0		13.2	13.2		9.6	9.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.0	NA	
Permitted Option (s)	71.8	21.0	
Split Option (s)	55.5	22.8	
Minimum (s)	41.0	21.0	62.0

Right Turns	SBR
Adj Reference Time (s)	8.4
Cross Thru Ref Time (s)	23.0
Oncoming Left Ref Time (s)	13.2
Combined (s)	44.6

Intersection Summary			
Intersection Capacity Utilization	51.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	593	153	238	577	91	79	425	188	107	494	89
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	82	593	153	238	577	91	79	425	188	107	583	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3535	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	2.8	19.7	11.5	8.1	19.1	6.9	5.3	14.1	14.2	7.1	20.0	0.0
Adj Reference Time (s)	8.0	23.7	15.8	12.1	23.2	11.4	9.3	19.1	19.2	11.1	26.6	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1767	
Reference Time A (s)	42.1	19.7		122.2	19.1		78.8	14.1		106.7	20.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		42.1			122.2			78.8			106.7	
Adj Reference Time (s)		46.1			126.2			82.8			110.7	
Split Option												
Ref Time Combined (s)	2.8	19.7		8.1	19.1		5.3	14.1		7.1	20.0	
Ref Time Seperate (s)	2.8	19.7		8.1	19.1		5.3	14.1		7.1	16.9	
Reference Time (s)	19.7	19.7		19.1	19.1		14.1	14.1		20.0	20.0	
Adj Reference Time (s)	23.7	23.7		23.2	23.2		19.1	19.1		26.6	26.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.9	35.8	
Permitted Option (s)	126.2	110.7	
Split Option (s)	47.0	45.7	
Minimum (s)	35.9	35.8	71.7

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	15.8	11.4	19.2
Cross Thru Ref Time (s)	26.6	19.1	23.7
Oncoming Left Ref Time (s)	12.1	8.0	11.1
Combined (s)	54.6	38.5	54.1

Intersection Summary			
Intersection Capacity Utilization	59.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	776	82	41	621	16	62	61	45	19	62	3
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	7	858	0	41	637	0	62	106	0	19	65	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3566	0	1805	3604	0	1805	1779	0	1805	1887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.5	28.9	0.0	2.7	21.2	0.0	4.1	7.3	0.0	1.3	4.1	0.0
Adj Reference Time (s)	8.0	32.9	0.0	8.0	25.2	0.0	8.1	11.8	0.0	8.0	8.1	0.0
Permitted Option												
Adj Saturation A (vph)	120	1783		120	1802		120	1779		120	1887	
Reference Time A (s)	7.0	28.9		40.9	21.2		61.8	7.3		18.9	4.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1779		0	1887	
Reference Time B (s)	NA	NA		NA	NA		12.1	7.3		9.3	4.1	
Reference Time (s)		28.9			40.9			12.1			9.3	
Adj Reference Time (s)		32.9			44.9			16.4			13.3	
Split Option												
Ref Time Combined (s)	0.5	28.9		2.7	21.2		4.1	7.3		1.3	4.1	
Ref Time Seperate (s)	0.5	26.1		2.7	20.7		4.1	4.2		1.3	3.9	
Reference Time (s)	28.9	28.9		21.2	21.2		7.3	7.3		4.1	4.1	
Adj Reference Time (s)	32.9	32.9		25.2	25.2		11.8	11.8		8.1	8.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.9	19.8	
Permitted Option (s)	44.9	16.4	
Split Option (s)	58.1	20.0	
Minimum (s)	40.9	16.4	57.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	47.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	23	173	51	23	64	148	404	45	51	470	99
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	131	173	0	74	64	148	449	0	51	569	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.97	0.85	0.95	0.98	0.85	0.95	0.97	0.85
Saturated Flow (vph)	0	1822	1615	0	1835	1615	1805	3563	0	1805	3523	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.3	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			13.4			8.2	9.8	15.1	0.0	3.4	19.7	0.0
Adj Reference Time (s)			18.2			19.9	13.8	19.2	0.0	8.0	23.7	0.0
Permitted Option												
Adj Saturation A (vph)	0	139		0	160		120	1782		120	1762	
Reference Time A (s)	0.0	113.3		0.0	55.4		147.6	15.1		50.9	19.7	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	15.2	16.6		11.4	12.8		NA	NA		NA	NA	
Reference Time (s)		16.6			12.8			147.6			50.9	
Adj Reference Time (s)		21.1			21.5			151.6			54.9	
Split Option												
Ref Time Combined (s)	0.0	8.6		0.0	4.8		9.8	15.1		3.4	19.7	
Ref Time Seperate (s)	7.2	1.5		3.4	1.5		9.8	13.6		3.4	16.3	
Reference Time (s)	8.6	8.6		4.8	4.8		15.1	15.1		19.7	19.7	
Adj Reference Time (s)	14.0	14.0		18.8	18.8		19.2	19.2		23.7	23.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	37.5	
Permitted Option (s)	21.5	151.6	
Split Option (s)	32.8	42.9	
Minimum (s)	21.5	37.5	59.0

Right Turns	EBR	WBR
Adj Reference Time (s)	18.2	19.9
Cross Thru Ref Time (s)	23.7	19.2
Oncoming Left Ref Time (s)	18.8	14.0
Combined (s)	60.6	53.2

Intersection Summary			
Intersection Capacity Utilization	50.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Appendix E

Analysis Worksheets for
Existing (2024) plus Project Phase 2 Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	605	18	149	447	0	0	0	0	150	0	296
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	623	0	149	447	0	0	0	0	0	150	296
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3602	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	20.8	0.0	9.9	14.8	0.0			0.0			22.6
Adj Reference Time (s)	0.0	24.8	0.0	13.9	18.8	0.0			0.0			26.6
Permitted Option												
Adj Saturation A (vph)	0	1801		120	1809		0	0		0	120	
Reference Time A (s)	0.0	20.8		148.6	14.8		0.0	0.0		0.0	149.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		18.0	18.0	
Reference Time (s)		20.8			148.6			0.0			18.0	
Adj Reference Time (s)		24.8			152.6			8.0			22.3	
Split Option												
Ref Time Combined (s)	0.0	20.8		9.9	14.8		0.0	0.0		0.0	10.0	
Ref Time Seperate (s)	0.0	20.2		9.9	14.8		0.0	0.0		10.0	0.0	
Reference Time (s)	20.8	20.8		14.8	14.8		0.0	0.0		10.0	10.0	
Adj Reference Time (s)	24.8	24.8		18.8	18.8		0.0	0.0		15.5	15.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.7	NA	
Permitted Option (s)	152.6	22.3	
Split Option (s)	43.6	15.5	
Minimum (s)	38.7	15.5	54.2

Right Turns	SBR
Adj Reference Time (s)	26.6
Cross Thru Ref Time (s)	18.8
Oncoming Left Ref Time (s)	0.0
Combined (s)	45.5

Intersection Summary			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	535	0	0	598	356	5	1	88	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	210	535	0	0	954	0	0	94	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3415	0	0	3101	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	14.0	17.7	0.0	0.0	33.8	0.0			0.0			0.0
Adj Reference Time (s)	18.0	21.7	0.0	0.0	37.8	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1708		0	514		0	0	
Reference Time A (s)	209.4	17.7		0.0	33.8		0.0	8.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1541		0	0	
Reference Time B (s)	NA	NA		NA	NA		8.3	7.7		0.0	0.0	
Reference Time (s)		209.4			33.8			8.3			0.0	
Adj Reference Time (s)		213.4			37.8			12.3			8.0	
Split Option												
Ref Time Combined (s)	14.0	17.7		0.0	33.8		0.0	3.6		0.0	0.0	
Ref Time Seperate (s)	14.0	17.7		0.0	21.3		0.3	0.0		0.0	0.0	
Reference Time (s)	17.7	17.7		33.8	33.8		3.6	3.6		0.0	0.0	
Adj Reference Time (s)	21.7	21.7		37.8	37.8		8.0	8.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	55.7	NA	
Permitted Option (s)	213.4	12.3	
Split Option (s)	59.5	8.0	
Minimum (s)	55.7	8.0	63.7

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	53.1%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	639	209	3	283	0	0	0	0	125	0	379
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	849	0	3	283	0	0	0	0	125	0	379
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3484	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			0.0	0.0	0.0	0.0	8.3	0.0	28.2
Adj Reference Time (s)			0.0			0.0	0.0	0.0	0.0	12.3	0.0	32.2
Permitted Option												
Adj Saturation A (vph)	0	1686		120	1900		0	0		120	0	
Reference Time A (s)	0.0	30.1		3.0	17.9		0.0	0.0		124.7	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		16.3	0.0	
Reference Time (s)		30.1			17.9			0.0			16.3	
Adj Reference Time (s)		34.1			21.9			8.0			20.3	
Split Option												
Ref Time Combined (s)	0.0	29.2		0.2	17.9		0.0	0.0		8.3	0.0	
Ref Time Seperate (s)	0.1	22.0		0.2	17.9		0.0	0.0		8.3	0.0	
Reference Time (s)	29.2	29.2		17.9	17.9		0.0	0.0		8.3	8.3	
Adj Reference Time (s)	33.2	33.2		21.9	21.9		0.0	0.0		12.3	12.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	12.3	
Permitted Option (s)	34.1	20.3	
Split Option (s)	55.1	12.3	
Minimum (s)	34.1	12.3	46.4

Right Turns	SBR
Adj Reference Time (s)	32.2
Cross Thru Ref Time (s)	21.9
Oncoming Left Ref Time (s)	0.0
Combined (s)	54.0

Intersection Summary			
Intersection Capacity Utilization	45.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	220	0	0	87	118	199	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	540	220	0	0	87	118	199	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.5	13.9	0.0	0.0	5.5	9.0	13.2	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	22.5	17.9	0.0	0.0	9.5	13.0	17.2	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	277.3	13.9		0.0	5.5		198.4	0.9		0.0	0.0	
Adj Saturation B (vph	0	1900		NA	NA		0	1647		0	0	
Reference Time B (s)	26.5	13.9		NA	NA		21.2	0.9		0.0	0.0	
Reference Time (s)		26.5			5.5			21.2			0.0	
Adj Reference Time (s)		30.5			9.5			25.2			8.4	
Split Option												
Ref Time Combined (s)	18.5	13.9		0.0	5.5		13.2	0.9		0.0	0.0	
Ref Time Seperate (s)	18.5	13.9		0.0	5.5		13.2	0.3		0.0	0.0	
Reference Time (s)	18.5	18.5		5.5	5.5		13.2	13.2		0.0	0.0	
Adj Reference Time (s)	22.5	22.5		9.5	9.5		20.0	20.0		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.0	20.0	
Permitted Option (s)	30.5	25.2	
Split Option (s)	32.0	28.4	
Minimum (s)	30.5	20.0	50.5

Right Turns	WBR
Adj Reference Time (s)	13.0
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	22.5
Combined (s)	55.5

Intersection Summary			
Intersection Capacity Utilization	46.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1094	147	3	190	0	0	0	0	3	1	764
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1241	0	3	190	0	0	0	0	0	259	509
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1866	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	79.8	0.0	0.2	12.0	0.0			0.0			37.8
Adj Reference Time (s)	0.0	83.8	0.0	8.0	16.0	0.0			0.0			41.8
Permitted Option												
Adj Saturation A (vph)	0	1866		120	1900		0	0		0	1391	
Reference Time A (s)	0.0	79.8		3.0	12.0		0.0	0.0		0.0	22.3	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.2	27.2	
Reference Time (s)		79.8			12.0			0.0			22.3	
Adj Reference Time (s)		83.8			16.0			8.0			26.3	
Split Option												
Ref Time Combined (s)	0.0	79.8		0.2	12.0		0.0	0.0		0.0	19.2	
Ref Time Seperate (s)	0.0	70.3		0.2	12.0		0.0	0.0		0.2	0.1	
Reference Time (s)	79.8	79.8		12.0	12.0		0.0	0.0		19.2	19.2	
Adj Reference Time (s)	83.8	83.8		16.0	16.0		0.0	0.0		23.2	23.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	91.8	NA	
Permitted Option (s)	83.8	26.3	
Split Option (s)	99.8	23.2	
Minimum (s)	83.8	23.2	107.0

Right Turns	SBR
Adj Reference Time (s)	41.8
Cross Thru Ref Time (s)	16.0
Oncoming Left Ref Time (s)	0.0
Combined (s)	57.8

Intersection Summary			
Intersection Capacity Utilization	89.1%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	523	357	6	406	0	0	0	0	18	0	517
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	523	357	0	412	0	0	0	0	18	0	517
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1899	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			26.5			0.0	0.0	0.0	0.0	1.2	0.0	38.4
Adj Reference Time (s)			30.5			0.0	0.0	0.0	0.0	8.0	0.0	42.4
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1575		0	0		120	0	
Reference Time A (s)	0.0	33.0		0.0	31.4		0.0	0.0		18.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		9.2	0.0	
Reference Time (s)		33.0			31.4			0.0			9.2	
Adj Reference Time (s)		37.0			35.4			8.0			13.2	
Split Option												
Ref Time Combined (s)	0.0	33.0		0.0	26.0		0.0	0.0		1.2	0.0	
Ref Time Seperate (s)	0.0	33.0		0.4	25.6		0.0	0.0		1.2	0.0	
Reference Time (s)	33.0	33.0		26.0	26.0		0.0	0.0		1.2	1.2	
Adj Reference Time (s)	37.0	37.0		30.0	30.0		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	37.0	13.2	
Split Option (s)	67.1	8.0	
Minimum (s)	37.0	8.0	45.0

Right Turns	EBR	SBR
Adj Reference Time (s)	30.5	42.4
Cross Thru Ref Time (s)	0.0	30.0
Oncoming Left Ref Time (s)	30.0	0.0
Combined (s)	60.6	72.5

Intersection Summary			
Intersection Capacity Utilization	60.4%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	746	251	44	458	0	0	0	0	148	0	1017
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	746	251	44	458	0	0	0	0	0	148	1017
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	13.0	18.8	2.9	15.2	0.0			0.0			42.7
Adj Reference Time (s)	0.0	17.0	22.8	8.0	19.2	0.0			0.0			46.7
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	13.0		43.9	15.2		0.0	0.0		0.0	73.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.9	12.9	
Reference Time (s)		13.0			43.9			0.0			12.9	
Adj Reference Time (s)		17.0			47.9			8.0			16.9	
Split Option												
Ref Time Combined (s)	0.0	13.0		2.9	15.2		0.0	0.0		0.0	4.9	
Ref Time Seperate (s)	0.0	13.0		2.9	15.2		0.0	0.0		4.9	0.0	
Reference Time (s)	13.0	13.0		15.2	15.2		0.0	0.0		4.9	4.9	
Adj Reference Time (s)	17.0	17.0		19.2	19.2		0.0	0.0		8.9	8.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.0	NA	
Permitted Option (s)	47.9	16.9	
Split Option (s)	36.2	8.9	
Minimum (s)	25.0	8.9	33.9

Right Turns	EBR	SBR
Adj Reference Time (s)	22.8	46.7
Cross Thru Ref Time (s)	8.9	19.2
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	39.7	65.9

Intersection Summary			
Intersection Capacity Utilization	54.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	580	325	0	0	167	125	322	3	70	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	580	325	0	0	167	125	0	325	70	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	19.9	10.8	0.0	0.0	5.5	9.4			5.3			0.0
Adj Reference Time (s)	23.9	14.8	0.0	0.0	9.9	13.6			9.7			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	297.8	10.8		0.0	5.5		0.0	161.0		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		18.7	18.8		0.0	0.0	
Reference Time (s)		297.8			5.5			18.8			0.0	
Adj Reference Time (s)		301.8			9.9			22.8			8.0	
Split Option												
Ref Time Combined (s)	19.9	10.8		0.0	5.5		0.0	10.8		0.0	0.0	
Ref Time Seperate (s)	19.9	10.8		0.0	5.5		10.7	0.2		0.0	0.0	
Reference Time (s)	19.9	19.9		5.5	5.5		10.8	10.8		0.0	0.0	
Adj Reference Time (s)	23.9	23.9		9.9	9.9		15.0	15.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	NA	
Permitted Option (s)	301.8	22.8	
Split Option (s)	33.7	15.0	
Minimum (s)	33.7	15.0	48.7

Right Turns	WBR	NBR
Adj Reference Time (s)	13.6	9.7
Cross Thru Ref Time (s)	15.0	14.8
Oncoming Left Ref Time (s)	23.9	0.0
Combined (s)	52.5	24.5

Intersection Summary			
Intersection Capacity Utilization	43.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	33	13	318	72	413	28	359	40	232	201	59
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	68	46	0	0	390	413	28	399	0	232	201	59
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3464	0	0	3645	1615	1805	3563	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			30.7	1.9	13.4	0.0	15.4	6.7	4.5
Adj Reference Time (s)			0.0			34.7	8.0	17.4	0.0	19.4	11.0	8.9
Permitted Option												
Adj Saturation A (vph)	120	1732		0	280		120	1782		120	1809	
Reference Time A (s)	67.8	1.6		0.0	167.2		27.9	13.4		231.4	6.7	
Adj Saturation B (vph	0	3464		0	0		NA	NA		NA	NA	
Reference Time B (s)	12.5	1.6		18.6	20.8		NA	NA		NA	NA	
Reference Time (s)		12.5			20.8			27.9			231.4	
Adj Reference Time (s)		16.5			24.8			31.9			235.4	
Split Option												
Ref Time Combined (s)	4.5	1.6		0.0	12.8		1.9	13.4		15.4	6.7	
Ref Time Seperate (s)	4.5	1.1		10.6	4.5		1.9	12.1		15.4	6.7	
Reference Time (s)	4.5	4.5		12.8	12.8		13.4	13.4		15.4	15.4	
Adj Reference Time (s)	8.5	8.5		16.8	16.8		17.4	17.4		19.4	19.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	36.9	
Permitted Option (s)	24.8	235.4	
Split Option (s)	25.4	36.9	
Minimum (s)	24.8	36.9	61.7

Right Turns	WBR	SBR
Adj Reference Time (s)	34.7	8.9
Cross Thru Ref Time (s)	17.4	16.8
Oncoming Left Ref Time (s)	8.5	8.0
Combined (s)	60.6	33.7

Intersection Summary			
Intersection Capacity Utilization	51.4%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	638	66	7	0	29	4	3	2	0	4	1	574
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	638	73	0	0	33	0	0	5	0	0	5	574
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.96	0.85
Saturated Flow (vph)	1805	1873	0	1805	1865	0	0	1843	0	0	1824	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	42.4	4.7	0.0	0.0	2.1	0.0			0.0			42.7
Adj Reference Time (s)	46.4	8.7	0.0	8.0	8.0	0.0			0.0			46.7
Permitted Option												
Adj Saturation A (vph)	120	1873		120	1865		0	181		0	1352	
Reference Time A (s)	636.2	4.7		0.0	2.1		0.0	3.3		0.0	0.4	
Adj Saturation B (vph	0	1873		0	1865		0	0		0	0	
Reference Time B (s)	50.4	4.7		8.0	2.1		8.2	8.3		8.3	8.3	
Reference Time (s)		50.4			2.1			3.3			0.4	
Adj Reference Time (s)		54.4			8.0			8.0			8.0	
Split Option												
Ref Time Combined (s)	42.4	4.7		0.0	2.1		0.0	0.3		0.0	0.3	
Ref Time Seperate (s)	42.4	4.2		0.0	1.9		0.2	0.1		0.3	0.1	
Reference Time (s)	42.4	42.4		2.1	2.1		0.3	0.3		0.3	0.3	
Adj Reference Time (s)	46.4	46.4		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.4	NA	
Permitted Option (s)	54.4	8.0	
Split Option (s)	54.4	16.0	
Minimum (s)	54.4	8.0	62.4

Right Turns	SBR
Adj Reference Time (s)	46.7
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	62.7

Intersection Summary			
Intersection Capacity Utilization	52.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	549	287	490	667	0	0	0	0	428	139	294
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	836	0	490	667	0	0	0	0	0	567	294
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.96	0.85
Saturated Flow (vph)	0	3431	0	3505	3618	0	0	0	0	0	1828	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	29.4	0.0	16.8	22.1	0.0			0.0			23.3
Adj Reference Time (s)	0.0	33.4	0.0	20.8	26.1	0.0			0.0			27.3
Permitted Option												
Adj Saturation A (vph)	0	1716		117	1809		0	0		0	149	
Reference Time A (s)	0.0	29.4		251.6	22.1		0.0	0.0		0.0	457.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		36.5	45.2	
Reference Time (s)		29.4			251.6			0.0			45.2	
Adj Reference Time (s)		33.4			255.6			8.0			49.2	
Split Option												
Ref Time Combined (s)	0.0	29.4		16.8	22.1		0.0	0.0		0.0	37.2	
Ref Time Seperate (s)	0.0	19.4		16.8	22.1		0.0	0.0		28.5	8.8	
Reference Time (s)	29.4	29.4		22.1	22.1		0.0	0.0		37.2	37.2	
Adj Reference Time (s)	33.4	33.4		26.1	26.1		0.0	0.0		41.2	41.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.2	NA	
Permitted Option (s)	255.6	49.2	
Split Option (s)	59.5	41.2	
Minimum (s)	54.2	41.2	95.4

Right Turns	SBR
Adj Reference Time (s)	27.3
Cross Thru Ref Time (s)	26.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	53.4

Intersection Summary			
Intersection Capacity Utilization	79.5%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	678	119	8	809	207	386	29	304	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	185	797	0	8	809	207	0	415	304	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3537	0	1805	3618	1615	0	1812	1615	0	0	0
Ped Intf Time (s)	0.0	0.1	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	6.3	27.1	0.0	0.5	26.8	16.3			22.9			0.0
Adj Reference Time (s)	10.3	31.1	0.0	8.0	30.8	20.3			27.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1768		120	1809		0	127		0	0	
Reference Time A (s)	95.0	27.1		8.0	26.8		0.0	393.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		33.7	35.5		0.0	0.0	
Reference Time (s)		95.0			26.8			35.5			0.0	
Adj Reference Time (s)		99.0			30.8			39.5			8.0	
Split Option												
Ref Time Combined (s)	6.3	27.1		0.5	26.8		0.0	27.5		0.0	0.0	
Ref Time Seperate (s)	6.3	23.1		0.5	26.8		25.7	1.8		0.0	0.0	
Reference Time (s)	27.1	27.1		26.8	26.8		27.5	27.5		0.0	0.0	
Adj Reference Time (s)	31.1	31.1		30.8	30.8		31.5	31.5		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.2	NA	
Permitted Option (s)	99.0	39.5	
Split Option (s)	62.0	31.5	
Minimum (s)	41.2	31.5	72.7

Right Turns	WBR	NBR
Adj Reference Time (s)	20.3	27.0
Cross Thru Ref Time (s)	31.5	31.1
Oncoming Left Ref Time (s)	10.3	0.0
Combined (s)	62.1	58.1

Intersection Summary			
Intersection Capacity Utilization	60.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	620	29	51	558	55	56	5	136	68	6	32
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	20	649	0	51	613	0	56	141	0	68	38	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.87	0.85
Saturated Flow (vph)	1805	3593	0	1805	3569	0	1805	1625	0	1805	1660	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.3	21.7	0.0	3.4	20.6	0.0	3.7	10.4	0.0	4.5	2.7	0.0
Adj Reference Time (s)	8.0	25.7	0.0	8.0	24.6	0.0	8.0	14.4	0.0	8.5	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1797		120	1784		120	1625		120	1660	
Reference Time A (s)	19.9	21.7		50.9	20.6		55.8	10.4		67.8	2.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1625		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		11.7	10.4		NA	NA	
Reference Time (s)		21.7			50.9			11.7			67.8	
Adj Reference Time (s)		25.7			54.9			15.7			71.8	
Split Option												
Ref Time Combined (s)	1.3	21.7		3.4	20.6		3.7	10.4		4.5	2.7	
Ref Time Seperate (s)	1.3	20.7		3.4	18.8		3.7	0.4		4.5	0.4	
Reference Time (s)	21.7	21.7		20.6	20.6		10.4	10.4		4.5	4.5	
Adj Reference Time (s)	25.7	25.7		24.6	24.6		14.4	14.4		8.5	8.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	22.9	
Permitted Option (s)	54.9	71.8	
Split Option (s)	50.3	22.9	
Minimum (s)	33.7	22.9	56.6

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	47.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	337	40	182	381	182	123	327	183	237	206	113
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	94	377	0	182	563	0	123	510	0	0	556	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3560	0	3505	3442	0	1805	3423	0	0	5149	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.2	12.7	0.0	6.2	19.8	0.0			0.0			0.0
Adj Reference Time (s)	8.0	16.7	0.0	10.2	24.3	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1780		117	1721		120	1711		0	172	
Reference Time A (s)	48.3	12.7		93.5	19.8		122.7	18.1		0.0	165.8	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		48.3			93.5			122.7			165.8	
Adj Reference Time (s)		52.3			97.5			126.7			169.8	
Split Option												
Ref Time Combined (s)	3.2	12.7		6.2	19.8		8.2	18.1		0.0	13.1	
Ref Time Seperate (s)	3.2	11.4		6.2	13.4		8.2	11.7		7.9	7.3	
Reference Time (s)	12.7	12.7		19.8	19.8		18.1	18.1		13.1	13.1	
Adj Reference Time (s)	16.7	16.7		24.3	24.3		23.5	23.5		18.8	18.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.3	NA	
Permitted Option (s)	97.5	169.8	
Split Option (s)	41.0	42.3	
Minimum (s)	32.3	42.3	74.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	62.1%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	448	95	39	648	18	242	64	55	16	34	63
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	80	543	0	39	666	0	242	119	0	0	50	63
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	0.93	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3523	0	1805	3603	0	1805	1768	0	0	1870	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.3	18.5	0.0	2.6	22.2	0.0			0.0			4.8
Adj Reference Time (s)	9.3	22.5	0.0	8.0	26.2	0.0			0.0			9.2
Permitted Option												
Adj Saturation A (vph)	120	1761		120	1801		120	1768		0	314	
Reference Time A (s)	79.8	18.5		38.9	22.2		241.3	8.1		0.0	19.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1768		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.1	8.1		9.1	11.2	
Reference Time (s)		79.8			38.9			24.1			11.2	
Adj Reference Time (s)		83.8			42.9			28.1			15.4	
Split Option												
Ref Time Combined (s)	5.3	18.5		2.6	22.2		16.1	8.1		0.0	3.2	
Ref Time Seperate (s)	5.3	15.3		2.6	21.6		16.1	4.4		1.1	2.1	
Reference Time (s)	18.5	18.5		22.2	22.2		16.1	16.1		3.2	3.2	
Adj Reference Time (s)	22.5	22.5		26.2	26.2		20.1	20.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.5	NA	
Permitted Option (s)	83.8	28.1	
Split Option (s)	48.7	28.5	
Minimum (s)	35.5	28.1	63.6

Right Turns	SBR
Adj Reference Time (s)	9.2
Cross Thru Ref Time (s)	26.2
Oncoming Left Ref Time (s)	20.1
Combined (s)	55.5

Intersection Summary			
Intersection Capacity Utilization	53.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	121	686	104	185	458	153	123	572	278	133	385	83
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	121	686	104	185	458	153	123	572	278	133	468	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3521	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	4.1	22.8	7.9	6.3	15.2	11.5	8.2	19.0	20.9	8.8	16.1	0.0
Adj Reference Time (s)	8.1	26.8	12.3	10.3	19.4	15.8	12.2	23.7	25.5	12.8	23.7	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1761	
Reference Time A (s)	62.1	22.8		95.0	15.2		122.7	19.0		132.6	16.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		62.1			95.0			122.7			132.6	
Adj Reference Time (s)		66.1			99.0			126.7			136.6	
Split Option												
Ref Time Combined (s)	4.1	22.8		6.3	15.2		8.2	19.0		8.8	16.1	
Ref Time Seperate (s)	4.1	22.8		6.3	15.2		8.2	19.0		8.8	13.3	
Reference Time (s)	22.8	22.8		15.2	15.2		19.0	19.0		16.1	16.1	
Adj Reference Time (s)	26.8	26.8		19.4	19.4		23.7	23.7		23.7	23.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	37.1	36.5	
Permitted Option (s)	99.0	136.6	
Split Option (s)	46.2	47.4	
Minimum (s)	37.1	36.5	73.6

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	12.3	15.8	25.5
Cross Thru Ref Time (s)	23.7	23.7	26.8
Oncoming Left Ref Time (s)	10.3	8.1	12.8
Combined (s)	46.4	47.7	65.1

Intersection Summary			
Intersection Capacity Utilization	61.3%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	716	99	31	583	10	136	67	93	22	54	7
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	1	815	0	31	593	0	136	160	0	22	61	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3552	0	1805	3608	0	1805	1734	0	1805	1867	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.1	27.5	0.0	2.1	19.7	0.0	9.0	11.2	0.0	1.5	3.9	0.0
Adj Reference Time (s)	8.0	31.5	0.0	8.0	23.7	0.0	13.0	15.5	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1776		120	1804		120	1734		120	1867	
Reference Time A (s)	1.0	27.5		30.9	19.7		135.6	11.2		21.9	3.9	
Adj Saturation B (vph	NA	NA		NA	NA		0	1734		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		17.0	11.2		NA	NA	
Reference Time (s)		27.5			30.9			17.0			21.9	
Adj Reference Time (s)		31.5			34.9			21.0			25.9	
Split Option												
Ref Time Combined (s)	0.1	27.5		2.1	19.7		9.0	11.2		1.5	3.9	
Ref Time Seperate (s)	0.1	24.2		2.1	19.4		9.0	4.8		1.5	3.5	
Reference Time (s)	27.5	27.5		19.7	19.7		11.2	11.2		3.9	3.9	
Adj Reference Time (s)	31.5	31.5		23.7	23.7		15.5	15.5		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.5	23.5	
Permitted Option (s)	34.9	25.9	
Split Option (s)	55.3	23.5	
Minimum (s)	34.9	23.5	58.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	153	30	193	46	75	101	240	520	74	78	332	242
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	183	193	0	121	101	240	594	0	78	574	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.98	0.85	0.95	0.98	0.85	0.95	0.94	0.85
Saturated Flow (vph)	0	1821	1615	0	1864	1615	1805	3550	0	1805	3389	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.7	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			14.9			10.9	16.0	20.1	0.0	5.2	21.0	0.0
Adj Reference Time (s)			19.5			20.9	20.0	24.1	0.0	9.2	25.0	0.0
Permitted Option												
Adj Saturation A (vph)	0	137		0	270		120	1775		120	1694	
Reference Time A (s)	0.0	160.0		0.0	53.8		239.3	20.1		77.8	21.0	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	18.2	20.1		11.1	15.8		NA	NA		NA	NA	
Reference Time (s)		20.1			15.8			239.3			77.8	
Adj Reference Time (s)		24.1			22.6			243.3			81.8	
Split Option												
Ref Time Combined (s)	0.0	12.1		0.0	7.8		16.0	20.1		5.2	21.0	
Ref Time Seperate (s)	10.2	1.9		3.1	4.7		16.0	17.6		5.2	12.4	
Reference Time (s)	12.1	12.1		7.8	7.8		20.1	20.1		21.0	21.0	
Adj Reference Time (s)	17.1	17.1		19.8	19.8		24.1	24.1		25.0	25.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	44.9	
Permitted Option (s)	24.1	243.3	
Split Option (s)	36.9	49.1	
Minimum (s)	24.1	44.9	69.0

Right Turns	EBR	WBR
Adj Reference Time (s)	19.5	20.9
Cross Thru Ref Time (s)	25.0	24.1
Oncoming Left Ref Time (s)	19.8	17.1
Combined (s)	64.3	62.0

Intersection Summary			
Intersection Capacity Utilization	57.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	536	9	105	456	0	0	0	0	265	0	219
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	545	0	105	456	0	0	0	0	0	265	219
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3609	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	18.1	0.0	7.0	15.1	0.0			0.0			16.9
Adj Reference Time (s)	0.0	22.1	0.0	11.0	19.1	0.0			0.0			21.4
Permitted Option												
Adj Saturation A (vph)	0	1804		120	1809		0	0		0	120	
Reference Time A (s)	0.0	18.1		104.7	15.1		0.0	0.0		0.0	264.3	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		25.6	25.6	
Reference Time (s)		18.1			104.7			0.0			25.6	
Adj Reference Time (s)		22.1			108.7			8.0			29.6	
Split Option												
Ref Time Combined (s)	0.0	18.1		7.0	15.1		0.0	0.0		0.0	17.6	
Ref Time Seperate (s)	0.0	17.8		7.0	15.1		0.0	0.0		17.6	0.0	
Reference Time (s)	18.1	18.1		15.1	15.1		0.0	0.0		17.6	17.6	
Adj Reference Time (s)	22.1	22.1		19.1	19.1		0.0	0.0		22.0	22.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.1	NA	
Permitted Option (s)	108.7	29.6	
Split Option (s)	41.3	22.0	
Minimum (s)	33.1	22.0	55.1

Right Turns	SBR
Adj Reference Time (s)	21.4
Cross Thru Ref Time (s)	19.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	40.5

Intersection Summary			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	646	0	0	523	205	24	2	245	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	155	646	0	0	728	0	0	271	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3465	0	0	3113	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.3	21.4	0.0	0.0	25.4	0.0			0.0			0.0
Adj Reference Time (s)	14.3	25.4	0.0	0.0	29.4	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1732		0	298		0	0	
Reference Time A (s)	154.6	21.4		0.0	25.4		0.0	35.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		9.6	14.5		NA	NA	
Reference Time (s)		154.6			25.4			14.5			0.0	
Adj Reference Time (s)		158.6			29.4			18.5			8.0	
Split Option												
Ref Time Combined (s)	10.3	21.4		0.0	25.4		0.0	10.4		0.0	0.0	
Ref Time Seperate (s)	10.3	21.4		0.0	18.3		1.6	0.1		0.0	0.0	
Reference Time (s)	21.4	21.4		25.4	25.4		10.4	10.4		0.0	0.0	
Adj Reference Time (s)	25.4	25.4		29.4	29.4		14.4	14.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	43.7	NA	
Permitted Option (s)	158.6	18.5	
Split Option (s)	54.8	14.4	
Minimum (s)	43.7	14.4	58.1

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	278	11	402	0	0	0	0	72	0	561
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	754	0	11	402	0	0	0	0	72	0	561
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3418	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	26.5	0.0	0.7	25.4	0.0	0.0	0.0	0.0	4.8	0.0	41.7
Adj Reference Time (s)	0.0	30.5	0.0	8.0	29.4	0.0	0.0	0.0	0.0	8.8	0.0	45.7
Permitted Option												
Adj Saturation A (vph)	0	1709		120	1900		0	0		120	0	
Reference Time A (s)	0.0	26.5		11.0	25.4		0.0	0.0		71.8	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.8	0.0	
Reference Time (s)		26.5			25.4			0.0			12.8	
Adj Reference Time (s)		30.5			29.4			8.0			16.8	
Split Option												
Ref Time Combined (s)	0.0	26.5		0.7	25.4		0.0	0.0		4.8	0.0	
Ref Time Seperate (s)	0.0	16.7		0.7	25.4		0.0	0.0		4.8	0.0	
Reference Time (s)	26.5	26.5		25.4	25.4		0.0	0.0		4.8	4.8	
Adj Reference Time (s)	30.5	30.5		29.4	29.4		0.0	0.0		8.8	8.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.5	8.8	
Permitted Option (s)	30.5	16.8	
Split Option (s)	59.9	8.8	
Minimum (s)	30.5	8.8	39.3

Right Turns	SBR
Adj Reference Time (s)	45.7
Cross Thru Ref Time (s)	29.4
Oncoming Left Ref Time (s)	0.0
Combined (s)	75.1

Intersection Summary			
Intersection Capacity Utilization	62.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	192	0	0	127	154	288	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	388	192	0	0	127	154	288	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	13.3	12.1	0.0	0.0	8.0	11.7	19.1	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	17.3	16.1	0.0	0.0	12.0	15.7	23.1	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	199.2	12.1		0.0	8.0		287.2	0.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1647		0	0	
Reference Time B (s)	NA	NA		NA	NA		27.1	0.9		0.0	0.0	
Reference Time (s)		199.2			8.0			27.1			0.0	
Adj Reference Time (s)		203.2			12.0			31.1			8.4	
Split Option												
Ref Time Combined (s)	13.3	12.1		0.0	8.0		19.1	0.9		0.0	0.0	
Ref Time Seperate (s)	13.3	12.1		0.0	8.0		19.1	0.3		0.0	0.0	
Reference Time (s)	13.3	13.3		8.0	8.0		19.1	19.1		0.0	0.0	
Adj Reference Time (s)	17.3	17.3		12.0	12.0		23.1	23.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	29.3	23.1	
Permitted Option (s)	203.2	31.1	
Split Option (s)	29.3	31.5	
Minimum (s)	29.3	23.1	52.5

Right Turns	WBR
Adj Reference Time (s)	15.7
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	17.3
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	44.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	786	171	3	183	0	0	0	0	4	0	949
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	957	0	3	183	0	0	0	0	0	320	633
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1849	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	62.1	0.0	0.2	11.6	0.0			0.0			47.0
Adj Reference Time (s)	0.0	66.1	0.0	8.0	15.6	0.0			0.0			51.0
Permitted Option												
Adj Saturation A (vph)	0	1849		120	1900		0	0		0	1375	
Reference Time A (s)	0.0	62.1		3.0	11.6		0.0	0.0		0.0	28.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.3	31.8	
Reference Time (s)		62.1			11.6			0.0			28.0	
Adj Reference Time (s)		66.1			15.6			8.0			32.0	
Split Option												
Ref Time Combined (s)	0.0	62.1		0.2	11.6		0.0	0.0		0.0	23.8	
Ref Time Seperate (s)	0.0	51.0		0.2	11.6		0.0	0.0		0.3	0.0	
Reference Time (s)	62.1	62.1		11.6	11.6		0.0	0.0		23.8	23.8	
Adj Reference Time (s)	66.1	66.1		15.6	15.6		0.0	0.0		27.8	27.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	74.1	NA	
Permitted Option (s)	66.1	32.0	
Split Option (s)	81.7	27.8	
Minimum (s)	66.1	27.8	93.9

Right Turns	SBR
Adj Reference Time (s)	51.0
Cross Thru Ref Time (s)	15.6
Oncoming Left Ref Time (s)	0.0
Combined (s)	66.6

Intersection Summary			
Intersection Capacity Utilization	78.2%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	388	381	9	401	0	0	0	0	5	0	485
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	388	381	0	410	0	0	0	0	5	0	485
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1898	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			28.3			0.0	0.0	0.0	0.0	0.3	0.0	36.0
Adj Reference Time (s)			32.3			0.0	0.0	0.0	0.0	8.0	0.0	40.0
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1447		0	0		120	0	
Reference Time A (s)	0.0	24.5		0.0	34.0		0.0	0.0		5.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		8.3	0.0	
Reference Time (s)		24.5			34.0			0.0			5.0	
Adj Reference Time (s)		28.5			38.0			8.0			9.0	
Split Option												
Ref Time Combined (s)	0.0	24.5		0.0	25.9		0.0	0.0		0.3	0.0	
Ref Time Seperate (s)	0.0	24.5		0.6	25.3		0.0	0.0		0.3	0.0	
Reference Time (s)	24.5	24.5		25.9	25.9		0.0	0.0		0.3	0.3	
Adj Reference Time (s)	28.5	28.5		29.9	29.9		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	38.0	9.0	
Split Option (s)	58.4	8.0	
Minimum (s)	38.0	8.0	46.0

Right Turns	EBR	SBR
Adj Reference Time (s)	32.3	40.0
Cross Thru Ref Time (s)	0.0	29.9
Oncoming Left Ref Time (s)	29.9	0.0
Combined (s)	62.2	70.0

Intersection Summary			
Intersection Capacity Utilization	58.3%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1068	467	47	664	0	0	0	0	69	0	879
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1068	467	47	664	0	0	0	0	0	69	879
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	18.6	34.8	3.1	22.0	0.0			0.0			36.9
Adj Reference Time (s)	0.0	22.6	38.8	8.0	26.0	0.0			0.0			40.9
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	18.6		46.9	22.0		0.0	0.0		0.0	34.4	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		10.3	10.3	
Reference Time (s)		18.6			46.9			0.0			10.3	
Adj Reference Time (s)		22.6			50.9			8.0			14.3	
Split Option												
Ref Time Combined (s)	0.0	18.6		3.1	22.0		0.0	0.0		0.0	2.3	
Ref Time Seperate (s)	0.0	18.6		3.1	22.0		0.0	0.0		2.3	0.0	
Reference Time (s)	18.6	18.6		22.0	22.0		0.0	0.0		2.3	2.3	
Adj Reference Time (s)	22.6	22.6		26.0	26.0		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	30.6	NA	
Permitted Option (s)	50.9	14.3	
Split Option (s)	48.6	8.0	
Minimum (s)	30.6	8.0	38.6

Right Turns	EBR	SBR
Adj Reference Time (s)	38.8	40.9
Cross Thru Ref Time (s)	8.0	26.0
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	54.8	66.9

Intersection Summary			
Intersection Capacity Utilization	55.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	936	202	0	0	272	195	432	5	52	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	936	202	0	0	272	195	0	437	52	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	32.0	6.7	0.0	0.0	9.0	14.6			4.0			0.0
Adj Reference Time (s)	36.0	10.7	0.0	0.0	13.3	18.7			8.4			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	243		0	0	
Reference Time A (s)	480.6	6.7		0.0	9.0		0.0	216.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		22.4	22.5		0.0	0.0	
Reference Time (s)		480.6			9.0			22.5			0.0	
Adj Reference Time (s)		484.6			13.3			26.5			8.0	
Split Option												
Ref Time Combined (s)	32.0	6.7		0.0	9.0		0.0	14.5		0.0	0.0	
Ref Time Seperate (s)	32.0	6.7		0.0	9.0		14.4	0.3		0.0	0.0	
Reference Time (s)	32.0	32.0		9.0	9.0		14.5	14.5		0.0	0.0	
Adj Reference Time (s)	36.0	36.0		13.3	13.3		18.6	18.6		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	49.3	NA	
Permitted Option (s)	484.6	26.5	
Split Option (s)	49.3	18.6	
Minimum (s)	49.3	18.6	67.9

Right Turns	WBR	NBR
Adj Reference Time (s)	18.7	8.4
Cross Thru Ref Time (s)	18.6	10.7
Oncoming Left Ref Time (s)	36.0	0.0
Combined (s)	73.3	19.1

Intersection Summary			
Intersection Capacity Utilization	61.1%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	68	78	458	49	251	71	574	82	387	386	74
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	96	146	0	0	507	251	71	656	0	387	386	74
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3328	0	0	3628	1615	1805	3550	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			18.7	4.7	22.2	0.0	25.7	12.8	5.6
Adj Reference Time (s)			0.0			22.7	8.7	26.2	0.0	29.7	16.9	10.0
Permitted Option												
Adj Saturation A (vph)	120	1664		0	259		120	1775		120	1809	
Reference Time A (s)	95.7	5.3		0.0	235.1		70.8	22.2		385.9	12.8	
Adj Saturation B (vph	0	3328		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	14.4	5.3		NA	NA		NA	NA		NA	NA	
Reference Time (s)		14.4			235.1			70.8			385.9	
Adj Reference Time (s)		18.4			239.1			74.8			389.9	
Split Option												
Ref Time Combined (s)	6.4	5.3		0.0	16.8		4.7	22.2		25.7	12.8	
Ref Time Seperate (s)	6.4	2.5		15.2	3.1		4.7	19.4		25.7	12.8	
Reference Time (s)	6.4	6.4		16.8	16.8		22.2	22.2		25.7	25.7	
Adj Reference Time (s)	10.4	10.4		20.8	20.8		26.2	26.2		29.7	29.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	55.9	
Permitted Option (s)	239.1	389.9	
Split Option (s)	31.2	55.9	
Minimum (s)	31.2	55.9	87.1

Right Turns	WBR	SBR
Adj Reference Time (s)	22.7	10.0
Cross Thru Ref Time (s)	26.2	20.8
Oncoming Left Ref Time (s)	10.4	8.7
Combined (s)	59.2	39.5

Intersection Summary			
Intersection Capacity Utilization	72.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	944	32	22	1	47	6	11	7	1	1	6	460
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	944	54	0	1	53	0	0	19	0	0	7	460
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	1784	0	1805	1868	0	0	1830	0	0	1886	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	62.8	3.6	0.0	0.1	3.4	0.0			0.0			34.2
Adj Reference Time (s)	66.8	8.0	0.0	8.0	8.0	0.0			0.0			38.2
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1868		0	185		0	1890	
Reference Time A (s)	941.4	3.6		1.0	3.4		0.0	12.3		0.0	0.4	
Adj Saturation B (vph	0	1784		0	1868		0	0		0	0	
Reference Time B (s)	70.8	3.6		8.1	3.4		8.7	9.2		8.1	8.4	
Reference Time (s)		70.8			3.4			9.2			0.4	
Adj Reference Time (s)		74.8			8.0			13.2			8.0	
Split Option												
Ref Time Combined (s)	62.8	3.6		0.1	3.4		0.0	1.2		0.0	0.4	
Ref Time Seperate (s)	62.8	2.2		0.1	3.0		0.7	0.5		0.1	0.4	
Reference Time (s)	62.8	62.8		3.4	3.4		1.2	1.2		0.4	0.4	
Adj Reference Time (s)	66.8	66.8		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	74.8	NA	
Permitted Option (s)	74.8	13.2	
Split Option (s)	74.8	16.0	
Minimum (s)	74.8	13.2	88.0

Right Turns	SBR
Adj Reference Time (s)	38.2
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	54.2

Intersection Summary			
Intersection Capacity Utilization	73.3%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	611	397	408	786	0	0	0	0	139	140	348
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1008	0	408	786	0	0	0	0	0	279	348
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	3404	0	3505	3618	0	0	0	0	0	1853	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	35.7	0.0	14.0	26.1	0.0			0.0			27.3
Adj Reference Time (s)	0.0	39.7	0.0	18.0	30.1	0.0			0.0			31.3
Permitted Option												
Adj Saturation A (vph)	0	1702		117	1809		0	0		0	212	
Reference Time A (s)	0.0	35.7		209.5	26.1		0.0	0.0		0.0	157.6	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		17.2	26.1	
Reference Time (s)		35.7			209.5			0.0			26.1	
Adj Reference Time (s)		39.7			213.5			8.0			30.1	
Split Option												
Ref Time Combined (s)	0.0	35.7		14.0	26.1		0.0	0.0		0.0	18.1	
Ref Time Seperate (s)	0.0	21.7		14.0	26.1		0.0	0.0		9.2	8.8	
Reference Time (s)	35.7	35.7		26.1	26.1		0.0	0.0		18.1	18.1	
Adj Reference Time (s)	39.7	39.7		30.1	30.1		0.0	0.0		22.7	22.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	57.7	NA	
Permitted Option (s)	213.5	30.1	
Split Option (s)	69.8	22.7	
Minimum (s)	57.7	22.7	80.4

Right Turns	SBR
Adj Reference Time (s)	31.3
Cross Thru Ref Time (s)	30.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	61.4

Intersection Summary			
Intersection Capacity Utilization	67.0%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	312	407	24	3	694	234	507	83	262	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	312	431	0	3	694	234	0	590	262	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.96	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3587	0	1805	3618	1615	0	1818	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.7	14.5	0.0	0.2	23.0	18.3			19.7			0.0
Adj Reference Time (s)	14.7	18.5	0.0	8.0	27.0	22.3			24.1			0.0
Permitted Option												
Adj Saturation A (vph)	117	1794		120	1809		0	134		0	0	
Reference Time A (s)	160.2	14.5		3.0	23.0		0.0	526.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		41.7	46.9		0.0	0.0	
Reference Time (s)		160.2			23.0			46.9			0.0	
Adj Reference Time (s)		164.2			27.0			50.9			8.0	
Split Option												
Ref Time Combined (s)	10.7	14.5		0.2	23.0		0.0	38.9		0.0	0.0	
Ref Time Seperate (s)	10.7	13.7		0.2	23.0		33.7	5.2		0.0	0.0	
Reference Time (s)	14.5	14.5		23.0	23.0		38.9	38.9		0.0	0.0	
Adj Reference Time (s)	18.5	18.5		27.0	27.0		42.9	42.9		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.7	NA	
Permitted Option (s)	164.2	50.9	
Split Option (s)	45.5	42.9	
Minimum (s)	41.7	42.9	84.6

Right Turns	WBR	NBR
Adj Reference Time (s)	22.3	24.1
Cross Thru Ref Time (s)	42.9	18.5
Oncoming Left Ref Time (s)	14.7	0.0
Combined (s)	79.9	42.5

Intersection Summary			
Intersection Capacity Utilization	70.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	586	78	135	809	64	50	4	79	40	2	22
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	21	664	0	135	873	0	50	83	0	40	24	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.86	0.85
Saturated Flow (vph)	1805	3554	0	1805	3578	0	1805	1629	0	1805	1639	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.4	22.4	0.0	9.0	29.3	0.0	3.3	6.1	0.0	2.7	1.8	0.0
Adj Reference Time (s)	8.0	26.4	0.0	13.0	33.3	0.0	8.0	10.1	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1777		120	1789		120	1629		120	1639	
Reference Time A (s)	20.9	22.4		134.6	29.3		49.9	6.1		39.9	1.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	1629		0	1639	
Reference Time B (s)	NA	NA		NA	NA		11.3	6.1		10.7	1.8	
Reference Time (s)		22.4			134.6			11.3			10.7	
Adj Reference Time (s)		26.4			138.6			15.3			14.7	
Split Option												
Ref Time Combined (s)	1.4	22.4		9.0	29.3		3.3	6.1		2.7	1.8	
Ref Time Seperate (s)	1.4	19.8		9.0	27.1		3.3	0.3		2.7	0.1	
Reference Time (s)	22.4	22.4		29.3	29.3		6.1	6.1		2.7	2.7	
Adj Reference Time (s)	26.4	26.4		33.3	33.3		10.1	10.1		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.3	18.1	
Permitted Option (s)	138.6	15.3	
Split Option (s)	59.7	18.1	
Minimum (s)	41.3	15.3	56.6

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	47.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	148	434	79	227	439	170	131	221	119	360	229	83
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	148	513	0	227	609	0	131	340	0	0	672	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.95	0.85	0.95	0.96	0.85
Saturated Flow (vph)	3505	3534	0	3505	3466	0	1805	3428	0	0	5183	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.1	17.4	0.0	7.8	21.2	0.0			0.0			0.0
Adj Reference Time (s)	9.1	21.4	0.0	11.8	25.6	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1767		117	1733		120	1714		0	173	
Reference Time A (s)	76.0	17.4		116.6	21.2		130.6	12.1		0.0	250.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		76.0			116.6			130.6			250.1	
Adj Reference Time (s)		80.0			120.6			134.6			254.1	
Split Option												
Ref Time Combined (s)	5.1	17.4		7.8	21.2		8.7	12.1		0.0	15.6	
Ref Time Seperate (s)	5.1	14.7		7.8	15.3		8.7	8.0		12.0	8.0	
Reference Time (s)	17.4	17.4		21.2	21.2		12.1	12.1		15.6	15.6	
Adj Reference Time (s)	21.4	21.4		25.6	25.6		18.4	18.4		21.0	21.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.6	NA	
Permitted Option (s)	120.6	254.1	
Split Option (s)	47.0	39.5	
Minimum (s)	34.6	39.5	74.1

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	61.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	607	227	68	552	25	135	39	44	13	69	51
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	51	834	0	68	577	0	135	83	0	0	82	51
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.99	0.85	0.95	0.92	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3470	0	1805	3594	0	1805	1749	0	0	1885	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.4	28.9	0.0	4.5	19.3	0.0			0.0			3.9
Adj Reference Time (s)	8.0	32.9	0.0	8.5	23.3	0.0			0.0			8.4
Permitted Option												
Adj Saturation A (vph)	120	1735		120	1797		120	1749		0	557	
Reference Time A (s)	50.9	28.9		67.8	19.3		134.6	5.8		0.0	17.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1749		0	0	
Reference Time B (s)	NA	NA		NA	NA		17.0	5.8		8.9	13.2	
Reference Time (s)		50.9			67.8			17.0			13.2	
Adj Reference Time (s)		54.9			71.8			21.0			17.3	
Split Option												
Ref Time Combined (s)	3.4	28.9		4.5	19.3		9.0	5.8		0.0	5.2	
Ref Time Seperate (s)	3.4	21.0		4.5	18.5		9.0	2.7		0.9	4.4	
Reference Time (s)	28.9	28.9		19.3	19.3		9.0	9.0		5.2	5.2	
Adj Reference Time (s)	32.9	32.9		23.3	23.3		13.2	13.2		9.6	9.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.4	NA	
Permitted Option (s)	71.8	21.0	
Split Option (s)	56.2	22.8	
Minimum (s)	41.4	21.0	62.4

Right Turns	SBR
Adj Reference Time (s)	8.4
Cross Thru Ref Time (s)	23.3
Oncoming Left Ref Time (s)	13.2
Combined (s)	44.9

Intersection Summary			
Intersection Capacity Utilization	52.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	600	153	248	583	99	79	425	200	116	494	89
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	82	600	153	248	583	99	79	425	200	116	583	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3535	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	2.8	19.9	11.5	8.5	19.3	7.5	5.3	14.1	15.1	7.7	20.0	0.0
Adj Reference Time (s)	8.0	24.0	15.8	12.5	23.4	12.0	9.3	19.1	20.1	11.7	26.6	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1767	
Reference Time A (s)	42.1	19.9		127.3	19.3		78.8	14.1		115.7	20.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		42.1			127.3			78.8			115.7	
Adj Reference Time (s)		46.1			131.3			82.8			119.7	
Split Option												
Ref Time Combined (s)	2.8	19.9		8.5	19.3		5.3	14.1		7.7	20.0	
Ref Time Seperate (s)	2.8	19.9		8.5	19.3		5.3	14.1		7.7	16.9	
Reference Time (s)	19.9	19.9		19.3	19.3		14.1	14.1		20.0	20.0	
Adj Reference Time (s)	24.0	24.0		23.4	23.4		19.1	19.1		26.6	26.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.5	35.8	
Permitted Option (s)	131.3	119.7	
Split Option (s)	47.4	45.7	
Minimum (s)	36.5	35.8	72.3

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	15.8	12.0	20.1
Cross Thru Ref Time (s)	26.6	19.1	24.0
Oncoming Left Ref Time (s)	12.5	8.0	11.7
Combined (s)	54.9	39.1	55.8

Intersection Summary			
Intersection Capacity Utilization	60.2%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	783	82	41	627	16	62	61	45	19	62	3
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	7	865	0	41	643	0	62	106	0	19	65	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3566	0	1805	3604	0	1805	1779	0	1805	1887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.5	29.1	0.0	2.7	21.4	0.0	4.1	7.3	0.0	1.3	4.1	0.0
Adj Reference Time (s)	8.0	33.1	0.0	8.0	25.4	0.0	8.1	11.8	0.0	8.0	8.1	0.0
Permitted Option												
Adj Saturation A (vph)	120	1783		120	1802		120	1779		120	1887	
Reference Time A (s)	7.0	29.1		40.9	21.4		61.8	7.3		18.9	4.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1779		0	1887	
Reference Time B (s)	NA	NA		NA	NA		12.1	7.3		9.3	4.1	
Reference Time (s)		29.1			40.9			12.1			9.3	
Adj Reference Time (s)		33.1			44.9			16.4			13.3	
Split Option												
Ref Time Combined (s)	0.5	29.1		2.7	21.4		4.1	7.3		1.3	4.1	
Ref Time Seperate (s)	0.5	26.3		2.7	20.9		4.1	4.2		1.3	3.9	
Reference Time (s)	29.1	29.1		21.4	21.4		7.3	7.3		4.1	4.1	
Adj Reference Time (s)	33.1	33.1		25.4	25.4		11.8	11.8		8.1	8.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.1	19.8	
Permitted Option (s)	44.9	16.4	
Split Option (s)	58.5	20.0	
Minimum (s)	41.1	16.4	57.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	47.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	23	173	51	23	64	148	412	45	51	479	99
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	131	173	0	74	64	148	457	0	51	578	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.97	0.85	0.95	0.99	0.85	0.95	0.97	0.85
Saturated Flow (vph)	0	1822	1615	0	1835	1615	1805	3564	0	1805	3525	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.3	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			13.4			8.2	9.8	15.4	0.0	3.4	19.9	0.0
Adj Reference Time (s)			18.2			19.9	13.8	19.5	0.0	8.0	23.9	0.0
Permitted Option												
Adj Saturation A (vph)	0	139		0	160		120	1782		120	1762	
Reference Time A (s)	0.0	113.3		0.0	55.4		147.6	15.4		50.9	19.9	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	15.2	16.6		11.4	12.8		NA	NA		NA	NA	
Reference Time (s)		16.6			12.8			147.6			50.9	
Adj Reference Time (s)		21.1			21.5			151.6			54.9	
Split Option												
Ref Time Combined (s)	0.0	8.6		0.0	4.8		9.8	15.4		3.4	19.9	
Ref Time Seperate (s)	7.2	1.5		3.4	1.5		9.8	13.9		3.4	16.6	
Reference Time (s)	8.6	8.6		4.8	4.8		15.4	15.4		19.9	19.9	
Adj Reference Time (s)	14.0	14.0		18.8	18.8		19.5	19.5		23.9	23.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	37.8	
Permitted Option (s)	21.5	151.6	
Split Option (s)	32.8	43.4	
Minimum (s)	21.5	37.8	59.3

Right Turns	EBR	WBR
Adj Reference Time (s)	18.2	19.9
Cross Thru Ref Time (s)	23.9	19.5
Oncoming Left Ref Time (s)	18.8	14.0
Combined (s)	60.9	53.4

Intersection Summary			
Intersection Capacity Utilization	50.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Appendix F

Analysis Worksheets for
Existing (2024) plus Project Phase 3 Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	625	18	149	474	0	0	0	0	150	0	296
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	643	0	149	474	0	0	0	0	0	150	296
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3602	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	21.4	0.0	9.9	15.7	0.0			0.0			22.6
Adj Reference Time (s)	0.0	25.4	0.0	13.9	19.7	0.0			0.0			26.6
Permitted Option												
Adj Saturation A (vph)	0	1801		120	1809		0	0		0	120	
Reference Time A (s)	0.0	21.4		148.6	15.7		0.0	0.0		0.0	149.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		18.0	18.0	
Reference Time (s)		21.4			148.6			0.0			18.0	
Adj Reference Time (s)		25.4			152.6			8.0			22.3	
Split Option												
Ref Time Combined (s)	0.0	21.4		9.9	15.7		0.0	0.0		0.0	10.0	
Ref Time Seperate (s)	0.0	20.8		9.9	15.7		0.0	0.0		10.0	0.0	
Reference Time (s)	21.4	21.4		15.7	15.7		0.0	0.0		10.0	10.0	
Adj Reference Time (s)	25.4	25.4		19.7	19.7		0.0	0.0		15.5	15.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.3	NA	
Permitted Option (s)	152.6	22.3	
Split Option (s)	45.2	15.5	
Minimum (s)	39.3	15.5	54.9

Right Turns	SBR
Adj Reference Time (s)	26.6
Cross Thru Ref Time (s)	19.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	46.4

Intersection Summary			
Intersection Capacity Utilization	45.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	555	0	0	625	356	5	1	88	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	210	555	0	0	981	0	0	94	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3421	0	0	3101	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	14.0	18.4	0.0	0.0	34.6	0.0			0.0			0.0
Adj Reference Time (s)	18.0	22.4	0.0	0.0	38.6	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1710		0	514		0	0	
Reference Time A (s)	209.4	18.4		0.0	34.6		0.0	8.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1541		0	0	
Reference Time B (s)	NA	NA		NA	NA		8.3	7.7		0.0	0.0	
Reference Time (s)		209.4			34.6			8.3			0.0	
Adj Reference Time (s)		213.4			38.6			12.3			8.0	
Split Option												
Ref Time Combined (s)	14.0	18.4		0.0	34.6		0.0	3.6		0.0	0.0	
Ref Time Seperate (s)	14.0	18.4		0.0	22.2		0.3	0.0		0.0	0.0	
Reference Time (s)	18.4	18.4		34.6	34.6		3.6	3.6		0.0	0.0	
Adj Reference Time (s)	22.4	22.4		38.6	38.6		8.0	8.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	56.6	NA	
Permitted Option (s)	213.4	12.3	
Split Option (s)	61.1	8.0	
Minimum (s)	56.6	8.0	64.6

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	53.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	639	294	3	402	0	0	0	0	125	0	379
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	934	0	3	402	0	0	0	0	125	0	379
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3447	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			0.0	0.0	0.0	0.0	8.3	0.0	28.2
Adj Reference Time (s)			0.0			0.0	0.0	0.0	0.0	12.3	0.0	32.2
Permitted Option												
Adj Saturation A (vph)	0	1673		120	1900		0	0		120	0	
Reference Time A (s)	0.0	33.4		3.0	25.4		0.0	0.0		124.7	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		16.3	0.0	
Reference Time (s)		33.4			25.4			0.0			16.3	
Adj Reference Time (s)		37.4			29.4			8.0			20.3	
Split Option												
Ref Time Combined (s)	0.0	32.5		0.2	25.4		0.0	0.0		8.3	0.0	
Ref Time Seperate (s)	0.1	22.2		0.2	25.4		0.0	0.0		8.3	0.0	
Reference Time (s)	32.5	32.5		25.4	25.4		0.0	0.0		8.3	8.3	
Adj Reference Time (s)	36.5	36.5		29.4	29.4		0.0	0.0		12.3	12.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	12.3	
Permitted Option (s)	37.4	20.3	
Split Option (s)	65.9	12.3	
Minimum (s)	37.4	12.3	49.7

Right Turns	SBR
Adj Reference Time (s)	32.2
Cross Thru Ref Time (s)	29.4
Oncoming Left Ref Time (s)	0.0
Combined (s)	61.6

Intersection Summary			
Intersection Capacity Utilization	51.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	220	0	0	87	118	318	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	540	220	0	0	87	118	318	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.5	13.9	0.0	0.0	5.5	9.0	21.1	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	22.5	17.9	0.0	0.0	9.5	13.0	25.1	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	277.3	13.9		0.0	5.5		317.1	0.9		0.0	0.0	
Adj Saturation B (vph	0	1900		NA	NA		0	1647		0	0	
Reference Time B (s)	26.5	13.9		NA	NA		29.1	0.9		0.0	0.0	
Reference Time (s)		26.5			5.5			29.1			0.0	
Adj Reference Time (s)		30.5			9.5			33.1			8.4	
Split Option												
Ref Time Combined (s)	18.5	13.9		0.0	5.5		21.1	0.9		0.0	0.0	
Ref Time Seperate (s)	18.5	13.9		0.0	5.5		21.1	0.3		0.0	0.0	
Reference Time (s)	18.5	18.5		5.5	5.5		21.1	21.1		0.0	0.0	
Adj Reference Time (s)	22.5	22.5		9.5	9.5		25.1	25.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.0	25.1	
Permitted Option (s)	30.5	33.1	
Split Option (s)	32.0	33.5	
Minimum (s)	30.5	25.1	55.6

Right Turns	WBR
Adj Reference Time (s)	13.0
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	22.5
Combined (s)	55.5

