APPENDIX 5.7

Transportation Impact Analysis

Transportation Impact Analysis

MONTREUX RESIDENTIAL PROJECT
SUBDIVISION 8279

City of Pittsburg

Prepared for:
City of Pittsburg
65 Civic Avenue
Pittsburg, CA 94565

Prepared by:
Abrams Associates
1875 Olympic Boulevard, Suite 210
Walnut Creek, CA 94596

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Montreux Residential Project
(Subdivision 8279)
City of Pittsburg

TRANSPORTATION AND CIRCULATION

1) INTRODUCTION

The proposed project is a subdivision development expected to include up to 368 residential units located west of Kirker Pass Road on the southern side of the City of Pittsburg. All access to the site would be from two intersections on Kirker Pass Road. **Figure 1** shows the location of the project and the surrounding roadway network. **Figure 2** shows the proposed site plan for the project.

This report describes the existing traffic and circulation system, parking conditions, and pedestrian and transit conditions in the vicinity of the proposed project and provides an analysis of the potential impacts of the project. This transportation impact study has been conducted consistent with the requirements and methodologies of the City of Pittsburg, the Contra Costa Transportation Authority (CCTA) and the applicable provisions of CEQA.

A traffic study must meet the requirements of the CCTA for all projects that generate over 100 trips during a one hour period. With 368 residential units it is estimated that the proposed apartment project could generate up to 339 trips during the critical PM peak hour. Based on the project's trip generation and the potential for traffic impacts a list of project study intersections was prepared in coordination with the City of Pittsburg.

2) SETTING

This section of the report describes the roadways, traffic conditions and other existing transportation characteristics in the vicinity of the project. The primary basis of the analysis is the peak hour level of service for the key intersections. The hours identified as the "peak" hours are generally between 7:15 a.m. and 8:15 a.m. and 4:45 p.m. and 5:45 p.m. for all of the transportation facilities described. Throughout this report, these peak hours will be identified as the AM and PM peak hours, respectively.

2.1 Project Study Intersections

Figure 1 shows the location of the proposed project and the main arterial roadways in the vicinity of the project. All traffic from the project would access the local road network via two intersections on Kirker Pass Road (study intersections #6 and #7) There are thirteen (13) study intersections that have been included in the analysis. All of the existing study intersections are controlled with traffic signals with the exception of the stop-controlled intersection at Somersville Rd. and James Donlon Blvd.

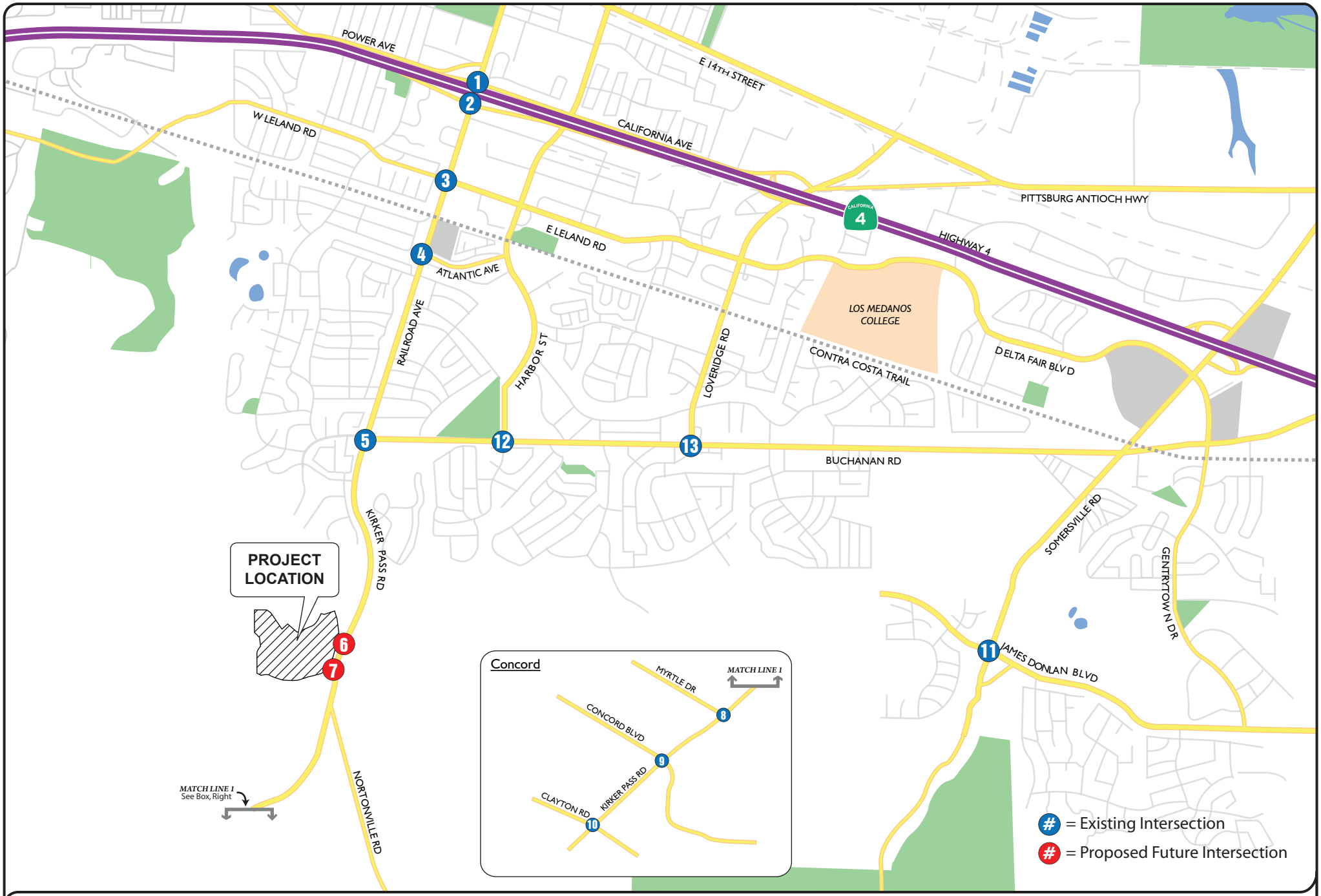

FIGURE 1 | PROJECT LOCATION
TRAFFIC IMPACT STUDY
Montreux Residential Project
City of Pittsburg

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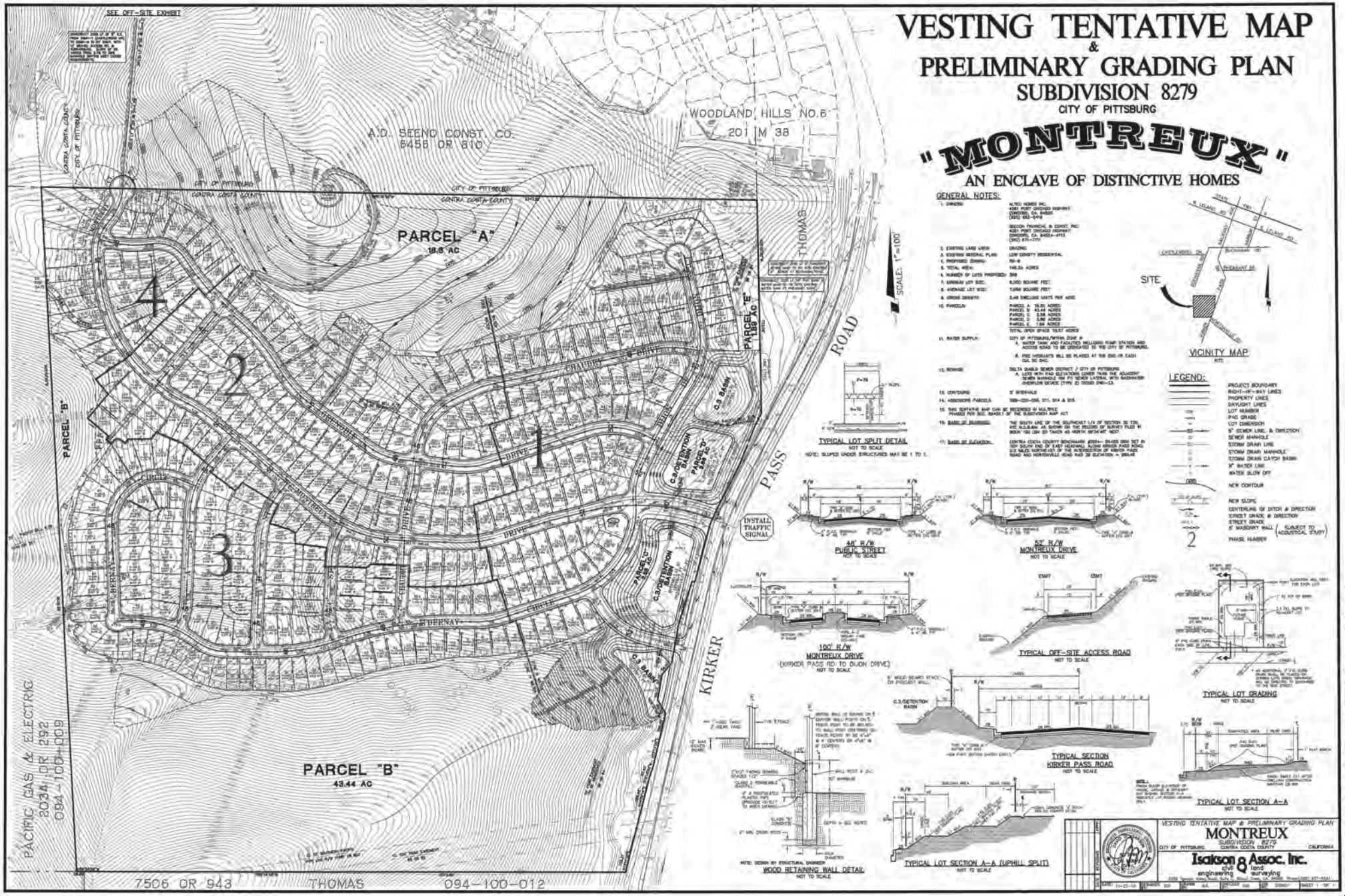

FIGURE 2 | SITE PLAN
TRAFFIC IMPACT STUDY
Montreux Residential Project
City of Pittsburg

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Project Study Intersections

1. California Avenue at SR 4 WB On-Ramp
2. Railroad Avenue at SR 4 Ramps
3. Railroad Avenue at Leland Road
4. Railroad Avenue at Atlantic Avenue
5. Railroad Avenue at Buchanan Road
6. Kirker Pass Road at Montreux Main Entrance (Proposed Future Intersection)
7. Kirker Pass Road at Montreux Secondary Entrance (Proposed Future Intersection)
8. Kirker Pass Road at Myrtle Drive
9. Kirker Pass Road at Concord Boulevard
10. Kirker Pass Road at Clayton Road
11. Somersville Road at Jamed Donlon Road
12. Buchanan Road at Harbor Street
13. Buchanan Road at Loveridge Road

2.2 Traffic Analysis Scenarios

The study intersections were evaluated for the following scenarios:

- Scenario 1: Existing Conditions – Level of Service (LOS) based on existing peak hour volumes and existing intersection configurations.

- Scenario 2: Existing Plus Project Conditions (without the Buchanan Bypass) – Existing traffic plus trips from the proposed project without the Buchanan Bypass.

- Scenario 3: Baseline Conditions (without the Buchanan Bypass) – Existing traffic plus anticipated traffic from approved developments that would substantially affect the volumes at the project study intersections without the Buchanan Bypass.

- Scenario 4: Baseline Conditions (with the Buchanan Bypass) – Existing traffic plus anticipated traffic from approved developments that would substantially affect the volumes at the project study intersections with the addition of the Buchanan Bypass.

- Scenario 5: Baseline Plus Project Conditions (without the Buchanan Bypass) – Baseline conditions peak-hour volumes plus trips from the proposed project without the Buchanan Bypass.

- Scenario 6: Baseline Plus Project Conditions (with the Buchanan Bypass) – Baseline conditions peak-hour volumes plus trips from the proposed project with the addition of the Buchanan Bypass.

- Scenario 7: Cumulative Conditions (Year 2035) without the Project – Baseline traffic plus anticipated traffic from projected growth in the area based on the County Traffic Model.

- Scenario 8: Cumulative Conditions (Year 2035) Plus Project – Cumulative No Project Conditions peak-hour volumes plus trips from the proposed residential development.

2.3 Existing Roadway Network

As discussed previously, the project location and the surrounding roadway network are illustrated in **Figure 1**. The roadways that would be affected are:

- **State Route 4 (SR 4) –** SR 4 is the primary east-west corridor in Contra Costa County. It connects Interstate 80 in the city of Hercules to the west with SR 160 and the cities of Oakley and Brentwood to the east. SR 4 is currently a two-lane roadway through Oakley and Brentwood and is a divided freeway from Interstate 680 east through Concord, Pittsburg, and Antioch. It should be noted that the State Route 4 Bypass has been completed in Antioch and Brentwood providing an alternative to SR 4 in these Cities. Interchanges along SR 4 within the study area include Railroad Ave, Loveridge Rd, and Somersville Rd.

- **Kirker Pass Road –** Kirker Pass Road is a north-south roadway that runs between Buchanan Rd in Pittsburg and Clayton Rd in Concord. In the Pittsburg 2020 General Plan, Kirker Pass Road is identified as a major arterial. Kirker Pass Road has four lanes and is divided by medians and barriers along most of its length within the City of Pittsburg.

- **Railroad Ave -** Railroad Avenue is a north-south roadway that starts at 3rd Street and ends at Buchanan Road where it turns into Kirker Pass Rd. Railroad Avenue is a four-lane major arterial, as identified in the Pittsburg 2020 General Plan.

- **Buchanan Road –** Buchanan Road is an east-west roadway that runs between Railroad Ave and Contra Loma Blvd. In the vicinity of the project area, Buchanan Road has two-lanes with a center turning lane, a bike lane on both sides and a sidewalk on the northern side. In the Pittsburg 2020 General Plan Buchanan Road is identified as a Major Arterial in the roadway system.

- **Harbor Street -** Harbor Street is a north-south roadway that runs from 3rd Street to Buchanan Road. Within the study area, Harbor Street has two travel lanes with left turn pockets and is identified as a Minor Arterial in the Pittsburg 2020 General Plan.

- **Loveridge Road -** Loveridge Road is a north-south roadway that runs between East 3rd Street and Buchanan Road. Within the study area, Loveridge Road is a four-lane Major Arterial, as identified in the Pittsburg 2020 General Plan.

- **East Leland Road -** East Leland Road is an east-west roadway that runs between Century Boulevard and turns into West Leland Road at Railroad Avenue. In the vicinity of the study area, East Leland Road is a four-lane major arterial, as identified in the Pittsburg General Plan, with a bike lane in each direction and a median.

- **Somersville Road –** Somersville Road is a north-south roadway that runs from Century Blvd to Oil Canyon Rd. From Century Blvd to James Donlon Blvd, Somersville Rd is identified as a Major Arterial in the Pittsburg 2020 General Plan with four lanes between Century Blvd and the Contra Costa Canal and two lanes between the Contra Costa Canal and James Donlon Boulevard. This two lane section is planned to be expanded to four lanes in the near future along with a new sign at James Donlon Boulevard and Somersville Road. South of James Donlon Boulevard Somersville Road provides access to the Black Diamond Mines Regional Park .

- **James Donlon Boulevard –** James Donlon Boulevard is an east-west roadway that begins west of Somersville Road and runs until Lone Tree Way. This roadway is a four-lane arterial divided by medians and left turn pockets with sidewalks on both sides along most of its length.

2.4 Intersection Analysis Methodology

Existing operational conditions at the thirteen (13) study intersections have been evaluated according to the requirements set forth by the Contra Costa County Transportation Authority (CCTA) using the methodology set forth in the Final Technical Procedures Update (dated July 19, 2006). Additional analysis of traffic operations was conducted using the 2000 *Highway Capacity Manual* (*HCM*) Level of Service (LOS) methodology with Synchro software.[1] Level of service is an expression, in the form of a scale, of the relationship between the capacity of an intersection (or roadway segment) to accommodate the volume of traffic moving through it at any given time. The level of service scale describes traffic flow with six ratings ranging from A to F, with "A" indicating relatively free flow of traffic and "F" indicating stop-and-go traffic characterized by traffic jams.

As the amount of traffic moving through a given intersection or roadway segment increases, the traffic flow conditions that motorists experience rapidly deteriorate as the capacity of the intersection or roadway segment is reached. Under such conditions, there is general instability in the traffic flow, which means that relatively small incidents (e.g., momentary engine stall) can cause considerable fluctuations in speeds and delays that lead to traffic congestion. This near-capacity situation is labeled level of service (LOS) E. Beyond LOS E, the intersection or roadway segment capacity has been exceeded, and arriving traffic would exceed the ability of the intersection to accommodate it.

For signalized intersections, The CCTA standards are based on LOS and the volume to capacity ratio (V/C) for the entire intersection. The *HCM* methodology determines the capacity of each lane group approaching the intersection. The LOS is then based on average control delay (in seconds per vehicle) for the various movements within the intersection. A combined weighted average control delay and LOS are presented for the intersection. A summary of the HCM results and copies of the detailed HCM LOS calculations are included in the appendix to this report. **Table 1** summarizes the relationship between LOS, average control delay, and the volume to capacity ratio at signalized intersections.

For unsignalized (all-way stop controlled and two-way stop controlled) intersections, the average control delay and LOS operating conditions are calculated by approach (e.g., northbound) and movement (e.g., northbound left-turn) for those movements that are subject to delay. In general, the operating conditions for unsignalized intersections are presented for the worst approach. **Table 2** summarizes the relationship between LOS and average control delay at unsignalized intersections.

[1] *Highway Capacity Manual*, Transportation Research Board, Washington D.C., 2000

TABLE 1
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description of Operations	Average Delay (sec/veh)	Volume to Capacity Ratio
A	Insignificant Delays: No approach phase is fully used and no vehicle waits longer than one red indication.	≤ 10	< 0.60
B	Minimal Delays: An occasional approach phase is fully used. Drivers begin to feel restricted.	> 10 to 20	> 0.61 to 0.70
C	Acceptable Delays: Major approach phase may become fully used. Most drivers feel somewhat restricted.	> 20 to 35	> 0.71 to 0.80
D	Tolerable Delays: Drivers may wait through no more than one red indication. Queues may develop but dissipate rapidly without excessive delays.	> 35 to 55	> 0.81 to 0.90
E	Significant Delays: Volumes approaching capacity. Vehicles may wait through several signal cycles and long vehicle queues from upstream.	> 55 to 80	> 0.91 to 1.00
F	Excessive Delays: Represents conditions at capacity, with extremely long delays. Queues may block upstream intersections.	> 80	> 1.00

SOURCES: *Highway Capacity Manual*, Transportation Research Board, 2000. *Technical Procedures Update,* Contra Costa Transportation Authority, July 19, 2006.

TABLE 2
UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description of Operations	Average Delay (seconds/vehicle)
A	No delay for stop-controlled approaches.	0 to 10
B	Operations with minor delays.	> 10 to 15
C	Operations with moderate delays.	> 15 to 25
D	Operations with some delays.	> 25 to 35
E	Operations with high delays and long queues.	> 35 to 50
F	Operation with extreme congestion, with very high delays and long queues unacceptable to most drivers.	> 50

SOURCE: *Highway Capacity Manual*, Transportation Research Board, 2000.

2.5 Existing Intersection Capacity Conditions

The existing intersection geometry can be seen in **Figure 3** and traffic volumes at the study intersections for weekday AM and PM peak hours are presented in the **Figure 4**. Existing turning counts for intersections 8, 9, and 10 were taken from the *Concord Community Reuse Plan Final Environmental Impact Report (January, 2010).* Traffic counts at all of the remaining intersections were conducted between November 2012 and March 2013 at times when local schools were in session.

Please note that the traffic counts taken for the previous traffic analysis of the Buchanan Bypass (in 2007) were compared to the volumes counted six years later for this study (in 2013).[1] This comparison indicated that the PM peak hour volumes on Kirker Pass Road have increased by about 6 percent during this three year period even though the Kirker Pass Road traffic travelling to and from Buchanan Road actually dropped by about 10 percent. This decrease on Buchanan Road was more than off-set by the fact that the Kirker Pass Road traffic travelling to and from Railroad Avenue increased during this same period by about 25%. However, in general, the average vehicle volumes (ADT and peak hour) have declined and are currently similar to the volumes recorded back in 2000, according to the Contra Costa Transportation Authority's *Traffic Service Objective Monitoring Report*.[2] **Table 3** summarizes the associated LOS computation results for the existing weekday AM and PM peak hour conditions.

It is also important to note that some of the queuing and delay that occurs on Buchanan Road is not fully reflected in the LOS calculations. This is because downstream traffic congestion during the peak hours often results in queues that limit the volume of traffic that can travel through adjacent intersections. In other words, the resulting LOS calculations do not always provide an accurate portrayal of the traffic operations because the volumes are restricted by the queuing problems that occur on Buchanan Road.

[1] *James Donlon Boulevard Extension EIR*, RBF Consulting, Walnut Creek, CA, July, 2008
[2] *Traffic Service Objective Monitoring Report: 2000 Update to the Countywide Comprehensive Transportation Plan.* Contra Costa Transportation Authority, Oakland, CA, August 19, 1999.

Table 3
EXISTING INTERSECTION LEVEL OF SERVICE CONDITIONS - CCTA METHODOLOGY

	INTERSECTION	CONTROL	PEAK HOUR	EXISTING		EXISTING PLUS PROJECT	
				V/C Ratio	LOS	V/C Ratio	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	0.76	C	0.78	C
			PM	0.65	B	0.67	B
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	0.59	A	0.61	B
			PM	0.59	A	0.61	B
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	0.65	B	0.67	B
			PM	0.79	C	0.82	D
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	0.42	A	0.46	A
			PM	0.53	A	0.55	A
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	0.51	A	0.54	A
			PM	0.65	B	0.66	B
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	N/A	N/A	0.53	A
			PM	N/A	N/A	0.50	A
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	0.30	A	0.30	A
			PM	0.56	A	0.58	A
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	0.66	B	0.67	B
			PM	0.60	B	0.61	B
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	0.59	A	0.60	A
			PM	0.65	B	0.66	B
11	SOMERSVILLE RD & JAMES DONLON BLVD	All Way Stop	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	0.74	C	0.74	C
			PM	0.68	B	0.68	B
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	0.73	C	0.73	C
			PM	0.62	B	0.63	B

SOURCE: Abrams Associates, 2013

NOTES: Intersection Delay is presented in terms of the volume to capacity ratio. Please note that the CCTA methodology only applies to signalized intersections.

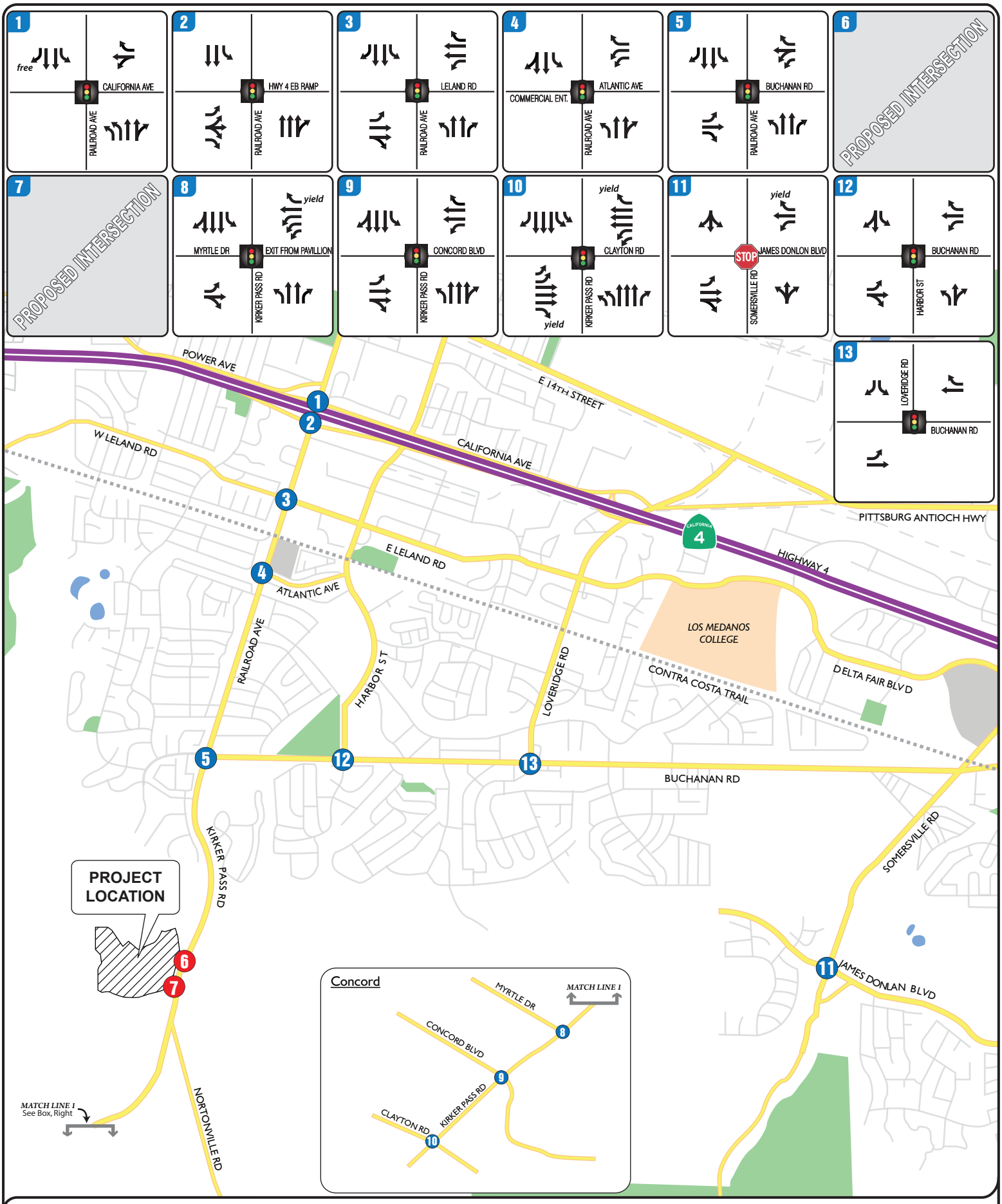

FIGURE 3 | EXISTING LANE CONFIGURATIONS
TRAFFIC IMPACT STUDY
Montreux Residential Subdivision
City of Pittsburg

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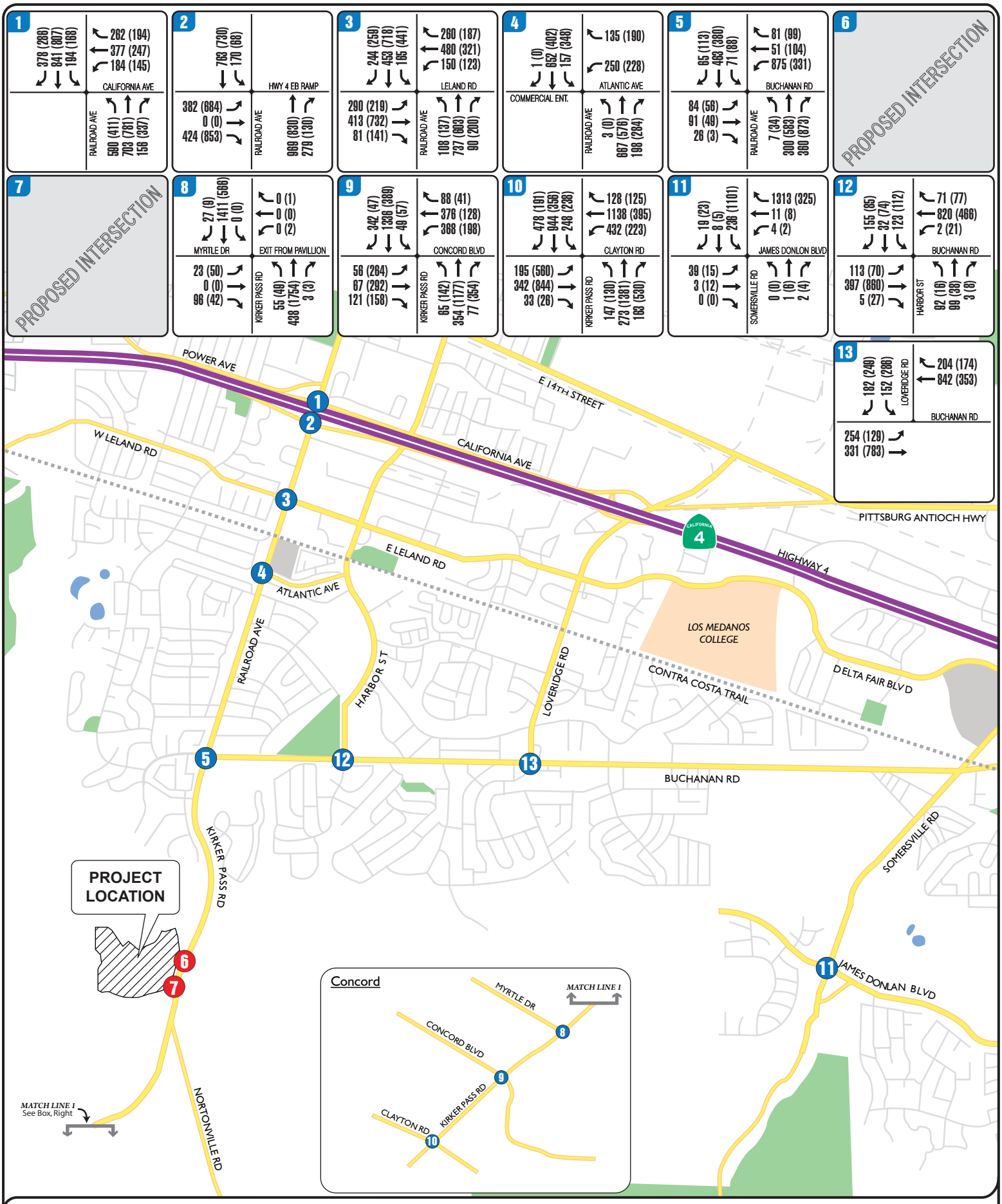

FIGURE 4 | EXISTING AM (PM) PEAK HOUR VOLUMES

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

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Please note that the corresponding LOS analysis calculation sheets are presented in the *Traffic Analysis Appendix*. As shown in **Table 3**, all of the signalized study intersections currently have acceptable conditions (LOS D or better) during the weekday AM and PM peak hours.

2.6 Planned Roadway Improvements

The most significant planned roadway improvement in the area is the proposed Buchanan Bypass. Please note that a portion of the Bypass on the eastern side is complete (starting at Somersville Road and extending through the Black Diamond Estates Project). The project to complete the Bypass is in the planning stages and is currently being reviewed by the City of Pittsburg. If this project is approved, it would create a major east-west bypass that would alleviate the significant congestion that occurs on Buchanan Road during peak periods. The roadway would connect the end of James Donlon Blvd to Kirker Pass. Alternatives for connecting the new bypass roadway to Kirker Pass Road are being considered and the previously studied alignment would feed directly into Kirker Pass Road. However, this report analyzes an alternative where Kirker Pass Road would terminate at the traffic signal for the main entrance to the proposed Montreux Project.

2.7 Pedestrian and Bicycle Facilities

Although the pedestrian activity could be considered light outside the City limits, Kirker Pass Road does accommodate bicycle use and would continue to do so with the planned future improvements. There are existing bicycle facilities on Kirker Pass Road but it should be noted that a sidewalk connecting the development to parks and retail located to the east of Railroad Avenue would be needed as required by the *Pittsburg General Plan.*

2.8 Transit Service

Three major public mass transit operators provide service within or adjacent to the study area, BART and the Eastern Contra Costa Transit Authority, or Tri Delta Transit, and County Connection Transit. These operators are described below.

Bay Area Rapid Transit (BART) – BART is a rapid mass transit system which provides regional transportation connections to much of the Bay Area. It runs from the North Bay Area in Richmond to the South Bay Area in Fremont. In the east-west direction it runs from Pittsburg to the San Francisco Airport and Milbrae with several connections in Oakland. The Pittsburg/Bay Point BART station, which is closest to the proposed project, serves all of Pittsburg, Bay Point, Antioch, and all other surrounding cities and runs from 4:00 am to 12:00 am daily, with a weekday frequency of 15 minutes.

Tri Delta Transit - Tri Delta Transit serves the East County including Brentwood, Oakley, Pittsburg, Antioch, Bay Point and unincorporated areas of East County. Tri Delta Transit operates fourteen local bus routes from Monday to Friday, including three express services, and three local bus routes during weekends and Holidays. The Tri Delta Transit route that runs closest to the proposed project is route 380, which has a bus stop approximately one mile north of the project at Railroad Avenue and Redondo Drive.

County Connection Transit – The County Connection currently operates a total of 31 fixed-route bus routes on weekdays throughout Central Contra Costa County with limited service to the East County area. The route that serves the East County area is route 93X. This is an express route that runs from the Hillcrest Park 'N Ride in Antioch, along Kirker Pass Road,

along Ygnacio Valley Road, and ends at the Walnut Creek BART station. This route has a frequency of 30 minutes and runs from 5:07 am to 7:41 pm during the weekdays. Currently, the bus stop for route 93X nearest to the proposed project is located north of the project on Kirker Pass Road and Castlewood Drive.

3) REGULATORY FRAMEWORK

3.1 Significance Criteria

The goal of the City of Pittsburg is to maintain a mid Level of Service (LOS) D during the peak hours (volume to capacity ratio less than or equal to 0.85) with mid LOS E permissible at intersections along Kirker Pass Road, according to the General Plan.

Signalized Intersections - Project-related operational impacts on the City of Pittsburg's signalized study intersections are considered significant if project-related traffic causes the Level of Service (LOS) rating to deteriorate from mid LOS D or better to high LOS D, LOS E or F, or from LOS E to LOS F. For Kirker Pass Road and Ygnacio Valley Road intersections the impacts are considered significant if project-related traffic causes the Level of Service (LOS) rating to deteriorate from mid LOS E or better to high LOS E, or LOS F, or from LOS E to LOS F.

Unsignalized Intersections - Project-related operational impacts on unsignalized intersections are considered significant if project generated traffic causes the worst-case movement (or average of all movements for all-way stop-controlled intersections and roundabouts) to deteriorate from LOS D or better to LOS E or F.

According to CEQA guidelines, a project would have a significant impact if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards, and travel demand measures, or other standards established by a county congestion management agency for designated roadways.
- Result in inadequate emergency vehicle access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.
- Result in a projected future over-capacity freeway condition where current long-range planning studies show an under-capacity condition.
- Result in an internal circulation system design that does not meet City standards.

4) IMPACTS AND MITIGATION MEASURES

4.1 Project Trip Generation

The proposed project would consist of up to 368 single-family dwellings. The trip generation calculations are shown in **Table 4**. They are based on the trip generation for Single-Family Detached Housing (Land Use Code 210) from ITE's Trip Generation (8th Edition).

Table 4
Trip Generation Calculations

Land Use	ITE Code	Size	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Detached Housing	210	368 units	3,448	67	202	269	214	125	339

The total trip generation reflects all vehicle trips that would be counted at the project driveways on Kirker Pass Road, both inbound and outbound. Since the project is residential there were no adjustments applied to account for pass-by or internal trips. The project is forecast to generate a total of 269 vehicle trips during the AM peak hour and 339 trips during the PM peak hour.

For purposes of determining the reasonable worst-case impacts of traffic on the surrounding street network from a proposed project, the trips generated by this proposed development are estimated for the peak commute hours of 7:15 a.m. and 8:15 a.m. and 4:45 p.m. and 5:45 p.m., which represent the peak of "adjacent street traffic". This is the time period when the project traffic would generally contribute to the greatest amount of congestion.

4.2 Project Trip Distribution

The trip distribution assumptions have been based on the project's proximity to freeway interchanges, the existing directional split at other local driveways and intersections, and the overall land use patterns in the area. **Figure 5** shows the percentage of project traffic assigned to various study roadways and **Figure 6** shows the AM and PM peak hour trips generated by the proposed project at each study area intersection.

Additional research was conducted to verify the project trip distribution and the percent of project traffic assigned to use Kirker Pass Road and Ygnacio Valley Road. Based on surveys of typical residential trip generation characteristics it can be shown that approximately 30 percent of peak hour residential trips are to and from work and/or university/college destinations (which comprise 6% of the total trips).[1] If the "*other*" category of trips is also included then the net percentage of project trips that is <u>not</u> destined for local destinations should be a maximum of 45%. As seen in Figure 5, the project trip distribution assumes that 49% of near-term project trips and 46% percent of future peak hour traffic would travel to and from destinations to the west via SR 4 and Kirker Pass Road. Please note this does not include the project trips assumed to be headed west towards the Bay Point BART station.

As shown in Figure 4, based the existing traffic volumes Kirker Pass Road carries a PM peak hour volume of approximately 2,400 vehicles per hour west of the project site (total of both directions). Based on Caltrans traffic data State Route 4 carries a total peak hour volume of

[1] *2008 Regional Transportation Plan Model Documentation*, Southern California Association of Governments, Los Angeles, CA, 2008.

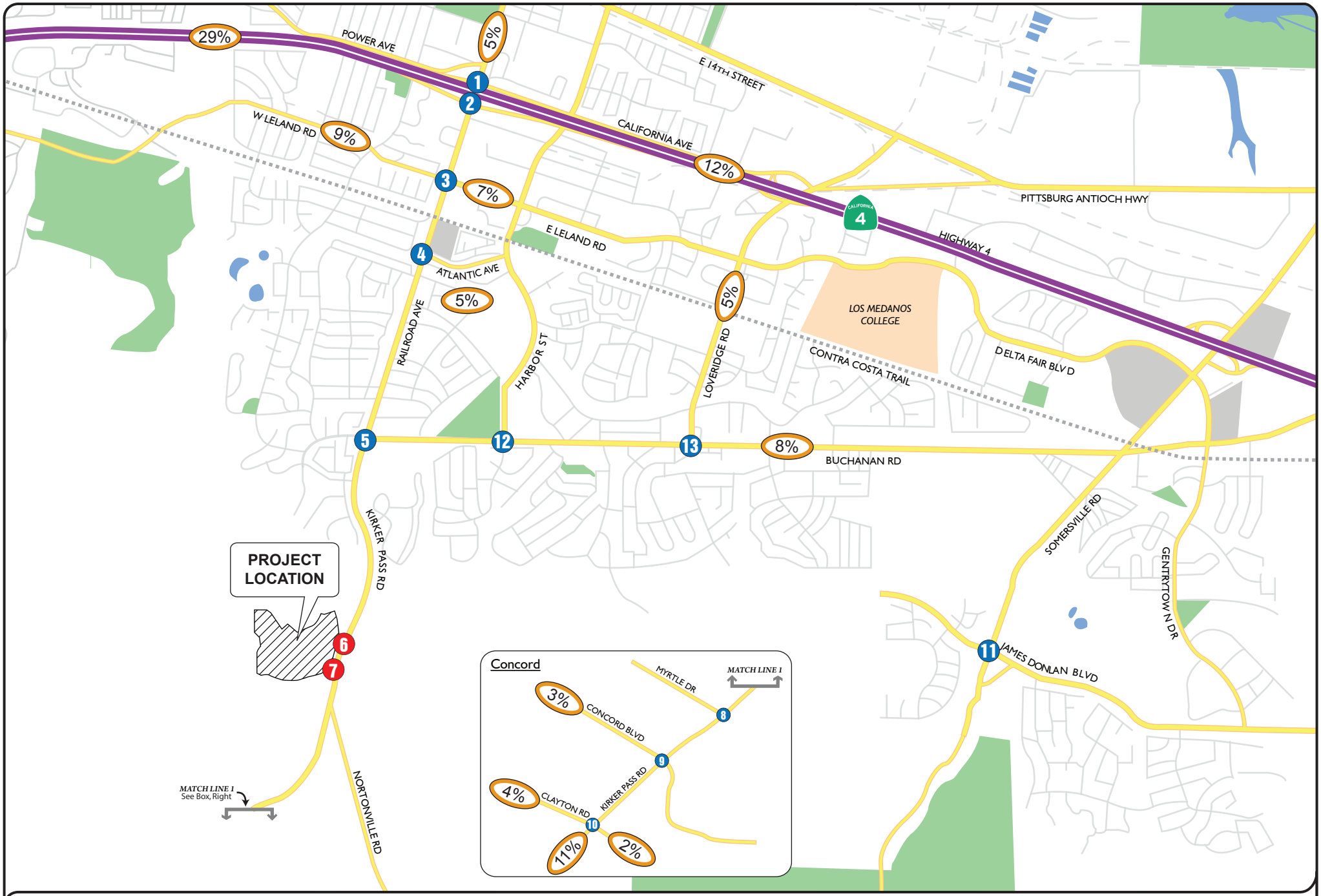

FIGURE 5 | EXISTING TRIP DISTRIBUTION
TRAFFIC IMPACT STUDY
Montreux Residential Project
City of Pittsburg

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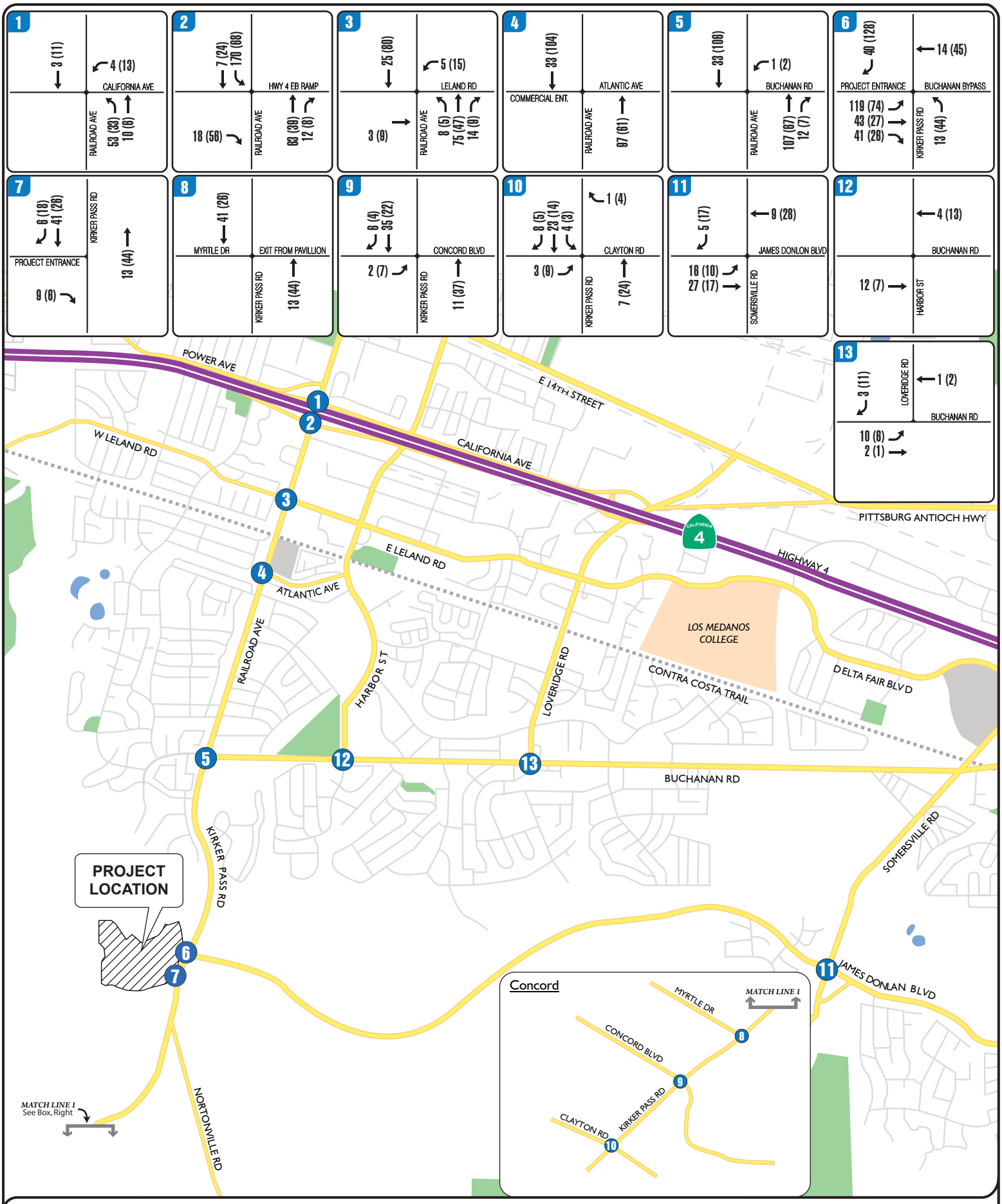

FIGURE 6 | PROJECT TRIP GENERATION

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

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approximately 8,600 vehicles.[1] Using these volumes to distribute the 45% of work, college, and "*other*" trips it can be concluded that approximately 10% of project traffic would use Kirker Pass Road and 35% would use State Route 4. However, based on the project's location on Kirker Pass Road and traffic counts taken at adjacent residential projects (including Kirker Creek Apartments located approximately 2,000 feet north of the project entrance) it was conservatively assumed that 20% of the project traffic would head west over Kirker Pass Road.

The traffic travelling over Kirker Pass was then proportionally distributed to Ygnacio Valley Road, Clayton Road, and Concord Boulevard based on the relative volumes of traffic on each roadway. This resulted in the conclusion that approximately 11% of the total project traffic would travel to and from the west on Ygnacio Valley Road, beyond Clayton road and Concord Boulevard. Again, 20% of the project traffic was assigned towards Concord and it was based on the traffic volumes at the Concord intersections that 11% of this traffic was assumed to continue west on Ygnacio Valley Road towards Walnut Creek.

Please note that peak hour traffic counts were also conducted in 2010 and again in 2013 at the nearby intersection of Pheasant Drive and Kirker Pass Road (entrance to the Kirker Creek Apartments). This intersection serves as the only access to a nearby project that is exclusively residential (like the proposed project) and therefore can provide comparable data to verify the expected travel characteristics of the proposed project's residents. Based on the traffic counts conducted at the project entrance during the worst case PM peak hour, 20% of the traffic generated by this existing residential area was found to travel to and from the west on Kirker Pass Road and 80% travels to and from the east towards Pittsburg. These traffic counts provide further verification of the trip distribution assumptions used in this analysis.

4.3 Existing *Plus Project* Intersection Capacity Conditions

The existing plus proposed project traffic forecasts were developed by adding project-related traffic to the existing traffic volumes. As noted above, **Table 3** summarizes the LOS results for the Existing Plus Project weekday AM and PM peak hour conditions *without the Buchanan Bypass* (i.e. the existing roadway network). Please note that the corresponding LOS analysis calculation sheets are presented in the appendix. As shown in **Table 3**, all of the signalized study intersections would continue to have acceptable conditions (LOS D or better) during the weekday AM and PM peak commute hours. For the unsignalized study intersections, all stop controlled side-street approaches would continue to operate at LOS D or better.

4.4 Baseline Traffic Capacity Conditions

The Baseline scenario evaluates the existing conditions with the addition of traffic from reasonably foreseeable projects in the area (see **Figure 7**) which have already received entitlements. As shown in Figure 7, this includes traffic from the nearby approved Sky Ranch and Black Diamond Residential Projects. In addition, the general baseline growth in traffic was developed based on the assumption that the project completion date would be 2020. This scenario was prepared in coordination with the City of Pittsburg and includes all reasonably foreseeable projects that would significantly affect the traffic volumes in the project study area. **Figure 7** identifies the location of approved projects assumed for this scenario and **Figure 8** presents the resulting baseline volumes at each of the project study intersections.

Table 5 summarizes the associated LOS computation results for the Baseline weekday AM and PM peak hour conditions without the Bypass. The corresponding LOS analysis calculation sheets are presented in the *Traffic Analysis Appendix*. As shown in **Table 5**, all of the

[1] *Caltrans 2011 Traffic Volume on State Highways*, Traffic Data Branch, Caltrans, Sacramento, CA, 2012.

signalized study intersections would continue to have acceptable conditions (LOS D or better) during the weekday AM and PM peak commute hours. For the unsignalized study intersections, the stop controlled side-street approaches would continue to operate at LOS D or better.

Table 6 summarizes the associated LOS computation results for the Baseline weekday AM and PM peak hour conditions *with the addition of the Buchanan Bypass.* The corresponding LOS analysis calculation sheets are presented in the *Traffic Analysis Appendix*. As shown in **Table 6**, with the addition of the Buchanan Bypass all of the signalized study intersections would have acceptable conditions (LOS D or better) during the weekday AM and PM peak commute hours. For the unsignalized study intersections, the stop controlled side-street approaches would continue to operate at LOS D or better.

4.5 Baseline *Plus Project* Intersection Capacity Conditions

The Baseline plus proposed project traffic forecasts were developed by adding project-related traffic to the baseline traffic volumes. **Figure 9** presents the Baseline Plus Project traffic volumes that were used in the analysis. As noted above, **Table 5** summarizes the LOS results for the Baseline Plus Project weekday AM and PM peak hour conditions *without the Buchanan Bypass* (i.e. the existing roadway network). Please note that the corresponding LOS analysis calculation sheets are presented in the appendix. As shown in **Table 5**, all of the signalized study intersections would continue to have acceptable conditions (LOS D or better) during the weekday AM and PM peak commute hours. For the unsignalized study intersections, all stop controlled side-street approaches would continue to operate at LOS D or better.

Table 6 summarizes the associated LOS computation results for the Baseline Plus Project weekday AM and PM peak hour conditions *with the addition of the Buchanan Bypass.* The corresponding LOS analysis calculation sheets are presented in the *Traffic Analysis Appendix*. As shown in **Table 6**, with the addition of the Buchanan Bypass all of the signalized study intersections would have acceptable conditions (LOS D or better) during the weekday AM and PM peak commute hours. For the unsignalized study intersections, the stop controlled side-street approaches would continue to operate at LOS D or better.

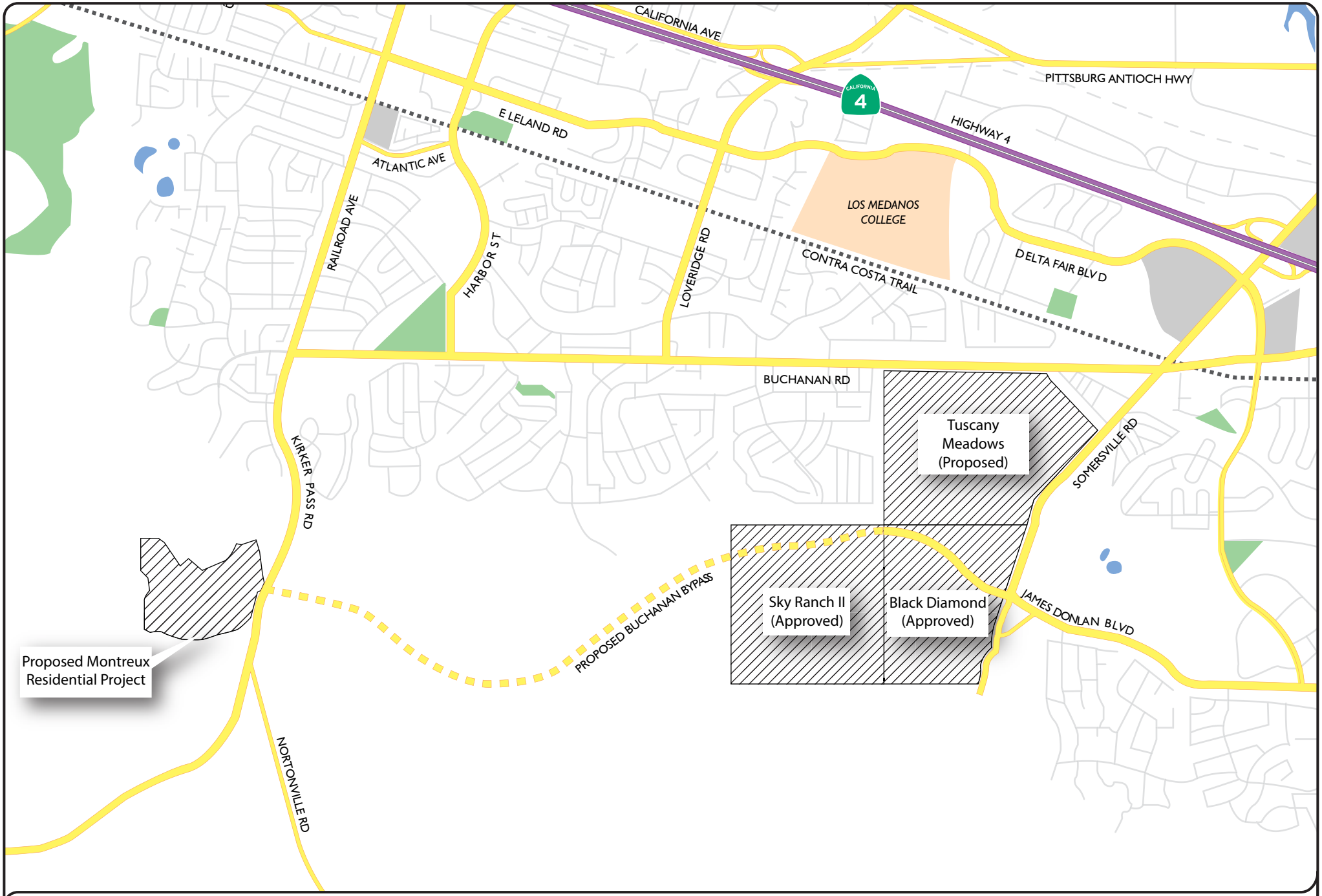

FIGURE 7 | PROPOSED AND APPROVED PROJECTS
TRAFFIC IMPACT STUDY
Montreux Residential Project
City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

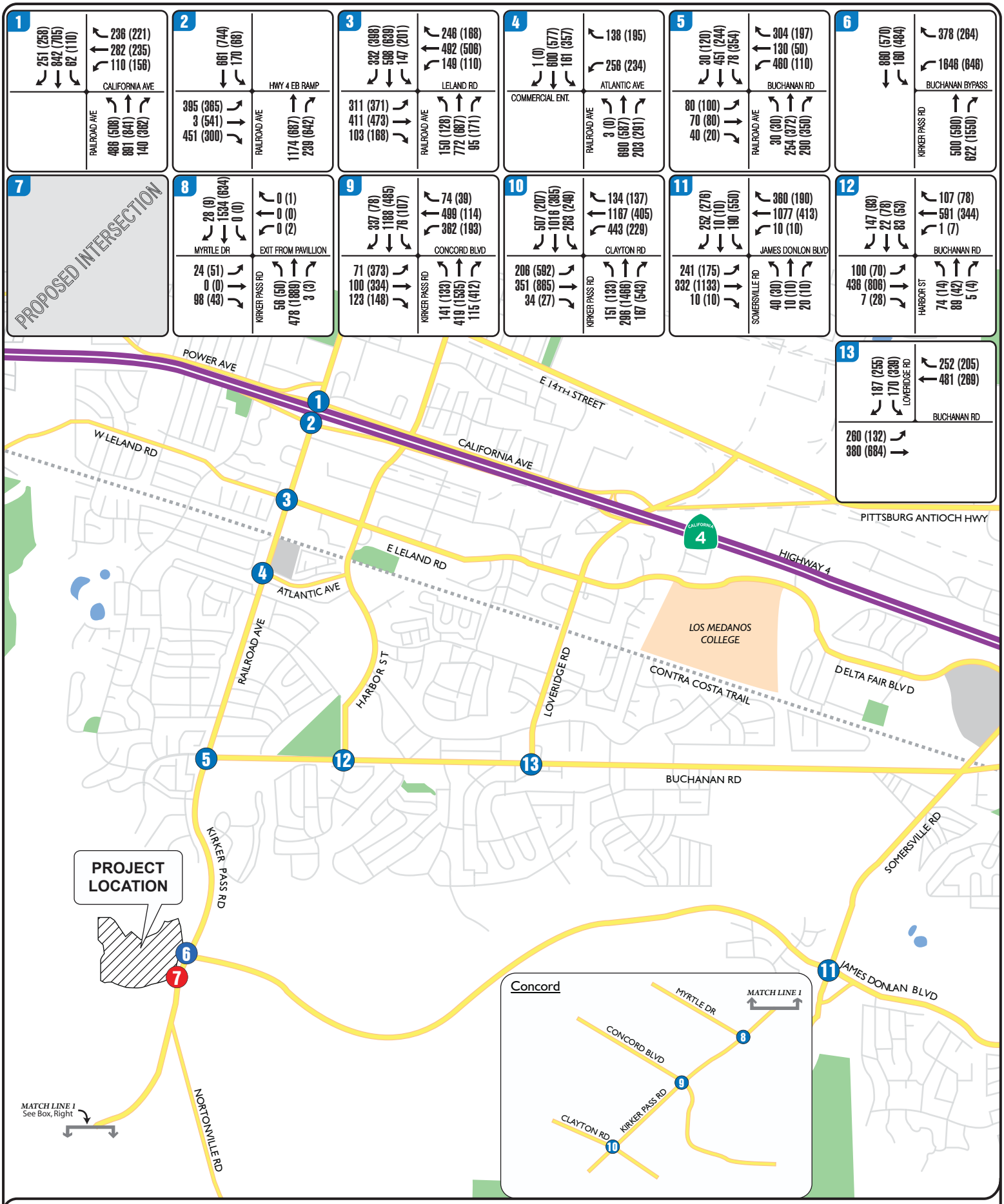

FIGURE 8 | BASELINE AM (PM) PEAK HOUR VOLUMES
TRAFFIC IMPACT STUDY
Montreux Residential Project
City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

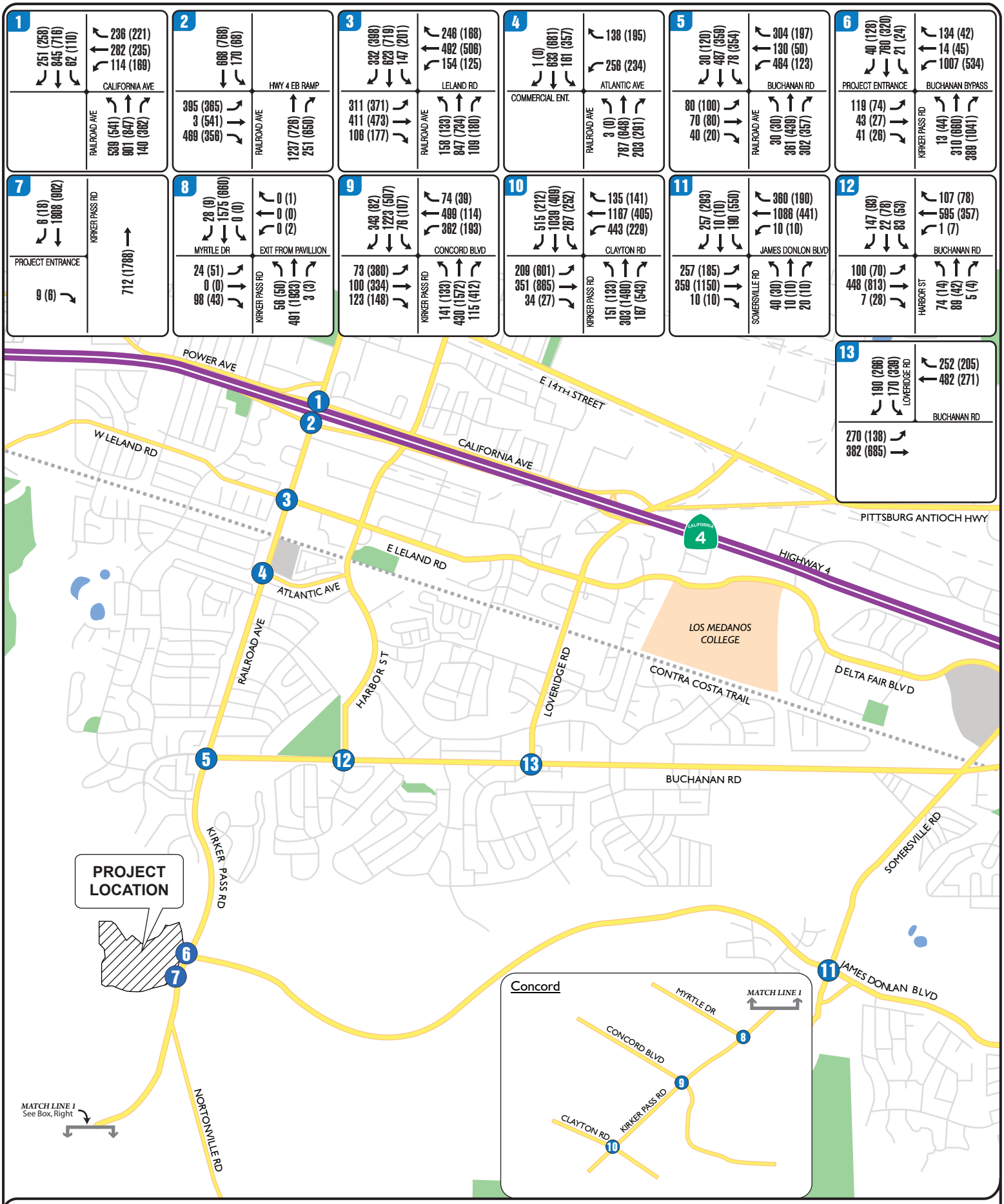

FIGURE 9 | BASELINE PLUS PROJECT AM (PM) PEAK HOUR VOLUMES

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

Table 5
BASELINE INTERSECTION LEVEL OF SERVICE CONDITIONS *WITHOUT* THE BUCHANAN BYPASS - CCTA METHODOLOGY

	INTERSECTION	CONTROL	PEAK HOUR	BASELINE		BASELINE PLUS PROJECT	
				V/C Ratio	LOS	V/C Ratio	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	0.63	B	0.65	B
			PM	0.64	B	0.66	B
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	0.61	B	0.63	B
			PM	0.80	C	0.81	D
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	0.66	B	0.69	B
			PM	0.71	C	0.73	C
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	0.48	A	0.52	A
			PM	0.54	A	0.56	A
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	0.72	C	0.73	C
			PM	0.85	D	0.86	D
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	N/A	N/A	0.62	B
			PM	N/A	N/A	0.55	C
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	0.32	A	0.32	A
			PM	0.60	B	0.62	B
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	0.67	B	0.68	B
			PM	0.72	C	0.73	C
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	0.62	B	0.63	B
			PM	0.69	B	0.70	B
11	SOMERSVILLE RD & JAMES DONLON BLVD	Traffic Signal	AM	0.33	A	0.33	A
			PM	0.61	B	0.61	A
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	0.82	D	0.82	D
			PM	0.78	C	0.79	C
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	0.76	C	0.77	C
			PM	0.77	C	0.77	C

SOURCE: Abrams Associates, 2013

NOTES: Intersection Delay is presented in terms of the volume to capacity ratio. Please note that the CCTA methodology only applies to signalized intersections.

Table 6
BASELINE INTERSECTION LEVEL OF SERVICE CONDITIONS *WITH*
THE BUCHANAN BYPASS - CCTA METHODOLOGY

	INTERSECTION	CONTROL	PEAK HOUR	BASELINE		BASELINE PLUS PROJECT	
				V/C Ratio	LOS	V/C Ratio	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	0.63	B	0.65	B
			PM	0.64	B	0.65	B
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	0.61	B	0.63	B
			PM	0.80	C	0.80	D
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	0.66	B	0.68	B
			PM	0.71	C	0.72	C
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	0.44	A	0.46	A
			PM	0.54	A	0.56	A
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	0.40	A	0.41	A
			PM	0.50	A	0.51	A
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	0.54	A	0.60	A
			PM	0.38	A	0.41	A
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	0.32	A	0.32	A
			PM	0.50	B	0.62	B
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	0.67	B	0.68	B
			PM	0.72	C	0.73	C
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	0.62	B	0.63	B
			PM	0.69	B	0.70	B
11	SOMERSVILLE RD & JAMES DONLON BLVD	Traffic Signal	AM	0.55	A	0.57	A
			PM	0.55	A	0.55	A
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	0.58	A	0.58	A
			PM	0.64	B	0.65	B
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	0.53	A	0.54	A
			PM	0.60	A	0.60	A

SOURCE: Abrams Associates, 2013

NOTES: Intersection Delay is presented in terms of the volume to capacity ratio. Please note that the CCTA methodology only applies to signalized intersections.

4.6 Internal Circulation, and Access

No internal site circulation or access issues have been identified that would cause a traffic safety problem or any unusual traffic congestion or delay. It should be noted that the volumes on the internal roadways would be light enough so that no significant conflicts would be expected with through traffic and vehicles backing out of the driveways and/or garages within the project. At the main project entrance on Kirker Pass Road there were no capacity problems identified with the proposed project driveway configuration. However, it should again be noted that the proposed connection for the future Buchanan Bypass to Kirker Pass Road (at the project entrance) is a different alignment than was previously proposed. This is shown on **Figure 10**. A preliminary layout of the proposed intersection is shown in **Figure 11**.

4.7 Parking

The proposed project would provide an adequate supply of off-street parking based on the City's requirements. The project is currently proposing to meet the City's parking requirements and based on our review of the proposed parking plan there would be no significant impacts to the surrounding properties.

4.8 Cumulative Traffic Analysis

For the cumulative conditions, the intersection traffic volumes were based on the existing turning movements plus traffic from all reasonably foreseeable projects including the previously approved Sky Ranch and Black Diamond Ranch residential subdivisions, and the proposed Tuscany Meadows residential subdivision, plus the addition of growth estimated by the County's traffic model. The cumulative analysis also took into account the anticipated traffic from the planned City Center project as per the *Railroad Avenue Specific Plan Environmental Impact Report* (Dated February 25, 2009). **Figure 12** shows the revised project trip distribution with the planned Buchanan Bypass. **Figure 13** presents cumulative (no project) traffic volumes at each of the project study intersections and **Figure 14** presents the volumes with the addition of traffic from the proposed residential project. Both of these scenarios include the planned Buchanan Bypass as depicted in the figures. **Figure 15** illustrates the peak hour volumes plus the estimated traffic created by the proposed project without the construction of the Buchanan Bypass.

4.9 Cumulative Traffic Capacity Conditions

Table 7 summarizes the associated LOS computation results for the Cumulative (Year 2035) weekday AM and PM peak hour traffic conditions without the proposed project and with the assumption of the construction of the Buchanan Bypass. The corresponding LOS analysis calculation sheets are presented in the *Traffic Analysis Appendix*. As shown in **Table 7**, all of the signalized study intersections would continue to have acceptable conditions (LOS D or better) during the weekday AM and PM peak commute hours. For the unsignalized study intersections, all of stop controlled side-street approaches would continue to operate at LOS D or better.

For comparison, **Table 8** presents the Cumulative (Year 2035) weekday AM and PM peak hour traffic conditions without the proposed project and without the Buchanan Bypass. As shown in **Table 8**, all of the intersections would operate at LOS D or better with the exception of the intersection of Railroad Avenue and Buchanan Road (Intersection 5) during the PM peak hour and the intersection of Buchanan Road and Harbor Street (Intersection 12) and Buchanan Road and Loveridge Road (Intersection13) during both AM and PM peak hours.

Table 7
CUMULATIVE INTERSECTION LEVEL OF SERVICE CONDITIONS
***WITH* THE BUCHANAN BYPASS – CCTA METHODOLOGY**

	INTERSECTION	CONTROL	PEAK HOUR	CUMULATIVE		CUMULATIVE PLUS PROJECT	
				V/C Ratio	LOS	V/C Ratio	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	0.71	C	0.73	C
			PM	0.70	B	0.71	C
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	0.69	B	0.71	C
			PM	0.86	D	0.87	D
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	0.75	C	0.77	C
			PM	0.79	C	0.80	D
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	0.59	A	0.62	B
			PM	0.61	B	0.63	B
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	0.69	B	0.72	C
			PM	0.73	C	0.73	C
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	0.64	B	0.69	B
			PM	0.61	B	0.65	B
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	0.36	A	0.36	A
			PM	0.68	B	0.70	B
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	0.74	C	0.75	C
			PM	0.80	C	0.81	D
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	0.68	B	0.69	B
			PM	0.76	C	0.77	C
11	SOMERSVILLE RD & JAMES DONLON BLVD	Traffic Signal	AM	0.75	C	0.76	C
			PM	0.68	B	0.68	B
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	0.74	C	0.74	C
			PM	0.82	D	0.82	D
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	0.69	B	0.70	C
			PM	0.79	C	0.79	C

SOURCE: Abrams Associates, 2013

NOTES: Intersection Delay is presented in terms of the volume to capacity ratio. Please note that the CCTA methodology only applies to signalized intersections.

4.10 Cumulative Plus Project Traffic Capacity Conditions

Table 7 also summarizes the LOS results for the Cumulative Plus Project (Year 2035) traffic conditions at each of the project study intersection with the Buchanan Bypass. This includes all reasonably foreseeable projects including Sky Ranch, Black Diamond Ranch, Tuscany Meadows, plus the planned City Center project as per the *Railroad Avenue Specific Plan Environmental Impact Report.* The volumes also include background traffic growth and traffic generated by the proposed project. As shown on this table, all of the signalized study intersections would continue to have acceptable conditions during the weekday AM and PM peak commute hours. For the unsignalized study intersections, all of the stop controlled side-street approaches would continue to operate at LOS D or better.

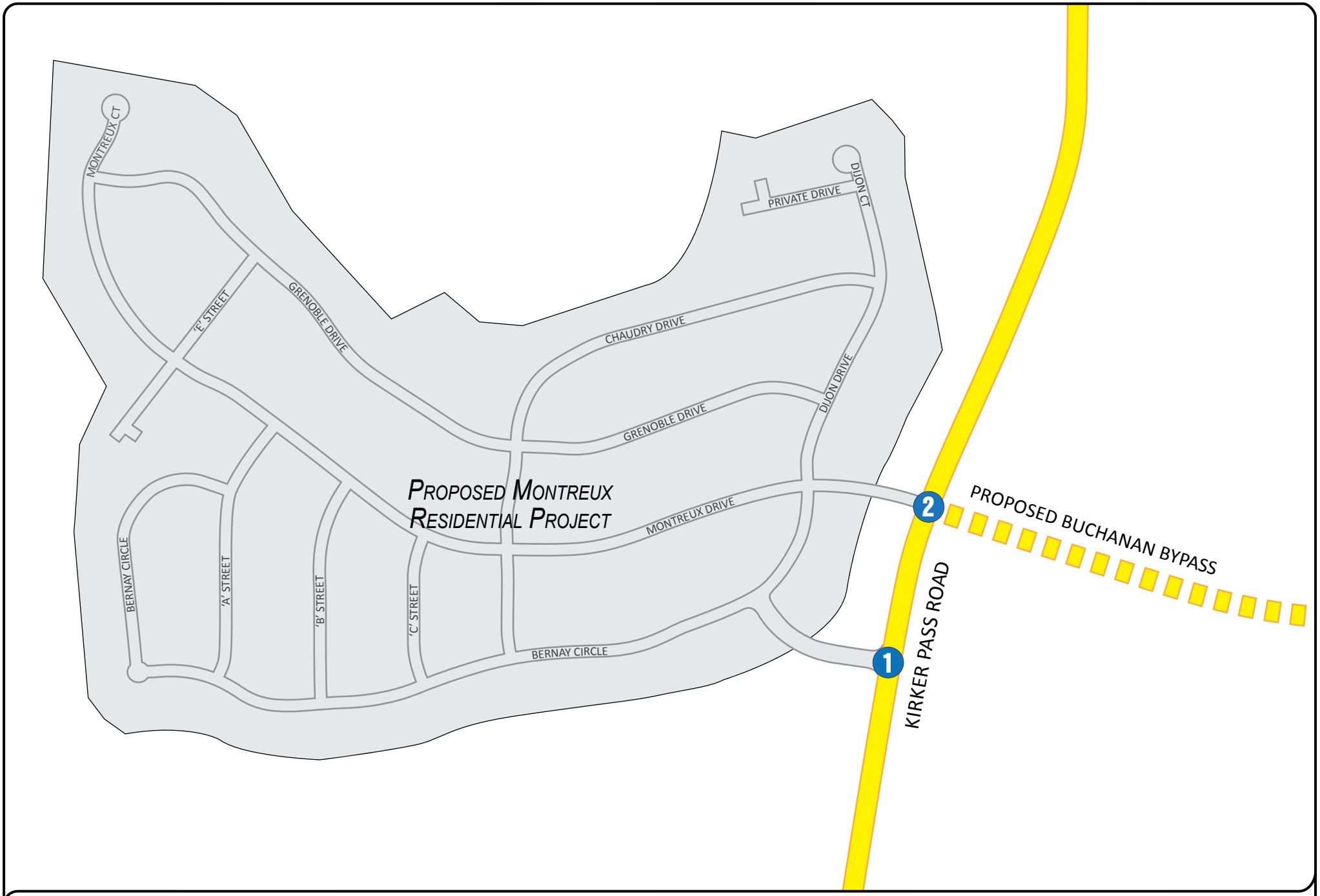

FIGURE 10 | PROPOSED ALIGNMENT FOR BUCHANAN BYPASS CONNECTION TO KIRKER PASS ROAD

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

FIGURE 11 | PRELIMINARY DESIGN FOR THE BUCHANAN BYPASS CONNECTION
TRAFFIC IMPACT STUDY
Montreux Residential Project
City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