Intersection Summary			
Intersection Capacity Utilization	46.4%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1094	195	3	257	0	0	0	0	3	1	764
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1289	0	3	257	0	0	0	0	0	259	509
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1857	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	83.3	0.0	0.2	16.2	0.0			0.0			37.8
Adj Reference Time (s)	0.0	87.3	0.0	8.0	20.2	0.0			0.0			41.8
Permitted Option												
Adj Saturation A (vph)	0	1857		120	1900		0	0		0	1391	
Reference Time A (s)	0.0	83.3		3.0	16.2		0.0	0.0		0.0	22.3	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.2	27.2	
Reference Time (s)		83.3			16.2			0.0			22.3	
Adj Reference Time (s)		87.3			20.2			8.0			26.3	
Split Option												
Ref Time Combined (s)	0.0	83.3		0.2	16.2		0.0	0.0		0.0	19.2	
Ref Time Seperate (s)	0.0	70.7		0.2	16.2		0.0	0.0		0.2	0.1	
Reference Time (s)	83.3	83.3		16.2	16.2		0.0	0.0		19.2	19.2	
Adj Reference Time (s)	87.3	87.3		20.2	20.2		0.0	0.0		23.2	23.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	95.3	NA	
Permitted Option (s)	87.3	26.3	
Split Option (s)	107.5	23.2	
Minimum (s)	87.3	23.2	110.5

Right Turns	SBR
Adj Reference Time (s)	41.8
Cross Thru Ref Time (s)	20.2
Oncoming Left Ref Time (s)	0.0
Combined (s)	62.1

Intersection Summary			
Intersection Capacity Utilization	92.1%	ICU Level of Service	F

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	523	434	6	521	0	0	0	0	18	0	517
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	523	434	0	527	0	0	0	0	18	0	517
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1899	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			32.2			0.0	0.0	0.0	0.0	1.2	0.0	38.4
Adj Reference Time (s)			36.2			0.0	0.0	0.0	0.0	8.0	0.0	42.4
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1636		0	0		120	0	
Reference Time A (s)	0.0	33.0		0.0	38.6		0.0	0.0		18.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		9.2	0.0	
Reference Time (s)		33.0			38.6			0.0			9.2	
Adj Reference Time (s)		37.0			42.6			8.0			13.2	
Split Option												
Ref Time Combined (s)	0.0	33.0		0.0	33.3		0.0	0.0		1.2	0.0	
Ref Time Seperate (s)	0.0	33.0		0.4	32.9		0.0	0.0		1.2	0.0	
Reference Time (s)	33.0	33.0		33.3	33.3		0.0	0.0		1.2	1.2	
Adj Reference Time (s)	37.0	37.0		37.3	37.3		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	42.6	13.2	
Split Option (s)	74.3	8.0	
Minimum (s)	42.6	8.0	50.6

Right Turns	EBR	SBR
Adj Reference Time (s)	36.2	42.4
Cross Thru Ref Time (s)	0.0	37.3
Oncoming Left Ref Time (s)	37.3	0.0
Combined (s)	73.6	79.7

Intersection Summary			
Intersection Capacity Utilization	66.4%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	746	290	44	514	0	0	0	0	148	0	1017
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	746	290	44	514	0	0	0	0	0	148	1017
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	13.0	21.7	2.9	17.0	0.0			0.0			42.7
Adj Reference Time (s)	0.0	17.0	25.7	8.0	21.0	0.0			0.0			46.7
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	13.0		43.9	17.0		0.0	0.0		0.0	73.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.9	12.9	
Reference Time (s)		13.0			43.9			0.0			12.9	
Adj Reference Time (s)		17.0			47.9			8.0			16.9	
Split Option												
Ref Time Combined (s)	0.0	13.0		2.9	17.0		0.0	0.0		0.0	4.9	
Ref Time Seperate (s)	0.0	13.0		2.9	17.0		0.0	0.0		4.9	0.0	
Reference Time (s)	13.0	13.0		17.0	17.0		0.0	0.0		4.9	4.9	
Adj Reference Time (s)	17.0	17.0		21.0	21.0		0.0	0.0		8.9	8.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.0	NA	
Permitted Option (s)	47.9	16.9	
Split Option (s)	38.0	8.9	
Minimum (s)	25.0	8.9	33.9

Right Turns	EBR	SBR
Adj Reference Time (s)	25.7	46.7
Cross Thru Ref Time (s)	8.9	21.0
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	42.6	67.7

Intersection Summary			
Intersection Capacity Utilization	56.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	580	325	0	0	167	125	378	3	70	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	580	325	0	0	167	125	0	381	70	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3611	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	19.9	10.8	0.0	0.0	5.5	9.4			5.3			0.0
Adj Reference Time (s)	23.9	14.8	0.0	0.0	9.9	13.6			9.7			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	297.8	10.8		0.0	5.5		0.0	188.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		20.6	20.7		0.0	0.0	
Reference Time (s)		297.8			5.5			20.7			0.0	
Adj Reference Time (s)		301.8			9.9			24.7			8.0	
Split Option												
Ref Time Combined (s)	19.9	10.8		0.0	5.5		0.0	12.7		0.0	0.0	
Ref Time Seperate (s)	19.9	10.8		0.0	5.5		12.6	0.2		0.0	0.0	
Reference Time (s)	19.9	19.9		5.5	5.5		12.7	12.7		0.0	0.0	
Adj Reference Time (s)	23.9	23.9		9.9	9.9		16.8	16.8		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	NA	
Permitted Option (s)	301.8	24.7	
Split Option (s)	33.7	16.8	
Minimum (s)	33.7	16.8	50.5

Right Turns	WBR	NBR
Adj Reference Time (s)	13.6	9.7
Cross Thru Ref Time (s)	16.8	14.8
Oncoming Left Ref Time (s)	23.9	0.0
Combined (s)	54.3	24.5

Intersection Summary			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	33	13	318	72	413	28	359	40	252	201	59
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	68	46	0	0	390	413	28	399	0	252	201	59
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3464	0	0	3645	1615	1805	3563	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			30.7	1.9	13.4	0.0	16.8	6.7	4.5
Adj Reference Time (s)			0.0			34.7	8.0	17.4	0.0	20.8	11.0	8.9
Permitted Option												
Adj Saturation A (vph)	120	1732		0	280		120	1782		120	1809	
Reference Time A (s)	67.8	1.6		0.0	167.2		27.9	13.4		251.3	6.7	
Adj Saturation B (vph	0	3464		0	0		NA	NA		NA	NA	
Reference Time B (s)	12.5	1.6		18.6	20.8		NA	NA		NA	NA	
Reference Time (s)		12.5			20.8			27.9			251.3	
Adj Reference Time (s)		16.5			24.8			31.9			255.3	
Split Option												
Ref Time Combined (s)	4.5	1.6		0.0	12.8		1.9	13.4		16.8	6.7	
Ref Time Seperate (s)	4.5	1.1		10.6	4.5		1.9	12.1		16.8	6.7	
Reference Time (s)	4.5	4.5		12.8	12.8		13.4	13.4		16.8	16.8	
Adj Reference Time (s)	8.5	8.5		16.8	16.8		17.4	17.4		20.8	20.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	38.2	
Permitted Option (s)	24.8	255.3	
Split Option (s)	25.4	38.2	
Minimum (s)	24.8	38.2	63.0

Right Turns	WBR	SBR
Adj Reference Time (s)	34.7	8.9
Cross Thru Ref Time (s)	17.4	16.8
Oncoming Left Ref Time (s)	8.5	8.0
Combined (s)	60.6	33.7

Intersection Summary			
Intersection Capacity Utilization	52.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	638	66	7	0	29	4	3	2	0	4	1	601
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	638	73	0	0	33	0	0	5	0	0	5	601
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.96	0.85
Saturated Flow (vph)	1805	1873	0	1805	1865	0	0	1843	0	0	1824	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	42.4	4.7	0.0	0.0	2.1	0.0			0.0			44.7
Adj Reference Time (s)	46.4	8.7	0.0	8.0	8.0	0.0			0.0			48.7
Permitted Option												
Adj Saturation A (vph)	120	1873		120	1865		0	181		0	1352	
Reference Time A (s)	636.2	4.7		0.0	2.1		0.0	3.3		0.0	0.4	
Adj Saturation B (vph	0	1873		0	1865		0	0		0	0	
Reference Time B (s)	50.4	4.7		8.0	2.1		8.2	8.3		8.3	8.3	
Reference Time (s)		50.4			2.1			3.3			0.4	
Adj Reference Time (s)		54.4			8.0			8.0			8.0	
Split Option												
Ref Time Combined (s)	42.4	4.7		0.0	2.1		0.0	0.3		0.0	0.3	
Ref Time Seperate (s)	42.4	4.2		0.0	1.9		0.2	0.1		0.3	0.1	
Reference Time (s)	42.4	42.4		2.1	2.1		0.3	0.3		0.3	0.3	
Adj Reference Time (s)	46.4	46.4		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.4	NA	
Permitted Option (s)	54.4	8.0	
Split Option (s)	54.4	16.0	
Minimum (s)	54.4	8.0	62.4

Right Turns	SBR
Adj Reference Time (s)	48.7
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	64.7

Intersection Summary			
Intersection Capacity Utilization	53.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	549	318	498	712	0	0	0	0	428	139	294
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	867	0	498	712	0	0	0	0	0	567	294
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.96	0.85
Saturated Flow (vph)	0	3419	0	3505	3618	0	0	0	0	0	1828	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	30.6	0.0	17.0	23.6	0.0			0.0			23.3
Adj Reference Time (s)	0.0	34.6	0.0	21.0	27.6	0.0			0.0			27.3
Permitted Option												
Adj Saturation A (vph)	0	1709		117	1809		0	0		0	149	
Reference Time A (s)	0.0	30.6		255.7	23.6		0.0	0.0		0.0	457.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		36.5	45.2	
Reference Time (s)		30.6			255.7			0.0			45.2	
Adj Reference Time (s)		34.6			259.7			8.0			49.2	
Split Option												
Ref Time Combined (s)	0.0	30.6		17.0	23.6		0.0	0.0		0.0	37.2	
Ref Time Seperate (s)	0.0	19.5		17.0	23.6		0.0	0.0		28.5	8.8	
Reference Time (s)	30.6	30.6		23.6	23.6		0.0	0.0		37.2	37.2	
Adj Reference Time (s)	34.6	34.6		27.6	27.6		0.0	0.0		41.2	41.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	55.7	NA	
Permitted Option (s)	259.7	49.2	
Split Option (s)	62.2	41.2	
Minimum (s)	55.7	41.2	96.9

Right Turns	SBR
Adj Reference Time (s)	27.3
Cross Thru Ref Time (s)	27.6
Oncoming Left Ref Time (s)	0.0
Combined (s)	54.9

Intersection Summary			
Intersection Capacity Utilization	80.7%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	678	119	8	817	207	431	29	315	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	185	797	0	8	817	207	0	460	315	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3537	0	1805	3618	1615	0	1811	1615	0	0	0
Ped Intf Time (s)	0.0	0.1	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	6.3	27.1	0.0	0.5	27.1	16.3			23.7			0.0
Adj Reference Time (s)	10.3	31.1	0.0	8.0	31.1	20.3			27.8			0.0
Permitted Option												
Adj Saturation A (vph)	117	1768		120	1809		0	126		0	0	
Reference Time A (s)	95.0	27.1		8.0	27.1		0.0	438.1		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		36.7	38.5		0.0	0.0	
Reference Time (s)		95.0			27.1			38.5			0.0	
Adj Reference Time (s)		99.0			31.1			42.5			8.0	
Split Option												
Ref Time Combined (s)	6.3	27.1		0.5	27.1		0.0	30.5		0.0	0.0	
Ref Time Seperate (s)	6.3	23.1		0.5	27.1		28.7	1.8		0.0	0.0	
Reference Time (s)	27.1	27.1		27.1	27.1		30.5	30.5		0.0	0.0	
Adj Reference Time (s)	31.1	31.1		31.1	31.1		34.5	34.5		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.4	NA	
Permitted Option (s)	99.0	42.5	
Split Option (s)	62.2	34.5	
Minimum (s)	41.4	34.5	75.9

Right Turns	WBR	NBR
Adj Reference Time (s)	20.3	27.8
Cross Thru Ref Time (s)	34.5	31.1
Oncoming Left Ref Time (s)	10.3	0.0
Combined (s)	65.1	58.9

Intersection Summary			
Intersection Capacity Utilization	63.3%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	693	29	56	661	66	56	5	140	76	6	32
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	20	722	0	56	727	0	56	145	0	76	38	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.87	0.85
Saturated Flow (vph)	1805	3596	0	1805	3568	0	1805	1625	0	1805	1660	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.3	24.1	0.0	3.7	24.5	0.0	3.7	10.7	0.0	5.1	2.7	0.0
Adj Reference Time (s)	8.0	28.1	0.0	8.0	28.5	0.0	8.0	14.7	0.0	9.1	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1798		120	1784		120	1625		120	1660	
Reference Time A (s)	19.9	24.1		55.8	24.5		55.8	10.7		75.8	2.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1625		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		11.7	10.7		NA	NA	
Reference Time (s)		24.1			55.8			11.7			75.8	
Adj Reference Time (s)		28.1			59.8			15.7			79.8	
Split Option												
Ref Time Combined (s)	1.3	24.1		3.7	24.5		3.7	10.7		5.1	2.7	
Ref Time Seperate (s)	1.3	23.1		3.7	22.2		3.7	0.4		5.1	0.4	
Reference Time (s)	24.1	24.1		24.5	24.5		10.7	10.7		5.1	5.1	
Adj Reference Time (s)	28.1	28.1		28.5	28.5		14.7	14.7		9.1	9.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.5	23.8	
Permitted Option (s)	59.8	79.8	
Split Option (s)	56.6	23.8	
Minimum (s)	36.5	23.8	60.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	50.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	357	40	198	408	242	123	327	195	278	206	113
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	94	397	0	198	650	0	123	522	0	0	597	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.94	0.85	0.95	0.94	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3563	0	3505	3416	0	1805	3415	0	0	5150	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.2	13.4	0.0	6.8	23.0	0.0			0.0			0.0
Adj Reference Time (s)	8.0	17.4	0.0	10.8	27.2	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1781		117	1708		120	1707		0	172	
Reference Time A (s)	48.3	13.4		101.7	23.0		122.7	18.6		0.0	194.4	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		48.3			101.7			122.7			194.4	
Adj Reference Time (s)		52.3			105.7			126.7			198.4	
Split Option												
Ref Time Combined (s)	3.2	13.4		6.8	23.0		8.2	18.6		0.0	14.0	
Ref Time Seperate (s)	3.2	12.0		6.8	14.5		8.2	11.7		9.2	7.3	
Reference Time (s)	13.4	13.4		23.0	23.0		18.6	18.6		14.0	14.0	
Adj Reference Time (s)	17.4	17.4		27.2	27.2		23.9	23.9		19.6	19.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.2	NA	
Permitted Option (s)	105.7	198.4	
Split Option (s)	44.5	43.5	
Minimum (s)	35.2	43.5	78.7

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	65.6%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	468	95	39	675	18	242	64	55	16	34	63
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	80	563	0	39	693	0	242	119	0	0	50	63
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	0.93	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3526	0	1805	3604	0	1805	1768	0	0	1870	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.3	19.2	0.0	2.6	23.1	0.0			0.0			4.8
Adj Reference Time (s)	9.3	23.2	0.0	8.0	27.1	0.0			0.0			9.2
Permitted Option												
Adj Saturation A (vph)	120	1763		120	1802		120	1768		0	314	
Reference Time A (s)	79.8	19.2		38.9	23.1		241.3	8.1		0.0	19.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1768		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.1	8.1		9.1	11.2	
Reference Time (s)		79.8			38.9			24.1			11.2	
Adj Reference Time (s)		83.8			42.9			28.1			15.4	
Split Option												
Ref Time Combined (s)	5.3	19.2		2.6	23.1		16.1	8.1		0.0	3.2	
Ref Time Seperate (s)	5.3	15.9		2.6	22.5		16.1	4.4		1.1	2.1	
Reference Time (s)	19.2	19.2		23.1	23.1		16.1	16.1		3.2	3.2	
Adj Reference Time (s)	23.2	23.2		27.1	27.1		20.1	20.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.4	NA	
Permitted Option (s)	83.8	28.1	
Split Option (s)	50.3	28.5	
Minimum (s)	36.4	28.1	64.5

Right Turns	SBR
Adj Reference Time (s)	9.2
Cross Thru Ref Time (s)	27.1
Oncoming Left Ref Time (s)	20.1
Combined (s)	56.4

Intersection Summary			
Intersection Capacity Utilization	53.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	121	698	104	214	474	175	123	572	299	148	385	83
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	121	698	104	214	474	175	123	572	299	148	468	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3521	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	4.1	23.2	7.9	7.3	15.7	13.1	8.2	19.0	22.5	9.8	16.1	0.0
Adj Reference Time (s)	8.1	27.2	12.3	11.3	19.9	17.4	12.2	23.7	27.0	13.8	23.7	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1761	
Reference Time A (s)	62.1	23.2		109.9	15.7		122.7	19.0		147.6	16.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		62.1			109.9			122.7			147.6	
Adj Reference Time (s)		66.1			113.9			126.7			151.6	
Split Option												
Ref Time Combined (s)	4.1	23.2		7.3	15.7		8.2	19.0		9.8	16.1	
Ref Time Seperate (s)	4.1	23.2		7.3	15.7		8.2	19.0		9.8	13.3	
Reference Time (s)	23.2	23.2		15.7	15.7		19.0	19.0		16.1	16.1	
Adj Reference Time (s)	27.2	27.2		19.9	19.9		23.7	23.7		23.7	23.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.5	37.5	
Permitted Option (s)	113.9	151.6	
Split Option (s)	47.1	47.4	
Minimum (s)	38.5	37.5	76.0

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	12.3	17.4	27.0
Cross Thru Ref Time (s)	23.7	23.7	27.2
Oncoming Left Ref Time (s)	11.3	8.1	13.8
Combined (s)	47.4	49.3	68.0

Intersection Summary			
Intersection Capacity Utilization	63.3%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	728	99	31	599	10	136	67	93	22	54	7
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	1	827	0	31	609	0	136	160	0	22	61	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3553	0	1805	3609	0	1805	1734	0	1805	1867	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.1	27.9	0.0	2.1	20.3	0.0	9.0	11.2	0.0	1.5	3.9	0.0
Adj Reference Time (s)	8.0	31.9	0.0	8.0	24.3	0.0	13.0	15.5	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1776		120	1804		120	1734		120	1867	
Reference Time A (s)	1.0	27.9		30.9	20.3		135.6	11.2		21.9	3.9	
Adj Saturation B (vph	NA	NA		NA	NA		0	1734		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		17.0	11.2		NA	NA	
Reference Time (s)		27.9			30.9			17.0			21.9	
Adj Reference Time (s)		31.9			34.9			21.0			25.9	
Split Option												
Ref Time Combined (s)	0.1	27.9		2.1	20.3		9.0	11.2		1.5	3.9	
Ref Time Seperate (s)	0.1	24.6		2.1	19.9		9.0	4.8		1.5	3.5	
Reference Time (s)	27.9	27.9		20.3	20.3		11.2	11.2		3.9	3.9	
Adj Reference Time (s)	31.9	31.9		24.3	24.3		15.5	15.5		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.9	23.5	
Permitted Option (s)	34.9	25.9	
Split Option (s)	56.2	23.5	
Minimum (s)	34.9	23.5	58.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	153	30	193	46	75	101	240	542	74	78	347	242
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	183	193	0	121	101	240	616	0	78	589	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.98	0.85	0.95	0.98	0.85	0.95	0.94	0.85
Saturated Flow (vph)	0	1821	1615	0	1864	1615	1805	3552	0	1805	3395	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.6	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			14.9			10.9	16.0	20.8	0.0	5.2	21.5	0.0
Adj Reference Time (s)			19.5			20.9	20.0	24.8	0.0	9.2	25.5	0.0
Permitted Option												
Adj Saturation A (vph)	0	137		0	270		120	1776		120	1697	
Reference Time A (s)	0.0	160.0		0.0	53.8		239.3	20.8		77.8	21.5	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	18.2	20.1		11.1	15.8		NA	NA		NA	NA	
Reference Time (s)		20.1			15.8			239.3			77.8	
Adj Reference Time (s)		24.1			22.6			243.3			81.8	
Split Option												
Ref Time Combined (s)	0.0	12.1		0.0	7.8		16.0	20.8		5.2	21.5	
Ref Time Seperate (s)	10.2	1.9		3.1	4.7		16.0	18.3		5.2	12.9	
Reference Time (s)	12.1	12.1		7.8	7.8		20.8	20.8		21.5	21.5	
Adj Reference Time (s)	17.1	17.1		19.8	19.8		24.8	24.8		25.5	25.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	45.4	
Permitted Option (s)	24.1	243.3	
Split Option (s)	36.9	50.3	
Minimum (s)	24.1	45.4	69.5

Right Turns	EBR	WBR
Adj Reference Time (s)	19.5	20.9
Cross Thru Ref Time (s)	25.5	24.8
Oncoming Left Ref Time (s)	19.8	17.1
Combined (s)	64.8	62.8

Intersection Summary			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	573	9	105	486	0	0	0	0	265	0	219
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	582	0	105	486	0	0	0	0	0	265	219
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3609	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	19.4	0.0	7.0	16.1	0.0			0.0			16.9
Adj Reference Time (s)	0.0	23.4	0.0	11.0	20.1	0.0			0.0			21.4
Permitted Option												
Adj Saturation A (vph)	0	1805		120	1809		0	0		0	120	
Reference Time A (s)	0.0	19.4		104.7	16.1		0.0	0.0		0.0	264.3	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		25.6	25.6	
Reference Time (s)		19.4			104.7			0.0			25.6	
Adj Reference Time (s)		23.4			108.7			8.0			29.6	
Split Option												
Ref Time Combined (s)	0.0	19.4		7.0	16.1		0.0	0.0		0.0	17.6	
Ref Time Seperate (s)	0.0	19.1		7.0	16.1		0.0	0.0		17.6	0.0	
Reference Time (s)	19.4	19.4		16.1	16.1		0.0	0.0		17.6	17.6	
Adj Reference Time (s)	23.4	23.4		20.1	20.1		0.0	0.0		22.0	22.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.3	NA	
Permitted Option (s)	108.7	29.6	
Split Option (s)	43.5	22.0	
Minimum (s)	34.3	22.0	56.3

Right Turns	SBR
Adj Reference Time (s)	21.4
Cross Thru Ref Time (s)	20.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	41.5

Intersection Summary			
Intersection Capacity Utilization	46.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	683	0	0	553	205	24	2	245	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	155	683	0	0	758	0	0	271	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3471	0	0	3113	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.3	22.7	0.0	0.0	26.4	0.0			0.0			0.0
Adj Reference Time (s)	14.3	26.7	0.0	0.0	30.4	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1735		0	298		0	0	
Reference Time A (s)	154.6	22.7		0.0	26.4		0.0	35.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		9.6	14.5		NA	NA	
Reference Time (s)		154.6			26.4			14.5			0.0	
Adj Reference Time (s)		158.6			30.4			18.5			8.0	
Split Option												
Ref Time Combined (s)	10.3	22.7		0.0	26.4		0.0	10.4		0.0	0.0	
Ref Time Seperate (s)	10.3	22.7		0.0	19.3		1.6	0.1		0.0	0.0	
Reference Time (s)	22.7	22.7		26.4	26.4		10.4	10.4		0.0	0.0	
Adj Reference Time (s)	26.7	26.7		30.4	30.4		14.4	14.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	44.7	NA	
Permitted Option (s)	158.6	18.5	
Split Option (s)	57.0	14.4	
Minimum (s)	44.7	14.4	59.1

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	49.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	436	11	529	0	0	0	0	72	0	561
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	912	0	11	529	0	0	0	0	72	0	561
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.93	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3358	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	32.6	0.0	0.7	33.4	0.0	0.0	0.0	0.0	4.8	0.0	41.7
Adj Reference Time (s)	0.0	36.6	0.0	8.0	37.4	0.0	0.0	0.0	0.0	8.8	0.0	45.7
Permitted Option												
Adj Saturation A (vph)	0	1679		120	1900		0	0		120	0	
Reference Time A (s)	0.0	32.6		11.0	33.4		0.0	0.0		71.8	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.8	0.0	
Reference Time (s)		32.6			33.4			0.0			12.8	
Adj Reference Time (s)		36.6			37.4			8.0			16.8	
Split Option												
Ref Time Combined (s)	0.0	32.6		0.7	33.4		0.0	0.0		4.8	0.0	
Ref Time Seperate (s)	0.0	17.0		0.7	33.4		0.0	0.0		4.8	0.0	
Reference Time (s)	32.6	32.6		33.4	33.4		0.0	0.0		4.8	4.8	
Adj Reference Time (s)	36.6	36.6		37.4	37.4		0.0	0.0		8.8	8.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	44.6	8.8	
Permitted Option (s)	37.4	16.8	
Split Option (s)	74.0	8.8	
Minimum (s)	37.4	8.8	46.2

Right Turns	SBR
Adj Reference Time (s)	45.7
Cross Thru Ref Time (s)	37.4
Oncoming Left Ref Time (s)	0.0
Combined (s)	83.1

Intersection Summary			
Intersection Capacity Utilization	69.2%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	192	0	0	127	154	415	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	388	192	0	0	127	154	415	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	13.3	12.1	0.0	0.0	8.0	11.7	27.6	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	17.3	16.1	0.0	0.0	12.0	15.7	31.6	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	199.2	12.1		0.0	8.0		413.9	0.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1647		0	0	
Reference Time B (s)	NA	NA		NA	NA		35.6	0.9		0.0	0.0	
Reference Time (s)		199.2			8.0			35.6			0.0	
Adj Reference Time (s)		203.2			12.0			39.6			8.4	
Split Option												
Ref Time Combined (s)	13.3	12.1		0.0	8.0		27.6	0.9		0.0	0.0	
Ref Time Seperate (s)	13.3	12.1		0.0	8.0		27.6	0.3		0.0	0.0	
Reference Time (s)	13.3	13.3		8.0	8.0		27.6	27.6		0.0	0.0	
Adj Reference Time (s)	17.3	17.3		12.0	12.0		31.6	31.6		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	29.3	31.6	
Permitted Option (s)	203.2	39.6	
Split Option (s)	29.3	40.0	
Minimum (s)	29.3	31.6	60.9

Right Turns	WBR
Adj Reference Time (s)	15.7
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	17.3
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	50.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	786	260	3	254	0	0	0	0	4	0	949
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1046	0	3	254	0	0	0	0	0	320	633
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1829	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	68.6	0.0	0.2	16.0	0.0			0.0			47.0
Adj Reference Time (s)	0.0	72.6	0.0	8.0	20.0	0.0			0.0			51.0
Permitted Option												
Adj Saturation A (vph)	0	1829		120	1900		0	0		0	1375	
Reference Time A (s)	0.0	68.6		3.0	16.0		0.0	0.0		0.0	28.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.3	31.8	
Reference Time (s)		68.6			16.0			0.0			28.0	
Adj Reference Time (s)		72.6			20.0			8.0			32.0	
Split Option												
Ref Time Combined (s)	0.0	68.6		0.2	16.0		0.0	0.0		0.0	23.8	
Ref Time Seperate (s)	0.0	51.6		0.2	16.0		0.0	0.0		0.3	0.0	
Reference Time (s)	68.6	68.6		16.0	16.0		0.0	0.0		23.8	23.8	
Adj Reference Time (s)	72.6	72.6		20.0	20.0		0.0	0.0		27.8	27.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	80.6	NA	
Permitted Option (s)	72.6	32.0	
Split Option (s)	92.7	27.8	
Minimum (s)	72.6	27.8	100.4

Right Turns	SBR
Adj Reference Time (s)	51.0
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	0.0
Combined (s)	71.1

Intersection Summary			
Intersection Capacity Utilization	83.7%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	388	527	9	518	0	0	0	0	5	0	485
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	388	527	0	527	0	0	0	0	5	0	485
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1898	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			39.2			0.0	0.0	0.0	0.0	0.3	0.0	36.0
Adj Reference Time (s)			43.2			0.0	0.0	0.0	0.0	8.0	0.0	40.0
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1529		0	0		120	0	
Reference Time A (s)	0.0	24.5		0.0	41.4		0.0	0.0		5.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		8.3	0.0	
Reference Time (s)		24.5			41.4			0.0			5.0	
Adj Reference Time (s)		28.5			45.4			8.0			9.0	
Split Option												
Ref Time Combined (s)	0.0	24.5		0.0	33.3		0.0	0.0		0.3	0.0	
Ref Time Seperate (s)	0.0	24.5		0.6	32.7		0.0	0.0		0.3	0.0	
Reference Time (s)	24.5	24.5		33.3	33.3		0.0	0.0		0.3	0.3	
Adj Reference Time (s)	28.5	28.5		37.3	37.3		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	45.4	9.0	
Split Option (s)	65.8	8.0	
Minimum (s)	45.4	8.0	53.4

Right Turns	EBR	SBR
Adj Reference Time (s)	43.2	40.0
Cross Thru Ref Time (s)	0.0	37.3
Oncoming Left Ref Time (s)	37.3	0.0
Combined (s)	80.5	77.3

Intersection Summary			
Intersection Capacity Utilization	67.1%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1068	539	47	722	0	0	0	0	69	0	879
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1068	539	47	722	0	0	0	0	0	69	879
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	18.6	40.2	3.1	23.9	0.0			0.0			36.9
Adj Reference Time (s)	0.0	22.6	44.2	8.0	27.9	0.0			0.0			40.9
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	18.6		46.9	23.9		0.0	0.0		0.0	34.4	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		10.3	10.3	
Reference Time (s)		18.6			46.9			0.0			10.3	
Adj Reference Time (s)		22.6			50.9			8.0			14.3	
Split Option												
Ref Time Combined (s)	0.0	18.6		3.1	23.9		0.0	0.0		0.0	2.3	
Ref Time Seperate (s)	0.0	18.6		3.1	23.9		0.0	0.0		2.3	0.0	
Reference Time (s)	18.6	18.6		23.9	23.9		0.0	0.0		2.3	2.3	
Adj Reference Time (s)	22.6	22.6		27.9	27.9		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	30.6	NA	
Permitted Option (s)	50.9	14.3	
Split Option (s)	50.5	8.0	
Minimum (s)	30.6	8.0	38.6

Right Turns	EBR	SBR
Adj Reference Time (s)	44.2	40.9
Cross Thru Ref Time (s)	8.0	27.9
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	60.2	68.8

Intersection Summary			
Intersection Capacity Utilization	57.4%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	936	202	0	0	272	195	490	5	52	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	936	202	0	0	272	195	0	495	52	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	32.0	6.7	0.0	0.0	9.0	14.6			4.0			0.0
Adj Reference Time (s)	36.0	10.7	0.0	0.0	13.3	18.7			8.4			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	480.6	6.7		0.0	9.0		0.0	245.1		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.3	24.4		0.0	0.0	
Reference Time (s)		480.6			9.0			24.4			0.0	
Adj Reference Time (s)		484.6			13.3			28.4			8.0	
Split Option												
Ref Time Combined (s)	32.0	6.7		0.0	9.0		0.0	16.4		0.0	0.0	
Ref Time Seperate (s)	32.0	6.7		0.0	9.0		16.3	0.3		0.0	0.0	
Reference Time (s)	32.0	32.0		9.0	9.0		16.4	16.4		0.0	0.0	
Adj Reference Time (s)	36.0	36.0		13.3	13.3		20.4	20.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	49.3	NA	
Permitted Option (s)	484.6	28.4	
Split Option (s)	49.3	20.4	
Minimum (s)	49.3	20.4	69.7

Right Turns	WBR	NBR
Adj Reference Time (s)	18.7	8.4
Cross Thru Ref Time (s)	20.4	10.7
Oncoming Left Ref Time (s)	36.0	0.0
Combined (s)	75.2	19.1

Intersection Summary			
Intersection Capacity Utilization	62.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	68	78	458	49	251	71	574	82	424	386	74
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	96	146	0	0	507	251	71	656	0	424	386	74
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3328	0	0	3628	1615	1805	3550	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			18.7	4.7	22.2	0.0	28.2	12.8	5.6
Adj Reference Time (s)			0.0			22.7	8.7	26.2	0.0	32.2	16.9	10.0
Permitted Option												
Adj Saturation A (vph)	120	1664		0	259		120	1775		120	1809	
Reference Time A (s)	95.7	5.3		0.0	235.1		70.8	22.2		422.8	12.8	
Adj Saturation B (vph	0	3328		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	14.4	5.3		NA	NA		NA	NA		NA	NA	
Reference Time (s)		14.4			235.1			70.8			422.8	
Adj Reference Time (s)		18.4			239.1			74.8			426.8	
Split Option												
Ref Time Combined (s)	6.4	5.3		0.0	16.8		4.7	22.2		28.2	12.8	
Ref Time Seperate (s)	6.4	2.5		15.2	3.1		4.7	19.4		28.2	12.8	
Reference Time (s)	6.4	6.4		16.8	16.8		22.2	22.2		28.2	28.2	
Adj Reference Time (s)	10.4	10.4		20.8	20.8		26.2	26.2		32.2	32.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	58.4	
Permitted Option (s)	239.1	426.8	
Split Option (s)	31.2	58.4	
Minimum (s)	31.2	58.4	89.5

Right Turns	WBR	SBR
Adj Reference Time (s)	22.7	10.0
Cross Thru Ref Time (s)	26.2	20.8
Oncoming Left Ref Time (s)	10.4	8.7
Combined (s)	59.2	39.5

Intersection Summary			
Intersection Capacity Utilization	74.6%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	944	32	22	1	47	6	11	7	1	1	6	490
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	944	54	0	1	53	0	0	19	0	0	7	490
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	1784	0	1805	1868	0	0	1830	0	0	1886	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	62.8	3.6	0.0	0.1	3.4	0.0			0.0			36.4
Adj Reference Time (s)	66.8	8.0	0.0	8.0	8.0	0.0			0.0			40.4
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1868		0	185		0	1890	
Reference Time A (s)	941.4	3.6		1.0	3.4		0.0	12.3		0.0	0.4	
Adj Saturation B (vph	0	1784		0	1868		0	0		0	0	
Reference Time B (s)	70.8	3.6		8.1	3.4		8.7	9.2		8.1	8.4	
Reference Time (s)		70.8			3.4			9.2			0.4	
Adj Reference Time (s)		74.8			8.0			13.2			8.0	
Split Option												
Ref Time Combined (s)	62.8	3.6		0.1	3.4		0.0	1.2		0.0	0.4	
Ref Time Seperate (s)	62.8	2.2		0.1	3.0		0.7	0.5		0.1	0.4	
Reference Time (s)	62.8	62.8		3.4	3.4		1.2	1.2		0.4	0.4	
Adj Reference Time (s)	66.8	66.8		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	74.8	NA	
Permitted Option (s)	74.8	13.2	
Split Option (s)	74.8	16.0	
Minimum (s)	74.8	13.2	88.0

Right Turns	SBR
Adj Reference Time (s)	40.4
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	56.4

Intersection Summary			
Intersection Capacity Utilization	73.3%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	611	455	422	833	0	0	0	0	139	140	348
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1066	0	422	833	0	0	0	0	0	279	348
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	3386	0	3505	3618	0	0	0	0	0	1853	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	38.0	0.0	14.4	27.6	0.0			0.0			27.3
Adj Reference Time (s)	0.0	42.0	0.0	18.4	31.6	0.0			0.0			31.3
Permitted Option												
Adj Saturation A (vph)	0	1693		117	1809		0	0		0	212	
Reference Time A (s)	0.0	38.0		216.7	27.6		0.0	0.0		0.0	157.6	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		17.2	26.1	
Reference Time (s)		38.0			216.7			0.0			26.1	
Adj Reference Time (s)		42.0			220.7			8.0			30.1	
Split Option												
Ref Time Combined (s)	0.0	38.0		14.4	27.6		0.0	0.0		0.0	18.1	
Ref Time Seperate (s)	0.0	21.9		14.4	27.6		0.0	0.0		9.2	8.8	
Reference Time (s)	38.0	38.0		27.6	27.6		0.0	0.0		18.1	18.1	
Adj Reference Time (s)	42.0	42.0		31.6	31.6		0.0	0.0		22.7	22.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	60.4	NA	
Permitted Option (s)	220.7	30.1	
Split Option (s)	73.6	22.7	
Minimum (s)	60.4	22.7	83.2

Right Turns	SBR
Adj Reference Time (s)	31.3
Cross Thru Ref Time (s)	31.6
Oncoming Left Ref Time (s)	0.0
Combined (s)	63.0

Intersection Summary			
Intersection Capacity Utilization	69.3%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	312	407	24	3	708	234	554	83	273	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	312	431	0	3	708	234	0	637	273	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.96	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3587	0	1805	3618	1615	0	1817	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.7	14.5	0.0	0.2	23.5	18.3			20.5			0.0
Adj Reference Time (s)	14.7	18.5	0.0	8.0	27.5	22.3			24.8			0.0
Permitted Option												
Adj Saturation A (vph)	117	1794		120	1809		0	133		0	0	
Reference Time A (s)	160.2	14.5		3.0	23.5		0.0	574.1		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		44.8	50.1		0.0	0.0	
Reference Time (s)		160.2			23.5			50.1			0.0	
Adj Reference Time (s)		164.2			27.5			54.1			8.0	
Split Option												
Ref Time Combined (s)	10.7	14.5		0.2	23.5		0.0	42.1		0.0	0.0	
Ref Time Seperate (s)	10.7	13.7		0.2	23.5		36.8	5.2		0.0	0.0	
Reference Time (s)	14.5	14.5		23.5	23.5		42.1	42.1		0.0	0.0	
Adj Reference Time (s)	18.5	18.5		27.5	27.5		46.1	46.1		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.2	NA	
Permitted Option (s)	164.2	54.1	
Split Option (s)	45.9	46.1	
Minimum (s)	42.2	46.1	88.2

Right Turns	WBR	NBR
Adj Reference Time (s)	22.3	24.8
Cross Thru Ref Time (s)	46.1	18.5
Oncoming Left Ref Time (s)	14.7	0.0
Combined (s)	83.0	43.3

Intersection Summary			
Intersection Capacity Utilization	73.5%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	723	78	141	919	75	50	4	86	54	2	22
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	21	801	0	141	994	0	50	90	0	54	24	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.86	0.85
Saturated Flow (vph)	1805	3565	0	1805	3577	0	1805	1628	0	1805	1639	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.4	27.0	0.0	9.4	33.4	0.0	3.3	6.6	0.0	3.6	1.8	0.0
Adj Reference Time (s)	8.0	31.0	0.0	13.4	37.4	0.0	8.0	10.6	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1782		120	1788		120	1628		120	1639	
Reference Time A (s)	20.9	27.0		140.6	33.4		49.9	6.6		53.9	1.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	1628		0	1639	
Reference Time B (s)	NA	NA		NA	NA		11.3	6.6		11.6	1.8	
Reference Time (s)		27.0			140.6			11.3			11.6	
Adj Reference Time (s)		31.0			144.6			15.3			15.6	
Split Option												
Ref Time Combined (s)	1.4	27.0		9.4	33.4		3.3	6.6		3.6	1.8	
Ref Time Seperate (s)	1.4	24.3		9.4	30.8		3.3	0.3		3.6	0.1	
Reference Time (s)	27.0	27.0		33.4	33.4		6.6	6.6		3.6	3.6	
Adj Reference Time (s)	31.0	31.0		37.4	37.4		10.6	10.6		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	45.4	18.6	
Permitted Option (s)	144.6	15.6	
Split Option (s)	68.3	18.6	
Minimum (s)	45.4	15.6	60.9

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	50.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	148	471	79	244	469	233	131	221	140	439	229	83
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	148	550	0	244	702	0	131	361	0	0	751	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.95	0.85	0.95	0.94	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3540	0	3505	3437	0	1805	3407	0	0	5180	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.1	18.6	0.0	8.4	24.6	0.0			0.0			0.0
Adj Reference Time (s)	9.1	22.6	0.0	12.4	28.7	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1770		117	1719		120	1704		0	173	
Reference Time A (s)	76.0	18.6		125.3	24.6		130.6	13.0		0.0	305.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		76.0			125.3			130.6			305.1	
Adj Reference Time (s)		80.0			129.3			134.6			309.1	
Split Option												
Ref Time Combined (s)	5.1	18.6		8.4	24.6		8.7	13.0		0.0	17.5	
Ref Time Seperate (s)	5.1	16.0		8.4	16.5		8.7	8.0		14.6	8.0	
Reference Time (s)	18.6	18.6		24.6	24.6		13.0	13.0		17.5	17.5	
Adj Reference Time (s)	22.6	22.6		28.7	28.7		19.1	19.1		22.6	22.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	37.7	NA	
Permitted Option (s)	129.3	309.1	
Split Option (s)	51.3	41.8	
Minimum (s)	37.7	41.8	79.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	66.3%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	644	227	68	582	25	135	39	44	13	69	51
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	51	871	0	68	607	0	135	83	0	0	82	51
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.99	0.85	0.95	0.92	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3476	0	1805	3595	0	1805	1749	0	0	1885	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.4	30.1	0.0	4.5	20.3	0.0			0.0			3.9
Adj Reference Time (s)	8.0	34.1	0.0	8.5	24.3	0.0			0.0			8.4
Permitted Option												
Adj Saturation A (vph)	120	1738		120	1798		120	1749		0	557	
Reference Time A (s)	50.9	30.1		67.8	20.3		134.6	5.8		0.0	17.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1749		0	0	
Reference Time B (s)	NA	NA		NA	NA		17.0	5.8		8.9	13.2	
Reference Time (s)		50.9			67.8			17.0			13.2	
Adj Reference Time (s)		54.9			71.8			21.0			17.3	
Split Option												
Ref Time Combined (s)	3.4	30.1		4.5	20.3		9.0	5.8		0.0	5.2	
Ref Time Seperate (s)	3.4	22.3		4.5	19.4		9.0	2.7		0.9	4.4	
Reference Time (s)	30.1	30.1		20.3	20.3		9.0	9.0		5.2	5.2	
Adj Reference Time (s)	34.1	34.1		24.3	24.3		13.2	13.2		9.6	9.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.6	NA	
Permitted Option (s)	71.8	21.0	
Split Option (s)	58.4	22.8	
Minimum (s)	42.6	21.0	63.6

Right Turns	SBR
Adj Reference Time (s)	8.4
Cross Thru Ref Time (s)	24.3
Oncoming Left Ref Time (s)	13.2
Combined (s)	45.9

Intersection Summary			
Intersection Capacity Utilization	53.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	621	153	279	600	122	79	425	238	146	494	89
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	82	621	153	279	600	122	79	425	238	146	583	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3535	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	2.8	20.6	11.5	9.6	19.9	9.2	5.3	14.1	17.9	9.7	20.0	0.0
Adj Reference Time (s)	8.0	24.6	15.8	13.6	24.0	13.6	9.3	19.1	22.7	13.7	26.6	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1767	
Reference Time A (s)	42.1	20.6		143.3	19.9		78.8	14.1		145.6	20.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		42.1			143.3			78.8			145.6	
Adj Reference Time (s)		46.1			147.3			82.8			149.6	
Split Option												
Ref Time Combined (s)	2.8	20.6		9.6	19.9		5.3	14.1		9.7	20.0	
Ref Time Seperate (s)	2.8	20.6		9.6	19.9		5.3	14.1		9.7	16.9	
Reference Time (s)	20.6	20.6		19.9	19.9		14.1	14.1		20.0	20.0	
Adj Reference Time (s)	24.6	24.6		24.0	24.0		19.1	19.1		26.6	26.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.2	35.8	
Permitted Option (s)	147.3	149.6	
Split Option (s)	48.6	45.7	
Minimum (s)	38.2	35.8	74.0

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	15.8	13.6	22.7
Cross Thru Ref Time (s)	26.6	19.1	24.6
Oncoming Left Ref Time (s)	13.6	8.0	13.7
Combined (s)	56.0	40.7	61.1

Intersection Summary			
Intersection Capacity Utilization	61.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	804	82	41	644	16	62	61	45	19	62	3
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	7	886	0	41	660	0	62	106	0	19	65	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3567	0	1805	3604	0	1805	1779	0	1805	1887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.5	29.8	0.0	2.7	22.0	0.0	4.1	7.3	0.0	1.3	4.1	0.0
Adj Reference Time (s)	8.0	33.8	0.0	8.0	26.0	0.0	8.1	11.8	0.0	8.0	8.1	0.0
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1802		120	1779		120	1887	
Reference Time A (s)	7.0	29.8		40.9	22.0		61.8	7.3		18.9	4.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1779		0	1887	
Reference Time B (s)	NA	NA		NA	NA		12.1	7.3		9.3	4.1	
Reference Time (s)		29.8			40.9			12.1			9.3	
Adj Reference Time (s)		33.8			44.9			16.4			13.3	
Split Option												
Ref Time Combined (s)	0.5	29.8		2.7	22.0		4.1	7.3		1.3	4.1	
Ref Time Seperate (s)	0.5	27.0		2.7	21.4		4.1	4.2		1.3	3.9	
Reference Time (s)	29.8	29.8		22.0	22.0		7.3	7.3		4.1	4.1	
Adj Reference Time (s)	33.8	33.8		26.0	26.0		11.8	11.8		8.1	8.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.8	19.8	
Permitted Option (s)	44.9	16.4	
Split Option (s)	59.8	20.0	
Minimum (s)	41.8	16.4	58.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	23	173	51	23	64	148	435	45	51	509	99
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	131	173	0	74	64	148	480	0	51	608	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.97	0.85	0.95	0.99	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	1822	1615	0	1835	1615	1805	3567	0	1805	3529	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.3	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			13.4			8.2	9.8	16.2	0.0	3.4	20.9	0.0
Adj Reference Time (s)			18.2			19.9	13.8	20.2	0.0	8.0	24.9	0.0
Permitted Option												
Adj Saturation A (vph)	0	139		0	160		120	1783		120	1765	
Reference Time A (s)	0.0	113.3		0.0	55.4		147.6	16.2		50.9	20.9	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	15.2	16.6		11.4	12.8		NA	NA		NA	NA	
Reference Time (s)		16.6			12.8			147.6			50.9	
Adj Reference Time (s)		21.1			21.5			151.6			54.9	
Split Option												
Ref Time Combined (s)	0.0	8.6		0.0	4.8		9.8	16.2		3.4	20.9	
Ref Time Seperate (s)	7.2	1.5		3.4	1.5		9.8	14.7		3.4	17.6	
Reference Time (s)	8.6	8.6		4.8	4.8		16.2	16.2		20.9	20.9	
Adj Reference Time (s)	14.0	14.0		18.8	18.8		20.2	20.2		24.9	24.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	38.8	
Permitted Option (s)	21.5	151.6	
Split Option (s)	32.8	45.1	
Minimum (s)	21.5	38.8	60.3

Right Turns	EBR	WBR
Adj Reference Time (s)	18.2	19.9
Cross Thru Ref Time (s)	24.9	20.2
Oncoming Left Ref Time (s)	18.8	14.0
Combined (s)	61.9	54.2

Intersection Summary			
Intersection Capacity Utilization	51.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Appendix G

Analysis Worksheets for
Existing (2024) plus Project Buildout Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	647	18	149	480	0	0	0	0	150	0	296
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	665	0	149	480	0	0	0	0	0	150	296
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3603	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	22.2	0.0	9.9	15.9	0.0			0.0			22.6
Adj Reference Time (s)	0.0	26.2	0.0	13.9	19.9	0.0			0.0			26.6
Permitted Option												
Adj Saturation A (vph)	0	1801		120	1809		0	0		0	120	
Reference Time A (s)	0.0	22.2		148.6	15.9		0.0	0.0		0.0	149.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		18.0	18.0	
Reference Time (s)		22.2			148.6			0.0			18.0	
Adj Reference Time (s)		26.2			152.6			8.0			22.3	
Split Option												
Ref Time Combined (s)	0.0	22.2		9.9	15.9		0.0	0.0		0.0	10.0	
Ref Time Seperate (s)	0.0	21.6		9.9	15.9		0.0	0.0		10.0	0.0	
Reference Time (s)	22.2	22.2		15.9	15.9		0.0	0.0		10.0	10.0	
Adj Reference Time (s)	26.2	26.2		19.9	19.9		0.0	0.0		15.5	15.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.1	NA	
Permitted Option (s)	152.6	22.3	
Split Option (s)	46.1	15.5	
Minimum (s)	40.1	15.5	55.6

Right Turns	SBR
Adj Reference Time (s)	26.6
Cross Thru Ref Time (s)	19.9
Oncoming Left Ref Time (s)	0.0
Combined (s)	46.6

Intersection Summary			
Intersection Capacity Utilization	46.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	577	0	0	631	356	5	1	88	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	210	577	0	0	987	0	0	94	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3422	0	0	3101	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	14.0	19.1	0.0	0.0	34.8	0.0			0.0			0.0
Adj Reference Time (s)	18.0	23.1	0.0	0.0	38.8	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1711		0	514		0	0	
Reference Time A (s)	209.4	19.1		0.0	34.8		0.0	8.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1541		0	0	
Reference Time B (s)	NA	NA		NA	NA		8.3	7.7		0.0	0.0	
Reference Time (s)		209.4			34.8			8.3			0.0	
Adj Reference Time (s)		213.4			38.8			12.3			8.0	
Split Option												
Ref Time Combined (s)	14.0	19.1		0.0	34.8		0.0	3.6		0.0	0.0	
Ref Time Seperate (s)	14.0	19.1		0.0	22.4		0.3	0.0		0.0	0.0	
Reference Time (s)	19.1	19.1		34.8	34.8		3.6	3.6		0.0	0.0	
Adj Reference Time (s)	23.1	23.1		38.8	38.8		8.0	8.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	56.8	NA	
Permitted Option (s)	213.4	12.3	
Split Option (s)	62.0	8.0	
Minimum (s)	56.8	8.0	64.8

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	54.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	639	393	3	427	0	0	0	0	125	0	379
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1033	0	3	427	0	0	0	0	125	0	379
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3411	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			0.0	0.0	0.0	0.0	8.3	0.0	28.2
Adj Reference Time (s)			0.0			0.0	0.0	0.0	0.0	12.3	0.0	32.2
Permitted Option												
Adj Saturation A (vph)	0	1660		120	1900		0	0		120	0	
Reference Time A (s)	0.0	37.2		3.0	27.0		0.0	0.0		124.7	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		16.3	0.0	
Reference Time (s)		37.2			27.0			0.0			16.3	
Adj Reference Time (s)		41.2			31.0			8.0			20.3	
Split Option												
Ref Time Combined (s)	0.0	36.3		0.2	27.0		0.0	0.0		8.3	0.0	
Ref Time Seperate (s)	0.1	22.5		0.2	27.0		0.0	0.0		8.3	0.0	
Reference Time (s)	36.3	36.3		27.0	27.0		0.0	0.0		8.3	8.3	
Adj Reference Time (s)	40.3	40.3		31.0	31.0		0.0	0.0		12.3	12.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	12.3	
Permitted Option (s)	41.2	20.3	
Split Option (s)	71.3	12.3	
Minimum (s)	41.2	12.3	53.5

Right Turns	SBR
Adj Reference Time (s)	32.2
Cross Thru Ref Time (s)	31.0
Oncoming Left Ref Time (s)	0.0
Combined (s)	63.1

Intersection Summary			
Intersection Capacity Utilization	52.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	220	0	0	87	118	343	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	540	220	0	0	87	118	343	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.5	13.9	0.0	0.0	5.5	9.0	22.8	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	22.5	17.9	0.0	0.0	9.5	13.0	26.8	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	277.3	13.9		0.0	5.5		342.0	0.9		0.0	0.0	
Adj Saturation B (vph	0	1900		NA	NA		0	1647		0	0	
Reference Time B (s)	26.5	13.9		NA	NA		30.8	0.9		0.0	0.0	
Reference Time (s)		26.5			5.5			30.8			0.0	
Adj Reference Time (s)		30.5			9.5			34.8			8.4	
Split Option												
Ref Time Combined (s)	18.5	13.9		0.0	5.5		22.8	0.9		0.0	0.0	
Ref Time Seperate (s)	18.5	13.9		0.0	5.5		22.8	0.3		0.0	0.0	
Reference Time (s)	18.5	18.5		5.5	5.5		22.8	22.8		0.0	0.0	
Adj Reference Time (s)	22.5	22.5		9.5	9.5		26.8	26.8		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.0	26.8	
Permitted Option (s)	30.5	34.8	
Split Option (s)	32.0	35.2	
Minimum (s)	30.5	26.8	57.3

Right Turns	WBR
Adj Reference Time (s)	13.0
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	22.5
Combined (s)	55.5

Intersection Summary			
Intersection Capacity Utilization	47.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1094	251	3	272	0	0	0	0	3	1	764
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1345	0	3	272	0	0	0	0	0	259	509
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1847	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	87.4	0.0	0.2	17.2	0.0			0.0			37.8
Adj Reference Time (s)	0.0	91.4	0.0	8.0	21.2	0.0			0.0			41.8
Permitted Option												
Adj Saturation A (vph)	0	1847		120	1900		0	0		0	1391	
Reference Time A (s)	0.0	87.4		3.0	17.2		0.0	0.0		0.0	22.3	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.2	27.2	
Reference Time (s)		87.4			17.2			0.0			22.3	
Adj Reference Time (s)		91.4			21.2			8.0			26.3	
Split Option												
Ref Time Combined (s)	0.0	87.4		0.2	17.2		0.0	0.0		0.0	19.2	
Ref Time Seperate (s)	0.0	71.1		0.2	17.2		0.0	0.0		0.2	0.1	
Reference Time (s)	87.4	87.4		17.2	17.2		0.0	0.0		19.2	19.2	
Adj Reference Time (s)	91.4	91.4		21.2	21.2		0.0	0.0		23.2	23.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	99.4	NA	
Permitted Option (s)	91.4	26.3	
Split Option (s)	112.6	23.2	
Minimum (s)	91.4	23.2	114.6

Right Turns	SBR
Adj Reference Time (s)	41.8
Cross Thru Ref Time (s)	21.2
Oncoming Left Ref Time (s)	0.0
Combined (s)	63.0

Intersection Summary			
Intersection Capacity Utilization	95.5%	ICU Level of Service	F

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	523	525	6	540	0	0	0	0	18	0	517
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	523	525	0	546	0	0	0	0	18	0	517
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1899	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			39.0			0.0	0.0	0.0	0.0	1.2	0.0	38.4
Adj Reference Time (s)			43.0			0.0	0.0	0.0	0.0	8.0	0.0	42.4
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1644		0	0		120	0	
Reference Time A (s)	0.0	33.0		0.0	39.8		0.0	0.0		18.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		9.2	0.0	
Reference Time (s)		33.0			39.8			0.0			9.2	
Adj Reference Time (s)		37.0			43.8			8.0			13.2	
Split Option												
Ref Time Combined (s)	0.0	33.0		0.0	34.5		0.0	0.0		1.2	0.0	
Ref Time Seperate (s)	0.0	33.0		0.4	34.1		0.0	0.0		1.2	0.0	
Reference Time (s)	33.0	33.0		34.5	34.5		0.0	0.0		1.2	1.2	
Adj Reference Time (s)	37.0	37.0		38.5	38.5		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	43.8	13.2	
Split Option (s)	75.5	8.0	
Minimum (s)	43.8	8.0	51.8

Right Turns	EBR	SBR
Adj Reference Time (s)	43.0	42.4
Cross Thru Ref Time (s)	0.0	38.5
Oncoming Left Ref Time (s)	38.5	0.0
Combined (s)	81.5	80.9

Intersection Summary			
Intersection Capacity Utilization	67.9%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	746	336	44	525	0	0	0	0	148	0	1017
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	746	336	44	525	0	0	0	0	0	148	1017
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	13.0	25.1	2.9	17.4	0.0			0.0			42.7
Adj Reference Time (s)	0.0	17.0	29.1	8.0	21.4	0.0			0.0			46.7
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	13.0		43.9	17.4		0.0	0.0		0.0	73.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.9	12.9	
Reference Time (s)		13.0			43.9			0.0			12.9	
Adj Reference Time (s)		17.0			47.9			8.0			16.9	
Split Option												
Ref Time Combined (s)	0.0	13.0		2.9	17.4		0.0	0.0		0.0	4.9	
Ref Time Seperate (s)	0.0	13.0		2.9	17.4		0.0	0.0		4.9	0.0	
Reference Time (s)	13.0	13.0		17.4	17.4		0.0	0.0		4.9	4.9	
Adj Reference Time (s)	17.0	17.0		21.4	21.4		0.0	0.0		8.9	8.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.0	NA	
Permitted Option (s)	47.9	16.9	
Split Option (s)	38.4	8.9	
Minimum (s)	25.0	8.9	33.9

Right Turns	EBR	SBR
Adj Reference Time (s)	29.1	46.7
Cross Thru Ref Time (s)	8.9	21.4
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	46.0	68.1

Intersection Summary			
Intersection Capacity Utilization	56.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	580	325	0	0	167	125	389	3	70	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	580	325	0	0	167	125	0	392	70	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3611	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	19.9	10.8	0.0	0.0	5.5	9.4			5.3			0.0
Adj Reference Time (s)	23.9	14.8	0.0	0.0	9.9	13.6			9.7			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	297.8	10.8		0.0	5.5		0.0	194.4		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		20.9	21.0		0.0	0.0	
Reference Time (s)		297.8			5.5			21.0			0.0	
Adj Reference Time (s)		301.8			9.9			25.0			8.0	
Split Option												
Ref Time Combined (s)	19.9	10.8		0.0	5.5		0.0	13.0		0.0	0.0	
Ref Time Seperate (s)	19.9	10.8		0.0	5.5		12.9	0.2		0.0	0.0	
Reference Time (s)	19.9	19.9		5.5	5.5		13.0	13.0		0.0	0.0	
Adj Reference Time (s)	23.9	23.9		9.9	9.9		17.1	17.1		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	NA	
Permitted Option (s)	301.8	25.0	
Split Option (s)	33.7	17.1	
Minimum (s)	33.7	17.1	50.9

Right Turns	WBR	NBR
Adj Reference Time (s)	13.6	9.7
Cross Thru Ref Time (s)	17.1	14.8
Oncoming Left Ref Time (s)	23.9	0.0
Combined (s)	54.6	24.5

Intersection Summary			
Intersection Capacity Utilization	45.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	33	13	318	72	413	28	359	40	274	201	59
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	68	46	0	0	390	413	28	399	0	274	201	59
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3464	0	0	3645	1615	1805	3563	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			30.7	1.9	13.4	0.0	18.2	6.7	4.5
Adj Reference Time (s)			0.0			34.7	8.0	17.4	0.0	22.2	11.0	8.9
Permitted Option												
Adj Saturation A (vph)	120	1732		0	280		120	1782		120	1809	
Reference Time A (s)	67.8	1.6		0.0	167.2		27.9	13.4		273.2	6.7	
Adj Saturation B (vph	0	3464		0	0		NA	NA		NA	NA	
Reference Time B (s)	12.5	1.6		18.6	20.8		NA	NA		NA	NA	
Reference Time (s)		12.5			20.8			27.9			273.2	
Adj Reference Time (s)		16.5			24.8			31.9			277.2	
Split Option												
Ref Time Combined (s)	4.5	1.6		0.0	12.8		1.9	13.4		18.2	6.7	
Ref Time Seperate (s)	4.5	1.1		10.6	4.5		1.9	12.1		18.2	6.7	
Reference Time (s)	4.5	4.5		12.8	12.8		13.4	13.4		18.2	18.2	
Adj Reference Time (s)	8.5	8.5		16.8	16.8		17.4	17.4		22.2	22.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	39.7	
Permitted Option (s)	24.8	277.2	
Split Option (s)	25.4	39.7	
Minimum (s)	24.8	39.7	64.5

Right Turns	WBR	SBR
Adj Reference Time (s)	34.7	8.9
Cross Thru Ref Time (s)	17.4	16.8
Oncoming Left Ref Time (s)	8.5	8.0
Combined (s)	60.6	33.7

Intersection Summary			
Intersection Capacity Utilization	53.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	638	66	7	0	29	4	3	2	0	4	1	607
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	638	73	0	0	33	0	0	5	0	0	5	607
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.96	0.85
Saturated Flow (vph)	1805	1873	0	1805	1865	0	0	1843	0	0	1824	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	42.4	4.7	0.0	0.0	2.1	0.0			0.0			45.1
Adj Reference Time (s)	46.4	8.7	0.0	8.0	8.0	0.0			0.0			49.1
Permitted Option												
Adj Saturation A (vph)	120	1873		120	1865		0	181		0	1352	
Reference Time A (s)	636.2	4.7		0.0	2.1		0.0	3.3		0.0	0.4	
Adj Saturation B (vph	0	1873		0	1865		0	0		0	0	
Reference Time B (s)	50.4	4.7		8.0	2.1		8.2	8.3		8.3	8.3	
Reference Time (s)		50.4			2.1			3.3			0.4	
Adj Reference Time (s)		54.4			8.0			8.0			8.0	
Split Option												
Ref Time Combined (s)	42.4	4.7		0.0	2.1		0.0	0.3		0.0	0.3	
Ref Time Seperate (s)	42.4	4.2		0.0	1.9		0.2	0.1		0.3	0.1	
Reference Time (s)	42.4	42.4		2.1	2.1		0.3	0.3		0.3	0.3	
Adj Reference Time (s)	46.4	46.4		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.4	NA	
Permitted Option (s)	54.4	8.0	
Split Option (s)	54.4	16.0	
Minimum (s)	54.4	8.0	62.4

Right Turns	SBR
Adj Reference Time (s)	49.1
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	65.1

Intersection Summary			
Intersection Capacity Utilization	54.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	549	354	507	721	0	0	0	0	428	139	294
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	903	0	507	721	0	0	0	0	0	567	294
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.96	0.85
Saturated Flow (vph)	0	3405	0	3505	3618	0	0	0	0	0	1828	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	32.0	0.0	17.4	23.9	0.0			0.0			23.3
Adj Reference Time (s)	0.0	36.0	0.0	21.4	27.9	0.0			0.0			27.3
Permitted Option												
Adj Saturation A (vph)	0	1702		117	1809		0	0		0	149	
Reference Time A (s)	0.0	32.0		260.3	23.9		0.0	0.0		0.0	457.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		36.5	45.2	
Reference Time (s)		32.0			260.3			0.0			45.2	
Adj Reference Time (s)		36.0			264.3			8.0			49.2	
Split Option												
Ref Time Combined (s)	0.0	32.0		17.4	23.9		0.0	0.0		0.0	37.2	
Ref Time Seperate (s)	0.0	19.6		17.4	23.9		0.0	0.0		28.5	8.8	
Reference Time (s)	32.0	32.0		23.9	23.9		0.0	0.0		37.2	37.2	
Adj Reference Time (s)	36.0	36.0		27.9	27.9		0.0	0.0		41.2	41.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	57.4	NA	
Permitted Option (s)	264.3	49.2	
Split Option (s)	63.9	41.2	
Minimum (s)	57.4	41.2	98.6

Right Turns	SBR
Adj Reference Time (s)	27.3
Cross Thru Ref Time (s)	27.9
Oncoming Left Ref Time (s)	0.0
Combined (s)	55.2