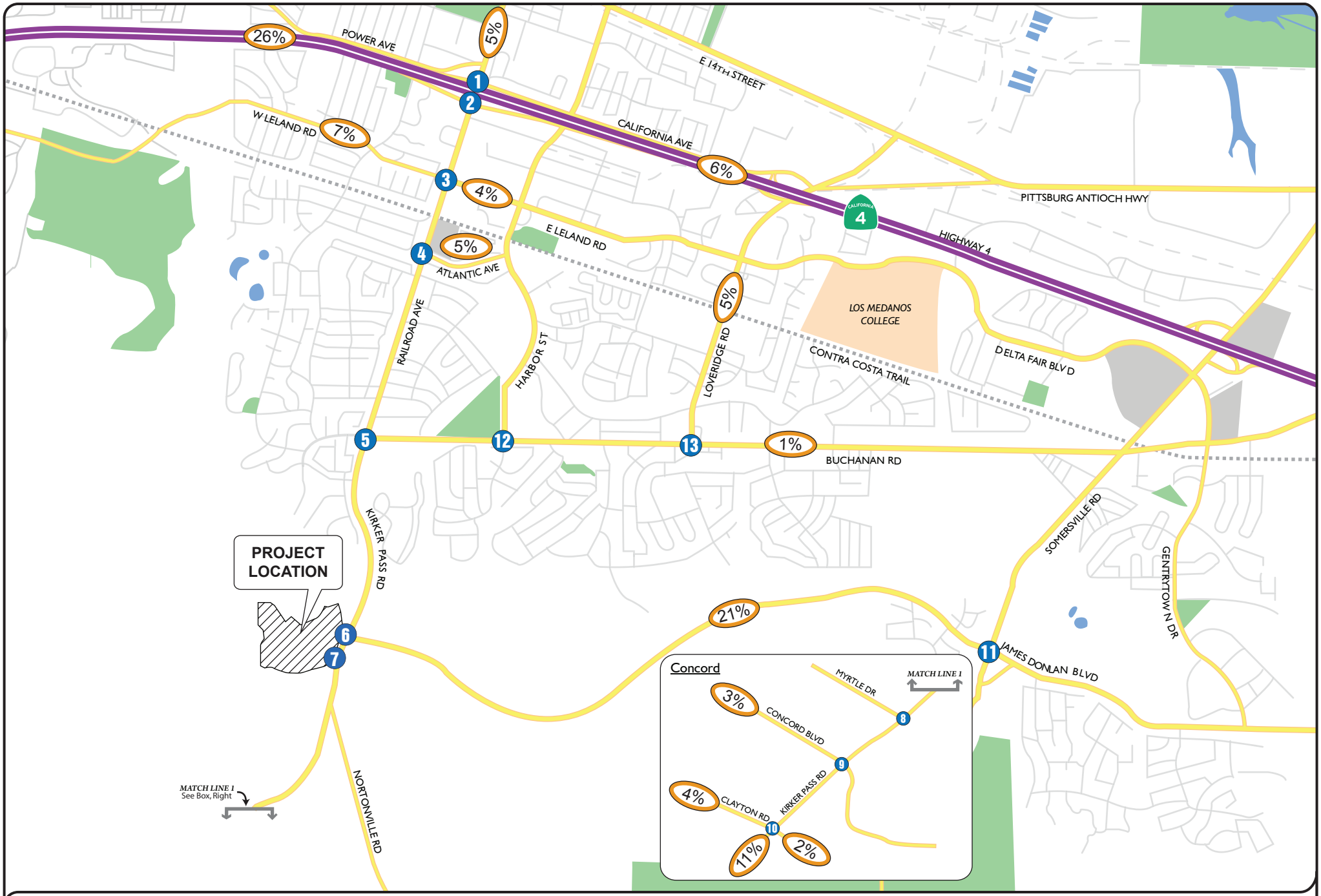

FIGURE 12 | FUTURE TRIP DISTRIBUTION

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

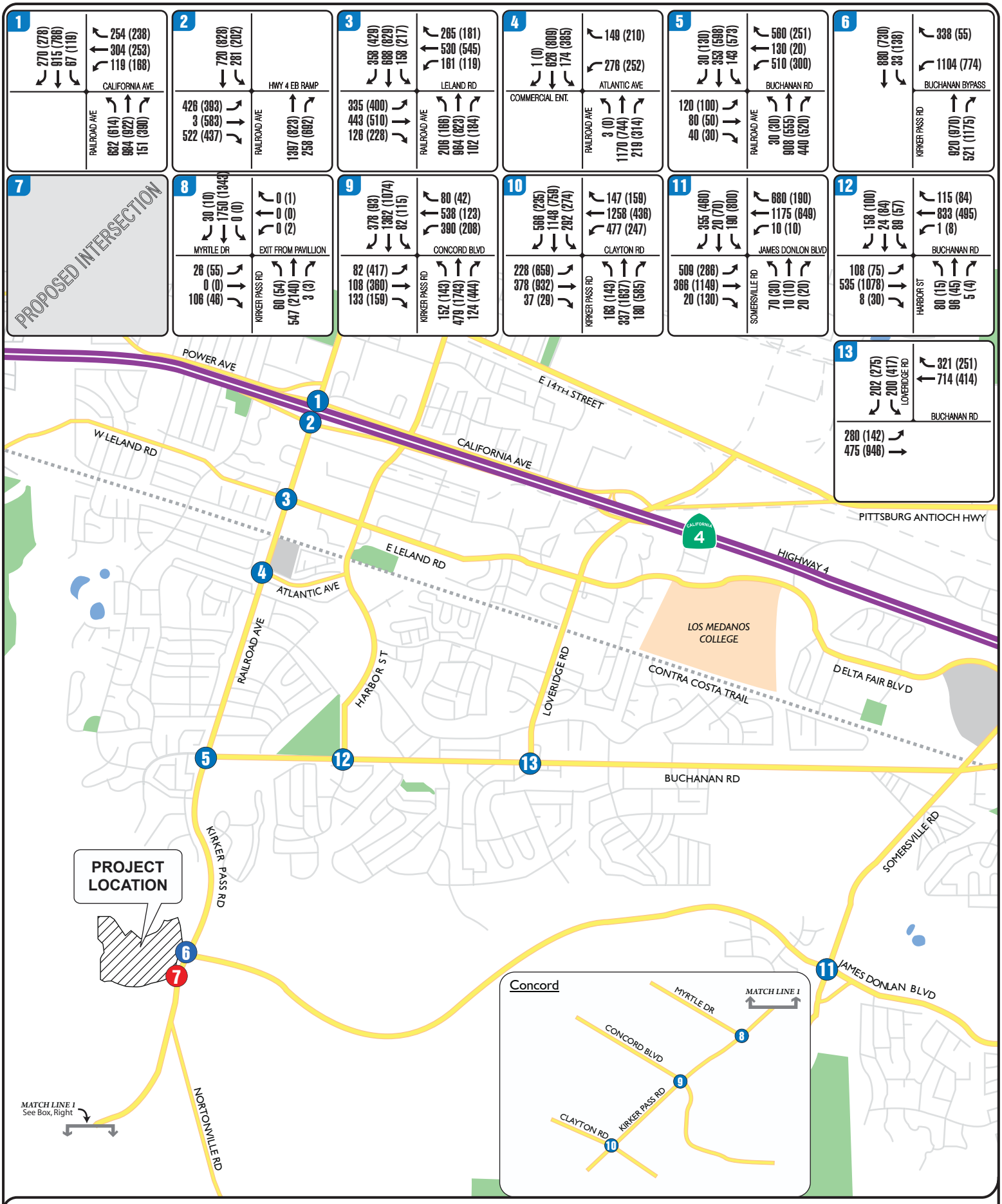

FIGURE 13 | CUMULATIVE AM (PM) VOLUMES - WITH BYPASS

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

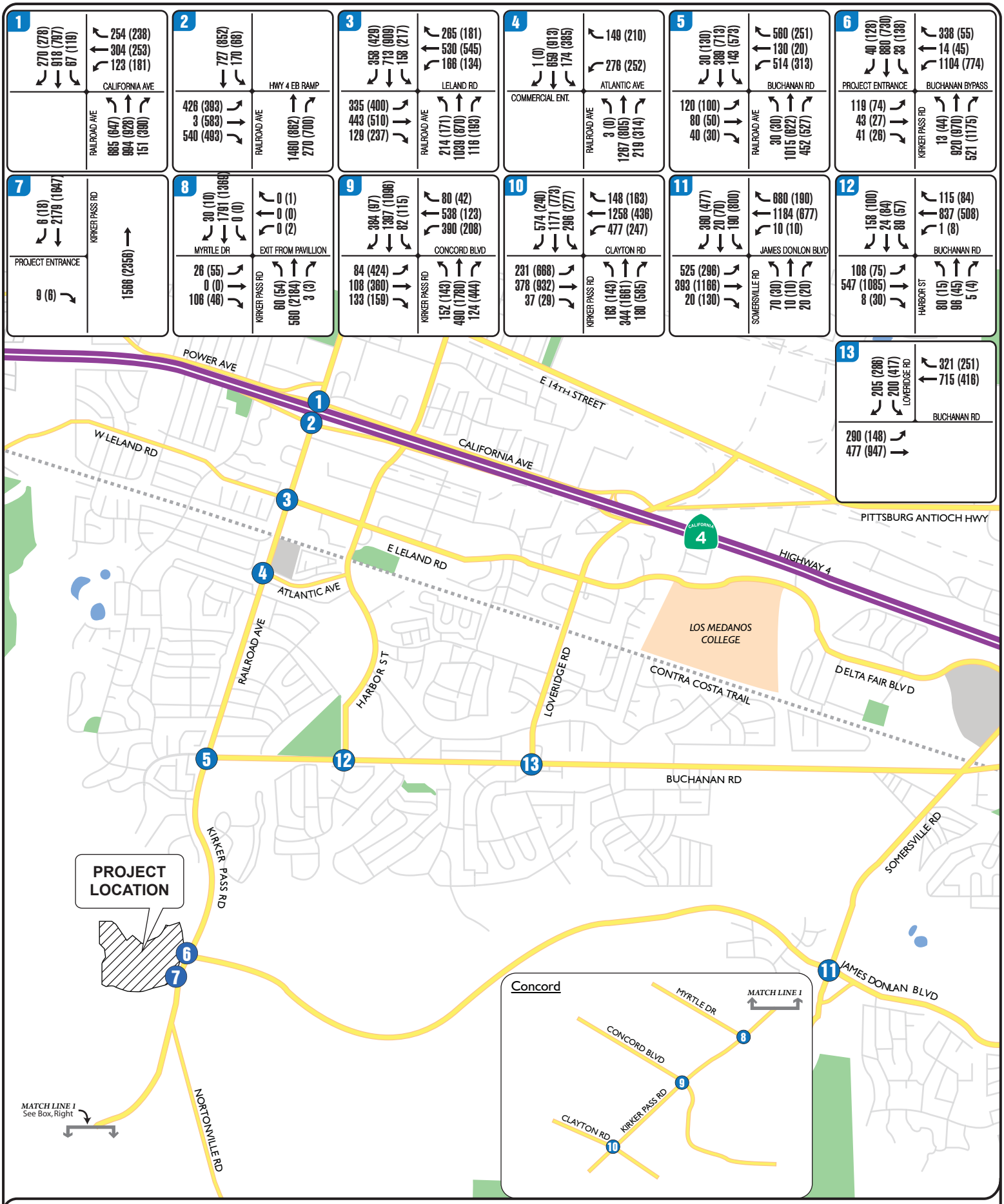

FIGURE 14 | CUMULATIVE PLUS PROJECT AM (PM) VOLUMES - WITH BYPASS

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

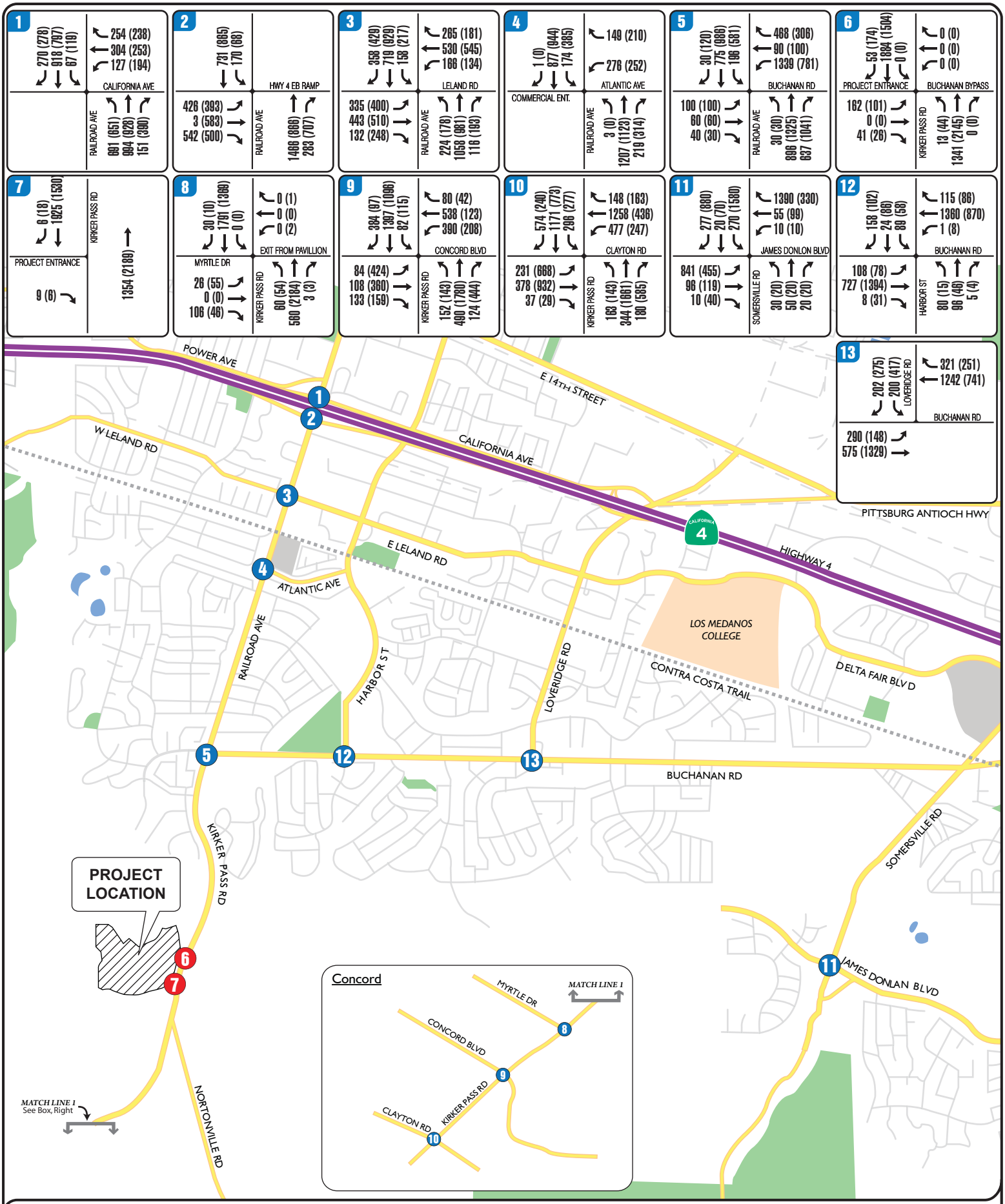

FIGURE 15 | CUMULATIVE PLUS PROJECT AM (PM) VOLUMES - NO BYPASS

TRAFFIC IMPACT STUDY

Montreux Residential Project

City of Pittsburg

Abrams Associates
TRAFFIC ENGINEERING, INC.

Table 8
CUMULATIVE INTERSECTION LEVEL OF SERVICE CONDITIONS
***WITHOUT* THE BUCHANAN BYPASS – CCTA METHODOLOGY**

	INTERSECTION	CONTROL	PEAK HOUR	CUMULATIVE		CUMULATIVE PLUS PROJECT	
				V/C Ratio	LOS	V/C Ratio	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	0.71	C	0.74	C
			PM	0.70	B	0.71	C
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	0.69	B	0.71	C
			PM	0.86	D	0.87	D
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	0.75	C	0.78	C
			PM	0.79	C	0.80	D
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	0.57	A	0.60	B
			PM	0.61	B	0.63	B
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	0.88	D	0.93	E
			PM	1.08	F	1.11	F
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	0.52	A	0.65	B
			PM	0.60	A	0.68	B
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	N/A	N/A
			PM	N/A	N/A	N/A	N/A
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	0.36	A	0.36	A
			PM	0.68	B	0.70	B
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	0.74	C	0.75	C
			PM	0.80	C	0.81	D
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	0.68	B	0.69	B
			PM	0.76	C	0.77	C
11	SOMERSVILLE RD & JAMES DONLON BLVD	Traffic Signal	AM	0.66	B	0.66	B
			PM	0.86	D	0.86	D
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	1.06	F	1.06	F
			PM	1.06	F	1.06	F
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	1.00	E	1.01	F
			PM	1.01	F	1.01	F

SOURCE: Abrams Associates, 2013

NOTES: Intersection Delay is presented in terms of the volume to capacity ratio. Please note that the CCTA methodology only applies to signalized intersections.

Table 8 also presents the LOS results for the Cumulative Plus Project traffic conditions without the construction of the Buchanan Bypass. As shown on **Table 8**, all of the intersections would operate at LOS D or better with the exception of the AM and PM peak hour conditions at the intersection of Railroad Avenue and Buchanan Bypass (Intersection 5), Buchanan Road and Harbor Street (Intersection 12), and Buchanan Road and Loveridge Road (Intersection 13).

5) Conclusions

The highest peak hour trip generation for the project would be about 339 vehicles during the PM peak hour. The project would not result in any significant traffic capacity or safety impacts and no off-site traffic mitigations would be required.

5.1 Baseline Plus Project Conditions

Based on the analysis of baseline traffic operations with the project all intersections would continue to operate at acceptable levels-of-service and no mitigations would be required for this scenario. It should be noted that this assumes completion of the Buchanan Bypass. It should also be noted the "*No Bypass*" analysis indicated additional operational problems (primarily related to queuing) could occur on Buchanan Road if the Bypass were not constructed. However, the City has established a Traffic Management Plan (TMP) for this roadway so if the Bypass were not built there would still be no LOS standards exceeded and no significant project impacts on Buchanan Road.

Under Baseline Plus Project conditions the project's main entrance intersection on Kirker Pass Road would require installation of the traffic signal that is planned as part of the project. It should also be noted that with this traffic signal the overall LOS and delay at all project study intersections would remain within the City's standards during both the weekday AM and PM peak hours.

5.2 Cumulative Plus Project Conditions

Under Cumulative Plus Project (Year 2035) traffic conditions all intersections would continue to have acceptable conditions (LOS D or better) during the weekday AM and PM peak commute hours. The overall intersection LOS at all of the study intersections would still be within the City's standards during both the weekday AM and PM peak hours. This scenario assumes completion of the Buchanan Bypass based on the preliminary layout presented previously in **Figures 10 and 11**. As noted above, the City has established a Traffic Management Plan (TMP) for this roadway so even if the Bypass were not built there would still be no LOS standards exceeded and no significant project impacts on Buchanan Road.

5.3 Bicycle and Pedestrian Impacts

Based on this analysis, the proposed project would not significantly impact any bicycle or pedestrian facilities, including bike lanes, routes, or paths. However, it should also be noted that a sidewalk is needed along Kirker Pass Road connecting the development to parks and retail located to the east of Railroad Avenue as mandated by the *Pittsburg General Plan*. The following policies are listed in the "Policies: Bikeways and Pedestrian Movements" section of the *General Plan*:

> 7-P-33: Require mitigation for development proposals which result in potential conflicts, or fail to provide adequate access, for pedestrians and bicycles.
>
> 7-P-34: As part of development approval, ensure that safe and contiguous routes for pedestrians and bicyclists are provided within new development projects.
>
> 7-P-38: Develop a series of continuous pedestrian systems within Downtown and residential neighborhoods, connecting major activity centers and trails with City and County open space areas.
>
> 7-P-40: Ensure provision of sufficiently wide sidewalks and pedestrian paths in all new residential development.

TECHNICAL APPENDIX

Montreux Residential Project
Subdivision 8279

CITY OF PITTSBURG

Prepared for:
City of Pittburg
65 Civic Avenue
Pittsburg, CA 94565

Prepared by:
Abrams Associates
1660 Olympic Boulevard, Suite 210
Walnut Creek, CA 94596
Tel: 925.945.0201

Abrams Associates
TRAFFIC ENGINEERING, INC.

August 1, 2011

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5. **Synchro "with Bypass" HCM LOS Summary Table**

6. **Synchro "with Bypass" HCM LOS Calculations**

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.759		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	95	Level Of Service:	C		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	590	703	156	194	841	378	0	0	0	184	377	262
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	590	703	156	194	841	378	0	0	0	184	377	262
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	590	703	156	194	841	378	0	0	0	184	377	262
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	590	703	156	194	841	378	0	0	0	184	377	262
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	194
RTOR Vol:	590	703	156	194	841	378	0	0	0	184	377	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	590	703	156	194	841	378	0	0	0	184	377	68
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.64	0.36	1.00	2.00	1.00	0.00	0.00	0.00	0.33	0.67	1.00
Final Sat.:	3127	2815	625	1720	3440	1720	0	0	0	564	1156	1720
Capacity Analysis Module:												
Vol/Sat:	0.19	0.25	0.25	0.11	0.24	0.22	0.00	0.00	0.00	0.33	0.33	0.04
Crit Volume:	295			421			0			561		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.586
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	55	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0	2	0 0	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	969	279	296	763	0	382	0	424	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	969	279	296	763	0	382	0	424	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	969	279	296	763	0	382	0	424	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	969	279	296	763	0	382	0	424	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	969	279	296	763	0	382	0	424	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	969	279	296	763	0	382	0	424	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.33	0.67	1.00	2.00	0.00	1.42	0.01	1.57	0.00	0.00	0.00
Final Sat.:	0	4006	1154	1720	3440	0	2223	0	2467	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.24	0.17	0.22	0.00	0.17	0.00	0.17	0.00	0.00	0.00
Crit Volume:			416	296					269	0		
Crit Moves:			****	****					****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec): 100 Critical Vol./Cap.(X): 0.645
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 64 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	108	737	90	165	453	244	290	413	81	150	480	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	108	737	90	165	453	244	290	413	81	150	480	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	108	737	90	165	453	244	290	413	81	150	480	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	737	90	165	453	244	290	413	81	150	480	260
RTOR Reduct:	0	0	90	0	0	244	0	0	0	0	0	165
RTOR Vol:	108	737	0	165	453	0	290	413	81	150	480	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	108	737	0	165	453	0	290	413	81	150	480	95
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.67	0.33	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2759	541	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.07	0.22	0.00	0.10	0.14	0.00	0.18	0.15	0.15	0.09	0.15	0.06
Crit Volume:		369			165			290			240	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec): 100 Critical Vol./Cap.(X): 0.423
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 39 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3	667	198	157	652	1	0	0	0	250	0	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	667	198	157	652	1	0	0	0	250	0	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	667	198	157	652	1	0	0	0	250	0	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	667	198	157	652	1	0	0	0	250	0	135
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	135
RTOR Vol:	3	667	198	157	652	1	0	0	0	250	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	667	198	157	652	1	0	0	0	250	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.54	0.46	1.00	1.99	0.01	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2653	787	1720	3435	5	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.09	0.19	0.19	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:		433			157			0			125	
Crit Moves:		****			****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			1 1 0 0 1		
Volume Module:												
Base Vol:	7	300	360	71	463	65	84	91	26	875	51	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	300	360	71	463	65	84	91	26	875	51	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	300	360	71	463	65	84	91	26	875	51	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	300	360	71	463	65	84	91	26	875	51	81
RTOR Reduct:	0	0	360	0	0	65	0	0	7	0	0	71
RTOR Vol:	7	300	0	71	463	0	84	91	19	875	51	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	300	0	71	463	0	84	91	19	875	51	10
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.89	0.11	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2834	182	1650
Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.00	0.04	0.14	0.00	0.05	0.06	0.01	0.31	0.28	0.01
Crit Volume:	7			231			91			463		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.297
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	32	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 3	1	0	1 0 0	1	0	3 0 1	0	1
Volume Module:												
Base Vol:	55	438	3	0	1411	27	23	0	96	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	438	3	0	1411	27	23	0	96	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	438	3	0	1411	27	23	0	96	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	438	3	0	1411	27	23	0	96	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	55	438	3	0	1411	27	23	0	96	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	438	3	0	1411	27	23	0	96	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	3.92	0.08	1.00	0.00	1.00	3.00	1.00	1.00
Final Sat.:	1720	3440	1720	1720	6751	129	1720	0	1720	4489	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.00	0.00	0.21	0.21	0.01	0.00	0.06	0.00	0.00	0.00
Crit Volume:	55				360				96	0		
Crit Moves:	****				****				****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.663
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	68	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	65	354	77	49	1336	342	56	67	121	368	376	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	354	77	49	1336	342	56	67	121	368	376	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	354	77	49	1336	342	56	67	121	368	376	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	354	77	49	1336	342	56	67	121	368	376	88
RTOR Reduct:	0	0	0	0	0	56	0	0	0	0	0	49
RTOR Vol:	65	354	77	49	1336	286	56	67	121	368	376	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	354	77	49	1336	286	56	67	121	368	376	39
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.46	0.54	1.00	2.47	0.53	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	4066	884	1650	4077	873	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.03	0.33	0.33	0.03	0.04	0.07	0.22	0.11	0.02
Crit Volume:	65					541			121	368		
Crit Moves:	****					****			****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.594
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	147	273	163	248	944	478	195	342	33	432	1138	128
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	147	273	163	248	944	478	195	342	33	432	1138	128
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	147	273	163	248	944	478	195	342	33	432	1138	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	273	163	248	944	478	195	342	33	432	1138	128
RTOR Reduct:	0	0	163	0	0	107	0	0	33	0	0	0
RTOR Vol:	147	273	0	248	944	371	195	342	0	432	1138	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	147	273	0	248	944	371	195	342	0	432	1138	128
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.70	0.30
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4450	500
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.00	0.08	0.19	0.22	0.07	0.07	0.00	0.14	0.26	0.26
Crit Volume:	74					371	98					422
Crit Moves:	****					****	****					****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.741
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	92	99	3	123	32	155	113	397	5	2	820	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	99	3	123	32	155	113	397	5	2	820	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	99	3	123	32	155	113	397	5	2	820	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	99	3	123	32	155	113	397	5	2	820	71
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	71
RTOR Vol:	92	99	3	123	32	155	113	397	5	2	820	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	99	3	123	32	155	113	397	5	2	820	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.97	0.03	1.00	0.17	0.83	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1650	1601	49	1650	282	1368	1650	1629	21	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.07	0.11	0.11	0.07	0.24	0.24	0.00	0.50	0.00
Crit Volume:			102			187			113			820
Crit Moves:			****			****			****			****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	83	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	152	0	182	254	331	0	0	842	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	152	0	182	254	331	0	0	842	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	152	0	182	254	331	0	0	842	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	152	0	182	254	331	0	0	842	204
RTOR Reduct:	0	0	0	0	0	182	0	0	0	0	0	152
RTOR Vol:	0	0	0	152	0	0	254	331	0	0	842	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	152	0	0	254	331	0	0	842	52
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.00	0.00	0.15	0.19	0.00	0.00	0.49	0.03
Crit Volume:	0			152			254			842		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec): 100 Critical Vol./Cap.(X): 0.651
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	411	781	337	168	807	286	0	0	0	145	247	194
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	411	781	337	168	807	286	0	0	0	145	247	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	411	781	337	168	807	286	0	0	0	145	247	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	411	781	337	168	807	286	0	0	0	145	247	194
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	168
RTOR Vol:	411	781	337	168	807	286	0	0	0	145	247	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	411	781	337	168	807	286	0	0	0	145	247	26
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.40	0.60	1.00	2.00	1.00	0.00	0.00	0.00	0.37	0.63	1.00
Final Sat.:	3127	2403	1037	1720	3440	1720	0	0	0	636	1084	1720
Capacity Analysis Module:												
Vol/Sat:	0.13	0.33	0.32	0.10	0.23	0.17	0.00	0.00	0.00	0.23	0.23	0.02
Crit Volume:		559		168				0			392	
Crit Moves:		****		****							****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec): 100 Critical Vol./Cap.(X): 0.588
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 55 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	830	130	128	730	0	684	0	853	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	830	130	128	730	0	684	0	853	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	830	130	128	730	0	684	0	853	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	830	130	128	730	0	684	0	853	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	830	130	128	730	0	684	0	853	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	830	130	128	730	0	684	0	853	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.59	0.41	1.00	2.00	0.00	1.33	0.01	1.66	0.00	0.00	0.00
Final Sat.:	0	4461	699	1720	3440	0	2087	0	2603	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.19	0.07	0.21	0.00	0.33	0.00	0.33	0.00	0.00	0.00
Crit Volume:		320		128					512	0		
Crit Moves:		****		****					****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.789
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	137	603	200	441	718	259	219	732	141	123	321	187
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	137	603	200	441	718	259	219	732	141	123	321	187
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	137	603	200	441	718	259	219	732	141	123	321	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	137	603	200	441	718	259	219	732	141	123	321	187
RTOR Reduct:	0	0	123	0	0	219	0	0	0	0	0	187
RTOR Vol:	137	603	77	441	718	40	219	732	141	123	321	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	137	603	77	441	718	40	219	732	141	123	321	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.68	0.32	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2767	533	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.08	0.18	0.05	0.27	0.22	0.02	0.13	0.26	0.26	0.07	0.10	0.00
Crit Volume:		302		441					437	123		
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.525
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	0	576	284	348	402	0	0	0	0	228	0	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	576	284	348	402	0	0	0	0	228	0	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	576	284	348	402	0	0	0	0	228	0	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	576	284	348	402	0	0	0	0	228	0	190
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	190
RTOR Vol:	0	576	284	348	402	0	0	0	0	228	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	576	284	348	402	0	0	0	0	228	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2304	1136	1720	3440	0	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.25	0.20	0.12	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Crit Volume:		430		348				0		114		
Crit Moves:		****		****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec): 100 Critical Vol./Cap.(X): 0.651
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 65 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	34	583	873	88	380	113	56	49	3	331	104	99
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	34	583	873	88	380	113	56	49	3	331	104	99
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	34	583	873	88	380	113	56	49	3	331	104	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	583	873	88	380	113	56	49	3	331	104	99
RTOR Reduct:	0	0	182	0	0	56	0	0	3	0	0	88
RTOR Vol:	34	583	691	88	380	57	56	49	0	331	104	11
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	34	583	691	88	380	57	56	49	0	331	104	11
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 2.00	1.00		1.00 1.00	1.00		1.52 0.48	1.00	
Final Sat.:	1650 3300	1650		1650 3300	1650		1650 1650	1650		2283	789	1650
Capacity Analysis Module:												
Vol/Sat:	0.02 0.18	0.42		0.05 0.12	0.03		0.03 0.03	0.00		0.15 0.13	0.01	
Crit Volume:		691		88			56			218		
Crit Moves:		****		****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec): 100 Critical Vol./Cap.(X): 0.562
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 52 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	49 1754	3		0 566	9		50	0	42	2	0	1
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	49 1754	3		0 566	9		50	0	42	2	0	1
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	49 1754	3		0 566	9		50	0	42	2	0	1
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	49 1754	3		0 566	9		50	0	42	2	0	1
RTOR Reduct:	0 0	1		0 0	0		0	0	0	0	0	0
RTOR Vol:	49 1754	2		0 566	9		50	0	42	2	0	1
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	49 1754	2		0 566	9		50	0	42	2	0	1
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.94	0.06		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1650 3300	1650		1650 6497	103		1650	0	1650	4307 1650	1650	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.53	0.00		0.00 0.09	0.09		0.03 0.00	0.03		0.00 0.00	0.00	
Crit Volume:	877			0			50				1	
Crit Moves:	****			****			****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	142	1177	354	57	389	47	264	292	158	198	128	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	142	1177	354	57	389	47	264	292	158	198	128	41
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	142	1177	354	57	389	47	264	292	158	198	128	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	142	1177	354	57	389	47	264	292	158	198	128	41
RTOR Reduct:	0	0	0	0	0	47	0	0	0	0	0	41
RTOR Vol:	142	1177	354	57	389	0	264	292	158	198	128	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	142	1177	354	57	389	0	264	292	158	198	128	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.31	0.69	1.00	3.00	0.00	1.00	1.30	0.70	1.00	2.00	1.00
Final Sat.:	1650	3805	1145	1650	4950	0	1650	2141	1159	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.31	0.31	0.03	0.08	0.00	0.16	0.14	0.14	0.12	0.04	0.00
Crit Volume:	510			57			225			198		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.650		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	65	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3	0	1	2 0 3	0	1	2 0 3	0	1	2 0 2	1	0
Volume Module:												
Base Vol:	130 1381		530	238	356	191	560	844	26	223	395	125
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130 1381		530	238	356	191	560	844	26	223	395	125
User Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130 1381		530	238	356	191	560	844	26	223	395	125
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130 1381		530	238	356	191	560	844	26	223	395	125
RTOR Reduct:	0	0	123	0	0	191	0	0	26	0	0	0
RTOR Vol:	130 1381		407	238	356	0	560	844	0	223	395	125
PCE Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130 1381		407	238	356	0	560	844	0	223	395	125
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91 1.00		1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00 3.00		1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.28	0.72
Final Sat.:	3000 4950		1650	3000	4950	1650	3000	4950	1650	3000	3760	1190
Capacity Analysis Module:												
Vol/Sat:	0.04 0.28		0.25	0.08	0.07	0.00	0.19	0.17	0.00	0.07	0.11	0.11
Crit Volume:	460			119			280			173		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.675
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	16	38	8	112	74	85	70	860	27	21	466	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	38	8	112	74	85	70	860	27	21	466	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	38	8	112	74	85	70	860	27	21	466	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	38	8	112	74	85	70	860	27	21	466	77
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	77
RTOR Vol:	16	38	8	112	74	85	70	860	27	21	466	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	38	8	112	74	85	70	860	27	21	466	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.83	0.17	1.00	0.47	0.53	1.00	0.97	0.03	1.00	1.00	1.00
Final Sat.:	1650	1363	287	1650	768	882	1650	1600	50	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.07	0.10	0.10	0.04	0.54	0.54	0.01	0.28	0.00
Crit Volume:			46			159			887			21
Crit Moves:			****			****			****			****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.622
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	286	0	249	129	783	0	0	353	174
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	286	0	249	129	783	0	0	353	174
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	286	0	249	129	783	0	0	353	174
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	286	0	249	129	783	0	0	353	174
RTOR Reduct:	0	0	0	0	0	129	0	0	0	0	0	174
RTOR Vol:	0	0	0	286	0	120	129	783	0	0	353	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	286	0	120	129	783	0	0	353	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.07	0.08	0.46	0.00	0.00	0.21	0.00
Crit Volume:	0			286			783			0		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.784		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	105	Level Of Service:	C		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	649	713	156	194	844	378	0	0	0	192	377	262
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	649	713	156	194	844	378	0	0	0	192	377	262
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	649	713	156	194	844	378	0	0	0	192	377	262
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	649	713	156	194	844	378	0	0	0	192	377	262
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	194
RTOR Vol:	649	713	156	194	844	378	0	0	0	192	377	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	649	713	156	194	844	378	0	0	0	192	377	68
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.64	0.36	1.00	2.00	1.00	0.00	0.00	0.00	0.34	0.66	1.00
Final Sat.:	3127	2822	618	1720	3440	1720	0	0	0	580	1140	1720
Capacity Analysis Module:												
Vol/Sat:	0.21	0.25	0.25	0.11	0.25	0.22	0.00	0.00	0.00	0.33	0.33	0.04
Crit Volume:	325			422			0			569		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	58	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	1 0	1 0	2	0 0	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	1038	304	296	774	0	382	0	444	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1038	304	296	774	0	382	0	444	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1038	304	296	774	0	382	0	444	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1038	304	296	774	0	382	0	444	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	1038	304	296	774	0	382	0	444	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1038	304	296	774	0	382	0	444	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.32	0.68	1.00	2.00	0.00	1.39	xxxx	1.61	0.00	0.00	0.00
Final Sat.:	0	3991	1169	1720	3440	0	2169	0	2521	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.17	0.23	0.00	0.18	0.00	0.18	0.00	0.00	0.00
Crit Volume:		447		296					275	0		
Crit Moves:		****		****					****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.673		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	70	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	126	831	104	165	484	244	290	413	87	155	480	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	126	831	104	165	484	244	290	413	87	155	480	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	126	831	104	165	484	244	290	413	87	155	480	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	126	831	104	165	484	244	290	413	87	155	480	260
RTOR Reduct:	0	0	104	0	0	244	0	0	0	0	0	165
RTOR Vol:	126	831	0	165	484	0	290	413	87	155	480	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	126	831	0	165	484	0	290	413	87	155	480	95
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.65	0.35	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2726	574	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.08	0.25	0.00	0.10	0.15	0.00	0.18	0.15	0.15	0.09	0.15	0.06
Crit Volume:		416			165			290			240	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.459
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 42 | Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3	793	198	157	694	1	0	0	0	250	0	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	793	198	157	694	1	0	0	0	250	0	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	793	198	157	694	1	0	0	0	250	0	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	793	198	157	694	1	0	0	0	250	0	135
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	135
RTOR Vol:	3	793	198	157	694	1	0	0	0	250	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	793	198	157	694	1	0	0	0	250	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.99	0.01	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2753	687	1720	3435	5	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.09	0.20	0.20	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:			496	157				0		125		
Crit Moves:			****	****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.541				
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx				
Optimal Cycle:	50	Level Of Service:	A				

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			1 1 0 0 1		
Volume Module:												
Base Vol:	7	436	386	71	508	65	84	91	26	880	51	81
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	7	436	386	71	508	65	84	91	26	880	51	81
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	7	436	386	71	508	65	84	91	26	880	51	81
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	436	386	71	508	65	84	91	26	880	51	81
RTOR Reduct:	0	0	386	0	0	65	0	0	7	0	0	71
RTOR Vol:	7	436	0	71	508	0	84	91	19	880	51	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	7	436	0	71	508	0	84	91	19	880	51	10
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.89	0.11	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2835	181	1650
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.00	0.04	0.15	0.00	0.05	0.06	0.01	0.31	0.28	0.01
Crit Volume:		218			71			91			466	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.534	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	49	Level Of Service:	A	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 2		1 0 2	0 1		1 0 1	0 1		2 0	0 1	1
Volume Module:												
Base Vol:	13	551	0	0	1488	53	162	0	41	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	551	0	0	1488	53	162	0	41	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	551	0	0	1488	53	162	0	41	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	551	0	0	1488	53	162	0	41	0	0	0
RTOR Reduct:	0	0	0	0	0	53	0	0	13	0	0	0
RTOR Vol:	13	551	0	0	1488	0	162	0	28	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	551	0	0	1488	0	162	0	28	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1720	3440	3127	1720	3440	1720	1720	1720	1720	3127	1720	1563
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.00	0.00	0.43	0.00	0.09	0.00	0.02	0.00	0.00	0.00
Crit Volume:	13				744		162				0	
Crit Moves:	****				****		****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.303
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	55	451	3	0	1452	27	23	0	96	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	451	3	0	1452	27	23	0	96	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	55	451	3	0	1452	27	23	0	96	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	55	451	3	0	1452	27	23	0	96	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	55	451	3	0	1452	27	23	0	96	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	55	451	3	0	1452	27	23	0	96	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	3.93	0.07	1.00	0.00	1.00	3.00	1.00	1.00
Final Sat.:	1720	3440	1720	1720	6754	126	1720	0	1720	4489	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.00	0.00	0.21	0.21	0.01	0.00	0.06	0.00	0.00	0.00
Crit Volume:	55				370				96	0		
Crit Moves:	****				****				****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.671
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 69 | Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	65	365	77	49	1371	348	58	67	121	368	376	88
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	365	77	49	1371	348	58	67	121	368	376	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	365	77	49	1371	348	58	67	121	368	376	88
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	365	77	49	1371	348	58	67	121	368	376	88
RTOR Reduct:	0	0	0	0	0	58	0	0	0	0	0	49
RTOR Vol:	65	365	77	49	1371	290	58	67	121	368	376	39
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	65	365	77	49	1371	290	58	67	121	368	376	39
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.48	0.52	1.00	2.48	0.52	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	4088	862	1650	4086	864	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.03	0.34	0.34	0.04	0.04	0.07	0.22	0.11	0.02
Crit Volume:	65					554			121	368		
Crit Moves:	****					****			****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	57	Level Of Service:	A		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	147	280	163	252	967	486	198	342	33	432	1138	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	147	280	163	252	967	486	198	342	33	432	1138	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	147	280	163	252	967	486	198	342	33	432	1138	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	280	163	252	967	486	198	342	33	432	1138	129
RTOR Reduct:	0	0	163	0	0	109	0	0	33	0	0	0
RTOR Vol:	147	280	0	252	967	377	198	342	0	432	1138	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	147	280	0	252	967	377	198	342	0	432	1138	129
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4446	504
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.00	0.08	0.20	0.23	0.07	0.07	0.00	0.14	0.26	0.26
Crit Volume:	74					377	99					422
Crit Moves:	****					****	****					****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Split Phase	Split Phase	Protected	Protected
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 0 1 0	1 0 1 0 1