Intersection Summary			
Intersection Capacity Utilization	82.2%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	678	119	8	826	207	440	29	317	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	185	797	0	8	826	207	0	469	317	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3537	0	1805	3618	1615	0	1811	1615	0	0	0
Ped Intf Time (s)	0.0	0.1	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	6.3	27.1	0.0	0.5	27.4	16.3			23.8			0.0
Adj Reference Time (s)	10.3	31.1	0.0	8.0	31.4	20.3			27.9			0.0
Permitted Option												
Adj Saturation A (vph)	117	1768		120	1809		0	126		0	0	
Reference Time A (s)	95.0	27.1		8.0	27.4		0.0	447.1		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		37.3	39.1		0.0	0.0	
Reference Time (s)		95.0			27.4			39.1			0.0	
Adj Reference Time (s)		99.0			31.4			43.1			8.0	
Split Option												
Ref Time Combined (s)	6.3	27.1		0.5	27.4		0.0	31.1		0.0	0.0	
Ref Time Seperate (s)	6.3	23.1		0.5	27.4		29.3	1.8		0.0	0.0	
Reference Time (s)	27.1	27.1		27.4	27.4		31.1	31.1		0.0	0.0	
Adj Reference Time (s)	31.1	31.1		31.4	31.4		35.1	35.1		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.7	NA	
Permitted Option (s)	99.0	43.1	
Split Option (s)	62.5	35.1	
Minimum (s)	41.7	35.1	76.8

Right Turns	WBR	NBR
Adj Reference Time (s)	20.3	27.9
Cross Thru Ref Time (s)	35.1	31.1
Oncoming Left Ref Time (s)	10.3	0.0
Combined (s)	65.7	59.0

Intersection Summary			
Intersection Capacity Utilization	64.0%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	778	29	57	683	68	56	5	145	85	6	32
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	20	807	0	57	751	0	56	150	0	85	38	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.87	0.85
Saturated Flow (vph)	1805	3598	0	1805	3568	0	1805	1625	0	1805	1660	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.3	26.9	0.0	3.8	25.3	0.0	3.7	11.1	0.0	5.7	2.7	0.0
Adj Reference Time (s)	8.0	30.9	0.0	8.0	29.3	0.0	8.0	15.1	0.0	9.7	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1799		120	1784		120	1625		120	1660	
Reference Time A (s)	19.9	26.9		56.8	25.3		55.8	11.1		84.8	2.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1625		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		11.7	11.1		NA	NA	
Reference Time (s)		26.9			56.8			11.7			84.8	
Adj Reference Time (s)		30.9			60.8			15.7			88.8	
Split Option												
Ref Time Combined (s)	1.3	26.9		3.8	25.3		3.7	11.1		5.7	2.7	
Ref Time Seperate (s)	1.3	25.9		3.8	23.0		3.7	0.4		5.7	0.4	
Reference Time (s)	26.9	26.9		25.3	25.3		11.1	11.1		5.7	5.7	
Adj Reference Time (s)	30.9	30.9		29.3	29.3		15.1	15.1		9.7	9.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.9	24.7	
Permitted Option (s)	60.8	88.8	
Split Option (s)	60.2	24.7	
Minimum (s)	38.9	24.7	63.6

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	53.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	379	40	202	414	254	123	327	209	327	206	113
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	94	419	0	202	668	0	123	536	0	0	646	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.94	0.85	0.95	0.94	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3566	0	3505	3411	0	1805	3406	0	0	5150	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.3	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.2	14.1	0.0	6.9	23.6	0.0			0.0			0.0
Adj Reference Time (s)	8.0	18.1	0.0	10.9	27.8	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1783		117	1706		120	1703		0	172	
Reference Time A (s)	48.3	14.1		103.7	23.6		122.7	19.1		0.0	228.7	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		48.3			103.7			122.7			228.7	
Adj Reference Time (s)		52.3			107.7			126.7			232.7	
Split Option												
Ref Time Combined (s)	3.2	14.1		6.9	23.6		8.2	19.1		0.0	15.1	
Ref Time Seperate (s)	3.2	12.8		6.9	14.7		8.2	11.8		10.9	7.3	
Reference Time (s)	14.1	14.1		23.6	23.6		19.1	19.1		15.1	15.1	
Adj Reference Time (s)	18.1	18.1		27.8	27.8		24.3	24.3		20.6	20.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.8	NA	
Permitted Option (s)	107.7	232.7	
Split Option (s)	45.9	45.0	
Minimum (s)	35.8	45.0	80.7

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	67.3%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	490	95	39	681	18	242	64	55	16	34	63
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	80	585	0	39	699	0	242	119	0	0	50	63
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.93	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3529	0	1805	3604	0	1805	1768	0	0	1870	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.3	19.9	0.0	2.6	23.3	0.0			0.0			4.8
Adj Reference Time (s)	9.3	23.9	0.0	8.0	27.3	0.0			0.0			9.2
Permitted Option												
Adj Saturation A (vph)	120	1765		120	1802		120	1768		0	314	
Reference Time A (s)	79.8	19.9		38.9	23.3		241.3	8.1		0.0	19.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1768		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.1	8.1		9.1	11.2	
Reference Time (s)		79.8			38.9			24.1			11.2	
Adj Reference Time (s)		83.8			42.9			28.1			15.4	
Split Option												
Ref Time Combined (s)	5.3	19.9		2.6	23.3		16.1	8.1		0.0	3.2	
Ref Time Seperate (s)	5.3	16.7		2.6	22.7		16.1	4.4		1.1	2.1	
Reference Time (s)	19.9	19.9		23.3	23.3		16.1	16.1		3.2	3.2	
Adj Reference Time (s)	23.9	23.9		27.3	27.3		20.1	20.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.6	NA	
Permitted Option (s)	83.8	28.1	
Split Option (s)	51.2	28.5	
Minimum (s)	36.6	28.1	64.7

Right Turns	SBR
Adj Reference Time (s)	9.2
Cross Thru Ref Time (s)	27.3
Oncoming Left Ref Time (s)	20.1
Combined (s)	56.6

Intersection Summary			
Intersection Capacity Utilization	53.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	121	712	104	220	478	180	123	572	323	166	385	83
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	121	712	104	220	478	180	123	572	323	166	468	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3521	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	4.1	23.6	7.9	7.5	15.9	13.5	8.2	19.0	24.3	11.0	16.1	0.0
Adj Reference Time (s)	8.1	27.6	12.3	11.5	20.1	17.8	12.2	23.7	28.6	15.0	23.7	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1761	
Reference Time A (s)	62.1	23.6		113.0	15.9		122.7	19.0		165.5	16.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		62.1			113.0			122.7			165.5	
Adj Reference Time (s)		66.1			117.0			126.7			169.5	
Split Option												
Ref Time Combined (s)	4.1	23.6		7.5	15.9		8.2	19.0		11.0	16.1	
Ref Time Seperate (s)	4.1	23.6		7.5	15.9		8.2	19.0		11.0	13.3	
Reference Time (s)	23.6	23.6		15.9	15.9		19.0	19.0		16.1	16.1	
Adj Reference Time (s)	27.6	27.6		20.1	20.1		23.7	23.7		23.7	23.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.1	38.7	
Permitted Option (s)	117.0	169.5	
Split Option (s)	47.7	47.4	
Minimum (s)	39.1	38.7	77.9

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	12.3	17.8	28.6
Cross Thru Ref Time (s)	23.7	23.7	27.6
Oncoming Left Ref Time (s)	11.5	8.1	15.0
Combined (s)	47.6	49.6	71.3

Intersection Summary			
Intersection Capacity Utilization	64.9%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	742	99	31	603	10	136	67	93	22	54	7
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	1	841	0	31	613	0	136	160	0	22	61	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3554	0	1805	3609	0	1805	1734	0	1805	1867	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.1	28.4	0.0	2.1	20.4	0.0	9.0	11.2	0.0	1.5	3.9	0.0
Adj Reference Time (s)	8.0	32.4	0.0	8.0	24.4	0.0	13.0	15.5	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1777		120	1804		120	1734		120	1867	
Reference Time A (s)	1.0	28.4		30.9	20.4		135.6	11.2		21.9	3.9	
Adj Saturation B (vph	NA	NA		NA	NA		0	1734		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		17.0	11.2		NA	NA	
Reference Time (s)		28.4			30.9			17.0			21.9	
Adj Reference Time (s)		32.4			34.9			21.0			25.9	
Split Option												
Ref Time Combined (s)	0.1	28.4		2.1	20.4		9.0	11.2		1.5	3.9	
Ref Time Seperate (s)	0.1	25.1		2.1	20.1		9.0	4.8		1.5	3.5	
Reference Time (s)	28.4	28.4		20.4	20.4		11.2	11.2		3.9	3.9	
Adj Reference Time (s)	32.4	32.4		24.4	24.4		15.5	15.5		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.4	23.5	
Permitted Option (s)	34.9	25.9	
Split Option (s)	56.8	23.5	
Minimum (s)	34.9	23.5	58.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	153	30	193	46	75	101	240	547	74	78	365	242
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	183	193	0	121	101	240	621	0	78	607	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.98	0.85	0.95	0.98	0.85	0.95	0.94	0.85
Saturated Flow (vph)	0	1821	1615	0	1864	1615	1805	3553	0	1805	3401	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.6	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			14.9			10.9	16.0	21.0	0.0	5.2	22.0	0.0
Adj Reference Time (s)			19.5			20.9	20.0	25.0	0.0	9.2	26.0	0.0
Permitted Option												
Adj Saturation A (vph)	0	137		0	270		120	1776		120	1701	
Reference Time A (s)	0.0	160.0		0.0	53.8		239.3	21.0		77.8	22.0	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	18.2	20.1		11.1	15.8		NA	NA		NA	NA	
Reference Time (s)		20.1			15.8			239.3			77.8	
Adj Reference Time (s)		24.1			22.6			243.3			81.8	
Split Option												
Ref Time Combined (s)	0.0	12.1		0.0	7.8		16.0	21.0		5.2	22.0	
Ref Time Seperate (s)	10.2	1.9		3.1	4.7		16.0	18.5		5.2	13.5	
Reference Time (s)	12.1	12.1		7.8	7.8		21.0	21.0		22.0	22.0	
Adj Reference Time (s)	17.1	17.1		19.8	19.8		25.0	25.0		26.0	26.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	46.0	
Permitted Option (s)	24.1	243.3	
Split Option (s)	36.9	51.1	
Minimum (s)	24.1	46.0	70.1

Right Turns	EBR	WBR
Adj Reference Time (s)	19.5	20.9
Cross Thru Ref Time (s)	26.0	25.0
Oncoming Left Ref Time (s)	19.8	17.1
Combined (s)	65.3	62.9

Intersection Summary			
Intersection Capacity Utilization	58.4%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	579	9	105	506	0	0	0	0	265	0	219
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	588	0	105	506	0	0	0	0	0	265	219
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3609	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	19.6	0.0	7.0	16.8	0.0			0.0			16.9
Adj Reference Time (s)	0.0	23.6	0.0	11.0	20.8	0.0			0.0			21.4
Permitted Option												
Adj Saturation A (vph)	0	1805		120	1809		0	0		0	120	
Reference Time A (s)	0.0	19.6		104.7	16.8		0.0	0.0		0.0	264.3	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		25.6	25.6	
Reference Time (s)		19.6			104.7			0.0			25.6	
Adj Reference Time (s)		23.6			108.7			8.0			29.6	
Split Option												
Ref Time Combined (s)	0.0	19.6		7.0	16.8		0.0	0.0		0.0	17.6	
Ref Time Seperate (s)	0.0	19.3		7.0	16.8		0.0	0.0		17.6	0.0	
Reference Time (s)	19.6	19.6		16.8	16.8		0.0	0.0		17.6	17.6	
Adj Reference Time (s)	23.6	23.6		20.8	20.8		0.0	0.0		22.0	22.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.5	NA	
Permitted Option (s)	108.7	29.6	
Split Option (s)	44.3	22.0	
Minimum (s)	34.5	22.0	56.5

Right Turns	SBR
Adj Reference Time (s)	21.4
Cross Thru Ref Time (s)	20.8
Oncoming Left Ref Time (s)	0.0
Combined (s)	42.2

Intersection Summary			
Intersection Capacity Utilization	47.1%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	689	0	0	573	205	24	2	245	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	155	689	0	0	778	0	0	271	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3475	0	0	3113	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.3	22.9	0.0	0.0	27.0	0.0			0.0			0.0
Adj Reference Time (s)	14.3	26.9	0.0	0.0	31.0	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1737		0	298		0	0	
Reference Time A (s)	154.6	22.9		0.0	27.0		0.0	35.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		9.6	14.5		NA	NA	
Reference Time (s)		154.6			27.0			14.5			0.0	
Adj Reference Time (s)		158.6			31.0			18.5			8.0	
Split Option												
Ref Time Combined (s)	10.3	22.9		0.0	27.0		0.0	10.4		0.0	0.0	
Ref Time Seperate (s)	10.3	22.9		0.0	20.0		1.6	0.1		0.0	0.0	
Reference Time (s)	22.9	22.9		27.0	27.0		10.4	10.4		0.0	0.0	
Adj Reference Time (s)	26.9	26.9		31.0	31.0		14.4	14.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	45.3	NA	
Permitted Option (s)	158.6	18.5	
Split Option (s)	57.9	14.4	
Minimum (s)	45.3	14.4	59.8

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	49.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	463	11	617	0	0	0	0	72	0	561
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	939	0	11	617	0	0	0	0	72	0	561
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.93	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3350	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	33.6	0.0	0.7	39.0	0.0	0.0	0.0	0.0	4.8	0.0	41.7
Adj Reference Time (s)	0.0	37.6	0.0	8.0	43.0	0.0	0.0	0.0	0.0	8.8	0.0	45.7
Permitted Option												
Adj Saturation A (vph)	0	1675		120	1900		0	0		120	0	
Reference Time A (s)	0.0	33.6		11.0	39.0		0.0	0.0		71.8	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.8	0.0	
Reference Time (s)		33.6			39.0			0.0			12.8	
Adj Reference Time (s)		37.6			43.0			8.0			16.8	
Split Option												
Ref Time Combined (s)	0.0	33.6		0.7	39.0		0.0	0.0		4.8	0.0	
Ref Time Seperate (s)	0.0	17.1		0.7	39.0		0.0	0.0		4.8	0.0	
Reference Time (s)	33.6	33.6		39.0	39.0		0.0	0.0		4.8	4.8	
Adj Reference Time (s)	37.6	37.6		43.0	43.0		0.0	0.0		8.8	8.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	45.6	8.8	
Permitted Option (s)	43.0	16.8	
Split Option (s)	80.6	8.8	
Minimum (s)	43.0	8.8	51.8

Right Turns	SBR
Adj Reference Time (s)	45.7
Cross Thru Ref Time (s)	43.0
Oncoming Left Ref Time (s)	0.0
Combined (s)	88.7

Intersection Summary			
Intersection Capacity Utilization	73.9%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	192	0	0	127	154	503	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	388	192	0	0	127	154	503	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	13.3	12.1	0.0	0.0	8.0	11.7	33.4	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	17.3	16.1	0.0	0.0	12.0	15.7	37.4	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	199.2	12.1		0.0	8.0		501.6	0.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1647		0	0	
Reference Time B (s)	NA	NA		NA	NA		41.4	0.9		0.0	0.0	
Reference Time (s)		199.2			8.0			41.4			0.0	
Adj Reference Time (s)		203.2			12.0			45.4			8.4	
Split Option												
Ref Time Combined (s)	13.3	12.1		0.0	8.0		33.4	0.9		0.0	0.0	
Ref Time Seperate (s)	13.3	12.1		0.0	8.0		33.4	0.3		0.0	0.0	
Reference Time (s)	13.3	13.3		8.0	8.0		33.4	33.4		0.0	0.0	
Adj Reference Time (s)	17.3	17.3		12.0	12.0		37.4	37.4		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	29.3	37.4	
Permitted Option (s)	203.2	45.4	
Split Option (s)	29.3	45.8	
Minimum (s)	29.3	37.4	66.7

Right Turns	WBR
Adj Reference Time (s)	15.7
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	17.3
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	55.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	786	275	3	303	0	0	0	0	4	0	949
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1061	0	3	303	0	0	0	0	0	320	633
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1826	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	69.7	0.0	0.2	19.1	0.0			0.0			47.0
Adj Reference Time (s)	0.0	73.7	0.0	8.0	23.1	0.0			0.0			51.0
Permitted Option												
Adj Saturation A (vph)	0	1826		120	1900		0	0		0	1375	
Reference Time A (s)	0.0	69.7		3.0	19.1		0.0	0.0		0.0	28.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.3	31.8	
Reference Time (s)		69.7			19.1			0.0			28.0	
Adj Reference Time (s)		73.7			23.1			8.0			32.0	
Split Option												
Ref Time Combined (s)	0.0	69.7		0.2	19.1		0.0	0.0		0.0	23.8	
Ref Time Seperate (s)	0.0	51.7		0.2	19.1		0.0	0.0		0.3	0.0	
Reference Time (s)	69.7	69.7		19.1	19.1		0.0	0.0		23.8	23.8	
Adj Reference Time (s)	73.7	73.7		23.1	23.1		0.0	0.0		27.8	27.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	81.7	NA	
Permitted Option (s)	73.7	32.0	
Split Option (s)	96.9	27.8	
Minimum (s)	73.7	27.8	101.5

Right Turns	SBR
Adj Reference Time (s)	51.0
Cross Thru Ref Time (s)	23.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	74.1

Intersection Summary			
Intersection Capacity Utilization	84.6%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	388	551	9	599	0	0	0	0	5	0	485
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	388	551	0	608	0	0	0	0	5	0	485
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1899	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			40.9			0.0	0.0	0.0	0.0	0.3	0.0	36.0
Adj Reference Time (s)			44.9			0.0	0.0	0.0	0.0	8.0	0.0	40.0
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1570		0	0		120	0	
Reference Time A (s)	0.0	24.5		0.0	46.5		0.0	0.0		5.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		8.3	0.0	
Reference Time (s)		24.5			46.5			0.0			5.0	
Adj Reference Time (s)		28.5			50.5			8.0			9.0	
Split Option												
Ref Time Combined (s)	0.0	24.5		0.0	38.4		0.0	0.0		0.3	0.0	
Ref Time Seperate (s)	0.0	24.5		0.6	37.8		0.0	0.0		0.3	0.0	
Reference Time (s)	24.5	24.5		38.4	38.4		0.0	0.0		0.3	0.3	
Adj Reference Time (s)	28.5	28.5		42.4	42.4		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	50.5	9.0	
Split Option (s)	70.9	8.0	
Minimum (s)	50.5	8.0	58.5

Right Turns	EBR	SBR
Adj Reference Time (s)	44.9	40.0
Cross Thru Ref Time (s)	0.0	42.4
Oncoming Left Ref Time (s)	42.4	0.0
Combined (s)	87.4	82.5

Intersection Summary			
Intersection Capacity Utilization	72.8%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1068	552	47	763	0	0	0	0	69	0	879
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1068	552	47	763	0	0	0	0	0	69	879
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	18.6	41.1	3.1	25.3	0.0			0.0			36.9
Adj Reference Time (s)	0.0	22.6	45.1	8.0	29.3	0.0			0.0			40.9
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	18.6		46.9	25.3		0.0	0.0		0.0	34.4	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		10.3	10.3	
Reference Time (s)		18.6			46.9			0.0			10.3	
Adj Reference Time (s)		22.6			50.9			8.0			14.3	
Split Option												
Ref Time Combined (s)	0.0	18.6		3.1	25.3		0.0	0.0		0.0	2.3	
Ref Time Seperate (s)	0.0	18.6		3.1	25.3		0.0	0.0		2.3	0.0	
Reference Time (s)	18.6	18.6		25.3	25.3		0.0	0.0		2.3	2.3	
Adj Reference Time (s)	22.6	22.6		29.3	29.3		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	30.6	NA	
Permitted Option (s)	50.9	14.3	
Split Option (s)	51.9	8.0	
Minimum (s)	30.6	8.0	38.6

Right Turns	EBR	SBR
Adj Reference Time (s)	45.1	40.9
Cross Thru Ref Time (s)	8.0	29.3
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	61.1	70.2

Intersection Summary			
Intersection Capacity Utilization	58.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	936	202	0	0	272	195	531	5	52	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	936	202	0	0	272	195	0	536	52	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	32.0	6.7	0.0	0.0	9.0	14.6			4.0			0.0
Adj Reference Time (s)	36.0	10.7	0.0	0.0	13.3	18.7			8.4			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	480.6	6.7		0.0	9.0		0.0	265.5		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		25.7	25.8		0.0	0.0	
Reference Time (s)		480.6			9.0			25.8			0.0	
Adj Reference Time (s)		484.6			13.3			29.8			8.0	
Split Option												
Ref Time Combined (s)	32.0	6.7		0.0	9.0		0.0	17.8		0.0	0.0	
Ref Time Seperate (s)	32.0	6.7		0.0	9.0		17.7	0.3		0.0	0.0	
Reference Time (s)	32.0	32.0		9.0	9.0		17.8	17.8		0.0	0.0	
Adj Reference Time (s)	36.0	36.0		13.3	13.3		21.8	21.8		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	49.3	NA	
Permitted Option (s)	484.6	29.8	
Split Option (s)	49.3	21.8	
Minimum (s)	49.3	21.8	71.1

Right Turns	WBR	NBR
Adj Reference Time (s)	18.7	8.4
Cross Thru Ref Time (s)	21.8	10.7
Oncoming Left Ref Time (s)	36.0	0.0
Combined (s)	76.5	19.1

Intersection Summary			
Intersection Capacity Utilization	63.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	68	78	458	49	251	71	574	82	430	386	74
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	96	146	0	0	507	251	71	656	0	430	386	74
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3328	0	0	3628	1615	1805	3550	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			18.7	4.7	22.2	0.0	28.6	12.8	5.6
Adj Reference Time (s)			0.0			22.7	8.7	26.2	0.0	32.6	16.9	10.0
Permitted Option												
Adj Saturation A (vph)	120	1664		0	259		120	1775		120	1809	
Reference Time A (s)	95.7	5.3		0.0	235.1		70.8	22.2		428.8	12.8	
Adj Saturation B (vph	0	3328		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	14.4	5.3		NA	NA		NA	NA		NA	NA	
Reference Time (s)		14.4			235.1			70.8			428.8	
Adj Reference Time (s)		18.4			239.1			74.8			432.8	
Split Option												
Ref Time Combined (s)	6.4	5.3		0.0	16.8		4.7	22.2		28.6	12.8	
Ref Time Seperate (s)	6.4	2.5		15.2	3.1		4.7	19.4		28.6	12.8	
Reference Time (s)	6.4	6.4		16.8	16.8		22.2	22.2		28.6	28.6	
Adj Reference Time (s)	10.4	10.4		20.8	20.8		26.2	26.2		32.6	32.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	58.8	
Permitted Option (s)	239.1	432.8	
Split Option (s)	31.2	58.8	
Minimum (s)	31.2	58.8	89.9

Right Turns	WBR	SBR
Adj Reference Time (s)	22.7	10.0
Cross Thru Ref Time (s)	26.2	20.8
Oncoming Left Ref Time (s)	10.4	8.7
Combined (s)	59.2	39.5

Intersection Summary			
Intersection Capacity Utilization	74.9%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	944	32	22	1	47	6	11	7	1	1	6	510
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	944	54	0	1	53	0	0	19	0	0	7	510
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	1784	0	1805	1868	0	0	1830	0	0	1886	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	62.8	3.6	0.0	0.1	3.4	0.0			0.0			37.9
Adj Reference Time (s)	66.8	8.0	0.0	8.0	8.0	0.0			0.0			41.9
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1868		0	185		0	1890	
Reference Time A (s)	941.4	3.6		1.0	3.4		0.0	12.3		0.0	0.4	
Adj Saturation B (vph	0	1784		0	1868		0	0		0	0	
Reference Time B (s)	70.8	3.6		8.1	3.4		8.7	9.2		8.1	8.4	
Reference Time (s)		70.8			3.4			9.2			0.4	
Adj Reference Time (s)		74.8			8.0			13.2			8.0	
Split Option												
Ref Time Combined (s)	62.8	3.6		0.1	3.4		0.0	1.2		0.0	0.4	
Ref Time Seperate (s)	62.8	2.2		0.1	3.0		0.7	0.5		0.1	0.4	
Reference Time (s)	62.8	62.8		3.4	3.4		1.2	1.2		0.4	0.4	
Adj Reference Time (s)	66.8	66.8		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	74.8	NA	
Permitted Option (s)	74.8	13.2	
Split Option (s)	74.8	16.0	
Minimum (s)	74.8	13.2	88.0

Right Turns	SBR
Adj Reference Time (s)	41.9
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	57.9

Intersection Summary			
Intersection Capacity Utilization	73.3%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	611	465	425	865	0	0	0	0	139	140	348
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1076	0	425	865	0	0	0	0	0	279	348
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	3383	0	3505	3618	0	0	0	0	0	1853	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	38.4	0.0	14.5	28.7	0.0			0.0			27.3
Adj Reference Time (s)	0.0	42.4	0.0	18.5	32.7	0.0			0.0			31.3
Permitted Option												
Adj Saturation A (vph)	0	1692		117	1809		0	0		0	212	
Reference Time A (s)	0.0	38.4		218.2	28.7		0.0	0.0		0.0	157.6	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		17.2	26.1	
Reference Time (s)		38.4			218.2			0.0			26.1	
Adj Reference Time (s)		42.4			222.2			8.0			30.1	
Split Option												
Ref Time Combined (s)	0.0	38.4		14.5	28.7		0.0	0.0		0.0	18.1	
Ref Time Seperate (s)	0.0	21.9		14.5	28.7		0.0	0.0		9.2	8.8	
Reference Time (s)	38.4	38.4		28.7	28.7		0.0	0.0		18.1	18.1	
Adj Reference Time (s)	42.4	42.4		32.7	32.7		0.0	0.0		22.7	22.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	60.9	NA	
Permitted Option (s)	222.2	30.1	
Split Option (s)	75.1	22.7	
Minimum (s)	60.9	22.7	83.6

Right Turns	SBR
Adj Reference Time (s)	31.3
Cross Thru Ref Time (s)	32.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	64.0

Intersection Summary			
Intersection Capacity Utilization	69.7%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	312	407	24	3	711	234	586	83	282	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	312	431	0	3	711	234	0	669	282	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.96	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3587	0	1805	3618	1615	0	1817	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.7	14.5	0.0	0.2	23.6	18.3			21.2			0.0
Adj Reference Time (s)	14.7	18.5	0.0	8.0	27.6	22.3			25.5			0.0
Permitted Option												
Adj Saturation A (vph)	117	1794		120	1809		0	132		0	0	
Reference Time A (s)	160.2	14.5		3.0	23.6		0.0	606.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		47.0	52.2		0.0	0.0	
Reference Time (s)		160.2			23.6			52.2			0.0	
Adj Reference Time (s)		164.2			27.6			56.2			8.0	
Split Option												
Ref Time Combined (s)	10.7	14.5		0.2	23.6		0.0	44.2		0.0	0.0	
Ref Time Seperate (s)	10.7	13.7		0.2	23.6		39.0	5.2		0.0	0.0	
Reference Time (s)	14.5	14.5		23.6	23.6		44.2	44.2		0.0	0.0	
Adj Reference Time (s)	18.5	18.5		27.6	27.6		48.2	48.2		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.3	NA	
Permitted Option (s)	164.2	56.2	
Split Option (s)	46.0	48.2	
Minimum (s)	42.3	48.2	90.5

Right Turns	WBR	NBR
Adj Reference Time (s)	22.3	25.5
Cross Thru Ref Time (s)	48.2	18.5
Oncoming Left Ref Time (s)	14.7	0.0
Combined (s)	85.1	43.9

Intersection Summary			
Intersection Capacity Utilization	75.4%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	746	78	145	994	84	50	4	87	57	2	22
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	21	824	0	145	1078	0	50	91	0	57	24	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.86	0.85
Saturated Flow (vph)	1805	3566	0	1805	3575	0	1805	1628	0	1805	1639	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.4	27.7	0.0	9.6	36.2	0.0	3.3	6.7	0.0	3.8	1.8	0.0
Adj Reference Time (s)	8.0	31.7	0.0	13.6	40.2	0.0	8.0	10.7	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1783		120	1788		120	1628		120	1639	
Reference Time A (s)	20.9	27.7		144.6	36.2		49.9	6.7		56.8	1.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	1628		0	1639	
Reference Time B (s)	NA	NA		NA	NA		11.3	6.7		11.8	1.8	
Reference Time (s)		27.7			144.6			11.3			11.8	
Adj Reference Time (s)		31.7			148.6			15.3			15.8	
Split Option												
Ref Time Combined (s)	1.4	27.7		9.6	36.2		3.3	6.7		3.8	1.8	
Ref Time Seperate (s)	1.4	25.1		9.6	33.4		3.3	0.3		3.8	0.1	
Reference Time (s)	27.7	27.7		36.2	36.2		6.7	6.7		3.8	3.8	
Adj Reference Time (s)	31.7	31.7		40.2	40.2		10.7	10.7		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	48.2	18.7	
Permitted Option (s)	148.6	15.8	
Split Option (s)	71.9	18.7	
Minimum (s)	48.2	15.8	64.0

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	53.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	148	477	79	256	489	276	131	221	144	452	229	83
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	148	556	0	256	765	0	131	365	0	0	764	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.95	0.85	0.95	0.94	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3540	0	3505	3422	0	1805	3404	0	0	5180	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.3	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.1	18.8	0.0	8.8	27.0	0.0			0.0			0.0
Adj Reference Time (s)	9.1	22.8	0.0	12.8	31.0	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1770		117	1711		120	1702		0	173	
Reference Time A (s)	76.0	18.8		131.5	27.0		130.6	13.1		0.0	314.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		76.0			131.5			130.6			314.2	
Adj Reference Time (s)		80.0			135.5			134.6			318.2	
Split Option												
Ref Time Combined (s)	5.1	18.8		8.8	27.0		8.7	13.1		0.0	17.8	
Ref Time Seperate (s)	5.1	16.2		8.8	17.3		8.7	8.0		15.0	8.0	
Reference Time (s)	18.8	18.8		27.0	27.0		13.1	13.1		17.8	17.8	
Adj Reference Time (s)	22.8	22.8		31.0	31.0		19.3	19.3		22.9	22.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.0	NA	
Permitted Option (s)	135.5	318.2	
Split Option (s)	53.8	42.2	
Minimum (s)	40.0	42.2	82.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	68.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	650	227	68	602	25	135	39	44	13	69	51
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	51	877	0	68	627	0	135	83	0	0	82	51
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.99	0.85	0.95	0.92	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3477	0	1805	3596	0	1805	1749	0	0	1885	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.4	30.3	0.0	4.5	20.9	0.0			0.0			3.9
Adj Reference Time (s)	8.0	34.3	0.0	8.5	24.9	0.0			0.0			8.4
Permitted Option												
Adj Saturation A (vph)	120	1739		120	1798		120	1749		0	557	
Reference Time A (s)	50.9	30.3		67.8	20.9		134.6	5.8		0.0	17.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1749		0	0	
Reference Time B (s)	NA	NA		NA	NA		17.0	5.8		8.9	13.2	
Reference Time (s)		50.9			67.8			17.0			13.2	
Adj Reference Time (s)		54.9			71.8			21.0			17.3	
Split Option												
Ref Time Combined (s)	3.4	30.3		4.5	20.9		9.0	5.8		0.0	5.2	
Ref Time Seperate (s)	3.4	22.5		4.5	20.1		9.0	2.7		0.9	4.4	
Reference Time (s)	30.3	30.3		20.9	20.9		9.0	9.0		5.2	5.2	
Adj Reference Time (s)	34.3	34.3		24.9	24.9		13.2	13.2		9.6	9.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.8	NA	
Permitted Option (s)	71.8	21.0	
Split Option (s)	59.2	22.8	
Minimum (s)	42.8	21.0	63.8

Right Turns	SBR
Adj Reference Time (s)	8.4
Cross Thru Ref Time (s)	24.9
Oncoming Left Ref Time (s)	13.2
Combined (s)	46.5

Intersection Summary			
Intersection Capacity Utilization	53.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	625	153	300	612	138	79	425	245	150	494	89
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	82	625	153	300	612	138	79	425	245	150	583	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3535	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	2.8	20.7	11.5	10.3	20.3	10.4	5.3	14.1	18.5	10.0	20.0	0.0
Adj Reference Time (s)	8.0	24.8	15.8	14.3	24.4	14.8	9.3	19.1	23.2	14.0	26.6	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1767	
Reference Time A (s)	42.1	20.7		154.1	20.3		78.8	14.1		149.6	20.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		42.1			154.1			78.8			149.6	
Adj Reference Time (s)		46.1			158.1			82.8			153.6	
Split Option												
Ref Time Combined (s)	2.8	20.7		10.3	20.3		5.3	14.1		10.0	20.0	
Ref Time Seperate (s)	2.8	20.7		10.3	20.3		5.3	14.1		10.0	16.9	
Reference Time (s)	20.7	20.7		20.3	20.3		14.1	14.1		20.0	20.0	
Adj Reference Time (s)	24.8	24.8		24.4	24.4		19.1	19.1		26.6	26.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.0	35.8	
Permitted Option (s)	158.1	153.6	
Split Option (s)	49.1	45.7	
Minimum (s)	39.0	35.8	74.9

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	15.8	14.8	23.2
Cross Thru Ref Time (s)	26.6	19.1	24.8
Oncoming Left Ref Time (s)	14.3	8.0	14.0
Combined (s)	56.7	41.9	62.0

Intersection Summary			
Intersection Capacity Utilization	62.4%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	808	82	41	656	16	62	61	45	19	62	3
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	7	890	0	41	672	0	62	106	0	19	65	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3568	0	1805	3605	0	1805	1779	0	1805	1887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.5	29.9	0.0	2.7	22.4	0.0	4.1	7.3	0.0	1.3	4.1	0.0
Adj Reference Time (s)	8.0	33.9	0.0	8.0	26.4	0.0	8.1	11.8	0.0	8.0	8.1	0.0
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1802		120	1779		120	1887	
Reference Time A (s)	7.0	29.9		40.9	22.4		61.8	7.3		18.9	4.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1779		0	1887	
Reference Time B (s)	NA	NA		NA	NA		12.1	7.3		9.3	4.1	
Reference Time (s)		29.9			40.9			12.1			9.3	
Adj Reference Time (s)		33.9			44.9			16.4			13.3	
Split Option												
Ref Time Combined (s)	0.5	29.9		2.7	22.4		4.1	7.3		1.3	4.1	
Ref Time Seperate (s)	0.5	27.2		2.7	21.8		4.1	4.2		1.3	3.9	
Reference Time (s)	29.9	29.9		22.4	22.4		7.3	7.3		4.1	4.1	
Adj Reference Time (s)	33.9	33.9		26.4	26.4		11.8	11.8		8.1	8.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.9	19.8	
Permitted Option (s)	44.9	16.4	
Split Option (s)	60.3	20.0	
Minimum (s)	41.9	16.4	58.3

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	23	173	51	23	64	148	451	45	51	513	99
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	131	173	0	74	64	148	496	0	51	612	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.97	0.85	0.95	0.99	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	1822	1615	0	1835	1615	1805	3568	0	1805	3530	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.3	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			13.4			8.2	9.8	16.7	0.0	3.4	21.1	0.0
Adj Reference Time (s)			18.2			19.9	13.8	20.7	0.0	8.0	25.1	0.0
Permitted Option												
Adj Saturation A (vph)	0	139		0	160		120	1784		120	1765	
Reference Time A (s)	0.0	113.3		0.0	55.4		147.6	16.7		50.9	21.1	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	15.2	16.6		11.4	12.8		NA	NA		NA	NA	
Reference Time (s)		16.6			12.8			147.6			50.9	
Adj Reference Time (s)		21.1			21.5			151.6			54.9	
Split Option												
Ref Time Combined (s)	0.0	8.6		0.0	4.8		9.8	16.7		3.4	21.1	
Ref Time Seperate (s)	7.2	1.5		3.4	1.5		9.8	15.2		3.4	17.7	
Reference Time (s)	8.6	8.6		4.8	4.8		16.7	16.7		21.1	21.1	
Adj Reference Time (s)	14.0	14.0		18.8	18.8		20.7	20.7		25.1	25.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	38.9	
Permitted Option (s)	21.5	151.6	
Split Option (s)	32.8	45.8	
Minimum (s)	21.5	38.9	60.4

Right Turns	EBR	WBR
Adj Reference Time (s)	18.2	19.9
Cross Thru Ref Time (s)	25.1	20.7
Oncoming Left Ref Time (s)	18.8	14.0
Combined (s)	62.0	54.7

Intersection Summary			
Intersection Capacity Utilization	51.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Appendix H

Analysis Worksheets for
Existing (2024) plus Project Buildout (Residential Only) Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	613	18	149	475	0	0	0	0	150	0	296
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	631	0	149	475	0	0	0	0	0	150	296
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3602	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	21.0	0.0	9.9	15.8	0.0			0.0			22.6
Adj Reference Time (s)	0.0	25.0	0.0	13.9	19.8	0.0			0.0			26.6
Permitted Option												
Adj Saturation A (vph)	0	1801		120	1809		0	0		0	120	
Reference Time A (s)	0.0	21.0		148.6	15.8		0.0	0.0		0.0	149.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		18.0	18.0	
Reference Time (s)		21.0			148.6			0.0			18.0	
Adj Reference Time (s)		25.0			152.6			8.0			22.3	
Split Option												
Ref Time Combined (s)	0.0	21.0		9.9	15.8		0.0	0.0		0.0	10.0	
Ref Time Seperate (s)	0.0	20.4		9.9	15.8		0.0	0.0		10.0	0.0	
Reference Time (s)	21.0	21.0		15.8	15.8		0.0	0.0		10.0	10.0	
Adj Reference Time (s)	25.0	25.0		19.8	19.8		0.0	0.0		15.5	15.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.9	NA	
Permitted Option (s)	152.6	22.3	
Split Option (s)	44.8	15.5	
Minimum (s)	38.9	15.5	54.5

Right Turns	SBR
Adj Reference Time (s)	26.6
Cross Thru Ref Time (s)	19.8
Oncoming Left Ref Time (s)	0.0
Combined (s)	46.4

Intersection Summary			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	210	543	0	0	626	356	5	1	88	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	210	543	0	0	982	0	0	94	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3421	0	0	3101	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	14.0	18.0	0.0	0.0	34.7	0.0			0.0			0.0
Adj Reference Time (s)	18.0	22.0	0.0	0.0	38.7	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1710		0	514		0	0	
Reference Time A (s)	209.4	18.0		0.0	34.7		0.0	8.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1541		0	0	
Reference Time B (s)	NA	NA		NA	NA		8.3	7.7		0.0	0.0	
Reference Time (s)		209.4			34.7			8.3			0.0	
Adj Reference Time (s)		213.4			38.7			12.3			8.0	
Split Option												
Ref Time Combined (s)	14.0	18.0		0.0	34.7		0.0	3.6		0.0	0.0	
Ref Time Seperate (s)	14.0	18.0		0.0	22.2		0.3	0.0		0.0	0.0	
Reference Time (s)	18.0	18.0		34.7	34.7		3.6	3.6		0.0	0.0	
Adj Reference Time (s)	22.0	22.0		38.7	38.7		8.0	8.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	56.6	NA	
Permitted Option (s)	213.4	12.3	
Split Option (s)	60.7	8.0	
Minimum (s)	56.6	8.0	64.6

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	53.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	639	244	3	407	0	0	0	0	125	0	379
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	884	0	3	407	0	0	0	0	125	0	379
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3468	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			0.0	0.0	0.0	0.0	8.3	0.0	28.2
Adj Reference Time (s)			0.0			0.0	0.0	0.0	0.0	12.3	0.0	32.2
Permitted Option												
Adj Saturation A (vph)	0	1680		120	1900		0	0		120	0	
Reference Time A (s)	0.0	31.4		3.0	25.7		0.0	0.0		124.7	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		16.3	0.0	
Reference Time (s)		31.4			25.7			0.0			16.3	
Adj Reference Time (s)		35.4			29.7			8.0			20.3	
Split Option												
Ref Time Combined (s)	0.0	30.6		0.2	25.7		0.0	0.0		8.3	0.0	
Ref Time Seperate (s)	0.1	22.1		0.2	25.7		0.0	0.0		8.3	0.0	
Reference Time (s)	30.6	30.6		25.7	25.7		0.0	0.0		8.3	8.3	
Adj Reference Time (s)	34.6	34.6		29.7	29.7		0.0	0.0		12.3	12.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	12.3	
Permitted Option (s)	35.4	20.3	
Split Option (s)	64.3	12.3	
Minimum (s)	35.4	12.3	47.7

Right Turns	SBR
Adj Reference Time (s)	32.2
Cross Thru Ref Time (s)	29.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	61.9

Intersection Summary			
Intersection Capacity Utilization	51.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	220	0	0	87	118	323	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	540	220	0	0	87	118	323	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.5	13.9	0.0	0.0	5.5	9.0	21.5	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	22.5	17.9	0.0	0.0	9.5	13.0	25.5	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	277.3	13.9		0.0	5.5		322.1	0.9		0.0	0.0	
Adj Saturation B (vph	0	1900		NA	NA		0	1647		0	0	
Reference Time B (s)	26.5	13.9		NA	NA		29.5	0.9		0.0	0.0	
Reference Time (s)		26.5			5.5			29.5			0.0	
Adj Reference Time (s)		30.5			9.5			33.5			8.4	
Split Option												
Ref Time Combined (s)	18.5	13.9		0.0	5.5		21.5	0.9		0.0	0.0	
Ref Time Seperate (s)	18.5	13.9		0.0	5.5		21.5	0.3		0.0	0.0	
Reference Time (s)	18.5	18.5		5.5	5.5		21.5	21.5		0.0	0.0	
Adj Reference Time (s)	22.5	22.5		9.5	9.5		25.5	25.5		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.0	25.5	
Permitted Option (s)	30.5	33.5	
Split Option (s)	32.0	33.9	
Minimum (s)	30.5	25.5	56.0

Right Turns	WBR
Adj Reference Time (s)	13.0
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	22.5
Combined (s)	55.5

Intersection Summary			
Intersection Capacity Utilization	46.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1094	167	3	260	0	0	0	0	3	1	764
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1261	0	3	260	0	0	0	0	0	259	509
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1862	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	81.3	0.0	0.2	16.4	0.0			0.0			37.8
Adj Reference Time (s)	0.0	85.3	0.0	8.0	20.4	0.0			0.0			41.8
Permitted Option												
Adj Saturation A (vph)	0	1862		120	1900		0	0		0	1391	
Reference Time A (s)	0.0	81.3		3.0	16.4		0.0	0.0		0.0	22.3	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.2	27.2	
Reference Time (s)		81.3			16.4			0.0			22.3	
Adj Reference Time (s)		85.3			20.4			8.0			26.3	
Split Option												
Ref Time Combined (s)	0.0	81.3		0.2	16.4		0.0	0.0		0.0	19.2	
Ref Time Seperate (s)	0.0	70.5		0.2	16.4		0.0	0.0		0.2	0.1	
Reference Time (s)	81.3	81.3		16.4	16.4		0.0	0.0		19.2	19.2	
Adj Reference Time (s)	85.3	85.3		20.4	20.4		0.0	0.0		23.2	23.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	93.3	NA	
Permitted Option (s)	85.3	26.3	
Split Option (s)	105.7	23.2	
Minimum (s)	85.3	23.2	108.4

Right Turns	SBR
Adj Reference Time (s)	41.8
Cross Thru Ref Time (s)	20.4
Oncoming Left Ref Time (s)	0.0
Combined (s)	62.3

Intersection Summary			
Intersection Capacity Utilization	90.4%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	523	389	6	522	0	0	0	0	18	0	517
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	523	389	0	528	0	0	0	0	18	0	517
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1899	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			28.9			0.0	0.0	0.0	0.0	1.2	0.0	38.4
Adj Reference Time (s)			32.9			0.0	0.0	0.0	0.0	8.0	0.0	42.4
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1637		0	0		120	0	
Reference Time A (s)	0.0	33.0		0.0	38.7		0.0	0.0		18.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		9.2	0.0	
Reference Time (s)		33.0			38.7			0.0			9.2	
Adj Reference Time (s)		37.0			42.7			8.0			13.2	
Split Option												
Ref Time Combined (s)	0.0	33.0		0.0	33.4		0.0	0.0		1.2	0.0	
Ref Time Seperate (s)	0.0	33.0		0.4	33.0		0.0	0.0		1.2	0.0	
Reference Time (s)	33.0	33.0		33.4	33.4		0.0	0.0		1.2	1.2	
Adj Reference Time (s)	37.0	37.0		37.4	37.4		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	42.7	13.2	
Split Option (s)	74.4	8.0	
Minimum (s)	42.7	8.0	50.7

Right Turns	EBR	SBR
Adj Reference Time (s)	32.9	42.4
Cross Thru Ref Time (s)	0.0	37.4
Oncoming Left Ref Time (s)	37.4	0.0
Combined (s)	70.3	79.8

Intersection Summary			
Intersection Capacity Utilization	66.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	746	267	44	516	0	0	0	0	148	0	1017
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	746	267	44	516	0	0	0	0	0	148	1017
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	13.0	20.0	2.9	17.1	0.0			0.0			42.7
Adj Reference Time (s)	0.0	17.0	24.0	8.0	21.1	0.0			0.0			46.7
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	13.0		43.9	17.1		0.0	0.0		0.0	73.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.9	12.9	
Reference Time (s)		13.0			43.9			0.0			12.9	
Adj Reference Time (s)		17.0			47.9			8.0			16.9	
Split Option												
Ref Time Combined (s)	0.0	13.0		2.9	17.1		0.0	0.0		0.0	4.9	
Ref Time Seperate (s)	0.0	13.0		2.9	17.1		0.0	0.0		4.9	0.0	
Reference Time (s)	13.0	13.0		17.1	17.1		0.0	0.0		4.9	4.9	
Adj Reference Time (s)	17.0	17.0		21.1	21.1		0.0	0.0		8.9	8.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.0	NA	
Permitted Option (s)	47.9	16.9	
Split Option (s)	38.1	8.9	
Minimum (s)	25.0	8.9	33.9

Right Turns	EBR	SBR
Adj Reference Time (s)	24.0	46.7
Cross Thru Ref Time (s)	8.9	21.1
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	40.9	67.8

Intersection Summary			
Intersection Capacity Utilization	56.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	580	325	0	0	167	125	380	3	70	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	580	325	0	0	167	125	0	383	70	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3611	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	19.9	10.8	0.0	0.0	5.5	9.4			5.3			0.0
Adj Reference Time (s)	23.9	14.8	0.0	0.0	9.9	13.6			9.7			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	297.8	10.8		0.0	5.5		0.0	189.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		20.6	20.7		0.0	0.0	
Reference Time (s)		297.8			5.5			20.7			0.0	
Adj Reference Time (s)		301.8			9.9			24.7			8.0	
Split Option												
Ref Time Combined (s)	19.9	10.8		0.0	5.5		0.0	12.7		0.0	0.0	
Ref Time Seperate (s)	19.9	10.8		0.0	5.5		12.6	0.2		0.0	0.0	
Reference Time (s)	19.9	19.9		5.5	5.5		12.7	12.7		0.0	0.0	
Adj Reference Time (s)	23.9	23.9		9.9	9.9		16.8	16.8		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.7	NA	
Permitted Option (s)	301.8	24.7	
Split Option (s)	33.7	16.8	
Minimum (s)	33.7	16.8	50.6

Right Turns	WBR	NBR
Adj Reference Time (s)	13.6	9.7
Cross Thru Ref Time (s)	16.8	14.8
Oncoming Left Ref Time (s)	23.9	0.0
Combined (s)	54.3	24.5

Intersection Summary			
Intersection Capacity Utilization	45.3%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	68	33	13	318	72	413	28	359	40	240	201	59
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	68	46	0	0	390	413	28	399	0	240	201	59
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3464	0	0	3645	1615	1805	3563	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			30.7	1.9	13.4	0.0	16.0	6.7	4.5
Adj Reference Time (s)			0.0			34.7	8.0	17.4	0.0	20.0	11.0	8.9
Permitted Option												
Adj Saturation A (vph)	120	1732		0	280		120	1782		120	1809	
Reference Time A (s)	67.8	1.6		0.0	167.2		27.9	13.4		239.3	6.7	
Adj Saturation B (vph	0	3464		0	0		NA	NA		NA	NA	
Reference Time B (s)	12.5	1.6		18.6	20.8		NA	NA		NA	NA	
Reference Time (s)		12.5			20.8			27.9			239.3	
Adj Reference Time (s)		16.5			24.8			31.9			243.3	
Split Option												
Ref Time Combined (s)	4.5	1.6		0.0	12.8		1.9	13.4		16.0	6.7	
Ref Time Seperate (s)	4.5	1.1		10.6	4.5		1.9	12.1		16.0	6.7	
Reference Time (s)	4.5	4.5		12.8	12.8		13.4	13.4		16.0	16.0	
Adj Reference Time (s)	8.5	8.5		16.8	16.8		17.4	17.4		20.0	20.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	37.4	
Permitted Option (s)	24.8	243.3	
Split Option (s)	25.4	37.4	
Minimum (s)	24.8	37.4	62.2

Right Turns	WBR	SBR
Adj Reference Time (s)	34.7	8.9
Cross Thru Ref Time (s)	17.4	16.8
Oncoming Left Ref Time (s)	8.5	8.0
Combined (s)	60.6	33.7

Intersection Summary			
Intersection Capacity Utilization	51.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	638	66	7	0	29	4	3	2	0	4	1	602
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	638	73	0	0	33	0	0	5	0	0	5	602
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.96	0.85
Saturated Flow (vph)	1805	1873	0	1805	1865	0	0	1843	0	0	1824	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	42.4	4.7	0.0	0.0	2.1	0.0			0.0			44.7
Adj Reference Time (s)	46.4	8.7	0.0	8.0	8.0	0.0			0.0			48.7
Permitted Option												
Adj Saturation A (vph)	120	1873		120	1865		0	181		0	1352	
Reference Time A (s)	636.2	4.7		0.0	2.1		0.0	3.3		0.0	0.4	
Adj Saturation B (vph	0	1873		0	1865		0	0		0	0	
Reference Time B (s)	50.4	4.7		8.0	2.1		8.2	8.3		8.3	8.3	
Reference Time (s)		50.4			2.1			3.3			0.4	
Adj Reference Time (s)		54.4			8.0			8.0			8.0	
Split Option												
Ref Time Combined (s)	42.4	4.7		0.0	2.1		0.0	0.3		0.0	0.3	
Ref Time Seperate (s)	42.4	4.2		0.0	1.9		0.2	0.1		0.3	0.1	
Reference Time (s)	42.4	42.4		2.1	2.1		0.3	0.3		0.3	0.3	
Adj Reference Time (s)	46.4	46.4		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.4	NA	
Permitted Option (s)	54.4	8.0	
Split Option (s)	54.4	16.0	
Minimum (s)	54.4	8.0	62.4

Right Turns	SBR
Adj Reference Time (s)	48.7
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	64.7

Intersection Summary			
Intersection Capacity Utilization	53.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	549	299	493	713	0	0	0	0	428	139	294
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	848	0	493	713	0	0	0	0	0	567	294
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.96	0.85
Saturated Flow (vph)	0	3426	0	3505	3618	0	0	0	0	0	1828	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	29.9	0.0	16.9	23.7	0.0			0.0			23.3
Adj Reference Time (s)	0.0	33.9	0.0	20.9	27.7	0.0			0.0			27.3
Permitted Option												
Adj Saturation A (vph)	0	1713		117	1809		0	0		0	149	
Reference Time A (s)	0.0	29.9		253.2	23.7		0.0	0.0		0.0	457.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		36.5	45.2	
Reference Time (s)		29.9			253.2			0.0			45.2	
Adj Reference Time (s)		33.9			257.2			8.0			49.2	
Split Option												
Ref Time Combined (s)	0.0	29.9		16.9	23.7		0.0	0.0		0.0	37.2	
Ref Time Seperate (s)	0.0	19.4		16.9	23.7		0.0	0.0		28.5	8.8	
Reference Time (s)	29.9	29.9		23.7	23.7		0.0	0.0		37.2	37.2	
Adj Reference Time (s)	33.9	33.9		27.7	27.7		0.0	0.0		41.2	41.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.8	NA	
Permitted Option (s)	257.2	49.2	
Split Option (s)	61.5	41.2	
Minimum (s)	54.8	41.2	96.0

Right Turns	SBR
Adj Reference Time (s)	27.3
Cross Thru Ref Time (s)	27.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	55.0

Intersection Summary			
Intersection Capacity Utilization	80.0%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	678	119	8	812	207	432	29	316	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	185	797	0	8	812	207	0	461	316	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3537	0	1805	3618	1615	0	1811	1615	0	0	0
Ped Intf Time (s)	0.0	0.1	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	6.3	27.1	0.0	0.5	26.9	16.3			23.7			0.0
Adj Reference Time (s)	10.3	31.1	0.0	8.0	30.9	20.3			27.8			0.0
Permitted Option												
Adj Saturation A (vph)	117	1768		120	1809		0	126		0	0	
Reference Time A (s)	95.0	27.1		8.0	26.9		0.0	439.1		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		36.7	38.5		0.0	0.0	
Reference Time (s)		95.0			26.9			38.5			0.0	
Adj Reference Time (s)		99.0			30.9			42.5			8.0	
Split Option												
Ref Time Combined (s)	6.3	27.1		0.5	26.9		0.0	30.5		0.0	0.0	
Ref Time Seperate (s)	6.3	23.1		0.5	26.9		28.7	1.8		0.0	0.0	
Reference Time (s)	27.1	27.1		26.9	26.9		30.5	30.5		0.0	0.0	
Adj Reference Time (s)	31.1	31.1		30.9	30.9		34.5	34.5		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.3	NA	
Permitted Option (s)	99.0	42.5	
Split Option (s)	62.1	34.5	
Minimum (s)	41.3	34.5	75.8

Right Turns	WBR	NBR
Adj Reference Time (s)	20.3	27.8
Cross Thru Ref Time (s)	34.5	31.1
Oncoming Left Ref Time (s)	10.3	0.0
Combined (s)	65.1	59.0

Intersection Summary			
Intersection Capacity Utilization	63.2%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	650	29	56	665	67	56	5	138	71	6	32
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	20	679	0	56	732	0	56	143	0	71	38	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.87	0.85
Saturated Flow (vph)	1805	3594	0	1805	3568	0	1805	1625	0	1805	1660	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.3	22.7	0.0	3.7	24.6	0.0	3.7	10.6	0.0	4.7	2.7	0.0
Adj Reference Time (s)	8.0	26.7	0.0	8.0	28.6	0.0	8.0	14.6	0.0	8.7	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1797		120	1784		120	1625		120	1660	
Reference Time A (s)	19.9	22.7		55.8	24.6		55.8	10.6		70.8	2.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1625		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		11.7	10.6		NA	NA	
Reference Time (s)		22.7			55.8			11.7			70.8	
Adj Reference Time (s)		26.7			59.8			15.7			74.8	
Split Option												
Ref Time Combined (s)	1.3	22.7		3.7	24.6		3.7	10.6		4.7	2.7	
Ref Time Seperate (s)	1.3	21.7		3.7	22.4		3.7	0.4		4.7	0.4	
Reference Time (s)	22.7	22.7		24.6	24.6		10.6	10.6		4.7	4.7	
Adj Reference Time (s)	26.7	26.7		28.6	28.6		14.6	14.6		8.7	8.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.6	23.3	
Permitted Option (s)	59.8	74.8	
Split Option (s)	55.3	23.3	
Minimum (s)	36.6	23.3	59.9

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	49.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	345	40	199	409	244	123	327	188	254	206	113
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	94	385	0	199	653	0	123	515	0	0	573	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.94	0.85	0.95	0.95	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3561	0	3505	3415	0	1805	3420	0	0	5149	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.2	13.0	0.0	6.8	23.1	0.0			0.0			0.0
Adj Reference Time (s)	8.0	17.0	0.0	10.8	27.3	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1781		117	1707		120	1710		0	172	
Reference Time A (s)	48.3	13.0		102.2	23.1		122.7	18.3		0.0	177.7	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		48.3			102.2			122.7			177.7	
Adj Reference Time (s)		52.3			106.2			126.7			181.7	
Split Option												
Ref Time Combined (s)	3.2	13.0		6.8	23.1		8.2	18.3		0.0	13.5	
Ref Time Seperate (s)	3.2	11.6		6.8	14.5		8.2	11.7		8.4	7.3	
Reference Time (s)	13.0	13.0		23.1	23.1		18.3	18.3		13.5	13.5	
Adj Reference Time (s)	17.0	17.0		27.3	27.3		23.6	23.6		19.1	19.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.3	NA	
Permitted Option (s)	106.2	181.7	
Split Option (s)	44.2	42.8	
Minimum (s)	35.3	42.8	78.1

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	65.1%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	456	95	39	676	18	242	64	55	16	34	63
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	80	551	0	39	694	0	242	119	0	0	50	63
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	0.93	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3524	0	1805	3604	0	1805	1768	0	0	1870	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.3	18.8	0.0	2.6	23.1	0.0			0.0			4.8
Adj Reference Time (s)	9.3	22.8	0.0	8.0	27.1	0.0			0.0			9.2
Permitted Option												
Adj Saturation A (vph)	120	1762		120	1802		120	1768		0	314	
Reference Time A (s)	79.8	18.8		38.9	23.1		241.3	8.1		0.0	19.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1768		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.1	8.1		9.1	11.2	
Reference Time (s)		79.8			38.9			24.1			11.2	
Adj Reference Time (s)		83.8			42.9			28.1			15.4	
Split Option												
Ref Time Combined (s)	5.3	18.8		2.6	23.1		16.1	8.1		0.0	3.2	
Ref Time Seperate (s)	5.3	15.6		2.6	22.5		16.1	4.4		1.1	2.1	
Reference Time (s)	18.8	18.8		23.1	23.1		16.1	16.1		3.2	3.2	
Adj Reference Time (s)	22.8	22.8		27.1	27.1		20.1	20.1		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.4	NA	
Permitted Option (s)	83.8	28.1	
Split Option (s)	49.9	28.5	
Minimum (s)	36.4	28.1	64.5

Right Turns	SBR
Adj Reference Time (s)	9.2
Cross Thru Ref Time (s)	27.1
Oncoming Left Ref Time (s)	20.1
Combined (s)	56.4

Intersection Summary			
Intersection Capacity Utilization	53.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	121	691	104	215	475	176	123	572	287	139	385	83
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	121	691	104	215	475	176	123	572	287	139	468	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3521	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	4.1	22.9	7.9	7.4	15.8	13.2	8.2	19.0	21.6	9.2	16.1	0.0
Adj Reference Time (s)	8.1	26.9	12.3	11.4	20.0	17.5	12.2	23.7	26.1	13.2	23.7	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1761	
Reference Time A (s)	62.1	22.9		110.4	15.8		122.7	19.0		138.6	16.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		62.1			110.4			122.7			138.6	
Adj Reference Time (s)		66.1			114.4			126.7			142.6	
Split Option												
Ref Time Combined (s)	4.1	22.9		7.4	15.8		8.2	19.0		9.2	16.1	
Ref Time Seperate (s)	4.1	22.9		7.4	15.8		8.2	19.0		9.2	13.3	
Reference Time (s)	22.9	22.9		15.8	15.8		19.0	19.0		16.1	16.1	
Adj Reference Time (s)	26.9	26.9		20.0	20.0		23.7	23.7		23.7	23.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	38.3	36.9	
Permitted Option (s)	114.4	142.6	
Split Option (s)	46.9	47.4	
Minimum (s)	38.3	36.9	75.2

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	12.3	17.5	26.1
Cross Thru Ref Time (s)	23.7	23.7	26.9
Oncoming Left Ref Time (s)	11.4	8.1	13.2
Combined (s)	47.4	49.3	66.3

Intersection Summary			
Intersection Capacity Utilization	62.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	721	99	31	600	10	136	67	93	22	54	7
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	1	820	0	31	610	0	136	160	0	22	61	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3552	0	1805	3609	0	1805	1734	0	1805	1867	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.1	27.7	0.0	2.1	20.3	0.0	9.0	11.2	0.0	1.5	3.9	0.0
Adj Reference Time (s)	8.0	31.7	0.0	8.0	24.3	0.0	13.0	15.5	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1776		120	1804		120	1734		120	1867	
Reference Time A (s)	1.0	27.7		30.9	20.3		135.6	11.2		21.9	3.9	
Adj Saturation B (vph	NA	NA		NA	NA		0	1734		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		17.0	11.2		NA	NA	
Reference Time (s)		27.7			30.9			17.0			21.9	
Adj Reference Time (s)		31.7			34.9			21.0			25.9	
Split Option												
Ref Time Combined (s)	0.1	27.7		2.1	20.3		9.0	11.2		1.5	3.9	
Ref Time Seperate (s)	0.1	24.4		2.1	20.0		9.0	4.8		1.5	3.5	
Reference Time (s)	27.7	27.7		20.3	20.3		11.2	11.2		3.9	3.9	
Adj Reference Time (s)	31.7	31.7		24.3	24.3		15.5	15.5		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.7	23.5	
Permitted Option (s)	34.9	25.9	
Split Option (s)	56.0	23.5	
Minimum (s)	34.9	23.5	58.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.7%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	153	30	193	46	75	101	240	543	74	78	338	242
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	183	193	0	121	101	240	617	0	78	580	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.98	0.85	0.95	0.98	0.85	0.95	0.94	0.85
Saturated Flow (vph)	0	1821	1615	0	1864	1615	1805	3553	0	1805	3391	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.7	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			14.9			10.9	16.0	20.9	0.0	5.2	21.2	0.0
Adj Reference Time (s)			19.5			20.9	20.0	24.9	0.0	9.2	25.2	0.0
Permitted Option												
Adj Saturation A (vph)	0	137		0	270		120	1776		120	1696	
Reference Time A (s)	0.0	160.0		0.0	53.8		239.3	20.9		77.8	21.2	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	18.2	20.1		11.1	15.8		NA	NA		NA	NA	
Reference Time (s)		20.1			15.8			239.3			77.8	
Adj Reference Time (s)		24.1			22.6			243.3			81.8	
Split Option												
Ref Time Combined (s)	0.0	12.1		0.0	7.8		16.0	20.9		5.2	21.2	
Ref Time Seperate (s)	10.2	1.9		3.1	4.7		16.0	18.4		5.2	12.6	
Reference Time (s)	12.1	12.1		7.8	7.8		20.9	20.9		21.2	21.2	
Adj Reference Time (s)	17.1	17.1		19.8	19.8		24.9	24.9		25.2	25.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	45.1	
Permitted Option (s)	24.1	243.3	
Split Option (s)	36.9	50.1	
Minimum (s)	24.1	45.1	69.2

Right Turns	EBR	WBR
Adj Reference Time (s)	19.5	20.9
Cross Thru Ref Time (s)	25.2	24.9
Oncoming Left Ref Time (s)	19.8	17.1
Combined (s)	64.5	62.8