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	92	99	3	123	32	155	113	423	5	2	825	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	99	3	123	32	155	113	423	5	2	825	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	99	3	123	32	155	113	423	5	2	825	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	99	3	123	32	155	113	423	5	2	825	71
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	71
RTOR Vol:	92	99	3	123	32	155	113	423	5	2	825	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	99	3	123	32	155	113	423	5	2	825	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.97	0.03	1.00	0.17	0.83	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1650	1601	49	1650	282	1368	1650	1631	19	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.07	0.11	0.11	0.07	0.26	0.26	0.00	0.50	0.00
Crit Volume:			102		187		113				825	
Crit Moves:			****		****		****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.734	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	86	Level Of Service:	C	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	152	0	182	264	347	0	0	847	204
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	152	0	182	264	347	0	0	847	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	152	0	182	264	347	0	0	847	204
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	152	0	182	264	347	0	0	847	204
RTOR Reduct:	0	0	0	0	0	182	0	0	0	0	0	152
RTOR Vol:	0	0	0	152	0	0	264	347	0	0	847	52
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	152	0	0	264	347	0	0	847	52
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.00	0.00	0.15	0.20	0.00	0.00	0.49	0.03
Crit Volume:	0			152			264			847		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.667
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	69	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	448	787	337	168	818	286	0	0	0	171	247	194
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	448	787	337	168	818	286	0	0	0	171	247	194
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	448	787	337	168	818	286	0	0	0	171	247	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	448	787	337	168	818	286	0	0	0	171	247	194
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	168
RTOR Vol:	448	787	337	168	818	286	0	0	0	171	247	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	448	787	337	168	818	286	0	0	0	171	247	26
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.40	0.60	1.00	2.00	1.00	0.00	0.00	0.00	0.41	0.59	1.00
Final Sat.:	3127	2409	1031	1720	3440	1720	0	0	0	704	1016	1720
Capacity Analysis Module:												
Vol/Sat:	0.14	0.33	0.33	0.10	0.24	0.17	0.00	0.00	0.00	0.24	0.24	0.02
Crit Volume:			562	168				0			418	
Crit Moves:			****	****							****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	59	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2	1 0	1 0	2	0 0	1 0	1!	0 1	0 0	0	0 0
Volume Module:												
Base Vol:	0	873	145	128	767	0	684	0	916	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0	873	145	128	767	0	684	0	916	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0	873	145	128	767	0	684	0	916	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	873	145	128	767	0	684	0	916	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	873	145	128	767	0	684	0	916	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0	873	145	128	767	0	684	0	916	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	0.91		1.00 1.00	1.00	
Lanes:	0.00 2.57	0.43		1.00 2.00	0.00		1.28 0.01	1.71		0.00 0.00	0.00	
Final Sat.:	0 4425	735		1720 3440	0		2005	0	2685	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.20	0.20		0.07 0.22	0.00		0.34 0.00	0.34		0.00 0.00	0.00	
Crit Volume:		339		128			533				0	
Crit Moves:		****		****			****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	128	Level Of Service:	D	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	149	661	209	441	818	259	219	732	161	138	321	187
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	149	661	209	441	818	259	219	732	161	138	321	187
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	149	661	209	441	818	259	219	732	161	138	321	187
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	149	661	209	441	818	259	219	732	161	138	321	187
RTOR Reduct:	0	0	138	0	0	219	0	0	0	0	0	187
RTOR Vol:	149	661	71	441	818	40	219	732	161	138	321	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	149	661	71	441	818	40	219	732	161	138	321	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.64	0.36	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2705	595	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.20	0.04	0.27	0.25	0.02	0.13	0.27	0.27	0.08	0.10	0.00
Crit Volume:		331			441			447			138	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.548		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	50	Level Of Service:	A		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	0	655	284	348	537	0	0	0	0	228	0	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	655	284	348	537	0	0	0	0	228	0	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	655	284	348	537	0	0	0	0	228	0	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	655	284	348	537	0	0	0	0	228	0	190
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	190
RTOR Vol:	0	655	284	348	537	0	0	0	0	228	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	655	284	348	537	0	0	0	0	228	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.40	0.60	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2400	1040	1720	3440	0	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.20	0.16	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Crit Volume:		470		348				0		114		
Crit Moves:		****		****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1	0	0 1
Volume Module:												
Base Vol:	34	668	889	88	526	113	56	49	3	348	104	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	668	889	88	526	113	56	49	3	348	104	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	668	889	88	526	113	56	49	3	348	104	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	668	889	88	526	113	56	49	3	348	104	99
RTOR Reduct:	0	0	191	0	0	56	0	0	3	0	0	88
RTOR Vol:	34	668	698	88	526	57	56	49	0	348	104	11
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	34	668	698	88	526	57	56	49	0	348	104	11
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.54	0.46	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2310	759	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.42	0.05	0.16	0.03	0.03	0.03	0.00	0.15	0.14	0.01
Crit Volume:			698	88			56			226		
Crit Moves:			****	****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.497	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	45	Level Of Service:	A	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 2		1 0 2	0 1		1 0 1	0 1		2 0	0 1	1
Volume Module:												
Base Vol:	44 1509	0		0 469	174		101	0	26	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	44 1509	0		0 469	174		101	0	26	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	44 1509	0		0 469	174		101	0	26	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	44 1509	0		0 469	174		101	0	26	0	0	0
RTOR Reduct:	0 0	0		0 0	101		0	0	26	0	0	0
RTOR Vol:	44 1509	0		0 469	73		101	0	0	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	44 1509	0		0 469	73		101	0	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	0.91		1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	0.91	
Lanes:	1.00 2.00	2.00		1.00 2.00	1.00		1.00 1.00	1.00		2.00 1.00	1.00	
Final Sat.:	1720 3440	3127		1720 3440	1720		1720 1720	1720		3127 1720	1563	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.44	0.00		0.00 0.14	0.04		0.06 0.00	0.00		0.00 0.00	0.00	
Crit Volume:	755			0			101			0		
Crit Moves:	****			****			****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.576
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	49 1798	3		0 592	9		50 0	42		2 0	1	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	49 1798	3		0 592	9		50 0	42		2 0	1	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	49 1798	3		0 592	9		50 0	42		2 0	1	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	49 1798	3		0 592	9		50 0	42		2 0	1	
RTOR Reduct:	0 0	1		0 0	0		0 0	0		0 0	0	
RTOR Vol:	49 1798	2		0 592	9		50 0	42		2 0	1	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	49 1798	2		0 592	9		50 0	42		2 0	1	
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.94	0.06		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1650 3300	1650		1650 6501	99		1650 0	1650		4307 1650	1650	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.54	0.00		0.00 0.09	0.09		0.03 0.00	0.03		0.00 0.00	0.00	
Crit Volume:	899	0			50						1	
Crit Moves:	****	****			****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.608	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	58	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1 0		1 0 2	1 0		1 0 1	1 0		1 0 2	0 1	
Volume Module:												
Base Vol:	142 1214	354		57 411	51		271 292	158		198 128	41	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	142 1214	354		57 411	51		271 292	158		198 128	41	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	142 1214	354		57 411	51		271 292	158		198 128	41	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	142 1214	354		57 411	51		271 292	158		198 128	41	
RTOR Reduct:	0 0	0		0 0	51		0 0	0		0 0	41	
RTOR Vol:	142 1214	354		57 411	0		271 292	158		198 128	0	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	142 1214	354		57 411	0		271 292	158		198 128	0	
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	1.00 2.32	0.68		1.00 3.00	0.00		1.00 1.30	0.70		1.00 2.00	1.00	
Final Sat.:	1650 3832	1118		1650 4950	0		1650 2141	1159		1650 3300	1650	
Capacity Analysis Module:												
Vol/Sat:	0.09 0.32	0.32		0.03 0.08	0.00		0.16 0.14	0.14		0.12 0.04	0.00	
Crit Volume:	523			57			225			198		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.660		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	67	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	130	1405	530	241	370	196	569	844	26	223	395	129
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1405	530	241	370	196	569	844	26	223	395	129
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1405	530	241	370	196	569	844	26	223	395	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1405	530	241	370	196	569	844	26	223	395	129
RTOR Reduct:	0	0	123	0	0	196	0	0	26	0	0	0
RTOR Vol:	130	1405	407	241	370	0	569	844	0	223	395	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1405	407	241	370	0	569	844	0	223	395	129
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.26	0.74
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	3731	1219
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.25	0.08	0.07	0.00	0.19	0.17	0.00	0.07	0.11	0.11
Crit Volume:		468			121			285				175
Crit Moves:		****			****			****				****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.684
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 72 | Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	16	38	8	112	74	85	70	876	27	21	483	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	16	38	8	112	74	85	70	876	27	21	483	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	16	38	8	112	74	85	70	876	27	21	483	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	16	38	8	112	74	85	70	876	27	21	483	77
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	77
RTOR Vol:	16	38	8	112	74	85	70	876	27	21	483	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	16	38	8	112	74	85	70	876	27	21	483	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.83	0.17	1.00	0.47	0.53	1.00	0.97	0.03	1.00	1.00	1.00
Final Sat.:	1650	1363	287	1650	768	882	1650	1601	49	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.07	0.10	0.10	0.04	0.55	0.55	0.01	0.29	0.00
Crit Volume:			46			159			903			21
Crit Moves:			****			****			****			****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.627	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	61	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	286	0	249	135	793	0	0	370	174
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	286	0	249	135	793	0	0	370	174
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	286	0	249	135	793	0	0	370	174
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	286	0	249	135	793	0	0	370	174
RTOR Reduct:	0	0	0	0	0	135	0	0	0	0	0	174
RTOR Vol:	0	0	0	286	0	114	135	793	0	0	370	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	286	0	114	135	793	0	0	370	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.17	0.00	0.07	0.08	0.46	0.00	0.00	0.22	0.00
Crit Volume:	0			286			793			0		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100			Critical Vol./Cap.(X):			0.628					
Loss Time (sec):	0 (Y+R=4.0 sec)			Average Delay (sec/veh):			xxxxxx					
Optimal Cycle:	61			Level Of Service:			B					

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	486	891	140	62	842	251	0	0	0	110	282	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	486	891	140	62	842	251	0	0	0	110	282	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	486	891	140	62	842	251	0	0	0	110	282	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	486	891	140	62	842	251	0	0	0	110	282	236
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	62
RTOR Vol:	486	891	140	62	842	251	0	0	0	110	282	174
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	486	891	140	62	842	251	0	0	0	110	282	174
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.73	0.27	1.00	2.00	1.00	0.00	0.00	0.00	0.28	0.72	1.00
Final Sat.:	3127	2973	467	1720	3440	1720	0	0	0	483	1237	1720
Capacity Analysis Module:												
Vol/Sat:	0.16	0.30	0.30	0.04	0.24	0.15	0.00	0.00	0.00	0.23	0.23	0.10
Crit Volume:	243				421			0			392	
Crit Moves:	****				****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1174	239		261 661	0		395	3	451	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1174	239		261 661	0		395	3	451	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0 1174	239		261 661	0		395	3	451	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	0 1174	239		261 661	0		395	3	451	0	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0	0	0	0	0
RTOR Vol:	0 1174	239		261 661	0		395	3	451	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0 1174	239		261 661	0		395	3	451	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	0.91		1.00 1.00	1.00	
Lanes:	0.00 2.49	0.51		1.00 2.00	0.00		1.40 0.01	1.59		0.00 0.00	0.00	
Final Sat.:	0 4287	873		1720 3440	0		2182	18	2492	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.27	0.27		0.15 0.19	0.00		0.18 0.16	0.18		0.00 0.00	0.00	
Crit Volume:	471			261				283		0		
Crit Moves:	****			****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	150	772	95	147	598	332	311	411	103	149	492	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	772	95	147	598	332	311	411	103	149	492	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	772	95	147	598	332	311	411	103	149	492	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	772	95	147	598	332	311	411	103	149	492	246
RTOR Reduct:	0	0	95	0	0	311	0	0	0	0	0	147
RTOR Vol:	150	772	0	147	598	21	311	411	103	149	492	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	772	0	147	598	21	311	411	103	149	492	99
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2639	661	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.09	0.18	0.01	0.19	0.16	0.16	0.09	0.15	0.06
Crit Volume:		386			147			311			246	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.479
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	44	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3	840	203	161	720	1	0	0	0	256	0	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	840	203	161	720	1	0	0	0	256	0	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	840	203	161	720	1	0	0	0	256	0	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	840	203	161	720	1	0	0	0	256	0	138
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	138
RTOR Vol:	3	840	203	161	720	1	0	0	0	256	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	840	203	161	720	1	0	0	0	256	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.61	0.39	1.00	1.99	0.01	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2770	670	1720	3435	5	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.09	0.21	0.21	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:			522	161				0		128		
Crit Moves:			****	****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.716
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1	0	0 1
Volume Module:												
Base Vol:	30	250	489	129	750	70	80	60	40	1177	90	248
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	250	489	129	750	70	80	60	40	1177	90	248
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	250	489	129	750	70	80	60	40	1177	90	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	250	489	129	750	70	80	60	40	1177	90	248
RTOR Reduct:	0	0	489	0	0	70	0	0	30	0	0	129
RTOR Vol:	30	250	0	129	750	0	80	60	10	1177	90	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	250	0	129	750	0	80	60	10	1177	90	119
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.86	0.14	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2787	234	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.08	0.00	0.08	0.23	0.00	0.05	0.04	0.01	0.42	0.38	0.07
Crit Volume:	30				375		80			634		
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec): 100 Critical Vol./Cap.(X): 0.317
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 33 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	56	478	3	0	1534	28	24	0	98	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	478	3	0	1534	28	24	0	98	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	478	3	0	1534	28	24	0	98	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	478	3	0	1534	28	24	0	98	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	56	478	3	0	1534	28	24	0	98	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	478	3	0	1534	28	24	0	98	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	3.93	0.07	1.00	0.00	1.00	3.00	1.00	1.00
Final Sat.:	1720	3440	1720	1720	6757	123	1720	0	1720	4489	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.00	0.00	0.23	0.23	0.01	0.00	0.06	0.00	0.00	0.00
Crit Volume:	56				391				98	0		
Crit Moves:	****				****				****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.673
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	141	419	115	76	1187	337	71	100	123	362	499	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	419	115	76	1187	337	71	100	123	362	499	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	419	115	76	1187	337	71	100	123	362	499	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	419	115	76	1187	337	71	100	123	362	499	74
RTOR Reduct:	0	0	0	0	0	71	0	0	0	0	0	74
RTOR Vol:	141	419	115	76	1187	266	71	100	123	362	499	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	419	115	76	1187	266	71	100	123	362	499	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.35	0.65	1.00	2.45	0.55	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	3884	1066	1650	4044	906	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.11	0.05	0.29	0.29	0.04	0.06	0.07	0.22	0.15	0.00
Crit Volume:	141					484			123	362		
Crit Moves:	****					****			****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	151	296	167	263	1015	507	206	351	34	443	1167	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	296	167	263	1015	507	206	351	34	443	1167	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	296	167	263	1015	507	206	351	34	443	1167	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	296	167	263	1015	507	206	351	34	443	1167	134
RTOR Reduct:	0	0	167	0	0	113	0	0	34	0	0	0
RTOR Vol:	151	296	0	263	1015	394	206	351	0	443	1167	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	296	0	263	1015	394	206	351	0	443	1167	134
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4440	510
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.00	0.09	0.21	0.24	0.07	0.07	0.00	0.15	0.26	0.26
Crit Volume:	76					394	103				434	
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.331
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	20	30	20	260	10	106	329	62	10	10	47	1320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	30	20	260	10	106	329	62	10	10	47	1320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	30	20	260	10	106	329	62	10	10	47	1320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	30	20	260	10	106	329	62	10	10	47	1320
RTOR Reduct:	0	0	0	0	0	106	0	0	0	0	0	0
RTOR Vol:	20	30	20	260	10	0	329	62	10	10	47	1320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	30	20	260	10	0	329	62	10	10	47	1320
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.60	0.40	2.00	1.00	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1650	990	660	3000	1650	1650	1650	2842	458	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.09	0.01	0.00	0.20	0.02	0.02	0.01	0.01	0.80
Crit Volume:		50		130			329				24	
Crit Moves:	****			****			****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.815
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	123	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	0	1	0	1 0	0	1	0	1 0	0	1	0	1 0	1	0	1
Volume Module:																
Base Vol:	74	89	5		83	22	147		100	559	7		1	982	107	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	74	89	5		83	22	147		100	559	7		1	982	107	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	74	89	5		83	22	147		100	559	7		1	982	107	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	74	89	5		83	22	147		100	559	7		1	982	107	
RTOR Reduct:	0	0	0		0	0	0		0	0	0		0	0	83	
RTOR Vol:	74	89	5		83	22	147		100	559	7		1	982	24	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	74	89	5		83	22	147		100	559	7		1	982	24	
Saturation Flow Module:																
Sat/Lane:	1650	1650	1650		1650	1650	1650		1650	1650	1650		1650	1650	1650	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	0.95	0.05		1.00	0.13	0.87		1.00	0.99	0.01		1.00	1.00	1.00	
Final Sat.:	1650	1562	88		1650	215	1435		1650	1630	20		1650	1650	1650	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.06	0.06		0.05	0.10	0.10		0.06	0.34	0.34		0.00	0.60	0.01	
Crit Volume:	94						169		100					982		
Crit Moves:	****						****		****					****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	94	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	170	0	187	260	427	0	0	872	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	170	0	187	260	427	0	0	872	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	170	0	187	260	427	0	0	872	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	170	0	187	260	427	0	0	872	252
RTOR Reduct:	0	0	0	0	0	187	0	0	0	0	0	170
RTOR Vol:	0	0	0	170	0	0	260	427	0	0	872	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	170	0	0	260	427	0	0	872	82
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.00	0.15	0.25	0.00	0.00	0.51	0.05
Crit Volume:	0			170			260			872		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	64	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	508	841	362	110	705	258	0	0	0	156	235	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	508	841	362	110	705	258	0	0	0	156	235	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	508	841	362	110	705	258	0	0	0	156	235	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	508	841	362	110	705	258	0	0	0	156	235	221
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	110
RTOR Vol:	508	841	362	110	705	258	0	0	0	156	235	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	508	841	362	110	705	258	0	0	0	156	235	111
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.40	0.60	1.00	2.00	1.00	0.00	0.00	0.00	0.40	0.60	1.00
Final Sat.:	3127	2405	1035	1720	3440	1720	0	0	0	686	1034	1720
Capacity Analysis Module:												
Vol/Sat:	0.16	0.35	0.35	0.06	0.20	0.15	0.00	0.00	0.00	0.23	0.23	0.06
Crit Volume:	602			110			0			391		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	687	642	187	744	0	365	541	300	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	687	642	187	744	0	365	541	300	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	687	642	187	744	0	365	541	300	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	687	642	187	744	0	365	541	300	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	687	642	187	744	0	365	541	300	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	687	642	187	744	0	365	541	300	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3440	1720	1720	3440	0	1563	1720	1563	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.37	0.11	0.22	0.00	0.23	0.31	0.19	0.00	0.00	0.00
Crit Volume:			642	187				541		0		
Crit Moves:			****	****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.708
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	128	687	171	201	639	398	371	473	168	110	506	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	687	171	201	639	398	371	473	168	110	506	168
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	687	171	201	639	398	371	473	168	110	506	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	687	171	201	639	398	371	473	168	110	506	168
RTOR Reduct:	0	0	110	0	0	371	0	0	0	0	0	168
RTOR Vol:	128	687	61	201	639	27	371	473	168	110	506	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	687	61	201	639	27	371	473	168	110	506	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.48	0.52	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2435	865	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.04	0.12	0.19	0.02	0.22	0.19	0.19	0.07	0.15	0.00
Crit Volume:		344			201			371			253	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100			Critical Vol./Cap.(X):			0.538				
Loss Time (sec):	0 (Y+R=4.0 sec)			Average Delay (sec/veh):			xxxxxx				
Optimal Cycle:	49			Level Of Service:			A				

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Protected						Protected					
Rights:	Include						Include						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	1	0	1	1	0		1	0	1	1	0		0	0	0	0	0		2	0	0	0	1	
Volume Module:																								
Base Vol:	0	587		291	357		577		0				0		0				234		0			195
Growth Adj:	1.00	1.00		1.00	1.00		1.00		1.00				1.00		1.00				1.00		1.00			1.00
Initial Bse:	0	587		291	357		577		0				0		0				234		0			195
User Adj:	1.00	1.00		1.00	1.00		1.00		1.00				1.00		1.00				1.00		1.00			1.00
PHF Adj:	1.00	1.00		1.00	1.00		1.00		1.00				1.00		1.00				1.00		1.00			1.00
PHF Volume:	0	587		291	357		577		0				0		0				234		0			195
Reduct Vol:	0	0		0	0		0		0				0		0				0		0			0
Reduced Vol:	0	587		291	357		577		0				0		0				234		0			195
RTOR Reduct:	0	0		0	0		0		0				0		0				0		0			195
RTOR Vol:	0	587		291	357		577		0				0		0				234		0			0
PCE Adj:	1.00	1.00		1.00	1.00		1.00		1.00				1.00		1.00				1.00		1.00			1.00
MLF Adj:	1.00	1.00		1.00	1.00		1.00		1.00				1.00		1.00				1.00		1.00			1.00
FinalVolume:	0	587		291	357		577		0				0		0				234		0			0
Saturation Flow Module:																								
Sat/Lane:	1720	1720		1720	1720		1720		1720				1720		1720				1720		1720			1720
Adjustment:	1.00	1.00		1.00	1.00		1.00		1.00				1.00		1.00				0.91		1.00			1.00
Lanes:	1.00	1.34		0.66	1.00		2.00		0.00				0.00		0.00				2.00		0.00			1.00
Final Sat.:	1720	2300		1140	1720		3440		0				0		0				3127		0			1720
Capacity Analysis Module:																								
Vol/Sat:	0.00	0.26		0.26	0.21		0.17		0.00				0.00		0.00				0.07		0.00			0.00
Crit Volume:				439	357										0				117					
Crit Moves:				****	****														****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.845
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	147	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1	0	0 1
Volume Module:												
Base Vol:	30	730	921	318	300	120	100	60	20	454	100	179
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	730	921	318	300	120	100	60	20	454	100	179
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	730	921	318	300	120	100	60	20	454	100	179
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	730	921	318	300	120	100	60	20	454	100	179
RTOR Reduct:	0	0	250	0	0	100	0	0	20	0	0	179
RTOR Vol:	30	730	671	318	300	20	100	60	0	454	100	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	730	671	318	300	20	100	60	0	454	100	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.64	0.36	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2458	596	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.41	0.19	0.09	0.01	0.06	0.04	0.00	0.18	0.17	0.00
Crit Volume:			671	318			100			277		
Crit Moves:			****	****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	50 1889	3		0 634	9		51	0	43	2	0	1
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	50 1889	3		0 634	9		51	0	43	2	0	1
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	50 1889	3		0 634	9		51	0	43	2	0	1
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	50 1889	3		0 634	9		51	0	43	2	0	1
RTOR Reduct:	0 0	1		0 0	0		0	0	0	0	0	0
RTOR Vol:	50 1889	2		0 634	9		51	0	43	2	0	1
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	50 1889	2		0 634	9		51	0	43	2	0	1
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.94	0.06		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1650 3300	1650		1650 6508	92		1650	0	1650	4307 1650	1650	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.57	0.00		0.00 0.10	0.10		0.03 0.00	0.03		0.00 0.00	0.00	
Crit Volume:	945			0			51				1	
Crit Moves:	****			****			****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	133 1535	412		107 485	78		373 334	148		193 114	39	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	133 1535	412		107 485	78		373 334	148		193 114	39	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	133 1535	412		107 485	78		373 334	148		193 114	39	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	133 1535	412		107 485	78		373 334	148		193 114	39	
RTOR Reduct:	0 0	0		0 0	78		0 0	0		0 0	39	
RTOR Vol:	133 1535	412		107 485	0		373 334	148		193 114	0	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	133 1535	412		107 485	0		373 334	148		193 114	0	
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	1.00 2.37	0.63		1.00 3.00	0.00		1.00 1.39	0.61		1.00 2.00	1.00	
Final Sat.:	1650 3903	1047		1650 4950	0		1650 2287	1013		1650 3300	1650	
Capacity Analysis Module:												
Vol/Sat:	0.08 0.39	0.39		0.06 0.10	0.00		0.23 0.15	0.15		0.12 0.03	0.00	
Crit Volume:	649			107			241			193		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.686				
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx				
Optimal Cycle:	73	Level Of Service:	B				

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	133	1466	543	249	395	207	592	865	27	229	405	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	1466	543	249	395	207	592	865	27	229	405	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	1466	543	249	395	207	592	865	27	229	405	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	1466	543	249	395	207	592	865	27	229	405	137
RTOR Reduct:	0	0	126	0	0	207	0	0	27	0	0	0
RTOR Vol:	133	1466	417	249	395	0	592	865	0	229	405	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	1466	417	249	395	0	592	865	0	229	405	137
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.24	0.76
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	3699	1251
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.25	0.08	0.08	0.00	0.20	0.17	0.00	0.08	0.11	0.11
Crit Volume:		489			125			296				181
Crit Moves:		****			****			****				****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	20	20	10	1370	10	325	201	93	0	10	53	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	20	10	1370	10	325	201	93	0	10	53	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	20	10	1370	10	325	201	93	0	10	53	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	20	10	1370	10	325	201	93	0	10	53	330
RTOR Reduct:	0	0	0	0	0	201	0	0	0	0	0	0
RTOR Vol:	20	20	10	1370	10	124	201	93	0	10	53	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	20	10	1370	10	124	201	93	0	10	53	330
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.67	0.33	2.00	1.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	1650	1100	550	3000	1650	1650	1650	3300	0	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.46	0.01	0.08	0.12	0.03	0.00	0.01	0.02	0.20
Crit Volume:		30			685			201			27	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.784
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	106	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	14	43	4	54	80	95	72	1036	29	7	651	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	43	4	54	80	95	72	1036	29	7	651	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	43	4	54	80	95	72	1036	29	7	651	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	43	4	54	80	95	72	1036	29	7	651	80
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	54
RTOR Vol:	14	43	4	54	80	95	72	1036	29	7	651	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	43	4	54	80	95	72	1036	29	7	651	26
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.91	0.09	1.00	0.46	0.54	1.00	0.97	0.03	1.00	1.00	1.00
Final Sat.:	1650	1510	140	1650	754	896	1650	1605	45	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.11	0.11	0.04	0.65	0.65	0.00	0.39	0.02
Crit Volume:			47			175			1065			7
Crit Moves:			****			****			****			****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	98	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	339	0	255	132	979	0	0	525	205
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	339	0	255	132	979	0	0	525	205
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	339	0	255	132	979	0	0	525	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	339	0	255	132	979	0	0	525	205
RTOR Reduct:	0	0	0	0	0	132	0	0	0	0	0	205
RTOR Vol:	0	0	0	339	0	123	132	979	0	0	525	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	339	0	123	132	979	0	0	525	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.07	0.08	0.57	0.00	0.00	0.31	0.00
Crit Volume:	0			339			979			0		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.652
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	545	901	140	62	845	251	0	0	0	118	282	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	545	901	140	62	845	251	0	0	0	118	282	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	545	901	140	62	845	251	0	0	0	118	282	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	545	901	140	62	845	251	0	0	0	118	282	236
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	62
RTOR Vol:	545	901	140	62	845	251	0	0	0	118	282	174
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	545	901	140	62	845	251	0	0	0	118	282	174
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.73	0.27	1.00	2.00	1.00	0.00	0.00	0.00	0.30	0.70	1.00
Final Sat.:	3127	2977	463	1720	3440	1720	0	0	0	507	1213	1720
Capacity Analysis Module:												
Vol/Sat:	0.17	0.30	0.30	0.04	0.25	0.15	0.00	0.00	0.00	0.23	0.23	0.10
Crit Volume:	273			422			0			400		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.629
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1243	264		261 672	0		395	3	471	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1243	264		261 672	0		395	3	471	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0 1243	264		261 672	0		395	3	471	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	0 1243	264		261 672	0		395	3	471	0	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0	0	0	0	0
RTOR Vol:	0 1243	264		261 672	0		395	3	471	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0 1243	264		261 672	0		395	3	471	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	0.91		1.00 1.00	1.00	
Lanes:	0.00 2.47	0.53		1.00 2.00	0.00		1.36 0.01	1.63		0.00 0.00	0.00	
Final Sat.:	0 4256	904		1720 3440	0		2132	18	2542	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.29	0.29		0.15 0.20	0.00		0.19 0.17	0.19		0.00 0.00	0.00	
Crit Volume:	502			261			290			0		
Crit Moves:	****			****			****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.689
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	168	866	109	147	629	332	311	411	109	154	492	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	866	109	147	629	332	311	411	109	154	492	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	866	109	147	629	332	311	411	109	154	492	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	866	109	147	629	332	311	411	109	154	492	246
RTOR Reduct:	0	0	109	0	0	311	0	0	0	0	0	147
RTOR Vol:	168	866	0	147	629	21	311	411	109	154	492	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	168	866	0	147	629	21	311	411	109	154	492	99
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.58	0.42	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2608	692	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.10	0.26	0.00	0.09	0.19	0.01	0.19	0.16	0.16	0.09	0.15	0.06
Crit Volume:		433			147			311			246	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.515
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	47	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3	966	203	161	762	1	0	0	0	256	0	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	966	203	161	762	1	0	0	0	256	0	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	966	203	161	762	1	0	0	0	256	0	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	966	203	161	762	1	0	0	0	256	0	138
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	138
RTOR Vol:	3	966	203	161	762	1	0	0	0	256	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	966	203	161	762	1	0	0	0	256	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.65	0.35	1.00	1.99	0.01	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2843	597	1720	3435	5	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.34	0.34	0.09	0.22	0.22	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:		585		161				0		128		
Crit Moves:		****		****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.732
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	30	386	515	129	795	70	80	60	40	1182	90	248
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	386	515	129	795	70	80	60	40	1182	90	248
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	386	515	129	795	70	80	60	40	1182	90	248
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	386	515	129	795	70	80	60	40	1182	90	248
RTOR Reduct:	0	0	515	0	0	70	0	0	30	0	0	129
RTOR Vol:	30	386	0	129	795	0	80	60	10	1182	90	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	386	0	129	795	0	80	60	10	1182	90	119
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.86	0.14	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2787	233	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.00	0.08	0.24	0.00	0.05	0.04	0.01	0.42	0.39	0.07
Crit Volume:	30				398		80			636		
Crit Moves:	****				****		****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.615
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	2	1 0 2	0	1	1 0 1	0	1	2 0 0	1	1
Volume Module:												
Base Vol:	13	699	0	0	1767	53	162	0	41	0	0	0
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	699	0	0	1767	53	162	0	41	0	0	0
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	699	0	0	1767	53	162	0	41	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	699	0	0	1767	53	162	0	41	0	0	0
RTOR Reduct:	0	0	0	0	0	53	0	0	13	0	0	0
RTOR Vol:	13	699	0	0	1767	0	162	0	28	0	0	0
PCE Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	699	0	0	1767	0	162	0	28	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720	1720	1720	1720	1720	1720 1720	1720	1720	1720	1720	1720
Adjustment:	1.00 1.00	0.91	1.00	1.00	1.00	1.00	1.00 1.00	1.00	0.91	1.00	0.91	
Lanes:	1.00 2.00	2.00	1.00	2.00	1.00	1.00 1.00	1.00	2.00	1.00	1.00		
Final Sat.:	1720 3440	3127	1720	3440	1720	1720 1720	1720	3127	1720	1563		
Capacity Analysis Module:												
Vol/Sat:	0.01 0.20	0.00	0.00	0.51	0.00	0.09 0.00	0.02	0.00	0.00	0.00		
Crit Volume:	13			884		162			0			
Crit Moves:	****			****		****						

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.323
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	56 491	3		0 1575	28		24	0		98	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	56 491	3		0 1575	28		24	0		98	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	56 491	3		0 1575	28		24	0		98	0	0
Reduct Vol:	0 0	0		0 0	0		0	0		0	0	0
Reduced Vol:	56 491	3		0 1575	28		24	0		98	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0		0	0	0
RTOR Vol:	56 491	3		0 1575	28		24	0		98	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	56 491	3		0 1575	28		24	0		98	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.93	0.07		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1720 3440	1720		1720 6760	120		1720 0	1720		4489 1720	1720	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.14	0.00		0.00 0.23	0.23		0.01 0.00	0.06		0.00 0.00	0.00	
Crit Volume:	56				401			98		0		
Crit Moves:	****				****			****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	141	430	115	76	1222	343	73	100	123	362	499	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	430	115	76	1222	343	73	100	123	362	499	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	430	115	76	1222	343	73	100	123	362	499	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	430	115	76	1222	343	73	100	123	362	499	74
RTOR Reduct:	0	0	0	0	0	73	0	0	0	0	0	74
RTOR Vol:	141	430	115	76	1222	270	73	100	123	362	499	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	430	115	76	1222	270	73	100	123	362	499	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.37	0.63	1.00	2.46	0.54	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	3906	1044	1650	4054	896	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.11	0.05	0.30	0.30	0.04	0.06	0.07	0.22	0.15	0.00
Crit Volume:	141				497				123	362		
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	61	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	151	303	167	267	1038	515	209	351	34	443	1167	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	303	167	267	1038	515	209	351	34	443	1167	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	303	167	267	1038	515	209	351	34	443	1167	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	303	167	267	1038	515	209	351	34	443	1167	135
RTOR Reduct:	0	0	167	0	0	115	0	0	34	0	0	0
RTOR Vol:	151	303	0	267	1038	400	209	351	0	443	1167	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	303	0	267	1038	400	209	351	0	443	1167	135
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4437	513
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.00	0.09	0.21	0.24	0.07	0.07	0.00	0.15	0.26	0.26
Crit Volume:	76					400	105				434	
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.331
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	20	30	20	260	10	106	329	62	10	10	47	1320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	30	20	260	10	106	329	62	10	10	47	1320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	30	20	260	10	106	329	62	10	10	47	1320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	30	20	260	10	106	329	62	10	10	47	1320
RTOR Reduct:	0	0	0	0	0	106	0	0	0	0	0	0
RTOR Vol:	20	30	20	260	10	0	329	62	10	10	47	1320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	30	20	260	10	0	329	62	10	10	47	1320
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.60	0.40	2.00	1.00	1.00	1.00	1.72	0.28	1.00	2.00	1.00
Final Sat.:	1650	990	660	3000	1650	1650	1650	2842	458	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.09	0.01	0.00	0.20	0.02	0.02	0.01	0.01	0.80
Crit Volume:		50		130			329				24	
Crit Moves:	****			****			****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.818
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	125	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 0	1	0	1	0 0	1	0	1	0 0	1	0	1	0	1	
Volume Module:																
Base Vol:	74	89	5		83	22	147		100	585	7		1	987	107	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	74	89	5		83	22	147		100	585	7		1	987	107	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	74	89	5		83	22	147		100	585	7		1	987	107	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	74	89	5		83	22	147		100	585	7		1	987	107	
RTOR Reduct:	0	0	0		0	0	0		0	0	0		0	0	83	
RTOR Vol:	74	89	5		83	22	147		100	585	7		1	987	24	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	74	89	5		83	22	147		100	585	7		1	987	24	
Saturation Flow Module:																
Sat/Lane:	1650	1650	1650		1650	1650	1650		1650	1650	1650		1650	1650	1650	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	0.95	0.05		1.00	0.13	0.87		1.00	0.99	0.01		1.00	1.00	1.00	
Final Sat.:	1650	1562	88		1650	215	1435		1650	1630	20		1650	1650	1650	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.06	0.06		0.05	0.10	0.10		0.06	0.36	0.36		0.00	0.60	0.01	
Crit Volume:		94					169		100					987		
Crit Moves:		****					****		****					****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.766
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 97 | Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	170	0	187	270	443	0	0	877	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	170	0	187	270	443	0	0	877	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	170	0	187	270	443	0	0	877	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	170	0	187	270	443	0	0	877	252
RTOR Reduct:	0	0	0	0	0	187	0	0	0	0	0	170
RTOR Vol:	0	0	0	170	0	0	270	443	0	0	877	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	170	0	0	270	443	0	0	877	82
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.00	0.16	0.26	0.00	0.00	0.51	0.05
Crit Volume:	0			170			270			877		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.658		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	67	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	545	847	362	110	716	258	0	0	0	182	235	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	545	847	362	110	716	258	0	0	0	182	235	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	545	847	362	110	716	258	0	0	0	182	235	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	545	847	362	110	716	258	0	0	0	182	235	221
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	110
RTOR Vol:	545	847	362	110	716	258	0	0	0	182	235	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	545	847	362	110	716	258	0	0	0	182	235	111
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.40	0.60	1.00	2.00	1.00	0.00	0.00	0.00	0.44	0.56	1.00
Final Sat.:	3127	2410	1030	1720	3440	1720	0	0	0	751	969	1720
Capacity Analysis Module:												
Vol/Sat:	0.17	0.35	0.35	0.06	0.21	0.15	0.00	0.00	0.00	0.24	0.24	0.06
Crit Volume:			605	110				0			417	
Crit Moves:			****	****							****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.805
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	117	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 730	657		187 781		0	365 541		363	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	0 730	657		187 781		0	365 541		363	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	0 730	657		187 781		0	365 541		363	0	0	0
Reduct Vol:	0 0	0		0 0		0	0 0		0	0	0	0
Reduced Vol:	0 730	657		187 781		0	365 541		363	0	0	0
RTOR Reduct:	0 0	0		0 0		0	0 0		0	0	0	0
RTOR Vol:	0 730	657		187 781		0	365 541		363	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00	1.00		1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	0 730	657		187 781		0	365 541		363	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720		1720	1720 1720		1720	1720 1720		1720
Adjustment:	1.00 1.00	1.00		1.00 1.00		1.00	0.91 1.00		0.91	1.00 1.00		1.00
Lanes:	0.00 2.00	1.00		1.00 2.00		0.00	1.00 1.00		1.00	0.00 0.00		0.00
Final Sat.:	0 3440	1720		1720 3440		0	1563 1720		1563	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.21	0.38		0.11 0.23		0.00	0.23 0.31		0.23	0.00 0.00		0.00
Crit Volume:		657		187			541			0		
Crit Moves:		****		****			****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	83	Level Of Service:	C		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	140	745	180	201	739	398	371	473	188	125	506	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	745	180	201	739	398	371	473	188	125	506	168
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	745	180	201	739	398	371	473	188	125	506	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	745	180	201	739	398	371	473	188	125	506	168
RTOR Reduct:	0	0	125	0	0	371	0	0	0	0	0	168
RTOR Vol:	140	745	55	201	739	27	371	473	188	125	506	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	745	55	201	739	27	371	473	188	125	506	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.43	0.57	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2361	939	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.03	0.12	0.22	0.02	0.22	0.20	0.20	0.08	0.15	0.00
Crit Volume:	373			201			371			253		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.561
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	52	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	0	666	291	357	712	0	0	0	0	234	0	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	666	291	357	712	0	0	0	0	234	0	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	666	291	357	712	0	0	0	0	234	0	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	666	291	357	712	0	0	0	0	234	0	195
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	195
RTOR Vol:	0	666	291	357	712	0	0	0	0	234	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	666	291	357	712	0	0	0	0	234	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.39	0.61	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2394	1046	1720	3440	0	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.28	0.21	0.21	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Crit Volume:		479		357				0		117		
Crit Moves:		****		****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.855
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	157	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			1 1 0 0 1		
Volume Module:												
Base Vol:	30	815	937	318	446	120	100	60	20	471	100	179
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	815	937	318	446	120	100	60	20	471	100	179
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	815	937	318	446	120	100	60	20	471	100	179
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	815	937	318	446	120	100	60	20	471	100	179
RTOR Reduct:	0	0	259	0	0	100	0	0	20	0	0	179
RTOR Vol:	30	815	678	318	446	20	100	60	0	471	100	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	815	678	318	446	20	100	60	0	471	100	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.65	0.35	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2474	578	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.25	0.41	0.19	0.14	0.01	0.06	0.04	0.00	0.19	0.17	0.00
Crit Volume:			678	318			100			286		
Crit Moves:			****	****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Ignore				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	2 0	2		1 0	2 0	1		1 0	1 0	1		2 0	0 1	1	
Volume Module:																
Base Vol:	44	1701	0		0	854	174		101	0	26		0	0	0	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	44	1701	0		0	854	174		101	0	26		0	0	0	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	44	1701	0		0	854	174		101	0	26		0	0	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	44	1701	0		0	854	174		101	0	26		0	0	0	
RTOR Reduct:	0	0	0		0	0	101		0	0	26		0	0	0	
RTOR Vol:	44	1701	0		0	854	73		101	0	0		0	0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	44	1701	0		0	854	73		101	0	0		0	0	0	
Saturation Flow Module:																
Sat/Lane:	1720	1720	1720		1720	1720	1720		1720	1720	1720		1720	1720	1720	
Adjustment:	1.00	1.00	0.91		1.00	1.00	1.00		1.00	1.00	1.00		0.91	1.00	0.91	
Lanes:	1.00	2.00	2.00		1.00	2.00	1.00		1.00	1.00	1.00		2.00	1.00	1.00	
Final Sat.:	1720	3440	3127		1720	3440	1720		1720	1720	1720		3127	1720	1563	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.49	0.00		0.00	0.25	0.04		0.06	0.00	0.00		0.00	0.00	0.00	
Crit Volume:		851				0				101				0		
Crit Moves:		****				****				****						