Intersection Summary			
Intersection Capacity Utilization	57.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	573	9	105	476	0	0	0	0	265	0	219
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	582	0	105	476	0	0	0	0	0	265	219
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3609	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	19.4	0.0	7.0	15.8	0.0			0.0			16.9
Adj Reference Time (s)	0.0	23.4	0.0	11.0	19.8	0.0			0.0			21.4
Permitted Option												
Adj Saturation A (vph)	0	1805		120	1809		0	0		0	120	
Reference Time A (s)	0.0	19.4		104.7	15.8		0.0	0.0		0.0	264.3	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		25.6	25.6	
Reference Time (s)		19.4			104.7			0.0			25.6	
Adj Reference Time (s)		23.4			108.7			8.0			29.6	
Split Option												
Ref Time Combined (s)	0.0	19.4		7.0	15.8		0.0	0.0		0.0	17.6	
Ref Time Seperate (s)	0.0	19.1		7.0	15.8		0.0	0.0		17.6	0.0	
Reference Time (s)	19.4	19.4		15.8	15.8		0.0	0.0		17.6	17.6	
Adj Reference Time (s)	23.4	23.4		19.8	19.8		0.0	0.0		22.0	22.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.3	NA	
Permitted Option (s)	108.7	29.6	
Split Option (s)	43.1	22.0	
Minimum (s)	34.3	22.0	56.3

Right Turns	SBR
Adj Reference Time (s)	21.4
Cross Thru Ref Time (s)	19.8
Oncoming Left Ref Time (s)	0.0
Combined (s)	41.2

Intersection Summary			
Intersection Capacity Utilization	46.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	683	0	0	543	205	24	2	245	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	155	683	0	0	748	0	0	271	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.96	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3469	0	0	3113	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.3	22.7	0.0	0.0	26.1	0.0			0.0			0.0
Adj Reference Time (s)	14.3	26.7	0.0	0.0	30.1	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1734		0	298		0	0	
Reference Time A (s)	154.6	22.7		0.0	26.1		0.0	35.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		9.6	14.5		NA	NA	
Reference Time (s)		154.6			26.1			14.5			0.0	
Adj Reference Time (s)		158.6			30.1			18.5			8.0	
Split Option												
Ref Time Combined (s)	10.3	22.7		0.0	26.1		0.0	10.4		0.0	0.0	
Ref Time Seperate (s)	10.3	22.7		0.0	19.0		1.6	0.1		0.0	0.0	
Reference Time (s)	22.7	22.7		26.1	26.1		10.4	10.4		0.0	0.0	
Adj Reference Time (s)	26.7	26.7		30.1	30.1		14.4	14.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	44.4	NA	
Permitted Option (s)	158.6	18.5	
Split Option (s)	56.7	14.4	
Minimum (s)	44.4	14.4	58.8

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	49.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	439	11	487	0	0	0	0	72	0	561
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	915	0	11	487	0	0	0	0	72	0	561
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.93	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3357	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	32.7	0.0	0.7	30.8	0.0	0.0	0.0	0.0	4.8	0.0	41.7
Adj Reference Time (s)	0.0	36.7	0.0	8.0	34.8	0.0	0.0	0.0	0.0	8.8	0.0	45.7
Permitted Option												
Adj Saturation A (vph)	0	1679		120	1900		0	0		120	0	
Reference Time A (s)	0.0	32.7		11.0	30.8		0.0	0.0		71.8	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.8	0.0	
Reference Time (s)		32.7			30.8			0.0			12.8	
Adj Reference Time (s)		36.7			34.8			8.0			16.8	
Split Option												
Ref Time Combined (s)	0.0	32.7		0.7	30.8		0.0	0.0		4.8	0.0	
Ref Time Seperate (s)	0.0	17.0		0.7	30.8		0.0	0.0		4.8	0.0	
Reference Time (s)	32.7	32.7		30.8	30.8		0.0	0.0		4.8	4.8	
Adj Reference Time (s)	36.7	36.7		34.8	34.8		0.0	0.0		8.8	8.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	44.7	8.8	
Permitted Option (s)	36.7	16.8	
Split Option (s)	71.5	8.8	
Minimum (s)	36.7	8.8	45.5

Right Turns	SBR
Adj Reference Time (s)	45.7
Cross Thru Ref Time (s)	34.8
Oncoming Left Ref Time (s)	0.0
Combined (s)	80.4

Intersection Summary			
Intersection Capacity Utilization	67.0%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	192	0	0	127	154	373	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	388	192	0	0	127	154	373	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	13.3	12.1	0.0	0.0	8.0	11.7	24.8	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	17.3	16.1	0.0	0.0	12.0	15.7	28.8	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	199.2	12.1		0.0	8.0		372.0	0.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1647		0	0	
Reference Time B (s)	NA	NA		NA	NA		32.8	0.9		0.0	0.0	
Reference Time (s)		199.2			8.0			32.8			0.0	
Adj Reference Time (s)		203.2			12.0			36.8			8.4	
Split Option												
Ref Time Combined (s)	13.3	12.1		0.0	8.0		24.8	0.9		0.0	0.0	
Ref Time Seperate (s)	13.3	12.1		0.0	8.0		24.8	0.3		0.0	0.0	
Reference Time (s)	13.3	13.3		8.0	8.0		24.8	24.8		0.0	0.0	
Adj Reference Time (s)	17.3	17.3		12.0	12.0		28.8	28.8		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	29.3	28.8	
Permitted Option (s)	203.2	36.8	
Split Option (s)	29.3	37.2	
Minimum (s)	29.3	28.8	58.1

Right Turns	WBR
Adj Reference Time (s)	15.7
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	17.3
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	786	262	3	229	0	0	0	0	4	0	949
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1048	0	3	229	0	0	0	0	0	320	633
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1829	0	1805	1900	0	0	0	0	0	1618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	68.8	0.0	0.2	14.5	0.0			0.0			47.0
Adj Reference Time (s)	0.0	72.8	0.0	8.0	18.5	0.0			0.0			51.0
Permitted Option												
Adj Saturation A (vph)	0	1829		120	1900		0	0		0	1375	
Reference Time A (s)	0.0	68.8		3.0	14.5		0.0	0.0		0.0	28.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.3	31.8	
Reference Time (s)		68.8			14.5			0.0			28.0	
Adj Reference Time (s)		72.8			18.5			8.0			32.0	
Split Option												
Ref Time Combined (s)	0.0	68.8		0.2	14.5		0.0	0.0		0.0	23.8	
Ref Time Seperate (s)	0.0	51.6		0.2	14.5		0.0	0.0		0.3	0.0	
Reference Time (s)	68.8	68.8		14.5	14.5		0.0	0.0		23.8	23.8	
Adj Reference Time (s)	72.8	72.8		18.5	18.5		0.0	0.0		27.8	27.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	80.8	NA	
Permitted Option (s)	72.8	32.0	
Split Option (s)	91.2	27.8	
Minimum (s)	72.8	27.8	100.5

Right Turns	SBR
Adj Reference Time (s)	51.0
Cross Thru Ref Time (s)	18.5
Oncoming Left Ref Time (s)	0.0
Combined (s)	69.5

Intersection Summary			
Intersection Capacity Utilization	83.8%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	388	529	9	482	0	0	0	0	5	0	485
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	388	529	0	491	0	0	0	0	5	0	485
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1898	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			39.3			0.0	0.0	0.0	0.0	0.3	0.0	36.0
Adj Reference Time (s)			43.3			0.0	0.0	0.0	0.0	8.0	0.0	40.0
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1507		0	0		120	0	
Reference Time A (s)	0.0	24.5		0.0	39.1		0.0	0.0		5.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		8.3	0.0	
Reference Time (s)		24.5			39.1			0.0			5.0	
Adj Reference Time (s)		28.5			43.1			8.0			9.0	
Split Option												
Ref Time Combined (s)	0.0	24.5		0.0	31.0		0.0	0.0		0.3	0.0	
Ref Time Seperate (s)	0.0	24.5		0.6	30.4		0.0	0.0		0.3	0.0	
Reference Time (s)	24.5	24.5		31.0	31.0		0.0	0.0		0.3	0.3	
Adj Reference Time (s)	28.5	28.5		35.0	35.0		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	43.1	9.0	
Split Option (s)	63.5	8.0	
Minimum (s)	43.1	8.0	51.1

Right Turns	EBR	SBR
Adj Reference Time (s)	43.3	40.0
Cross Thru Ref Time (s)	0.0	35.0
Oncoming Left Ref Time (s)	35.0	0.0
Combined (s)	78.3	75.1

Intersection Summary			
Intersection Capacity Utilization	65.3%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1068	541	47	703	0	0	0	0	69	0	879
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1068	541	47	703	0	0	0	0	0	69	879
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	18.6	40.3	3.1	23.3	0.0			0.0			36.9
Adj Reference Time (s)	0.0	22.6	44.3	8.0	27.3	0.0			0.0			40.9
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	18.6		46.9	23.3		0.0	0.0		0.0	34.4	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		10.3	10.3	
Reference Time (s)		18.6			46.9			0.0			10.3	
Adj Reference Time (s)		22.6			50.9			8.0			14.3	
Split Option												
Ref Time Combined (s)	0.0	18.6		3.1	23.3		0.0	0.0		0.0	2.3	
Ref Time Seperate (s)	0.0	18.6		3.1	23.3		0.0	0.0		2.3	0.0	
Reference Time (s)	18.6	18.6		23.3	23.3		0.0	0.0		2.3	2.3	
Adj Reference Time (s)	22.6	22.6		27.3	27.3		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	30.6	NA	
Permitted Option (s)	50.9	14.3	
Split Option (s)	49.9	8.0	
Minimum (s)	30.6	8.0	38.6

Right Turns	EBR	SBR
Adj Reference Time (s)	44.3	40.9
Cross Thru Ref Time (s)	8.0	27.3
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	60.3	68.2

Intersection Summary			
Intersection Capacity Utilization	56.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	936	202	0	0	272	195	471	5	52	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	936	202	0	0	272	195	0	476	52	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	32.0	6.7	0.0	0.0	9.0	14.6			4.0			0.0
Adj Reference Time (s)	36.0	10.7	0.0	0.0	13.3	18.7			8.4			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	242		0	0	
Reference Time A (s)	480.6	6.7		0.0	9.0		0.0	235.6		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		23.7	23.8		0.0	0.0	
Reference Time (s)		480.6			9.0			23.8			0.0	
Adj Reference Time (s)		484.6			13.3			27.8			8.0	
Split Option												
Ref Time Combined (s)	32.0	6.7		0.0	9.0		0.0	15.8		0.0	0.0	
Ref Time Seperate (s)	32.0	6.7		0.0	9.0		15.7	0.3		0.0	0.0	
Reference Time (s)	32.0	32.0		9.0	9.0		15.8	15.8		0.0	0.0	
Adj Reference Time (s)	36.0	36.0		13.3	13.3		19.8	19.8		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	49.3	NA	
Permitted Option (s)	484.6	27.8	
Split Option (s)	49.3	19.8	
Minimum (s)	49.3	19.8	69.1

Right Turns	WBR	NBR
Adj Reference Time (s)	18.7	8.4
Cross Thru Ref Time (s)	19.8	10.7
Oncoming Left Ref Time (s)	36.0	0.0
Combined (s)	74.5	19.1

Intersection Summary			
Intersection Capacity Utilization	62.1%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	68	78	458	49	251	71	574	82	424	386	74
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	96	146	0	0	507	251	71	656	0	424	386	74
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3328	0	0	3628	1615	1805	3550	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			18.7	4.7	22.2	0.0	28.2	12.8	5.6
Adj Reference Time (s)			0.0			22.7	8.7	26.2	0.0	32.2	16.9	10.0
Permitted Option												
Adj Saturation A (vph)	120	1664		0	259		120	1775		120	1809	
Reference Time A (s)	95.7	5.3		0.0	235.1		70.8	22.2		422.8	12.8	
Adj Saturation B (vph	0	3328		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	14.4	5.3		NA	NA		NA	NA		NA	NA	
Reference Time (s)		14.4			235.1			70.8			422.8	
Adj Reference Time (s)		18.4			239.1			74.8			426.8	
Split Option												
Ref Time Combined (s)	6.4	5.3		0.0	16.8		4.7	22.2		28.2	12.8	
Ref Time Seperate (s)	6.4	2.5		15.2	3.1		4.7	19.4		28.2	12.8	
Reference Time (s)	6.4	6.4		16.8	16.8		22.2	22.2		28.2	28.2	
Adj Reference Time (s)	10.4	10.4		20.8	20.8		26.2	26.2		32.2	32.2	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	58.4	
Permitted Option (s)	239.1	426.8	
Split Option (s)	31.2	58.4	
Minimum (s)	31.2	58.4	89.5

Right Turns	WBR	SBR
Adj Reference Time (s)	22.7	10.0
Cross Thru Ref Time (s)	26.2	20.8
Oncoming Left Ref Time (s)	10.4	8.7
Combined (s)	59.2	39.5

Intersection Summary			
Intersection Capacity Utilization	74.6%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	944	32	22	1	47	6	11	7	1	1	6	480
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	944	54	0	1	53	0	0	19	0	0	7	480
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	1784	0	1805	1868	0	0	1830	0	0	1886	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	62.8	3.6	0.0	0.1	3.4	0.0			0.0			35.7
Adj Reference Time (s)	66.8	8.0	0.0	8.0	8.0	0.0			0.0			39.7
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1868		0	185		0	1890	
Reference Time A (s)	941.4	3.6		1.0	3.4		0.0	12.3		0.0	0.4	
Adj Saturation B (vph	0	1784		0	1868		0	0		0	0	
Reference Time B (s)	70.8	3.6		8.1	3.4		8.7	9.2		8.1	8.4	
Reference Time (s)		70.8			3.4			9.2			0.4	
Adj Reference Time (s)		74.8			8.0			13.2			8.0	
Split Option												
Ref Time Combined (s)	62.8	3.6		0.1	3.4		0.0	1.2		0.0	0.4	
Ref Time Seperate (s)	62.8	2.2		0.1	3.0		0.7	0.5		0.1	0.4	
Reference Time (s)	62.8	62.8		3.4	3.4		1.2	1.2		0.4	0.4	
Adj Reference Time (s)	66.8	66.8		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	74.8	NA	
Permitted Option (s)	74.8	13.2	
Split Option (s)	74.8	16.0	
Minimum (s)	74.8	13.2	88.0

Right Turns	SBR
Adj Reference Time (s)	39.7
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	55.7

Intersection Summary			
Intersection Capacity Utilization	73.3%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	611	456	423	817	0	0	0	0	139	140	348
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1067	0	423	817	0	0	0	0	0	279	348
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	3386	0	3505	3618	0	0	0	0	0	1853	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	38.0	0.0	14.5	27.1	0.0			0.0			27.3
Adj Reference Time (s)	0.0	42.0	0.0	18.5	31.1	0.0			0.0			31.3
Permitted Option												
Adj Saturation A (vph)	0	1693		117	1809		0	0		0	212	
Reference Time A (s)	0.0	38.0		217.2	27.1		0.0	0.0		0.0	157.6	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		17.2	26.1	
Reference Time (s)		38.0			217.2			0.0			26.1	
Adj Reference Time (s)		42.0			221.2			8.0			30.1	
Split Option												
Ref Time Combined (s)	0.0	38.0		14.5	27.1		0.0	0.0		0.0	18.1	
Ref Time Seperate (s)	0.0	21.9		14.5	27.1		0.0	0.0		9.2	8.8	
Reference Time (s)	38.0	38.0		27.1	27.1		0.0	0.0		18.1	18.1	
Adj Reference Time (s)	42.0	42.0		31.1	31.1		0.0	0.0		22.7	22.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	60.5	NA	
Permitted Option (s)	221.2	30.1	
Split Option (s)	73.1	22.7	
Minimum (s)	60.5	22.7	83.2

Right Turns	SBR
Adj Reference Time (s)	31.3
Cross Thru Ref Time (s)	31.1
Oncoming Left Ref Time (s)	0.0
Combined (s)	62.4

Intersection Summary			
Intersection Capacity Utilization	69.4%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	312	407	24	3	709	234	538	83	270	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	312	431	0	3	709	234	0	621	270	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.96	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3587	0	1805	3618	1615	0	1818	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.7	14.5	0.0	0.2	23.5	18.3			20.3			0.0
Adj Reference Time (s)	14.7	18.5	0.0	8.0	27.5	22.3			24.6			0.0
Permitted Option												
Adj Saturation A (vph)	117	1794		120	1809		0	134		0	0	
Reference Time A (s)	160.2	14.5		3.0	23.5		0.0	558.1		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		43.8	49.0		0.0	0.0	
Reference Time (s)		160.2			23.5			49.0			0.0	
Adj Reference Time (s)		164.2			27.5			53.0			8.0	
Split Option												
Ref Time Combined (s)	10.7	14.5		0.2	23.5		0.0	41.0		0.0	0.0	
Ref Time Seperate (s)	10.7	13.7		0.2	23.5		35.8	5.2		0.0	0.0	
Reference Time (s)	14.5	14.5		23.5	23.5		41.0	41.0		0.0	0.0	
Adj Reference Time (s)	18.5	18.5		27.5	27.5		45.0	45.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.2	NA	
Permitted Option (s)	164.2	53.0	
Split Option (s)	46.0	45.0	
Minimum (s)	42.2	45.0	87.2

Right Turns	WBR	NBR
Adj Reference Time (s)	22.3	24.6
Cross Thru Ref Time (s)	45.0	18.5
Oncoming Left Ref Time (s)	14.7	0.0
Combined (s)	82.0	43.1

Intersection Summary			
Intersection Capacity Utilization	72.7%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	725	78	139	882	72	50	4	86	55	2	22
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	21	803	0	139	954	0	50	90	0	55	24	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.86	0.85
Saturated Flow (vph)	1805	3565	0	1805	3577	0	1805	1628	0	1805	1639	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.4	27.0	0.0	9.2	32.0	0.0	3.3	6.6	0.0	3.7	1.8	0.0
Adj Reference Time (s)	8.0	31.0	0.0	13.2	36.0	0.0	8.0	10.6	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1782		120	1788		120	1628		120	1639	
Reference Time A (s)	20.9	27.0		138.6	32.0		49.9	6.6		54.8	1.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	1628		0	1639	
Reference Time B (s)	NA	NA		NA	NA		11.3	6.6		11.7	1.8	
Reference Time (s)		27.0			138.6			11.3			11.7	
Adj Reference Time (s)		31.0			142.6			15.3			15.7	
Split Option												
Ref Time Combined (s)	1.4	27.0		9.2	32.0		3.3	6.6		3.7	1.8	
Ref Time Seperate (s)	1.4	24.4		9.2	29.6		3.3	0.3		3.7	0.1	
Reference Time (s)	27.0	27.0		32.0	32.0		6.6	6.6		3.7	3.7	
Adj Reference Time (s)	31.0	31.0		36.0	36.0		10.6	10.6		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	44.3	18.6	
Permitted Option (s)	142.6	15.7	
Split Option (s)	67.0	18.6	
Minimum (s)	44.3	15.7	59.9

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	49.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	148	471	79	238	459	212	131	221	141	440	229	83
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	148	550	0	238	671	0	131	362	0	0	752	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.95	0.85	0.95	0.94	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3540	0	3505	3446	0	1805	3406	0	0	5180	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.3	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.1	18.6	0.0	8.1	23.5	0.0			0.0			0.0
Adj Reference Time (s)	9.1	22.6	0.0	12.1	27.6	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1770		117	1723		120	1703		0	173	
Reference Time A (s)	76.0	18.6		122.2	23.5		130.6	13.0		0.0	305.8	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		76.0			122.2			130.6			305.8	
Adj Reference Time (s)		80.0			126.2			134.6			309.8	
Split Option												
Ref Time Combined (s)	5.1	18.6		8.1	23.5		8.7	13.0		0.0	17.5	
Ref Time Seperate (s)	5.1	16.0		8.1	16.1		8.7	8.0		14.6	8.0	
Reference Time (s)	18.6	18.6		23.5	23.5		13.0	13.0		17.5	17.5	
Adj Reference Time (s)	22.6	22.6		27.6	27.6		19.2	19.2		22.7	22.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	36.7	NA	
Permitted Option (s)	126.2	309.8	
Split Option (s)	50.3	41.8	
Minimum (s)	36.7	41.8	78.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	65.4%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	644	227	68	572	25	135	39	44	13	69	51
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	51	871	0	68	597	0	135	83	0	0	82	51
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.99	0.85	0.95	0.92	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3476	0	1805	3595	0	1805	1749	0	0	1885	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.4	30.1	0.0	4.5	20.0	0.0			0.0			3.9
Adj Reference Time (s)	8.0	34.1	0.0	8.5	24.0	0.0			0.0			8.4
Permitted Option												
Adj Saturation A (vph)	120	1738		120	1797		120	1749		0	557	
Reference Time A (s)	50.9	30.1		67.8	20.0		134.6	5.8		0.0	17.7	
Adj Saturation B (vph	NA	NA		NA	NA		0	1749		0	0	
Reference Time B (s)	NA	NA		NA	NA		17.0	5.8		8.9	13.2	
Reference Time (s)		50.9			67.8			17.0			13.2	
Adj Reference Time (s)		54.9			71.8			21.0			17.3	
Split Option												
Ref Time Combined (s)	3.4	30.1		4.5	20.0		9.0	5.8		0.0	5.2	
Ref Time Seperate (s)	3.4	22.3		4.5	19.1		9.0	2.7		0.9	4.4	
Reference Time (s)	30.1	30.1		20.0	20.0		9.0	9.0		5.2	5.2	
Adj Reference Time (s)	34.1	34.1		24.0	24.0		13.2	13.2		9.6	9.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.6	NA	
Permitted Option (s)	71.8	21.0	
Split Option (s)	58.1	22.8	
Minimum (s)	42.6	21.0	63.6

Right Turns	SBR
Adj Reference Time (s)	8.4
Cross Thru Ref Time (s)	24.0
Oncoming Left Ref Time (s)	13.2
Combined (s)	45.5

Intersection Summary			
Intersection Capacity Utilization	53.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	622	153	268	594	114	79	425	239	146	494	89
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	82	622	153	268	594	114	79	425	239	146	583	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3535	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	2.8	20.6	11.5	9.2	19.7	8.6	5.3	14.1	18.0	9.7	20.0	0.0
Adj Reference Time (s)	8.0	24.7	15.8	13.2	23.8	13.0	9.3	19.1	22.8	13.7	26.6	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1767	
Reference Time A (s)	42.1	20.6		137.6	19.7		78.8	14.1		145.6	20.0	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		42.1			137.6			78.8			145.6	
Adj Reference Time (s)		46.1			141.6			82.8			149.6	
Split Option												
Ref Time Combined (s)	2.8	20.6		9.2	19.7		5.3	14.1		9.7	20.0	
Ref Time Seperate (s)	2.8	20.6		9.2	19.7		5.3	14.1		9.7	16.9	
Reference Time (s)	20.6	20.6		19.7	19.7		14.1	14.1		20.0	20.0	
Adj Reference Time (s)	24.7	24.7		23.8	23.8		19.1	19.1		26.6	26.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	37.9	35.8	
Permitted Option (s)	141.6	149.6	
Split Option (s)	48.5	45.7	
Minimum (s)	37.9	35.8	73.7

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	15.8	13.0	22.8
Cross Thru Ref Time (s)	26.6	19.1	24.7
Oncoming Left Ref Time (s)	13.2	8.0	13.7
Combined (s)	55.6	40.2	61.2

Intersection Summary			
Intersection Capacity Utilization	61.4%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	805	82	41	638	16	62	61	45	19	62	3
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	7	887	0	41	654	0	62	106	0	19	65	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3567	0	1805	3604	0	1805	1779	0	1805	1887	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.5	29.8	0.0	2.7	21.8	0.0	4.1	7.3	0.0	1.3	4.1	0.0
Adj Reference Time (s)	8.0	33.8	0.0	8.0	25.8	0.0	8.1	11.8	0.0	8.0	8.1	0.0
Permitted Option												
Adj Saturation A (vph)	120	1784		120	1802		120	1779		120	1887	
Reference Time A (s)	7.0	29.8		40.9	21.8		61.8	7.3		18.9	4.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1779		0	1887	
Reference Time B (s)	NA	NA		NA	NA		12.1	7.3		9.3	4.1	
Reference Time (s)		29.8			40.9			12.1			9.3	
Adj Reference Time (s)		33.8			44.9			16.4			13.3	
Split Option												
Ref Time Combined (s)	0.5	29.8		2.7	21.8		4.1	7.3		1.3	4.1	
Ref Time Seperate (s)	0.5	27.1		2.7	21.2		4.1	4.2		1.3	3.9	
Reference Time (s)	29.8	29.8		21.8	21.8		7.3	7.3		4.1	4.1	
Adj Reference Time (s)	33.8	33.8		25.8	25.8		11.8	11.8		8.1	8.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.8	19.8	
Permitted Option (s)	44.9	16.4	
Split Option (s)	59.6	20.0	
Minimum (s)	41.8	16.4	58.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	23	173	51	23	64	148	427	45	51	509	99
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	131	173	0	74	64	148	472	0	51	608	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.97	0.85	0.95	0.99	0.85	0.95	0.98	0.85
Saturated Flow (vph)	0	1822	1615	0	1835	1615	1805	3566	0	1805	3529	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.3	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			13.4			8.2	9.8	15.9	0.0	3.4	20.9	0.0
Adj Reference Time (s)			18.2			19.9	13.8	19.9	0.0	8.0	24.9	0.0
Permitted Option												
Adj Saturation A (vph)	0	139		0	160		120	1783		120	1765	
Reference Time A (s)	0.0	113.3		0.0	55.4		147.6	15.9		50.9	20.9	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	15.2	16.6		11.4	12.8		NA	NA		NA	NA	
Reference Time (s)		16.6			12.8			147.6			50.9	
Adj Reference Time (s)		21.1			21.5			151.6			54.9	
Split Option												
Ref Time Combined (s)	0.0	8.6		0.0	4.8		9.8	15.9		3.4	20.9	
Ref Time Seperate (s)	7.2	1.5		3.4	1.5		9.8	14.4		3.4	17.6	
Reference Time (s)	8.6	8.6		4.8	4.8		15.9	15.9		20.9	20.9	
Adj Reference Time (s)	14.0	14.0		18.8	18.8		19.9	19.9		24.9	24.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	38.8	
Permitted Option (s)	21.5	151.6	
Split Option (s)	32.8	44.8	
Minimum (s)	21.5	38.8	60.3

Right Turns	EBR	WBR
Adj Reference Time (s)	18.2	19.9
Cross Thru Ref Time (s)	24.9	19.9
Oncoming Left Ref Time (s)	18.8	14.0
Combined (s)	61.9	53.9

Intersection Summary			
Intersection Capacity Utilization	51.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Appendix I

Analysis Worksheets for
Cumulative (2035) Conditions

Intersection Capacity Utilization
1: SR-135 SB On Ramp/SR-135 SB Off Ramp & E Clark Ave

02/03/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	601	20	171	418	0	0	0	0	154	0	296
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	621	0	171	418	0	0	0	0	0	154	296
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3600	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	20.7	0.0	11.4	13.9	0.0			0.0			22.6
Adj Reference Time (s)	0.0	24.7	0.0	15.4	17.9	0.0			0.0			26.6
Permitted Option												
Adj Saturation A (vph)	0	1800		120	1809		0	0		0	120	
Reference Time A (s)	0.0	20.7		170.5	13.9		0.0	0.0		0.0	153.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		18.2	18.2	
Reference Time (s)		20.7			170.5			0.0			18.2	
Adj Reference Time (s)		24.7			174.5			8.0			22.5	
Split Option												
Ref Time Combined (s)	0.0	20.7		11.4	13.9		0.0	0.0		0.0	10.2	
Ref Time Seperate (s)	0.0	20.0		11.4	13.9		0.0	0.0		10.2	0.0	
Reference Time (s)	20.7	20.7		13.9	13.9		0.0	0.0		10.2	10.2	
Adj Reference Time (s)	24.7	24.7		17.9	17.9		0.0	0.0		15.7	15.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.1	NA	
Permitted Option (s)	174.5	22.5	
Split Option (s)	42.6	15.7	
Minimum (s)	40.1	15.7	55.8

Right Turns	SBR
Adj Reference Time (s)	26.6
Cross Thru Ref Time (s)	17.9
Oncoming Left Ref Time (s)	0.0
Combined (s)	44.5

Intersection Summary			
Intersection Capacity Utilization	46.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	206	535	0	0	585	403	5	1	95	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	206	535	0	0	988	0	0	101	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.94	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3396	0	0	3100	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.3	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	13.7	17.7	0.0	0.0	35.2	0.0			0.0			0.0
Adj Reference Time (s)	17.7	21.7	0.0	0.0	39.2	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1698		0	547		0	0	
Reference Time A (s)	205.4	17.7		0.0	35.2		0.0	8.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		0	0	
Reference Time B (s)	NA	NA		NA	NA		8.3	7.9		0.0	0.0	
Reference Time (s)		205.4			35.2			8.3			0.0	
Adj Reference Time (s)		209.4			39.2			12.3			8.0	
Split Option												
Ref Time Combined (s)	13.7	17.7		0.0	35.2		0.0	3.9		0.0	0.0	
Ref Time Seperate (s)	13.7	17.7		0.0	20.9		0.3	0.0		0.0	0.0	
Reference Time (s)	17.7	17.7		35.2	35.2		3.9	3.9		0.0	0.0	
Adj Reference Time (s)	21.7	21.7		39.2	39.2		8.0	8.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	56.9	NA	
Permitted Option (s)	209.4	12.3	
Split Option (s)	60.9	8.0	
Minimum (s)	56.9	8.0	64.9

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	54.1%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	699	219	10	122	0	0	0	0	131	0	379
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	919	0	10	122	0	0	0	0	131	0	379
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3488	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			0.0	0.0	0.0	0.0	8.7	0.0	28.2
Adj Reference Time (s)			0.0			0.0	0.0	0.0	0.0	12.7	0.0	32.2
Permitted Option												
Adj Saturation A (vph)	0	1692		120	1900		0	0		120	0	
Reference Time A (s)	0.0	32.4		10.0	7.7		0.0	0.0		130.6	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		16.7	0.0	
Reference Time (s)		32.4			10.0			0.0			16.7	
Adj Reference Time (s)		36.4			14.0			8.0			20.7	
Split Option												
Ref Time Combined (s)	0.0	31.6		0.7	7.7		0.0	0.0		8.7	0.0	
Ref Time Seperate (s)	0.1	24.0		0.7	7.7		0.0	0.0		8.7	0.0	
Reference Time (s)	31.6	31.6		7.7	7.7		0.0	0.0		8.7	8.7	
Adj Reference Time (s)	35.6	35.6		11.7	11.7		0.0	0.0		12.7	12.7	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	12.7	
Permitted Option (s)	36.4	20.7	
Split Option (s)	47.3	12.7	
Minimum (s)	36.4	12.7	49.2

Right Turns	SBR
Adj Reference Time (s)	32.2
Cross Thru Ref Time (s)	11.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	43.9

Intersection Summary			
Intersection Capacity Utilization	41.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	225	0	0	89	129	43	1	8	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	540	225	0	0	89	129	43	9	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.87	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1647	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	18.5	14.2	0.0	0.0	5.6	9.8	2.9	0.9	0.0	0.0	0.0	0.0
Adj Reference Time (s)	22.5	18.2	0.0	0.0	9.6	13.8	8.0	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1647		0	0	
Reference Time A (s)	277.3	14.2		0.0	5.6		42.9	0.9		0.0	0.0	
Adj Saturation B (vph	0	1900		NA	NA		0	1647		0	0	
Reference Time B (s)	26.5	14.2		NA	NA		10.9	0.9		0.0	0.0	
Reference Time (s)		26.5			5.6			10.9			0.0	
Adj Reference Time (s)		30.5			9.6			20.0			8.4	
Split Option												
Ref Time Combined (s)	18.5	14.2		0.0	5.6		2.9	0.9		0.0	0.0	
Ref Time Seperate (s)	18.5	14.2		0.0	5.6		2.9	0.3		0.0	0.0	
Reference Time (s)	18.5	18.5		5.6	5.6		2.9	2.9		0.0	0.0	
Adj Reference Time (s)	22.5	22.5		9.6	9.6		20.0	20.0		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.1	20.0	
Permitted Option (s)	30.5	20.0	
Split Option (s)	32.1	28.4	
Minimum (s)	30.5	20.0	50.5

Right Turns	WBR
Adj Reference Time (s)	13.8
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	22.5
Combined (s)	56.3

Intersection Summary			
Intersection Capacity Utilization	46.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1132	108	6	104	0	0	0	0	8	6	796
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1240	0	6	104	0	0	0	0	0	279	531
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.86	0.85
Saturated Flow (vph)	0	1875	0	1805	1900	0	0	0	0	0	1627	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	79.4	0.0	0.4	6.6	0.0			0.0			39.4
Adj Reference Time (s)	0.0	83.4	0.0	8.0	10.6	0.0			0.0			43.4
Permitted Option												
Adj Saturation A (vph)	0	1875		120	1900		0	0		0	1156	
Reference Time A (s)	0.0	79.4		6.0	6.6		0.0	0.0		0.0	29.0	
Adj Saturation B (vph	0	1875		NA	NA		NA	NA		0	0	
Reference Time B (s)	0.0	79.4		NA	NA		NA	NA		8.5	28.6	
Reference Time (s)		79.4			6.6			0.0			28.6	
Adj Reference Time (s)		83.4			10.6			8.0			32.6	
Split Option												
Ref Time Combined (s)	0.0	79.4		0.4	6.6		0.0	0.0		0.0	20.6	
Ref Time Seperate (s)	0.0	72.4		0.4	6.6		0.0	0.0		0.5	0.4	
Reference Time (s)	79.4	79.4		6.6	6.6		0.0	0.0		20.6	20.6	
Adj Reference Time (s)	83.4	83.4		10.6	10.6		0.0	0.0		24.6	24.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	91.4	NA	
Permitted Option (s)	83.4	32.6	
Split Option (s)	93.9	24.6	
Minimum (s)	83.4	24.6	108.0

Right Turns	SBR
Adj Reference Time (s)	43.4
Cross Thru Ref Time (s)	10.6
Oncoming Left Ref Time (s)	0.0
Combined (s)	54.0

Intersection Summary			
Intersection Capacity Utilization	90.0%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	523	381	6	300	0	0	0	0	18	0	517
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	523	381	0	306	0	0	0	0	18	0	517
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1898	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			28.3			0.0	0.0	0.0	0.0	1.2	0.0	38.4
Adj Reference Time (s)			32.3			0.0	0.0	0.0	0.0	8.0	0.0	42.4
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1485		0	0		120	0	
Reference Time A (s)	0.0	33.0		0.0	24.7		0.0	0.0		18.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		9.2	0.0	
Reference Time (s)		33.0			24.7			0.0			9.2	
Adj Reference Time (s)		37.0			28.7			8.0			13.2	
Split Option												
Ref Time Combined (s)	0.0	33.0		0.0	19.3		0.0	0.0		1.2	0.0	
Ref Time Seperate (s)	0.0	33.0		0.4	18.9		0.0	0.0		1.2	0.0	
Reference Time (s)	33.0	33.0		19.3	19.3		0.0	0.0		1.2	1.2	
Adj Reference Time (s)	37.0	37.0		23.3	23.3		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	37.0	13.2	
Split Option (s)	60.4	8.0	
Minimum (s)	37.0	8.0	45.0

Right Turns	EBR	SBR
Adj Reference Time (s)	32.3	42.4
Cross Thru Ref Time (s)	0.0	23.3
Oncoming Left Ref Time (s)	23.3	0.0
Combined (s)	55.7	65.8

Intersection Summary			
Intersection Capacity Utilization	54.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	799	247	44	481	0	0	0	0	148	0	1025
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	799	247	44	481	0	0	0	0	0	148	1025
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	13.9	18.5	2.9	16.0	0.0			0.0			43.0
Adj Reference Time (s)	0.0	17.9	22.5	8.0	20.0	0.0			0.0			47.0
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	13.9		43.9	16.0		0.0	0.0		0.0	73.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		12.9	12.9	
Reference Time (s)		13.9			43.9			0.0			12.9	
Adj Reference Time (s)		17.9			47.9			8.0			16.9	
Split Option												
Ref Time Combined (s)	0.0	13.9		2.9	16.0		0.0	0.0		0.0	4.9	
Ref Time Seperate (s)	0.0	13.9		2.9	16.0		0.0	0.0		4.9	0.0	
Reference Time (s)	13.9	13.9		16.0	16.0		0.0	0.0		4.9	4.9	
Adj Reference Time (s)	17.9	17.9		20.0	20.0		0.0	0.0		8.9	8.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	25.9	NA	
Permitted Option (s)	47.9	16.9	
Split Option (s)	37.8	8.9	
Minimum (s)	25.9	8.9	34.8

Right Turns	EBR	SBR
Adj Reference Time (s)	22.5	47.0
Cross Thru Ref Time (s)	8.9	20.0
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	39.4	67.0

Intersection Summary			
Intersection Capacity Utilization	55.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	589	318	0	0	184	118	336	4	82	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	589	318	0	0	184	118	0	340	82	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3612	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	20.2	10.5	0.0	0.0	6.1	8.9			6.2			0.0
Adj Reference Time (s)	24.2	14.5	0.0	0.0	10.4	13.1			10.5			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	243		0	0	
Reference Time A (s)	302.5	10.5		0.0	6.1		0.0	168.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		19.2	19.3		0.0	0.0	
Reference Time (s)		302.5			6.1			19.3			0.0	
Adj Reference Time (s)		306.5			10.4			23.3			8.0	
Split Option												
Ref Time Combined (s)	20.2	10.5		0.0	6.1		0.0	11.3		0.0	0.0	
Ref Time Seperate (s)	20.2	10.5		0.0	6.1		11.2	0.3		0.0	0.0	
Reference Time (s)	20.2	20.2		6.1	6.1		11.3	11.3		0.0	0.0	
Adj Reference Time (s)	24.2	24.2		10.4	10.4		15.4	15.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	34.6	NA	
Permitted Option (s)	306.5	23.3	
Split Option (s)	34.6	15.4	
Minimum (s)	34.6	15.4	50.0

Right Turns	WBR	NBR
Adj Reference Time (s)	13.1	10.5
Cross Thru Ref Time (s)	15.4	14.5
Oncoming Left Ref Time (s)	24.2	0.0
Combined (s)	52.7	25.1

Intersection Summary			
Intersection Capacity Utilization	44.0%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	41	16	406	75	449	31	392	58	273	241	56
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	64	57	0	0	481	449	31	450	0	273	241	56
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.96	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3465	0	0	3640	1615	1805	3548	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			33.4	2.1	15.2	0.0	18.1	8.0	4.3
Adj Reference Time (s)			0.0			37.4	8.0	19.2	0.0	22.1	12.3	8.7
Permitted Option												
Adj Saturation A (vph)	120	1733		0	272		120	1774		120	1809	
Reference Time A (s)	63.8	2.0		0.0	211.9		30.9	15.2		272.2	8.0	
Adj Saturation B (vph	0	3465		0	0		NA	NA		NA	NA	
Reference Time B (s)	12.3	2.0		21.5	23.9		NA	NA		NA	NA	
Reference Time (s)		12.3			23.9			30.9			272.2	
Adj Reference Time (s)		16.3			27.9			34.9			276.2	
Split Option												
Ref Time Combined (s)	4.3	2.0		0.0	15.9		2.1	15.2		18.1	8.0	
Ref Time Seperate (s)	4.3	1.4		13.5	4.7		2.1	13.3		18.1	8.0	
Reference Time (s)	4.3	4.3		15.9	15.9		15.2	15.2		18.1	18.1	
Adj Reference Time (s)	8.3	8.3		19.9	19.9		19.2	19.2		22.1	22.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	41.4	
Permitted Option (s)	27.9	276.2	
Split Option (s)	28.1	41.4	
Minimum (s)	27.9	41.4	69.2

Right Turns	WBR	SBR
Adj Reference Time (s)	37.4	8.7
Cross Thru Ref Time (s)	19.2	19.9
Oncoming Left Ref Time (s)	8.3	8.0
Combined (s)	64.8	36.5

Intersection Summary			
Intersection Capacity Utilization	57.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	636	60	55	0	33	7	18	12	0	11	16	533
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	636	115	0	0	40	0	0	30	0	0	27	533
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.93	0.85	0.95	0.97	0.85	0.95	0.97	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	1764	0	1805	1850	0	0	1843	0	0	1861	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	42.3	7.8	0.0	0.0	2.6	0.0			0.0			39.6
Adj Reference Time (s)	46.3	11.8	0.0	8.0	8.0	0.0			0.0			43.6
Permitted Option												
Adj Saturation A (vph)	120	1764		120	1850		0	181		0	1721	
Reference Time A (s)	634.2	7.8		0.0	2.6		0.0	19.9		0.0	1.9	
Adj Saturation B (vph	0	1764		0	1850		0	0		0	0	
Reference Time B (s)	50.3	7.8		8.0	2.6		9.2	10.0		8.7	9.7	
Reference Time (s)		50.3			2.6			10.0			1.9	
Adj Reference Time (s)		54.3			8.0			14.0			8.0	
Split Option												
Ref Time Combined (s)	42.3	7.8		0.0	2.6		0.0	2.0		0.0	1.7	
Ref Time Seperate (s)	42.3	4.1		0.0	2.1		1.2	0.8		0.7	1.0	
Reference Time (s)	42.3	42.3		2.6	2.6		2.0	2.0		1.7	1.7	
Adj Reference Time (s)	46.3	46.3		8.0	8.0		8.0	8.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	54.3	NA	
Permitted Option (s)	54.3	14.0	
Split Option (s)	54.3	16.0	
Minimum (s)	54.3	14.0	68.2

Right Turns	SBR
Adj Reference Time (s)	43.6
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	8.0
Combined (s)	59.6

Intersection Summary			
Intersection Capacity Utilization	56.9%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	589	331	511	655	0	0	0	0	432	139	294
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	920	0	511	655	0	0	0	0	0	571	294
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.96	0.85
Saturated Flow (vph)	0	3422	0	3505	3618	0	0	0	0	0	1828	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	32.4	0.0	17.5	21.7	0.0			0.0			23.3
Adj Reference Time (s)	0.0	36.4	0.0	21.5	25.7	0.0			0.0			27.3
Permitted Option												
Adj Saturation A (vph)	0	1711		117	1809		0	0		0	149	
Reference Time A (s)	0.0	32.4		262.4	21.7		0.0	0.0		0.0	461.2	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		36.7	45.5	
Reference Time (s)		32.4			262.4			0.0			45.5	
Adj Reference Time (s)		36.4			266.4			8.0			49.5	
Split Option												
Ref Time Combined (s)	0.0	32.4		17.5	21.7		0.0	0.0		0.0	37.5	
Ref Time Seperate (s)	0.0	20.8		17.5	21.7		0.0	0.0		28.7	8.8	
Reference Time (s)	32.4	32.4		21.7	21.7		0.0	0.0		37.5	37.5	
Adj Reference Time (s)	36.4	36.4		25.7	25.7		0.0	0.0		41.5	41.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	57.9	NA	
Permitted Option (s)	266.4	49.5	
Split Option (s)	62.2	41.5	
Minimum (s)	57.9	41.5	99.4

Right Turns	SBR
Adj Reference Time (s)	27.3
Cross Thru Ref Time (s)	25.7
Oncoming Left Ref Time (s)	0.0
Combined (s)	53.0

Intersection Summary			
Intersection Capacity Utilization	82.8%	ICU Level of Service	E

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	712	133	8	850	212	354	29	303	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	185	845	0	8	850	212	0	383	303	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3532	0	1805	3618	1615	0	1812	1615	0	0	0
Ped Intf Time (s)	0.0	0.1	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	6.3	28.8	0.0	0.5	28.2	16.6			22.8			0.0
Adj Reference Time (s)	10.3	32.8	0.0	8.0	32.2	20.6			26.9			0.0
Permitted Option												
Adj Saturation A (vph)	117	1766		120	1809		0	127		0	0	
Reference Time A (s)	95.0	28.8		8.0	28.2		0.0	361.2		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		31.5	33.4		0.0	0.0	
Reference Time (s)		95.0			28.2			33.4			0.0	
Adj Reference Time (s)		99.0			32.2			37.4			8.0	
Split Option												
Ref Time Combined (s)	6.3	28.8		0.5	28.2		0.0	25.4		0.0	0.0	
Ref Time Seperate (s)	6.3	24.3		0.5	28.2		23.5	1.8		0.0	0.0	
Reference Time (s)	28.8	28.8		28.2	28.2		25.4	25.4		0.0	0.0	
Adj Reference Time (s)	32.8	32.8		32.2	32.2		29.4	29.4		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	42.5	NA	
Permitted Option (s)	99.0	37.4	
Split Option (s)	65.0	29.4	
Minimum (s)	42.5	29.4	71.9

Right Turns	WBR	NBR
Adj Reference Time (s)	20.6	26.9
Cross Thru Ref Time (s)	29.4	32.8
Oncoming Left Ref Time (s)	10.3	0.0
Combined (s)	60.3	59.7

Intersection Summary			
Intersection Capacity Utilization	59.9%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	21	571	34	48	411	42	65	7	161	68	8	35
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	21	605	0	48	453	0	65	168	0	68	43	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.88	0.85
Saturated Flow (vph)	1805	3587	0	1805	3567	0	1805	1627	0	1805	1668	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.4	20.2	0.0	3.2	15.3	0.0	4.3	12.4	0.0	4.5	3.1	0.0
Adj Reference Time (s)	8.0	24.2	0.0	8.0	19.3	0.0	8.3	16.4	0.0	8.5	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1794		120	1784		120	1627		120	1668	
Reference Time A (s)	20.9	20.2		47.9	15.3		64.8	12.4		67.8	3.1	
Adj Saturation B (vph	NA	NA		NA	NA		0	1627		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		12.3	12.4		NA	NA	
Reference Time (s)		20.9			47.9			12.4			67.8	
Adj Reference Time (s)		24.9			51.9			16.4			71.8	
Split Option												
Ref Time Combined (s)	1.4	20.2		3.2	15.3		4.3	12.4		4.5	3.1	
Ref Time Seperate (s)	1.4	19.1		3.2	13.8		4.3	0.5		4.5	0.6	
Reference Time (s)	20.2	20.2		15.3	15.3		12.4	12.4		4.5	4.5	
Adj Reference Time (s)	24.2	24.2		19.3	19.3		16.4	16.4		8.5	8.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.2	24.9	
Permitted Option (s)	51.9	71.8	
Split Option (s)	43.5	24.9	
Minimum (s)	32.2	24.9	57.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	47.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	349	41	167	343	102	133	402	185	201	221	130
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	116	390	0	167	445	0	133	587	0	0	552	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.97	0.85	0.95	0.95	0.85	0.95	0.95	0.85
Saturated Flow (vph)	3505	3561	0	3505	3493	0	1805	3447	0	0	5139	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	4.0	13.1	0.0	5.7	15.4	0.0			0.0			0.0
Adj Reference Time (s)	8.0	17.1	0.0	9.7	20.3	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1780		117	1747		120	1723		0	171	
Reference Time A (s)	59.6	13.1		85.8	15.4		132.6	20.6		0.0	140.9	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		59.6			85.8			132.6			140.9	
Adj Reference Time (s)		63.6			89.8			136.6			144.9	
Split Option												
Ref Time Combined (s)	4.0	13.1		5.7	15.4		8.8	20.6		0.0	13.0	
Ref Time Seperate (s)	4.0	11.8		5.7	11.9		8.8	14.2		6.7	7.9	
Reference Time (s)	13.1	13.1		15.4	15.4		20.6	20.6		13.0	13.0	
Adj Reference Time (s)	17.1	17.1		20.3	20.3		25.6	25.6		18.8	18.8	

Summary	EB WB	NB SB	Combined
Protected Option (s)	28.3	NA	
Permitted Option (s)	89.8	144.9	
Split Option (s)	37.4	44.4	
Minimum (s)	28.3	44.4	72.7

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	60.6%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	444	95	53	631	18	290	68	90	17	43	63
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	81	539	0	53	649	0	290	158	0	0	60	63
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3522	0	1805	3603	0	1805	1738	0	0	1873	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.4	18.4	0.0	3.5	21.6	0.0			0.0			4.8
Adj Reference Time (s)	9.4	22.4	0.0	8.0	25.6	0.0			0.0			9.2
Permitted Option												
Adj Saturation A (vph)	120	1761		120	1801		120	1738		0	349	
Reference Time A (s)	80.8	18.4		52.9	21.6		289.2	11.0		0.0	20.6	
Adj Saturation B (vph	NA	NA		NA	NA		0	1738		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		27.3	11.0		NA	NA	
Reference Time (s)		80.8			52.9			27.3			20.6	
Adj Reference Time (s)		84.8			56.9			31.3			24.6	
Split Option												
Ref Time Combined (s)	5.4	18.4		3.5	21.6		19.3	11.0		0.0	3.8	
Ref Time Seperate (s)	5.4	15.2		3.5	21.0		19.3	4.8		1.1	2.7	
Reference Time (s)	18.4	18.4		21.6	21.6		19.3	19.3		3.8	3.8	
Adj Reference Time (s)	22.4	22.4		25.6	25.6		23.3	23.3		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	35.0	NA	
Permitted Option (s)	84.8	31.3	
Split Option (s)	48.0	31.7	
Minimum (s)	35.0	31.3	66.3

Right Turns	SBR
Adj Reference Time (s)	9.2
Cross Thru Ref Time (s)	25.6
Oncoming Left Ref Time (s)	23.3
Combined (s)	58.1

Intersection Summary			
Intersection Capacity Utilization	55.2%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	104	761	95	188	508	154	119	564	347	146	369	76
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	104	761	95	188	508	154	119	564	347	146	445	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3525	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	3.6	25.2	7.2	6.4	16.9	11.6	7.9	18.7	26.0	9.7	15.3	0.0
Adj Reference Time (s)	8.0	29.2	11.7	10.4	21.0	15.9	11.9	23.4	30.3	13.7	23.1	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1762	
Reference Time A (s)	53.4	25.2		96.5	16.9		118.7	18.7		145.6	15.3	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		53.4			96.5			118.7			145.6	
Adj Reference Time (s)		57.4			100.5			122.7			149.6	
Split Option												
Ref Time Combined (s)	3.6	25.2		6.4	16.9		7.9	18.7		9.7	15.3	
Ref Time Seperate (s)	3.6	25.2		6.4	16.9		7.9	18.7		9.7	12.8	
Reference Time (s)	25.2	25.2		16.9	16.9		18.7	18.7		15.3	15.3	
Adj Reference Time (s)	29.2	29.2		21.0	21.0		23.4	23.4		23.1	23.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.7	37.1	
Permitted Option (s)	100.5	149.6	
Split Option (s)	50.3	46.6	
Minimum (s)	39.7	37.1	76.8

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	11.7	15.9	30.3
Cross Thru Ref Time (s)	23.1	23.4	29.2
Oncoming Left Ref Time (s)	10.4	8.0	13.7
Combined (s)	45.3	47.4	73.3

Intersection Summary			
Intersection Capacity Utilization	64.0%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	741	103	38	594	15	148	61	105	24	59	8
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	4	844	0	38	609	0	148	166	0	24	67	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	1.00	0.85	0.95	0.91	0.85	0.95	0.98	0.85
Saturated Flow (vph)	1805	3551	0	1805	3604	0	1805	1720	0	1805	1866	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.3	28.5	0.0	2.5	20.3	0.0	9.8	11.7	0.0	1.6	4.3	0.0
Adj Reference Time (s)	8.0	32.5	0.0	8.0	24.3	0.0	13.8	16.0	0.0	8.0	8.3	0.0
Permitted Option												
Adj Saturation A (vph)	120	1776		120	1802		120	1720		120	1866	
Reference Time A (s)	4.0	28.5		37.9	20.3		147.6	11.7		23.9	4.3	
Adj Saturation B (vph	NA	NA		NA	NA		0	1720		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		17.8	11.7		NA	NA	
Reference Time (s)		28.5			37.9			17.8			23.9	
Adj Reference Time (s)		32.5			41.9			21.8			27.9	
Split Option												
Ref Time Combined (s)	0.3	28.5		2.5	20.3		9.8	11.7		1.6	4.3	
Ref Time Seperate (s)	0.3	25.0		2.5	19.8		9.8	4.4		1.6	3.8	
Reference Time (s)	28.5	28.5		20.3	20.3		11.7	11.7		4.3	4.3	
Adj Reference Time (s)	32.5	32.5		24.3	24.3		16.0	16.0		8.3	8.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	40.5	24.0	
Permitted Option (s)	41.9	27.9	
Split Option (s)	56.8	24.3	
Minimum (s)	40.5	24.0	64.5

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	53.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	155	32	196	48	79	104	246	491	77	82	316	246
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	187	196	0	127	104	246	568	0	82	562	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.98	0.85	0.95	0.98	0.85	0.95	0.93	0.85
Saturated Flow (vph)	0	1821	1615	0	1864	1615	1805	3544	0	1805	3380	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.7	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			15.1			11.1	16.4	19.3	0.0	5.5	20.6	0.0
Adj Reference Time (s)			19.7			21.0	20.4	23.3	0.0	9.5	24.6	0.0
Permitted Option												
Adj Saturation A (vph)	0	138		0	271		120	1772		120	1690	
Reference Time A (s)	0.0	162.4		0.0	56.2		245.3	19.3		81.8	20.6	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	18.3	20.3		11.2	16.2		NA	NA		NA	NA	
Reference Time (s)		20.3			16.2			245.3			81.8	
Adj Reference Time (s)		24.3			22.7			249.3			85.8	
Split Option												
Ref Time Combined (s)	0.0	12.3		0.0	8.2		16.4	19.3		5.5	20.6	
Ref Time Seperate (s)	10.3	2.0		3.2	5.0		16.4	16.7		5.5	11.9	
Reference Time (s)	12.3	12.3		8.2	8.2		19.3	19.3		20.6	20.6	
Adj Reference Time (s)	17.3	17.3		19.9	19.9		23.3	23.3		24.6	24.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	45.0	
Permitted Option (s)	24.3	249.3	
Split Option (s)	37.2	47.9	
Minimum (s)	24.3	45.0	69.3

Right Turns	EBR	WBR
Adj Reference Time (s)	19.7	21.0
Cross Thru Ref Time (s)	24.6	23.3
Oncoming Left Ref Time (s)	19.9	17.3
Combined (s)	64.3	61.5

Intersection Summary			
Intersection Capacity Utilization	57.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.