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.617
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 3 1 0			1 0 0 1 0			3 0 1 0 1		
Volume Module:												
Base Vol:	50 1933	3	0	660	9	51	0	43	2	0	1	
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	50 1933	3	0	660	9	51	0	43	2	0	1	
User Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	50 1933	3	0	660	9	51	0	43	2	0	1	
Reduct Vol:	0 0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	50 1933	3	0	660	9	51	0	43	2	0	1	
RTOR Reduct:	0 0	1	0	0	0	0	0	0	0	0	0	
RTOR Vol:	50 1933	2	0	660	9	51	0	43	2	0	1	
PCE Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	50 1933	2	0	660	9	51	0	43	2	0	1	
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	
Adjustment:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00
Lanes:	1.00 2.00	1.00	1.00	3.95	0.05	1.00	0.00	1.00	3.00	1.00	1.00	
Final Sat.:	1650 3300	1650	1650	6511	89	1650	0	1650	4307	1650	1650	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.59	0.00	0.00	0.10	0.10	0.03	0.00	0.03	0.00	0.00	0.00	
Crit Volume:	967		0			51					1	
Crit Moves:	****		****			****					****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	133 1572	412		107 507	82		380 334	148		193 114	39	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	133 1572	412		107 507	82		380 334	148		193 114	39	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	133 1572	412		107 507	82		380 334	148		193 114	39	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	133 1572	412		107 507	82		380 334	148		193 114	39	
RTOR Reduct:	0 0	0		0 0	82		0 0	0		0 0	39	
RTOR Vol:	133 1572	412		107 507	0		380 334	148		193 114	0	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	133 1572	412		107 507	0		380 334	148		193 114	0	
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	1.00 2.38	0.62		1.00 3.00	0.00		1.00 1.39	0.61		1.00 2.00	1.00	
Final Sat.:	1650 3922	1028		1650 4950	0		1650 2287	1013		1650 3300	1650	
Capacity Analysis Module:												
Vol/Sat:	0.08 0.40	0.40		0.06 0.10	0.00		0.23 0.15	0.15		0.12 0.03	0.00	
Crit Volume:	661			107			241			193		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.696	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	75	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3	0	1	2 0 3	0	1	2 0 3	0	1	2 0 2	1	0
Volume Module:												
Base Vol:	133 1490		543	252	409	212	601	865	27	229	405	141
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133 1490		543	252	409	212	601	865	27	229	405	141
User Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133 1490		543	252	409	212	601	865	27	229	405	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133 1490		543	252	409	212	601	865	27	229	405	141
RTOR Reduct:	0	0	126	0	0	212	0	0	27	0	0	0
RTOR Vol:	133 1490		417	252	409	0	601	865	0	229	405	141
PCE Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133 1490		417	252	409	0	601	865	0	229	405	141
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91 1.00		1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00 3.00		1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.23	0.77
Final Sat.:	3000 4950		1650	3000	4950	1650	3000	4950	1650	3000	3672	1278
Capacity Analysis Module:												
Vol/Sat:	0.04 0.30		0.25	0.08	0.08	0.00	0.20	0.17	0.00	0.08	0.11	0.11
Crit Volume:	497			126			301					182
Crit Moves:	****			****			****					****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.613	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	59	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	20	20	10	1370	10	325	201	93	0	10	53	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	20	10	1370	10	325	201	93	0	10	53	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	20	10	1370	10	325	201	93	0	10	53	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	20	10	1370	10	325	201	93	0	10	53	330
RTOR Reduct:	0	0	0	0	0	201	0	0	0	0	0	0
RTOR Vol:	20	20	10	1370	10	124	201	93	0	10	53	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	20	10	1370	10	124	201	93	0	10	53	330
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.67	0.33	2.00	1.00	1.00	1.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	1650	1100	550	3000	1650	1650	1650	3300	0	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.02	0.02	0.46	0.01	0.08	0.12	0.03	0.00	0.01	0.02	0.20
Crit Volume:		30			685			201			27	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.794
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	111	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	14	43	4	54	80	95	72	1052	29	7	668	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	43	4	54	80	95	72	1052	29	7	668	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	43	4	54	80	95	72	1052	29	7	668	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	43	4	54	80	95	72	1052	29	7	668	80
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	54
RTOR Vol:	14	43	4	54	80	95	72	1052	29	7	668	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	43	4	54	80	95	72	1052	29	7	668	26
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.91	0.09	1.00	0.46	0.54	1.00	0.97	0.03	1.00	1.00	1.00
Final Sat.:	1650	1510	140	1650	754	896	1650	1606	44	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.11	0.11	0.04	0.66	0.66	0.00	0.40	0.02
Crit Volume:			47		175			1081			7	
Crit Moves:			****		****			****		****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	100	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	339	0	255	138	989	0	0	542	205
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	339	0	255	138	989	0	0	542	205
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	339	0	255	138	989	0	0	542	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	339	0	255	138	989	0	0	542	205
RTOR Reduct:	0	0	0	0	0	138	0	0	0	0	0	205
RTOR Vol:	0	0	0	339	0	117	138	989	0	0	542	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	339	0	117	138	989	0	0	542	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.07	0.08	0.57	0.00	0.00	0.32	0.00
Crit Volume:	0			339			989			0		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.628		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	61	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	486	891	140	62	842	251	0	0	0	110	282	236
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	486	891	140	62	842	251	0	0	0	110	282	236
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	486	891	140	62	842	251	0	0	0	110	282	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	486	891	140	62	842	251	0	0	0	110	282	236
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	62
RTOR Vol:	486	891	140	62	842	251	0	0	0	110	282	174
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	486	891	140	62	842	251	0	0	0	110	282	174
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.73	0.27	1.00	2.00	1.00	0.00	0.00	0.00	0.28	0.72	1.00
Final Sat.:	3127	2973	467	1720	3440	1720	0	0	0	483	1237	1720
Capacity Analysis Module:												
Vol/Sat:	0.16	0.30	0.30	0.04	0.24	0.15	0.00	0.00	0.00	0.23	0.23	0.10
Crit Volume:	243				421			0			392	
Crit Moves:	****				****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.607
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1174		239	261	661	0	395	3	451	0	0	0
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0 1174		239	261	661	0	395	3	451	0	0	0
User Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0 1174		239	261	661	0	395	3	451	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0 1174		239	261	661	0	395	3	451	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0 1174		239	261	661	0	395	3	451	0	0	0
PCE Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0 1174		239	261	661	0	395	3	451	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720		1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00 1.00		1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00 2.49		0.51	1.00	2.00	0.00	1.40	0.01	1.59	0.00	0.00	0.00
Final Sat.:	0 4287		873	1720	3440	0	2182	18	2492	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.27		0.27	0.15	0.19	0.00	0.18	0.16	0.18	0.00	0.00	0.00
Crit Volume:	471			261					283	0		
Crit Moves:	****			****					****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	67	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	150	772	95	147	598	332	311	411	103	149	492	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	772	95	147	598	332	311	411	103	149	492	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	772	95	147	598	332	311	411	103	149	492	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	772	95	147	598	332	311	411	103	149	492	246
RTOR Reduct:	0	0	95	0	0	311	0	0	0	0	0	147
RTOR Vol:	150	772	0	147	598	21	311	411	103	149	492	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	772	0	147	598	21	311	411	103	149	492	99
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.60	0.40	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2639	661	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.00	0.09	0.18	0.01	0.19	0.16	0.16	0.09	0.15	0.06
Crit Volume:		386			147			311			246	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.435
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	40	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3	690	203	161	600	1	0	0	0	256	0	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	690	203	161	600	1	0	0	0	256	0	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	690	203	161	600	1	0	0	0	256	0	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	690	203	161	600	1	0	0	0	256	0	138
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	138
RTOR Vol:	3	690	203	161	600	1	0	0	0	256	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	690	203	161	600	1	0	0	0	256	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	1.99	0.01	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2658	782	1720	3434	6	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.09	0.17	0.17	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:			447	161				0		128		
Crit Moves:			****	****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.400
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1	0	0 1
Volume Module:												
Base Vol:	30 254		290	78 451		30	80 70		40	460 130		304
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	30 254		290	78 451		30	80 70		40	460 130		304
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	30 254		290	78 451		30	80 70		40	460 130		304
Reduct Vol:	0 0		0	0 0		0	0 0		0	0 0		0
Reduced Vol:	30 254		290	78 451		30	80 70		40	460 130		304
RTOR Reduct:	0 0		253	0 0		30	0 0		30	0 0		78
RTOR Vol:	30 254		37	78 451		0	80 70		10	460 130		226
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	30 254		37	78 451		0	80 70		10	460 130		226
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650 1650		1650	1650 1650		1650	1650 1650		1650
Adjustment:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	0.91 1.00		1.00
Lanes:	1.00 2.00		1.00	1.00 2.00		1.00	1.00 1.00		1.00	1.56 0.44		1.00
Final Sat.:	1650 3300		1650	1650 3300		1650	1650 1650		1650	2339 727		1650
Capacity Analysis Module:												
Vol/Sat:	0.02 0.08		0.02	0.05 0.14		0.00	0.05 0.04		0.01	0.20 0.18		0.14
Crit Volume:	30			226			80			295		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.317
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	56	478	3	0	1534	28	24	0	98	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	56	478	3	0	1534	28	24	0	98	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	56	478	3	0	1534	28	24	0	98	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	56	478	3	0	1534	28	24	0	98	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	56	478	3	0	1534	28	24	0	98	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	56	478	3	0	1534	28	24	0	98	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	3.93	0.07	1.00	0.00	1.00	3.00	1.00	1.00
Final Sat.:	1720	3440	1720	1720	6757	123	1720	0	1720	4489	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.00	0.00	0.23	0.23	0.01	0.00	0.06	0.00	0.00	0.00
Crit Volume:	56				391				98	0		
Crit Moves:	****				****				****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.673
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	70	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	141	419	115	76	1188	337	71	100	123	362	499	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	419	115	76	1188	337	71	100	123	362	499	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	419	115	76	1188	337	71	100	123	362	499	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	419	115	76	1188	337	71	100	123	362	499	74
RTOR Reduct:	0	0	0	0	0	71	0	0	0	0	0	74
RTOR Vol:	141	419	115	76	1188	266	71	100	123	362	499	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	419	115	76	1188	266	71	100	123	362	499	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.35	0.65	1.00	2.45	0.55	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	3884	1066	1650	4044	906	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.11	0.05	0.29	0.29	0.04	0.06	0.07	0.22	0.15	0.00
Crit Volume:	141				485				123	362		
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.620
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	151	296	167	263	1016	507	206	351	34	443	1167	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	296	167	263	1016	507	206	351	34	443	1167	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	296	167	263	1016	507	206	351	34	443	1167	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	296	167	263	1016	507	206	351	34	443	1167	134
RTOR Reduct:	0	0	167	0	0	113	0	0	34	0	0	0
RTOR Vol:	151	296	0	263	1016	394	206	351	0	443	1167	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	296	0	263	1016	394	206	351	0	443	1167	134
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4440	510
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.00	0.09	0.21	0.24	0.07	0.07	0.00	0.15	0.26	0.26
Crit Volume:	76					394	103				434	
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.554
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	51	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	40	10	20	190	10	252	241	332	10	10	1077	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	10	20	190	10	252	241	332	10	10	1077	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	10	20	190	10	252	241	332	10	10	1077	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	10	20	190	10	252	241	332	10	10	1077	360
RTOR Reduct:	0	0	0	0	0	241	0	0	0	0	0	0
RTOR Vol:	40	10	20	190	10	11	241	332	10	10	1077	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	10	20	190	10	11	241	332	10	10	1077	360
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.33	0.67	2.00	1.00	1.00	1.00	1.94	0.06	1.00	2.00	1.00
Final Sat.:	1650	550	1100	3000	1650	1650	1650	3204	96	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.01	0.01	0.15	0.10	0.10	0.01	0.33	0.22
Crit Volume:		30			95			241			539	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.578
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	74	89	5	83	22	147	100	436	7	1	591	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	74	89	5	83	22	147	100	436	7	1	591	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	74	89	5	83	22	147	100	436	7	1	591	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	74	89	5	83	22	147	100	436	7	1	591	107
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	83
RTOR Vol:	74	89	5	83	22	147	100	436	7	1	591	24
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	74	89	5	83	22	147	100	436	7	1	591	24
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	1.00	0.13	0.87	1.00	0.98	0.02	1.00	1.00	1.00
Final Sat.:	1650	1562	88	1650	215	1435	1650	1624	26	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.05	0.10	0.10	0.06	0.27	0.27	0.00	0.36	0.01
Crit Volume:		94				169	100				591	
Crit Moves:		****				****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.530
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	48	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	170	0	187	260	380	0	0	481	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	170	0	187	260	380	0	0	481	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	170	0	187	260	380	0	0	481	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	170	0	187	260	380	0	0	481	252
RTOR Reduct:	0	0	0	0	0	187	0	0	0	0	0	170
RTOR Vol:	0	0	0	170	0	0	260	380	0	0	481	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	170	0	0	260	380	0	0	481	82
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.00	0.15	0.22	0.00	0.00	0.28	0.05
Crit Volume:	0			170			260			481		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	64	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	508	841	362	110	705	258	0	0	0	156	235	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	508	841	362	110	705	258	0	0	0	156	235	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	508	841	362	110	705	258	0	0	0	156	235	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	508	841	362	110	705	258	0	0	0	156	235	221
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	110
RTOR Vol:	508	841	362	110	705	258	0	0	0	156	235	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	508	841	362	110	705	258	0	0	0	156	235	111
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.40	0.60	1.00	2.00	1.00	0.00	0.00	0.00	0.40	0.60	1.00
Final Sat.:	3127	2405	1035	1720	3440	1720	0	0	0	686	1034	1720
Capacity Analysis Module:												
Vol/Sat:	0.16	0.35	0.35	0.06	0.20	0.15	0.00	0.00	0.00	0.23	0.23	0.06
Crit Volume:	602			110			0			391		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.797
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	112	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	687	642	187	744	0	365	541	300	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	687	642	187	744	0	365	541	300	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	687	642	187	744	0	365	541	300	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	687	642	187	744	0	365	541	300	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	687	642	187	744	0	365	541	300	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	687	642	187	744	0	365	541	300	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3440	1720	1720	3440	0	1563	1720	1563	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.37	0.11	0.22	0.00	0.23	0.31	0.19	0.00	0.00	0.00
Crit Volume:			642	187				541		0		
Crit Moves:			****	****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.708
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	78	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	128	687	171	201	639	398	371	473	168	110	506	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	687	171	201	639	398	371	473	168	110	506	168
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	687	171	201	639	398	371	473	168	110	506	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	687	171	201	639	398	371	473	168	110	506	168
RTOR Reduct:	0	0	110	0	0	371	0	0	0	0	0	168
RTOR Vol:	128	687	61	201	639	27	371	473	168	110	506	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	128	687	61	201	639	27	371	473	168	110	506	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.48	0.52	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2435	865	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.04	0.12	0.19	0.02	0.22	0.19	0.19	0.07	0.15	0.00
Crit Volume:		344			201			371			253	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.538
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	0	587	291	357	577	0	0	0	0	234	0	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	587	291	357	577	0	0	0	0	234	0	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	587	291	357	577	0	0	0	0	234	0	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	587	291	357	577	0	0	0	0	234	0	195
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	195
RTOR Vol:	0	587	291	357	577	0	0	0	0	234	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	587	291	357	577	0	0	0	0	234	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.34	0.66	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2300	1140	1720	3440	0	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.26	0.21	0.17	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Crit Volume:			439	357				0		117		
Crit Moves:			****	****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.504
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			1 1 0 0 1		
Volume Module:												
Base Vol:	30	372	350	354	244	120	100	80	20	110	50	197
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	372	350	354	244	120	100	80	20	110	50	197
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	372	350	354	244	120	100	80	20	110	50	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	372	350	354	244	120	100	80	20	110	50	197
RTOR Reduct:	0	0	61	0	0	100	0	0	20	0	0	197
RTOR Vol:	30	372	290	354	244	20	100	80	0	110	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	372	290	354	244	20	100	80	0	110	50	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.38	0.62	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2062	1031	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.18	0.21	0.07	0.01	0.06	0.05	0.00	0.05	0.05	0.00
Crit Volume:			290	354			100			80		
Crit Moves:			****	****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.604
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	58	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 3	1	0	1 0 0	1	0	3 0 1	0	1
Volume Module:												
Base Vol:	50 1889		3	0 634		9	51	0	43	2	0	1
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
Initial Bse:	50 1889		3	0 634		9	51	0	43	2	0	1
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
PHF Volume:	50 1889		3	0 634		9	51	0	43	2	0	1
Reduct Vol:	0 0		0	0 0		0	0	0	0	0	0	0
Reduced Vol:	50 1889		3	0 634		9	51	0	43	2	0	1
RTOR Reduct:	0 0		1	0 0		0	0	0	0	0	0	0
RTOR Vol:	50 1889		2	0 634		9	51	0	43	2	0	1
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00
FinalVolume:	50 1889		2	0 634		9	51	0	43	2	0	1
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650 1650		1650	1650 1650		1650	1650 1650		1650
Adjustment:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	0.87 1.00		1.00
Lanes:	1.00 2.00		1.00	1.00 3.94		0.06	1.00 0.00		1.00	3.00 1.00		1.00
Final Sat.:	1650 3300		1650	1650 6508		92	1650	0	1650	4307 1650		1650
Capacity Analysis Module:												
Vol/Sat:	0.03 0.57		0.00	0.00 0.10		0.10	0.03 0.00		0.03	0.00 0.00		0.00
Crit Volume:	945			0			51					1
Crit Moves:	****			****			****					****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.721
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	133	1535	412	107	485	78	373	334	148	193	114	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	1535	412	107	485	78	373	334	148	193	114	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	1535	412	107	485	78	373	334	148	193	114	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	1535	412	107	485	78	373	334	148	193	114	39
RTOR Reduct:	0	0	0	0	0	78	0	0	0	0	0	39
RTOR Vol:	133	1535	412	107	485	0	373	334	148	193	114	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	1535	412	107	485	0	373	334	148	193	114	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.37	0.63	1.00	3.00	0.00	1.00	1.39	0.61	1.00	2.00	1.00
Final Sat.:	1650	3903	1047	1650	4950	0	1650	2287	1013	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.08	0.39	0.39	0.06	0.10	0.00	0.23	0.15	0.15	0.12	0.03	0.00
Crit Volume:	649			107			241			193		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.686		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	73	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	133	1466	543	249	395	207	592	865	27	229	405	137
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	1466	543	249	395	207	592	865	27	229	405	137
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	1466	543	249	395	207	592	865	27	229	405	137
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	1466	543	249	395	207	592	865	27	229	405	137
RTOR Reduct:	0	0	126	0	0	207	0	0	27	0	0	0
RTOR Vol:	133	1466	417	249	395	0	592	865	0	229	405	137
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	1466	417	249	395	0	592	865	0	229	405	137
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.24	0.76
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	3699	1251
Capacity Analysis Module:												
Vol/Sat:	0.04	0.30	0.25	0.08	0.08	0.00	0.20	0.17	0.00	0.08	0.11	0.11
Crit Volume:		489			125			296				181
Crit Moves:		****			****			****				****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.548
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	50	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	30	10	10	550	10	276	175	1133	10	10	413	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	10	550	10	276	175	1133	10	10	413	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	10	550	10	276	175	1133	10	10	413	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	10	550	10	276	175	1133	10	10	413	190
RTOR Reduct:	0	0	0	0	0	175	0	0	0	0	0	0
RTOR Vol:	30	10	10	550	10	101	175	1133	10	10	413	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	10	550	10	101	175	1133	10	10	413	190
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.50	0.50	2.00	1.00	1.00	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	1650	825	825	3000	1650	1650	1650	3271	29	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.18	0.01	0.06	0.11	0.35	0.35	0.01	0.13	0.12
Crit Volume:		20		275					572	10		
Crit Moves:		****		****					****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.641
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	14	42	4	53	78	93	70	806	28	7	344	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	42	4	53	78	93	70	806	28	7	344	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	42	4	53	78	93	70	806	28	7	344	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	42	4	53	78	93	70	806	28	7	344	78
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	53
RTOR Vol:	14	42	4	53	78	93	70	806	28	7	344	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	42	4	53	78	93	70	806	28	7	344	25
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.91	0.09	1.00	0.46	0.54	1.00	0.97	0.03	1.00	1.00	1.00
Final Sat.:	1650	1507	143	1650	753	897	1650	1595	55	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.10	0.10	0.04	0.51	0.51	0.00	0.21	0.02
Crit Volume:			46			171			834	7		
Crit Moves:			****			****			****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	339	0	255	132	684	0	0	269	205
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	339	0	255	132	684	0	0	269	205
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	339	0	255	132	684	0	0	269	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	339	0	255	132	684	0	0	269	205
RTOR Reduct:	0	0	0	0	0	132	0	0	0	0	0	205
RTOR Vol:	0	0	0	339	0	123	132	684	0	0	269	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	339	0	123	132	684	0	0	269	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.07	0.08	0.40	0.00	0.00	0.16	0.00
Crit Volume:		0		339				684		0		
Crit Moves:				****				****		****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100			Critical Vol./Cap.(X):			0.648									
Loss Time (sec):	0 (Y+R=4.0 sec)			Average Delay (sec/veh):			xxxxxx									
Optimal Cycle:	65			Level Of Service:			B									

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Protected						Protected						Split Phase						Split Phase					
Rights:	Include						Ignore						Include						Include					
Min. Green:	0	0	0				0	0	0				0	0	0				0	0	0			
Lanes:	2	0	1	1	0		1	0	2	0	1		0	0	0	0	0		0	1	0	0	1	
Volume Module:																								
Base Vol:	539	901	140				62	845	251				0	0	0				114	282	236			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	539	901	140				62	845	251				0	0	0				114	282	236			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	539	901	140				62	845	251				0	0	0				114	282	236			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
Reduced Vol:	539	901	140				62	845	251				0	0	0				114	282	236			
RTOR Reduct:	0	0	0				0	0	0				0	0	0				0	0	62			
RTOR Vol:	539	901	140				62	845	251				0	0	0				114	282	174			
PCE Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
FinalVolume:	539	901	140				62	845	251				0	0	0				114	282	174			
Saturation Flow Module:																								
Sat/Lane:	1720	1720	1720				1720	1720	1720				1720	1720	1720				1720	1720	1720			
Adjustment:	0.91	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Lanes:	2.00	1.73	0.27				1.00	2.00	1.00				0.00	0.00	0.00				0.29	0.71	1.00			
Final Sat.:	3127	2977	463				1720	3440	1720				0	0	0				495	1225	1720			
Capacity Analysis Module:																								
Vol/Sat:	0.17	0.30	0.30				0.04	0.25	0.15				0.00	0.00	0.00				0.23	0.23	0.10			
Crit Volume:	270						422						0						396					
Crit Moves:	****						****												****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	61	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1237	251		261 668	0		395	3	469	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1237	251		261 668	0		395	3	469	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0 1237	251		261 668	0		395	3	469	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	0 1237	251		261 668	0		395	3	469	0	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0	0	0	0	0
RTOR Vol:	0 1237	251		261 668	0		395	3	469	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0 1237	251		261 668	0		395	3	469	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	0.91		1.00 1.00	1.00	
Lanes:	0.00 2.49	0.51		1.00 2.00	0.00		1.37 0.01	1.62		0.00 0.00	0.00	
Final Sat.:	0 4290	870		1720 3440	0		2137	18	2537	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.29	0.29		0.15 0.19	0.00		0.18 0.17	0.18		0.00 0.00	0.00	
Crit Volume:	496			261			289			0		
Crit Moves:	****			****			****					

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.683
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	158	847	109	147	623	332	311	411	106	154	492	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	158	847	109	147	623	332	311	411	106	154	492	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	158	847	109	147	623	332	311	411	106	154	492	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	847	109	147	623	332	311	411	106	154	492	246
RTOR Reduct:	0	0	109	0	0	311	0	0	0	0	0	147
RTOR Vol:	158	847	0	147	623	21	311	411	106	154	492	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	158	847	0	147	623	21	311	411	106	154	492	99
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.59	0.41	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2623	677	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.10	0.26	0.00	0.09	0.19	0.01	0.19	0.16	0.16	0.09	0.15	0.06
Crit Volume:		424			147			311			246	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.463		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	42	Level Of Service:	A		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3	787	203	161	633	1	0	0	0	256	0	138
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	787	203	161	633	1	0	0	0	256	0	138
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	787	203	161	633	1	0	0	0	256	0	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	787	203	161	633	1	0	0	0	256	0	138
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	138
RTOR Vol:	3	787	203	161	633	1	0	0	0	256	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	787	203	161	633	1	0	0	0	256	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	1.99	0.01	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2735	705	1720	3435	5	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.29	0.29	0.09	0.18	0.18	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:	495			161			0			128		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.412
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1 0	0	1
Volume Module:												
Base Vol:	30	361	302	78	487	30	80	70	40	464	130	304
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	361	302	78	487	30	80	70	40	464	130	304
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	361	302	78	487	30	80	70	40	464	130	304
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	361	302	78	487	30	80	70	40	464	130	304
RTOR Reduct:	0	0	255	0	0	30	0	0	30	0	0	78
RTOR Vol:	30	361	47	78	487	0	80	70	10	464	130	226
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	361	47	78	487	0	80	70	10	464	130	226
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.56	0.44	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2343	722	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.03	0.05	0.15	0.00	0.05	0.04	0.01	0.20	0.18	0.14
Crit Volume:	30			244			80			297		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.600
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	57	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	2 0 0	1	1
Volume Module:												
Base Vol:	13	310	389	21	760	40	119	43	41	1007	14	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	310	389	21	760	40	119	43	41	1007	14	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	310	389	21	760	40	119	43	41	1007	14	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	310	389	21	760	40	119	43	41	1007	14	134
RTOR Reduct:	0	0	0	0	0	40	0	0	13	0	0	21
RTOR Vol:	13	310	389	21	760	0	119	43	28	1007	14	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	310	389	21	760	0	119	43	28	1007	14	113
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	0.22	1.78
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	3000	364	2669
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.24	0.01	0.23	0.00	0.07	0.03	0.02	0.34	0.04	0.04
Crit Volume:	13				380			43		504		
Crit Moves:	****				****			****		****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #7

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.531
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 49 | Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	0	0	0 0 2	0	1	0 0 0	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	712	0	0	1808	6	0	0	9	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	712	0	0	1808	6	0	0	9	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	712	0	0	1808	6	0	0	9	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	712	0	0	1808	6	0	0	9	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	712	0	0	1808	6	0	0	9	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	712	0	0	1808	6	0	0	9	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	2.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3440	0	0	3440	1720	0	0	1720	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.00	0.00	0.53	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Crit Volume:	0				904				9	0		
Crit Moves:	****				****				****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.323
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	34	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	56 491	3		0 1575	28		24	0		98	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	56 491	3		0 1575	28		24	0		98	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	56 491	3		0 1575	28		24	0		98	0	0
Reduct Vol:	0 0	0		0 0	0		0	0		0	0	0
Reduced Vol:	56 491	3		0 1575	28		24	0		98	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0		0	0	0
RTOR Vol:	56 491	3		0 1575	28		24	0		98	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	56 491	3		0 1575	28		24	0		98	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.93	0.07		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1720 3440	1720		1720 6760	120		1720 0	1720		4489 1720	1720	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.14	0.00		0.00 0.23	0.23		0.01 0.00	0.06		0.00 0.00	0.00	
Crit Volume:	56				401			98		0		
Crit Moves:	****				****			****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	141	430	115	76	1223	343	73	100	123	362	499	74
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	141	430	115	76	1223	343	73	100	123	362	499	74
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	141	430	115	76	1223	343	73	100	123	362	499	74
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	430	115	76	1223	343	73	100	123	362	499	74
RTOR Reduct:	0	0	0	0	0	73	0	0	0	0	0	74
RTOR Vol:	141	430	115	76	1223	270	73	100	123	362	499	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	141	430	115	76	1223	270	73	100	123	362	499	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.37	0.63	1.00	2.46	0.54	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	3906	1044	1650	4055	895	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.11	0.11	0.05	0.30	0.30	0.04	0.06	0.07	0.22	0.15	0.00
Crit Volume:	141					498			123	362		
Crit Moves:	****					****			****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.625	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	61	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	151	303	167	267	1039	515	209	351	34	443	1167	135
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	303	167	267	1039	515	209	351	34	443	1167	135
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	303	167	267	1039	515	209	351	34	443	1167	135
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	303	167	267	1039	515	209	351	34	443	1167	135
RTOR Reduct:	0	0	167	0	0	115	0	0	34	0	0	0
RTOR Vol:	151	303	0	267	1039	400	209	351	0	443	1167	135
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	303	0	267	1039	400	209	351	0	443	1167	135
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4437	513
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.00	0.09	0.21	0.24	0.07	0.07	0.00	0.15	0.26	0.26
Crit Volume:	76					400	105				434	
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.566
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 53 | Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	40	10	20	190	10	257	257	359	10	10	1086	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	10	20	190	10	257	257	359	10	10	1086	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	10	20	190	10	257	257	359	10	10	1086	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	10	20	190	10	257	257	359	10	10	1086	360
RTOR Reduct:	0	0	0	0	0	257	0	0	0	0	0	0
RTOR Vol:	40	10	20	190	10	0	257	359	10	10	1086	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	10	20	190	10	0	257	359	10	10	1086	360
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.33	0.67	2.00	1.00	1.00	1.00	1.95	0.05	1.00	2.00	1.00
Final Sat.:	1650	550	1100	3000	1650	1650	1650	3211	89	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.01	0.00	0.16	0.11	0.11	0.01	0.33	0.22
Crit Volume:		30			95			257			543	
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	54	Level Of Service:	A