3: US-101 SB On Ramp/US-101 SB Off Ramp & E Clark Ave Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.0	0.0	0.3	0.4
Denied Del/Veh (s)	0.2	0.2	2.2	0.8
Total Delay (hr)	0.5	0.1	1.2	1.8
Total Del/Veh (s)	2.1	1.8	8.6	4.2
Stop Delay (hr)	0.0	0.0	0.7	0.7
Stop Del/Veh (s)	0.0	0.4	4.7	1.6
Vehicles Entered	914	130	508	1552
Vehicles Exited	916	131	507	1554
Hourly Exit Rate	916	131	507	1554
Input Volume	918	132	510	1560
% of Volume	100	99	99	100
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

5: US-101 SB Ramp & E Union Valley Parkway Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.5	0.0	0.4	0.9
Denied Del/Veh (s)	1.5	0.2	1.7	1.5
Total Delay (hr)	3.1	0.1	4.3	7.5
Total Del/Veh (s)	9.1	2.4	18.8	12.4
Stop Delay (hr)	0.0	0.0	3.1	3.1
Stop Del/Veh (s)	0.0	1.3	13.4	5.1
Vehicles Entered	1235	108	810	2153
Vehicles Exited	1235	107	810	2152
Hourly Exit Rate	1235	107	810	2152
Input Volume	1240	110	810	2160
% of Volume	100	97	100	100
Denied Entry Before	0	0	0	0
Denied Entry After	1	0	0	1

6: US-101 SB Ramps & S Santa Maria Way Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.1	0.0	0.4	0.5
Denied Del/Veh (s)	0.3	0.3	2.9	1.1
Total Delay (hr)	0.9	0.1	0.9	1.8
Total Del/Veh (s)	3.4	0.8	5.8	3.7
Stop Delay (hr)	0.0	0.0	0.1	0.1
Stop Del/Veh (s)	0.0	0.1	0.4	0.1
Vehicles Entered	905	309	530	1744
Vehicles Exited	905	308	531	1744
Hourly Exit Rate	905	308	531	1744
Input Volume	904	306	535	1745
% of Volume	100	101	99	100
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

10: Nicholson Ave/US-101 NB Ramp & E Stowell Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.0	0.0	0.0	0.5	0.5
Denied Del/Veh (s)	0.2	0.1	0.1	3.1	1.3
Total Delay (hr)	0.7	0.1	0.1	0.8	1.7
Total Del/Veh (s)	3.3	12.1	12.1	4.9	4.4
Stop Delay (hr)	0.0	0.1	0.1	0.1	0.3
Stop Del/Veh (s)	0.0	8.6	9.2	0.5	0.7
Vehicles Entered	746	40	30	557	1373
Vehicles Exited	749	40	30	558	1377
Hourly Exit Rate	749	40	30	558	1377
Input Volume	751	40	30	561	1382
% of Volume	100	99	100	100	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

Intersection Capacity Utilization
1: SR-135 SB On Ramp/SR-135 SB Off Ramp & E Clark Ave

02/03/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	502	9	111	438	0	0	0	0	288	0	222
Pedestrians	6		4	4		6	5					5
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	511	0	111	438	0	0	0	0	0	288	222
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	3608	0	1805	3618	0	0	0	0	0	1805	1615
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.6
Pedestrian Frequency (%)		0.12			0.18			0.00			0.15	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	17.0	0.0	7.4	14.5	0.0			0.0			17.1
Adj Reference Time (s)	0.0	21.0	0.0	11.4	18.5	0.0			0.0			21.6
Permitted Option												
Adj Saturation A (vph)	0	1804		120	1809		0	0		0	120	
Reference Time A (s)	0.0	17.0		110.7	14.5		0.0	0.0		0.0	287.2	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		27.1	27.1	
Reference Time (s)		17.0			110.7			0.0			27.1	
Adj Reference Time (s)		21.0			114.7			8.0			31.1	
Split Option												
Ref Time Combined (s)	0.0	17.0		7.4	14.5		0.0	0.0		0.0	19.1	
Ref Time Seperate (s)	0.0	16.7		7.4	14.5		0.0	0.0		19.1	0.0	
Reference Time (s)	17.0	17.0		14.5	14.5		0.0	0.0		19.1	19.1	
Adj Reference Time (s)	21.0	21.0		18.5	18.5		0.0	0.0		23.3	23.3	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.4	NA	
Permitted Option (s)	114.7	31.1	
Split Option (s)	39.5	23.3	
Minimum (s)	32.4	23.3	55.7

Right Turns	SBR
Adj Reference Time (s)	21.6
Cross Thru Ref Time (s)	18.5
Oncoming Left Ref Time (s)	0.0
Combined (s)	40.1

Intersection Summary			
Intersection Capacity Utilization	46.4%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	156	636	0	0	505	222	25	2	264	0	0	0
Pedestrians	5		2	2		5						
Ped Button		Yes			Yes							
Pedestrian Timing (s)		16.0			16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	156	636	0	0	727	0	0	291	0	0	0	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	0.95	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3618	0	0	3452	0	0	3112	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.3	0.0	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.06			0.15			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.4	21.1	0.0	0.0	25.5	0.0			0.0			0.0
Adj Reference Time (s)	14.4	25.1	0.0	0.0	29.5	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	120	1809		0	1726		0	310		0	0	
Reference Time A (s)	155.6	21.1		0.0	25.5		0.0	37.0		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1540		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		9.7	15.3		NA	NA	
Reference Time (s)		155.6			25.5			15.3			0.0	
Adj Reference Time (s)		159.6			29.5			19.3			8.0	
Split Option												
Ref Time Combined (s)	10.4	21.1		0.0	25.5		0.0	11.2		0.0	0.0	
Ref Time Seperate (s)	10.4	21.1		0.0	17.8		1.7	0.1		0.0	0.0	
Reference Time (s)	21.1	21.1		25.5	25.5		11.2	11.2		0.0	0.0	
Adj Reference Time (s)	25.1	25.1		29.5	29.5		15.2	15.2		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	43.8	NA	
Permitted Option (s)	159.6	19.3	
Split Option (s)	54.6	15.2	
Minimum (s)	43.8	15.2	59.1

Right Turns	
Adj Reference Time (s)	
Cross Thru Ref Time (s)	
Oncoming Left Ref Time (s)	
Combined (s)	

Intersection Summary			
Intersection Capacity Utilization	49.2%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	97	11	347	0	0	0	0	84	0	561
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	573	0	11	347	0	0	0	0	84	0	561
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	3526	0	1805	1900	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.0	19.5	0.0	0.7	21.9	0.0	0.0	0.0	0.0	5.6	0.0	41.7
Adj Reference Time (s)	0.0	23.5	0.0	8.0	25.9	0.0	0.0	0.0	0.0	9.6	0.0	45.7
Permitted Option												
Adj Saturation A (vph)	0	1763		120	1900		0	0		120	0	
Reference Time A (s)	0.0	19.5		11.0	21.9		0.0	0.0		83.8	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		13.6	0.0	
Reference Time (s)		19.5			21.9			0.0			13.6	
Adj Reference Time (s)		23.5			25.9			8.0			17.6	
Split Option												
Ref Time Combined (s)	0.0	19.5		0.7	21.9		0.0	0.0		5.6	0.0	
Ref Time Seperate (s)	0.0	16.2		0.7	21.9		0.0	0.0		5.6	0.0	
Reference Time (s)	19.5	19.5		21.9	21.9		0.0	0.0		5.6	5.6	
Adj Reference Time (s)	23.5	23.5		25.9	25.9		0.0	0.0		9.6	9.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	31.5	9.6	
Permitted Option (s)	25.9	17.6	
Split Option (s)	49.4	9.6	
Minimum (s)	25.9	9.6	35.5

Right Turns	SBR
Adj Reference Time (s)	45.7
Cross Thru Ref Time (s)	25.9
Oncoming Left Ref Time (s)	0.0
Combined (s)	71.6

Intersection Summary			
Intersection Capacity Utilization	59.7%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	388	200	0	0	127	161	237	1	14	0	0	0
Pedestrians	2		1	1		2	1		2	2		1
Ped Button		Yes			Yes			No			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	388	200	0	0	127	161	237	15	0	0	0	0
Lane Utilization Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.86	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	1900	0	0	1900	1615	1805	1634	0	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.3	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.06			1.00			0.03	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	13.3	12.6	0.0	0.0	8.0	12.2	15.8	1.3	0.0	0.0	0.0	0.0
Adj Reference Time (s)	17.3	16.6	0.0	0.0	12.0	16.2	19.8	20.0	0.0	0.0	0.0	0.0
Permitted Option												
Adj Saturation A (vph)	117	1900		0	1900		120	1634		0	0	
Reference Time A (s)	199.2	12.6		0.0	8.0		236.3	1.3		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1634		0	0	
Reference Time B (s)	NA	NA		NA	NA		23.8	1.3		0.0	0.0	
Reference Time (s)		199.2			8.0			23.8			0.0	
Adj Reference Time (s)		203.2			12.0			27.8			8.4	
Split Option												
Ref Time Combined (s)	13.3	12.6		0.0	8.0		15.8	1.3		0.0	0.0	
Ref Time Seperate (s)	13.3	12.6		0.0	8.0		15.8	0.3		0.0	0.0	
Reference Time (s)	13.3	13.3		8.0	8.0		15.8	15.8		0.0	0.0	
Adj Reference Time (s)	17.3	17.3		12.0	12.0		20.0	20.0		8.4	8.4	

Summary	EB WB	NB SB	Combined
Protected Option (s)	29.3	20.0	
Permitted Option (s)	203.2	27.8	
Split Option (s)	29.3	28.4	
Minimum (s)	29.3	20.0	49.3

Right Turns	WBR
Adj Reference Time (s)	16.2
Cross Thru Ref Time (s)	20.0
Oncoming Left Ref Time (s)	17.3
Combined (s)	53.5

Intersection Summary			
Intersection Capacity Utilization	44.6%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	819	74	6	126	0	0	0	0	11	0	984
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	893	0	6	126	0	0	0	0	0	339	656
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.85	0.85
Saturated Flow (vph)	0	1876	0	1805	1900	0	0	0	0	0	1622	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	57.1	0.0	0.4	8.0	0.0			0.0			48.7
Adj Reference Time (s)	0.0	61.1	0.0	8.0	12.0	0.0			0.0			52.7
Permitted Option												
Adj Saturation A (vph)	0	1876		120	1900		0	0		0	1108	
Reference Time A (s)	0.0	57.1		6.0	8.0		0.0	0.0		0.0	36.7	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		8.7	33.1	
Reference Time (s)		57.1			8.0			0.0			33.1	
Adj Reference Time (s)		61.1			12.0			8.0			37.1	
Split Option												
Ref Time Combined (s)	0.0	57.1		0.4	8.0		0.0	0.0		0.0	25.1	
Ref Time Seperate (s)	0.0	52.4		0.4	8.0		0.0	0.0		0.7	0.0	
Reference Time (s)	57.1	57.1		8.0	8.0		0.0	0.0		25.1	25.1	
Adj Reference Time (s)	61.1	61.1		12.0	12.0		0.0	0.0		29.1	29.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	69.1	NA	
Permitted Option (s)	61.1	37.1	
Split Option (s)	73.1	29.1	
Minimum (s)	61.1	29.1	90.2

Right Turns	SBR
Adj Reference Time (s)	52.7
Cross Thru Ref Time (s)	12.0
Oncoming Left Ref Time (s)	0.0
Combined (s)	64.7

Intersection Summary			
Intersection Capacity Utilization	75.2%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	388	241	9	297	0	0	0	0	5	0	485
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	388	241	0	306	0	0	0	0	5	0	485
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Saturated Flow (vph)	0	1900	1615	0	1897	0	0	0	0	1805	0	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			17.9			0.0	0.0	0.0	0.0	0.3	0.0	36.0
Adj Reference Time (s)			21.9			0.0	0.0	0.0	0.0	8.0	0.0	40.0
Permitted Option												
Adj Saturation A (vph)	0	1900		0	1337		0	0		120	0	
Reference Time A (s)	0.0	24.5		0.0	27.5		0.0	0.0		5.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		8.3	0.0	
Reference Time (s)		24.5			27.5			0.0			5.0	
Adj Reference Time (s)		28.5			31.5			8.0			9.0	
Split Option												
Ref Time Combined (s)	0.0	24.5		0.0	19.4		0.0	0.0		0.3	0.0	
Ref Time Seperate (s)	0.0	24.5		0.6	18.8		0.0	0.0		0.3	0.0	
Reference Time (s)	24.5	24.5		19.4	19.4		0.0	0.0		0.3	0.3	
Adj Reference Time (s)	28.5	28.5		23.4	23.4		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	8.0	
Permitted Option (s)	31.5	9.0	
Split Option (s)	51.9	8.0	
Minimum (s)	31.5	8.0	39.5

Right Turns	EBR	SBR
Adj Reference Time (s)	21.9	40.0
Cross Thru Ref Time (s)	0.0	23.4
Oncoming Left Ref Time (s)	23.4	0.0
Combined (s)	45.3	63.4

Intersection Summary			
Intersection Capacity Utilization	52.8%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1152	450	47	745	0	0	0	0	69	0	901
Pedestrians			1	1								
Ped Button		Yes										
Pedestrian Timing (s)		16.0										
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1152	450	47	745	0	0	0	0	0	69	901
Lane Utilization Factor	1.00	0.91	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.89
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85
Saturated Flow (vph)	0	6901	1615	1805	3618	0	0	0	0	0	3610	2859
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	20.0	33.6	3.1	24.7	0.0			0.0			37.8
Adj Reference Time (s)	0.0	24.0	37.6	8.0	28.7	0.0			0.0			41.8
Permitted Option												
Adj Saturation A (vph)	0	1725		120	1809		0	0		0	241	
Reference Time A (s)	0.0	20.0		46.9	24.7		0.0	0.0		0.0	34.4	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		0.0	0.0		10.3	10.3	
Reference Time (s)		20.0			46.9			0.0			10.3	
Adj Reference Time (s)		24.0			50.9			8.0			14.3	
Split Option												
Ref Time Combined (s)	0.0	20.0		3.1	24.7		0.0	0.0		0.0	2.3	
Ref Time Seperate (s)	0.0	20.0		3.1	24.7		0.0	0.0		2.3	0.0	
Reference Time (s)	20.0	20.0		24.7	24.7		0.0	0.0		2.3	2.3	
Adj Reference Time (s)	24.0	24.0		28.7	28.7		0.0	0.0		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	32.0	NA	
Permitted Option (s)	50.9	14.3	
Split Option (s)	52.7	8.0	
Minimum (s)	32.0	8.0	40.0

Right Turns	EBR	SBR
Adj Reference Time (s)	37.6	41.8
Cross Thru Ref Time (s)	8.0	28.7
Oncoming Left Ref Time (s)	8.0	0.0
Combined (s)	53.6	70.5

Intersection Summary			
Intersection Capacity Utilization	58.8%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1009	198	0	0	287	184	503	7	62	0	0	0
Pedestrians	1		1	1		1			1	1		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	1009	198	0	0	287	184	0	510	62	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.95	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3618	0	0	3618	1615	0	3613	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Pedestrian Frequency (%)		0.03			0.03			0.03			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	34.5	6.6	0.0	0.0	9.5	13.8			4.7			0.0
Adj Reference Time (s)	38.5	10.6	0.0	0.0	13.7	17.9			9.1			0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		0	1809		0	243		0	0	
Reference Time A (s)	518.1	6.6		0.0	9.5		0.0	251.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		24.7	24.9		0.0	0.0	
Reference Time (s)		518.1			9.5			24.9			0.0	
Adj Reference Time (s)		522.1			13.7			28.9			8.0	
Split Option												
Ref Time Combined (s)	34.5	6.6		0.0	9.5		0.0	16.9		0.0	0.0	
Ref Time Seperate (s)	34.5	6.6		0.0	9.5		16.7	0.4		0.0	0.0	
Reference Time (s)	34.5	34.5		9.5	9.5		16.9	16.9		0.0	0.0	
Adj Reference Time (s)	38.5	38.5		13.7	13.7		20.9	20.9		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	52.3	NA	
Permitted Option (s)	522.1	28.9	
Split Option (s)	52.3	20.9	
Minimum (s)	52.3	20.9	73.2

Right Turns	WBR	NBR
Adj Reference Time (s)	17.9	9.1
Cross Thru Ref Time (s)	20.9	10.6
Oncoming Left Ref Time (s)	38.5	0.0
Combined (s)	77.4	19.7

Intersection Summary			
Intersection Capacity Utilization	64.5%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	72	81	520	50	280	74	646	100	400	443	76
Pedestrians							1					1
Ped Button											Yes	
Pedestrian Timing (s)											16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	98	153	0	0	570	280	74	746	0	400	443	76
Lane Utilization Factor	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.95	0.85	0.95	0.98	0.85	0.95	1.00	0.85
Saturated Flow (vph)	1805	3330	0	0	3627	1615	1805	3545	0	1805	3618	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Pedestrian Frequency (%)		0.00			0.00			0.00			0.03	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			0.0			20.8	4.9	25.3	0.0	26.6	14.7	5.8
Adj Reference Time (s)			0.0			24.8	8.9	29.3	0.0	30.6	18.7	10.1
Permitted Option												
Adj Saturation A (vph)	120	1665		0	257		120	1772		120	1809	
Reference Time A (s)	97.7	5.5		0.0	266.2		73.8	25.3		398.9	14.7	
Adj Saturation B (vph	0	3330		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	14.5	5.5		NA	NA		NA	NA		NA	NA	
Reference Time (s)		14.5			266.2			73.8			398.9	
Adj Reference Time (s)		18.5			270.2			77.8			402.9	
Split Option												
Ref Time Combined (s)	6.5	5.5		0.0	18.9		4.9	25.3		26.6	14.7	
Ref Time Seperate (s)	6.5	2.6		17.3	3.2		4.9	21.9		26.6	14.7	
Reference Time (s)	6.5	6.5		18.9	18.9		25.3	25.3		26.6	26.6	
Adj Reference Time (s)	10.5	10.5		22.9	22.9		29.3	29.3		30.6	30.6	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	59.8	
Permitted Option (s)	270.2	402.9	
Split Option (s)	33.4	59.8	
Minimum (s)	33.4	59.8	93.2

Right Turns	WBR	SBR
Adj Reference Time (s)	24.8	10.1
Cross Thru Ref Time (s)	29.3	22.9
Oncoming Left Ref Time (s)	10.5	8.9
Combined (s)	64.6	41.9

Intersection Summary			
Intersection Capacity Utilization	77.7%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	950	32	36	2	51	7	46	30	5	3	12	436
Pedestrians												
Ped Button												
Pedestrian Timing (s)												
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	950	68	0	2	58	0	0	81	0	0	15	436
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.92	0.85	0.95	0.98	0.85	0.95	0.96	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	1749	0	1805	1866	0	0	1829	0	0	1881	1615
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.00			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	63.2	4.7	0.0	0.1	3.7	0.0			0.0			32.4
Adj Reference Time (s)	67.2	8.7	0.0	8.0	8.0	0.0			0.0			36.4
Permitted Option												
Adj Saturation A (vph)	120	1749		120	1866		0	188		0	1857	
Reference Time A (s)	947.4	4.7		2.0	3.7		0.0	51.8		0.0	1.0	
Adj Saturation B (vph	0	1749		0	1866		0	0		0	0	
Reference Time B (s)	71.2	4.7		8.1	3.7		11.1	13.3		8.2	9.0	
Reference Time (s)		71.2			3.7			13.3			1.0	
Adj Reference Time (s)		75.2			8.0			17.3			8.0	
Split Option												
Ref Time Combined (s)	63.2	4.7		0.1	3.7		0.0	5.3		0.0	1.0	
Ref Time Seperate (s)	63.2	2.2		0.1	3.3		3.1	1.9		0.2	0.8	
Reference Time (s)	63.2	63.2		3.7	3.7		5.3	5.3		1.0	1.0	
Adj Reference Time (s)	67.2	67.2		8.0	8.0		9.3	9.3		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	75.2	NA	
Permitted Option (s)	75.2	17.3	
Split Option (s)	75.2	17.3	
Minimum (s)	75.2	17.3	92.5

Right Turns	SBR
Adj Reference Time (s)	36.4
Cross Thru Ref Time (s)	8.0
Oncoming Left Ref Time (s)	9.3
Combined (s)	53.7

Intersection Summary			
Intersection Capacity Utilization	77.1%	ICU Level of Service	D

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	631	370	423	801	0	0	0	0	146	140	348
Pedestrians	11		4	4		11	12					12
Ped Button		Yes			Yes						Yes	
Pedestrian Timing (s)		16.0			16.0						20.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	1001	0	423	801	0	0	0	0	0	286	348
Lane Utilization Factor	1.00	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.94	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.85
Saturated Flow (vph)	0	3417	0	3505	3618	0	0	0	0	0	1852	1615
Ped Intf Time (s)	0.0	0.2	0.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	1.5
Pedestrian Frequency (%)		0.12			0.31			0.00			0.33	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	0.0	35.3	0.0	14.5	26.6	0.0			0.0			27.3
Adj Reference Time (s)	0.0	39.3	0.0	18.5	30.6	0.0			0.0			31.3
Permitted Option												
Adj Saturation A (vph)	0	1709		117	1809		0	0		0	208	
Reference Time A (s)	0.0	35.3		217.2	26.6		0.0	0.0		0.0	165.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		0	0	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		17.7	26.5	
Reference Time (s)		35.3			217.2			0.0			26.5	
Adj Reference Time (s)		39.3			221.2			8.0			30.5	
Split Option												
Ref Time Combined (s)	0.0	35.3		14.5	26.6		0.0	0.0		0.0	18.5	
Ref Time Seperate (s)	0.0	22.4		14.5	26.6		0.0	0.0		9.7	8.8	
Reference Time (s)	35.3	35.3		26.6	26.6		0.0	0.0		18.5	18.5	
Adj Reference Time (s)	39.3	39.3		30.6	30.6		0.0	0.0		23.0	23.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	57.8	NA	
Permitted Option (s)	221.2	30.5	
Split Option (s)	69.9	23.0	
Minimum (s)	57.8	23.0	80.8

Right Turns	SBR
Adj Reference Time (s)	31.3
Cross Thru Ref Time (s)	30.6
Oncoming Left Ref Time (s)	0.0
Combined (s)	61.9

Intersection Summary			
Intersection Capacity Utilization	67.4%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	312	436	25	3	739	250	493	83	250	0	0	0
Pedestrians	7		5	5		7			2	2		
Ped Button		Yes			Yes			Yes				
Pedestrian Timing (s)		16.0			16.0			25.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	312	461	0	3	739	250	0	576	250	0	0	0
Lane Utilization Factor	0.97	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.99	0.85	0.95	1.00	0.85	0.95	0.96	0.85	0.95	1.00	0.85
Saturated Flow (vph)	3505	3588	0	1805	3618	1615	0	1819	1615	0	0	0
Ped Intf Time (s)	0.0	0.0	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.15			0.21			0.06			0.00	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	10.7	15.5	0.0	0.2	24.5	19.5			18.8			0.0
Adj Reference Time (s)	14.7	19.5	0.0	8.0	28.5	23.5			23.2			0.0
Permitted Option												
Adj Saturation A (vph)	117	1794		120	1809		0	135		0	0	
Reference Time A (s)	160.2	15.5		3.0	24.5		0.0	512.9		0.0	0.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	0		0	0	
Reference Time B (s)	NA	NA		NA	NA		40.8	46.0		0.0	0.0	
Reference Time (s)		160.2			24.5			46.0			0.0	
Adj Reference Time (s)		164.2			28.5			50.0			8.0	
Split Option												
Ref Time Combined (s)	10.7	15.5		0.2	24.5		0.0	38.0		0.0	0.0	
Ref Time Seperate (s)	10.7	14.6		0.2	24.5		32.8	5.2		0.0	0.0	
Reference Time (s)	15.5	15.5		24.5	24.5		38.0	38.0		0.0	0.0	
Adj Reference Time (s)	19.5	19.5		28.5	28.5		42.0	42.0		0.0	0.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	43.2	NA	
Permitted Option (s)	164.2	50.0	
Split Option (s)	48.0	42.0	
Minimum (s)	43.2	42.0	85.2

Right Turns	WBR	NBR
Adj Reference Time (s)	23.5	23.2
Cross Thru Ref Time (s)	42.0	19.5
Oncoming Left Ref Time (s)	14.7	0.0
Combined (s)	80.1	42.7

Intersection Summary			
Intersection Capacity Utilization	71.0%	ICU Level of Service	C

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	23	416	84	165	709	62	52	7	82	25	3	24
Pedestrians	1					1						
Ped Button					Yes							
Pedestrian Timing (s)					16.0							
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	23	500	0	165	771	0	52	89	0	25	27	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	0.99	0.85	0.95	0.86	0.85	0.95	0.87	0.85
Saturated Flow (vph)	1805	3526	0	1805	3574	0	1805	1637	0	1805	1647	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.03			0.00			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	1.5	17.0	0.0	11.0	25.9	0.0	3.5	6.5	0.0	1.7	2.0	0.0
Adj Reference Time (s)	8.0	21.0	0.0	15.0	29.9	0.0	8.0	10.5	0.0	8.0	8.0	0.0
Permitted Option												
Adj Saturation A (vph)	120	1763		120	1787		120	1637		120	1647	
Reference Time A (s)	22.9	17.0		164.5	25.9		51.9	6.5		24.9	2.0	
Adj Saturation B (vph	NA	NA		NA	NA		0	1637		0	1647	
Reference Time B (s)	NA	NA		NA	NA		11.5	6.5		9.7	2.0	
Reference Time (s)		22.9			164.5			11.5			9.7	
Adj Reference Time (s)		26.9			168.5			15.5			13.7	
Split Option												
Ref Time Combined (s)	1.5	17.0		11.0	25.9		3.5	6.5		1.7	2.0	
Ref Time Seperate (s)	1.5	14.2		11.0	23.8		3.5	0.5		1.7	0.2	
Reference Time (s)	17.0	17.0		25.9	25.9		6.5	6.5		2.0	2.0	
Adj Reference Time (s)	21.0	21.0		29.9	29.9		10.5	10.5		8.0	8.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	37.9	18.5	
Permitted Option (s)	168.5	15.5	
Split Option (s)	50.9	18.5	
Minimum (s)	37.9	15.5	53.4

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	44.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	166	393	85	211	436	109	132	246	101	266	315	98
Pedestrians	3					3	4		5	5		4
Ped Button					Yes			Yes			Yes	
Pedestrian Timing (s)					25.0			27.0			27.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	166	478	0	211	545	0	132	347	0	0	679	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.97	0.85	0.95	0.97	0.85	0.95	0.96	0.85	0.95	0.96	0.85
Saturated Flow (vph)	3505	3521	0	3505	3509	0	1805	3460	0	0	5205	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.6	0.0	0.1	0.5
Pedestrian Frequency (%)		0.00			0.10			0.15			0.12	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	5.7	16.3	0.0	7.2	18.7	0.0			0.0			0.0
Adj Reference Time (s)	9.7	20.3	0.0	11.2	23.3	0.0			0.0			0.0
Permitted Option												
Adj Saturation A (vph)	117	1761		117	1755		120	1730		0	173	
Reference Time A (s)	85.2	16.3		108.3	18.7		131.6	12.2		0.0	184.1	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		85.2			108.3			131.6			184.1	
Adj Reference Time (s)		89.2			112.3			135.6			188.1	
Split Option												
Ref Time Combined (s)	5.7	16.3		7.2	18.7		8.8	12.2		0.0	15.7	
Ref Time Seperate (s)	5.7	13.4		7.2	15.0		8.8	8.7		8.8	10.9	
Reference Time (s)	16.3	16.3		18.7	18.7		12.2	12.2		15.7	15.7	
Adj Reference Time (s)	20.3	20.3		23.3	23.3		18.5	18.5		21.1	21.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	33.0	NA	
Permitted Option (s)	112.3	188.1	
Split Option (s)	43.6	39.6	
Minimum (s)	33.0	39.6	72.6

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	60.5%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	581	257	100	532	25	152	39	61	13	90	52
Pedestrians	4		1	1		4	1		1	1		1
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		16.0			16.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	51	838	0	100	557	0	152	100	0	0	103	52
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.95	0.85	0.95	0.99	0.85	0.95	0.91	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3451	0	1805	3593	0	1805	1726	0	0	1888	1615
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.1	0.1	0.0	0.0	0.1
Pedestrian Frequency (%)		0.03			0.12			0.03			0.03	
Protected Option Allowed		Yes			Yes			No			No	
Reference Time (s)	3.4	29.2	0.0	6.6	18.6	0.0			0.0			4.0
Adj Reference Time (s)	8.0	33.2	0.0	10.6	22.6	0.0			0.0			8.4
Permitted Option												
Adj Saturation A (vph)	120	1726		120	1797		120	1726		0	656	
Reference Time A (s)	50.9	29.2		99.7	18.6		151.6	7.0		0.0	18.8	
Adj Saturation B (vph	NA	NA		NA	NA		0	1726		0	0	
Reference Time B (s)	NA	NA		NA	NA		18.1	7.0		8.9	14.5	
Reference Time (s)		50.9			99.7			18.1			14.5	
Adj Reference Time (s)		54.9			103.7			22.1			18.6	
Split Option												
Ref Time Combined (s)	3.4	29.2		6.6	18.6		10.1	7.0		0.0	6.5	
Ref Time Seperate (s)	3.4	20.2		6.6	17.8		10.1	2.8		0.9	5.7	
Reference Time (s)	29.2	29.2		18.6	18.6		10.1	10.1		6.5	6.5	
Adj Reference Time (s)	33.2	33.2		22.6	22.6		14.3	14.3		10.9	10.9	

Summary	EB WB	NB SB	Combined
Protected Option (s)	43.8	NA	
Permitted Option (s)	103.7	22.1	
Split Option (s)	55.8	25.2	
Minimum (s)	43.8	22.1	65.9

Right Turns	SBR
Adj Reference Time (s)	8.4
Cross Thru Ref Time (s)	22.6
Oncoming Left Ref Time (s)	14.3
Combined (s)	45.3

Intersection Summary			
Intersection Capacity Utilization	54.9%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	72	641	141	299	641	102	71	416	205	104	490	78
Pedestrians	1		1	1		1	9		2	2		9
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		22.0			22.0			30.0			30.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	72	641	141	299	641	102	71	416	205	104	568	0
Lane Utilization Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	1.00	0.85	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.85
Saturated Flow (vph)	3505	3618	1615	3505	3618	1615	1805	3618	1615	1805	3543	0
Ped Intf Time (s)	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	1.1
Pedestrian Frequency (%)		0.03			0.03			0.06			0.26	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	2.5	21.3	10.6	10.2	21.3	7.7	4.7	13.8	15.5	6.9	19.4	0.0
Adj Reference Time (s)	8.0	25.3	15.0	14.2	25.3	12.2	8.7	18.8	20.4	10.9	26.1	0.0
Permitted Option												
Adj Saturation A (vph)	117	1809		117	1809		120	1809		120	1772	
Reference Time A (s)	37.0	21.3		153.5	21.3		70.8	13.8		103.7	19.4	
Adj Saturation B (vph	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time B (s)	NA	NA		NA	NA		NA	NA		NA	NA	
Reference Time (s)		37.0			153.5			70.8			103.7	
Adj Reference Time (s)		41.0			157.5			74.8			107.7	
Split Option												
Ref Time Combined (s)	2.5	21.3		10.2	21.3		4.7	13.8		6.9	19.4	
Ref Time Seperate (s)	2.5	21.3		10.2	21.3		4.7	13.8		6.9	16.8	
Reference Time (s)	21.3	21.3		21.3	21.3		13.8	13.8		19.4	19.4	
Adj Reference Time (s)	25.3	25.3		25.3	25.3		18.8	18.8		26.1	26.1	

Summary	EB WB	NB SB	Combined
Protected Option (s)	39.5	34.9	
Permitted Option (s)	157.5	107.7	
Split Option (s)	50.6	45.0	
Minimum (s)	39.5	34.9	74.4

Right Turns	EBR	WBR	NBR
Adj Reference Time (s)	15.0	12.2	20.4
Cross Thru Ref Time (s)	26.1	18.8	25.3
Oncoming Left Ref Time (s)	14.2	8.0	10.9
Combined (s)	55.4	39.0	56.6

Intersection Summary			
Intersection Capacity Utilization	62.0%	ICU Level of Service	B

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	784	98	55	634	22	63	60	47	19	68	3
Pedestrians									2	2		
Ped Button								Yes				
Pedestrian Timing (s)								16.0				
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	8	882	0	55	656	0	63	107	0	19	71	0
Lane Utilization Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Factor (vph)	0.95	0.98	0.85	0.95	0.99	0.85	0.95	0.93	0.85	0.95	0.99	0.85
Saturated Flow (vph)	1805	3557	0	1805	3599	0	1805	1775	0	1805	1888	0
Ped Intf Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0
Pedestrian Frequency (%)		0.00			0.00			0.06			0.00	
Protected Option Allowed		Yes			Yes			Yes			Yes	
Reference Time (s)	0.5	29.8	0.0	3.7	21.9	0.0	4.2	7.4	0.0	1.3	4.5	0.0
Adj Reference Time (s)	8.0	33.8	0.0	8.0	25.9	0.0	8.2	11.9	0.0	8.0	8.5	0.0
Permitted Option												
Adj Saturation A (vph)	120	1779		120	1800		120	1775		120	1888	
Reference Time A (s)	8.0	29.8		54.8	21.9		62.8	7.4		18.9	4.5	
Adj Saturation B (vph	NA	NA		NA	NA		0	1775		0	1888	
Reference Time B (s)	NA	NA		NA	NA		12.2	7.4		9.3	4.5	
Reference Time (s)		29.8			54.8			12.2			9.3	
Adj Reference Time (s)		33.8			58.8			16.4			13.3	
Split Option												
Ref Time Combined (s)	0.5	29.8		3.7	21.9		4.2	7.4		1.3	4.5	
Ref Time Seperate (s)	0.5	26.4		3.7	21.1		4.2	4.2		1.3	4.3	
Reference Time (s)	29.8	29.8		21.9	21.9		7.4	7.4		4.5	4.5	
Adj Reference Time (s)	33.8	33.8		25.9	25.9		11.9	11.9		8.5	8.5	

Summary	EB WB	NB SB	Combined
Protected Option (s)	41.8	19.9	
Permitted Option (s)	58.8	16.4	
Split Option (s)	59.6	20.4	
Minimum (s)	41.8	16.4	58.2

Right Turns
Adj Reference Time (s)
Cross Thru Ref Time (s)
Oncoming Left Ref Time (s)
Combined (s)

Intersection Summary			
Intersection Capacity Utilization	48.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	25	182	52	24	64	155	389	46	51	445	104
Pedestrians	32		4	4		32	13		2	2		13
Ped Button		Yes			Yes			Yes			Yes	
Pedestrian Timing (s)		20.0			20.0			16.0			16.0	
Free Right			No			No			No			No
Ideal Flow	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Green (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Refr Cycle Length (s)	120	120	120	120	120	120	120	120	120	120	120	120
Volume Combined (vph)	0	139	182	0	76	64	155	435	0	51	549	0
Lane Utilization Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Turning Factor (vph)	0.95	0.96	0.85	0.95	0.97	0.85	0.95	0.98	0.85	0.95	0.97	0.85
Saturated Flow (vph)	0	1822	1615	0	1835	1615	1805	3560	0	1805	3515	0
Ped Intf Time (s)	0.0	0.0	0.5	0.0	0.0	3.4	0.0	0.0	0.3	0.0	0.3	1.6
Pedestrian Frequency (%)		0.12			0.66			0.06			0.35	
Protected Option Allowed		No			No			Yes			Yes	
Reference Time (s)			14.0			8.2	10.3	14.7	0.0	3.4	19.0	0.0
Adj Reference Time (s)			18.8			19.9	14.3	18.8	0.0	8.0	23.0	0.0
Permitted Option												
Adj Saturation A (vph)	0	139		0	161		120	1780		120	1757	
Reference Time A (s)	0.0	119.7		0.0	56.5		154.6	14.7		50.9	19.0	
Adj Saturation B (vph	0	0		0	0		NA	NA		NA	NA	
Reference Time B (s)	15.6	17.2		11.5	13.0		NA	NA		NA	NA	
Reference Time (s)		17.2			13.0			154.6			50.9	
Adj Reference Time (s)		21.5			21.6			158.6			54.9	
Split Option												
Ref Time Combined (s)	0.0	9.2		0.0	5.0		10.3	14.7		3.4	19.0	
Ref Time Seperate (s)	7.6	1.6		3.5	1.5		10.3	13.1		3.4	15.5	
Reference Time (s)	9.2	9.2		5.0	5.0		14.7	14.7		19.0	19.0	
Adj Reference Time (s)	14.5	14.5		18.8	18.8		18.8	18.8		23.0	23.0	

Summary	EB WB	NB SB	Combined
Protected Option (s)	NA	37.3	
Permitted Option (s)	21.6	158.6	
Split Option (s)	33.3	41.8	
Minimum (s)	21.6	37.3	58.9

Right Turns	EBR	WBR
Adj Reference Time (s)	18.8	19.9
Cross Thru Ref Time (s)	23.0	18.8
Oncoming Left Ref Time (s)	18.8	14.5
Combined (s)	60.7	53.2

Intersection Summary			
Intersection Capacity Utilization	50.5%	ICU Level of Service	A

Reference Times and Phasing Options do not represent an optimized timing plan.

3: US-101 SB On Ramp/US-101 SB Off Ramp & E Clark Ave Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.0	0.0	0.4	0.5
Denied Del/Veh (s)	0.1	0.3	2.4	1.1
Total Delay (hr)	0.2	0.3	1.1	1.6
Total Del/Veh (s)	1.3	2.7	6.0	3.6
Stop Delay (hr)	0.0	0.0	0.3	0.3
Stop Del/Veh (s)	0.0	0.1	1.4	0.6
Vehicles Entered	564	370	646	1580
Vehicles Exited	564	369	647	1580
Hourly Exit Rate	564	369	647	1580
Input Volume	573	358	645	1576
% of Volume	98	103	100	100
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	1	1

5: US-101 SB Ramp & E Union Valley Parkway Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.2	0.0	0.3	0.5
Denied Del/Veh (s)	0.8	0.3	1.0	0.9
Total Delay (hr)	1.1	0.1	3.1	4.3
Total Del/Veh (s)	4.1	3.2	11.0	7.5
Stop Delay (hr)	0.0	0.0	2.0	2.0
Stop Del/Veh (s)	0.0	0.3	7.0	3.5
Vehicles Entered	909	131	997	2037
Vehicles Exited	907	132	996	2035
Hourly Exit Rate	907	132	996	2035
Input Volume	894	132	996	2021
% of Volume	102	100	100	101
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

6: US-101 SB Ramps & S Santa Maria Way Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.0	0.0	0.4	0.5
Denied Del/Veh (s)	0.3	0.3	2.9	1.2
Total Delay (hr)	0.5	0.1	0.7	1.2
Total Del/Veh (s)	2.6	0.9	5.2	3.1
Stop Delay (hr)	0.0	0.0	0.0	0.0
Stop Del/Veh (s)	0.0	0.1	0.1	0.1
Vehicles Entered	632	304	491	1427
Vehicles Exited	633	302	492	1427
Hourly Exit Rate	633	302	492	1427
Input Volume	629	306	490	1426
% of Volume	101	99	100	100
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0

10: Nicholson Ave/US-101 NB Ramp & E Stowell Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.0	0.4	0.5
Denied Del/Veh (s)	0.2	0.1	0.1	3.2	1.0
Total Delay (hr)	1.7	0.8	1.2	0.6	4.3
Total Del/Veh (s)	5.9	47.0	51.3	4.9	9.6
Stop Delay (hr)	0.0	0.8	1.1	0.1	2.0
Stop Del/Veh (s)	0.1	42.9	47.9	0.9	4.5
Vehicles Entered	1013	62	85	440	1600
Vehicles Exited	1013	62	85	441	1601
Hourly Exit Rate	1013	62	85	441	1601
Input Volume	1018	60	81	451	1610
% of Volume	100	102	105	98	99
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0

Appendix J

Analysis Worksheets for
Cumulative (2035) plus Project Buildout Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	654	20	171	489	0	0	0	0	154	0	296
Future Volume (vph)	0	654	20	171	489	0	0	0	0	154	0	296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	4.0
Lane Util. Factor		0.95		1.00	0.95						1.00	1.00
Frpb, ped/bikes		0.99		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.95	1.00
Satd. Flow (prot)		3487		1752	3505						1752	1543
Flt Permitted		1.00		0.95	1.00						0.95	1.00
Satd. Flow (perm)		3487		1752	3505						1752	1543
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	0	788	24	206	589	0	0	0	0	186	0	357
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	0	229
Lane Group Flow (vph)	0	809	0	206	589	0	0	0	0	0	186	128
Confl. Peds. (#/hr)	6		4	4		6	5					5
Confl. Bikes (#/hr)						4						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases												4
Actuated Green, G (s)		18.3		11.7	34.0						12.4	12.4
Effective Green, g (s)		18.3		11.7	34.0						12.4	12.4
Actuated g/C Ratio		0.34		0.22	0.63						0.23	0.23
Clearance Time (s)		4.0		4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1173		376	2190						399	351
v/s Ratio Prot		c0.23		c0.12	0.17						c0.11	
v/s Ratio Perm												0.08
v/c Ratio		0.68		0.54	0.26						0.46	0.36
Uniform Delay, d1		15.5		18.9	4.5						18.1	17.6
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		1.7		1.6	0.0						0.8	0.6
Delay (s)		17.3		20.6	4.6						19.0	18.3
Level of Service		B		C	A						B	B
Approach Delay (s/veh)		17.3			8.8			0.0			18.5	
Approach LOS		B			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	54.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	206	588	0	0	656	403	5	1	95	0	0	0
Future Volume (vph)	206	588	0	0	656	403	5	1	95	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0			4.0				
Lane Util. Factor	1.00	0.95			0.95			0.95				
Frpb, ped/bikes	1.00	1.00			0.99			1.00				
Flpb, ped/bikes	1.00	1.00			1.00			1.00				
Frt	1.00	1.00			0.94			0.85				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1752	3505			3282			3004				
Flt Permitted	0.95	1.00			1.00			0.99				
Satd. Flow (perm)	1752	3505			3282			3004				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	231	661	0	0	737	453	6	1	107	0	0	0
RTOR Reduction (vph)	0	0	0	0	140	0	0	94	0	0	0	0
Lane Group Flow (vph)	231	661	0	0	1050	0	0	20	0	0	0	0
Confl. Peds. (#/hr)	5		2	2		5						
Confl. Bikes (#/hr)			1			4						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA			NA		Split	NA				
Protected Phases	5	2			6		8	8				
Permitted Phases												
Actuated Green, G (s)	10.7	34.4			19.7			6.0				
Effective Green, g (s)	10.7	34.4			19.7			6.0				
Actuated g/C Ratio	0.22	0.71			0.41			0.12				
Clearance Time (s)	4.0	4.0			4.0			4.0				
Vehicle Extension (s)	3.0	3.0			3.0			3.0				
Lane Grp Cap (vph)	387	2491			1335			372				
v/s Ratio Prot	c0.13	0.19			c0.32			c0.01				
v/s Ratio Perm												
v/c Ratio	0.59	0.26			0.78			0.05				
Uniform Delay, d1	16.9	2.4			12.5			18.6				
Progression Factor	1.00	1.00			1.00			1.00				
Incremental Delay, d2	2.4	0.0			3.1			0.0				
Delay (s)	19.3	2.5			15.6			18.7				
Level of Service	B	A			B			B				
Approach Delay (s/veh)		6.9			15.6			18.7			0.0	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	48.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	540	225	0	0	89	129	353	1	8	0	0	0
Future Volume (vph)	540	225	0	0	89	129	353	1	8	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	1.00				
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	0.97				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	0.86				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (prot)	3335	1810			1810	1513	1719	1530				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (perm)	3335	1810			1810	1513	1719	1530				
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	692	288	0	0	114	165	453	1	10	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	142	0	7	0	0	0	0
Lane Group Flow (vph)	692	288	0	0	114	23	453	4	0	0	0	0
Confl. Peds. (#/hr)	2		1	1		2	1		2	2		1
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		8	8				
Permitted Phases						6						
Actuated Green, G (s)	14.3	25.3			7.0	7.0	16.6	16.6				
Effective Green, g (s)	14.3	25.3			7.0	7.0	16.6	16.6				
Actuated g/C Ratio	0.29	0.51			0.14	0.14	0.33	0.33				
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0				
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	955	917			253	212	571	508				
v/s Ratio Prot	c0.21	0.16			c0.06		c0.26	0.00				
v/s Ratio Perm						0.02						
v/c Ratio	0.72	0.31			0.45	0.10	0.79	0.00				
Uniform Delay, d1	16.0	7.2			19.6	18.7	15.0	11.1				
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00				
Incremental Delay, d2	2.7	0.1			1.2	0.2	10.8	0.0				
Delay (s)	18.7	7.4			20.9	18.9	25.9	11.1				
Level of Service	B	A			C	B	C	B				
Approach Delay (s/veh)		15.4			19.7			25.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	49.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	799	353	44	624	0	0	0	0	148	0	1025
Future Volume (vph)	0	799	353	44	624	0	0	0	0	148	0	1025
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.86	1.00	1.00	0.95					0.95	0.95	0.88
Frpb, ped/bikes		1.00	0.97	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		5942	1436	1597	3195					1618	1618	2682
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		5942	1436	1597	3195					1618	1618	2682
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	0	986	436	54	770	0	0	0	0	183	0	1265
RTOR Reduction (vph)	0	0	319	0	0	0	0	0	0	0	0	77
Lane Group Flow (vph)	0	986	117	54	770	0	0	0	0	91	92	1188
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	10%	10%	10%	13%	13%	13%	10%	10%	10%	6%	6%	6%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		2		1	6					4	4	4
Permitted Phases			2									
Actuated Green, G (s)		15.4	15.4	2.2	21.6					27.6	27.6	27.6
Effective Green, g (s)		15.4	15.4	2.2	21.6					27.6	27.6	27.6
Actuated g/C Ratio		0.27	0.27	0.04	0.38					0.48	0.48	0.48
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1599	386	61	1206					780	780	1294
v/s Ratio Prot		0.17		0.03	c0.24					0.06	0.06	c0.44
v/s Ratio Perm			0.08									
v/c Ratio		0.61	0.30	0.88	0.63					0.11	0.11	0.91
Uniform Delay, d1		18.3	16.6	27.3	14.5					8.1	8.1	13.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.7	0.4	75.0	1.1					0.0	0.0	10.4
Delay (s)		19.0	17.0	102.3	15.7					8.1	8.1	24.1
Level of Service		B	B	F	B					A	A	C
Approach Delay (s/veh)		18.4			21.3			0.0			22.1	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	57.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	589	318	0	0	184	118	479	4	82	0	0	0
Future Volume (vph)	589	318	0	0	184	118	479	4	82	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3127	3223			2735	1208	1618	1623	1504			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3127	3223			2735	1208	1618	1623	1504			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	640	346	0	0	200	128	521	4	89	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	103	0	0	66	0	0	0
Lane Group Flow (vph)	640	346	0	0	200	25	260	265	23	0	0	0
Confl. Peds. (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	12%	12%	12%	32%	32%	32%	6%	6%	6%	32%	32%	32%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.1	27.4			9.3	9.3	12.7	12.7	12.7			
Effective Green, g (s)	14.1	27.4			9.3	9.3	12.7	12.7	12.7			
Actuated g/C Ratio	0.29	0.57			0.19	0.19	0.26	0.26	0.26			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	916	1835			528	233	427	428	397			
v/s Ratio Prot	c0.20	0.11			c0.07		0.16	c0.16				
v/s Ratio Perm						0.02			0.02			
v/c Ratio	0.69	0.18			0.37	0.10	0.60	0.61	0.05			
Uniform Delay, d1	15.1	4.9			16.8	15.9	15.5	15.5	13.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	2.3	0.0			0.4	0.2	2.4	2.6	0.0			
Delay (s)	17.4	5.0			17.3	16.1	17.9	18.2	13.2			
Level of Service	B	A			B	B	B	B	B			
Approach Delay (s/veh)		13.1			16.8			17.4			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	48.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	41	16	406	75	449	31	392	58	326	241	56
Future Volume (vph)	64	41	16	406	75	449	31	392	58	326	241	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		0.95	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	3356		1665	1694	1568	1752	3437		1752	3505	1530
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1752	3356		1665	1694	1568	1752	3437		1752	3505	1530
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	82	53	21	521	96	576	40	503	74	418	309	72
RTOR Reduction (vph)	0	19	0	0	0	170	0	14	0	0	0	42
Lane Group Flow (vph)	82	55	0	307	310	406	40	563	0	418	309	30
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												2
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA		Prot	NA	Perm
Protected Phases	4	4		8	8	8 1	5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	7.2	7.2		16.1	16.1	36.3	2.8	16.7		16.2	30.1	30.1
Effective Green, g (s)	7.2	7.2		16.1	16.1	36.3	2.8	16.7		16.2	30.1	30.1
Actuated g/C Ratio	0.10	0.10		0.22	0.22	0.50	0.04	0.23		0.22	0.42	0.42
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	174	334		371	377	788	67	794		393	1461	637
v/s Ratio Prot	c0.05	0.02		c0.18	0.18	0.26	0.02	c0.16		c0.24	0.09	
v/s Ratio Perm												0.02
v/c Ratio	0.47	0.16		0.82	0.82	0.51	0.59	0.70		1.06	0.21	0.04
Uniform Delay, d1	30.7	29.7		26.7	26.6	12.0	34.1	25.5		28.0	13.4	12.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.0	0.2		14.0	13.4	0.5	13.4	2.9		63.2	0.0	0.0
Delay (s)	32.7	29.9		40.7	40.1	12.6	47.6	28.4		91.2	13.5	12.5
Level of Service	C	C		D	D	B	D	C		F	B	B
Approach Delay (s/veh)		31.4			27.0			29.6			54.1	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	72.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	589	416	532	769	0	0	0	0	432	139	294
Future Volume (vph)	0	589	416	532	769	0	0	0	0	432	139	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	4.0
Lane Util. Factor		0.95		0.97	0.95						1.00	1.00
Frpb, ped/bikes		0.99		1.00	1.00						1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.93		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.96	1.00
Satd. Flow (prot)		3259		3400	3505						1777	1529
Flt Permitted		1.00		0.95	1.00						0.96	1.00
Satd. Flow (perm)		3259		3400	3505						1777	1529
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	647	457	585	845	0	0	0	0	475	153	323
RTOR Reduction (vph)	0	181	0	0	0	0	0	0	0	0	0	57
Lane Group Flow (vph)	0	923	0	585	845	0	0	0	0	0	628	266
Confl. Peds. (#/hr)	11		4	4		11	12					12
Confl. Bikes (#/hr)			4			2						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases												4
Actuated Green, G (s)		17.1		12.0	33.1						27.3	27.3
Effective Green, g (s)		17.1		12.0	33.1						27.3	27.3
Actuated g/C Ratio		0.25		0.18	0.48						0.40	0.40
Clearance Time (s)		4.0		4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		814		596	1696						709	610
v/s Ratio Prot		c0.28		c0.17	0.24						c0.35	
v/s Ratio Perm												0.17
v/c Ratio		1.13		0.98	0.49						0.88	0.43
Uniform Delay, d1		25.6		28.0	12.0						19.1	14.9
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		75.3		32.0	0.2						12.7	0.5
Delay (s)		101.0		60.1	12.2						31.8	15.4
Level of Service		F		E	B						C	B
Approach Delay (s/veh)		101.0			31.8			0.0			26.2	
Approach LOS		F			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	712	133	8	871	212	468	29	332	0	0	0
Future Volume (vph)	185	712	133	8	871	212	468	29	332	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0			
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		1.00	1.00			
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.97		1.00	0.98			
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00			
Frt	1.00	0.97		1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	3400	3407		1752	3505	1532		1762	1547			
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00			
Satd. Flow (perm)	3400	3407		1752	3505	1532		1762	1547			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	195	749	140	8	917	223	493	31	349	0	0	0
RTOR Reduction (vph)	0	15	0	0	0	125	0	0	232	0	0	0
Lane Group Flow (vph)	195	874	0	8	917	98	0	524	117	0	0	0
Confl. Peds. (#/hr)	7		5	5		7			2	2		
Confl. Bikes (#/hr)			4			4						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm			
Protected Phases	5	2		1	6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	7.0	32.2		1.3	26.5	26.5		22.9	22.9			
Effective Green, g (s)	7.0	32.2		1.3	26.5	26.5		22.9	22.9			
Actuated g/C Ratio	0.10	0.47		0.02	0.39	0.39		0.33	0.33			
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	347	1603		33	1357	593		589	517			
v/s Ratio Prot	c0.06	0.26		0.00	c0.26			c0.30				
v/s Ratio Perm						0.06			0.08			
v/c Ratio	0.56	0.54		0.24	0.67	0.16		0.88	0.22			
Uniform Delay, d1	29.2	12.8		33.0	17.3	13.7		21.5	16.3			
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	2.0	0.3		3.7	1.3	0.1		15.2	0.2			
Delay (s)	31.3	13.2		36.8	18.7	13.8		36.7	16.5			
Level of Service	C	B		D	B	B		D	B			
Approach Delay (s/veh)		16.5			17.9			28.7			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	769	34	62	678	71	65	7	172	89	8	35
Future Volume (vph)	21	769	34	62	678	71	65	7	172	89	8	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	0.98		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.85		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3482		1752	3448		1752	1558		1752	1618	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	3482		1752	3448		1752	1558		1752	1618	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	24	894	40	72	788	83	76	8	200	103	9	41
RTOR Reduction (vph)	0	4	0	0	9	0	0	172	0	0	35	0
Lane Group Flow (vph)	24	930	0	72	862	0	76	36	0	103	15	0
Confl. Peds. (#/hr)	1					1						
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	0.7	20.7		3.0	23.0		7.9	7.9		8.6	8.6	
Effective Green, g (s)	0.7	20.7		3.0	23.0		7.9	7.9		8.6	8.6	
Actuated g/C Ratio	0.01	0.37		0.05	0.41		0.14	0.14		0.15	0.15	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	21	1282		93	1411		246	219		268	247	
v/s Ratio Prot	0.01	c0.27		c0.04	0.25		c0.04	0.02		c0.06	0.01	
v/s Ratio Perm												
v/c Ratio	1.14	0.72		0.77	0.61		0.30	0.16		0.38	0.06	
Uniform Delay, d1	27.7	15.3		26.2	13.0		21.6	21.2		21.4	20.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	244.5	2.0		32.1	0.7		0.7	0.3		0.9	0.1	
Delay (s)	272.2	17.3		58.4	13.8		22.4	21.6		22.3	20.4	
Level of Service	F	B		E	B		C	C		C	C	
Approach Delay (s/veh)		23.7			17.2			21.8			21.7	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	116	402	41	210	414	255	133	402	217	314	221	130
Future Volume (vph)	116	402	41	210	414	255	133	402	217	314	221	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	0.95		0.91	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.94		1.00	0.94		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.98	
Satd. Flow (prot)	3400	3452		3400	3284		1752	3298		1595	3161	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.98	
Satd. Flow (perm)	3400	3452		3400	3284		1752	3298		1595	3161	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	147	509	52	266	524	323	168	509	275	397	280	165
RTOR Reduction (vph)	0	7	0	0	88	0	0	64	0	0	38	0
Lane Group Flow (vph)	147	554	0	266	759	0	168	720	0	282	522	0
Confl. Peds. (#/hr)	3					3	4		5	5		4
Confl. Bikes (#/hr)			1			1			2			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	7.1	24.2		11.4	28.5		25.5	25.5		23.2	23.2	
Effective Green, g (s)	7.1	24.2		11.4	28.5		25.5	25.5		23.2	23.2	
Actuated g/C Ratio	0.07	0.24		0.11	0.28		0.25	0.25		0.23	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	240	832		386	933		445	838		368	731	
v/s Ratio Prot	0.04	0.16		c0.08	c0.23		0.10	c0.22		c0.18	0.17	
v/s Ratio Perm												
v/c Ratio	0.61	0.66		0.68	0.81		0.37	0.85		0.76	0.71	
Uniform Delay, d1	45.2	34.3		42.7	33.4		30.8	35.6		36.0	35.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.5	2.0		5.0	5.4		0.5	8.7		9.2	3.3	
Delay (s)	49.8	36.4		47.8	38.9		31.3	44.4		45.2	38.8	
Level of Service	D	D		D	D		C	D		D	D	
Approach Delay (s/veh)		39.2			41.0			42.1			40.9	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	497	95	53	702	18	290	68	90	17	43	63
Future Volume (vph)	81	497	95	53	702	18	290	68	90	17	43	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99			1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.91			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (prot)	1736	3375		1736	3456		1736	1658			1802	1532
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.98	1.00
Satd. Flow (perm)	1736	3375		1736	3456		1736	1658			1802	1532
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	95	585	112	62	826	21	341	80	106	20	51	74
RTOR Reduction (vph)	0	17	0	0	2	0	0	56	0	0	0	65
Lane Group Flow (vph)	95	680	0	62	845	0	341	130	0	0	71	9
Confl. Peds. (#/hr)	4		1	1		4	1		1	1		1
Confl. Bikes (#/hr)			1			2						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Actuated Green, G (s)	7.4	19.4		5.0	17.0		16.3	16.3			7.9	7.9
Effective Green, g (s)	7.4	19.4		5.0	17.0		16.3	16.3			7.9	7.9
Actuated g/C Ratio	0.11	0.30		0.08	0.26		0.25	0.25			0.12	0.12
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	198	1013		134	909		438	418			220	187
v/s Ratio Prot	c0.05	0.20		0.04	c0.24		c0.20	0.08			c0.04	
v/s Ratio Perm												0.01
v/c Ratio	0.47	0.67		0.46	0.92		0.77	0.31			0.32	0.04
Uniform Delay, d1	26.7	19.8		28.5	23.2		22.4	19.5			25.9	25.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	1.8	1.7		2.5	15.3		8.4	0.4			0.8	0.1
Delay (s)	28.6	21.5		31.0	38.5		30.9	20.0			26.7	25.1
Level of Service	C	C		C	D		C	C			C	C
Approach Delay (s/veh)		22.4			38.0			27.1			25.9	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	64.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	104	793	95	263	551	211	119	564	403	188	369	76
Future Volume (vph)	104	793	95	263	551	211	119	564	403	188	369	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1563	3433	3539	1563	1770	3539	1552	1770	3438	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1563	3433	3539	1563	1770	3539	1552	1770	3438	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	120	911	109	302	633	243	137	648	463	216	424	87
RTOR Reduction (vph)	0	0	76	0	0	165	0	0	122	0	24	0
Lane Group Flow (vph)	120	911	33	302	633	78	137	648	341	216	487	0
Confl. Peds. (#/hr)	1		1	1		1	9		2	2		9
Confl. Bikes (#/hr)									9			1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	3.9	22.4	22.4	5.1	23.6	23.6	7.1	22.5	22.5	7.1	22.5	
Effective Green, g (s)	3.9	22.4	22.4	5.1	23.6	23.6	7.1	22.5	22.5	7.1	22.5	
Actuated g/C Ratio	0.05	0.31	0.31	0.07	0.32	0.32	0.10	0.31	0.31	0.10	0.31	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	183	1084	478	239	1142	504	171	1089	477	171	1058	
v/s Ratio Prot	0.03	c0.26		c0.09	0.18		0.08	0.18		c0.12	0.14	
v/s Ratio Perm			0.02			0.05			c0.22			
v/c Ratio	0.65	0.84	0.06	1.26	0.55	0.15	0.80	0.59	0.71	1.26	0.46	
Uniform Delay, d1	33.9	23.6	17.9	34.0	20.4	17.6	32.3	21.4	22.4	33.0	20.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.1	6.0	0.0	147.6	0.5	0.1	22.9	0.8	5.0	156.6	0.3	
Delay (s)	42.1	29.6	18.0	181.6	20.9	17.7	55.2	22.3	27.5	189.6	20.7	
Level of Service	D	C	B	F	C	B	E	C	C	F	C	
Approach Delay (s/veh)		29.8			61.5			27.8			70.9	
Approach LOS		C			E			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	44.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	73.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	773	103	38	637	15	148	61	105	24	59	8
Future Volume (vph)	4	773	103	38	637	15	148	61	105	24	59	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.90		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3435		1752	3491		1752	1655		1752	1813	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1752	3435		1752	3491		1752	1655		1752	1813	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	5	909	121	45	749	18	174	72	124	28	69	9
RTOR Reduction (vph)	0	13	0	0	2	0	0	91	0	0	8	0
Lane Group Flow (vph)	5	1017	0	45	765	0	174	105	0	28	70	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.7	20.1		2.1	21.5		10.6	11.7		6.5	7.6	
Effective Green, g (s)	0.7	20.1		2.1	21.5		10.6	11.7		6.5	7.6	
Actuated g/C Ratio	0.01	0.36		0.04	0.38		0.19	0.21		0.12	0.13	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	21	1224		65	1330		329	343		201	244	
v/s Ratio Prot	0.00	c0.30		c0.03	0.22		c0.10	c0.06		0.02	0.04	
v/s Ratio Perm												
v/c Ratio	0.23	0.83		0.69	0.57		0.52	0.30		0.13	0.28	
Uniform Delay, d1	27.5	16.5		26.8	13.8		20.6	18.9		22.4	21.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.7	4.9		27.2	0.6		1.5	0.5		0.3	0.6	
Delay (s)	33.3	21.5		54.1	14.4		22.1	19.4		22.7	22.6	
Level of Service	C	C		D	B		C	B		C	C	
Approach Delay (s/veh)		21.5			16.6			20.7			22.6	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	56.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	32	196	48	79	104	246	548	77	82	358	246
Future Volume (vph)	155	32	196	48	79	104	246	548	77	82	358	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.98		1.00	0.95	1.00	0.99		1.00	0.98	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.93	
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1789	1558		1828	1512	1770	3462		1770	3261	
Flt Permitted		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1789	1558		1828	1512	1770	3462		1770	3261	
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	185	38	233	57	94	124	293	652	92	98	426	293
RTOR Reduction (vph)	0	0	185	0	0	103	0	13	0	0	146	0
Lane Group Flow (vph)	0	223	48	0	151	21	293	731	0	98	573	0
Confl. Peds. (#/hr)	32		4	4		32	13		2	2		13
Confl. Bikes (#/hr)						2			2			
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		13.4	13.4		10.8	10.8	8.2	19.7		4.6	16.1	
Effective Green, g (s)		13.4	13.4		10.8	10.8	8.2	19.7		4.6	16.1	
Actuated g/C Ratio		0.21	0.21		0.17	0.17	0.13	0.31		0.07	0.25	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		371	323		306	253	225	1057		126	813	
v/s Ratio Prot		c0.12			c0.08		c0.17	c0.21		0.06	0.18	
v/s Ratio Perm			0.03			0.01						
v/c Ratio		0.60	0.14		0.49	0.08	1.30	0.69		0.77	0.70	
Uniform Delay, d1		23.1	20.8		24.3	22.6	28.1	19.7		29.4	22.0	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.7	0.2		1.2	0.1	164.4	1.9		25.4	2.8	
Delay (s)		25.8	21.1		25.6	22.8	192.6	21.7		54.8	24.8	
Level of Service		C	C		C	C	F	C		D	C	
Approach Delay (s/veh)		23.4			24.3			70.0			28.4	
Approach LOS		C			C			E			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	64.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

3: US-101 SB On Ramp/US-101 SB Off Ramp & E Clark Ave Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.1	0.0	0.4	0.6
Denied Del/Veh (s)	0.3	0.4	2.8	0.9
Total Delay (hr)	0.9	0.2	1.6	2.7
Total Del/Veh (s)	2.8	1.6	10.9	4.5
Vehicles Entered	1158	437	511	2106
Vehicles Exited	1157	437	511	2105
Hourly Exit Rate	1157	437	511	2105
Input Volume	1148	442	510	2100
% of Volume	101	99	100	100

5: US-101 SB Ramp & E Union Valley Parkway Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	5.1	0.0	0.8	5.9
Denied Del/Veh (s)	13.3	0.3	3.6	8.7
Total Delay (hr)	5.0	0.4	6.2	11.6
Total Del/Veh (s)	13.1	4.9	27.2	16.9
Vehicles Entered	1371	270	812	2453
Vehicles Exited	1371	271	813	2455
Hourly Exit Rate	1371	271	813	2455
Input Volume	1370	285	811	2466
% of Volume	100	95	100	100

6: US-101 SB Ramps & S Santa Maria Way Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.1	0.1	0.5	0.7
Denied Del/Veh (s)	0.5	0.5	3.4	1.2
Total Delay (hr)	1.2	0.1	0.9	2.1
Total Del/Veh (s)	3.8	0.5	5.8	3.4
Vehicles Entered	1122	593	536	2251
Vehicles Exited	1122	593	537	2252
Hourly Exit Rate	1122	593	537	2252
Input Volume	1116	593	535	2244
% of Volume	101	100	100	100

10: Nicholson Ave/US-101 NB Ramp & E Stowell Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.0	0.6	0.7
Denied Del/Veh (s)	0.4	0.1	0.1	3.4	1.7
Total Delay (hr)	0.4	0.2	0.1	0.9	1.6
Total Del/Veh (s)	1.9	16.3	14.6	5.1	3.9
Vehicles Entered	746	41	28	636	1451
Vehicles Exited	746	41	28	636	1451
Hourly Exit Rate	746	41	28	636	1451
Input Volume	751	40	30	630	1452
% of Volume	99	102	94	101	100

Total Network Performance

Denied Delay (hr)	7.9
Denied Del/Veh (s)	3.4
Total Delay (hr)	22.4
Total Del/Veh (s)	9.7
Vehicles Entered	8261
Vehicles Exited	8267
Hourly Exit Rate	8267
Input Volume	16523
% of Volume	50