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	0	1	0	1 0	0	1	0	1 0	0	1	0	1 0	1	0	1
Volume Module:																
Base Vol:	74	89	5		83	22	147		100	448	7		1	595	107	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	74	89	5		83	22	147		100	448	7		1	595	107	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	74	89	5		83	22	147		100	448	7		1	595	107	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	74	89	5		83	22	147		100	448	7		1	595	107	
RTOR Reduct:	0	0	0		0	0	0		0	0	0		0	0	83	
RTOR Vol:	74	89	5		83	22	147		100	448	7		1	595	24	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	74	89	5		83	22	147		100	448	7		1	595	24	
Saturation Flow Module:																
Sat/Lane:	1650	1650	1650		1650	1650	1650		1650	1650	1650		1650	1650	1650	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	0.95	0.05		1.00	0.13	0.87		1.00	0.98	0.02		1.00	1.00	1.00	
Final Sat.:	1650	1562	88		1650	215	1435		1650	1625	25		1650	1650	1650	
Capacity Analysis Module:																
Vol/Sat:	0.04	0.06	0.06		0.05	0.10	0.10		0.06	0.28	0.28		0.00	0.36	0.01	
Crit Volume:	94						169		100					595		
Crit Moves:	****						****		****					****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.536
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	49	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	170	0	190	270	382	0	0	482	252
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	170	0	190	270	382	0	0	482	252
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	170	0	190	270	382	0	0	482	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	170	0	190	270	382	0	0	482	252
RTOR Reduct:	0	0	0	0	0	190	0	0	0	0	0	170
RTOR Vol:	0	0	0	170	0	0	270	382	0	0	482	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	170	0	0	270	382	0	0	482	82
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.00	0.16	0.22	0.00	0.00	0.28	0.05
Crit Volume:	0			170			270			482		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.650		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	65	Level Of Service:	B		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2 0 1			0 0 0 0 0			0 1 0 0 1		
Volume Module:												
Base Vol:	541	847	362	110	716	258	0	0	0	169	235	221
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	541	847	362	110	716	258	0	0	0	169	235	221
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	541	847	362	110	716	258	0	0	0	169	235	221
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	541	847	362	110	716	258	0	0	0	169	235	221
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	110
RTOR Vol:	541	847	362	110	716	258	0	0	0	169	235	111
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	541	847	362	110	716	258	0	0	0	169	235	111
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.40	0.60	1.00	2.00	1.00	0.00	0.00	0.00	0.42	0.58	1.00
Final Sat.:	3127	2410	1030	1720	3440	1720	0	0	0	720	1000	1720
Capacity Analysis Module:												
Vol/Sat:	0.17	0.35	0.35	0.06	0.21	0.15	0.00	0.00	0.00	0.23	0.23	0.06
Crit Volume:			605	110				0			404	
Crit Moves:			****	****							****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	115	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	726	650	187	768	0	365	541	356	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	726	650	187	768	0	365	541	356	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	726	650	187	768	0	365	541	356	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	726	650	187	768	0	365	541	356	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	726	650	187	768	0	365	541	356	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	726	650	187	768	0	365	541	356	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3440	1720	1720	3440	0	1563	1720	1563	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.38	0.11	0.22	0.00	0.23	0.31	0.23	0.00	0.00	0.00
Crit Volume:			650	187				541		0		
Crit Moves:			****	****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.722
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	82	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	133	734	180	201	719	398	371	473	177	125	506	168
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	734	180	201	719	398	371	473	177	125	506	168
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	734	180	201	719	398	371	473	177	125	506	168
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	734	180	201	719	398	371	473	177	125	506	168
RTOR Reduct:	0	0	125	0	0	371	0	0	0	0	0	168
RTOR Vol:	133	734	55	201	719	27	371	473	177	125	506	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133	734	55	201	719	27	371	473	177	125	506	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.46	0.54	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2401	899	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.08	0.22	0.03	0.12	0.22	0.02	0.22	0.20	0.20	0.08	0.15	0.00
Crit Volume:		367			201			371			253	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.555		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	51	Level Of Service:	A		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	0	648	291	357	681	0	0	0	0	234	0	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	648	291	357	681	0	0	0	0	234	0	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	648	291	357	681	0	0	0	0	234	0	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	648	291	357	681	0	0	0	0	234	0	195
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	195
RTOR Vol:	0	648	291	357	681	0	0	0	0	234	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	648	291	357	681	0	0	0	0	234	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.38	0.62	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2374	1066	1720	3440	0	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.21	0.20	0.00	0.00	0.00	0.00	0.07	0.00	0.00
Crit Volume:		470		357				0		117		
Crit Moves:		****		****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.508
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			1 1 0 0 1		
Volume Module:												
Base Vol:	30	439	357	354	359	120	100	80	20	123	50	197
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	439	357	354	359	120	100	80	20	123	50	197
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	439	357	354	359	120	100	80	20	123	50	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	439	357	354	359	120	100	80	20	123	50	197
RTOR Reduct:	0	0	68	0	0	100	0	0	20	0	0	197
RTOR Vol:	30	439	289	354	359	20	100	80	0	123	50	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	439	289	354	359	20	100	80	0	123	50	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.42	0.58	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2133	954	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.13	0.18	0.21	0.11	0.01	0.06	0.05	0.00	0.06	0.05	0.00
Crit Volume:			289	354			100			87		
Crit Moves:			****	****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.409
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	39	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			2 0 0 1 1		
Volume Module:												
Base Vol:	44	660	1041	24	320	128	74	27	26	534	45	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	660	1041	24	320	128	74	27	26	534	45	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	660	1041	24	320	128	74	27	26	534	45	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	660	1041	24	320	128	74	27	26	534	45	42
RTOR Reduct:	0	0	0	0	0	74	0	0	26	0	0	24
RTOR Vol:	44	660	1041	24	320	54	74	27	0	534	45	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	660	1041	24	320	54	74	27	0	534	45	18
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	3000	1650	1500
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.63	0.01	0.10	0.03	0.04	0.02	0.00	0.18	0.03	0.01
Crit Volume:		330			24			27			267	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.617
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	50 1933	3		0 660	9		51	0	43	2	0	1
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	50 1933	3		0 660	9		51	0	43	2	0	1
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	50 1933	3		0 660	9		51	0	43	2	0	1
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	50 1933	3		0 660	9		51	0	43	2	0	1
RTOR Reduct:	0 0	1		0 0	0		0	0	0	0	0	0
RTOR Vol:	50 1933	2		0 660	9		51	0	43	2	0	1
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	50 1933	2		0 660	9		51	0	43	2	0	1
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.95	0.05		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1650 3300	1650		1650 6511	89		1650	0	1650	4307 1650	1650	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.59	0.00		0.00 0.10	0.10		0.03 0.00	0.03		0.00 0.00	0.00	
Crit Volume:	967			0			51				1	
Crit Moves:	****			****			****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.729
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	133 1572	412		107 507	82		380 334	148		193 114	39	
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	133 1572	412		107 507	82		380 334	148		193 114	39	
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	133 1572	412		107 507	82		380 334	148		193 114	39	
Reduct Vol:	0 0	0		0 0	0		0 0	0		0 0	0	
Reduced Vol:	133 1572	412		107 507	82		380 334	148		193 114	39	
RTOR Reduct:	0 0	0		0 0	82		0 0	0		0 0	39	
RTOR Vol:	133 1572	412		107 507	0		380 334	148		193 114	0	
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	133 1572	412		107 507	0		380 334	148		193 114	0	
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Lanes:	1.00 2.38	0.62		1.00 3.00	0.00		1.00 1.39	0.61		1.00 2.00	1.00	
Final Sat.:	1650 3922	1028		1650 4950	0		1650 2287	1013		1650 3300	1650	
Capacity Analysis Module:												
Vol/Sat:	0.08 0.40	0.40		0.06 0.10	0.00		0.23 0.15	0.15		0.12 0.03	0.00	
Crit Volume:	661			107			241			193		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.696	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	75	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3	0	1	2 0 3	0	1	2 0 3	0	1	2 0 2	1	0
Volume Module:												
Base Vol:	133 1490		543	252	409	212	601	865	27	229	405	141
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133 1490		543	252	409	212	601	865	27	229	405	141
User Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133 1490		543	252	409	212	601	865	27	229	405	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133 1490		543	252	409	212	601	865	27	229	405	141
RTOR Reduct:	0	0	126	0	0	212	0	0	27	0	0	0
RTOR Vol:	133 1490		417	252	409	0	601	865	0	229	405	141
PCE Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	133 1490		417	252	409	0	601	865	0	229	405	141
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91 1.00		1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00 3.00		1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.23	0.77
Final Sat.:	3000 4950		1650	3000	4950	1650	3000	4950	1650	3000	3672	1278
Capacity Analysis Module:												
Vol/Sat:	0.04 0.30		0.25	0.08	0.08	0.00	0.20	0.17	0.00	0.08	0.11	0.11
Crit Volume:	497			126			301					182
Crit Moves:	****			****			****					****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.553	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	51	Level Of Service:	A	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	30	10	10	550	10	293	185	1150	10	10	441	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	10	550	10	293	185	1150	10	10	441	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	10	550	10	293	185	1150	10	10	441	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	10	550	10	293	185	1150	10	10	441	190
RTOR Reduct:	0	0	0	0	0	185	0	0	0	0	0	0
RTOR Vol:	30	10	10	550	10	108	185	1150	10	10	441	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	10	550	10	108	185	1150	10	10	441	190
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.50	0.50	2.00	1.00	1.00	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	1650	825	825	3000	1650	1650	1650	3272	28	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.01	0.01	0.18	0.01	0.07	0.11	0.35	0.35	0.01	0.13	0.12
Crit Volume:		20			275			580			10	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.645
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	64	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	14	42	4	53	78	93	70	813	28	7	357	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	42	4	53	78	93	70	813	28	7	357	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	42	4	53	78	93	70	813	28	7	357	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	42	4	53	78	93	70	813	28	7	357	78
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	53
RTOR Vol:	14	42	4	53	78	93	70	813	28	7	357	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	14	42	4	53	78	93	70	813	28	7	357	25
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.91	0.09	1.00	0.46	0.54	1.00	0.97	0.03	1.00	1.00	1.00
Final Sat.:	1650	1507	143	1650	753	897	1650	1595	55	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.10	0.10	0.04	0.51	0.51	0.00	0.22	0.02
Crit Volume:			46			171			841	7		
Crit Moves:			****			****			****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.595
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	339	0	266	138	685	0	0	271	205
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	339	0	266	138	685	0	0	271	205
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	339	0	266	138	685	0	0	271	205
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	339	0	266	138	685	0	0	271	205
RTOR Reduct:	0	0	0	0	0	138	0	0	0	0	0	205
RTOR Vol:	0	0	0	339	0	128	138	685	0	0	271	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	339	0	128	138	685	0	0	271	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.07	0.08	0.40	0.00	0.00	0.16	0.00
Crit Volume:		0		339				685		0		
Crit Moves:				****				****		****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.714
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	80	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	632	984	151	67	915	270	0	0	0	119	304	254
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	632	984	151	67	915	270	0	0	0	119	304	254
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	632	984	151	67	915	270	0	0	0	119	304	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	632	984	151	67	915	270	0	0	0	119	304	254
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	67
RTOR Vol:	632	984	151	67	915	270	0	0	0	119	304	187
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	632	984	151	67	915	270	0	0	0	119	304	187
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.73	0.27	1.00	2.00	1.00	0.00	0.00	0.00	0.28	0.72	1.00
Final Sat.:	3127	2982	458	1720	3440	1720	0	0	0	484	1236	1720
Capacity Analysis Module:												
Vol/Sat:	0.20	0.33	0.33	0.04	0.27	0.16	0.00	0.00	0.00	0.25	0.25	0.11
Crit Volume:	316				457			0			423	
Crit Moves:	****				****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1397	258		281 720	0		426	3	522	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1397	258		281 720	0		426	3	522	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0 1397	258		281 720	0		426	3	522	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	0 1397	258		281 720	0		426	3	522	0	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0	0	0	0	0
RTOR Vol:	0 1397	258		281 720	0		426	3	522	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0 1397	258		281 720	0		426	3	522	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	0.91		1.00 1.00	1.00	
Lanes:	0.00 2.53	0.47		1.00 2.00	0.00		1.34 0.01	1.65		0.00 0.00	0.00	
Final Sat.:	0 4356	804		1720 3440	0		2101	16	2575	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.32	0.32		0.16 0.21	0.00		0.20 0.18	0.20		0.00 0.00	0.00	
Crit Volume:		552		281				317		0		
Crit Moves:		****		****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	206	964	102	158	688	358	335	443	126	161	530	265
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	206	964	102	158	688	358	335	443	126	161	530	265
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	206	964	102	158	688	358	335	443	126	161	530	265
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	206	964	102	158	688	358	335	443	126	161	530	265
RTOR Reduct:	0	0	102	0	0	335	0	0	0	0	0	158
RTOR Vol:	206	964	0	158	688	23	335	443	126	161	530	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	206	964	0	158	688	23	335	443	126	161	530	107
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.56	0.44	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2569	731	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.12	0.29	0.00	0.10	0.21	0.01	0.20	0.17	0.17	0.10	0.16	0.06
Crit Volume:		482			158			335			265	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec): 100 Critical Vol./Cap.(X): 0.593
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 56 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3	1170	219	174	626	1	0	0	0	276	0	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	1170	219	174	626	1	0	0	0	276	0	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	1170	219	174	626	1	0	0	0	276	0	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	1170	219	174	626	1	0	0	0	276	0	149
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	149
RTOR Vol:	3	1170	219	174	626	1	0	0	0	276	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	1170	219	174	626	1	0	0	0	276	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	1.99	0.01	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2898	542	1720	3435	5	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.40	0.40	0.10	0.18	0.18	0.00	0.00	0.00	0.09	0.00	0.00
Crit Volume:	695			174				0		138		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec): 100 Critical Vol./Cap.(X): 0.687
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 73 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 0	1	1 1	0 0	1
Volume Module:												
Base Vol:	30	908	440	143	353	30	120	80	40	510	130	560
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	908	440	143	353	30	120	80	40	510	130	560
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	908	440	143	353	30	120	80	40	510	130	560
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	908	440	143	353	30	120	80	40	510	130	560
RTOR Reduct:	0	0	281	0	0	30	0	0	30	0	0	143
RTOR Vol:	30	908	160	143	353	0	120	80	10	510	130	417
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	908	160	143	353	0	120	80	10	510	130	417
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.59	0.41	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2390	670	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.28	0.10	0.09	0.11	0.00	0.07	0.05	0.01	0.21	0.19	0.25
Crit Volume:		454			143			120				417
Crit Moves:		****			****			****				****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.355
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	35	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 3	1	0	1 0 0	1	0	3 0 1	0	1
Volume Module:												
Base Vol:	60	547	3	0	1750	30	26	0	106	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	547	3	0	1750	30	26	0	106	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	547	3	0	1750	30	26	0	106	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	547	3	0	1750	30	26	0	106	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	60	547	3	0	1750	30	26	0	106	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	547	3	0	1750	30	26	0	106	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.87	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	3.93	0.07	1.00	0.00	1.00	3.00	1.00	1.00
Final Sat.:	1720	3440	1720	1720	6764	116	1720	0	1720	4489	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.00	0.00	0.26	0.26	0.02	0.00	0.06	0.00	0.00	0.00
Crit Volume:	60				445				106	0		
Crit Moves:	****				****				****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1 0		1 0 2	1 0		1 0 1	1 0		1 0 2	0 1	
Volume Module:												
Base Vol:	152	479	124	82	1362	378	82	108	133	390	538	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	479	124	82	1362	378	82	108	133	390	538	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	479	124	82	1362	378	82	108	133	390	538	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	479	124	82	1362	378	82	108	133	390	538	80
RTOR Reduct:	0	0	0	0	0	82	0	0	0	0	0	80
RTOR Vol:	152	479	124	82	1362	296	82	108	133	390	538	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	479	124	82	1362	296	82	108	133	390	538	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.38	0.62	1.00	2.46	0.54	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	3932	1018	1650	4066	884	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.12	0.05	0.33	0.33	0.05	0.07	0.08	0.24	0.16	0.00
Crit Volume:	152				553				133	390		
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	163	337	180	292	1148	566	228	378	37	477	1258	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	337	180	292	1148	566	228	378	37	477	1258	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	163	337	180	292	1148	566	228	378	37	477	1258	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	337	180	292	1148	566	228	378	37	477	1258	147
RTOR Reduct:	0	0	180	0	0	125	0	0	37	0	0	0
RTOR Vol:	163	337	0	292	1148	441	228	378	0	477	1258	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	163	337	0	292	1148	441	228	378	0	477	1258	147
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.69	0.31
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4432	518
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.00	0.10	0.23	0.27	0.08	0.08	0.00	0.16	0.28	0.28
Crit Volume:	82					441	114				468	
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.746
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	90	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	70	10	20	190	20	355	509	366	20	10	1175	680
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	10	20	190	20	355	509	366	20	10	1175	680
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	10	20	190	20	355	509	366	20	10	1175	680
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	10	20	190	20	355	509	366	20	10	1175	680
RTOR Reduct:	0	0	0	0	0	355	0	0	0	0	0	0
RTOR Vol:	70	10	20	190	20	0	509	366	20	10	1175	680
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	10	20	190	20	0	509	366	20	10	1175	680
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.33	0.67	2.00	1.00	1.00	1.00	1.90	0.10	1.00	2.00	1.00
Final Sat.:	1650	550	1100	3000	1650	1650	1650	3129	171	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.06	0.01	0.00	0.31	0.12	0.12	0.01	0.36	0.41
Crit Volume:		30			95			509			588	
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.742
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	88	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	96	5	89	24	158	108	535	8	1	833	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	96	5	89	24	158	108	535	8	1	833	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	96	5	89	24	158	108	535	8	1	833	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	96	5	89	24	158	108	535	8	1	833	115
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	89
RTOR Vol:	80	96	5	89	24	158	108	535	8	1	833	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	96	5	89	24	158	108	535	8	1	833	26
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	1.00	0.13	0.87	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1650	1568	82	1650	218	1432	1650	1626	24	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.06	0.05	0.11	0.11	0.07	0.33	0.33	0.00	0.50	0.02
Crit Volume:		101				182	108				833	
Crit Moves:		****				****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.694
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	75	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	200	0	202	280	475	0	0	714	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	200	0	202	280	475	0	0	714	321
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	200	0	202	280	475	0	0	714	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	200	0	202	280	475	0	0	714	321
RTOR Reduct:	0	0	0	0	0	202	0	0	0	0	0	200
RTOR Vol:	0	0	0	200	0	0	280	475	0	0	714	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	200	0	0	280	475	0	0	714	121
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.00	0.16	0.28	0.00	0.00	0.42	0.07
Crit Volume:	0			200			280			714		
Crit Moves:				****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec): 100 Critical Vol./Cap.(X): 0.695
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	614	922	390	119	786	278	0	0	0	168	253	238
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	614	922	390	119	786	278	0	0	0	168	253	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	614	922	390	119	786	278	0	0	0	168	253	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	614	922	390	119	786	278	0	0	0	168	253	238
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	119
RTOR Vol:	614	922	390	119	786	278	0	0	0	168	253	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	614	922	390	119	786	278	0	0	0	168	253	119
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.41	0.59	1.00	2.00	1.00	0.00	0.00	0.00	0.40	0.60	1.00
Final Sat.:	3127	2417	1023	1720	3440	1720	0	0	0	686	1034	1720
Capacity Analysis Module:												
Vol/Sat:	0.20	0.38	0.38	0.07	0.23	0.16	0.00	0.00	0.00	0.24	0.24	0.07
Crit Volume:		656			119			0			421	
Crit Moves:		****			****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.859
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	161	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0	823	692	202	828	0	393	583	437	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	823	692	202	828	0	393	583	437	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	823	692	202	828	0	393	583	437	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	823	692	202	828	0	393	583	437	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	823	692	202	828	0	393	583	437	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	823	692	202	828	0	393	583	437	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3440	1720	1720	3440	0	1563	1720	1563	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.40	0.12	0.24	0.00	0.25	0.34	0.28	0.00	0.00	0.00
Crit Volume:			692	202				583		0		
Crit Moves:			****	****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	108	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	166	823	184	217	829	429	400	510	228	119	545	181
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	166	823	184	217	829	429	400	510	228	119	545	181
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	166	823	184	217	829	429	400	510	228	119	545	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	823	184	217	829	429	400	510	228	119	545	181
RTOR Reduct:	0	0	119	0	0	400	0	0	0	0	0	181
RTOR Vol:	166	823	65	217	829	29	400	510	228	119	545	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	166	823	65	217	829	29	400	510	228	119	545	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.38	0.62	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2280	1020	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.04	0.13	0.25	0.02	0.24	0.22	0.22	0.07	0.17	0.00
Crit Volume:		412			217			400			273	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.612
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	59	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0	0	1 0 1	1 0		0 0 0	0 0	0	2 0 0	0 1	
Volume Module:												
Base Vol:	0	744	314	385	809	0	0	0	0	252	0	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	744	314	385	809	0	0	0	0	252	0	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	744	314	385	809	0	0	0	0	252	0	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	744	314	385	809	0	0	0	0	252	0	210
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	210
RTOR Vol:	0	744	314	385	809	0	0	0	0	252	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	744	314	385	809	0	0	0	0	252	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.41	0.59	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2419	1021	1720	3440	0	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.22	0.24	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:		529		385				0		126		
Crit Moves:		****		****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.730
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	84	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1	0	0 1
Volume Module:												
Base Vol:	30 555		520	573	598	130	100	50	30	300	20	251
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30 555		520	573	598	130	100	50	30	300	20	251
User Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30 555		520	573	598	130	100	50	30	300	20	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30 555		520	573	598	130	100	50	30	300	20	251
RTOR Reduct:	0	0	165	0	0	100	0	0	30	0	0	251
RTOR Vol:	30 555		355	573	598	30	100	50	0	300	20	0
PCE Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30 555		355	573	598	30	100	50	0	300	20	0
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00 2.00		1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.88	0.12	1.00
Final Sat.:	1650 3300		1650	1650	3300	1650	1650	1650	1650	2812	206	1650
Capacity Analysis Module:												
Vol/Sat:	0.02 0.17		0.22	0.35	0.18	0.02	0.06	0.03	0.00	0.11	0.10	0.00
Crit Volume:			355	573			100			160		
Crit Moves:			****	****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.682
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	72	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	54 2140	3		0 1343	10		55	0	46	2	0	1
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	54 2140	3		0 1343	10		55	0	46	2	0	1
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	54 2140	3		0 1343	10		55	0	46	2	0	1
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	54 2140	3		0 1343	10		55	0	46	2	0	1
RTOR Reduct:	0 0	1		0 0	0		0	0	0	0	0	0
RTOR Vol:	54 2140	2		0 1343	10		55	0	46	2	0	1
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	54 2140	2		0 1343	10		55	0	46	2	0	1
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650 1650	1650	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.97	0.03		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1650 3300	1650		1650 6551	49		1650	0	1650	4307 1650	1650	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.65	0.00		0.00 0.21	0.20		0.03 0.00	0.03		0.00 0.00	0.00	
Crit Volume:	1070			0			55				1	
Crit Moves:	****			****			****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.795		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	111	Level Of Service:	C		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	143 1743		444	115 1074		93	417 360		159	208	123	42
Growth Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00
Initial Bse:	143 1743		444	115 1074		93	417 360		159	208	123	42
User Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00
PHF Volume:	143 1743		444	115 1074		93	417 360		159	208	123	42
Reduct Vol:	0 0		0	0 0		0	0 0		0	0	0	0
Reduced Vol:	143 1743		444	115 1074		93	417 360		159	208	123	42
RTOR Reduct:	0 0		0	0 0		93	0 0		0	0	0	42
RTOR Vol:	143 1743		444	115 1074		0	417 360		159	208	123	0
PCE Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00
FinalVolume:	143 1743		444	115 1074		0	417 360		159	208	123	0
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650 1650		1650	1650 1650		1650	1650	1650	1650
Adjustment:	1.00 1.00		1.00	1.00 1.00		1.00	1.00 1.00		1.00	1.00	1.00	1.00
Lanes:	1.00 2.39		0.61	1.00 3.00		0.00	1.00 1.39		0.61	1.00	2.00	1.00
Final Sat.:	1650 3945		1005	1650 4950		0	1650 2289		1011	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09 0.44		0.44	0.07 0.22		0.00	0.25 0.16		0.16	0.13	0.04	0.00
Crit Volume:		729		115				260			208	
Crit Moves:		****		****				****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec): 100 Critical Vol./Cap.(X): 0.762
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 96 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	143	1637	585	274	759	235	659	932	29	247	436	159
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	1637	585	274	759	235	659	932	29	247	436	159
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	1637	585	274	759	235	659	932	29	247	436	159
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	1637	585	274	759	235	659	932	29	247	436	159
RTOR Reduct:	0	0	136	0	0	235	0	0	29	0	0	0
RTOR Vol:	143	1637	449	274	759	0	659	932	0	247	436	159
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	1637	449	274	759	0	659	932	0	247	436	159
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.20	0.80
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	3627	1323
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.27	0.09	0.15	0.00	0.22	0.19	0.00	0.08	0.12	0.12
Crit Volume:		546			137			330			198	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.679
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	71	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	30	10	20	800	70	460	286	1149	130	10	649	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	20	800	70	460	286	1149	130	10	649	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	20	800	70	460	286	1149	130	10	649	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	20	800	70	460	286	1149	130	10	649	190
RTOR Reduct:	0	0	0	0	0	286	0	0	0	0	0	0
RTOR Vol:	30	10	20	800	70	174	286	1149	130	10	649	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	20	800	70	174	286	1149	130	10	649	190
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.33	0.67	2.00	1.00	1.00	1.00	1.80	0.20	1.00	2.00	1.00
Final Sat.:	1650	550	1100	3000	1650	1650	1650	2965	335	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.27	0.04	0.11	0.17	0.39	0.39	0.01	0.20	0.12
Crit Volume:		30			400			640			10	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec): 100 Critical Vol./Cap.(X): 0.818
Loss Time (sec): 0 (Y+R=4.0 sec) Average Delay (sec/veh): xxxxxx
Optimal Cycle: 125 Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	15	45	4	57	84	100	75	1078	30	8	495	84
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	45	4	57	84	100	75	1078	30	8	495	84
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	45	4	57	84	100	75	1078	30	8	495	84
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	15	45	4	57	84	100	75	1078	30	8	495	84
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	57
RTOR Vol:	15	45	4	57	84	100	75	1078	30	8	495	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	15	45	4	57	84	100	75	1078	30	8	495	27
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.92	0.08	1.00	0.46	0.54	1.00	0.97	0.03	1.00	1.00	1.00
Final Sat.:	1650	1515	135	1650	753	897	1650	1605	45	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.01	0.03	0.03	0.03	0.11	0.11	0.05	0.67	0.67	0.00	0.30	0.02
Crit Volume:		49				184			1108	8		
Crit Moves:	****					****			****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.792
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	417	0	275	142	946	0	0	414	251
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	417	0	275	142	946	0	0	414	251
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	417	0	275	142	946	0	0	414	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	417	0	275	142	946	0	0	414	251
RTOR Reduct:	0	0	0	0	0	142	0	0	0	0	0	251
RTOR Vol:	0	0	0	417	0	133	142	946	0	0	414	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	417	0	133	142	946	0	0	414	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.08	0.08	0.55	0.00	0.00	0.24	0.00
Crit Volume:		0		417				946		0		
Crit Moves:				****				****		****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.734
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	685	994	151	67	918	270	0	0	0	123	304	254
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	685	994	151	67	918	270	0	0	0	123	304	254
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	685	994	151	67	918	270	0	0	0	123	304	254
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	685	994	151	67	918	270	0	0	0	123	304	254
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	67
RTOR Vol:	685	994	151	67	918	270	0	0	0	123	304	187
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	685	994	151	67	918	270	0	0	0	123	304	187
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.74	0.26	1.00	2.00	1.00	0.00	0.00	0.00	0.29	0.71	1.00
Final Sat.:	3127	2986	454	1720	3440	1720	0	0	0	495	1225	1720
Capacity Analysis Module:												
Vol/Sat:	0.22	0.33	0.33	0.04	0.27	0.16	0.00	0.00	0.00	0.25	0.25	0.11
Crit Volume:	343				459			0			427	
Crit Moves:	****				****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	77	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 2	1	0	1 0 2	0	0	1 0 1!	0	1	0 0 0	0	0
Volume Module:												
Base Vol:	0 1460	270		281 727	0		426	3	540	0	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	0 1460	270		281 727	0		426	3	540	0	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	0 1460	270		281 727	0		426	3	540	0	0	0
Reduct Vol:	0 0	0		0 0	0		0	0	0	0	0	0
Reduced Vol:	0 1460	270		281 727	0		426	3	540	0	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0	0	0	0	0
RTOR Vol:	0 1460	270		281 727	0		426	3	540	0	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	0 1460	270		281 727	0		426	3	540	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		0.91 1.00	0.91		1.00 1.00	1.00	
Lanes:	0.00 2.53	0.47		1.00 2.00	0.00		1.32 0.01	1.67		0.00 0.00	0.00	
Final Sat.:	0 4355	805		1720 3440	0		2062	16	2614	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00 0.34	0.34		0.16 0.21	0.00		0.21 0.19	0.21		0.00 0.00	0.00	
Crit Volume:	577			281				323		0		
Crit Moves:	****			****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.774
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	101	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	214 1039		116	158	713	358	335	443	129	166	530	265
Growth Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	214 1039		116	158	713	358	335	443	129	166	530	265
User Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	214 1039		116	158	713	358	335	443	129	166	530	265
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	214 1039		116	158	713	358	335	443	129	166	530	265
RTOR Reduct:	0	0	116	0	0	335	0	0	0	0	0	158
RTOR Vol:	214 1039		0	158	713	23	335	443	129	166	530	107
PCE Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	214 1039		0	158	713	23	335	443	129	166	530	107
Saturation Flow Module:												
Sat/Lane:	1650 1650		1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00 1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00 2.00		1.00	1.00	2.00	1.00	1.00	1.55	0.45	1.00	2.00	1.00
Final Sat.:	1650 3300		1650	1650	3300	1650	1650	2556	744	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.13 0.31		0.00	0.10	0.22	0.01	0.20	0.17	0.17	0.10	0.16	0.06
Crit Volume:	520			158			335			265		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.621
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	60	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	3 1267	219		174	659		1	0		0	276	
Growth Adj:	1.00 1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:	3 1267	219		174	659		1	0		0	276	
User Adj:	1.00 1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	3 1267	219		174	659		1	0		0	276	
Reduct Vol:	0 0	0		0	0		0	0		0	0	
Reduced Vol:	3 1267	219		174	659		1	0		0	276	
RTOR Reduct:	0 0	0		0	0		0	0		0	0	
RTOR Vol:	3 1267	219		174	659		1	0		0	276	
PCE Adj:	1.00 1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:	3 1267	219		174	659		1	0		0	276	
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720	1720		1720	1720		1720	1720	
Adjustment:	1.00 1.00	1.00		1.00	1.00		1.00	1.00		0.91	1.00	
Lanes:	1.00 1.71	0.29		1.00	1.99		0.01	0.00		2.00	0.00	
Final Sat.:	1720 2933	507		1720	3435		5	0		3127	0	
Capacity Analysis Module:												
Vol/Sat:	0.00 0.43	0.43		0.10	0.19		0.00	0.00		0.09	0.00	
Crit Volume:	743			174				0		138		
Crit Moves:	****			****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.720
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	81	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			1 1 0 0 1		
Volume Module:												
Base Vol:	30	1015	452	143	389	30	120	80	40	514	130	560
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1015	452	143	389	30	120	80	40	514	130	560
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	1015	452	143	389	30	120	80	40	514	130	560
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1015	452	143	389	30	120	80	40	514	130	560
RTOR Reduct:	0	0	283	0	0	30	0	0	30	0	0	143
RTOR Vol:	30	1015	169	143	389	0	120	80	10	514	130	417
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	1015	169	143	389	0	120	80	10	514	130	417
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.60	0.40	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2394	666	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.31	0.10	0.09	0.12	0.00	0.07	0.05	0.01	0.21	0.20	0.25
Crit Volume:		507			143			120				417
Crit Moves:		****			****			****				****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.693
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	74	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 2	0 1		1 0 1	0 1		2 0	0 1	1
Volume Module:												
Base Vol:	13	920	521	33	880	40	119	43	41	1104	14	338
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	13	920	521	33	880	40	119	43	41	1104	14	338
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	13	920	521	33	880	40	119	43	41	1104	14	338
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	13	920	521	33	880	40	119	43	41	1104	14	338
RTOR Reduct:	0	0	0	0	0	40	0	0	13	0	0	33
RTOR Vol:	13	920	521	33	880	0	119	43	28	1104	14	305
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	13	920	521	33	880	0	119	43	28	1104	14	305
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	0.09	1.91
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	3000	145	2868
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.32	0.02	0.27	0.00	0.07	0.03	0.02	0.37	0.10	0.11
Crit Volume:		460			33			43		552		
Crit Moves:		****			****			****		****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec):	100	Critical Vol./Cap.(X):	0.361
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	36	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0 1		1 0 3	1 0		1 0 0	1 0		3 0 1	0 1	
Volume Module:												
Base Vol:	60 560	3		0 1791	30		26	0		106	0	0
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
Initial Bse:	60 560	3		0 1791	30		26	0		106	0	0
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
PHF Volume:	60 560	3		0 1791	30		26	0		106	0	0
Reduct Vol:	0 0	0		0 0	0		0	0		0	0	0
Reduced Vol:	60 560	3		0 1791	30		26	0		106	0	0
RTOR Reduct:	0 0	0		0 0	0		0	0		0	0	0
RTOR Vol:	60 560	3		0 1791	30		26	0		106	0	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00	
FinalVolume:	60 560	3		0 1791	30		26	0		106	0	0
Saturation Flow Module:												
Sat/Lane:	1720 1720	1720		1720 1720	1720		1720 1720	1720		1720 1720	1720	
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		0.87 1.00	1.00	
Lanes:	1.00 2.00	1.00		1.00 3.93	0.07		1.00 0.00	1.00		3.00 1.00	1.00	
Final Sat.:	1720 3440	1720		1720 6767	113		1720 0	1720		4489 1720	1720	
Capacity Analysis Module:												
Vol/Sat:	0.03 0.16	0.00		0.00 0.26	0.26		0.02 0.00	0.06		0.00 0.00	0.00	
Crit Volume:	60			455				106		0		
Crit Moves:	****			****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.752
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	92	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	152	490	124	82	1397	384	84	108	133	390	538	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	490	124	82	1397	384	84	108	133	390	538	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	152	490	124	82	1397	384	84	108	133	390	538	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	152	490	124	82	1397	384	84	108	133	390	538	80
RTOR Reduct:	0	0	0	0	0	84	0	0	0	0	0	80
RTOR Vol:	152	490	124	82	1397	300	84	108	133	390	538	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	152	490	124	82	1397	300	84	108	133	390	538	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.39	0.61	1.00	2.47	0.53	1.00	1.00	1.00	1.00	2.00	1.00
Final Sat.:	1650	3950	1000	1650	4075	875	1650	1650	1650	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.12	0.05	0.34	0.34	0.05	0.07	0.08	0.24	0.16	0.00
Crit Volume:	152				566				133	390		
Crit Moves:	****				****				****	****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.686
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	73	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	163	344	180	296	1171	574	231	378	37	477	1258	148
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	344	180	296	1171	574	231	378	37	477	1258	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	163	344	180	296	1171	574	231	378	37	477	1258	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	344	180	296	1171	574	231	378	37	477	1258	148
RTOR Reduct:	0	0	180	0	0	127	0	0	37	0	0	0
RTOR Vol:	163	344	0	296	1171	447	231	378	0	477	1258	148
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	163	344	0	296	1171	447	231	378	0	477	1258	148
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.68	0.32
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	4429	521
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.00	0.10	0.24	0.27	0.08	0.08	0.00	0.16	0.28	0.28
Crit Volume:	82					447	116					469
Crit Moves:	****					****	****					****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.758
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 94 | Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	70	10	20	190	20	360	525	393	20	10	1184	680
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	10	20	190	20	360	525	393	20	10	1184	680
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	10	20	190	20	360	525	393	20	10	1184	680
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	10	20	190	20	360	525	393	20	10	1184	680
RTOR Reduct:	0	0	0	0	0	360	0	0	0	0	0	0
RTOR Vol:	70	10	20	190	20	0	525	393	20	10	1184	680
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	10	20	190	20	0	525	393	20	10	1184	680
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.33	0.67	2.00	1.00	1.00	1.00	1.90	0.10	1.00	2.00	1.00
Final Sat.:	1650	550	1100	3000	1650	1650	1650	3140	160	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.02	0.06	0.01	0.00	0.32	0.13	0.13	0.01	0.36	0.41
Crit Volume:	30			95			525			592		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.744
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	89	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	0 1	0	1 0	1 0	1
Volume Module:												
Base Vol:	80	96	5	89	24	158	108	547	8	1	837	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	96	5	89	24	158	108	547	8	1	837	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	96	5	89	24	158	108	547	8	1	837	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	96	5	89	24	158	108	547	8	1	837	115
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	89
RTOR Vol:	80	96	5	89	24	158	108	547	8	1	837	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	96	5	89	24	158	108	547	8	1	837	26
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.95	0.05	1.00	0.13	0.87	1.00	0.99	0.01	1.00	1.00	1.00
Final Sat.:	1650	1568	82	1650	218	1432	1650	1626	24	1650	1650	1650
Capacity Analysis Module:												
Vol/Sat:	0.05	0.06	0.06	0.05	0.11	0.11	0.07	0.34	0.34	0.00	0.51	0.02
Crit Volume:	101					182	108				837	
Crit Moves:	****					****	****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	76	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	200	0	205	290	477	0	0	715	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	200	0	205	290	477	0	0	715	321
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	200	0	205	290	477	0	0	715	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	200	0	205	290	477	0	0	715	321
RTOR Reduct:	0	0	0	0	0	205	0	0	0	0	0	200
RTOR Vol:	0	0	0	200	0	0	290	477	0	0	715	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	200	0	0	290	477	0	0	715	121
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.00	0.17	0.28	0.00	0.00	0.42	0.07
Crit Volume:		0			200			290			715	
Crit Moves:					****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #1

Cycle (sec):	100	Critical Vol./Cap.(X):	0.705	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	77	Level Of Service:	C	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Ignore			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 1	1 0		1 0 2	0 1		0 0 0	0 0		0 1	0 0 1	
Volume Module:												
Base Vol:	647	928	390	119	797	278	0	0	0	181	253	238
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	647	928	390	119	797	278	0	0	0	181	253	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	647	928	390	119	797	278	0	0	0	181	253	238
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	647	928	390	119	797	278	0	0	0	181	253	238
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	119
RTOR Vol:	647	928	390	119	797	278	0	0	0	181	253	119
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	647	928	390	119	797	278	0	0	0	181	253	119
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	1.41	0.59	1.00	2.00	1.00	0.00	0.00	0.00	0.42	0.58	1.00
Final Sat.:	3127	2422	1018	1720	3440	1720	0	0	0	717	1003	1720
Capacity Analysis Module:												
Vol/Sat:	0.21	0.38	0.38	0.07	0.23	0.16	0.00	0.00	0.00	0.25	0.25	0.07
Crit Volume:		659			119			0			434	
Crit Moves:		****			****						****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #2

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.866
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 170 | Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	2 1	0	1 0	2 0	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	0	862	700	202	852	0	393	583	493	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	862	700	202	852	0	393	583	493	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	862	700	202	852	0	393	583	493	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	862	700	202	852	0	393	583	493	0	0	0
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Vol:	0	862	700	202	852	0	393	583	493	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	862	700	202	852	0	393	583	493	0	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91	1.00	1.00	1.00
Lanes:	0.00	2.00	1.00	1.00	2.00	0.00	1.00	0.99	1.01	0.00	0.00	0.00
Final Sat.:	0	3440	1720	1720	3440	0	1563	1708	1574	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.41	0.12	0.25	0.00	0.25	0.34	0.31	0.00	0.00	0.00
Crit Volume:			700	202				587		0		
Crit Moves:			****	****				****				

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #3

Cycle (sec):	100	Critical Vol./Cap.(X):	0.803
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	116	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	2 0	1	1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	171	870	193	217	909	429	400	510	237	134	545	181
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	171	870	193	217	909	429	400	510	237	134	545	181
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	171	870	193	217	909	429	400	510	237	134	545	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	171	870	193	217	909	429	400	510	237	134	545	181
RTOR Reduct:	0	0	134	0	0	400	0	0	0	0	0	181
RTOR Vol:	171	870	59	217	909	29	400	510	237	134	545	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	171	870	59	217	909	29	400	510	237	134	545	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.37	0.63	1.00	2.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	2253	1047	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.10	0.26	0.04	0.13	0.28	0.02	0.24	0.23	0.23	0.08	0.17	0.00
Crit Volume:		435			217			400			273	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #4

Cycle (sec):	100	Critical Vol./Cap.(X):	0.630
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	62	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1	1 0		1 0 1	1 0		0 0 0	0 0		2 0 0	0 1	
Volume Module:												
Base Vol:	0	805	314	385	913	0	0	0	0	252	0	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	805	314	385	913	0	0	0	0	252	0	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	805	314	385	913	0	0	0	0	252	0	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	805	314	385	913	0	0	0	0	252	0	210
RTOR Reduct:	0	0	0	0	0	0	0	0	0	0	0	210
RTOR Vol:	0	805	314	385	913	0	0	0	0	252	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	805	314	385	913	0	0	0	0	252	0	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	1.44	0.56	1.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	1720	2475	965	1720	3440	0	0	0	0	3127	0	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.22	0.27	0.00	0.00	0.00	0.00	0.08	0.00	0.00
Crit Volume:		560		385				0		126		
Crit Moves:		****		****						****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #5

Cycle (sec):	100	Critical Vol./Cap.(X):	0.734
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	86	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	0	1	1 0 2	0	1	1 0 1	0	1	1 1	0	0 1
Volume Module:												
Base Vol:	30	622	527	573	713	130	100	50	30	313	20	251
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	622	527	573	713	130	100	50	30	313	20	251
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	622	527	573	713	130	100	50	30	313	20	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	622	527	573	713	130	100	50	30	313	20	251
RTOR Reduct:	0	0	172	0	0	100	0	0	30	0	0	251
RTOR Vol:	30	622	355	573	713	30	100	50	0	313	20	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	622	355	573	713	30	100	50	0	313	20	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.88	0.12	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	2820	198	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.22	0.35	0.22	0.02	0.06	0.03	0.00	0.11	0.10	0.00
Crit Volume:			355	573			100			166		
Crit Moves:			****	****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #6

Cycle (sec):	100	Critical Vol./Cap.(X):	0.652
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	66	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Ignore			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2 0 1			1 0 2 0 1			1 0 1 0 1			2 0 0 1 1		
Volume Module:												
Base Vol:	44	970	1175	138	730	128	74	27	26	774	45	55
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	970	1175	138	730	128	74	27	26	774	45	55
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	970	1175	138	730	128	74	27	26	774	45	55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	970	1175	138	730	128	74	27	26	774	45	55
RTOR Reduct:	0	0	0	0	0	74	0	0	26	0	0	55
RTOR Vol:	44	970	1175	138	730	54	74	27	0	774	45	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	970	1175	138	730	54	74	27	0	774	45	0
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00
Final Sat.:	1650	3300	1650	1650	3300	1650	1650	1650	1650	3000	1650	1500
Capacity Analysis Module:												
Vol/Sat:	0.03	0.29	0.71	0.08	0.22	0.03	0.04	0.02	0.00	0.26	0.03	0.00
Crit Volume:		485			138			27			387	
Crit Moves:		****			****			****			****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #8

Cycle (sec): 100 | Critical Vol./Cap.(X): 0.696
Loss Time (sec): 0 (Y+R=4.0 sec) | Average Delay (sec/veh): xxxxxx
Optimal Cycle: 75 | Level Of Service: B