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	585	9	111	510	0	0	0	0	288	0	222
Future Volume (vph)	0	585	9	111	510	0	0	0	0	288	0	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	4.0
Lane Util. Factor		0.95		1.00	0.95						1.00	1.00
Frpb, ped/bikes		0.99		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.95	1.00
Satd. Flow (prot)		3529		1770	3539						1770	1559
Flt Permitted		1.00		0.95	1.00						0.95	1.00
Satd. Flow (perm)		3529		1770	3539						1770	1559
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	629	10	119	548	0	0	0	0	310	0	239
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	167
Lane Group Flow (vph)	0	638	0	119	548	0	0	0	0	0	310	72
Confl. Peds. (#/hr)	6		4	4		6	5					5
Confl. Bikes (#/hr)			1			1						
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases												4
Actuated Green, G (s)		15.7		7.2	26.9						14.9	14.9
Effective Green, g (s)		15.7		7.2	26.9						14.9	14.9
Actuated g/C Ratio		0.32		0.14	0.54						0.30	0.30
Clearance Time (s)		4.0		4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		1112		255	1911						529	466
v/s Ratio Prot		c0.18		c0.07	0.15						c0.18	
v/s Ratio Perm												0.05
v/c Ratio		0.57		0.46	0.28						0.58	0.15
Uniform Delay, d1		14.2		19.5	6.2						14.8	12.8
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		0.7		1.3	0.0						1.6	0.1
Delay (s)		14.9		20.8	6.3						16.4	12.9
Level of Service		B		C	A						B	B
Approach Delay (s/veh)		14.9			8.9			0.0			14.9	
Approach LOS		B			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	49.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	156	719	0	0	577	222	25	2	264	0	0	0
Future Volume (vph)	156	719	0	0	577	222	25	2	264	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0			4.0				
Lane Util. Factor	1.00	0.95			0.95			0.95				
Frpb, ped/bikes	1.00	1.00			0.99			1.00				
Flpb, ped/bikes	1.00	1.00			1.00			1.00				
Frt	1.00	1.00			0.95			0.86				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1770	3539			3376			3045				
Flt Permitted	0.95	1.00			1.00			0.99				
Satd. Flow (perm)	1770	3539			3376			3045				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	166	765	0	0	614	236	27	2	281	0	0	0
RTOR Reduction (vph)	0	0	0	0	63	0	0	167	0	0	0	0
Lane Group Flow (vph)	166	765	0	0	787	0	0	143	0	0	0	0
Confl. Peds. (#/hr)	5		2	2		5						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA			NA		Split	NA				
Protected Phases	5	2			6		8	8				
Permitted Phases												
Actuated Green, G (s)	7.4	27.7			16.3			8.0				
Effective Green, g (s)	7.4	27.7			16.3			8.0				
Actuated g/C Ratio	0.17	0.63			0.37			0.18				
Clearance Time (s)	4.0	4.0			4.0			4.0				
Vehicle Extension (s)	3.0	3.0			3.0			3.0				
Lane Grp Cap (vph)	299	2243			1259			557				
v/s Ratio Prot	c0.09	0.22			c0.23			c0.05				
v/s Ratio Perm												
v/c Ratio	0.55	0.34			0.62			0.25				
Uniform Delay, d1	16.6	3.7			11.2			15.3				
Progression Factor	1.00	1.00			1.00			1.00				
Incremental Delay, d2	2.2	0.0			0.9			0.2				
Delay (s)	18.8	3.8			12.1			15.5				
Level of Service	B	A			B			B				
Approach Delay (s/veh)		6.5			12.1			15.5			0.0	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	43.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	388	200	0	0	127	161	548	1	14	0	0	0
Future Volume (vph)	388	200	0	0	127	161	548	1	14	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0				
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	1.00				
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	0.97				
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00				
Frt	1.00	1.00			1.00	0.85	1.00	0.85				
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (prot)	3400	1845			1845	1543	1752	1551				
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00				
Satd. Flow (perm)	3400	1845			1845	1543	1752	1551				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	408	211	0	0	134	169	577	1	15	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	143	0	10	0	0	0	0
Lane Group Flow (vph)	408	211	0	0	134	26	577	6	0	0	0	0
Confl. Peds. (#/hr)	2		1	1		2	1		2	2		1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		8	8				
Permitted Phases						6						
Actuated Green, G (s)	11.1	22.3			7.2	7.2	16.6	16.6				
Effective Green, g (s)	11.1	22.3			7.2	7.2	16.6	16.6				
Actuated g/C Ratio	0.24	0.48			0.15	0.15	0.35	0.35				
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0				
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0				
Lane Grp Cap (vph)	804	877			283	236	620	548				
v/s Ratio Prot	c0.12	0.11			c0.07		c0.33	0.00				
v/s Ratio Perm						0.02						
v/c Ratio	0.50	0.24			0.47	0.10	0.93	0.01				
Uniform Delay, d1	15.5	7.2			18.1	17.0	14.5	9.8				
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00				
Incremental Delay, d2	0.5	0.1			1.2	0.2	22.5	0.0				
Delay (s)	16.0	7.4			19.3	17.2	37.1	9.8				
Level of Service	B	A			B	B	D	A				
Approach Delay (s/veh)		13.1			18.2			36.4			0.0	
Approach LOS		B			B			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1152	616	47	888	0	0	0	0	69	0	901
Future Volume (vph)	0	1152	616	47	888	0	0	0	0	69	0	901
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.86	1.00	1.00	0.95					0.95	0.95	0.88
Frpb, ped/bikes		1.00	0.97	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		6346	1534	1703	3406					1588	1588	2632
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		6346	1534	1703	3406					1588	1588	2632
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1188	635	48	915	0	0	0	0	71	0	929
RTOR Reduction (vph)	0	0	439	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	1188	196	48	915	0	0	0	0	35	36	877
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	3%	3%	3%	6%	6%	6%	2%	2%	2%	8%	8%	8%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		2		1	6					4	4	4
Permitted Phases			2									
Actuated Green, G (s)		16.6	16.6	2.1	22.7					23.1	23.1	23.1
Effective Green, g (s)		16.6	16.6	2.1	22.7					23.1	23.1	23.1
Actuated g/C Ratio		0.31	0.31	0.04	0.42					0.43	0.43	0.43
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1958	473	66	1437					681	681	1130
v/s Ratio Prot		0.19		0.03	c0.27					0.02	0.02	c0.33
v/s Ratio Perm			0.13									
v/c Ratio		0.60	0.41	0.72	0.63					0.05	0.05	0.77
Uniform Delay, d1		15.8	14.7	25.5	12.2					8.9	8.9	13.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.5	32.6	0.9					0.0	0.0	3.4
Delay (s)		16.3	15.3	58.1	13.2					8.9	8.9	16.5
Level of Service		B	B	E	B					A	A	B
Approach Delay (s/veh)		16.0			15.4			0.0			16.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	53.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1009	198	0	0	287	184	646	7	62	0	0	0
Future Volume (vph)	1009	198	0	0	287	184	646	7	62	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	3335	3438			3312	1462	1649	1655	1533			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	3335	3438			3312	1462	1649	1655	1533			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1073	211	0	0	305	196	687	7	66	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	157	0	0	48	0	0	0
Lane Group Flow (vph)	1073	211	0	0	305	39	343	351	18	0	0	0
Confl. Peds. (#/hr)	1		1	1		1			1	1		
Heavy Vehicles (%)	5%	5%	5%	9%	9%	9%	4%	4%	4%	2%	2%	2%
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	16.1	30.8			10.7	10.7	14.8	14.8	14.8			
Effective Green, g (s)	16.1	30.8			10.7	10.7	14.8	14.8	14.8			
Actuated g/C Ratio	0.30	0.57			0.20	0.20	0.28	0.28	0.28			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	1001	1975			661	291	455	456	423			
v/s Ratio Prot	c0.32	0.06			c0.09		0.21	c0.21				
v/s Ratio Perm						0.03			0.01			
v/c Ratio	1.07	0.10			0.46	0.13	0.75	0.76	0.04			
Uniform Delay, d1	18.7	5.1			18.9	17.6	17.7	17.8	14.2			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	49.7	0.0			0.5	0.2	6.9	7.6	0.0			
Delay (s)	68.5	5.1			19.4	17.8	24.6	25.5	14.2			
Level of Service	E	A			B	B	C	C	B			
Approach Delay (s/veh)		58.1			18.8			24.1			0.0	
Approach LOS		E			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	53.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	72	81	520	50	280	74	646	100	483	443	76
Future Volume (vph)	98	72	81	520	50	280	74	646	100	483	443	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		0.95	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3257		1681	1700	1583	1770	3468		1770	3539	1547
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3257		1681	1700	1583	1770	3468		1770	3539	1547
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	101	74	84	536	52	289	76	666	103	498	457	78
RTOR Reduction (vph)	0	73	0	0	0	150	0	15	0	0	0	47
Lane Group Flow (vph)	101	85	0	295	293	139	76	754	0	498	457	31
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												1
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA		Prot	NA	Perm
Protected Phases	4	4		8	8	8 1	5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)	9.5	9.5		15.4	15.4	35.4	3.9	16.9		16.0	29.0	29.0
Effective Green, g (s)	9.5	9.5		15.4	15.4	35.4	3.9	16.9		16.0	29.0	29.0
Actuated g/C Ratio	0.13	0.13		0.21	0.21	0.48	0.05	0.23		0.22	0.39	0.39
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	227	419		350	354	759	93	794		383	1390	607
v/s Ratio Prot	c0.06	0.03		c0.18	0.17	0.09	0.04	c0.22		c0.28	0.13	
v/s Ratio Perm												0.02
v/c Ratio	0.44	0.20		0.84	0.82	0.18	0.81	0.95		1.30	0.32	0.05
Uniform Delay, d1	29.7	28.7		28.0	27.9	10.9	34.5	28.0		28.8	15.6	13.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	0.2		16.6	14.6	0.1	40.3	20.6		153.0	0.1	0.0
Delay (s)	31.1	29.0		44.6	42.5	11.0	74.9	48.7		181.9	15.7	13.9
Level of Service	C	C		D	D	B	E	D		F	B	B
Approach Delay (s/veh)		29.8			32.8			51.0			95.7	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	59.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	73.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	631	502	456	916	0	0	0	0	146	140	348
Future Volume (vph)	0	631	502	456	916	0	0	0	0	146	140	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	4.0
Lane Util. Factor		0.95		0.97	0.95						1.00	1.00
Frpb, ped/bikes		0.99		1.00	1.00						1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.93		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3279		3433	3539						1816	1547
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3279		3433	3539						1816	1547
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	686	546	496	996	0	0	0	0	159	152	378
RTOR Reduction (vph)	0	192	0	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	1040	0	496	996	0	0	0	0	0	311	324
Confl. Peds. (#/hr)	11		4	4		11	12					12
Confl. Bikes (#/hr)			1			1						1
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases												4
Actuated Green, G (s)		17.3		11.7	33.0						18.3	18.3
Effective Green, g (s)		17.3		11.7	33.0						18.3	18.3
Actuated g/C Ratio		0.29		0.20	0.56						0.31	0.31
Clearance Time (s)		4.0		4.0	4.0						4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0						3.0	3.0
Lane Grp Cap (vph)		956		677	1969						560	477
v/s Ratio Prot		c0.32		c0.14	0.28						0.17	
v/s Ratio Perm												c0.21
v/c Ratio		1.08		0.73	0.50						0.55	0.67
Uniform Delay, d1		21.0		22.3	8.1						17.1	17.9
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		56.0		4.1	0.2						1.1	3.8
Delay (s)		77.0		26.4	8.3						18.3	21.7
Level of Service		E		C	A						B	C
Approach Delay (s/veh)		77.0			14.3			0.0			20.2	
Approach LOS		E			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	59.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	312	436	25	3	772	250	608	83	279	0	0	0
Future Volume (vph)	312	436	25	3	772	250	608	83	279	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0			
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00		1.00	1.00			
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.97		1.00	0.98			
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00			
Frt	1.00	0.99		1.00	1.00	0.85		1.00	0.85			
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00			
Satd. Flow (prot)	3433	3506		1770	3539	1549		1784	1562			
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00			
Satd. Flow (perm)	3433	3506		1770	3539	1549		1784	1562			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	351	490	28	3	867	281	683	93	313	0	0	0
RTOR Reduction (vph)	0	4	0	0	0	170	0	0	202	0	0	0
Lane Group Flow (vph)	351	514	0	3	867	111	0	776	111	0	0	0
Confl. Peds. (#/hr)	7		5	5		7			2	2		
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm			
Protected Phases	5	2		1	6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	7.0	32.2		1.2	26.4	26.4		25.1	25.1			
Effective Green, g (s)	7.0	32.2		1.2	26.4	26.4		25.1	25.1			
Actuated g/C Ratio	0.10	0.46		0.02	0.37	0.37		0.36	0.36			
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0			
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)	340	1601		30	1325	580		635	556			
v/s Ratio Prot	c0.10	0.15		0.00	c0.24			c0.43				
v/s Ratio Perm						0.07			0.07			
v/c Ratio	1.03	0.32		0.10	0.65	0.19		1.22	0.20			
Uniform Delay, d1	31.7	12.1		34.1	18.2	14.8		22.7	15.7			
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2	57.4	0.1		1.4	1.1	0.1		113.6	0.1			
Delay (s)	89.1	12.3		35.5	19.4	15.0		136.3	15.9			
Level of Service	F	B		D	B	B		F	B			
Approach Delay (s/veh)		43.3			18.4			101.7			0.0	
Approach LOS		D			B			F			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	70.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	727	84	179	977	91	52	7	99	58	3	24
Future Volume (vph)	23	727	84	179	977	91	52	7	99	58	3	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.85		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1769	3484		1770	3487		1770	1602		1770	1590	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1769	3484		1770	3487		1770	1602		1770	1590	
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	27	845	98	208	1136	106	60	8	115	67	3	28
RTOR Reduction (vph)	0	11	0	0	7	0	0	100	0	0	24	0
Lane Group Flow (vph)	27	932	0	208	1235	0	60	23	0	67	7	0
Confl. Peds. (#/hr)	1					1						
Confl. Bikes (#/hr)												1
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	0.7	21.3		4.0	24.6		7.2	7.2		7.4	7.4	
Effective Green, g (s)	0.7	21.3		4.0	24.6		7.2	7.2		7.4	7.4	
Actuated g/C Ratio	0.01	0.38		0.07	0.44		0.13	0.13		0.13	0.13	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	22	1327		126	1534		227	206		234	210	
v/s Ratio Prot	0.02	0.27		c0.12	c0.35		c0.03	0.01		c0.04	0.00	
v/s Ratio Perm												
v/c Ratio	1.22	0.70		1.65	0.80		0.26	0.11		0.28	0.03	
Uniform Delay, d1	27.6	14.6		25.9	13.5		21.9	21.5		21.8	21.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	269.7	1.7		325.4	3.1		0.6	0.2		0.6	0.0	
Delay (s)	297.3	16.3		351.4	16.7		22.5	21.7		22.5	21.1	
Level of Service	F	B		F	B		C	C		C	C	
Approach Delay (s/veh)		24.1			64.7			22.0			22.1	
Approach LOS		C			E			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	55.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	476	85	254	508	262	132	246	151	444	315	98
Future Volume (vph)	166	476	85	254	508	262	132	246	151	444	315	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97	0.95		0.97	0.95		1.00	0.95		0.91	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.94		1.00	0.94		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.98	
Satd. Flow (prot)	3433	3458		3433	3341		1770	3316		1610	3249	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	0.98	
Satd. Flow (perm)	3433	3458		3433	3341		1770	3316		1610	3249	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	173	496	89	265	529	273	138	256	157	462	328	102
RTOR Reduction (vph)	0	13	0	0	60	0	0	94	0	0	15	0
Lane Group Flow (vph)	173	572	0	265	742	0	138	319	0	296	582	0
Confl. Peds. (#/hr)	3					3	4		5	5		4
Confl. Bikes (#/hr)												1
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	7.2	21.7		11.1	25.6		14.5	14.5		22.4	22.4	
Effective Green, g (s)	7.2	21.7		11.1	25.6		14.5	14.5		22.4	22.4	
Actuated g/C Ratio	0.08	0.25		0.13	0.30		0.17	0.17		0.26	0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	288	875		444	998		299	561		420	849	
v/s Ratio Prot	0.05	0.17		c0.08	c0.22		0.08	c0.10		c0.18	0.18	
v/s Ratio Perm												
v/c Ratio	0.60	0.65		0.59	0.74		0.46	0.56		0.70	0.68	
Uniform Delay, d1	37.8	28.6		35.1	27.0		32.0	32.7		28.6	28.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.5	1.7		2.1	3.0		1.1	1.3		5.3	2.3	
Delay (s)	41.3	30.3		37.3	30.1		33.2	34.0		33.9	30.7	
Level of Service	D	C		D	C		C	C		C	C	
Approach Delay (s/veh)		32.8			31.9			33.8			31.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	664	257	100	604	25	152	39	61	13	90	52
Future Volume (vph)	51	664	257	100	604	25	152	39	61	13	90	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99			1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.95		1.00	0.99		1.00	0.90			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	1.00
Satd. Flow (prot)	1770	3369		1770	3515		1770	1679			1851	1560
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			0.99	1.00
Satd. Flow (perm)	1770	3369		1770	3515		1770	1679			1851	1560
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	54	699	271	105	636	26	160	41	64	14	95	55
RTOR Reduction (vph)	0	46	0	0	3	0	0	53	0	0	0	47
Lane Group Flow (vph)	54	924	0	105	659	0	160	52	0	0	109	8
Confl. Peds. (#/hr)	4		1	1		4	1		1	1		1
Confl. Bikes (#/hr)			1									1
Turn Type	Prot	NA		Prot	NA		Split	NA		Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												4
Actuated Green, G (s)	4.6	17.6		7.4	20.4		10.8	10.8			9.1	9.1
Effective Green, g (s)	4.6	17.6		7.4	20.4		10.8	10.8			9.1	9.1
Actuated g/C Ratio	0.08	0.29		0.12	0.33		0.18	0.18			0.15	0.15
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	133	973		215	1177		313	297			276	233
v/s Ratio Prot	0.03	c0.27		c0.06	c0.19		c0.09	0.03			c0.06	
v/s Ratio Perm												0.01
v/c Ratio	0.40	0.95		0.48	0.55		0.51	0.17			0.39	0.03
Uniform Delay, d1	26.8	21.2		24.9	16.5		22.6	21.2			23.4	22.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2	2.0	17.9		1.7	0.5		1.4	0.2			0.9	0.0
Delay (s)	28.8	39.2		26.7	17.1		24.0	21.5			24.3	22.2
Level of Service	C	D		C	B		C	C			C	C
Approach Delay (s/veh)		38.6			18.4			23.0			23.6	
Approach LOS		D			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	691	141	375	684	159	71	416	292	170	490	78
Future Volume (vph)	72	691	141	375	684	159	71	416	292	170	490	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	3539	1563	3433	3539	1563	1770	3539	1562	1770	3456	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	3539	1563	3433	3539	1563	1770	3539	1562	1770	3456	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	77	735	150	399	728	169	76	443	311	181	521	83
RTOR Reduction (vph)	0	0	105	0	0	115	0	0	142	0	18	0
Lane Group Flow (vph)	77	735	45	399	728	54	76	443	169	181	586	0
Confl. Peds. (#/hr)	1		1	1		1	9		2	2		9
Confl. Bikes (#/hr)												5
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	3.8	19.5	19.5	5.1	20.8	20.8	5.3	17.2	17.2	7.1	19.0	
Effective Green, g (s)	3.8	19.5	19.5	5.1	20.8	20.8	5.3	17.2	17.2	7.1	19.0	
Actuated g/C Ratio	0.06	0.30	0.30	0.08	0.32	0.32	0.08	0.27	0.27	0.11	0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	201	1063	469	269	1134	500	144	937	413	193	1011	
v/s Ratio Prot	0.02	c0.21		c0.12	0.21		0.04	0.13		c0.10	c0.17	
v/s Ratio Perm			0.03			0.03			0.11			
v/c Ratio	0.38	0.69	0.09	1.48	0.64	0.10	0.52	0.47	0.40	0.93	0.57	
Uniform Delay, d1	29.4	20.0	16.3	29.9	18.8	15.5	28.5	20.0	19.6	28.6	19.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	1.9	0.0	236.3	1.2	0.0	3.4	0.3	0.6	46.7	0.8	
Delay (s)	30.6	22.0	16.4	266.2	20.1	15.6	32.0	20.4	20.3	75.4	20.3	
Level of Service	C	C	B	F	C	B	C	C	C	E	C	
Approach Delay (s/veh)		21.8			95.3			21.4			33.0	
Approach LOS		C			F			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	64.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	834	98	55	677	22	63	60	47	19	68	3
Future Volume (vph)	8	834	98	55	677	22	63	60	47	19	68	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.93		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3484		1770	3523		1770	1730		1770	1851	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3484		1770	3523		1770	1730		1770	1851	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	9	948	111	62	769	25	72	68	53	22	77	3
RTOR Reduction (vph)	0	11	0	0	2	0	0	43	0	0	3	0
Lane Group Flow (vph)	9	1048	0	63	792	0	72	78	0	22	77	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)												1
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	0.7	19.8		2.2	21.3		7.6	8.9		6.3	7.6	
Effective Green, g (s)	0.7	19.8		2.2	21.3		7.6	8.9		6.3	7.6	
Actuated g/C Ratio	0.01	0.37		0.04	0.40		0.14	0.17		0.12	0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	23	1296		73	1410		252	289		209	264	
v/s Ratio Prot	0.01	c0.30		c0.04	0.22		c0.04	c0.04		0.01	0.04	
v/s Ratio Perm												
v/c Ratio	0.39	0.80		0.86	0.56		0.28	0.26		0.10	0.29	
Uniform Delay, d1	26.0	15.0		25.3	12.3		20.3	19.3		20.9	20.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.6	3.8		60.7	0.5		0.6	0.5		0.2	0.6	
Delay (s)	36.6	18.8		86.0	12.8		21.0	19.8		21.1	21.0	
Level of Service	D	B		F	B		C	B		C	C	
Approach Delay (s/veh)		18.9			18.2			20.2			21.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	53.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	25	182	52	24	64	155	446	46	51	511	104
Future Volume (vph)	114	25	182	52	24	64	155	446	46	51	511	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00	0.98		1.00	0.95	1.00	0.99		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1789	1553		1801	1519	1770	3482		1770	3422	
Flt Permitted		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1789	1553		1801	1519	1770	3482		1770	3422	
Peak-hour factor, PHF	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Adj. Flow (vph)	146	32	233	67	31	82	199	572	59	65	655	133
RTOR Reduction (vph)	0	0	190	0	0	72	0	8	0	0	19	0
Lane Group Flow (vph)	0	178	43	0	98	10	199	623	0	65	769	0
Confl. Peds. (#/hr)	32		4	4		32	13		2	2		13
Confl. Bikes (#/hr)			3						1			2
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA		Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8						
Actuated Green, G (s)		11.3	11.3		7.1	7.1	8.2	23.3		3.3	18.4	
Effective Green, g (s)		11.3	11.3		7.1	7.1	8.2	23.3		3.3	18.4	
Actuated g/C Ratio		0.19	0.19		0.12	0.12	0.13	0.38		0.05	0.30	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		331	287		209	176	237	1330		95	1032	
v/s Ratio Prot		c0.10			c0.05		c0.11	0.18		0.04	c0.22	
v/s Ratio Perm			0.03			0.01						
v/c Ratio		0.53	0.15		0.46	0.05	0.83	0.46		0.68	0.74	
Uniform Delay, d1		22.4	20.8		25.1	23.9	25.7	14.1		28.3	19.1	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.6	0.2		1.6	0.1	22.1	0.2		18.4	2.9	
Delay (s)		24.1	21.0		26.8	24.0	47.9	14.4		46.7	22.1	
Level of Service		C	C		C	C	D	B		D	C	
Approach Delay (s/veh)		22.4			25.5			22.4			24.0	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	61.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

3: US-101 SB On Ramp/US-101 SB Off Ramp & E Clark Ave Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.1	0.1	0.5	0.7
Denied Del/Veh (s)	0.3	0.6	3.1	1.2
Total Delay (hr)	0.6	0.3	1.1	1.9
Total Del/Veh (s)	2.4	1.6	6.7	3.4
Vehicles Entered	866	601	592	2059
Vehicles Exited	867	601	592	2060
Hourly Exit Rate	946	656	646	2247
Input Volume	936	671	646	2253
% of Volume	101	98	100	100

5: US-101 SB Ramp & E Union Valley Parkway Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.3	0.0	0.3	0.6
Denied Del/Veh (s)	1.2	0.3	1.0	1.0
Total Delay (hr)	3.2	0.3	3.8	7.3
Total Del/Veh (s)	10.9	4.1	14.6	11.6
Vehicles Entered	1025	284	916	2225
Vehicles Exited	1027	283	917	2227
Hourly Exit Rate	1120	309	1000	2429
Input Volume	1098	309	997	2404
% of Volume	102	100	100	101

6: US-101 SB Ramps & S Santa Maria Way Performance by approach

Approach	EB	WB	SB	All
Denied Delay (hr)	0.1	0.1	0.4	0.6
Denied Del/Veh (s)	0.4	0.5	3.5	1.2
Total Delay (hr)	0.9	0.1	0.6	1.5
Total Del/Veh (s)	3.5	0.5	4.9	2.9
Vehicles Entered	887	537	446	1870
Vehicles Exited	887	537	445	1869
Hourly Exit Rate	968	586	485	2039
Input Volume	962	593	491	2046
% of Volume	101	99	99	100

10: Nicholson Ave/US-101 NB Ramp & E Stowell Rd Performance by approach

Approach	EB	WB	NB	SB	All
Denied Delay (hr)	0.1	0.0	0.0	0.3	0.4
Denied Del/Veh (s)	0.3	0.2	0.2	2.1	0.8
Total Delay (hr)	1.3	0.7	1.3	0.9	4.2
Total Del/Veh (s)	5.0	47.9	61.5	6.4	9.8
Vehicles Entered	917	54	74	478	1523
Vehicles Exited	918	55	74	479	1526
Hourly Exit Rate	1001	60	81	523	1665
Input Volume	1020	61	81	524	1686
% of Volume	98	99	100	100	99

Total Network Performance

Denied Delay (hr)	2.3
Denied Del/Veh (s)	1.1
Total Delay (hr)	21.3
Total Del/Veh (s)	9.8
Vehicles Entered	7677
Vehicles Exited	7680
Hourly Exit Rate	8378
Input Volume	16778
% of Volume	50

Appendix K

Analysis Worksheets for
Off Ramp Queueing Evaluation



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	730	180	493	181	357
v/c Ratio	0.61	0.46	0.24	0.42	0.55
Control Delay (s/veh)	18.1	24.8	5.5	22.2	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.1	24.8	5.5	22.2	6.3
Queue Length 50th (ft)	96	50	28	48	0
Queue Length 95th (ft)	175	111	60	103	42
Internal Link Dist (ft)	218		222	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1736	634	2839	792	892
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.42	0.28	0.17	0.23	0.40

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	236	582	1029	106
v/c Ratio	0.59	0.24	0.73	0.22
Control Delay (s/veh)	23.7	2.8	12.9	7.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.7	2.8	12.9	7.6
Queue Length 50th (ft)	60	19	89	1
Queue Length 95th (ft)	120	36	153	17
Internal Link Dist (ft)		193	262	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	457	2743	1568	1110
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.52	0.21	0.66	0.10

Intersection Summary

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	639	135	3	119	0	0	0	0	125	0	379
Future Vol, veh/h	0	639	135	3	119	0	0	0	0	125	0	379
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	0	770	163	4	143	0	0	0	0	151	0	457

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	933	0	0			536	-	143
Stage 1	-	-	-	-	-	-			151	-	-
Stage 2	-	-	-	-	-	-			385	-	-
Critical Hdwy	-	-	-	4.16	-	-			6.66	-	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-			5.46	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.86	-	-
Follow-up Hdwy	-	-	-	2.238	-	-			3.538	-	3.338
Pot Cap-1 Maneuver	0	-	-	722	-	0			486	0	898
Stage 1	0	-	-	-	-	0			871	0	-
Stage 2	0	-	-	-	-	0			653	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	722	-	-			483	0	898
Mov Cap-2 Maneuver	-	-	-	-	-	-			483	0	-
Stage 1	-	-	-	-	-	-			871	0	-
Stage 2	-	-	-	-	-	-			650	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.25	13.76
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	722	-	483	898
HCM Lane V/C Ratio	-	-	0.005	-	0.312	0.509
HCM Control Delay (s/veh)	-	-	10	-	15.8	13.1
HCM Lane LOS	-	-	B	-	C	B
HCM 95th %tile Q(veh)	-	-	0	-	1.3	2.9



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	692	282	112	151	45	11
v/c Ratio	0.71	0.32	0.36	0.39	0.08	0.02
Control Delay (s/veh)	21.1	7.7	22.7	7.6	14.4	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	7.7	22.7	7.6	14.4	9.0
Queue Length 50th (ft)	95	42	32	0	10	0
Queue Length 95th (ft)	129	63	58	26	26	8
Internal Link Dist (ft)		282	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1126	1351	611	612	580	523
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.21	0.18	0.25	0.08	0.02

Intersection Summary

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1094	105	3	97	0	0	0	0	3	1	764
Future Vol, veh/h	0	1094	105	3	97	0	0	0	0	3	1	764
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	1272	122	3	113	0	0	0	0	3	1	888

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1394	0	0	1392	1514	113
Stage 1	-	-	-	-	-	-	120	120	-
Stage 2	-	-	-	-	-	-	1272	1394	-
Critical Hdwy	-	-	-	4.13	-	-	6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-	3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	487	-	0	156	119	937
Stage 1	0	-	-	-	-	0	903	795	-
Stage 2	0	-	-	-	-	0	262	207	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	487	-	-	155	0	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	155	0	-
Stage 1	-	-	-	-	-	-	903	0	-
Stage 2	-	-	-	-	-	-	260	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.37	13.83
HCM LOS			B

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	487	-	885	937
HCM Lane V/C Ratio	-	-	0.007	-	0.34	0.632
HCM Control Delay (s/veh)	-	-	12.4	-	11.1	15.2
HCM Lane LOS	-	-	B	-	B	C
HCM 95th %tile Q(veh)	-	-	0	-	1.5	4.6

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑					↰		↱
Traffic Vol, veh/h	0	523	288	6	258	0	0	0	0	18	0	517
Future Vol, veh/h	0	523	288	6	258	0	0	0	0	18	0	517
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	615	339	7	304	0	0	0	0	21	0	608

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	615	0	0	933	-	-
Stage 1	-	-	-	-	-	-	318	-	-
Stage 2	-	-	-	-	-	-	615	-	-
Critical Hdwy	-	-	-	4.15	-	-	6.45	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.45	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.45	-	-
Follow-up Hdwy	-	-	-	2.245	-	-	3.545	-	-
Pot Cap-1 Maneuver	0	-	0	950	-	0	292	0	0
Stage 1	0	-	0	-	-	0	731	0	0
Stage 2	0	-	0	-	-	0	533	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	950	-	-	289	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	289	0	-
Stage 1	-	-	-	-	-	-	731	0	-
Stage 2	-	-	-	-	-	-	529	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.2	18.43
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	41	-	289	-
HCM Lane V/C Ratio	-	0.007	-	0.073	-
HCM Control Delay (s/veh)	-	8.8	0	18.4	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0.2	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	921	268	54	473	91	92	1256
v/c Ratio	0.56	0.45	0.43	0.41	0.12	0.12	0.83
Control Delay (s/veh)	18.8	5.7	39.6	14.0	9.3	9.3	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	5.7	39.6	14.0	9.3	9.3	15.1
Queue Length 50th (ft)	83	0	19	61	17	18	145
Queue Length 95th (ft)	98	34	#52	82	36	36	186
Internal Link Dist (ft)	512			291		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	1893	640	127	1527	902	902	1677
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.42	0.43	0.31	0.10	0.10	0.75

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	630	353	182	136	137	134	76
v/c Ratio	0.61	0.20	0.32	0.38	0.36	0.35	0.18
Control Delay (s/veh)	16.8	4.9	18.3	7.8	18.7	18.5	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.8	4.9	18.3	7.8	18.7	18.5	4.8
Queue Length 50th (ft)	65	16	21	0	31	30	0
Queue Length 95th (ft)	145	41	50	36	78	77	20
Internal Link Dist (ft)		153	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1299	2663	1136	581	672	674	678
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.13	0.16	0.23	0.20	0.20	0.11

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	59	249	251	529	36	511	276	258	76
v/c Ratio	0.37	0.13	0.66	0.66	0.55	0.26	0.69	0.72	0.16	0.10
Control Delay (s/veh)	33.7	22.2	36.5	35.9	7.2	38.1	30.5	39.2	14.2	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.7	22.2	36.5	35.9	7.2	38.1	30.5	39.2	14.2	1.6
Queue Length 50th (ft)	37	8	108	108	46	16	108	115	31	0
Queue Length 95th (ft)	66	21	166	166	86	39	140	172	60	4
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	447	869	425	433	1007	139	891	447	1643	782
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	0.59	0.58	0.53	0.26	0.57	0.62	0.16	0.10

Intersection Summary

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	536
Future Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	536
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	751	78	8	0	34	5	4	2	0	5	1	631

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	86	0	0	1618	1622	82	1616	1624	-
Stage 1	-	-	-	-	-	-	1583	1583	-	36	36	-
Stage 2	-	-	-	-	-	-	35	39	-	1580	1587	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	-
Pot Cap-1 Maneuver	1565	-	-	1504	-	-	83	102	975	83	102	0
Stage 1	-	-	-	-	-	-	136	168	-	976	863	0
Stage 2	-	-	-	-	-	-	979	861	-	136	167	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1504	-	-	42	53	975	42	53	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	53	-	42	53	-
Stage 1	-	-	-	-	-	-	71	87	-	976	863	-
Stage 2	-	-	-	-	-	-	977	861	-	69	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.44	0	93.95	99.35
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	46	1565	-	-	1504	-	-	44	-
HCM Lane V/C Ratio	0.127	0.48	-	-	-	-	-	0.134	-
HCM Control Delay (s/veh)	94	9.4	-	-	0	-	-	99.4	0
HCM Lane LOS	F	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.4	2.7	-	-	0	-	-	0.4	-



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	539	113	459	285	235
v/c Ratio	0.52	0.32	0.26	0.54	0.37
Control Delay (s/veh)	17.3	22.9	6.7	20.3	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.3	22.9	6.7	20.3	4.8
Queue Length 50th (ft)	66	28	31	67	0
Queue Length 95th (ft)	133	80	63	161	44
Internal Link Dist (ft)	218		215	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1906	695	3012	869	883
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.16	0.15	0.33	0.27

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	165	640	744	289
v/c Ratio	0.40	0.30	0.59	0.39
Control Delay (s/veh)	19.0	3.7	11.8	6.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.0	3.7	11.8	6.1
Queue Length 50th (ft)	34	22	60	3
Queue Length 95th (ft)	90	47	122	30
Internal Link Dist (ft)		250	211	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	587	3010	1911	1494
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.21	0.39	0.19

Intersection Summary

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	0	476	86	11	274	0	0	0	0	72	0	561
Future Vol, veh/h	0	476	86	11	274	0	0	0	0	72	0	561
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	512	92	12	295	0	0	0	0	77	0	603

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	604	0	0			574	-	295
Stage 1	-	-	-	-	-	-			318	-	-
Stage 2	-	-	-	-	-	-			256	-	-
Critical Hdwy	-	-	-	4.13	-	-			6.63	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.83	-	-
Follow-up Hdwy	-	-	-	2.219	-	-			3.519	-	3.319
Pot Cap-1 Maneuver	0	-	-	971	-	0			464	0	744
Stage 1	0	-	-	-	-	0			737	0	-
Stage 2	0	-	-	-	-	0			764	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	971	-	-			459	0	744
Mov Cap-2 Maneuver	-	-	-	-	-	-			459	0	-
Stage 1	-	-	-	-	-	-			737	0	-
Stage 2	-	-	-	-	-	-			755	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.34	25.65
HCM LOS			D

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	971	-	459	744
HCM Lane V/C Ratio	-	-	0.012	-	0.169	0.811
HCM Control Delay (s/veh)	-	-	8.8	-	14.4	27.1
HCM Lane LOS	-	-	A	-	B	D
HCM 95th %tile Q(veh)	-	-	0	-	0.6	8.6



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	408	202	134	162	168	9
v/c Ratio	0.50	0.24	0.38	0.38	0.27	0.02
Control Delay (s/veh)	18.5	7.3	21.1	6.8	14.9	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	7.3	21.1	6.8	14.9	9.0
Queue Length 50th (ft)	51	28	33	0	33	0
Queue Length 95th (ft)	91	54	77	38	86	9
Internal Link Dist (ft)		215	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1223	1444	663	659	630	568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.14	0.20	0.25	0.27	0.02

Intersection Summary

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	786	62	3	110	0	0	0	0	4	0	949
Future Vol, veh/h	0	786	62	3	110	0	0	0	0	4	0	949
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	827	65	3	116	0	0	0	0	4	0	999

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	893	0	0			949	1015	116
Stage 1	-	-	-	-	-	-			122	122	-
Stage 2	-	-	-	-	-	-			827	893	-
Critical Hdwy	-	-	-	4.13	-	-			6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-			3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	756	-	0			288	237	~ 934
Stage 1	0	-	-	-	-	0			901	793	-
Stage 2	0	-	-	-	-	0			428	359	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	756	-	-			286	0	~ 934
Mov Cap-2 Maneuver	-	-	-	-	-	-			286	0	-
Stage 1	-	-	-	-	-	-			901	0	-
Stage 2	-	-	-	-	-	-			426	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.26	15.62
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	756	-	908	934
HCM Lane V/C Ratio	-	-	0.004	-	0.371	0.713
HCM Control Delay (s/veh)	-	-	9.8	-	11.3	17.8
HCM Lane LOS	-	-	A	-	B	C
HCM 95th %tile Q(veh)	-	-	0	-	1.7	6.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	388	204	9	285	0	0	0	0	5	0	485
Future Vol, veh/h	0	388	204	9	285	0	0	0	0	5	0	485
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	413	217	10	303	0	0	0	0	5	0	516

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	413	0	0	735	-	-
Stage 1	-	-	-	-	-	-	322	-	-
Stage 2	-	-	-	-	-	-	413	-	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	-	-
Pot Cap-1 Maneuver	0	-	0	1146	-	0	387	0	0
Stage 1	0	-	0	-	-	0	734	0	0
Stage 2	0	-	0	-	-	0	668	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	1146	-	-	383	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	383	0	-
Stage 1	-	-	-	-	-	-	734	0	-
Stage 2	-	-	-	-	-	-	661	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.25	14.54
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	55	-	383	-
HCM Lane V/C Ratio	-	0.008	-	0.014	-
HCM Control Delay (s/veh)	-	8.2	0	14.5	0
HCM Lane LOS	-	A	A	B	A
HCM 95th %tile Q(veh)	-	0	-	0	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1101	390	48	624	35	36	906
v/c Ratio	0.54	0.52	0.32	0.46	0.05	0.05	0.72
Control Delay (s/veh)	16.9	5.3	32.6	12.8	9.2	9.2	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.9	5.3	32.6	12.8	9.2	9.2	12.4
Queue Length 50th (ft)	87	0	15	68	6	7	94
Queue Length 95th (ft)	134	57	#51	123	20	20	157
Internal Link Dist (ft)	512			195		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	2221	790	148	1788	973	973	1707
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.49	0.32	0.35	0.04	0.04	0.53

Intersection Summary

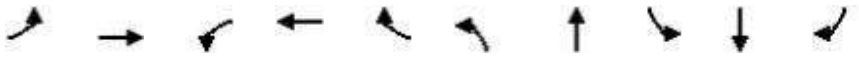
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	996	215	289	207	202	200	55
v/c Ratio	0.92	0.10	0.43	0.45	0.54	0.53	0.13
Control Delay (s/veh)	34.7	4.7	19.9	6.9	23.3	23.1	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.7	4.7	19.9	6.9	23.3	23.1	2.8
Queue Length 50th (ft)	135	11	38	0	52	52	0
Queue Length 95th (ft)	#318	26	73	43	118	116	12
Internal Link Dist (ft)		308	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1086	2520	1079	616	537	539	560
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.09	0.27	0.34	0.38	0.37	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	150	260	263	259	73	677	354	398	76
v/c Ratio	0.43	0.31	0.76	0.76	0.29	0.59	0.86	0.90	0.28	0.11
Control Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	57.5	16.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	57.5	16.9	1.6
Queue Length 50th (ft)	42	15	115	116	0	33	153	158	66	0
Queue Length 95th (ft)	86	40	#238	#241	37	#96	#268	#331	107	11
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	393	786	373	378	884	123	785	393	1425	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.19	0.70	0.70	0.29	0.59	0.86	0.90	0.28	0.11

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	28.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	431
Future Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	431
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1015	34	24	1	51	6	12	8	1	1	6	463

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	58	0	0	2132	2135	46	2124	2144	-
Stage 1	-	-	-	-	-	-	2076	2076	-	56	56	-
Stage 2	-	-	-	-	-	-	56	59	-	2068	2088	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	-
Pot Cap-1 Maneuver	1547	-	-	1546	-	-	36	49	1023	36	49	0
Stage 1	-	-	-	-	-	-	70	95	-	956	848	0
Stage 2	-	-	-	-	-	-	956	846	-	71	94	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1547	-	-	1546	-	-	~ 10	17	1023	10	17	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	17	-	10	17	-
Stage 1	-	-	-	-	-	-	24	33	-	956	848	-
Stage 2	-	-	-	-	-	-	948	845	-	19	32	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.01	0.14	$ 900.99	$ 385.47
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	13	1547	-	-	1546	-	-	15	-
HCM Lane V/C Ratio	1.612	0.656	-	-	0.001	-	-	0.496	-
HCM Control Delay (s/veh)	$ 901	11.6	-	-	7.3	-	-	$ 385.5	0
HCM Lane LOS	F	B	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	3.3	5.3	-	-	0	-	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1018	424	803	303	378
v/c Ratio	0.94	0.65	0.41	0.55	0.70
Control Delay (s/veh)	37.9	28.7	9.4	20.6	19.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.9	28.7	9.4	20.6	19.6
Queue Length 50th (ft)	161	70	74	89	81
Queue Length 95th (ft)	#365	#138	163	148	158
Internal Link Dist (ft)	364		313	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	1085	721	2045	923	836
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.94	0.59	0.39	0.33	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	744	180	528	181	357
v/c Ratio	0.61	0.46	0.26	0.42	0.56
Control Delay (s/veh)	18.2	24.9	5.5	22.4	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.2	24.9	5.5	22.4	7.2
Queue Length 50th (ft)	99	50	31	49	4
Queue Length 95th (ft)	179	111	64	103	48
Internal Link Dist (ft)	218		147	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1730	631	2831	789	881
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.43	0.29	0.19	0.23	0.41

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	236	594	1062	106
v/c Ratio	0.60	0.24	0.75	0.23
Control Delay (s/veh)	24.1	2.8	13.8	7.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.1	2.8	13.8	7.7
Queue Length 50th (ft)	60	20	99	1
Queue Length 95th (ft)	120	36	167	17
Internal Link Dist (ft)		153	240	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	448	2692	1531	1091
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.53	0.22	0.69	0.10

Intersection Summary

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	639	181	3	245	0	0	0	0	125	0	379
Future Vol, veh/h	1	639	181	3	245	0	0	0	0	125	0	379
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	770	218	4	295	0	0	0	0	151	0	457

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	295	0	0	988	0	0			690	-	295
Stage 1	-	-	-	-	-	-			302	-	-
Stage 2	-	-	-	-	-	-			387	-	-
Critical Hdwy	4.16	-	-	4.16	-	-			6.66	-	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-			5.46	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.86	-	-
Follow-up Hdwy	2.238	-	-	2.238	-	-			3.538	-	3.338
Pot Cap-1 Maneuver	1252	-	-	687	-	0			391	0	738
Stage 1	-	-	-	-	-	0			744	0	-
Stage 2	-	-	-	-	-	0			651	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	1252	-	-	687	-	-			389	0	738
Mov Cap-2 Maneuver	-	-	-	-	-	-			389	0	-
Stage 1	-	-	-	-	-	-			743	0	-
Stage 2	-	-	-	-	-	-			648	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.01	0.12	18.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	1252	-	-	687	-	389	738
HCM Lane V/C Ratio	0.001	-	-	0.005	-	0.388	0.619
HCM Control Delay (s/veh)	7.9	-	-	10.3	-	20	17.5
HCM Lane LOS	A	-	-	B	-	C	C
HCM 95th %tile Q(veh)	0	-	-	0	-	1.8	4.3



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	692	282	112	151	206	11
v/c Ratio	0.71	0.32	0.36	0.39	0.36	0.02
Control Delay (s/veh)	21.1	7.7	22.7	7.6	17.0	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	7.7	22.7	7.6	17.0	9.0
Queue Length 50th (ft)	95	42	32	0	50	0
Queue Length 95th (ft)	129	63	58	26	89	8
Internal Link Dist (ft)		276	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1126	1351	611	612	580	523
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.21	0.18	0.25	0.36	0.02

Intersection Summary

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1094	131	3	167	0	0	0	0	3	1	764
Future Vol, veh/h	0	1094	131	3	167	0	0	0	0	3	1	764
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	1272	152	3	194	0	0	0	0	3	1	888

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	1424	0	0			1473	1626	194
Stage 1	-	-	-	-	-	-			201	201	-
Stage 2	-	-	-	-	-	-			1272	1424	-
Critical Hdwy	-	-	-	4.13	-	-			6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-			3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	475	-	0			139	102	~ 845
Stage 1	0	-	-	-	-	0			830	733	-
Stage 2	0	-	-	-	-	0			262	200	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	475	-	-			138	0	~ 845
Mov Cap-2 Maneuver	-	-	-	-	-	-			138	0	-
Stage 1	-	-	-	-	-	-			830	0	-
Stage 2	-	-	-	-	-	-			260	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.22	16.46
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	475	-	797	845
HCM Lane V/C Ratio	-	-	0.007	-	0.377	0.701
HCM Control Delay (s/veh)	-	-	12.6	-	12.2	18.6
HCM Lane LOS	-	-	B	-	B	C
HCM 95th %tile Q(veh)	-	-	0	-	1.8	5.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↑					↰		↱
Traffic Vol, veh/h	0	523	331	6	373	0	0	0	0	18	0	517
Future Vol, veh/h	0	523	331	6	373	0	0	0	0	18	0	517
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	615	389	7	439	0	0	0	0	21	0	608

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	615	0	0	1068	-	-
Stage 1	-	-	-	-	-	-	453	-	-
Stage 2	-	-	-	-	-	-	615	-	-
Critical Hdwy	-	-	-	4.15	-	-	6.45	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.45	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.45	-	-
Follow-up Hdwy	-	-	-	2.245	-	-	3.545	-	-
Pot Cap-1 Maneuver	0	-	0	950	-	0	242	0	0
Stage 1	0	-	0	-	-	0	634	0	0
Stage 2	0	-	0	-	-	0	533	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	950	-	-	240	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	240	0	-
Stage 1	-	-	-	-	-	-	634	0	-
Stage 2	-	-	-	-	-	-	528	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.14	21.46
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	28	-	240	-
HCM Lane V/C Ratio	-	0.007	-	0.088	-
HCM Control Delay (s/veh)	-	8.8	0	21.5	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0.3	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	921	294	54	544	91	92	1256
v/c Ratio	0.57	0.49	0.44	0.48	0.11	0.12	0.85
Control Delay (s/veh)	19.1	5.9	40.4	15.0	9.2	9.2	17.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.1	5.9	40.4	15.0	9.2	9.2	17.1
Queue Length 50th (ft)	83	0	19	72	17	18	165
Queue Length 95th (ft)	98	35	#52	94	36	36	209
Internal Link Dist (ft)	512			356		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	1845	648	124	1488	879	879	1605
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.45	0.44	0.37	0.10	0.10	0.78

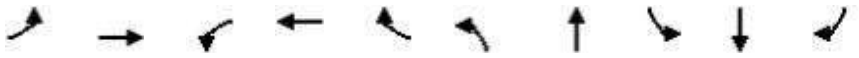
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	630	353	182	136	166	169	76
v/c Ratio	0.62	0.20	0.32	0.38	0.42	0.42	0.17
Control Delay (s/veh)	17.4	5.2	18.8	7.9	19.2	19.3	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.4	5.2	18.8	7.9	19.2	19.3	4.6
Queue Length 50th (ft)	69	17	21	0	38	40	0
Queue Length 95th (ft)	147	42	51	37	93	94	20
Internal Link Dist (ft)		283	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1270	2616	1111	571	657	659	665
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.13	0.16	0.24	0.25	0.26	0.11

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	59	249	251	529	36	511	290	258	76
v/c Ratio	0.37	0.13	0.67	0.66	0.55	0.26	0.69	0.74	0.16	0.10
Control Delay (s/veh)	33.8	22.2	36.8	36.2	7.2	38.3	30.7	40.3	14.2	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.8	22.2	36.8	36.2	7.2	38.3	30.7	40.3	14.2	1.6
Queue Length 50th (ft)	37	8	108	108	46	16	108	122	31	0
Queue Length 95th (ft)	66	21	166	166	86	39	140	#187	60	4
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	442	860	420	429	1001	138	882	442	1638	780
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.07	0.59	0.59	0.53	0.26	0.58	0.66	0.16	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	565
Future Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	565
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	751	78	8	0	34	5	4	2	0	5	1	665

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	86	0	0	1618	1622	82	1616	1624	-
Stage 1	-	-	-	-	-	-	1583	1583	-	36	36	-
Stage 2	-	-	-	-	-	-	35	39	-	1580	1587	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	-
Pot Cap-1 Maneuver	1565	-	-	1504	-	-	83	102	975	83	102	0
Stage 1	-	-	-	-	-	-	136	168	-	976	863	0
Stage 2	-	-	-	-	-	-	979	861	-	136	167	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1504	-	-	42	53	975	42	53	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	53	-	42	53	-
Stage 1	-	-	-	-	-	-	71	87	-	976	863	-
Stage 2	-	-	-	-	-	-	977	861	-	69	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.44	0	93.95	99.35
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	46	1565	-	-	1504	-	-	44	-
HCM Lane V/C Ratio	0.127	0.48	-	-	-	-	-	0.134	-
HCM Control Delay (s/veh)	94	9.4	-	-	0	-	-	99.4	0
HCM Lane LOS	F	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.4	2.7	-	-	0	-	-	0.4	-



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	906	535	718	623	323
v/c Ratio	0.99	0.89	0.42	0.88	0.47
Control Delay (s/veh)	53.0	48.5	12.8	35.4	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.0	48.5	12.8	35.4	10.7
Queue Length 50th (ft)	~188	118	102	233	51
Queue Length 95th (ft)	#313	#206	143	#419	114
Internal Link Dist (ft)	364		337	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	914	599	1699	757	730
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.99	0.89	0.42	0.82	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	575	113	481	285	235
v/c Ratio	0.54	0.33	0.27	0.54	0.38
Control Delay (s/veh)	17.5	23.4	6.7	20.7	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.5	23.4	6.7	20.7	4.9
Queue Length 50th (ft)	72	29	32	69	0
Queue Length 95th (ft)	142	82	66	164	45
Internal Link Dist (ft)	218		204	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1879	685	2987	856	874
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.16	0.16	0.33	0.27

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	165	676	765	289
v/c Ratio	0.40	0.32	0.60	0.39
Control Delay (s/veh)	19.3	3.8	12.2	6.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.3	3.8	12.2	6.6
Queue Length 50th (ft)	35	24	64	4
Queue Length 95th (ft)	90	51	128	32
Internal Link Dist (ft)		196	119	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	580	2985	1892	1474
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.28	0.23	0.40	0.20

Intersection Summary

Intersection	
Int Delay, s/veh	14.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	476	229	11	362	0	0	0	0	72	0	561
Future Vol, veh/h	0	476	229	11	362	0	0	0	0	72	0	561
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	512	246	12	389	0	0	0	0	77	0	603

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	758	0	0			669	-	389
Stage 1	-	-	-	-	-	-			413	-	-
Stage 2	-	-	-	-	-	-			256	-	-
Critical Hdwy	-	-	-	4.13	-	-			6.63	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.83	-	-
Follow-up Hdwy	-	-	-	2.219	-	-			3.519	-	3.319
Pot Cap-1 Maneuver	0	-	-	851	-	0			407	0	658
Stage 1	0	-	-	-	-	0			667	0	-
Stage 2	0	-	-	-	-	0			764	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	851	-	-			401	0	658
Mov Cap-2 Maneuver	-	-	-	-	-	-			401	0	-
Stage 1	-	-	-	-	-	-			667	0	-
Stage 2	-	-	-	-	-	-			753	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.27	39.73
HCM LOS			E

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	851	-	401	658
HCM Lane V/C Ratio	-	-	0.014	-	0.193	0.917
HCM Control Delay (s/veh)	-	-	9.3	-	16.1	42.8
HCM Lane LOS	-	-	A	-	C	E
HCM 95th %tile Q(veh)	-	-	0	-	0.7	12



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	408	202	134	162	261	9
v/c Ratio	0.50	0.24	0.38	0.38	0.41	0.02
Control Delay (s/veh)	18.5	7.3	21.1	6.8	16.3	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	7.3	21.1	6.8	16.3	9.0
Queue Length 50th (ft)	51	28	33	0	55	0
Queue Length 95th (ft)	91	54	77	38	132	9
Internal Link Dist (ft)		310	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1223	1444	663	659	630	568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.14	0.20	0.25	0.41	0.02

Intersection Summary

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	786	143	3	159	0	0	0	0	4	0	949
Future Vol, veh/h	0	786	143	3	159	0	0	0	0	4	0	949
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	827	151	3	167	0	0	0	0	4	0	999

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	978	0	0			1001	1152	167
Stage 1	-	-	-	-	-	-			174	174	-
Stage 2	-	-	-	-	-	-			827	978	-
Critical Hdwy	-	-	-	4.13	-	-			6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-			3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	702	-	0			268	197	~ 874
Stage 1	0	-	-	-	-	0			854	753	-
Stage 2	0	-	-	-	-	0			428	327	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	702	-	-			267	0	~ 874
Mov Cap-2 Maneuver	-	-	-	-	-	-			267	0	-
Stage 1	-	-	-	-	-	-			854	0	-
Stage 2	-	-	-	-	-	-			426	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.19	17.96
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	702	-	850	874
HCM Lane V/C Ratio	-	-	0.005	-	0.397	0.762
HCM Control Delay (s/veh)	-	-	10.2	-	12	21
HCM Lane LOS	-	-	B	-	B	C
HCM 95th %tile Q(veh)	-	-	0	-	1.9	7.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	388	336	9	368	0	0	0	0	5	0	485
Future Vol, veh/h	0	388	336	9	368	0	0	0	0	5	0	485
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	413	357	10	391	0	0	0	0	5	0	516

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	413	0	0	823	-	-
Stage 1	-	-	-	-	-	-	411	-	-
Stage 2	-	-	-	-	-	-	413	-	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	-	-
Pot Cap-1 Maneuver	0	-	0	1146	-	0	343	0	0
Stage 1	0	-	0	-	-	0	669	0	0
Stage 2	0	-	0	-	-	0	668	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	1146	-	-	339	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	339	0	-
Stage 1	-	-	-	-	-	-	669	0	-
Stage 2	-	-	-	-	-	-	661	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.19	15.78
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	43	-	339	-
HCM Lane V/C Ratio	-	0.008	-	0.016	-
HCM Control Delay (s/veh)	-	8.2	0	15.8	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1101	458	48	666	35	36	906
v/c Ratio	0.54	0.57	0.33	0.49	0.05	0.05	0.73
Control Delay (s/veh)	17.0	5.6	32.8	13.2	9.1	9.2	13.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.0	5.6	32.8	13.2	9.1	9.2	13.0
Queue Length 50th (ft)	89	0	16	76	6	7	101
Queue Length 95th (ft)	134	61	#51	133	20	20	165
Internal Link Dist (ft)	512			208		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	2197	830	147	1769	962	962	1678
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.55	0.33	0.38	0.04	0.04	0.54

Intersection Summary

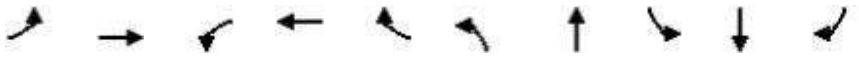
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	996	215	289	207	224	221	55
v/c Ratio	0.93	0.10	0.43	0.45	0.57	0.56	0.13
Control Delay (s/veh)	37.5	5.0	20.3	6.9	23.7	23.4	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	37.5	5.0	20.3	6.9	23.7	23.4	2.7
Queue Length 50th (ft)	144	12	40	0	60	58	0
Queue Length 95th (ft)	#318	26	73	43	130	129	12
Internal Link Dist (ft)		202	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1067	2475	1059	608	527	529	552
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.93	0.09	0.27	0.34	0.43	0.42	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	150	260	263	259	73	677	388	398	76
v/c Ratio	0.43	0.31	0.76	0.76	0.29	0.59	0.86	0.99	0.28	0.11
Control Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	74.8	16.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	74.8	16.9	1.6
Queue Length 50th (ft)	42	15	115	116	0	33	153	~179	66	0
Queue Length 95th (ft)	86	40	#238	#241	37	#96	#268	#371	107	11
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	393	786	373	378	884	123	785	393	1425	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.19	0.70	0.70	0.29	0.59	0.86	0.99	0.28	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	28.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	451
Future Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	451
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1015	34	24	1	51	6	12	8	1	1	6	485

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	58	0	0	2132	2135	46	2124	2144	-
Stage 1	-	-	-	-	-	-	2076	2076	-	56	56	-
Stage 2	-	-	-	-	-	-	56	59	-	2068	2088	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	-
Pot Cap-1 Maneuver	1547	-	-	1546	-	-	36	49	1023	36	49	0
Stage 1	-	-	-	-	-	-	70	95	-	956	848	0
Stage 2	-	-	-	-	-	-	956	846	-	71	94	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1547	-	-	1546	-	-	~ 10	17	1023	10	17	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	17	-	10	17	-
Stage 1	-	-	-	-	-	-	24	33	-	956	848	-
Stage 2	-	-	-	-	-	-	948	845	-	19	32	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.01	0.14	$ 900.99	$ 385.47
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	13	1547	-	-	1546	-	-	15	-
HCM Lane V/C Ratio	1.612	0.656	-	-	0.001	-	-	0.496	-
HCM Control Delay (s/veh)	$ 901	11.6	-	-	7.3	-	-	$ 385.5	0
HCM Lane LOS	F	B	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	3.3	5.3	-	-	0	-	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1076	438	838	303	378
v/c Ratio	0.97	0.67	0.43	0.55	0.70
Control Delay (s/veh)	42.5	29.5	9.7	20.5	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.5	29.5	9.7	20.5	20.4
Queue Length 50th (ft)	168	73	80	89	85
Queue Length 95th (ft)	#378	#152	172	148	163
Internal Link Dist (ft)	364		322	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	1107	716	2031	917	826
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.97	0.61	0.41	0.33	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	751	180	539	181	357
v/c Ratio	0.62	0.46	0.27	0.42	0.57
Control Delay (s/veh)	18.3	24.9	5.6	22.4	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.3	24.9	5.6	22.4	7.6
Queue Length 50th (ft)	100	50	32	49	6
Queue Length 95th (ft)	181	111	65	103	51
Internal Link Dist (ft)	218		147	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1723	629	2826	786	874
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.44	0.29	0.19	0.23	0.41

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	236	601	1072	106
v/c Ratio	0.60	0.24	0.75	0.23
Control Delay (s/veh)	24.1	2.8	14.1	7.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.1	2.8	14.1	7.7
Queue Length 50th (ft)	60	20	102	1
Queue Length 95th (ft)	120	37	170	17
Internal Link Dist (ft)		153	240	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	446	2681	1522	1087
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.53	0.22	0.70	0.10

Intersection Summary

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	639	209	3	283	0	0	0	0	125	0	379
Future Vol, veh/h	1	639	209	3	283	0	0	0	0	125	0	379
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	770	252	4	341	0	0	0	0	151	0	457

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	341	0	0	1022	0	0			736	-	341
Stage 1	-	-	-	-	-	-			348	-	-
Stage 2	-	-	-	-	-	-			387	-	-
Critical Hdwy	4.16	-	-	4.16	-	-			6.66	-	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-			5.46	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.86	-	-
Follow-up Hdwy	2.238	-	-	2.238	-	-			3.538	-	3.338
Pot Cap-1 Maneuver	1204	-	-	667	-	0			367	0	695
Stage 1	-	-	-	-	-	0			709	0	-
Stage 2	-	-	-	-	-	0			651	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	1204	-	-	667	-	-			364	0	695
Mov Cap-2 Maneuver	-	-	-	-	-	-			364	0	-
Stage 1	-	-	-	-	-	-			708	0	-
Stage 2	-	-	-	-	-	-			648	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.01	0.11	20.06
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	1204	-	-	667	-	364	695
HCM Lane V/C Ratio	0.001	-	-	0.005	-	0.414	0.657
HCM Control Delay (s/veh)	8	-	-	10.4	-	21.7	19.5
HCM Lane LOS	A	-	-	B	-	C	C
HCM 95th %tile Q(veh)	0	-	-	0	-	2	4.9



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	692	282	112	151	255	11
v/c Ratio	0.71	0.32	0.36	0.39	0.44	0.02
Control Delay (s/veh)	21.1	7.7	22.7	7.6	18.1	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	7.7	22.7	7.6	18.1	9.0
Queue Length 50th (ft)	95	42	32	0	63	0
Queue Length 95th (ft)	129	63	58	26	108	8
Internal Link Dist (ft)		276	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1126	1351	611	612	580	523
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.21	0.18	0.25	0.44	0.02

Intersection Summary

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1094	147	3	190	0	0	0	0	3	1	764
Future Vol, veh/h	0	1094	147	3	190	0	0	0	0	3	1	764
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	1272	171	3	221	0	0	0	0	3	1	888

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1443	0	0	1500	1671	221
Stage 1	-	-	-	-	-	-	228	228	-
Stage 2	-	-	-	-	-	-	1272	1443	-
Critical Hdwy	-	-	-	4.13	-	-	6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-	3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	467	-	0	134	95	~ 816
Stage 1	0	-	-	-	-	0	808	714	-
Stage 2	0	-	-	-	-	0	262	196	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	467	-	-	133	0	~ 816
Mov Cap-2 Maneuver	-	-	-	-	-	-	133	0	-
Stage 1	-	-	-	-	-	-	808	0	-
Stage 2	-	-	-	-	-	-	260	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.2	17.62
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	467	-	770	816
HCM Lane V/C Ratio	-	-	0.007	-	0.391	0.726
HCM Control Delay (s/veh)	-	-	12.8	-	12.6	20.1
HCM Lane LOS	-	-	B	-	B	C
HCM 95th %tile Q(veh)	-	-	0	-	1.9	6.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	523	357	6	406	0	0	0	0	18	0	517
Future Vol, veh/h	0	523	357	6	406	0	0	0	0	18	0	517
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	615	420	7	478	0	0	0	0	21	0	608

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	615	0	0	1107	-	-
Stage 1	-	-	-	-	-	-	492	-	-
Stage 2	-	-	-	-	-	-	615	-	-
Critical Hdwy	-	-	-	4.15	-	-	6.45	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.45	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.45	-	-
Follow-up Hdwy	-	-	-	2.245	-	-	3.545	-	-
Pot Cap-1 Maneuver	0	-	0	950	-	0	229	0	0
Stage 1	0	-	0	-	-	0	609	0	0
Stage 2	0	-	0	-	-	0	533	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	950	-	-	227	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	227	0	-
Stage 1	-	-	-	-	-	-	609	0	-
Stage 2	-	-	-	-	-	-	528	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.13	22.47
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	26	-	227	-
HCM Lane V/C Ratio	-	0.007	-	0.093	-
HCM Control Delay (s/veh)	-	8.8	0	22.5	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0.3	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	921	310	54	565	91	92	1256
v/c Ratio	0.56	0.50	0.44	0.50	0.11	0.12	0.85
Control Delay (s/veh)	19.1	5.9	40.9	15.2	9.2	9.2	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.1	5.9	40.9	15.2	9.2	9.2	17.8
Queue Length 50th (ft)	83	0	19	75	17	18	171
Queue Length 95th (ft)	98	36	#52	98	36	36	214
Internal Link Dist (ft)	512			356		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	1816	654	122	1465	865	865	1574
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.47	0.44	0.39	0.11	0.11	0.80

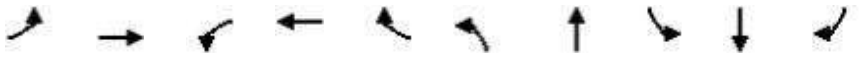
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	630	353	182	136	175	178	76
v/c Ratio	0.62	0.20	0.32	0.38	0.43	0.44	0.17
Control Delay (s/veh)	17.5	5.2	18.9	7.9	19.4	19.5	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.5	5.2	18.9	7.9	19.4	19.5	4.6
Queue Length 50th (ft)	69	17	22	0	41	42	0
Queue Length 95th (ft)	147	42	51	37	97	100	20
Internal Link Dist (ft)		283	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1264	2607	1106	569	654	656	662
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.14	0.16	0.24	0.27	0.27	0.11

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	59	249	251	529	36	511	297	258	76
v/c Ratio	0.37	0.13	0.67	0.66	0.55	0.26	0.69	0.75	0.16	0.10
Control Delay (s/veh)	33.9	22.2	37.0	36.3	7.1	38.4	30.8	40.8	14.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.9	22.2	37.0	36.3	7.1	38.4	30.8	40.8	14.1	1.6
Queue Length 50th (ft)	37	8	108	108	46	16	108	125	31	0
Queue Length 95th (ft)	66	21	166	166	86	39	140	#201	60	4
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	441	856	419	427	999	137	878	441	1636	779
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.07	0.59	0.59	0.53	0.26	0.58	0.67	0.16	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	574
Future Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	574
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	751	78	8	0	34	5	4	2	0	5	1	675

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	86	0	0	1618	1622	82	1616	1624	-
Stage 1	-	-	-	-	-	-	1583	1583	-	36	36	-
Stage 2	-	-	-	-	-	-	35	39	-	1580	1587	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	-
Pot Cap-1 Maneuver	1565	-	-	1504	-	-	83	102	975	83	102	0
Stage 1	-	-	-	-	-	-	136	168	-	976	863	0
Stage 2	-	-	-	-	-	-	979	861	-	136	167	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1504	-	-	42	53	975	42	53	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	53	-	42	53	-
Stage 1	-	-	-	-	-	-	71	87	-	976	863	-
Stage 2	-	-	-	-	-	-	977	861	-	69	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.44	0	93.95	99.35
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	46	1565	-	-	1504	-	-	44	-
HCM Lane V/C Ratio	0.127	0.48	-	-	-	-	-	0.134	-
HCM Control Delay (s/veh)	94	9.4	-	-	0	-	-	99.4	0
HCM Lane LOS	F	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.4	2.7	-	-	0	-	-	0.4	-



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	918	538	733	623	323
v/c Ratio	1.00	0.90	0.43	0.88	0.47
Control Delay (s/veh)	54.3	49.1	12.9	35.4	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.3	49.1	12.9	35.4	11.1
Queue Length 50th (ft)	~191	119	104	233	53
Queue Length 95th (ft)	#316	#207	146	#419	117
Internal Link Dist (ft)	364		337	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	920	599	1699	757	727
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.00	0.90	0.43	0.82	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	586	113	490	285	235
v/c Ratio	0.55	0.33	0.27	0.55	0.38
Control Delay (s/veh)	17.5	23.6	6.7	20.9	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.5	23.6	6.7	20.9	4.9
Queue Length 50th (ft)	73	29	33	69	0
Queue Length 95th (ft)	145	82	67	166	45
Internal Link Dist (ft)	218		204	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1872	683	2977	853	872
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.17	0.16	0.33	0.27

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	165	687	774	289
v/c Ratio	0.40	0.32	0.60	0.39
Control Delay (s/veh)	19.6	3.8	12.2	6.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.6	3.8	12.2	6.9
Queue Length 50th (ft)	35	25	66	5
Queue Length 95th (ft)	90	53	131	33
Internal Link Dist (ft)		196	119	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	576	2961	1880	1462
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.23	0.41	0.20

Intersection Summary

Intersection	
Int Delay, s/veh	17.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	476	278	11	402	0	0	0	0	72	0	561
Future Vol, veh/h	0	476	278	11	402	0	0	0	0	72	0	561
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	512	299	12	432	0	0	0	0	77	0	603

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	811	0	0	712	-	432
Stage 1	-	-	-	-	-	-	456	-	-
Stage 2	-	-	-	-	-	-	256	-	-
Critical Hdwy	-	-	-	4.13	-	-	6.63	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.83	-	-
Follow-up Hdwy	-	-	-	2.219	-	-	3.519	-	3.319
Pot Cap-1 Maneuver	0	-	-	813	-	0	383	0	622
Stage 1	0	-	-	-	-	0	637	0	-
Stage 2	0	-	-	-	-	0	764	0	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	813	-	-	377	0	622
Mov Cap-2 Maneuver	-	-	-	-	-	-	377	0	-
Stage 1	-	-	-	-	-	-	637	0	-
Stage 2	-	-	-	-	-	-	753	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.25	50.27
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	813	-	377	622
HCM Lane V/C Ratio	-	-	0.015	-	0.205	0.969
HCM Control Delay (s/veh)	-	-	9.5	-	17	54.5
HCM Lane LOS	-	-	A	-	C	F
HCM 95th %tile Q(veh)	-	-	0	-	0.8	13.9



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	408	202	134	162	303	9
v/c Ratio	0.50	0.24	0.38	0.38	0.48	0.02
Control Delay (s/veh)	18.5	7.3	21.1	6.8	17.3	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	7.3	21.1	6.8	17.3	9.0
Queue Length 50th (ft)	51	28	33	0	66	0
Queue Length 95th (ft)	91	54	77	38	155	9
Internal Link Dist (ft)		310	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1223	1444	663	659	630	568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.14	0.20	0.25	0.48	0.02

Intersection Summary

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	786	171	3	183	0	0	0	0	4	0	949
Future Vol, veh/h	0	786	171	3	183	0	0	0	0	4	0	949
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	827	180	3	193	0	0	0	0	4	0	999

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1007	0	0	1026	1206	193
Stage 1	-	-	-	-	-	-	199	199	-
Stage 2	-	-	-	-	-	-	827	1007	-
Critical Hdwy	-	-	-	4.13	-	-	6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-	3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	684	-	0	259	183	~ 846
Stage 1	0	-	-	-	-	0	832	735	-
Stage 2	0	-	-	-	-	0	428	317	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	684	-	-	258	0	~ 846
Mov Cap-2 Maneuver	-	-	-	-	-	-	258	0	-
Stage 1	-	-	-	-	-	-	832	0	-
Stage 2	-	-	-	-	-	-	426	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.17	19.42
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	684	-	823	846
HCM Lane V/C Ratio	-	-	0.005	-	0.41	0.787
HCM Control Delay (s/veh)	-	-	10.3	-	12.4	23
HCM Lane LOS	-	-	B	-	B	C
HCM 95th %tile Q(veh)	-	-	0	-	2	8.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	388	381	9	401	0	0	0	0	5	0	485
Future Vol, veh/h	0	388	381	9	401	0	0	0	0	5	0	485
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	413	405	10	427	0	0	0	0	5	0	516

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	413	0	0	859	-	-
Stage 1	-	-	-	-	-	-	446	-	-
Stage 2	-	-	-	-	-	-	413	-	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	-	-
Pot Cap-1 Maneuver	0	-	0	1146	-	0	327	0	0
Stage 1	0	-	0	-	-	0	645	0	0
Stage 2	0	-	0	-	-	0	668	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	1146	-	-	323	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	323	0	-
Stage 1	-	-	-	-	-	-	645	0	-
Stage 2	-	-	-	-	-	-	661	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.18	16.32
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	40	-	323	-
HCM Lane V/C Ratio	-	0.008	-	0.016	-
HCM Control Delay (s/veh)	-	8.2	0	16.3	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0.1	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1101	481	48	685	35	36	906
v/c Ratio	0.55	0.59	0.33	0.50	0.05	0.05	0.73
Control Delay (s/veh)	17.1	5.7	32.9	13.4	9.1	9.1	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.1	5.7	32.9	13.4	9.1	9.1	13.3
Queue Length 50th (ft)	90	0	16	80	6	7	103
Queue Length 95th (ft)	134	62	#51	137	20	20	168
Internal Link Dist (ft)	512			208		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	2186	843	146	1760	957	957	1666
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.57	0.33	0.39	0.04	0.04	0.54

Intersection Summary

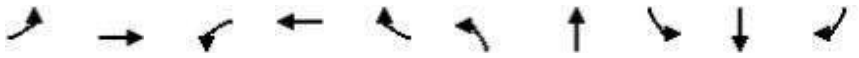
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	996	215	289	207	235	230	55
v/c Ratio	0.94	0.10	0.44	0.45	0.59	0.58	0.13
Control Delay (s/veh)	38.2	5.1	20.4	7.0	24.2	23.7	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	38.2	5.1	20.4	7.0	24.2	23.7	2.7
Queue Length 50th (ft)	146	12	40	0	63	62	0
Queue Length 95th (ft)	#318	26	73	43	137	134	12
Internal Link Dist (ft)		202	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1062	2465	1055	606	525	527	550
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.09	0.27	0.34	0.45	0.44	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	150	260	263	259	73	677	399	398	76
v/c Ratio	0.43	0.31	0.76	0.76	0.29	0.59	0.86	1.02	0.28	0.11
Control Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	81.7	16.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	81.7	16.9	1.6
Queue Length 50th (ft)	42	15	115	116	0	33	153	~199	66	0
Queue Length 95th (ft)	86	40	#238	#241	37	#96	#268	#384	107	11
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	393	786	373	378	884	123	785	393	1425	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.19	0.70	0.70	0.29	0.59	0.86	1.02	0.28	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	28.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	460
Future Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	460
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1015	34	24	1	51	6	12	8	1	1	6	495

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	58	0	0	2132	2135	46	2124	2144	-
Stage 1	-	-	-	-	-	-	2076	2076	-	56	56	-
Stage 2	-	-	-	-	-	-	56	59	-	2068	2088	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	-
Pot Cap-1 Maneuver	1547	-	-	1546	-	-	36	49	1023	36	49	0
Stage 1	-	-	-	-	-	-	70	95	-	956	848	0
Stage 2	-	-	-	-	-	-	956	846	-	71	94	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1547	-	-	1546	-	-	~ 10	17	1023	10	17	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	17	-	10	17	-
Stage 1	-	-	-	-	-	-	24	33	-	956	848	-
Stage 2	-	-	-	-	-	-	948	845	-	19	32	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.01	0.14	$ 900.99	$ 385.47
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	13	1547	-	-	1546	-	-	15	-
HCM Lane V/C Ratio	1.612	0.656	-	-	0.001	-	-	0.496	-
HCM Control Delay (s/veh)	$ 901	11.6	-	-	7.3	-	-	$ 385.5	0
HCM Lane LOS	F	B	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	3.3	5.3	-	-	0	-	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1096	443	854	303	378
v/c Ratio	0.98	0.67	0.43	0.55	0.71
Control Delay (s/veh)	44.0	29.7	9.8	20.4	20.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.0	29.7	9.8	20.4	20.7
Queue Length 50th (ft)	~170	74	82	89	87
Queue Length 95th (ft)	#381	#155	176	148	165
Internal Link Dist (ft)	364		322	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	1117	714	2026	914	823
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.98	0.62	0.42	0.33	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	775	180	571	181	357
v/c Ratio	0.63	0.46	0.28	0.42	0.59
Control Delay (s/veh)	18.6	25.2	5.7	22.4	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.6	25.2	5.7	22.4	8.8
Queue Length 50th (ft)	105	51	34	50	12
Queue Length 95th (ft)	189	112	71	103	59
Internal Link Dist (ft)	218		147	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1709	623	2809	779	857
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.45	0.29	0.20	0.23	0.42

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	236	624	1102	106
v/c Ratio	0.60	0.25	0.77	0.23
Control Delay (s/veh)	24.4	2.8	15.1	7.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.4	2.8	15.1	7.7
Queue Length 50th (ft)	60	21	110	1
Queue Length 95th (ft)	120	38	182	17
Internal Link Dist (ft)		153	240	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	441	2652	1500	1076
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.54	0.24	0.73	0.10

Intersection Summary

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	639	294	3	402	0	0	0	0	125	0	379
Future Vol, veh/h	1	639	294	3	402	0	0	0	0	125	0	379
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	770	354	4	484	0	0	0	0	151	0	457

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	484	0	0	1124	0	0			879	-	484
Stage 1	-	-	-	-	-	-			492	-	-
Stage 2	-	-	-	-	-	-			387	-	-
Critical Hdwy	4.16	-	-	4.16	-	-			6.66	-	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-			5.46	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.86	-	-
Follow-up Hdwy	2.238	-	-	2.238	-	-			3.538	-	3.338
Pot Cap-1 Maneuver	1064	-	-	610	-	0			299	0	577
Stage 1	-	-	-	-	-	0			609	0	-
Stage 2	-	-	-	-	-	0			651	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	1064	-	-	610	-	-			297	0	577
Mov Cap-2 Maneuver	-	-	-	-	-	-			297	0	-
Stage 1	-	-	-	-	-	-			608	0	-
Stage 2	-	-	-	-	-	-			647	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.01	0.08	30.41
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	1064	-	-	610	-	297	577
HCM Lane V/C Ratio	0.001	-	-	0.006	-	0.508	0.792
HCM Control Delay (s/veh)	8.4	-	-	10.9	-	29	30.9
HCM Lane LOS	A	-	-	B	-	D	D
HCM 95th %tile Q(veh)	0	-	-	0	-	2.7	7.6



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	692	282	112	151	408	11
v/c Ratio	0.71	0.32	0.36	0.39	0.70	0.02
Control Delay (s/veh)	21.1	7.7	22.7	7.6	26.2	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	7.7	22.7	7.6	26.2	9.0
Queue Length 50th (ft)	95	42	32	0	113	0
Queue Length 95th (ft)	129	63	58	26	#202	8
Internal Link Dist (ft)		276	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1126	1351	611	612	580	523
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.21	0.18	0.25	0.70	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1094	195	3	257	0	0	0	0	3	1	764
Future Vol, veh/h	0	1094	195	3	257	0	0	0	0	3	1	764
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	1272	227	3	299	0	0	0	0	3	1	888

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1499	0	0	1578	1805	299
Stage 1	-	-	-	-	-	-	306	306	-
Stage 2	-	-	-	-	-	-	1272	1499	-
Critical Hdwy	-	-	-	4.13	-	-	6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-	3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	444	-	0	120	79	~ 738
Stage 1	0	-	-	-	-	0	745	660	-
Stage 2	0	-	-	-	-	0	262	184	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	444	-	-	119	0	~ 738
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	0	-
Stage 1	-	-	-	-	-	-	745	0	-
Stage 2	-	-	-	-	-	-	260	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.15	22.33
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	444	-	696	738
HCM Lane V/C Ratio	-	-	0.008	-	0.432	0.802
HCM Control Delay (s/veh)	-	-	13.2	-	14	26.5
HCM Lane LOS	-	-	B	-	B	D
HCM 95th %tile Q(veh)	-	-	0	-	2.2	8.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	523	434	6	521	0	0	0	0	18	0	517
Future Vol, veh/h	0	523	434	6	521	0	0	0	0	18	0	517
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	615	511	7	613	0	0	0	0	21	0	608

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	615	0	0	1242	-	-
Stage 1	-	-	-	-	-	-	627	-	-
Stage 2	-	-	-	-	-	-	615	-	-
Critical Hdwy	-	-	-	4.15	-	-	6.45	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.45	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.45	-	-
Follow-up Hdwy	-	-	-	2.245	-	-	3.545	-	-
Pot Cap-1 Maneuver	0	-	0	950	-	0	190	0	0
Stage 1	0	-	0	-	-	0	527	0	0
Stage 2	0	-	0	-	-	0	533	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	950	-	-	188	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	188	0	-
Stage 1	-	-	-	-	-	-	527	0	-
Stage 2	-	-	-	-	-	-	527	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.1	26.58
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	20	-	188	-
HCM Lane V/C Ratio	-	0.007	-	0.113	-
HCM Control Delay (s/veh)	-	8.8	0	26.6	0
HCM Lane LOS	-	A	A	D	A
HCM 95th %tile Q(veh)	-	0	-	0.4	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	921	358	54	635	91	92	1256
v/c Ratio	0.56	0.55	0.45	0.56	0.11	0.12	0.87
Control Delay (s/veh)	19.2	6.1	41.4	16.0	9.3	9.3	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.2	6.1	41.4	16.0	9.3	9.3	20.0
Queue Length 50th (ft)	83	0	19	86	17	18	186
Queue Length 95th (ft)	98	37	#52	112	36	36	#234
Internal Link Dist (ft)	512			356		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	1787	682	120	1442	852	852	1524
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.52	0.45	0.44	0.11	0.11	0.82

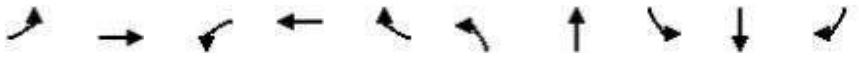
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	630	353	182	136	205	209	76
v/c Ratio	0.63	0.20	0.33	0.39	0.48	0.48	0.16
Control Delay (s/veh)	18.4	5.6	19.6	8.1	19.8	19.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.4	5.6	19.6	8.1	19.8	19.9	4.5
Queue Length 50th (ft)	76	20	23	0	50	51	0
Queue Length 95th (ft)	147	42	51	37	114	116	20
Internal Link Dist (ft)		283	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1227	2541	1074	556	635	637	645
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.14	0.17	0.24	0.32	0.33	0.12

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	59	249	251	529	36	511	323	258	76
v/c Ratio	0.38	0.13	0.68	0.67	0.54	0.27	0.70	0.79	0.16	0.10
Control Delay (s/veh)	34.0	22.2	37.3	36.7	7.1	38.5	31.1	43.7	14.1	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.0	22.2	37.3	36.7	7.1	38.5	31.1	43.7	14.1	1.5
Queue Length 50th (ft)	37	8	108	108	46	16	108	139	31	0
Queue Length 95th (ft)	66	21	166	166	86	39	140	#229	60	4
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	432	840	411	419	989	134	862	432	1608	768
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.07	0.61	0.60	0.53	0.27	0.59	0.75	0.16	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	601
Future Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	601
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	751	78	8	0	34	5	4	2	0	5	1	707

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	86	0	0	1618	1622	82	1616	1624	-
Stage 1	-	-	-	-	-	-	1583	1583	-	36	36	-
Stage 2	-	-	-	-	-	-	35	39	-	1580	1587	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	-
Pot Cap-1 Maneuver	1565	-	-	1504	-	-	83	102	975	83	102	0
Stage 1	-	-	-	-	-	-	136	168	-	976	863	0
Stage 2	-	-	-	-	-	-	979	861	-	136	167	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1504	-	-	42	53	975	42	53	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	53	-	42	53	-
Stage 1	-	-	-	-	-	-	71	87	-	976	863	-
Stage 2	-	-	-	-	-	-	977	861	-	69	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.44	0	93.95	99.35
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	46	1565	-	-	1504	-	-	44	-
HCM Lane V/C Ratio	0.127	0.48	-	-	-	-	-	0.134	-
HCM Control Delay (s/veh)	94	9.4	-	-	0	-	-	99.4	0
HCM Lane LOS	F	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.4	2.7	-	-	0	-	-	0.4	-



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	952	547	782	623	323
v/c Ratio	1.01	0.91	0.46	0.88	0.48
Control Delay (s/veh)	57.7	51.2	13.2	35.4	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.7	51.2	13.2	35.4	12.1
Queue Length 50th (ft)	~208	121	114	233	59
Queue Length 95th (ft)	#324	#212	158	#419	124
Internal Link Dist (ft)	364		337	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	938	599	1699	757	717
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.01	0.91	0.46	0.82	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	626	113	523	285	235
v/c Ratio	0.56	0.33	0.28	0.55	0.38
Control Delay (s/veh)	17.6	24.2	6.7	21.6	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.6	24.2	6.7	21.6	5.0
Queue Length 50th (ft)	80	30	36	70	0
Queue Length 95th (ft)	155	83	72	167	45
Internal Link Dist (ft)	218		204	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1832	667	2931	834	858
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.17	0.18	0.34	0.27

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	165	727	806	289
v/c Ratio	0.41	0.34	0.62	0.40
Control Delay (s/veh)	20.1	3.9	12.7	7.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.1	3.9	12.7	7.8
Queue Length 50th (ft)	36	28	73	7
Queue Length 95th (ft)	91	58	141	36
Internal Link Dist (ft)		196	119	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	567	2920	1849	1430
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.25	0.44	0.20

Intersection Summary

Intersection	
Int Delay, s/veh	32.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	476	436	11	529	0	0	0	0	72	0	561
Future Vol, veh/h	0	476	436	11	529	0	0	0	0	72	0	561
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	512	469	12	569	0	0	0	0	77	0	603

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	981	0	0			848	-	569
Stage 1	-	-	-	-	-	-			592	-	-
Stage 2	-	-	-	-	-	-			256	-	-
Critical Hdwy	-	-	-	4.13	-	-			6.63	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.83	-	-
Follow-up Hdwy	-	-	-	2.219	-	-			3.519	-	3.319
Pot Cap-1 Maneuver	0	-	-	702	-	0			316	0	~ 521
Stage 1	0	-	-	-	-	0			551	0	-
Stage 2	0	-	-	-	-	0			764	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	702	-	-			310	0	~ 521
Mov Cap-2 Maneuver	-	-	-	-	-	-			310	0	-
Stage 1	-	-	-	-	-	-			551	0	-
Stage 2	-	-	-	-	-	-			751	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.21	106.27
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	702	-	310	521
HCM Lane V/C Ratio	-	-	0.017	-	0.25	1.158
HCM Control Delay (s/veh)	-	-	10.2	-	20.4	117.3
HCM Lane LOS	-	-	B	-	C	F
HCM 95th %tile Q(veh)	-	-	0.1	-	1	21

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	408	202	134	162	437	9
v/c Ratio	0.50	0.24	0.38	0.38	0.69	0.02
Control Delay (s/veh)	18.5	7.3	21.1	6.8	24.3	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	7.3	21.1	6.8	24.3	9.0
Queue Length 50th (ft)	51	28	33	0	104	0
Queue Length 95th (ft)	91	54	77	38	#280	9
Internal Link Dist (ft)		310	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1223	1444	663	659	630	568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.14	0.20	0.25	0.69	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	10.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	786	260	3	254	0	0	0	0	4	0	949
Future Vol, veh/h	0	786	260	3	254	0	0	0	0	4	0	949
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	827	274	3	267	0	0	0	0	4	0	999

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1101	0	0	1101	1375	267
Stage 1	-	-	-	-	-	-	274	274	-
Stage 2	-	-	-	-	-	-	827	1101	-
Critical Hdwy	-	-	-	4.13	-	-	6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-	3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	630	-	0	233	145	~ 769
Stage 1	0	-	-	-	-	0	770	682	-
Stage 2	0	-	-	-	-	0	428	286	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	630	-	-	232	0	~ 769
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	0	-
Stage 1	-	-	-	-	-	-	770	0	-
Stage 2	-	-	-	-	-	-	426	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.13	25.74
HCM LOS			D

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	630	-	747	769
HCM Lane V/C Ratio	-	-	0.005	-	0.451	0.866
HCM Control Delay (s/veh)	-	-	10.7	-	13.7	31.8
HCM Lane LOS	-	-	B	-	B	D
HCM 95th %tile Q(veh)	-	-	0	-	2.4	10.6

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	388	527	9	518	0	0	0	0	5	0	485
Future Vol, veh/h	0	388	527	9	518	0	0	0	0	5	0	485
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	413	561	10	551	0	0	0	0	5	0	516

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	413	0	0	983	-	-
Stage 1	-	-	-	-	-	-	570	-	-
Stage 2	-	-	-	-	-	-	413	-	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	-	-
Pot Cap-1 Maneuver	0	-	0	1146	-	0	276	0	0
Stage 1	0	-	0	-	-	0	566	0	0
Stage 2	0	-	0	-	-	0	668	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	1146	-	-	273	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	273	0	-
Stage 1	-	-	-	-	-	-	566	0	-
Stage 2	-	-	-	-	-	-	660	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.14	18.47
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	31	-	273	-
HCM Lane V/C Ratio	-	0.008	-	0.02	-
HCM Control Delay (s/veh)	-	8.2	0	18.5	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0.1	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1101	556	48	744	35	36	906
v/c Ratio	0.55	0.64	0.34	0.55	0.05	0.05	0.74
Control Delay (s/veh)	17.2	6.1	33.3	14.1	9.1	9.1	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.2	6.1	33.3	14.1	9.1	9.1	14.1
Queue Length 50th (ft)	92	0	16	91	6	7	110
Queue Length 95th (ft)	134	67	#51	151	20	20	176
Internal Link Dist (ft)	512			208		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	2141	885	143	1724	938	938	1620
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.63	0.34	0.43	0.04	0.04	0.56

Intersection Summary

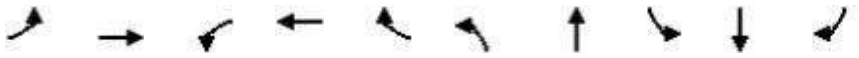
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	996	215	289	207	260	266	55
v/c Ratio	0.95	0.11	0.44	0.45	0.63	0.65	0.12
Control Delay (s/veh)	40.1	5.2	20.6	7.0	25.4	25.8	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.1	5.2	20.6	7.0	25.4	25.8	2.7
Queue Length 50th (ft)	152	13	42	0	71	73	0
Queue Length 95th (ft)	#318	26	73	43	152	155	12
Internal Link Dist (ft)		202	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1050	2437	1043	602	519	520	545
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.09	0.28	0.34	0.50	0.51	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	150	260	263	259	73	677	437	398	76
v/c Ratio	0.43	0.31	0.76	0.76	0.29	0.59	0.86	1.11	0.28	0.11
Control Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	110.2	16.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	110.2	16.9	1.6
Queue Length 50th (ft)	42	15	115	116	0	33	153	~235	66	0
Queue Length 95th (ft)	86	40	#238	#241	37	#96	#268	#429	107	11
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	393	786	373	378	884	123	785	393	1425	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.19	0.70	0.70	0.29	0.59	0.86	1.11	0.28	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	28.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	490
Future Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	490
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1015	34	24	1	51	6	12	8	1	1	6	527

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	58	0	0	2132	2135	46	2124	2144	-
Stage 1	-	-	-	-	-	-	2076	2076	-	56	56	-
Stage 2	-	-	-	-	-	-	56	59	-	2068	2088	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	-
Pot Cap-1 Maneuver	1547	-	-	1546	-	-	36	49	1023	36	49	0
Stage 1	-	-	-	-	-	-	70	95	-	956	848	0
Stage 2	-	-	-	-	-	-	956	846	-	71	94	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1547	-	-	1546	-	-	~ 10	17	1023	10	17	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	17	-	10	17	-
Stage 1	-	-	-	-	-	-	24	33	-	956	848	-
Stage 2	-	-	-	-	-	-	948	845	-	19	32	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.01	0.14	$ 900.99	$ 385.47
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	13	1547	-	-	1546	-	-	15	-
HCM Lane V/C Ratio	1.612	0.656	-	-	0.001	-	-	0.496	-
HCM Control Delay (s/veh)	$ 901	11.6	-	-	7.3	-	-	$ 385.5	0
HCM Lane LOS	F	B	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	3.3	5.3	-	-	0	-	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1159	459	905	303	378
v/c Ratio	1.02	0.69	0.46	0.54	0.71
Control Delay (s/veh)	51.6	30.6	10.2	20.2	21.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.6	30.6	10.2	20.2	21.6
Queue Length 50th (ft)	~204	78	91	89	92
Queue Length 95th (ft)	#395	#163	189	148	170
Internal Link Dist (ft)	364		322	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	1141	708	2008	906	810
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.02	0.65	0.45	0.33	0.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	802	180	578	181	357
v/c Ratio	0.64	0.47	0.28	0.43	0.59
Control Delay (s/veh)	18.7	25.4	5.7	22.7	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.7	25.4	5.7	22.7	9.1
Queue Length 50th (ft)	110	52	35	51	14
Queue Length 95th (ft)	197	112	72	103	61
Internal Link Dist (ft)	218		222	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1672	610	2795	762	843
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.48	0.30	0.21	0.24	0.42

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	236	648	1109	106
v/c Ratio	0.60	0.26	0.77	0.23
Control Delay (s/veh)	24.4	2.8	15.4	7.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.4	2.8	15.4	7.7
Queue Length 50th (ft)	60	22	112	1
Queue Length 95th (ft)	120	40	185	17
Internal Link Dist (ft)		193	262	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	440	2647	1495	1074
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.54	0.24	0.74	0.10

Intersection Summary

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	1	639	393	3	427	0	0	0	0	125	0	379
Future Vol, veh/h	1	639	393	3	427	0	0	0	0	125	0	379
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	770	473	4	514	0	0	0	0	151	0	457

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	514	0	0	1243	0	0			909	-	514
Stage 1	-	-	-	-	-	-			522	-	-
Stage 2	-	-	-	-	-	-			387	-	-
Critical Hdwy	4.16	-	-	4.16	-	-			6.66	-	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-			5.46	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.86	-	-
Follow-up Hdwy	2.238	-	-	2.238	-	-			3.538	-	3.338
Pot Cap-1 Maneuver	1037	-	-	549	-	0			286	0	554
Stage 1	-	-	-	-	-	0			590	0	-
Stage 2	-	-	-	-	-	0			651	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	1037	-	-	549	-	-			284	0	554
Mov Cap-2 Maneuver	-	-	-	-	-	-			284	0	-
Stage 1	-	-	-	-	-	-			588	0	-
Stage 2	-	-	-	-	-	-			647	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.01	0.08	33.99
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	1037	-	-	549	-	284	554
HCM Lane V/C Ratio	0.001	-	-	0.007	-	0.53	0.824
HCM Control Delay (s/veh)	8.5	-	-	11.6	-	31.1	34.9
HCM Lane LOS	A	-	-	B	-	D	D
HCM 95th %tile Q(veh)	0	-	-	0	-	2.9	8.3



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	692	282	112	151	440	11
v/c Ratio	0.71	0.32	0.36	0.39	0.76	0.02
Control Delay (s/veh)	21.1	7.7	22.7	7.6	29.2	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	7.7	22.7	7.6	29.2	9.0
Queue Length 50th (ft)	95	42	32	0	125	0
Queue Length 95th (ft)	129	63	58	26	#225	8
Internal Link Dist (ft)		282	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1126	1351	611	612	580	523
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.21	0.18	0.25	0.76	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1094	251	3	272	0	0	0	0	3	1	764
Future Vol, veh/h	0	1094	251	3	272	0	0	0	0	3	1	764
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	1272	292	3	316	0	0	0	0	3	1	888

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1564	0	0	1595	1887	316
Stage 1	-	-	-	-	-	-	323	323	-
Stage 2	-	-	-	-	-	-	1272	1564	-
Critical Hdwy	-	-	-	4.13	-	-	6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-	3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	419	-	0	117	70	~ 722
Stage 1	0	-	-	-	-	0	731	648	-
Stage 2	0	-	-	-	-	0	262	171	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	419	-	-	116	0	~ 722
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	0	-
Stage 1	-	-	-	-	-	-	731	0	-
Stage 2	-	-	-	-	-	-	260	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.15	23.77
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	419	-	680	722
HCM Lane V/C Ratio	-	-	0.008	-	0.442	0.82
HCM Control Delay (s/veh)	-	-	13.7	-	14.4	28.5
HCM Lane LOS	-	-	B	-	B	D
HCM 95th %tile Q(veh)	-	-	0	-	2.3	8.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↱		↰					↰		↱
Traffic Vol, veh/h	0	523	525	6	540	0	0	0	0	18	0	517
Future Vol, veh/h	0	523	525	6	540	0	0	0	0	18	0	517
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	615	618	7	635	0	0	0	0	21	0	608

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	615	0	0	1265	-	-
Stage 1	-	-	-	-	-	-	649	-	-
Stage 2	-	-	-	-	-	-	615	-	-
Critical Hdwy	-	-	-	4.15	-	-	6.45	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.45	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.45	-	-
Follow-up Hdwy	-	-	-	2.245	-	-	3.545	-	-
Pot Cap-1 Maneuver	0	-	0	950	-	0	184	0	0
Stage 1	0	-	0	-	-	0	514	0	0
Stage 2	0	-	0	-	-	0	533	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	950	-	-	182	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	182	0	-
Stage 1	-	-	-	-	-	-	514	0	-
Stage 2	-	-	-	-	-	-	527	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.1	27.35
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	20	-	182	-
HCM Lane V/C Ratio	-	0.007	-	0.116	-
HCM Control Delay (s/veh)	-	8.8	0	27.4	0
HCM Lane LOS	-	A	A	D	A
HCM 95th %tile Q(veh)	-	0	-	0.4	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	921	415	54	648	91	92	1256
v/c Ratio	0.56	0.60	0.45	0.57	0.11	0.12	0.87
Control Delay (s/veh)	19.2	6.4	41.5	16.2	9.3	9.3	20.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.2	6.4	41.5	16.2	9.3	9.3	20.4
Queue Length 50th (ft)	83	0	19	88	17	18	189
Queue Length 95th (ft)	98	38	#52	114	36	36	#240
Internal Link Dist (ft)	512			291		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	1784	721	119	1439	850	850	1516
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.58	0.45	0.45	0.11	0.11	0.83

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	630	353	182	136	211	215	76
v/c Ratio	0.64	0.20	0.33	0.39	0.49	0.49	0.16
Control Delay (s/veh)	18.5	5.7	19.7	8.1	19.9	20.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	5.7	19.7	8.1	19.9	20.1	4.5
Queue Length 50th (ft)	76	21	23	0	52	53	0
Queue Length 95th (ft)	147	42	51	37	117	120	20
Internal Link Dist (ft)		153	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1223	2535	1070	555	633	634	644
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.14	0.17	0.25	0.33	0.34	0.12

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	59	249	251	529	36	511	351	258	76
v/c Ratio	0.38	0.13	0.69	0.68	0.54	0.27	0.71	0.83	0.16	0.10
Control Delay (s/veh)	34.2	22.2	37.8	37.1	7.0	38.8	31.5	46.9	14.0	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	34.2	22.2	37.8	37.1	7.0	38.8	31.5	46.9	14.0	1.5
Queue Length 50th (ft)	37	8	108	108	46	16	108	154	31	0
Queue Length 95th (ft)	66	21	166	166	86	39	140	#257	60	4
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	424	825	403	411	978	132	846	424	1620	772
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.07	0.62	0.61	0.54	0.27	0.60	0.83	0.16	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	607
Future Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	607
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	751	78	8	0	34	5	4	2	0	5	1	714

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	86	0	0	1618	1622	82	1616	1624	-
Stage 1	-	-	-	-	-	-	1583	1583	-	36	36	-
Stage 2	-	-	-	-	-	-	35	39	-	1580	1587	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	-
Pot Cap-1 Maneuver	1565	-	-	1504	-	-	83	102	975	83	102	0
Stage 1	-	-	-	-	-	-	136	168	-	976	863	0
Stage 2	-	-	-	-	-	-	979	861	-	136	167	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1504	-	-	42	53	975	42	53	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	53	-	42	53	-
Stage 1	-	-	-	-	-	-	71	87	-	976	863	-
Stage 2	-	-	-	-	-	-	977	861	-	69	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.44	0	93.95	99.35
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	46	1565	-	-	1504	-	-	44	-
HCM Lane V/C Ratio	0.127	0.48	-	-	-	-	-	0.134	-
HCM Control Delay (s/veh)	94	9.4	-	-	0	-	-	99.4	0
HCM Lane LOS	F	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.4	2.7	-	-	0	-	-	0.4	-



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	992	557	792	623	323
v/c Ratio	1.03	0.93	0.47	0.88	0.48
Control Delay (s/veh)	59.3	53.8	13.3	35.4	12.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.3	53.8	13.3	35.4	12.3
Queue Length 50th (ft)	~213	123	116	233	60
Queue Length 95th (ft)	#330	#218	161	#419	125
Internal Link Dist (ft)	364		187	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	966	599	1699	757	715
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.03	0.93	0.47	0.82	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	633	113	544	285	235
v/c Ratio	0.56	0.33	0.30	0.55	0.38
Control Delay (s/veh)	17.7	24.3	6.8	21.6	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.7	24.3	6.8	21.6	5.0
Queue Length 50th (ft)	82	30	38	71	0
Queue Length 95th (ft)	157	83	75	167	45
Internal Link Dist (ft)	218		215	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1827	666	2922	832	856
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.17	0.19	0.34	0.27

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	165	733	828	289
v/c Ratio	0.41	0.34	0.62	0.41
Control Delay (s/veh)	20.3	3.9	12.9	8.0
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.3	3.9	12.9	8.0
Queue Length 50th (ft)	37	29	76	8
Queue Length 95th (ft)	91	58	147	37
Internal Link Dist (ft)		250	211	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	555	2907	1814	1403
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.25	0.46	0.21

Intersection Summary

Intersection	
Int Delay, s/veh	46.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	476	463	11	617	0	0	0	0	72	0	561
Future Vol, veh/h	0	476	463	11	617	0	0	0	0	72	0	561
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	512	498	12	663	0	0	0	0	77	0	603

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	1010	0	0			943	-	663
Stage 1	-	-	-	-	-	-			687	-	-
Stage 2	-	-	-	-	-	-			256	-	-
Critical Hdwy	-	-	-	4.13	-	-			6.63	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.83	-	-
Follow-up Hdwy	-	-	-	2.219	-	-			3.519	-	3.319
Pot Cap-1 Maneuver	0	-	-	684	-	0			276	0	~ 460
Stage 1	0	-	-	-	-	0			498	0	-
Stage 2	0	-	-	-	-	0			764	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	684	-	-			271	0	~ 460
Mov Cap-2 Maneuver	-	-	-	-	-	-			271	0	-
Stage 1	-	-	-	-	-	-			498	0	-
Stage 2	-	-	-	-	-	-			751	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.18	162.65
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	684	-	271	460
HCM Lane V/C Ratio	-	-	0.017	-	0.286	1.311
HCM Control Delay (s/veh)	-	-	10.4	-	23.5	180.5
HCM Lane LOS	-	-	B	-	C	F
HCM 95th %tile Q(veh)	-	-	0.1	-	1.1	26.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	408	202	134	162	529	9
v/c Ratio	0.50	0.24	0.38	0.38	0.84	0.02
Control Delay (s/veh)	18.5	7.3	21.1	6.8	33.6	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	7.3	21.1	6.8	33.6	9.0
Queue Length 50th (ft)	51	28	33	0	135	0
Queue Length 95th (ft)	91	54	77	38	#357	9
Internal Link Dist (ft)		215	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1223	1444	663	659	630	568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.14	0.20	0.25	0.84	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	13.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	786	275	3	303	0	0	0	0	4	0	949
Future Vol, veh/h	0	786	275	3	303	0	0	0	0	4	0	949
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	827	289	3	319	0	0	0	0	4	0	999

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	1117	0	0			1153	1442	319
Stage 1	-	-	-	-	-	-			325	325	-
Stage 2	-	-	-	-	-	-			827	1117	-
Critical Hdwy	-	-	-	4.13	-	-			6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-			3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	622	-	0			217	132	~ 719
Stage 1	0	-	-	-	-	0			730	647	-
Stage 2	0	-	-	-	-	0			428	282	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	622	-	-			216	0	~ 719
Mov Cap-2 Maneuver	-	-	-	-	-	-			216	0	-
Stage 1	-	-	-	-	-	-			730	0	-
Stage 2	-	-	-	-	-	-			426	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.11	32.82
HCM LOS			D

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	622	-	699	719
HCM Lane V/C Ratio	-	-	0.005	-	0.482	0.926
HCM Control Delay (s/veh)	-	-	10.8	-	14.9	41.9
HCM Lane LOS	-	-	B	-	B	E
HCM 95th %tile Q(veh)	-	-	0	-	2.6	12.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	388	551	9	599	0	0	0	0	5	0	485
Future Vol, veh/h	0	388	551	9	599	0	0	0	0	5	0	485
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	413	586	10	637	0	0	0	0	5	0	516

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	413	0	0	1069	-	-
Stage 1	-	-	-	-	-	-	656	-	-
Stage 2	-	-	-	-	-	-	413	-	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	-	-
Pot Cap-1 Maneuver	0	-	0	1146	-	0	245	0	0
Stage 1	0	-	0	-	-	0	516	0	0
Stage 2	0	-	0	-	-	0	668	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	1146	-	-	242	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	242	0	-
Stage 1	-	-	-	-	-	-	516	0	-
Stage 2	-	-	-	-	-	-	659	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.12	20.22
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	27	-	242	-
HCM Lane V/C Ratio	-	0.008	-	0.022	-
HCM Control Delay (s/veh)	-	8.2	0	20.2	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0.1	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1101	569	48	787	35	36	906
v/c Ratio	0.55	0.65	0.34	0.58	0.05	0.05	0.74
Control Delay (s/veh)	17.3	6.2	33.5	14.6	9.1	9.1	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.3	6.2	33.5	14.6	9.1	9.1	14.6
Queue Length 50th (ft)	93	0	16	100	6	7	115
Queue Length 95th (ft)	134	69	#51	162	20	20	181
Internal Link Dist (ft)	512			195		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	2129	892	142	1714	932	932	1603
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.64	0.34	0.46	0.04	0.04	0.57

Intersection Summary

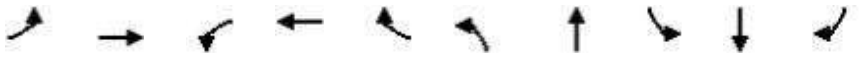
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	996	215	289	207	282	288	55
v/c Ratio	0.96	0.11	0.44	0.45	0.67	0.68	0.12
Control Delay (s/veh)	41.9	5.3	20.8	7.0	26.6	27.2	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	41.9	5.3	20.8	7.0	26.6	27.2	2.6
Queue Length 50th (ft)	157	14	43	0	80	81	0
Queue Length 95th (ft)	#318	26	73	43	#166	#172	12
Internal Link Dist (ft)		308	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1040	2413	1033	598	514	516	540
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.09	0.28	0.35	0.55	0.56	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	150	260	263	259	73	677	443	398	76
v/c Ratio	0.43	0.31	0.76	0.76	0.29	0.59	0.86	1.13	0.28	0.11
Control Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	115.4	16.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	115.4	16.9	1.6
Queue Length 50th (ft)	42	15	115	116	0	33	153	~241	66	0
Queue Length 95th (ft)	86	40	#238	#241	37	#96	#268	#435	107	11
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	393	786	373	378	884	123	785	393	1425	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.19	0.70	0.70	0.29	0.59	0.86	1.13	0.28	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	28.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	510
Future Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	510
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1015	34	24	1	51	6	12	8	1	1	6	548

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	58	0	0	2132	2135	46	2124	2144	-
Stage 1	-	-	-	-	-	-	2076	2076	-	56	56	-
Stage 2	-	-	-	-	-	-	56	59	-	2068	2088	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	-
Pot Cap-1 Maneuver	1547	-	-	1546	-	-	36	49	1023	36	49	0
Stage 1	-	-	-	-	-	-	70	95	-	956	848	0
Stage 2	-	-	-	-	-	-	956	846	-	71	94	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1547	-	-	1546	-	-	~ 10	17	1023	10	17	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	17	-	10	17	-
Stage 1	-	-	-	-	-	-	24	33	-	956	848	-
Stage 2	-	-	-	-	-	-	948	845	-	19	32	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.01	0.14	$ 900.99	$ 385.47
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	13	1547	-	-	1546	-	-	15	-
HCM Lane V/C Ratio	1.612	0.656	-	-	0.001	-	-	0.496	-
HCM Control Delay (s/veh)	$ 901	11.6	-	-	7.3	-	-	$ 385.5	0
HCM Lane LOS	F	B	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	3.3	5.3	-	-	0	-	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1169	462	940	303	378
v/c Ratio	1.02	0.70	0.48	0.54	0.71
Control Delay (s/veh)	53.7	30.8	10.4	20.2	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.7	30.8	10.4	20.2	21.8
Queue Length 50th (ft)	~207	79	96	89	92
Queue Length 95th (ft)	#398	#165	198	148	171
Internal Link Dist (ft)	364		313	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	1142	707	2004	904	807
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.02	0.65	0.47	0.34	0.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	761	180	572	181	357
v/c Ratio	0.62	0.46	0.28	0.42	0.59
Control Delay (s/veh)	18.5	25.1	5.7	22.4	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	25.1	5.7	22.4	8.8
Queue Length 50th (ft)	102	50	35	49	12
Queue Length 95th (ft)	185	112	71	103	59
Internal Link Dist (ft)	218		222	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1715	626	2816	782	859
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.44	0.29	0.20	0.23	0.42

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	236	610	1103	106
v/c Ratio	0.60	0.25	0.77	0.23
Control Delay (s/veh)	24.4	2.8	15.1	7.7
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.4	2.8	15.1	7.7
Queue Length 50th (ft)	60	20	111	1
Queue Length 95th (ft)	120	37	183	17
Internal Link Dist (ft)		193	262	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	441	2650	1499	1075
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.54	0.23	0.74	0.10

Intersection Summary

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	1	639	244	3	407	0	0	0	0	125	0	379
Future Vol, veh/h	1	639	244	3	407	0	0	0	0	125	0	379
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	83	83	83
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	1	770	294	4	490	0	0	0	0	151	0	457

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	490	0	0	1064	0	0			885	-	490
Stage 1	-	-	-	-	-	-			498	-	-
Stage 2	-	-	-	-	-	-			387	-	-
Critical Hdwy	4.16	-	-	4.16	-	-			6.66	-	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-			5.46	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.86	-	-
Follow-up Hdwy	2.238	-	-	2.238	-	-			3.538	-	3.338
Pot Cap-1 Maneuver	1059	-	-	643	-	0			296	0	572
Stage 1	-	-	-	-	-	0			605	0	-
Stage 2	-	-	-	-	-	0			651	0	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	1059	-	-	643	-	-			294	0	572
Mov Cap-2 Maneuver	-	-	-	-	-	-			294	0	-
Stage 1	-	-	-	-	-	-			604	0	-
Stage 2	-	-	-	-	-	-			648	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.01	0.08	31.07
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	1059	-	-	643	-	294	572
HCM Lane V/C Ratio	0.001	-	-	0.006	-	0.512	0.798
HCM Control Delay (s/veh)	8.4	-	-	10.6	-	29.4	31.6
HCM Lane LOS	A	-	-	B	-	D	D
HCM 95th %tile Q(veh)	0	-	-	0	-	2.7	7.7



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	692	282	112	151	414	11
v/c Ratio	0.71	0.32	0.36	0.39	0.71	0.02
Control Delay (s/veh)	21.1	7.7	22.7	7.6	26.7	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.1	7.7	22.7	7.6	26.7	9.0
Queue Length 50th (ft)	95	42	32	0	116	0
Queue Length 95th (ft)	129	63	58	26	#206	8
Internal Link Dist (ft)		282	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1126	1351	611	612	580	523
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.21	0.18	0.25	0.71	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1094	167	3	260	0	0	0	0	3	1	764
Future Vol, veh/h	0	1094	167	3	260	0	0	0	0	3	1	764
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	1272	194	3	302	0	0	0	0	3	1	888

Major/Minor	Major1			Major2					Minor2		
Conflicting Flow All	-	0	0	1466	0	0			1581	1776	302
Stage 1	-	-	-	-	-	-			309	309	-
Stage 2	-	-	-	-	-	-			1272	1466	-
Critical Hdwy	-	-	-	4.13	-	-			6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-			3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	457	-	0			119	82	~ 735
Stage 1	0	-	-	-	-	0			742	658	-
Stage 2	0	-	-	-	-	0			262	191	-
Platoon blocked, %		-	-		-						
Mov Cap-1 Maneuver	-	-	-	457	-	-			118	0	~ 735
Mov Cap-2 Maneuver	-	-	-	-	-	-			118	0	-
Stage 1	-	-	-	-	-	-			742	0	-
Stage 2	-	-	-	-	-	-			260	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.15	22.6
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	457	-	693	735
HCM Lane V/C Ratio	-	-	0.008	-	0.434	0.806
HCM Control Delay (s/veh)	-	-	12.9	-	14.1	26.9
HCM Lane LOS	-	-	B	-	B	D
HCM 95th %tile Q(veh)	-	-	0	-	2.2	8.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	523	389	6	522	0	0	0	0	18	0	517
Future Vol, veh/h	0	523	389	6	522	0	0	0	0	18	0	517
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	0	615	458	7	614	0	0	0	0	21	0	608

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	615	0	0	1244	-	-
Stage 1	-	-	-	-	-	-	628	-	-
Stage 2	-	-	-	-	-	-	615	-	-
Critical Hdwy	-	-	-	4.15	-	-	6.45	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.45	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.45	-	-
Follow-up Hdwy	-	-	-	2.245	-	-	3.545	-	-
Pot Cap-1 Maneuver	0	-	0	950	-	0	190	0	0
Stage 1	0	-	0	-	-	0	526	0	0
Stage 2	0	-	0	-	-	0	533	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	950	-	-	188	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	188	0	-
Stage 1	-	-	-	-	-	-	526	0	-
Stage 2	-	-	-	-	-	-	527	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.1	26.62
HCM LOS			D

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	20	-	188	-
HCM Lane V/C Ratio	-	0.007	-	0.113	-
HCM Control Delay (s/veh)	-	8.8	0	26.6	0
HCM Lane LOS	-	A	A	D	A
HCM 95th %tile Q(veh)	-	0	-	0.4	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	921	330	54	637	91	92	1256
v/c Ratio	0.57	0.52	0.45	0.56	0.11	0.12	0.87
Control Delay (s/veh)	19.3	6.0	41.3	16.2	9.2	9.2	19.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.3	6.0	41.3	16.2	9.2	9.2	19.8
Queue Length 50th (ft)	83	0	19	87	17	18	186
Queue Length 95th (ft)	98	36	#52	112	36	36	#235
Internal Link Dist (ft)	512			291		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	1795	663	120	1448	855	855	1528
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.50	0.45	0.44	0.11	0.11	0.82

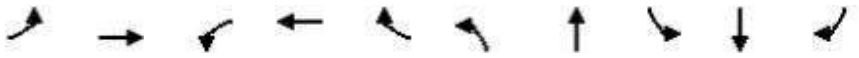
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	630	353	182	136	206	210	76
v/c Ratio	0.63	0.20	0.33	0.39	0.48	0.48	0.16
Control Delay (s/veh)	18.4	5.6	19.6	8.1	19.8	19.9	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.4	5.6	19.6	8.1	19.8	19.9	4.5
Queue Length 50th (ft)	76	20	23	0	50	52	0
Queue Length 95th (ft)	147	42	51	37	114	116	20
Internal Link Dist (ft)		153	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1227	2540	1073	556	635	637	645
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.14	0.17	0.24	0.32	0.33	0.12

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	87	59	249	251	529	36	511	308	258	76
v/c Ratio	0.38	0.13	0.67	0.67	0.55	0.26	0.69	0.77	0.16	0.10
Control Delay (s/veh)	33.9	22.2	37.1	36.4	7.1	38.4	30.9	42.1	14.1	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	33.9	22.2	37.1	36.4	7.1	38.4	30.9	42.1	14.1	1.6
Queue Length 50th (ft)	37	8	108	108	46	16	108	131	31	0
Queue Length 95th (ft)	66	21	166	166	86	39	140	#213	60	4
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	438	851	416	424	996	136	873	438	1627	775
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.07	0.60	0.59	0.53	0.26	0.59	0.70	0.16	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	602
Future Vol, veh/h	638	66	7	0	29	4	3	2	0	4	1	602
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	751	78	8	0	34	5	4	2	0	5	1	708

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	86	0	0	1618	1622	82	1616	1624	-
Stage 1	-	-	-	-	-	-	1583	1583	-	36	36	-
Stage 2	-	-	-	-	-	-	35	39	-	1580	1587	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	-
Pot Cap-1 Maneuver	1565	-	-	1504	-	-	83	102	975	83	102	0
Stage 1	-	-	-	-	-	-	136	168	-	976	863	0
Stage 2	-	-	-	-	-	-	979	861	-	136	167	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1565	-	-	1504	-	-	42	53	975	42	53	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	42	53	-	42	53	-
Stage 1	-	-	-	-	-	-	71	87	-	976	863	-
Stage 2	-	-	-	-	-	-	977	861	-	69	87	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.44	0	93.95	99.35
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	46	1565	-	-	1504	-	-	44	-
HCM Lane V/C Ratio	0.127	0.48	-	-	-	-	-	0.134	-
HCM Control Delay (s/veh)	94	9.4	-	-	0	-	-	99.4	0
HCM Lane LOS	F	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	0.4	2.7	-	-	0	-	-	0.4	-



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	932	542	784	623	323
v/c Ratio	1.01	0.90	0.46	0.88	0.48
Control Delay (s/veh)	56.1	50.0	13.2	35.4	12.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.1	50.0	13.2	35.4	12.1
Queue Length 50th (ft)	~205	120	114	233	59
Queue Length 95th (ft)	#320	#209	159	#419	124
Internal Link Dist (ft)	364		187	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	926	599	1699	757	717
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.01	0.90	0.46	0.82	0.45

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	626	113	512	285	235
v/c Ratio	0.56	0.33	0.28	0.55	0.38
Control Delay (s/veh)	17.6	24.2	6.7	21.6	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.6	24.2	6.7	21.6	5.0
Queue Length 50th (ft)	80	30	35	70	0
Queue Length 95th (ft)	155	83	71	167	45
Internal Link Dist (ft)	218		215	599	
Turn Bay Length (ft)		110			425
Base Capacity (vph)	1832	667	2931	834	858
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.17	0.17	0.34	0.27

Intersection Summary



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	165	727	796	289
v/c Ratio	0.41	0.34	0.62	0.40
Control Delay (s/veh)	20.0	4.0	12.6	7.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.0	4.0	12.6	7.8
Queue Length 50th (ft)	36	28	71	7
Queue Length 95th (ft)	91	58	138	36
Internal Link Dist (ft)		250	211	602
Turn Bay Length (ft)	100			
Base Capacity (vph)	569	2928	1857	1435
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.29	0.25	0.43	0.20

Intersection Summary

Intersection	
Int Delay, s/veh	26.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	476	439	11	487	0	0	0	0	72	0	561
Future Vol, veh/h	0	476	439	11	487	0	0	0	0	72	0	561
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	150	-	-	-	-	-	0	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	512	472	12	524	0	0	0	0	77	0	603

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	984	0	0	803	-	524
Stage 1	-	-	-	-	-	-	547	-	-
Stage 2	-	-	-	-	-	-	256	-	-
Critical Hdwy	-	-	-	4.13	-	-	6.63	-	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.83	-	-
Follow-up Hdwy	-	-	-	2.219	-	-	3.519	-	3.319
Pot Cap-1 Maneuver	0	-	-	700	-	0	336	0	~ 553
Stage 1	0	-	-	-	-	0	579	0	-
Stage 2	0	-	-	-	-	0	764	0	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	700	-	-	331	0	~ 553
Mov Cap-2 Maneuver	-	-	-	-	-	-	331	0	-
Stage 1	-	-	-	-	-	-	579	0	-
Stage 2	-	-	-	-	-	-	751	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.23	84.06
HCM LOS			F

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	700	-	331	553
HCM Lane V/C Ratio	-	-	0.017	-	0.234	1.092
HCM Control Delay (s/veh)	-	-	10.2	-	19.2	92.4
HCM Lane LOS	-	-	B	-	C	F
HCM 95th %tile Q(veh)	-	-	0.1	-	0.9	18.5

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT
Lane Group Flow (vph)	408	202	134	162	393	9
v/c Ratio	0.50	0.24	0.38	0.38	0.62	0.02
Control Delay (s/veh)	18.5	7.3	21.1	6.8	21.6	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.5	7.3	21.1	6.8	21.6	9.0
Queue Length 50th (ft)	51	28	33	0	91	0
Queue Length 95th (ft)	91	54	77	38	#242	9
Internal Link Dist (ft)		215	565			370
Turn Bay Length (ft)	280			200	150	
Base Capacity (vph)	1223	1444	663	659	630	568
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.14	0.20	0.25	0.62	0.02

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	786	262	3	229	0	0	0	0	4	0	949
Future Vol, veh/h	0	786	262	3	229	0	0	0	0	4	0	949
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	265	-	-	-	-	-	-	-	525
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	827	276	3	241	0	0	0	0	4	0	999

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	0	1103	0	0	1075	1351	241
Stage 1	-	-	-	-	-	-	247	247	-
Stage 2	-	-	-	-	-	-	827	1103	-
Critical Hdwy	-	-	-	4.13	-	-	6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-	3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	629	-	0	242	150	~ 795
Stage 1	0	-	-	-	-	0	791	700	-
Stage 2	0	-	-	-	-	0	428	286	-
Platoon blocked, %		-	-		-				
Mov Cap-1 Maneuver	-	-	-	629	-	-	241	0	~ 795
Mov Cap-2 Maneuver	-	-	-	-	-	-	241	0	-
Stage 1	-	-	-	-	-	-	791	0	-
Stage 2	-	-	-	-	-	-	426	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.14	23.1
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	-	629	-	773	795
HCM Lane V/C Ratio	-	-	0.005	-	0.436	0.837
HCM Control Delay (s/veh)	-	-	10.8	-	13.2	28.1
HCM Lane LOS	-	-	B	-	B	D
HCM 95th %tile Q(veh)	-	-	0	-	2.2	9.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	388	529	9	482	0	0	0	0	5	0	485
Future Vol, veh/h	0	388	529	9	482	0	0	0	0	5	0	485
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	0	-	-	-	-	-	-	0	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	413	563	10	513	0	0	0	0	5	0	516

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	-	0	-	413	0	0	945	-	-
Stage 1	-	-	-	-	-	-	532	-	-
Stage 2	-	-	-	-	-	-	413	-	-
Critical Hdwy	-	-	-	4.12	-	-	6.42	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-	-
Follow-up Hdwy	-	-	-	2.218	-	-	3.518	-	-
Pot Cap-1 Maneuver	0	-	0	1146	-	0	291	0	0
Stage 1	0	-	0	-	-	0	589	0	0
Stage 2	0	-	0	-	-	0	668	0	0
Platoon blocked, %		-			-				
Mov Cap-1 Maneuver	-	-	-	1146	-	-	287	0	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	287	0	-
Stage 1	-	-	-	-	-	-	589	0	-
Stage 2	-	-	-	-	-	-	660	0	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0.15	17.76
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	33	-	287	-
HCM Lane V/C Ratio	-	0.008	-	0.019	-
HCM Control Delay (s/veh)	-	8.2	0	17.8	0
HCM Lane LOS	-	A	A	C	A
HCM 95th %tile Q(veh)	-	0	-	0.1	-



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	1101	558	48	725	35	36	906
v/c Ratio	0.54	0.64	0.33	0.53	0.05	0.05	0.74
Control Delay (s/veh)	17.1	6.1	33.2	13.8	9.1	9.1	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.1	6.1	33.2	13.8	9.1	9.1	13.9
Queue Length 50th (ft)	91	0	16	87	6	7	108
Queue Length 95th (ft)	134	68	#51	146	20	20	174
Internal Link Dist (ft)	512			195		603	
Turn Bay Length (ft)			385		375		375
Base Capacity (vph)	2149	888	144	1730	941	941	1630
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.63	0.33	0.42	0.04	0.04	0.56

Intersection Summary

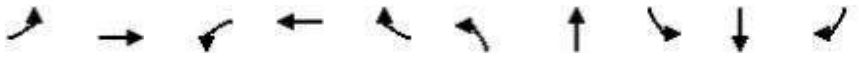
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Group Flow (vph)	996	215	289	207	250	256	55
v/c Ratio	0.94	0.11	0.44	0.45	0.62	0.63	0.12
Control Delay (s/veh)	39.4	5.1	20.6	7.0	24.8	25.2	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.4	5.1	20.6	7.0	24.8	25.2	2.7
Queue Length 50th (ft)	150	13	41	0	68	70	0
Queue Length 95th (ft)	#318	26	73	43	146	150	12
Internal Link Dist (ft)		308	363			523	
Turn Bay Length (ft)				215	250		145
Base Capacity (vph)	1055	2447	1047	604	521	523	547
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.09	0.28	0.34	0.48	0.49	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	99	150	260	263	259	73	677	437	398	76
v/c Ratio	0.43	0.31	0.76	0.76	0.29	0.59	0.86	1.11	0.28	0.11
Control Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	110.2	16.9	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.4	16.4	43.7	43.5	2.7	56.3	40.7	110.2	16.9	1.6
Queue Length 50th (ft)	42	15	115	116	0	33	153	~235	66	0
Queue Length 95th (ft)	86	40	#238	#241	37	#96	#268	#429	107	11
Internal Link Dist (ft)		274		377			511		360	
Turn Bay Length (ft)	160		300		175	250		220		250
Base Capacity (vph)	393	786	373	378	884	123	785	393	1425	696
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.19	0.70	0.70	0.29	0.59	0.86	1.11	0.28	0.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Intersection	
Int Delay, s/veh	28.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	480
Future Vol, veh/h	944	32	22	1	47	6	11	7	1	1	6	480
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	0	-	-	75	-	-	-	-	-	-	-	425
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1015	34	24	1	51	6	12	8	1	1	6	516

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	57	0	0	58	0	0	2132	2135	46	2124	2144	-
Stage 1	-	-	-	-	-	-	2076	2076	-	56	56	-
Stage 2	-	-	-	-	-	-	56	59	-	2068	2088	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	-
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	-
Pot Cap-1 Maneuver	1547	-	-	1546	-	-	36	49	1023	36	49	0
Stage 1	-	-	-	-	-	-	70	95	-	956	848	0
Stage 2	-	-	-	-	-	-	956	846	-	71	94	0
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1547	-	-	1546	-	-	~ 10	17	1023	10	17	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 10	17	-	10	17	-
Stage 1	-	-	-	-	-	-	24	33	-	956	848	-
Stage 2	-	-	-	-	-	-	948	845	-	19	32	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.01	0.14	$ 900.99	$ 385.47
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	13	1547	-	-	1546	-	-	15	-
HCM Lane V/C Ratio	1.612	0.656	-	-	0.001	-	-	0.496	-
HCM Control Delay (s/veh)	$ 901	11.6	-	-	7.3	-	-	$ 385.5	0
HCM Lane LOS	F	B	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	3.3	5.3	-	-	0	-	-	1.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	1160	460	888	303	378
v/c Ratio	1.01	0.69	0.45	0.54	0.71
Control Delay (s/veh)	51.4	30.6	10.1	20.3	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.4	30.6	10.1	20.3	21.4
Queue Length 50th (ft)	~190	78	88	89	90
Queue Length 95th (ft)	#396	#164	184	148	169
Internal Link Dist (ft)	364		313	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	1143	709	2012	908	813
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	1.01	0.65	0.44	0.33	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	SBT	SBR
Lane Group Flow (vph)	888	531	667	623	323
v/c Ratio	0.98	0.89	0.39	0.88	0.46
Control Delay (s/veh)	50.5	47.6	12.5	35.4	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	50.5	47.6	12.5	35.4	9.6
Queue Length 50th (ft)	~181	117	93	233	44
Queue Length 95th (ft)	#307	#204	132	#419	105
Internal Link Dist (ft)	364		187	504	
Turn Bay Length (ft)		175			350
Base Capacity (vph)	907	599	1699	757	743
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.98	0.89	0.39	0.82	0.43

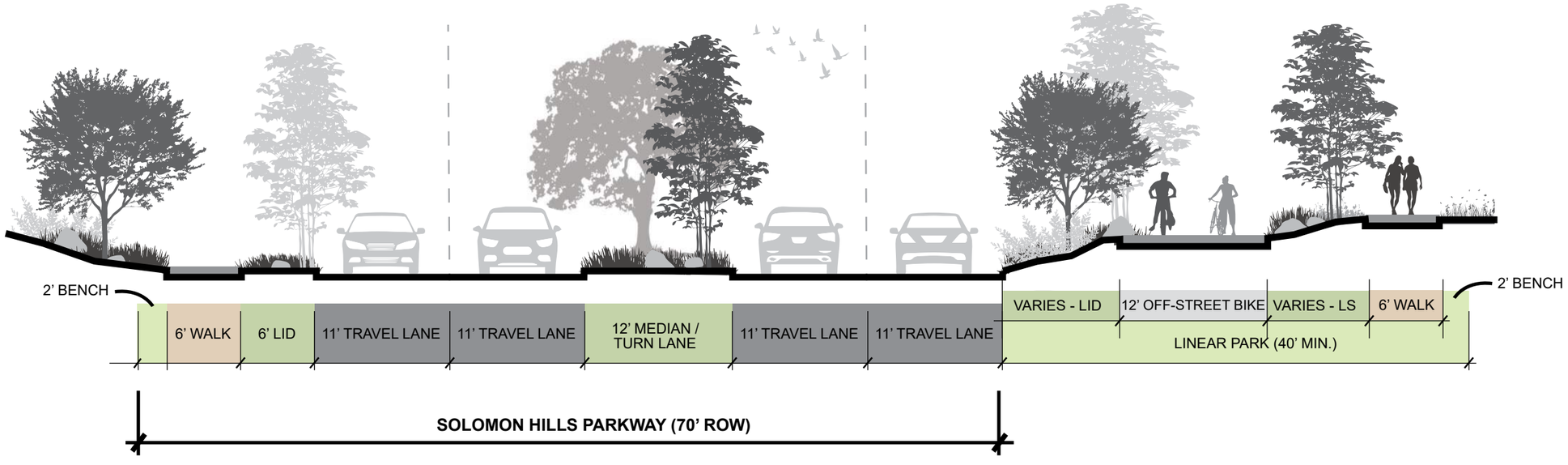
Intersection Summary

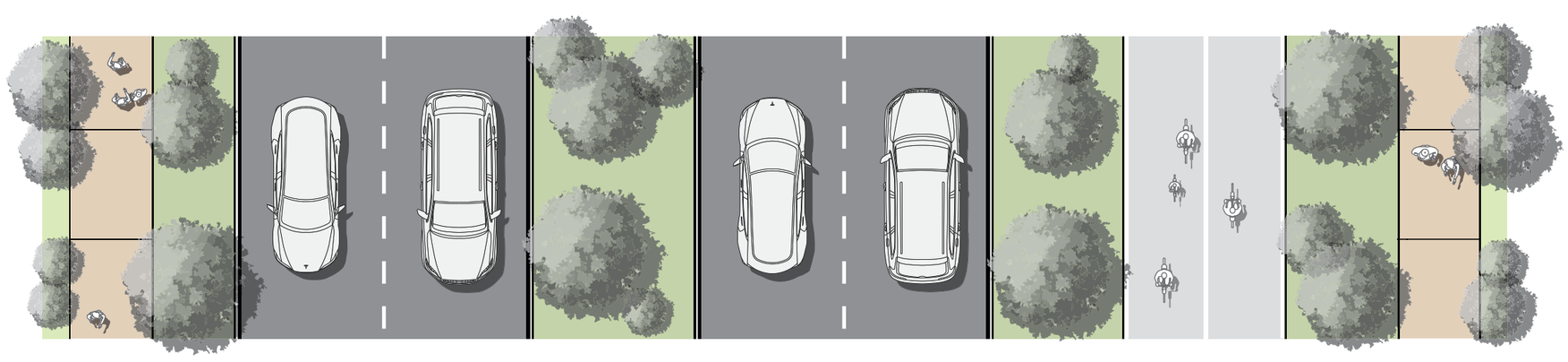
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Appendix L