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Protected				Protected				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1 0	2 0	1		1 0	3 1	0		1 0	0 1	0		3 0	1 0	1	
Volume Module:																
Base Vol:	54	2184	3		0	1369	10		55	0	46		2	0	1	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	54	2184	3		0	1369	10		55	0	46		2	0	1	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	54	2184	3		0	1369	10		55	0	46		2	0	1	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	54	2184	3		0	1369	10		55	0	46		2	0	1	
RTOR Reduct:	0	0	1		0	0	0		0	0	0		0	0	0	
RTOR Vol:	54	2184	2		0	1369	10		55	0	46		2	0	1	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	54	2184	2		0	1369	10		55	0	46		2	0	1	
Saturation Flow Module:																
Sat/Lane:	1650	1650	1650		1650	1650	1650		1650	1650	1650		1650	1650	1650	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		0.87	1.00	1.00	
Lanes:	1.00	2.00	1.00		1.00	3.97	0.03		1.00	0.00	1.00		3.00	1.00	1.00	
Final Sat.:	1650	3300	1650		1650	6552	48		1650	0	1650		4307	1650	1650	
Capacity Analysis Module:																
Vol/Sat:	0.03	0.66	0.00		0.00	0.21	0.21		0.03	0.00	0.03		0.00	0.00	0.00	
Crit Volume:		1092				0				55					1	
Crit Moves:		****				****				****					****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #9

Cycle (sec):	100	Critical Vol./Cap.(X):	0.813
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	122	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			AddLane			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 2	1	0	1 0 2	1	0	1 0 1	1	0	1 0 2	0	1
Volume Module:												
Base Vol:	143 1780	444		115 1096	97		424 360	159		208	123	42
Growth Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00
Initial Bse:	143 1780	444		115 1096	97		424 360	159		208	123	42
User Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00
PHF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00
PHF Volume:	143 1780	444		115 1096	97		424 360	159		208	123	42
Reduct Vol:	0 0	0		0 0	0		0 0	0		0	0	0
Reduced Vol:	143 1780	444		115 1096	97		424 360	159		208	123	42
RTOR Reduct:	0 0	0		0 0	97		0 0	0		0	0	42
RTOR Vol:	143 1780	444		115 1096	0		424 360	159		208	123	0
PCE Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00
MLF Adj:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00
FinalVolume:	143 1780	444		115 1096	0		424 360	159		208	123	0
Saturation Flow Module:												
Sat/Lane:	1650 1650	1650		1650 1650	1650		1650 1650	1650		1650	1650	1650
Adjustment:	1.00 1.00	1.00		1.00 1.00	1.00		1.00 1.00	1.00		1.00	1.00	1.00
Lanes:	1.00 2.40	0.60		1.00 3.00	0.00		1.00 1.39	0.61		1.00	2.00	1.00
Final Sat.:	1650 3962	988		1650 4950	0		1650 2289	1011		1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.09 0.45	0.45		0.07 0.22	0.00		0.26 0.16	0.16		0.13	0.04	0.00
Crit Volume:		741		115			424				62	
Crit Moves:		****		****			****				****	

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #10

Cycle (sec):	100	Critical Vol./Cap.(X):	0.772		
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx		
Optimal Cycle:	100	Level Of Service:	C		

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	2 0 3 0 1			2 0 3 0 1			2 0 3 0 1			2 0 2 1 0		
Volume Module:												
Base Vol:	143	1661	585	277	773	240	668	932	29	247	436	163
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	1661	585	277	773	240	668	932	29	247	436	163
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	1661	585	277	773	240	668	932	29	247	436	163
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	1661	585	277	773	240	668	932	29	247	436	163
RTOR Reduct:	0	0	136	0	0	240	0	0	29	0	0	0
RTOR Vol:	143	1661	449	277	773	0	668	932	0	247	436	163
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	1661	449	277	773	0	668	932	0	247	436	163
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.18	0.82
Final Sat.:	3000	4950	1650	3000	4950	1650	3000	4950	1650	3000	3603	1347
Capacity Analysis Module:												
Vol/Sat:	0.05	0.34	0.27	0.09	0.16	0.00	0.22	0.19	0.00	0.08	0.12	0.12
Crit Volume:		554			139			334				200
Crit Moves:		****			****			****				****

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #11

Cycle (sec):	100	Critical Vol./Cap.(X):	0.684	
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx	
Optimal Cycle:	72	Level Of Service:	B	

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ignore		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 1	0	2 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	30	10	20	800	70	477	296	1166	130	10	677	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	20	800	70	477	296	1166	130	10	677	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	20	800	70	477	296	1166	130	10	677	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	20	800	70	477	296	1166	130	10	677	190
RTOR Reduct:	0	0	0	0	0	296	0	0	0	0	0	0
RTOR Vol:	30	10	20	800	70	181	296	1166	130	10	677	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	20	800	70	181	296	1166	130	10	677	190
Saturation Flow Module:												
Sat/Lane:	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650	1650
Adjustment:	1.00	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.33	0.67	2.00	1.00	1.00	1.00	1.80	0.20	1.00	2.00	1.00
Final Sat.:	1650	550	1100	3000	1650	1650	1650	2969	331	1650	3300	1650
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.27	0.04	0.11	0.18	0.39	0.39	0.01	0.21	0.12
Crit Volume:	30			400			648			10		
Crit Moves:	****			****			****			****		

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #12

Cycle (sec):	100	Critical Vol./Cap.(X):	0.822
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	128	Level Of Service:	D

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Split Phase				Split Phase				Protected				Protected			
Rights:	Include				Include				Include				Include			
Min. Green:	0	0	0		0	0	0		0	0	0		0	0	0	
Lanes:	1	0 0	1	0	1	0 0	1	0	1	0 0	1	0	1	0	1	0
Volume Module:																
Base Vol:	15	45	4		57	84	100		75	1085	30		8	508	84	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	15	45	4		57	84	100		75	1085	30		8	508	84	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
PHF Volume:	15	45	4		57	84	100		75	1085	30		8	508	84	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	15	45	4		57	84	100		75	1085	30		8	508	84	
RTOR Reduct:	0	0	0		0	0	0		0	0	0		0	0	57	
RTOR Vol:	15	45	4		57	84	100		75	1085	30		8	508	27	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
FinalVolume:	15	45	4		57	84	100		75	1085	30		8	508	27	
Saturation Flow Module:																
Sat/Lane:	1650	1650	1650		1650	1650	1650		1650	1650	1650		1650	1650	1650	
Adjustment:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Lanes:	1.00	0.92	0.08		1.00	0.46	0.54		1.00	0.97	0.03		1.00	1.00	1.00	
Final Sat.:	1650	1515	135		1650	753	897		1650	1606	44		1650	1650	1650	
Capacity Analysis Module:																
Vol/Sat:	0.01	0.03	0.03		0.03	0.11	0.11		0.05	0.68	0.68		0.00	0.31	0.02	
Crit Volume:	49						184			1115			8			
Crit Moves:	****						****			****			****			

Level Of Service Computation Report
CCTALOS Method (Base Volume Alternative)

Intersection #13

Cycle (sec):	100	Critical Vol./Cap.(X):	0.793
Loss Time (sec):	0 (Y+R=4.0 sec)	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	110	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 0 0 0			1 0 0 0 1			1 0 1 0 0			0 0 1 0 1		
Volume Module:												
Base Vol:	0	0	0	417	0	286	148	947	0	0	416	251
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	417	0	286	148	947	0	0	416	251
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	417	0	286	148	947	0	0	416	251
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	417	0	286	148	947	0	0	416	251
RTOR Reduct:	0	0	0	0	0	148	0	0	0	0	0	251
RTOR Vol:	0	0	0	417	0	138	148	947	0	0	416	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	417	0	138	148	947	0	0	416	0
Saturation Flow Module:												
Sat/Lane:	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720	1720
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1720	0	1720	1720	1720	0	0	1720	1720
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.08	0.09	0.55	0.00	0.00	0.24	0.00
Crit Volume:		0		417			947			0		
Crit Moves:				****			****			****		

Table 8
EXISTING INTERSECTION LEVEL OF SERVICE CONDITIONS – HCM METHODOLOGY
Without Bypass

	INTERSECTION	CONTROL	PEAK HOUR	EXISTING	
				DELAY (sec/veh)	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	21.3	C
			PM	25.4	C
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	19.8	B
			PM	24.5	C
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	34.6	C
			PM	34.1	C
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	21.7	C
			PM	23.1	C
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	43.8	D
			PM	48.5	D
6	PROPOSED FUTURE INTERSECTION		AM		
			PM		
7	PROPOSED FUTURE INTERSECTION		AM		
			PM		
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	12.6	B
			PM	7.1	A
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	36.7	D
			PM	35.2	D
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	32.1	C
			PM	40.4	D
11	SOMERSVILLE RD & JAMES DONLON BLVD	Stop Sign	AM	N/A	N/A
			PM	N/A	N/A
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	30.4	C
			PM	22.1	C
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	36.4	D
			PM	35.6	D

SOURCE: Abrams Associates, 2010

NOTES: Intersection Delay is presented in terms of seconds per vehicle. For Stop Controlled intersections, the level of service and delay are reported for the worst approach.

Table 9
BASELINE INTERSECTION LEVEL OF SERVICE CONDITIONS - HCM METHODOLOGY
Without Bypass

	INTERSECTION	CONTROL	PEAK HOUR	BASELINE		BASELINE PLUS PROJECT	
				DELAY (sec/veh)	LOS	DELAY (sec/veh)	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	21.6	C	21.8	C
			PM	26.9	C	28.3	C
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	19.9	B	19.7	B
			PM	27.5	C	28.1	C
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	36.4	D	37.0	D
			PM	35.1	D	36.2	D
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	21.9	C	20.7	C
			PM	21.4	C	20.5	C
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	43.2	D	39.7	D
			PM	72.1	E	73.7	E
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	N/A	N/A	8.6	A
			PM	N/A	N/A	7.0	A
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	10.5	B
			PM	N/A	N/A	10.0	B
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	12.1	B	11.9	B
			PM	7.2	A	7.4	A
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	37.5	D	37.8	D
			PM	37.1	D	37.7	D
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	32.4	C	32.4	C
			PM	41.5	D	41.7	D
11	SOMERSVILLE RD & JAMES DONLON BLVD	Traffic Signal	AM	14.2	B	14.2	B
			PM	22.7	C	22.7	C
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	29.3	C	30.0	C
			PM	19.8	B	19.9	B
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	37.0	D	37.9	D
			PM	34.2	C	34.0	C

SOURCE: Abrams Associates, 2010

NOTES: Intersection Delay is presented in terms of seconds per vehicle. For Stop Controlled intersections, the level of service and delay are reported for the worst approach.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	107	275	230	381	848	137	60	814	245
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1837	1583	3433	3465		1770	3539	1583
Flt Permitted					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1837	1583	3433	3465		1770	3539	1583
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	0	0	116	299	250	414	922	149	65	885	266
RTOR Reduction (vph)	0	0	0	0	0	163	0	13	0	0	0	142
Lane Group Flow (vph)	0	0	0	0	415	87	414	1058	0	65	885	124
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.1	24.1	22.7	48.7		5.2	31.2	31.2
Effective Green, g (s)					24.1	24.1	22.7	48.7		5.2	31.2	31.2
Actuated g/C Ratio					0.27	0.27	0.25	0.54		0.06	0.35	0.35
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)					492	424	866	1875		102	1227	549
v/s Ratio Prot							0.12	c0.31		0.04	c0.25	
v/s Ratio Perm					0.23	0.06						0.08
v/c Ratio					0.84	0.21	0.48	0.56		0.64	0.72	0.23
Uniform Delay, d1					31.2	25.5	28.6	13.6		41.5	25.6	20.8
Progression Factor					1.00	1.00	0.61	0.24		1.00	1.00	1.00
Incremental Delay, d2					12.5	0.2	0.3	0.9		12.3	3.7	1.0
Delay (s)					43.6	25.8	17.8	4.2		53.8	29.3	21.8
Level of Service					D	C	B	A		D	C	C
Approach Delay (s)		0.0			36.9			8.0			29.0	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM Average Control Delay	21.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.8%	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												
Volume (vph)	385	3	409	0	0	0	0	1031	233	255	638	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.91	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1516	1504					4945		1770	3539	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1516	1504					4945		1770	3539	
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)	418	3	445	0	0	0	0	1121	253	277	693	0
RTOR Reduction (vph)	0	58	215	0	0	0	0	39	0	0	0	0
Lane Group Flow (vph)	301	231	61	0	0	0	0	1335	0	277	693	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.9	19.9	19.9					40.1		18.0	62.1	
Effective Green, g (s)	19.9	19.9	19.9					40.1		18.0	62.1	
Actuated g/C Ratio	0.22	0.22	0.22					0.45		0.20	0.69	
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)	372	335	333					2203		354	2442	
v/s Ratio Prot								c0.27		c0.16	0.20	
v/s Ratio Perm	c0.18	0.15	0.04									
v/c Ratio	0.81	0.69	0.18					0.61		0.78	0.28	
Uniform Delay, d1	33.2	32.2	28.5					19.0		34.1	5.4	
Progression Factor	1.00	1.00	1.00					0.56		1.19	0.41	
Incremental Delay, d2	12.2	5.8	0.3					1.0		7.6	0.2	
Delay (s)	45.5	38.0	28.7					11.6		48.4	2.4	
Level of Service	D	D	C					B		D	A	
Approach Delay (s)		37.6			0.0			11.6			15.5	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.1%	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												
Volume (vph)	303	401	88	145	480	240	108	639	93	143	545	324
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3443		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3443		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	329	436	96	158	522	261	117	695	101	155	592	352
RTOR Reduction (vph)	0	22	0	0	0	215	0	0	67	0	0	246
Lane Group Flow (vph)	329	510	0	158	522	46	117	695	34	155	592	106
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	18.5	18.5		15.7	15.7	15.7	12.8	30.6	30.6	9.2	27.0	27.0
Effective Green, g (s)	18.5	18.5		15.7	15.7	15.7	12.8	30.6	30.6	9.2	27.0	27.0
Actuated g/C Ratio	0.21	0.21		0.17	0.17	0.17	0.14	0.34	0.34	0.10	0.30	0.30
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)	364	708		309	617	276	252	1203	538	181	1062	475
v/s Ratio Prot	c0.19	0.15		0.09	c0.15		0.07	c0.20		c0.09	c0.17	
v/s Ratio Perm						0.03			0.02			0.07
v/c Ratio	0.90	0.72		0.51	0.85	0.16	0.46	0.58	0.06	0.86	0.56	0.22
Uniform Delay, d1	34.9	33.3		33.7	36.0	31.6	35.5	24.4	20.0	39.7	26.5	23.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.62	1.19
Incremental Delay, d2	24.8	3.5		1.4	10.4	0.3	1.4	2.0	0.2	29.1	2.0	1.0
Delay (s)	59.7	36.9		35.1	46.4	31.9	36.8	26.4	20.3	55.9	18.5	29.1
Level of Service	E	D		D	D	C	D	C	C	E	B	C
Approach Delay (s)		45.6			40.4			27.1			27.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	34.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.0%	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												
Volume (vph)	0	0	0	250	0	135	3	667	198	157	652	1
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	0.95		1.00	0.95	
Frt				1.00		0.85	1.00	0.97		1.00	1.00	
Flt Protected				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583	1770	3418		1770	3538	
Flt Permitted				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583	1770	3418		1770	3538	
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	0	0	272	0	147	3	725	215	171	709	1
RTOR Reduction (vph)	0	0	0	0	0	130	0	15	0	0	0	0
Lane Group Flow (vph)	0	0	0	272	0	17	3	925	0	171	710	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				17.2		17.2	1.3	96.2		24.6	119.5	
Effective Green, g (s)				17.2		17.2	1.3	96.2		24.6	119.5	
Actuated g/C Ratio				0.11		0.11	0.01	0.64		0.16	0.80	
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)				394		182	15	2192		290	2819	
v/s Ratio Prot				c0.08			0.00	c0.27		c0.10	0.20	
v/s Ratio Perm						0.01						
v/c Ratio				0.69		0.09	0.20	0.42		0.59	0.25	
Uniform Delay, d1				63.8		59.4	73.8	13.2		58.0	3.9	
Progression Factor				1.00		1.00	1.02	0.57		1.00	1.00	
Incremental Delay, d2				5.1		0.2	6.5	0.6		3.1	0.2	
Delay (s)				69.0		59.6	81.9	8.1		61.1	4.1	
Level of Service				E		E	F	A		E	A	
Approach Delay (s)		0.0			65.7			8.3			15.2	
Approach LOS		A			E			A			B	

Intersection Summary			
HCM Average Control Delay	21.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.6%	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												
Volume (vph)	71	60	35	1073	84	65	17	247	287	51	380	27
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1697	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1697	1583	1770	3539	1583	1770	3539	1583
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)	77	65	38	1166	91	71	18	268	312	55	413	29
RTOR Reduction (vph)	0	0	35	0	0	31	0	0	203	0	0	18
Lane Group Flow (vph)	77	65	3	630	627	40	18	268	109	55	413	11
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.8	11.8	11.8	61.1	61.1	61.1	4.2	52.3	52.3	8.8	56.9	56.9
Effective Green, g (s)	11.8	11.8	11.8	61.1	61.1	61.1	4.2	52.3	52.3	8.8	56.9	56.9
Actuated g/C Ratio	0.08	0.08	0.08	0.41	0.41	0.41	0.03	0.35	0.35	0.06	0.38	0.38
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	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	3.0
Lane Grp Cap (vph)	139	147	125	685	691	645	50	1234	552	104	1342	600
v/s Ratio Prot	c0.04	0.03		c0.37	0.37		c0.01	0.08		c0.03	c0.12	
v/s Ratio Perm			0.00			0.03			0.07			0.01
v/c Ratio	0.55	0.44	0.02	0.92	0.91	0.06	0.36	0.22	0.20	0.53	0.31	0.02
Uniform Delay, d1	66.6	66.0	63.8	42.1	41.8	27.0	71.6	34.4	34.2	68.6	32.7	29.1
Progression Factor	1.00	1.00	1.00	0.87	0.87	0.58	1.00	1.00	1.00	0.98	0.72	0.38
Incremental Delay, d2	4.7	2.1	0.1	16.1	14.4	0.0	4.4	0.4	0.8	4.6	0.6	0.1
Delay (s)	71.3	68.1	63.9	52.6	50.5	15.6	76.0	34.8	35.0	72.0	24.0	11.1
Level of Service	E	E	E	D	D	B	E	C	C	E	C	B
Approach Delay (s)		68.6			49.6			36.1			28.6	
Approach LOS		E			D			D			C	

Intersection Summary			
HCM Average Control Delay	43.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.4%	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												
Volume (vph)	23	0	96	0	0	0	55	438	3	0	1411	27
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	1.00	1.00					1.00	0.95	1.00		0.91	
Frt	1.00	0.85					1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583					1770	3539	1583		5071	
Flt Permitted	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583					1770	3539	1583		5071	
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)	25	0	104	0	0	0	60	476	3	0	1534	29
RTOR Reduction (vph)	0	94	0	0	0	0	0	0	1	0	1	0
Lane Group Flow (vph)	25	10	0	0	0	0	60	476	2	0	1562	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	4.8	11.0					20.1	91.0	91.0		66.9	
Effective Green, g (s)	4.8	11.0					20.1	91.0	91.0		66.9	
Actuated g/C Ratio	0.04	0.10					0.18	0.83	0.83		0.61	
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)	77	158					323	2928	1310		3084	
v/s Ratio Prot	c0.01	c0.01					c0.03	0.13			c0.31	
v/s Ratio Perm									0.00			
v/c Ratio	0.32	0.07					0.19	0.16	0.00		0.51	
Uniform Delay, d1	51.0	44.8					38.0	1.9	1.6		12.2	
Progression Factor	1.00	1.00					0.68	0.38	0.43		1.00	
Incremental Delay, d2	2.5	0.2					0.3	0.1	0.0		0.6	
Delay (s)	53.5	45.0					26.3	0.8	0.7		12.8	
Level of Service	D	D					C	A	A		B	
Approach Delay (s)		46.7			0.0			3.7			12.8	
Approach LOS		D			A			A			B	

Intersection Summary			
HCM Average Control Delay	12.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.1%	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												
Volume (vph)	65	98	120	353	487	72	138	384	112	74	1087	316
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3248		1770	3539	1583	1770	4913		1770	4914	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3248		1770	3539	1583	1770	4913		1770	4914	
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)	71	107	130	384	529	78	150	417	122	80	1182	343
RTOR Reduction (vph)	0	119	0	0	0	57	0	44	0	0	46	0
Lane Group Flow (vph)	71	118	0	384	529	21	150	495	0	80	1479	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	8.3	9.2		29.3	30.2	30.2	10.8	46.9		8.6	44.7	
Effective Green, g (s)	8.3	9.2		29.3	30.2	30.2	10.8	46.9		8.6	44.7	
Actuated g/C Ratio	0.08	0.08		0.27	0.27	0.27	0.10	0.43		0.08	0.41	
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)	134	272		471	972	435	174	2095		138	1997	
v/s Ratio Prot	c0.04	0.04		c0.22	0.15		c0.08	0.10		0.05	c0.30	
v/s Ratio Perm						0.01						
v/c Ratio	0.53	0.43		0.82	0.54	0.05	0.86	0.24		0.58	0.74	
Uniform Delay, d1	49.0	47.9		37.8	34.0	29.3	48.9	20.1		49.0	27.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.81	0.64		0.75	1.25	
Incremental Delay, d2	3.7	1.1		10.4	0.6	0.0	30.2	0.2		5.3	2.3	
Delay (s)	52.7	49.0		48.2	34.7	29.4	69.6	13.0		41.8	37.0	
Level of Service	D	D		D	C	C	E	B		D	D	
Approach Delay (s)		49.9			39.5			25.4			37.3	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	36.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.2%	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												
Volume (vph)	195	342	33	432	1138	128	147	273	163	248	944	478
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5008		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5008		3433	5085	1583	3433	5085	1583
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)	212	372	36	470	1237	139	160	297	177	270	1026	520
RTOR Reduction (vph)	0	0	32	0	13	0	0	0	118	0	0	131
Lane Group Flow (vph)	212	372	4	470	1363	0	160	297	59	270	1026	389
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	9.0	13.3	13.3	30.7	35.0		7.1	36.4	36.4	13.6	42.9	42.9
Effective Green, g (s)	9.0	13.3	13.3	30.7	35.0		7.1	36.4	36.4	13.6	42.9	42.9
Actuated g/C Ratio	0.08	0.12	0.12	0.28	0.32		0.06	0.33	0.33	0.12	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	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)	281	615	191	958	1593		222	1683	524	424	1983	617
v/s Ratio Prot	c0.06	c0.07		0.14	c0.27		c0.05	0.06		0.08	0.20	
v/s Ratio Perm			0.00						0.04			c0.25
v/c Ratio	0.75	0.60	0.02	0.49	0.86		0.72	0.18	0.11	0.64	0.52	0.63
Uniform Delay, d1	49.4	45.9	42.6	33.1	35.1		50.5	26.1	25.6	45.9	25.6	27.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.92	0.49	0.39
Incremental Delay, d2	10.9	1.7	0.0	0.4	4.7		10.9	0.2	0.4	2.3	0.7	3.6
Delay (s)	60.3	47.5	42.7	33.5	39.9		61.4	26.4	26.0	44.4	13.2	14.2
Level of Service	E	D	D	C	D		E	C	C	D	B	B
Approach Delay (s)		51.6			38.3			35.1			18.1	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM Average Control Delay	32.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.6%	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												
Volume (vph)	98	459	7	1	699	104	72	87	5	81	21	143
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1858		1770	1863	1583	1770	1849		1770	1619	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1858		1770	1863	1583	1770	1849		1770	1619	
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)	107	499	8	1	760	113	78	95	5	88	23	155
RTOR Reduction (vph)	0	0	0	0	0	40	0	1	0	0	138	0
Lane Group Flow (vph)	107	507	0	1	760	73	78	99	0	88	40	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						6						
Actuated Green, G (s)	12.1	107.7		0.8	96.4	96.4	7.5	16.0		7.5	16.0	
Effective Green, g (s)	12.6	108.2		1.3	96.9	96.9	8.0	16.5		8.0	16.5	
Actuated g/C Ratio	0.08	0.72		0.01	0.65	0.65	0.05	0.11		0.05	0.11	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	149	1340		15	1203	1023	94	203		94	178	
v/s Ratio Prot	c0.06	0.27		0.00	c0.41		0.04	c0.05		c0.05	0.02	
v/s Ratio Perm						0.05						
v/c Ratio	0.72	0.38		0.07	0.63	0.07	0.83	0.49		0.94	0.23	
Uniform Delay, d1	67.0	8.0		73.7	15.9	9.9	70.3	62.8		70.7	60.9	
Progression Factor	1.00	1.07		1.32	0.30	0.11	1.00	1.00		1.00	1.00	
Incremental Delay, d2	14.9	0.8		1.6	2.2	0.1	42.7	8.2		71.5	2.9	
Delay (s)	81.8	9.3		99.1	7.0	1.2	113.0	70.9		142.2	63.8	
Level of Service	F	A		F	A	A	F	E		F	E	
Approach Delay (s)		22.0			6.3			89.4			89.8	
Approach LOS		C			A			F			F	

Intersection Summary			
HCM Average Control Delay	30.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	254	331	592	204	152	182
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	276	360	643	222	165	198
RTOR Reduction (vph)	0	0	0	78	0	176
Lane Group Flow (vph)	276	360	643	144	165	22
Turn Type	Prot			Perm		Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	23.5	124.5	96.5	96.5	16.5	16.5
Effective Green, g (s)	24.0	125.0	97.0	97.0	17.0	17.0
Actuated g/C Ratio	0.16	0.83	0.65	0.65	0.11	0.11
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	283	1553	1205	1024	201	179
v/s Ratio Prot	c0.16	0.19	c0.35		c0.09	
v/s Ratio Perm				0.09		0.01
v/c Ratio	0.98	0.23	0.53	0.14	0.82	0.13
Uniform Delay, d1	62.7	2.6	14.3	10.3	65.0	59.8
Progression Factor	0.81	0.61	1.09	1.31	1.00	1.00
Incremental Delay, d2	44.3	0.3	0.2	0.0	29.9	1.4
Delay (s)	95.1	1.9	15.7	13.5	94.9	61.2
Level of Service	F	A	B	B	F	E
Approach Delay (s)		42.4	15.1		76.6	
Approach LOS		D	B		E	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.7%	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												
Volume (vph)	0	0	0	152	229	216	438	808	353	107	665	252
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1826	1583	3433	3378		1770	3539	1583
Flt Permitted					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1826	1583	3433	3378		1770	3539	1583
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	0	0	165	249	235	476	878	384	116	723	274
RTOR Reduction (vph)	0	0	0	0	0	171	0	52	0	0	0	161
Lane Group Flow (vph)	0	0	0	0	414	64	476	1210	0	116	723	113
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.5	24.5	17.6	44.8		8.7	35.9	35.9
Effective Green, g (s)					24.5	24.5	17.6	44.8		8.7	35.9	35.9
Actuated g/C Ratio					0.27	0.27	0.20	0.50		0.10	0.40	0.40
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)					497	431	671	1681		171	1412	631
v/s Ratio Prot							c0.14	c0.36		0.07	0.20	
v/s Ratio Perm					0.23	0.04						0.07
v/c Ratio					0.83	0.15	0.71	0.72		0.68	0.51	0.18
Uniform Delay, d1					30.8	24.8	33.8	17.7		39.3	20.4	17.5
Progression Factor					1.00	1.00	1.00	0.82		1.00	1.00	1.00
Incremental Delay, d2					11.4	0.2	3.2	2.5		10.2	1.3	0.6
Delay (s)					42.2	25.0	37.0	17.0		49.5	21.8	18.1
Level of Service					D	C	D	B		D	C	B
Approach Delay (s)		0.0			36.0			22.5			23.8	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	25.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.0%	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												
Volume (vph)	356	528	194	0	0	0	0	600	626	182	703	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	1.00	0.85					0.92		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1682	1504					4696		1770	3539	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1682	1504					4696		1770	3539	
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)	387	574	211	0	0	0	0	652	680	198	764	0
RTOR Reduction (vph)	0	1	103	0	0	0	0	96	0	0	0	0
Lane Group Flow (vph)	348	633	87	0	0	0	0	1236	0	198	764	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Effective Green, g (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.36		0.13	0.53	
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)	635	635	568					1670		236	1887	
v/s Ratio Prot								c0.26		c0.11	0.22	
v/s Ratio Perm	0.21	0.38	0.06									
v/c Ratio	0.55	1.00	0.15					1.02dr		0.84	0.40	
Uniform Delay, d1	22.0	27.9	18.5					25.4		38.1	12.5	
Progression Factor	1.00	1.00	1.00					0.49		0.82	0.45	
Incremental Delay, d2	1.0	34.6	0.1					1.9		19.8	0.6	
Delay (s)	22.9	62.5	18.6					14.2		51.0	6.2	
Level of Service	C	E	B					B		D	A	
Approach Delay (s)		43.7			0.0			14.2			15.4	
Approach LOS		D			A			B			B	

Intersection Summary				
HCM Average Control Delay	24.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	74.0%	ICU Level of Service	D	
Analysis Period (min)	15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	362	461	124	107	494	164	101	697	167	196	502	388
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3427		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3427		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	393	501	135	116	537	178	110	758	182	213	546	422
RTOR Reduction (vph)	0	27	0	0	0	147	0	0	132	0	0	286
Lane Group Flow (vph)	393	609	0	116	537	31	110	758	50	213	546	136
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	21.5	28.0		9.3	15.8	15.8	7.8	24.6	24.6	12.1	28.9	28.9
Effective Green, g (s)	21.5	28.0		9.3	15.8	15.8	7.8	24.6	24.6	12.1	28.9	28.9
Actuated g/C Ratio	0.24	0.31		0.10	0.18	0.18	0.09	0.27	0.27	0.13	0.32	0.32
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)	423	1066		183	621	278	153	967	433	238	1136	508
v/s Ratio Prot	c0.22	0.18		0.07	c0.15		0.06	c0.21		c0.12	0.15	
v/s Ratio Perm						0.02			0.03			0.09
v/c Ratio	0.93	0.57		0.63	0.86	0.11	0.72	0.78	0.11	0.89	0.48	0.27
Uniform Delay, d1	33.5	26.0		38.7	36.1	31.2	40.0	30.2	24.5	38.3	24.5	22.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.85	0.81	1.12	1.47	0.61	0.10
Incremental Delay, d2	26.5	0.7		7.0	12.0	0.2	13.7	5.8	0.5	30.9	1.4	1.2
Delay (s)	60.0	26.7		45.7	48.1	31.4	47.9	30.4	27.9	87.1	16.3	3.4
Level of Service	E	C		D	D	C	D	C	C	F	B	A
Approach Delay (s)		39.4			44.2			31.8			24.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.2%	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												
Volume (vph)	0	0	0	228	0	190	0	576	284	348	402	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	
Lane Util. Factor				0.97		1.00		0.95		1.00	0.95	
Frt				1.00		0.85		0.95		1.00	1.00	
Flt Protected				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583		3364		1770	3539	
Flt Permitted				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583		3364		1770	3539	
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	0	0	248	0	207	0	626	309	378	437	0
RTOR Reduction (vph)	0	0	0	0	0	180	0	63	0	0	0	0
Lane Group Flow (vph)	0	0	0	248	0	27	0	872	0	378	437	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				11.8		11.8		40.2		26.0	70.2	
Effective Green, g (s)				11.8		11.8		40.2		26.0	70.2	
Actuated g/C Ratio				0.13		0.13		0.45		0.29	0.78	
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)				450		208		1503		511	2760	
v/s Ratio Prot				c0.07				c0.26		c0.21	0.12	
v/s Ratio Perm						0.02						
v/c Ratio				0.55		0.13		0.58		0.74	0.16	
Uniform Delay, d1				36.6		34.6		18.6		28.9	2.5	
Progression Factor				1.00		1.00		1.00		1.21	0.24	
Incremental Delay, d2				1.5		0.3		1.6		4.9	0.1	
Delay (s)				38.1		34.9		20.2		39.8	0.7	
Level of Service				D		C		C		D	A	
Approach Delay (s)		0.0			36.6			20.2			18.9	
Approach LOS		A			D			C			B	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.8%	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												
Volume (vph)	87	60	10	378	98	69	25	654	830	81	81	64
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1719	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1719	1583	1770	3539	1583	1770	3539	1583
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)	95	65	11	411	107	75	27	711	902	88	88	70
RTOR Reduction (vph)	0	0	10	0	0	61	0	0	499	0	0	28
Lane Group Flow (vph)	95	65	1	255	263	14	27	711	403	88	88	42
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.9	12.9	12.9	27.5	27.5	27.5	4.2	58.4	58.4	35.2	89.4	89.4
Effective Green, g (s)	12.9	12.9	12.9	27.5	27.5	27.5	4.2	58.4	58.4	35.2	89.4	89.4
Actuated g/C Ratio	0.09	0.09	0.09	0.18	0.18	0.18	0.03	0.39	0.39	0.23	0.60	0.60
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	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	3.0
Lane Grp Cap (vph)	152	160	136	308	315	290	50	1378	616	415	2109	943
v/s Ratio Prot	c0.05	0.03		0.15	c0.15		c0.02	0.20		c0.05	0.02	
v/s Ratio Perm			0.00			0.01			c0.25			0.03
v/c Ratio	0.62	0.41	0.01	0.83	0.83	0.05	0.54	0.52	0.65	0.21	0.04	0.04
Uniform Delay, d1	66.2	64.9	62.7	59.0	59.1	50.5	71.9	35.0	37.5	46.2	12.6	12.6
Progression Factor	1.00	1.00	1.00	0.93	0.93	1.87	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.8	1.7	0.0	15.7	16.3	0.1	11.4	1.4	5.3	0.3	0.0	0.1
Delay (s)	74.0	66.6	62.7	70.4	71.0	94.5	83.3	36.4	42.9	46.5	12.6	12.7
Level of Service	E	E	E	E	E	F	F	D	D	D	B	B
Approach Delay (s)		70.5			73.7			40.7			24.7	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM Average Control Delay	48.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	70.7%	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												
Volume (vph)	50	0	42	2	0	1	49	1754	3	0	566	9
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		0.94		1.00	1.00	0.95	1.00		0.91	
Frt	1.00	0.85		1.00		0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583		4990		1583	1770	3539	1583		5073	
Flt Permitted	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583		4990		1583	1770	3539	1583		5073	
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)	54	0	46	2	0	1	53	1907	3	0	615	10
RTOR Reduction (vph)	0	44	0	0	0	1	0	0	0	0	1	0
Lane Group Flow (vph)	54	2	0	2	0	0	53	1907	3	0	624	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	5.2	5.5		0.8		1.1	7.8	101.7	101.7		89.9	
Effective Green, g (s)	5.2	5.5		0.8		1.1	7.8	101.7	101.7		89.9	
Actuated g/C Ratio	0.04	0.05		0.01		0.01	0.06	0.85	0.85		0.75	
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)	77	73		33		15	115	2999	1342		3801	
v/s Ratio Prot	c0.03	c0.00		0.00			0.03	c0.54			0.12	
v/s Ratio Perm						0.00			0.00			
v/c Ratio	0.70	0.03		0.06		0.00	0.46	0.64	0.00		0.16	
Uniform Delay, d1	56.6	54.7		59.2		58.9	54.1	3.0	1.4		4.3	
Progression Factor	1.00	1.00		1.00		1.00	1.31	0.75	0.00		1.00	
Incremental Delay, d2	25.0	0.2		0.8		0.0	1.6	0.6	0.0		0.1	
Delay (s)	81.6	54.9		60.0		58.9	72.2	2.8	0.0		4.4	
Level of Service	F	D		E		E	E	A	A		A	
Approach Delay (s)		69.3			59.6			4.7			4.4	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	7.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.2%	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												
Volume (vph)	350	326	144	188	111	38	130	1422	402	104	428	68
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3376		1770	3539	1583	1770	4917		1770	4981	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3376		1770	3539	1583	1770	4917		1770	4981	
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)	380	354	157	204	121	41	141	1546	437	113	465	74
RTOR Reduction (vph)	0	43	0	0	0	37	0	39	0	0	16	0
Lane Group Flow (vph)	380	468	0	204	121	4	141	1944	0	113	523	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	27.4	21.9		17.3	11.8	11.8	14.3	57.8		7.0	50.5	
Effective Green, g (s)	27.4	21.9		17.3	11.8	11.8	14.3	57.8		7.0	50.5	
Actuated g/C Ratio	0.23	0.18		0.14	0.10	0.10	0.12	0.48		0.06	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)	404	616		255	348	156	211	2368		103	2096	
v/s Ratio Prot	c0.21	c0.14		0.12	0.03		0.08	c0.40		c0.06	0.10	
v/s Ratio Perm						0.00						
v/c Ratio	0.94	0.76		0.80	0.35	0.03	0.67	0.82		1.10	0.25	
Uniform Delay, d1	45.5	46.5		49.7	50.5	48.9	50.6	26.7		56.5	22.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.11	0.43		0.93	0.83	
Incremental Delay, d2	30.0	5.4		16.3	0.6	0.1	5.4	2.3		117.0	0.3	
Delay (s)	75.5	51.9		65.9	51.1	49.0	61.7	13.6		169.6	19.1	
Level of Service	E	D		E	D	D	E	B		F	B	
Approach Delay (s)		62.0			59.1			16.8			45.1	
Approach LOS		E			E			B			D	