Specific Plan Roadway Cross Sections





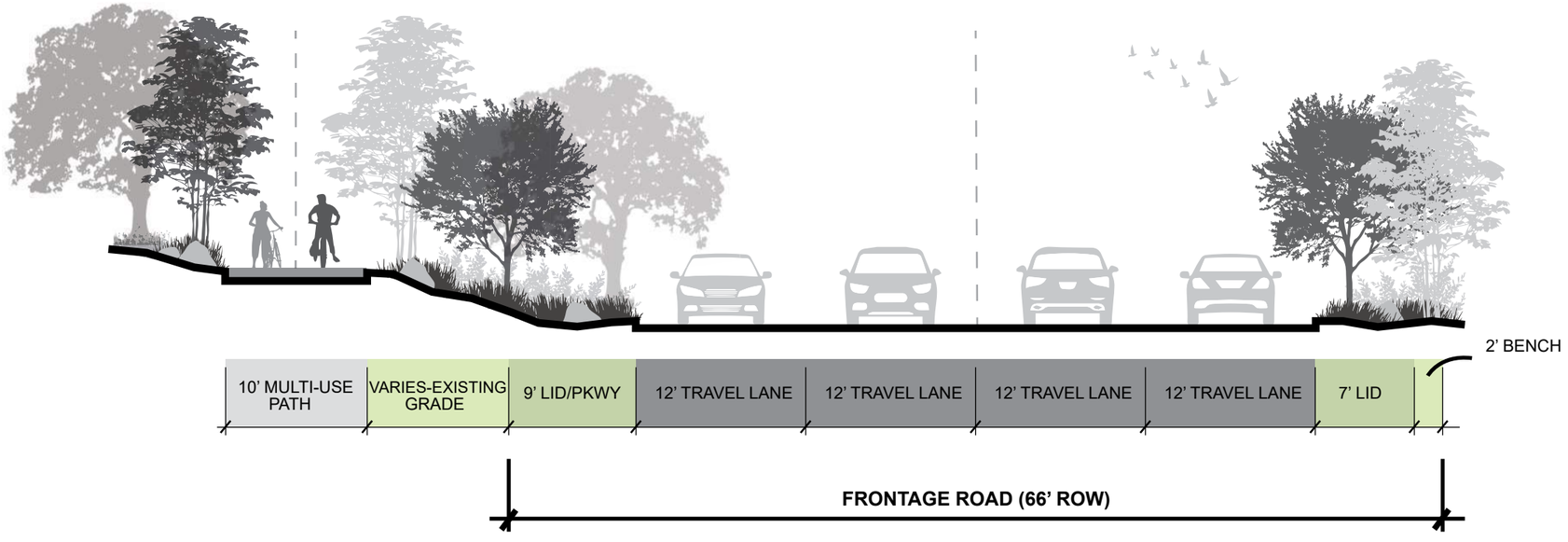
solomon hills

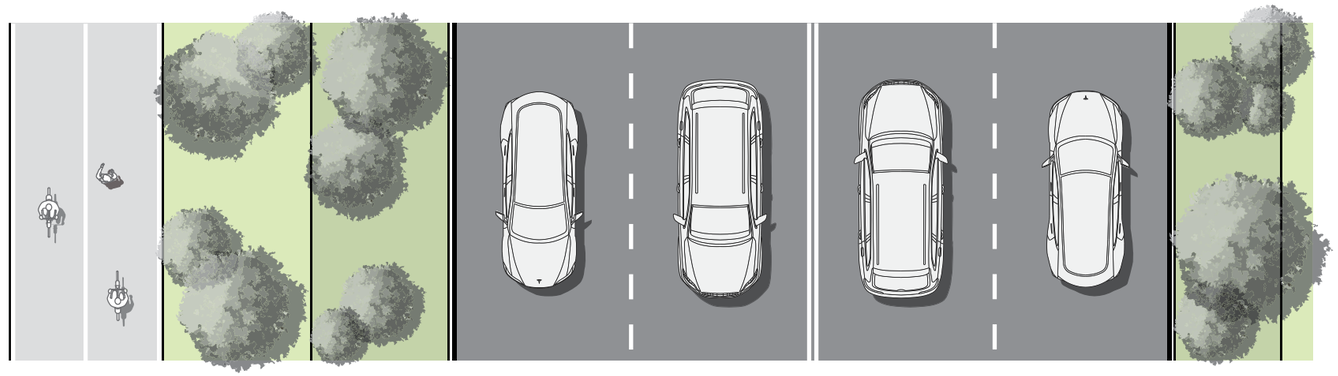
SOLOMON HILLS PARKWAY SECTION & PLAN VIEW

rrm design group

May 30, 2024

A1





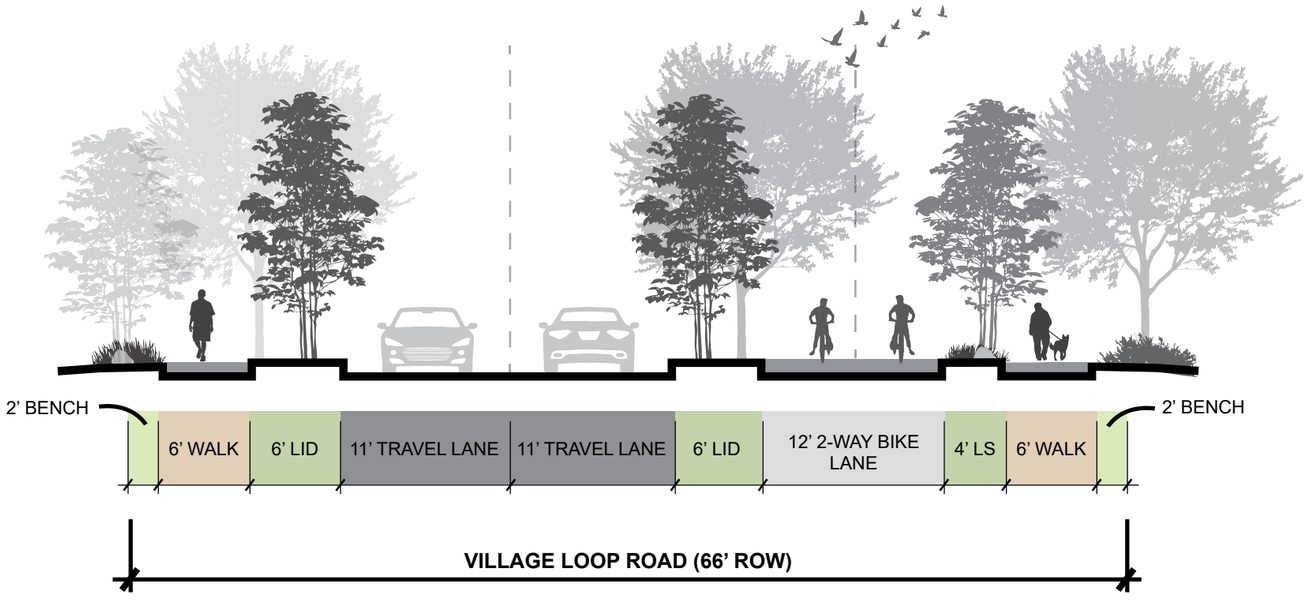
solomon hills

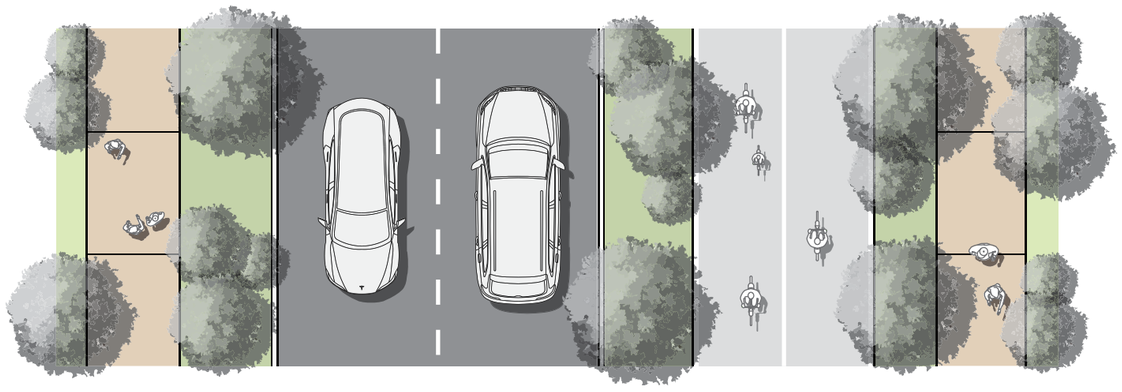
FRONTAGE ROAD SECTION & PLAN VIEW

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May 30, 2024

A2





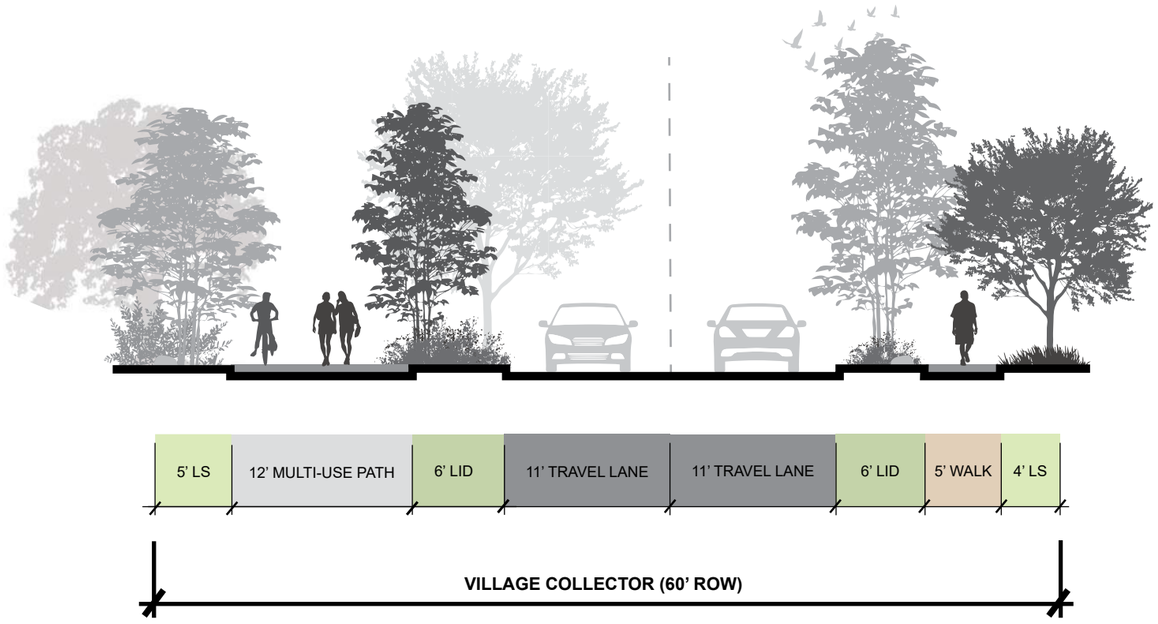
solomon hills

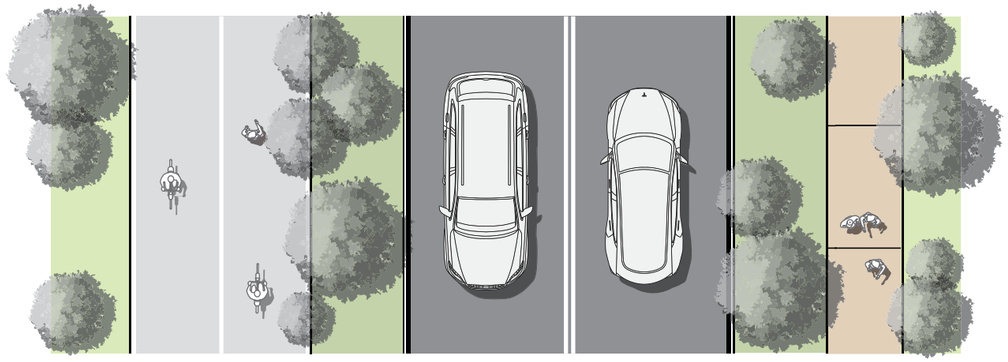
VILLAGE LOOP ROAD SECTION & PLAN VIEW

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A3





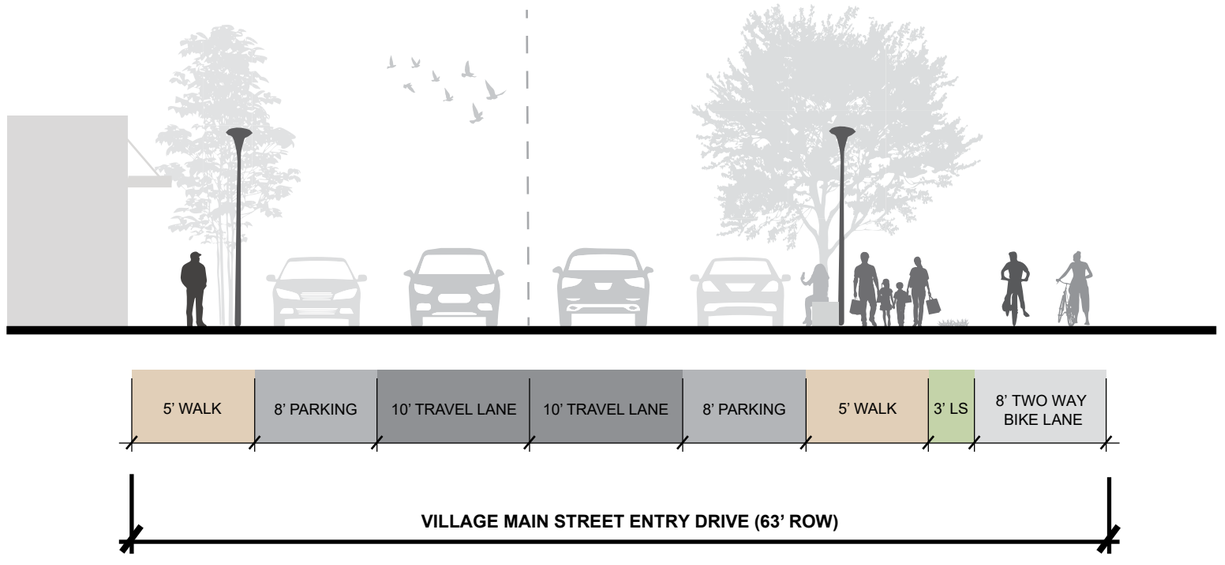
solomon hills

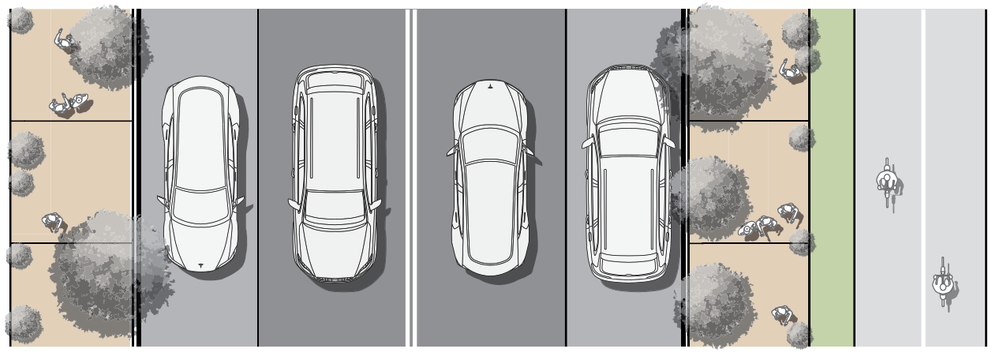
VILLAGE COLLECTOR SECTION & PLAN VIEW

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A4





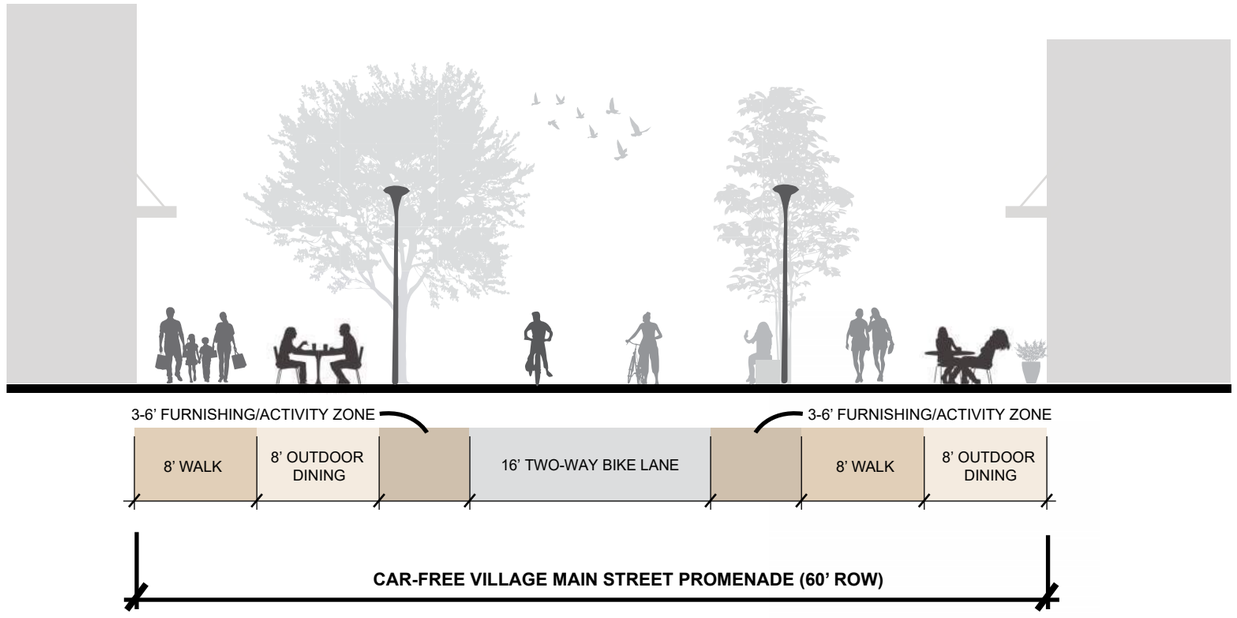
solomon hills

VILLAGE MAIN STREET ENTRY DRIVE SECTION & PLAN VIEW

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A5





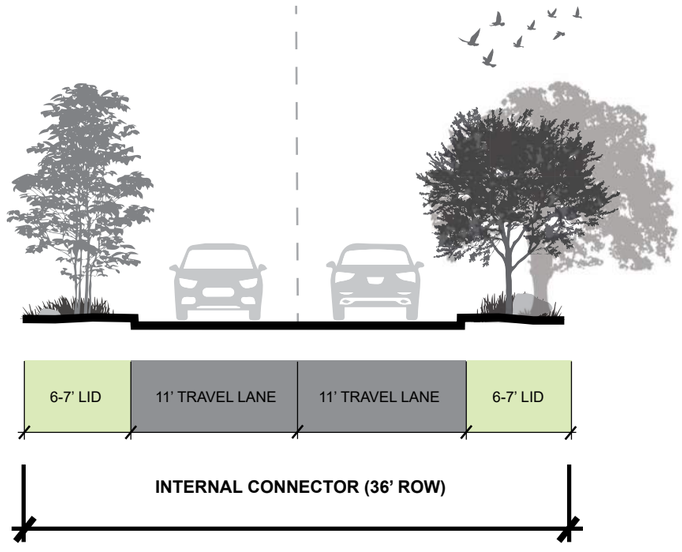
solomon hills

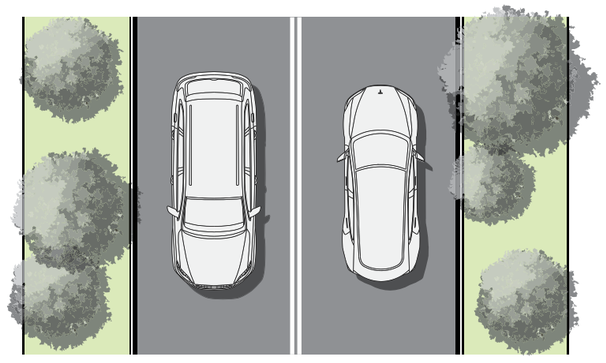
CAR-FREE VILLAGE MAIN STREET PROMENADE SECTION & PLAN VIEW

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May 30, 2024

A6





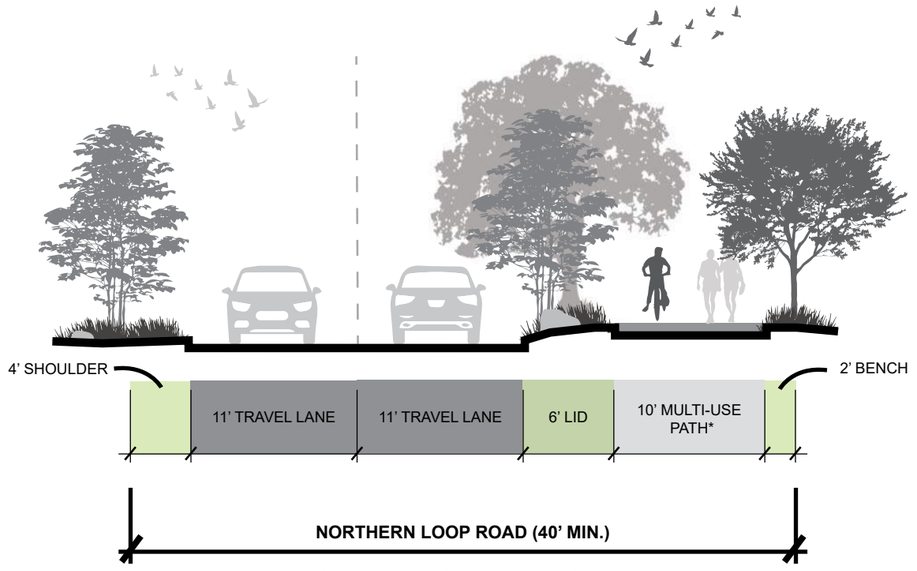
solomon hills

INTERNAL CONNECTOR SECTION & PLAN VIEW

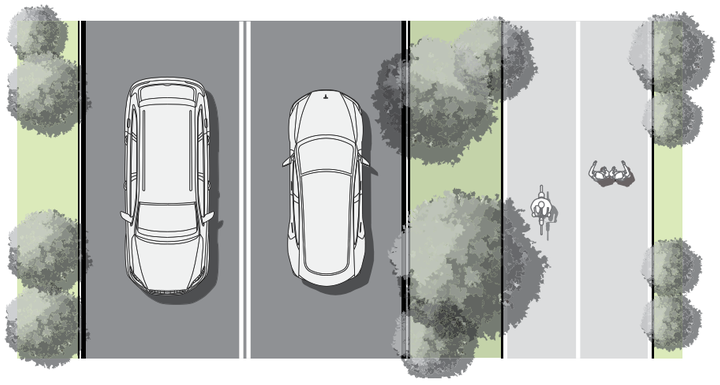
rrm design group

May 30, 2024

A7



Note: Multi-use path will be separated from the road when slope conditions allow.



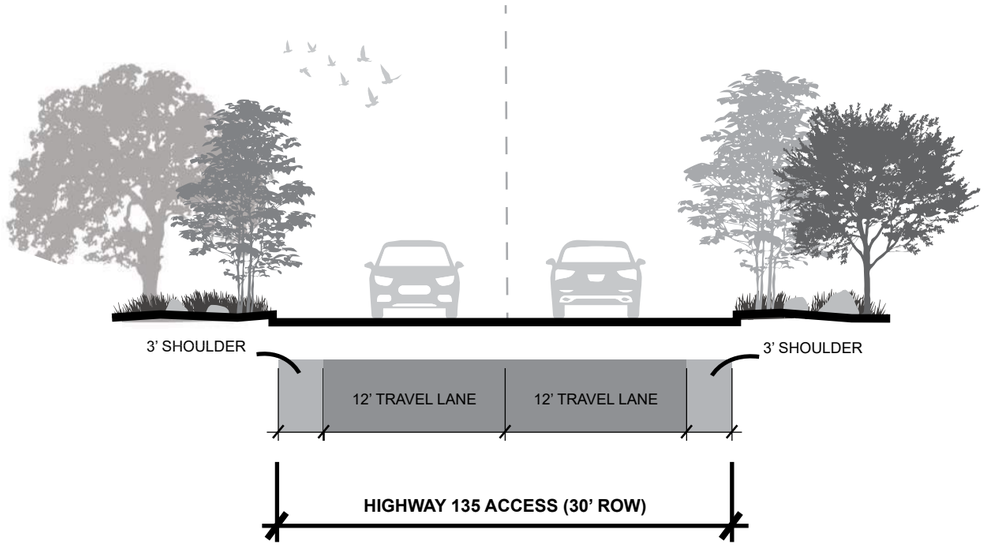
solomon hills

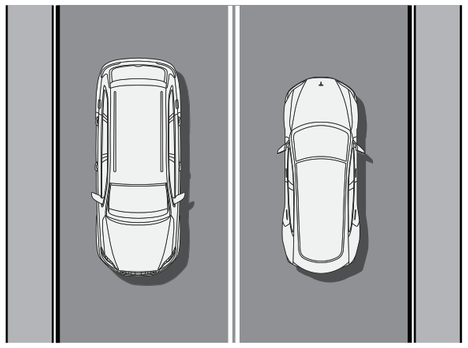
NORTHERN LOOP ROAD SECTION & PLAN VIEW

rrm design group

May 30, 2024

A8





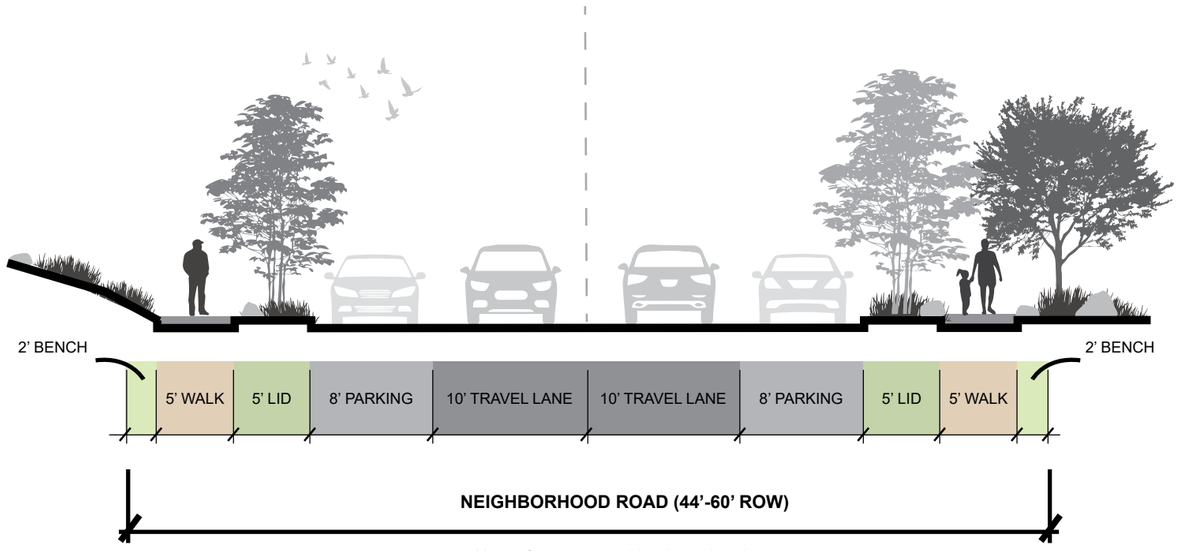
solomon hills

HIGHWAY 135 ACCESS SECTION & PLAN VIEW

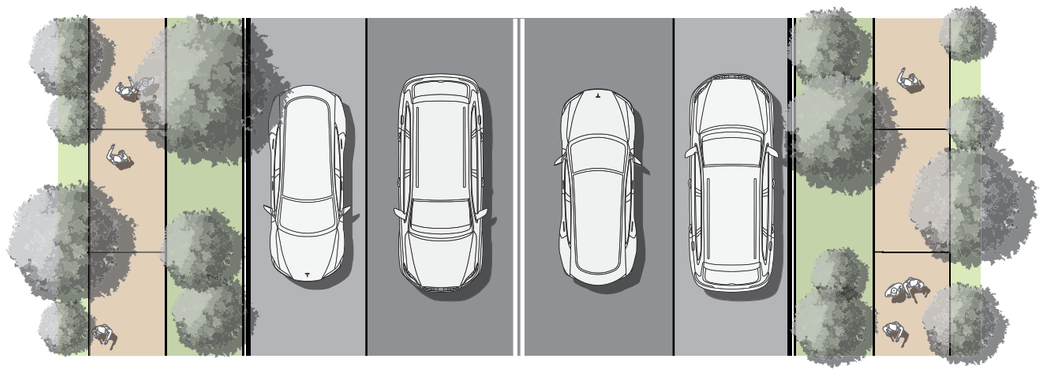
rrm design group

May 30, 2024

A9



Note: On-street parking is optional.



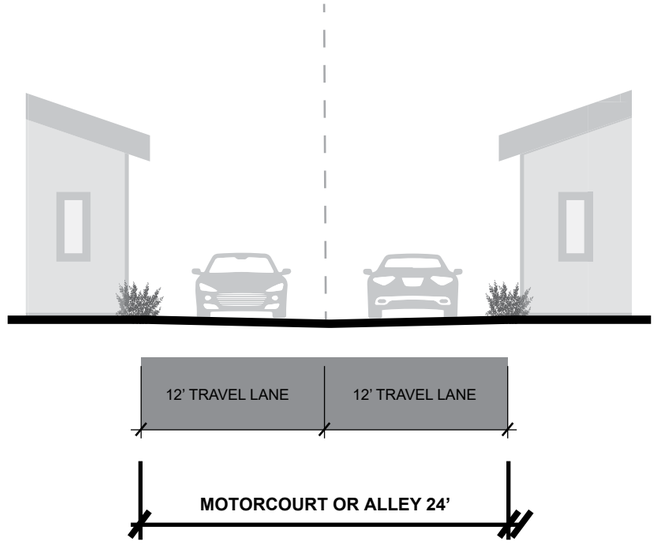
solomon hills

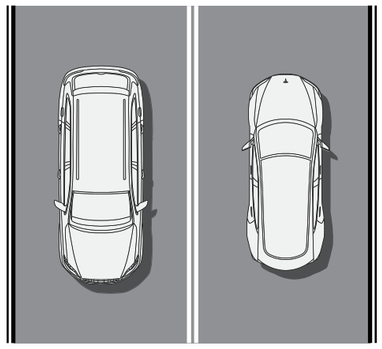
NEIGHBORHOOD ROAD SECTION & PLAN VIEW

rrm design group

May 30, 2024

A10





solomon hills

MOTORCOURT OR ALLEY SECTION & PLAN VIEW

rrm design group

May 30, 2024

A11

Appendix M

San Antonio Road Analysis Memorandum

Memorandum

To: Peter Kiesecker
Solomon Hills

From: Chris Gregerson, P.E., T.E., AICP
Tyler Mickelson, EIT
Atticus Washington, EIT

Re: **San Antonio Road Traffic Analysis**
Solomon Hills, County of Santa Barbara

Date: September 18, 2024

This memorandum documents a traffic analysis of San Antonio Road between SR-135 and Highway 1 completed for the Solomon Hills development ("Project" or "proposed Project") located in Santa Barbara County, California. The Solomon Hills development is proposing to construct 4,000 residential dwelling units, 50 gross acres of General Commercial, 11 gross acres of Education, 2 gross acres of Institutional/ Government and 57 acres of parks.

The Project is located south of Orcutt, California within unincorporated Santa Barbara County, California. The Project will include local roads to connect the various land uses within the project area. The Project will connect to the regional roadway network via SR-135, Graciosa Road, and US-101.

Previous analysis and findings for the project documented in *Vehicle Miles Traveled and Local Transportation Analysis*[1] completed May 2024 and *Interchange Trigger Assessment*[2] completed August 2024 find that access from the Project to SR-135 may most economically be provided to the southwest of the project at the intersection of SR-135 with San Antonio Road/Graciosa Road. The scope of study for this traffic analysis is to evaluate the potential effect of project trips assigned to San Antonio Road as they travel between the Project and Vanderberg Space Force base and its surrounding area.

Methodology

Turning movement counts during the AM (7 AM – 9 AM) and PM (4 PM – 6 PM) peak periods were collected on Tuesday August 20, 2024. These counts are used to evaluate existing operations at the study intersections to establish a baseline to compare against Project conditions. For the study intersections, level of service (LOS) was determined using Synchro® analysis software HCM 7th Edition methodology to calculate average vehicle delay at the intersections. The HCM includes procedures for analyzing unsignalized intersections including side-street stop controlled (SSSC) intersections The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement while the signalized procedure defines LOS as a function of average control delay for the intersection as a whole.

[1] *Vehicle Miles Traveled and Local Transportation Analysis for the Solomon Hills Specific Plan*. Kimley-Horn. May 28, 2024.
[2] *Interchange Trigger Assessment for Solomon Hills, County of Santa Barbara.* Kimley-Horn. August 8, 2024.

Study Facilities

The following intersections are included in this evaluation, which are also shown in **Attachment A**:

1. SR-135 @ San Antonio Road/Graciosa Road
2. Highway 1 @ San Antonio Road

Analysis Scenarios

The study facilities were evaluated for the AM and PM peak-hours for the following analysis scenarios:

- Existing Conditions
- Existing Plus Project Conditions

Standards of Deficiency and Assessment of Proposed Project

Per state guidelines, as of July 2020, Caltrans no longer defines an operational level of service threshold at Caltrans facilities including on-ramps, off-ramps and Caltrans maintained intersections at freeway interchanges or along state routes. Prior to July 2020, the cusp of level of service (LOS) C/D was defined as the operational threshold. LOS C is also the threshold defined in the Santa Barbara County Circulation Element and is used at the threshold for this analysis.

Therefore, the Project would trigger the need for improvements at a study intersection when it causes the un-signalized vehicle delay at an study intersection to exceed 25 seconds per vehicle (limit for LOS C for an unsignalized intersection) or when it causes signalized vehicle delay to exceed 35 seconds per vehicle (limit for LOS C for a signalized intersection).

Project Trip Generation, Distribution, and Assignment

The Project proposes the following land uses at full buildout:

- 2,522 Single-Family Dwelling Units
- 353 Multifamily Dwelling Units
- 400 Deed-restricted Affordable Dwelling Units
- 350 Senior Single-Family Dwelling Units
- 375 Senior Multifamily Dwelling Units
- 525,000 square-feet of Office
- 125,000 square-feet of Retail
- 1,000 Student TK-8 School

As reported in the Local Transportation Analysis (LTA), the proposed Project's trip generation under buildout conditions is 31,560 new daily trips with 2,487 new trips occurring during the AM peak-hour and 3,088 new trips occurring during the PM peak-hour with the following distribution of Project trips to the west of the project:

- 6% to/from the West via SR-135/Highway 1

Using the trip generation and distribution established in the LTA, project trips were assigned to study intersections as shown in **Attachment A**.

Analysis Results

This section provides the LOS analysis results completed for the San Antonio Road study intersections to determine the level of Project development, if any, that would trigger an intersection deficiency.

Table 1 summarizes the delay and corresponding LOS for the study intersections under Existing Conditions and Existing plus Project Conditions. As shown in **Table 1**, the SR-135 intersection with San Antonio Road (Intersection #1) operates at acceptable LOS B or better under Existing and Existing Plus Project Conditions. However, the intersection of Highway 1 with San Antonio Road (Intersection #2) operates at unacceptable LOS D under Existing Conditions and degrades to LOS E with addition of Project traffic. LOS analysis worksheets are included in **Attachment B**.

Operations at the Highway 1 intersection with San Antonio Road (Intersection #2) may be improved to acceptable LOS A under Existing Plus Project Conditions by installing a traffic signal and providing left- and right-turn pockets to provide vehicles traveling from Highway 1 onto San Antonio Road a separate lane from through traffic, as shown in **Table 1**. Peak-hour signal warrants were evaluated for Intersection #2 based on the California Manual on Uniform Traffic Control Devices (CaMUTCD) peak-hour signal warrant, Warrant 3. **Attachment C** includes the warrant worksheets completed for Intersection #2 under Existing Plus Project Conditions, showing that the peak-hour warrant is not met for the AM or PM peak-hours. However, it should be noted that satisfying a single warrant is not the ultimate determinant of whether a signal should be installed or not and the CaMUTCD states that ultimately several factors can contribute to the need for the installation of a traffic signal.

Table 1 – Level of Service Results at Study Intersections

ID	Intersection	Control	Peak	Delay [sec]	LOS
Existing					
1	SR-135 @ San Antonio Rd	SSSC	AM	9.7 (EB)	A
			PM	10.4 (EB)	B
2	Highway 1 @ San Antonio Rd*	SSSC	AM	20.7 (WB)	C
			PM	**31.2 (WB)**	**D**
Existing Plus Project					
1	SR-135 @ San Antonio Rd	SSSC	AM	11.7 (EB)	B
			PM	14.1 (EB)	B
2	Highway 1 @ San Antonio Rd*	SSSC	AM	25.1 (WB)	D
			PM	**45.8 (WB)**	**E**
Existing Plus Project w/ Signal & Turn Pocket Improvement					
1	SR-135 @ San Antonio Rd	SSSC	AM	11.7 (EB)	B
			PM	14.1 (EB)	B
2	Highway 1 @ San Antonio Rd*	Signal	AM	3.5	A
			PM	3.5	A

SSSC = Side Street Stop Controlled.
Highway Capacity Manual 7th Edition (HCM7) Methodologies Applied
*Highway 1 is a northbound/southbound roadway and for the purposes of this analysis, the San Antonio Road approach is analyzed as a westbound approach even though the intersection itself may have the San Antonio Road approach as northbound.

95th Percentile Queues

Table 2 summarizes the estimated 95th percentile queue length for turn lanes at the study intersections. The 95th percentile queue represents the recommended design length for queue storage to prevent turn lane queues from spilling out and blocking the other lanes of traffic. As shown in **Table 2**, all queues are accommodated by existing queue storage under Existing and Existing Plus Project conditions. Improved signalized conditions at the intersection of Highway 1 and San Antonio Road (Intersection #2) assume a

right- and left-turn storage of 100 feet is constructed to accommodate vehicles turning from Highway 1 onto San Antonio Road. Worksheets for 95th percentile queues are included in **Attachment B**.

Table 2 – 95th Percentile Queue Length at Study Intersections

ID	Intersection	Control	Traffic Movement	Available Storage [ft]	Peak Hour	Queue Length [ft]
Existing						
1	SR-135 @ San Antonio Rd	SSSC	SBL	100	AM	25
					PM	25
			NBL	85	AM	25
					PM	25
			EBLT	-	AM	25
					PM	25
			EBR	50	AM	25
					PM	25
			WBLT	-	AM	25
					PM	25
			WBR	50	AM	25
					PM	25
2	Highway 1 @ San Antonio Rd*	SSSC	WBR	50	AM	25
					PM	25
			WBL	-	AM	25
					PM	25
Existing Plus Project						
1	SR-135 @ San Antonio Rd	SSSC	SBL	100	AM	25
					PM	25
			NBL	85	AM	25
					PM	25
			EBLT	-	AM	25
					PM	25
			EBR	50	AM	25
					PM	25
			WBLT	-	AM	25
					PM	25
			WBR	50	AM	25
					PM	25
2	Highway 1 @ San Antonio Rd*	SSSC	WBL	-	AM	25
					PM	50
			WBR	50	AM	25
					PM	25
Existing Plus Project w/ Signal & Turn Pocket Improvement						
2	Highway 1 @ San Antonio Rd*	Signal	NBR	100	AM	25
					PM	25
			SBL	100	AM	25
					PM	25
			WBL	-	AM	50
					PM	50
			WBR	50	AM	25
					PM	25

SSSC = Side Street Stop Controlled.
Highway Capacity Manual 7th Edition (HCM7) Methodologies Applied
*Highway 1 is a northbound/southbound roadway and for the purposes of this analysis, the San Antonio Road approach is analyzed as a westbound approach even though the intersection itself may have the San Antonio Road approach as northbound.

Findings

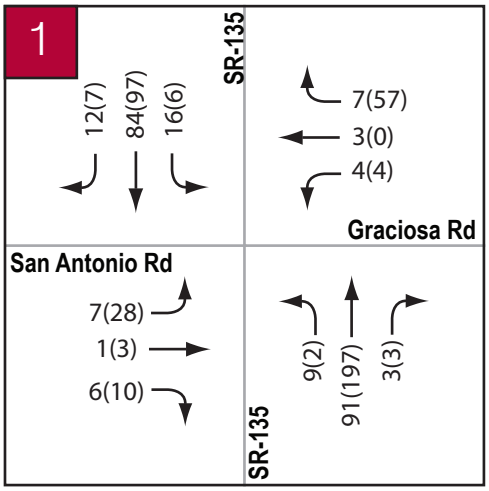
Based on the results of this analysis, the following findings are made:

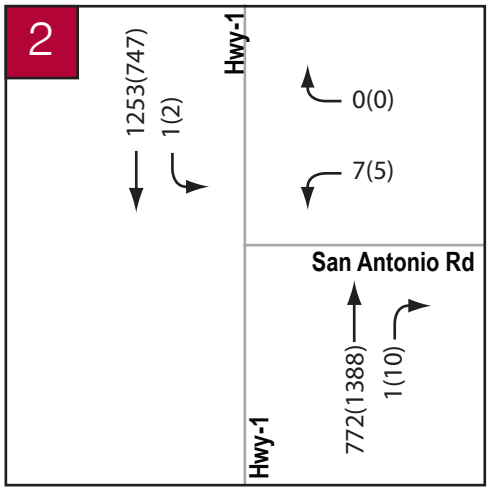
- The SR-135 intersection with San Antonio Road (Intersection #1) operates at acceptable LOS B or better under Existing and Existing plus Project conditions. Capacity at this intersection can accommodate 100-percent of Project buildout.
- The Highway 1 intersection with San Antonio Road (Intersection #2) operates at unacceptable LOS D under Existing Conditions and degrades to LOS E with addition of Project traffic. Because the intersection currently operates unacceptably, any addition of Project traffic would trigger a deficiency.
    - Operations at the Intersection #2 may be improved to acceptable LOS A under Existing plus Project Conditions by installing a traffic signal and providing left- and right-turn pockets to provide vehicles traveling from Highway 1 onto San Antonio Road a separate lane from through traffic.
- All queues are accommodated by existing queue storage under Existing and Existing plus Project Conditions. Improved signalized conditions at Intersection #2 assume a right- and left-turn storage of 100-feet is constructed to accommodate vehicles turning from Highway 1 onto San Antonio Road.
- The peak-hour signal warrant (Warrant 3) is not met at the Intersection #2 under Existing plus Project Conditions for the AM or PM peak-hour. However, it should be noted that satisfying a single warrant is not the ultimate determinant of whether a signal should be installed or not and the CaMUTCD states that ultimately several factors can contribute to the need for the installation of a traffic signal.

Attachments

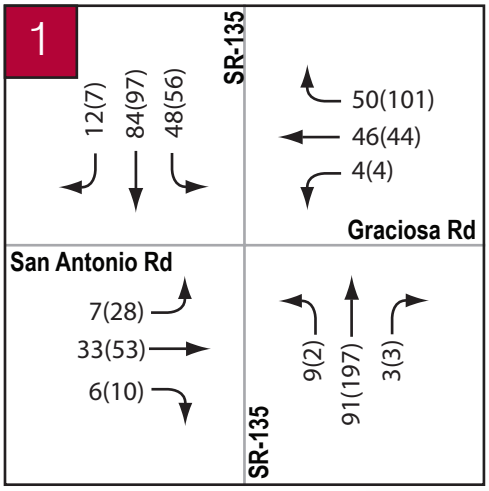
Attachment A – Study Intersection Turning Movement Volumes
Attachment B – Intersection LOS and Queueing Worksheets
Attachment C – Intersection Signal Warrant Worksheets

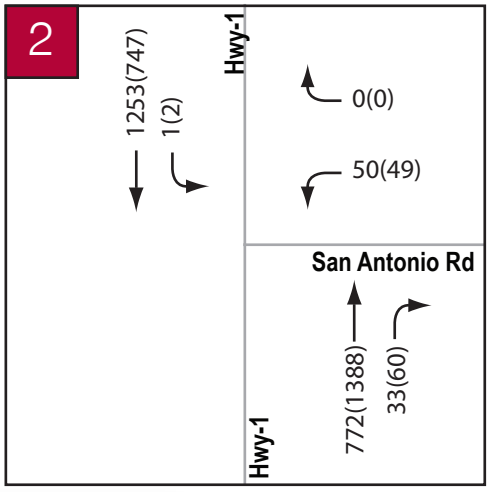
Existing Conditions





Existing Plus Project





LEGEND

- # Study Intersection
- XX(YY) AM(PM) Peak Hour Volume



Attachments

Attachment B – Intersection LOS and Queueing Worksheets

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	1	6	4	3	7	9	91	3	16	84	12
Future Vol, veh/h	7	1	6	4	3	7	9	91	3	16	84	12
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	-	-	Yield
Storage Length	-	-	50	-	-	50	85	-	-	100	-	400
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	14	14	14	43	43	43	10	10	10	22	22	22
Mvmt Flow	8	1	7	5	3	8	10	103	3	18	95	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	206	259	48	210	257	53	95	0	0	107	0	0
Stage 1	132	132	-	126	126	-	-	-	-	-	-	-
Stage 2	74	127	-	85	132	-	-	-	-	-	-	-
Critical Hdwy	7.78	6.78	7.18	8.36	7.36	7.76	4.3	-	-	4.54	-	-
Critical Hdwy Stg 1	6.78	5.78	-	7.36	6.36	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.78	5.78	-	7.36	6.36	-	-	-	-	-	-	-
Follow-up Hdwy	3.64	4.14	3.44	3.93	4.43	3.73	2.3	-	-	2.42	-	-
Pot Cap-1 Maneuver	702	617	973	629	560	884	1440	-	-	1347	-	-
Stage 1	824	758	-	758	703	-	-	-	-	-	-	-
Stage 2	893	762	-	807	697	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	678	605	973	611	549	884	1440	-	-	1347	-	-
Mov Cap-2 Maneuver	678	605	-	611	549	-	-	-	-	-	-	-
Stage 1	813	748	-	753	698	-	-	-	-	-	-	-
Stage 2	874	757	-	789	688	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.72	10.19	0.66	1.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1440	-	-	668	973	583	884	1347	-	-
HCM Lane V/C Ratio	0.007	-	-	0.014	0.007	0.014	0.009	0.013	-	-
HCM Control Delay (s/veh)	7.5	-	-	10.5	8.7	11.3	9.1	7.7	-	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	0	772	1	1	1253
Future Vol, veh/h	7	0	772	1	1	1253
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	50	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	8	0	848	1	1	1377

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1540	425	0	0	849	0
Stage 1	849	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	106	578	-	-	765	-
Stage 1	380	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	106	578	-	-	765	-
Mov Cap-2 Maneuver	237	-	-	-	-	-
Stage 1	380	-	-	-	-	-
Stage 2	458	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.68	0	0.03
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	237	-	3	-
HCM Lane V/C Ratio	-	-	0.032	-	0.001	-
HCM Control Delay (s/veh)	-	-	20.7	0	9.7	0
HCM Lane LOS	-	-	C	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	3	10	4	0	57	2	197	3	6	97	7
Future Vol, veh/h	28	3	10	4	0	57	2	197	3	6	97	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	-	-	Yield
Storage Length	-	-	50	-	-	50	85	-	-	100	-	400
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	5	5	5	7	7	7	8	8	8	13	13	13
Mvmt Flow	31	3	11	4	0	63	2	216	3	7	107	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	232	344	53	291	342	110	107	0	0	220	0	0
Stage 1	120	120	-	223	223	-	-	-	-	-	-	-
Stage 2	113	224	-	68	120	-	-	-	-	-	-	-
Critical Hdwy	7.6	6.6	7	7.64	6.64	7.04	4.26	-	-	4.36	-	-
Critical Hdwy Stg 1	6.6	5.6	-	6.64	5.64	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.6	5.6	-	6.64	5.64	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	4.05	3.35	3.57	4.07	3.37	2.28	-	-	2.33	-	-
Pot Cap-1 Maneuver	695	571	993	626	567	907	1439	-	-	1270	-	-
Stage 1	863	789	-	745	706	-	-	-	-	-	-	-
Stage 2	872	710	-	920	784	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	642	567	993	612	564	907	1439	-	-	1270	-	-
Mov Cap-2 Maneuver	642	567	-	612	564	-	-	-	-	-	-	-
Stage 1	859	785	-	744	705	-	-	-	-	-	-	-
Stage 2	810	709	-	901	780	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	10.43	9.37	0.07	0.43
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1439	-	-	634	993	612	907	1270	-	-
HCM Lane V/C Ratio	0.002	-	-	0.054	0.011	0.007	0.069	0.005	-	-
HCM Control Delay (s/veh)	7.5	-	-	11	8.7	10.9	9.3	7.8	-	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	0.2	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	0	1388	10	2	747
Future Vol, veh/h	5	0	1388	10	2	747
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	50	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	5	5	5	5
Mvmt Flow	5	0	1477	11	2	795

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1884	744	0	0	1487	0
Stage 1	1482	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	62	357	-	-	433	-
Stage 1	175	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	62	357	-	-	433	-
Mov Cap-2 Maneuver	143	-	-	-	-	-
Stage 1	175	-	-	-	-	-
Stage 2	641	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	31.16	0	0.12
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	143	-	10	-
HCM Lane V/C Ratio	-	-	0.037	-	0.005	-
HCM Control Delay (s/veh)	-	-	31.2	0	13.3	0.1
HCM Lane LOS	-	-	D	A	B	A
HCM 95th %tile Q(veh)	-	-	0.1	-	0	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	33	6	4	46	50	9	91	3	48	84	12
Future Vol, veh/h	7	33	6	4	46	50	9	91	3	48	84	12
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	-	-	Yield
Storage Length	-	-	50	-	-	50	85	-	-	100	-	400
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	4	4	4	6	6	6	10	10	10	17	17	17
Mvmt Flow	8	38	7	5	52	57	10	103	3	55	95	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	303	332	48	301	330	53	95	0	0	107	0	0
Stage 1	205	205	-	126	126	-	-	-	-	-	-	-
Stage 2	98	127	-	176	205	-	-	-	-	-	-	-
Critical Hdwy	7.58	6.58	6.98	7.62	6.62	7.02	4.3	-	-	4.44	-	-
Critical Hdwy Stg 1	6.58	5.58	-	6.62	5.62	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.58	5.58	-	6.62	5.62	-	-	-	-	-	-	-
Follow-up Hdwy	3.54	4.04	3.34	3.56	4.06	3.36	2.3	-	-	2.37	-	-
Pot Cap-1 Maneuver	621	582	1004	618	579	990	1440	-	-	1379	-	-
Stage 1	772	726	-	854	782	-	-	-	-	-	-	-
Stage 2	891	785	-	798	721	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	508	555	1004	548	552	990	1440	-	-	1379	-	-
Mov Cap-2 Maneuver	508	555	-	548	552	-	-	-	-	-	-	-
Stage 1	742	698	-	848	776	-	-	-	-	-	-	-
Stage 2	778	779	-	720	693	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.72	10.57	0.66	2.57
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1440	-	-	546	1004	552	990	1379	-	-
HCM Lane V/C Ratio	0.007	-	-	0.083	0.007	0.103	0.057	0.04	-	-
HCM Control Delay (s/veh)	7.5	-	-	12.2	8.6	12.3	8.9	7.7	-	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	0.3	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	0	772	33	1	1253
Future Vol, veh/h	50	0	772	33	1	1253
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	50	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	5	5
Mvmt Flow	55	0	848	36	1	1377

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1557	442	0	0	885	0
Stage 1	866	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	103	563	-	-	742	-
Stage 1	372	-	-	-	-	-
Stage 2	459	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	103	563	-	-	742	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	372	-	-	-	-	-
Stage 2	458	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	25.08	0	0.03
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	234	-	3	-
HCM Lane V/C Ratio	-	-	0.235	-	0.001	-
HCM Control Delay (s/veh)	-	-	25.1	0	9.9	0
HCM Lane LOS	-	-	D	A	A	A
HCM 95th %tile Q(veh)	-	-	0.9	-	0	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	53	10	4	44	101	2	197	3	56	97	7
Future Vol, veh/h	28	53	10	4	44	101	2	197	3	56	97	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	-	-	Yield
Storage Length	-	-	50	-	-	50	85	-	-	100	-	400
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	3	3	3	8	8	8	9	9	9
Mvmt Flow	31	58	11	4	48	111	2	216	3	62	107	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	366	454	53	428	452	110	107	0	0	220	0	0
Stage 1	230	230	-	223	223	-	-	-	-	-	-	-
Stage 2	137	224	-	205	230	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.56	6.56	6.96	4.26	-	-	4.28	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.56	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.56	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.53	4.03	3.33	2.28	-	-	2.29	-	-
Pot Cap-1 Maneuver	565	501	1003	508	499	919	1439	-	-	1297	-	-
Stage 1	752	713	-	757	716	-	-	-	-	-	-	-
Stage 2	852	717	-	774	711	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	426	476	1003	422	475	919	1439	-	-	1297	-	-
Mov Cap-2 Maneuver	426	476	-	422	475	-	-	-	-	-	-	-
Stage 1	717	679	-	756	715	-	-	-	-	-	-	-
Stage 2	698	716	-	667	677	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.08	10.8	0.07	2.77
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1439	-	-	458	1003	470	919	1297	-	-
HCM Lane V/C Ratio	0.002	-	-	0.195	0.011	0.112	0.121	0.047	-	-
HCM Control Delay (s/veh)	7.5	-	-	14.8	8.6	13.6	9.5	7.9	-	-
HCM Lane LOS	A	-	-	B	A	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0	0.4	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	49	0	1388	60	2	747
Future Vol, veh/h	49	0	1388	60	2	747
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	50	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	4	4	5	5
Mvmt Flow	52	0	1477	64	2	795

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1910	770	0	0	1540	0
Stage 1	1509	-	-	-	-	-
Stage 2	402	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.2	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.25	-
Pot Cap-1 Maneuver	60	343	-	-	413	-
Stage 1	169	-	-	-	-	-
Stage 2	645	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	60	343	-	-	413	-
Mov Cap-2 Maneuver	139	-	-	-	-	-
Stage 1	169	-	-	-	-	-
Stage 2	640	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	45.84	0	0.13
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	139	-	10	-
HCM Lane V/C Ratio	-	-	0.376	-	0.005	-
HCM Control Delay (s/veh)	-	-	45.8	0	13.8	0.1
HCM Lane LOS	-	-	E	A	B	A
HCM 95th %tile Q(veh)	-	-	1.6	-	0	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	50	0	772	33	1	1253
Future Volume (veh/h)	50	0	772	33	1	1253
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1826	1826
Adj Flow Rate, veh/h	55	0	848	36	1	1377
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	5	5
Cap, veh/h	109	97	2265	1010	562	2212
Arrive On Green	0.06	0.00	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1781	1585	3647	1585	613	3561
Grp Volume(v), veh/h	55	0	848	36	1	1377
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1585	613	1735
Q Serve(g_s), s	0.9	0.0	3.4	0.3	0.0	7.1
Cycle Q Clear(g_c), s	0.9	0.0	3.4	0.3	3.4	7.1
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	109	97	2265	1010	562	2212
V/C Ratio(X)	0.50	0.00	0.37	0.04	0.00	0.62
Avail Cap(c_a), veh/h	1073	955	3925	1751	849	3831
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	1.00
Uniform Delay (d), s/veh	13.6	0.0	2.6	2.0	3.4	3.3
Incr Delay (d2), s/veh	3.6	0.0	0.1	0.0	0.0	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	0.3	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	17.1	0.0	2.7	2.0	3.4	3.5
LnGrp LOS	B		A	A	A	A
Approach Vol, veh/h	55		884			1378
Approach Delay, s/veh	17.1		2.7			3.5
Approach LOS	B		A			A

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	23.5			23.5	6.3
Change Period (Y+Rc), s	4.5			4.5	4.5
Max Green Setting (Gmax), s	33.0			33.0	18.0
Max Q Clear Time (g_c+I1), s	5.4			9.1	2.9
Green Ext Time (p_c), s	5.6			9.9	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	3.5
HCM 7th LOS	A



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	49	0	1388	60	2	747
Future Volume (veh/h)	49	0	1388	60	2	747
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1841	1841	1826	1826
Adj Flow Rate, veh/h	52	0	1477	64	2	795
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	4	4	5	5
Cap, veh/h	103	92	2301	1026	361	2283
Arrive On Green	0.06	0.00	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1781	1585	3589	1560	328	3561
Grp Volume(v), veh/h	52	0	1477	64	2	795
Grp Sat Flow(s),veh/h/ln	1781	1585	1749	1560	328	1735
Q Serve(g_s), s	0.9	0.0	7.9	0.5	0.1	3.2
Cycle Q Clear(g_c), s	0.9	0.0	7.9	0.5	8.0	3.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	103	92	2301	1026	361	2283
V/C Ratio(X)	0.50	0.00	0.64	0.06	0.01	0.35
Avail Cap(c_a), veh/h	1012	901	3643	1625	487	3614
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	1.00
Uniform Delay (d), s/veh	14.5	0.0	3.2	1.9	5.6	2.4
Incr Delay (d2), s/veh	3.8	0.0	0.3	0.0	0.0	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	0.4	0.0	0.1	0.0	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	18.2	0.0	3.5	2.0	5.6	2.5
LnGrp LOS	B		A	A	A	A
Approach Vol, veh/h	52		1541			797
Approach Delay, s/veh	18.2		3.4			2.5
Approach LOS	B		A			A

Timer - Assigned Phs	2				6	8
Phs Duration (G+Y+Rc), s	25.3				25.3	6.3
Change Period (Y+Rc), s	4.5				4.5	4.5
Max Green Setting (Gmax), s	33.0				33.0	18.0
Max Q Clear Time (g_c+I1), s	9.9				10.0	2.9
Green Ext Time (p_c), s	10.9				4.9	0.1

Intersection Summary	
HCM 7th Control Delay, s/veh	3.5
HCM 7th LOS	A



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	55	848	36	1	1377
v/c Ratio	0.18	0.27	0.03	0.00	0.45
Control Delay (s/veh)	21.7	2.2	1.2	3.0	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	21.7	2.2	1.2	3.0	3.0
Queue Length 50th (ft)	9	0	0	0	0
Queue Length 95th (ft)	46	73	6	1	149
Internal Link Dist (ft)	3661	3522			5177
Turn Bay Length (ft)			250	250	
Base Capacity (vph)	784	3062	1374	521	2974
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.28	0.03	0.00	0.46

Intersection Summary



Lane Group	WBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	52	1477	64	2	795
v/c Ratio	0.18	0.48	0.05	0.01	0.26
Control Delay (s/veh)	22.8	3.1	1.0	2.5	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.8	3.1	1.0	2.5	2.1
Queue Length 50th (ft)	9	0	0	0	0
Queue Length 95th (ft)	45	165	8	2	68
Internal Link Dist (ft)	3661	3522			5177
Turn Bay Length (ft)			250	250	
Base Capacity (vph)	755	3036	1366	248	3007
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.49	0.05	0.01	0.26

Intersection Summary

Attachments

Attachment C – Intersection Signal Warrant Worksheets

Kimley»Horn

PEAK HOUR SIGNAL WARRANT ANALYSIS (Warrant #3, California MUTCD 2012 Edition)

INT #3

PROJECT NAME: ***Solomon Hills San Antonio Rd Amendment***

SCENARIO: ***Existing Plus Project Conditions***

COMMENTS:

MAJOR STREET: ***Hwy 1*** ☑ NB/SB ☐ EB/WB # OF APPROACH LANES: 4

MINOR STREET: ***San Antonio Rd*** ☐ NB/SB ☑ EB/WB # OF APPROACH LANES: 1

THE STUDY INTERSECTION HAS MORE THAN THREE APPROACHES (Y OR N): N

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N): Y

85TH PERCENTILE SPEED GREATER THAN 40 MPH ON MAJOR STREET (Y OR N): Y 65

WORST CASE DELAY FOR MINOR STREET APPROACH:	AM		PM	
	11.2	sec/veh	34.2	sec/veh
	0.16	veh-hr	0.47	veh-hr

			MAJOR STREET			MINOR STREET				
			NB Approach	SB Approach	Total	EB Approach	WB Approach	Heavy Leg	Total	Intersection Total
06:00 AM	TO	07:00 AM			0			0	0	0
07:00 AM	TO	08:00 AM	805	1254	2059	0	50	50	50	2109
08:00 AM	TO	09:00 AM			0			0	0	0
09:00 AM	TO	10:00 AM			0			0	0	0
10:00 AM	TO	11:00 AM			0			0	0	0
11:00 AM	TO	12:00 PM			0			0	0	0
12:00 PM	TO	01:00 PM			0			0	0	0
01:00 PM	TO	02:00 PM			0			0	0	0
02:00 PM	TO	03:00 PM			0			0	0	0
03:00 PM	TO	04:00 PM			0			0	0	0
04:00 PM	TO	05:00 PM			0			0	0	0
05:00 PM	TO	06:00 PM	1448	749	2197	0	49	49	49	2246
06:00 PM	TO	07:00 PM			0			0	0	0
07:00 PM	TO	08:00 PM			0			0	0	0
08:00 PM	TO	09:00 PM			0			0	0	0
09:00 PM	TO	10:00 PM			0			0	0	0

	MAJOR STREET	MINOR STREET		INTERSECTION
	Total	Heavy Leg	Total	Total
AM MAX	2059	50	50	2109
PM MAX	2197	49	49	2246

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2012 California Supplement

Scenario: Existing Plus Project Conditions AM

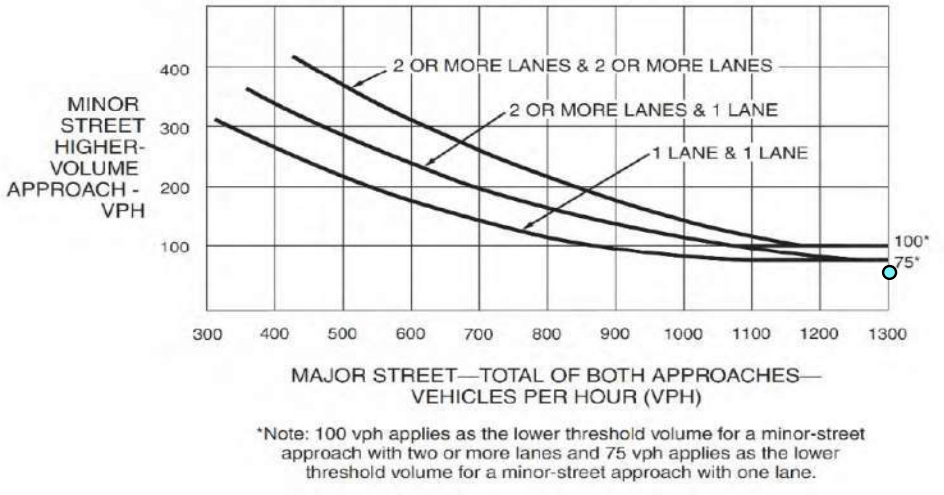
Comments:

	PART A or PART B	SATISFIED	**NO**
PART A (All parts 1, 2, and 3 below must be satisfied)		SATISFIED	**NO**
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND			No
2. The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND			No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.			Yes
PART B		SATISFIED	**No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		2059
Highest Approach - Minor Street	50	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

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.

Kimley»Horn

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2012 California Supplement

Scenario: Existing Plus Project Conditions PM

Comments:

	PART A or PART B	SATISFIED	**NO**

PART A
(All parts 1, 2, and 3 below must be satisfied) — SATISFIED — **NO**

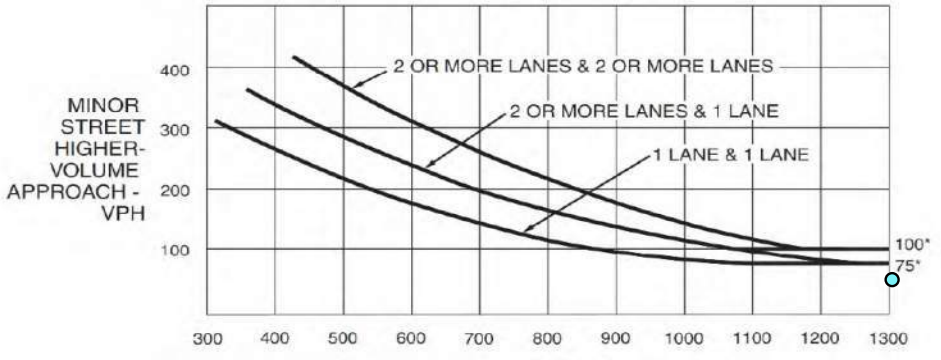
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2.	The volume on the same minor street approach equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	No
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B — SATISFIED — **No**

APPROACH LANES	One	2 or More
Both Approaches - Major Street		2197
Highest Approach - Minor Street	49	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

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.