Intersection Summary					
HCM Average Control Delay	35.2	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.85				
Actuated Cycle Length (s)	120.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	79.6%	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												
Volume (vph)	560	844	26	223	395	125	130	1381	530	238	356	191
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	4902		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	4902		3433	5085	1583	3433	5085	1583
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)	609	917	28	242	429	136	141	1501	576	259	387	208
RTOR Reduction (vph)	0	0	21	0	48	0	0	0	157	0	0	116
Lane Group Flow (vph)	609	917	7	242	517	0	141	1501	419	259	387	92
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	25.5	29.5	29.5	11.6	15.6		9.7	51.2	51.2	11.7	53.2	53.2
Effective Green, g (s)	25.5	29.5	29.5	11.6	15.6		9.7	51.2	51.2	11.7	53.2	53.2
Actuated g/C Ratio	0.21	0.25	0.25	0.10	0.13		0.08	0.43	0.43	0.10	0.44	0.44
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)	730	1250	389	332	637		278	2170	675	335	2254	702
v/s Ratio Prot	c0.18	c0.18		0.07	c0.11		0.04	c0.30		c0.08	0.08	
v/s Ratio Perm			0.00						0.26			0.06
v/c Ratio	0.83	0.73	0.02	0.73	0.81		0.51	0.69	0.62	0.77	0.17	0.13
Uniform Delay, d1	45.2	41.6	34.3	52.7	50.8		52.9	28.0	26.8	52.9	20.1	19.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.93	0.82	1.43
Incremental Delay, d2	8.1	2.3	0.0	7.8	7.8		1.5	1.8	4.3	9.8	0.2	0.4
Delay (s)	53.4	43.9	34.3	60.5	58.5		54.3	29.8	31.1	58.8	16.8	28.5
Level of Service	D	D	C	E	E		D	C	C	E	B	C
Approach Delay (s)		47.4			59.1			31.7			32.4	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM Average Control Delay	40.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.2%	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												
Volume (vph)	68	851	27	7	426	76	14	41	4	52	76	91
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1854		1770	1863	1583	1770	1840		1770	1711	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1854		1770	1863	1583	1770	1840		1770	1711	
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)	74	925	29	8	463	83	15	45	4	57	83	99
RTOR Reduction (vph)	0	1	0	0	0	32	0	2	0	0	27	0
Lane Group Flow (vph)	74	953	0	8	463	51	15	47	0	57	155	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	11.2	102.3		0.8	91.9	91.9	1.6	21.7		7.2	27.3	
Effective Green, g (s)	11.7	102.8		1.3	92.4	92.4	2.1	22.2		7.7	27.8	
Actuated g/C Ratio	0.08	0.69		0.01	0.62	0.62	0.01	0.15		0.05	0.19	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	138	1271		15	1148	975	25	272		91	317	
v/s Ratio Prot	0.04	c0.51		0.00	c0.25		0.01	0.03		c0.03	c0.09	
v/s Ratio Perm						0.03						
v/c Ratio	0.54	0.75		0.53	0.40	0.05	0.60	0.17		0.63	0.49	
Uniform Delay, d1	66.5	15.3		74.0	14.7	11.4	73.5	55.9		69.7	54.7	
Progression Factor	1.04	0.79		0.73	0.34	0.03	1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.7	1.7		30.6	0.2	0.0	33.2	1.4		12.7	5.3	
Delay (s)	71.9	13.8		85.0	5.2	0.4	106.7	57.3		82.4	60.1	
Level of Service	E	B		F	A	A	F	E		F	E	
Approach Delay (s)		17.9			5.7			68.9			65.4	
Approach LOS		B			A			E			E	

Intersection Summary			
HCM Average Control Delay	22.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	129	683	353	174	286	249
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	140	742	384	189	311	271
RTOR Reduction (vph)	0	0	0	139	0	159
Lane Group Flow (vph)	140	742	384	50	311	112
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	35.4	79.3	39.4	39.4	61.7	61.7
Effective Green, g (s)	35.9	79.8	39.9	39.9	62.2	62.2
Actuated g/C Ratio	0.24	0.53	0.27	0.27	0.41	0.41
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	424	991	496	421	734	656
v/s Ratio Prot	0.08	c0.40	0.21		c0.18	
v/s Ratio Perm				0.03		0.07
v/c Ratio	0.33	0.75	0.77	0.12	0.42	0.17
Uniform Delay, d1	47.1	27.3	50.9	41.7	31.2	27.7
Progression Factor	0.82	0.86	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	2.1	7.4	0.1	1.8	0.6
Delay (s)	39.0	25.5	58.3	41.9	33.0	28.2
Level of Service	D	C	E	D	C	C
Approach Delay (s)		27.7	52.9		30.8	
Approach LOS		C	D		C	

Intersection Summary			
HCM Average Control Delay	35.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.5%	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												
Volume (vph)	0	0	0	110	282	236	486	891	140	62	842	251
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1837	1583	3433	3467		1770	3539	1583
Flt Permitted					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1837	1583	3433	3467		1770	3539	1583
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	0	0	120	307	257	528	968	152	67	915	273
RTOR Reduction (vph)	0	0	0	0	0	154	0	13	0	0	0	122
Lane Group Flow (vph)	0	0	0	0	427	103	528	1107	0	67	915	151
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.5	24.5	22.7	48.4		5.1	30.8	30.8
Effective Green, g (s)					24.5	24.5	22.7	48.4		5.1	30.8	30.8
Actuated g/C Ratio					0.27	0.27	0.25	0.54		0.06	0.34	0.34
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)					500	431	866	1864		100	1211	542
v/s Ratio Prot							0.15	c0.32		0.04	c0.26	
v/s Ratio Perm					0.23	0.06						0.10
v/c Ratio					0.85	0.24	0.61	0.59		0.67	0.76	0.28
Uniform Delay, d1					31.1	25.5	29.7	14.1		41.6	26.3	21.5
Progression Factor					1.00	1.00	0.57	0.20		1.00	1.00	1.00
Incremental Delay, d2					13.3	0.3	0.8	1.0		16.2	4.4	1.3
Delay (s)					44.4	25.8	17.8	3.8		57.8	30.7	22.8
Level of Service					D	C	B	A		E	C	C
Approach Delay (s)		0.0			37.4			8.3			30.4	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.1%	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												
Volume (vph)	395	3	451	0	0	0	0	1174	239	261	661	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.90	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1506	1504					4956		1770	3539	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1506	1504					4956		1770	3539	
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)	429	3	490	0	0	0	0	1276	260	284	718	0
RTOR Reduction (vph)	0	73	208	0	0	0	0	33	0	0	0	0
Lane Group Flow (vph)	322	233	86	0	0	0	0	1503	0	284	718	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.4	20.4	20.4					39.6		18.0	61.6	
Effective Green, g (s)	20.4	20.4	20.4					39.6		18.0	61.6	
Actuated g/C Ratio	0.23	0.23	0.23					0.44		0.20	0.68	
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)	381	341	341					2181		354	2422	
v/s Ratio Prot								c0.30		c0.16	0.20	
v/s Ratio Perm	c0.19	0.15	0.06									
v/c Ratio	0.85	0.68	0.25					0.69		0.80	0.30	
Uniform Delay, d1	33.3	31.9	28.5					20.3		34.3	5.6	
Progression Factor	1.00	1.00	1.00					0.50		1.18	0.41	
Incremental Delay, d2	15.7	5.6	0.4					1.3		8.3	0.2	
Delay (s)	49.0	37.4	28.9					11.5		48.8	2.5	
Level of Service	D	D	C					B		D	A	
Approach Delay (s)		38.7			0.0			11.5			15.6	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.1%	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												
Volume (vph)	311	411	103	149	492	246	150	772	95	147	598	332
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3433		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3433		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	338	447	112	162	535	267	163	839	103	160	650	361
RTOR Reduction (vph)	0	26	0	0	0	211	0	0	68	0	0	266
Lane Group Flow (vph)	338	533	0	162	535	56	163	839	35	160	650	95
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	18.7	19.0		15.4	15.7	15.7	16.0	30.3	30.3	9.3	23.6	23.6
Effective Green, g (s)	18.7	19.0		15.4	15.7	15.7	16.0	30.3	30.3	9.3	23.6	23.6
Actuated g/C Ratio	0.21	0.21		0.17	0.17	0.17	0.18	0.34	0.34	0.10	0.26	0.26
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)	368	725		303	617	276	315	1191	533	183	928	415
v/s Ratio Prot	c0.19	0.16		0.09	c0.15		0.09	c0.24		c0.09	c0.18	
v/s Ratio Perm						0.04			0.02			0.06
v/c Ratio	0.92	0.74		0.53	0.87	0.20	0.52	0.70	0.07	0.87	0.70	0.23
Uniform Delay, d1	34.9	33.2		34.0	36.1	31.8	33.5	26.0	20.2	39.8	30.0	26.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.69	0.62	1.20
Incremental Delay, d2	27.1	3.9		1.8	12.3	0.4	1.4	3.5	0.2	32.1	4.1	1.2
Delay (s)	62.0	37.0		35.8	48.4	32.2	34.9	29.5	20.5	59.6	22.7	32.5
Level of Service	E	D		D	D	C	C	C	C	E	C	C
Approach Delay (s)		46.5			41.8			29.4			30.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	36.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.6%	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												
Volume (vph)	0	0	0	256	0	138	3	840	203	161	720	1
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	0.95		1.00	0.95	
Frt				1.00		0.85	1.00	0.97		1.00	1.00	
Flt Protected				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583	1770	3436		1770	3539	
Flt Permitted				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583	1770	3436		1770	3539	
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	0	0	278	0	150	3	913	221	175	783	1
RTOR Reduction (vph)	0	0	0	0	0	133	0	12	0	0	0	0
Lane Group Flow (vph)	0	0	0	278	0	17	3	1122	0	175	784	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				17.4		17.4	1.3	95.9		24.7	119.3	
Effective Green, g (s)				17.4		17.4	1.3	95.9		24.7	119.3	
Actuated g/C Ratio				0.12		0.12	0.01	0.64		0.16	0.80	
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)				398		184	15	2197		291	2815	
v/s Ratio Prot				c0.08			0.00	c0.33		c0.10	0.22	
v/s Ratio Perm						0.01						
v/c Ratio				0.70		0.09	0.20	0.51		0.60	0.28	
Uniform Delay, d1				63.8		59.3	73.8	14.5		58.1	4.0	
Progression Factor				1.00		1.00	0.96	0.72		1.00	1.00	
Incremental Delay, d2				5.3		0.2	6.4	0.8		3.5	0.2	
Delay (s)				69.1		59.5	77.2	11.3		61.6	4.3	
Level of Service				E		E	E	B		E	A	
Approach Delay (s)		0.0			65.7			11.5			14.7	
Approach LOS		A			E			B			B	

Intersection Summary			
HCM Average Control Delay	21.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.9%	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												
Volume (vph)	80	60	40	1177	90	248	30	250	489	129	750	70
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1697	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1697	1583	1770	3539	1583	1770	3539	1583
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)	87	65	43	1279	98	270	33	272	532	140	815	76
RTOR Reduction (vph)	0	0	39	0	0	101	0	0	384	0	0	46
Lane Group Flow (vph)	87	65	4	691	686	169	33	272	148	140	815	30
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.4	12.4	12.4	65.1	65.1	65.1	5.6	41.6	41.6	14.9	50.9	50.9
Effective Green, g (s)	12.4	12.4	12.4	65.1	65.1	65.1	5.6	41.6	41.6	14.9	50.9	50.9
Actuated g/C Ratio	0.08	0.08	0.08	0.43	0.43	0.43	0.04	0.28	0.28	0.10	0.34	0.34
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	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	3.0
Lane Grp Cap (vph)	146	154	131	730	736	687	66	981	439	176	1201	537
v/s Ratio Prot	c0.05	0.03		c0.41	0.40		c0.02	0.08		c0.08	c0.23	
v/s Ratio Perm			0.00			0.11			0.09			0.02
v/c Ratio	0.60	0.42	0.03	0.95	0.93	0.25	0.50	0.28	0.34	0.80	0.68	0.06
Uniform Delay, d1	66.4	65.4	63.3	40.8	40.3	26.9	70.8	42.4	43.2	66.1	42.5	33.4
Progression Factor	1.00	1.00	1.00	0.74	0.74	0.42	1.00	1.00	1.00	0.96	0.77	0.32
Incremental Delay, d2	6.4	1.9	0.1	17.3	15.1	0.1	5.8	0.7	2.0	20.7	3.0	0.2
Delay (s)	72.8	67.3	63.3	47.7	45.0	11.3	76.6	43.1	45.2	83.9	35.6	10.7
Level of Service	E	E	E	D	D	B	E	D	D	F	D	B
Approach Delay (s)		68.9			40.6			45.8			40.3	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.7%	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												
Volume (vph)	24	0	98	0	0	0	56	478	3	0	1534	28
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	1.00	1.00					1.00	0.95	1.00		0.91	
Frt	1.00	0.85					1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583					1770	3539	1583		5072	
Flt Permitted	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583					1770	3539	1583		5072	
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)	26	0	107	0	0	0	61	520	3	0	1667	30
RTOR Reduction (vph)	0	96	0	0	0	0	0	0	1	0	1	0
Lane Group Flow (vph)	26	11	0	0	0	0	61	520	2	0	1696	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	4.8	11.0					18.2	91.0	91.0		68.8	
Effective Green, g (s)	4.8	11.0					18.2	91.0	91.0		68.8	
Actuated g/C Ratio	0.04	0.10					0.17	0.83	0.83		0.63	
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)	77	158					293	2928	1310		3172	
v/s Ratio Prot	c0.01	c0.01					c0.03	0.15			c0.33	
v/s Ratio Perm									0.00			
v/c Ratio	0.34	0.07					0.21	0.18	0.00		0.53	
Uniform Delay, d1	51.1	44.9					39.7	1.9	1.6		11.6	
Progression Factor	1.00	1.00					0.70	0.34	0.43		1.00	
Incremental Delay, d2	2.6	0.2					0.3	0.1	0.0		0.6	
Delay (s)	53.7	45.0					28.1	0.8	0.7		12.2	
Level of Service	D	D					C	A	A		B	
Approach Delay (s)		46.7			0.0			3.6			12.2	
Approach LOS		D			A			A			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	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												
Volume (vph)	71	100	123	362	499	74	141	419	115	76	1187	337
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3246		1770	3539	1583	1770	4921		1770	4917	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3246		1770	3539	1583	1770	4921		1770	4917	
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)	77	109	134	393	542	80	153	455	125	83	1290	366
RTOR Reduction (vph)	0	123	0	0	0	58	0	41	0	0	45	0
Lane Group Flow (vph)	77	120	0	393	542	22	153	539	0	83	1611	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	8.5	9.2		30.1	30.8	30.8	10.8	46.0		8.7	43.9	
Effective Green, g (s)	8.5	9.2		30.1	30.8	30.8	10.8	46.0		8.7	43.9	
Actuated g/C Ratio	0.08	0.08		0.27	0.28	0.28	0.10	0.42		0.08	0.40	
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)	137	271		484	991	443	174	2058		140	1962	
v/s Ratio Prot	c0.04	0.04		c0.22	0.15		c0.09	0.11		0.05	c0.33	
v/s Ratio Perm						0.01						
v/c Ratio	0.56	0.44		0.81	0.55	0.05	0.88	0.26		0.59	0.82	
Uniform Delay, d1	49.0	48.0		37.3	33.7	28.9	49.0	20.9		48.9	29.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.80	0.63		0.77	1.21	
Incremental Delay, d2	5.2	1.2		10.0	0.6	0.0	32.7	0.3		5.9	3.6	
Delay (s)	54.1	49.1		47.3	34.3	29.0	71.9	13.4		43.4	39.2	
Level of Service	D	D		D	C	C	E	B		D	D	
Approach Delay (s)		50.3			38.9			25.6			39.4	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	37.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.4%	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												
Volume (vph)	206	351	34	443	1167	134	151	296	167	263	1015	507
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5007		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5007		3433	5085	1583	3433	5085	1583
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)	224	382	37	482	1268	146	164	322	182	286	1103	551
RTOR Reduction (vph)	0	0	32	0	13	0	0	0	123	0	0	130
Lane Group Flow (vph)	224	382	5	482	1401	0	164	322	59	286	1103	421
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	9.0	13.7	13.7	30.6	35.3		7.0	35.8	35.8	13.9	42.7	42.7
Effective Green, g (s)	9.0	13.7	13.7	30.6	35.3		7.0	35.8	35.8	13.9	42.7	42.7
Actuated g/C Ratio	0.08	0.12	0.12	0.28	0.32		0.06	0.33	0.33	0.13	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	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)	281	633	197	955	1607		218	1655	515	434	1974	614
v/s Ratio Prot	c0.07	c0.08		0.14	c0.28		c0.05	0.06		0.08	0.22	
v/s Ratio Perm			0.00						0.04			c0.27
v/c Ratio	0.80	0.60	0.02	0.50	0.87		0.75	0.19	0.12	0.66	0.56	0.69
Uniform Delay, d1	49.6	45.6	42.3	33.3	35.2		50.6	26.7	26.0	45.8	26.3	28.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.96	0.45	0.35
Incremental Delay, d2	14.5	1.6	0.0	0.4	5.5		13.6	0.3	0.5	2.4	0.8	4.2
Delay (s)	64.1	47.2	42.3	33.8	40.7		64.3	27.0	26.5	46.3	12.7	13.9
Level of Service	E	D	D	C	D		E	C	C	D	B	B
Approach Delay (s)		52.8			39.0			36.0			18.0	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM Average Control Delay	32.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.2%	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												
Volume (vph)	329	62	10	10	47	1320	20	30	20	260	10	106
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3464		1770	3539	1583	1770	1751		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3464		1770	3539	1583	1770	1751		3433	1863	2787
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)	358	67	11	11	51	1435	22	33	22	283	11	115
RTOR Reduction (vph)	0	7	0	0	0	0	0	19	0	0	0	75
Lane Group Flow (vph)	358	71	0	11	51	1435	22	36	0	283	11	40
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	18.0	22.2		0.6	4.8	61.7	1.2	5.2		17.7	21.7	21.7
Effective Green, g (s)	18.0	22.2		0.6	4.8	61.7	1.2	5.2		17.7	21.7	21.7
Actuated g/C Ratio	0.29	0.36		0.01	0.08	1.00	0.02	0.08		0.29	0.35	0.35
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)	516	1246		17	275	1583	34	148		985	655	980
v/s Ratio Prot	0.20	0.02		0.01	0.01		0.01	0.02		0.08	0.01	
v/s Ratio Perm						c0.91						0.01
v/c Ratio	0.69	0.06		0.65	0.19	0.91	0.65	0.24		0.29	0.02	0.04
Uniform Delay, d1	19.4	12.9		30.4	26.6	0.0	30.0	26.4		17.1	13.0	13.2
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	4.0	0.0		62.0	0.3	9.1	35.3	0.9		0.7	0.0	0.1
Delay (s)	23.4	12.9		92.4	26.9	9.1	65.3	27.3		17.8	13.1	13.2
Level of Service	C	B		F	C	A	E	C		B	B	B
Approach Delay (s)		21.5			10.3			38.1			16.4	
Approach LOS		C			B			D			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	61.7	Sum of lost time (s)	0.0
Intersection Capacity Utilization	45.6%	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												
Volume (vph)	100	559	7	1	982	107	74	89	5	83	22	147
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1859		1770	1863	1583	1770	1849		1770	1620	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1859		1770	1863	1583	1770	1849		1770	1620	
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)	109	608	8	1	1067	116	80	97	5	90	24	160
RTOR Reduction (vph)	0	0	0	0	0	31	0	1	0	0	142	0
Lane Group Flow (vph)	109	616	0	1	1067	85	80	101	0	90	42	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						6						
Actuated Green, G (s)	12.1	107.7		0.8	96.4	96.4	7.5	16.0		7.5	16.0	
Effective Green, g (s)	12.6	108.2		1.3	96.9	96.9	8.0	16.5		8.0	16.5	
Actuated g/C Ratio	0.08	0.72		0.01	0.65	0.65	0.05	0.11		0.05	0.11	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	149	1341		15	1203	1023	94	203		94	178	
v/s Ratio Prot	c0.06	0.33		0.00	c0.57		0.05	c0.05		c0.05	0.03	
v/s Ratio Perm						0.05						
v/c Ratio	0.73	0.46		0.07	0.89	0.08	0.85	0.50		0.96	0.23	
Uniform Delay, d1	67.0	8.7		73.7	22.0	9.9	70.4	62.9		70.8	61.0	
Progression Factor	0.91	1.00		1.34	0.25	0.04	1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.3	0.9		1.3	6.9	0.1	48.3	8.5		78.1	3.1	
Delay (s)	74.6	9.6		99.8	12.3	0.5	118.7	71.3		148.9	64.0	
Level of Service	E	A		F	B	A	F	E		F	E	
Approach Delay (s)		19.4			11.3			92.2			91.9	
Approach LOS		B			B			F			F	

Intersection Summary			
HCM Average Control Delay	29.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	260	427	872	252	170	187
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	283	464	948	274	185	203
RTOR Reduction (vph)	0	0	0	76	0	180
Lane Group Flow (vph)	283	464	948	198	185	23
Turn Type	Prot			Perm		Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	23.5	124.5	96.5	96.5	16.5	16.5
Effective Green, g (s)	24.0	125.0	97.0	97.0	17.0	17.0
Actuated g/C Ratio	0.16	0.83	0.65	0.65	0.11	0.11
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	283	1553	1205	1024	201	179
v/s Ratio Prot	c0.16	0.25	c0.51		c0.10	
v/s Ratio Perm				0.12		0.01
v/c Ratio	1.00	0.30	0.79	0.19	0.92	0.13
Uniform Delay, d1	63.0	2.8	19.1	10.7	65.8	59.8
Progression Factor	0.84	0.58	1.11	1.19	1.00	1.00
Incremental Delay, d2	50.6	0.4	0.5	0.0	45.6	1.5
Delay (s)	103.4	2.0	21.7	12.8	111.4	61.3
Level of Service	F	A	C	B	F	E
Approach Delay (s)		40.4	19.7		85.2	
Approach LOS		D	B		F	

Intersection Summary			
HCM Average Control Delay	37.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.7%	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												
Volume (vph)	0	0	0	156	235	221	508	841	362	110	705	258
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1826	1583	3433	3380		1770	3539	1583
Flt Permitted					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1826	1583	3433	3380		1770	3539	1583
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	0	0	170	255	240	552	914	393	120	766	280
RTOR Reduction (vph)	0	0	0	0	0	174	0	51	0	0	0	156
Lane Group Flow (vph)	0	0	0	0	425	66	552	1256	0	120	766	124
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.9	24.9	19.2	44.4		8.7	33.9	33.9
Effective Green, g (s)					24.9	24.9	19.2	44.4		8.7	33.9	33.9
Actuated g/C Ratio					0.28	0.28	0.21	0.49		0.10	0.38	0.38
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)					505	438	732	1667		171	1333	596
v/s Ratio Prot							c0.16	c0.37		0.07	0.22	
v/s Ratio Perm					0.23	0.04						0.08
v/c Ratio					0.84	0.15	0.75	0.75		0.70	0.57	0.21
Uniform Delay, d1					30.7	24.6	33.2	18.4		39.4	22.3	19.0
Progression Factor					1.00	1.00	1.01	0.86		1.00	1.00	1.00
Incremental Delay, d2					12.1	0.2	4.0	2.9		12.3	1.8	0.8
Delay (s)					42.7	24.7	37.5	18.6		51.6	24.1	19.8
Level of Service					D	C	D	B		D	C	B
Approach Delay (s)		0.0			36.2			24.2			25.9	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	26.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.9%	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												
Volume (vph)	365	541	300	0	0	0	0	687	642	187	744	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.99	0.85					0.93		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1677	1504					4717		1770	3539	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1677	1504					4717		1770	3539	
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)	397	588	326	0	0	0	0	747	698	203	809	0
RTOR Reduction (vph)	0	2	92	0	0	0	0	92	0	0	0	0
Lane Group Flow (vph)	357	659	201	0	0	0	0	1353	0	203	809	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Effective Green, g (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.36		0.13	0.53	
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)	635	634	568					1677		236	1887	
v/s Ratio Prot								c0.29		c0.11	0.23	
v/s Ratio Perm	0.21	0.39	0.13									
v/c Ratio	0.56	1.04	0.35					1.05dr		0.86	0.43	
Uniform Delay, d1	22.1	28.0	20.1					26.2		38.2	12.7	
Progression Factor	1.00	1.00	1.00					0.54		0.79	0.41	
Incremental Delay, d2	1.1	46.4	0.4					2.9		22.4	0.6	
Delay (s)	23.3	74.4	20.5					17.2		52.5	5.8	
Level of Service	C	E	C					B		D	A	
Approach Delay (s)		48.4			0.0			17.2			15.2	
Approach LOS		D			A			B			B	

Intersection Summary				
HCM Average Control Delay	27.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.92			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	77.2%	ICU Level of Service	D	
Analysis Period (min)	15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	371	473	168	110	506	168	128	687	171	201	639	398
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3400		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3400		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	403	514	183	120	550	183	139	747	186	218	695	433
RTOR Reduction (vph)	0	40	0	0	0	151	0	0	136	0	0	304
Lane Group Flow (vph)	403	657	0	120	550	32	139	747	50	218	695	129
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	21.8	28.2		9.4	15.8	15.8	9.6	24.2	24.2	12.2	26.8	26.8
Effective Green, g (s)	21.8	28.2		9.4	15.8	15.8	9.6	24.2	24.2	12.2	26.8	26.8
Actuated g/C Ratio	0.24	0.31		0.10	0.18	0.18	0.11	0.27	0.27	0.14	0.30	0.30
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)	429	1065		185	621	278	189	952	426	240	1054	471
v/s Ratio Prot	c0.23	0.19		0.07	c0.16		0.08	c0.21		c0.12	c0.20	
v/s Ratio Perm						0.02			0.03			0.08
v/c Ratio	0.94	0.62		0.65	0.89	0.12	0.74	0.78	0.12	0.91	0.66	0.27
Uniform Delay, d1	33.5	26.3		38.7	36.2	31.2	39.0	30.5	24.8	38.3	27.6	24.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.86	0.81	1.10	1.38	0.67	0.18
Incremental Delay, d2	28.3	1.1		7.6	14.2	0.2	12.6	5.9	0.5	32.8	3.1	1.4
Delay (s)	61.8	27.4		46.3	50.4	31.4	45.9	30.6	27.7	85.8	21.4	5.7
Level of Service	E	C		D	D	C	D	C	C	F	C	A
Approach Delay (s)		40.0			45.8			32.1			26.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	35.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	78.0%	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												
Volume (vph)	0	0	0	234	0	195	0	587	291	357	577	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	
Lane Util. Factor				0.97		1.00		0.95		1.00	0.95	
Frt				1.00		0.85		0.95		1.00	1.00	
Flt Protected				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583		3363		1770	3539	
Flt Permitted				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583		3363		1770	3539	
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	0	0	254	0	212	0	638	316	388	627	0
RTOR Reduction (vph)	0	0	0	0	0	184	0	63	0	0	0	0
Lane Group Flow (vph)	0	0	0	254	0	28	0	891	0	388	627	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				11.9		11.9		40.1		26.0	70.1	
Effective Green, g (s)				11.9		11.9		40.1		26.0	70.1	
Actuated g/C Ratio				0.13		0.13		0.45		0.29	0.78	
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)				454		209		1498		511	2756	
v/s Ratio Prot				c0.07				c0.27		c0.22	0.18	
v/s Ratio Perm						0.02						
v/c Ratio				0.56		0.13		0.60		0.76	0.23	
Uniform Delay, d1				36.6		34.5		18.8		29.1	2.7	
Progression Factor				1.00		1.00		1.00		1.16	0.10	
Incremental Delay, d2				1.5		0.3		1.7		5.0	0.1	
Delay (s)				38.1		34.8		20.6		38.9	0.4	
Level of Service				D		C		C		D	A	
Approach Delay (s)		0.0			36.6			20.6			15.1	
Approach LOS		A			D			C			B	

Intersection Summary			
HCM Average Control Delay	21.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.0%	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												
Volume (vph)	100	60	20	454	100	179	30	730	921	318	300	120
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1715	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1715	1583	1770	3539	1583	1770	3539	1583
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)	109	65	22	493	109	195	33	793	1001	346	326	130
RTOR Reduction (vph)	0	0	20	0	0	155	0	0	389	0	0	57
Lane Group Flow (vph)	109	65	2	301	301	40	33	793	612	346	326	73
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	13.6	13.6	13.6	30.5	30.5	30.5	5.6	53.3	53.3	36.6	84.3	84.3
Effective Green, g (s)	13.6	13.6	13.6	30.5	30.5	30.5	5.6	53.3	53.3	36.6	84.3	84.3
Actuated g/C Ratio	0.09	0.09	0.09	0.20	0.20	0.20	0.04	0.36	0.36	0.24	0.56	0.56
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	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	3.0
Lane Grp Cap (vph)	160	169	144	342	349	322	66	1258	562	432	1989	890
v/s Ratio Prot	c0.06	0.03		c0.18	0.18		0.02	0.22		c0.20	0.09	
v/s Ratio Perm			0.00			0.03			c0.39			0.05
v/c Ratio	0.68	0.38	0.01	0.88	0.86	0.12	0.50	0.63	1.09	0.80	0.16	0.08
Uniform Delay, d1	66.1	64.3	62.1	58.0	57.7	48.8	70.8	40.2	48.4	53.3	15.8	15.1
Progression Factor	1.00	1.00	1.00	0.94	0.94	2.69	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.3	1.5	0.0	19.0	16.4	0.1	5.8	2.4	64.2	10.2	0.2	0.2
Delay (s)	77.4	65.7	62.1	73.3	70.4	131.7	76.7	42.6	112.5	63.5	16.0	15.3
Level of Service	E	E	E	E	E	F	E	D	F	E	B	B
Approach Delay (s)		71.8			86.5			81.5			36.4	
Approach LOS		E			F			F			D	

Intersection Summary			
HCM Average Control Delay	72.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.2%	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												
Volume (vph)	51	0	43	2	0	1	50	1889	3	0	634	9
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		0.94		1.00	1.00	0.95	1.00		0.91	
Frt	1.00	0.85		1.00		0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583		4990		1583	1770	3539	1583		5074	
Flt Permitted	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583		4990		1583	1770	3539	1583		5074	
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)	55	0	47	2	0	1	54	2053	3	0	689	10
RTOR Reduction (vph)	0	45	0	0	0	1	0	0	0	0	1	0
Lane Group Flow (vph)	55	2	0	2	0	0	54	2053	3	0	698	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	5.2	5.5		0.8		1.1	7.9	101.7	101.7		89.8	
Effective Green, g (s)	5.2	5.5		0.8		1.1	7.9	101.7	101.7		89.8	
Actuated g/C Ratio	0.04	0.05		0.01		0.01	0.07	0.85	0.85		0.75	
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)	77	73		33		15	117	2999	1342		3797	
v/s Ratio Prot	c0.03	c0.00		0.00			0.03	c0.58			0.14	
v/s Ratio Perm						0.00			0.00			
v/c Ratio	0.71	0.03		0.06		0.00	0.46	0.68	0.00		0.18	
Uniform Delay, d1	56.7	54.7		59.2		58.9	54.0	3.3	1.4		4.4	
Progression Factor	1.00	1.00		1.00		1.00	1.31	0.81	0.00		1.00	
Incremental Delay, d2	26.8	0.2		0.8		0.0	1.2	0.6	0.0		0.1	
Delay (s)	83.5	54.9		60.0		58.9	71.8	3.2	0.0		4.5	
Level of Service	F	D		E		E	E	A	A		A	
Approach Delay (s)		70.3			59.6			5.0			4.5	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	7.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.9%	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												
Volume (vph)	373	334	148	193	114	39	133	1535	412	107	485	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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3376		1770	3539	1583	1770	4924		1770	4979	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3376		1770	3539	1583	1770	4924		1770	4979	
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)	405	363	161	210	124	42	145	1668	448	116	527	85
RTOR Reduction (vph)	0	43	0	0	0	38	0	38	0	0	16	0
Lane Group Flow (vph)	405	481	0	210	124	4	145	2078	0	116	596	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	28.0	22.6		17.5	12.1	12.1	14.5	56.9		7.0	49.4	
Effective Green, g (s)	28.0	22.6		17.5	12.1	12.1	14.5	56.9		7.0	49.4	
Actuated g/C Ratio	0.23	0.19		0.15	0.10	0.10	0.12	0.47		0.06	0.41	
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)	413	636		258	357	160	214	2335		103	2050	
v/s Ratio Prot	c0.23	c0.14		0.12	0.04		0.08	c0.42		c0.07	0.12	
v/s Ratio Perm						0.00						
v/c Ratio	0.98	0.76		0.81	0.35	0.03	0.68	0.89		1.13	0.29	
Uniform Delay, d1	45.7	46.1		49.7	50.3	48.6	50.5	28.7		56.5	23.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.12	0.43		0.93	0.84	
Incremental Delay, d2	39.0	5.1		17.6	0.6	0.1	5.2	3.6		126.4	0.4	
Delay (s)	84.7	51.2		67.2	50.9	48.7	61.8	15.8		179.1	20.2	
Level of Service	F	D		E	D	D	E	B		F	C	
Approach Delay (s)		65.8			59.8			18.8			45.5	
Approach LOS		E			E			B			D	

Intersection Summary			
HCM Average Control Delay	37.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.8%	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												
Volume (vph)	592	865	27	229	405	137	133	1466	543	249	395	207
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	4892		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	4892		3433	5085	1583	3433	5085	1583
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)	643	940	29	249	440	149	145	1593	590	271	429	225
RTOR Reduction (vph)	0	0	22	0	51	0	0	0	158	0	0	127
Lane Group Flow (vph)	643	940	7	249	538	0	145	1593	432	271	429	98
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	26.2	30.2	30.2	11.7	15.7		9.8	50.3	50.3	11.8	52.3	52.3
Effective Green, g (s)	26.2	30.2	30.2	11.7	15.7		9.8	50.3	50.3	11.8	52.3	52.3
Actuated g/C Ratio	0.22	0.25	0.25	0.10	0.13		0.08	0.42	0.42	0.10	0.44	0.44
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)	750	1280	398	335	640		280	2131	664	338	2216	690
v/s Ratio Prot	c0.19	c0.18		0.07	c0.11		0.04	c0.31		c0.08	0.08	
v/s Ratio Perm			0.00						0.27			0.06
v/c Ratio	0.86	0.73	0.02	0.74	0.84		0.52	0.75	0.65	0.80	0.19	0.14
Uniform Delay, d1	45.1	41.2	33.8	52.7	50.9		52.8	29.5	27.8	53.0	20.9	20.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.94	0.79	1.47
Incremental Delay, d2	9.5	2.2	0.0	8.6	9.7		1.6	2.4	4.9	11.7	0.2	0.4
Delay (s)	54.6	43.4	33.8	61.3	60.6		54.5	31.9	32.7	61.4	16.7	30.3
Level of Service	D	D	C	E	E		D	C	C	E	B	C
Approach Delay (s)		47.7			60.8			33.5			33.1	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM Average Control Delay	41.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.5%	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												
Volume (vph)	201	93	0	10	53	330	20	20	10	1370	10	325
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1583	1770	1770		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1583	1770	1770		3433	1863	2787
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)	218	101	0	11	58	359	22	22	11	1489	11	353
RTOR Reduction (vph)	0	0	0	0	0	0	0	10	0	0	0	140
Lane Group Flow (vph)	218	101	0	11	58	359	22	23	0	1489	11	213
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	18.9	26.5		0.7	8.3	116.3	3.0	5.5		67.6	70.1	70.1
Effective Green, g (s)	18.9	26.5		0.7	8.3	116.3	3.0	5.5		67.6	70.1	70.1
Actuated g/C Ratio	0.16	0.23		0.01	0.07	1.00	0.03	0.05		0.58	0.60	0.60
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)	288	806		11	253	1583	46	84		1995	1123	1680
v/s Ratio Prot	c0.12	0.03		0.01	0.02		0.01	0.01		c0.43	0.01	
v/s Ratio Perm						c0.23						0.08
v/c Ratio	0.76	0.13		1.00	0.23	0.23	0.48	0.27		0.75	0.01	0.13
Uniform Delay, d1	46.5	35.7		57.8	51.0	0.0	55.9	53.5		18.0	9.2	9.9
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	10.8	0.1		271.4	0.5	0.3	7.6	1.7		2.6	0.0	0.2
Delay (s)	57.3	35.8		329.2	51.4	0.3	63.5	55.2		20.6	9.2	10.1
Level of Service	E	D		F	D	A	E	E		C	A	B
Approach Delay (s)		50.5			15.7			58.5			18.5	
Approach LOS		D			B			E			B	

Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	116.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.2%	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												
Volume (vph)	72	1036	29	7	651	80	14	43	4	54	80	95
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1855		1770	1863	1583	1770	1841		1770	1711	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1855		1770	1863	1583	1770	1841		1770	1711	
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)	78	1126	32	8	708	87	15	47	4	59	87	103
RTOR Reduction (vph)	0	1	0	0	0	31	0	2	0	0	27	0
Lane Group Flow (vph)	78	1157	0	8	708	56	15	49	0	59	163	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	11.5	106.5		0.8	95.8	95.8	1.6	17.5		7.2	23.1	
Effective Green, g (s)	12.0	107.0		1.3	96.3	96.3	2.1	18.0		7.7	23.6	
Actuated g/C Ratio	0.08	0.71		0.01	0.64	0.64	0.01	0.12		0.05	0.16	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	142	1323		15	1196	1016	25	221		91	269	
v/s Ratio Prot	0.04	c0.62		0.00	c0.38		0.01	0.03		c0.03	c0.10	
v/s Ratio Perm						0.04						
v/c Ratio	0.55	0.87		0.53	0.59	0.05	0.60	0.22		0.65	0.61	
Uniform Delay, d1	66.4	16.4		74.0	15.5	10.0	73.5	59.7		69.8	58.9	
Progression Factor	1.13	0.54		0.68	0.32	0.07	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.4	2.4		28.0	0.7	0.0	33.2	2.3		14.8	9.8	
Delay (s)	76.8	11.3		78.6	5.6	0.7	106.7	62.0		84.6	68.6	
Level of Service	E	B		E	A	A	F	E		F	E	
Approach Delay (s)		15.4			5.8			72.2			72.4	
Approach LOS		B			A			E			E	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	132	979	525	205	339	255
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	143	1064	571	223	368	277
RTOR Reduction (vph)	0	0	0	137	0	198
Lane Group Flow (vph)	143	1064	571	86	368	79
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	43.5	105.5	57.5	57.5	35.5	35.5
Effective Green, g (s)	44.0	106.0	58.0	58.0	36.0	36.0
Actuated g/C Ratio	0.29	0.71	0.39	0.39	0.24	0.24
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	519	1317	720	612	425	380
v/s Ratio Prot	0.08	c0.57	0.31		c0.21	
v/s Ratio Perm				0.05		0.05
v/c Ratio	0.28	0.81	0.79	0.14	0.87	0.21
Uniform Delay, d1	40.7	15.0	40.7	29.8	54.7	45.6
Progression Factor	0.78	0.63	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	1.8	6.0	0.1	20.4	1.2
Delay (s)	32.0	11.3	46.7	29.9	75.1	46.8
Level of Service	C	B	D	C	E	D
Approach Delay (s)		13.7	42.0		63.0	
Approach LOS		B	D		E	

Intersection Summary			
HCM Average Control Delay	34.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.0%	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												
Volume (vph)	0	0	0	118	282	236	545	901	140	62	845	251
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1836	1583	3433	3468		1770	3539	1583
Flt Permitted					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1836	1583	3433	3468		1770	3539	1583
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	0	0	128	307	257	592	979	152	67	918	273
RTOR Reduction (vph)	0	0	0	0	0	152	0	13	0	0	0	118
Lane Group Flow (vph)	0	0	0	0	435	105	592	1118	0	67	918	155
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.7	24.7	22.8	48.2		5.1	30.5	30.5
Effective Green, g (s)					24.7	24.7	22.8	48.2		5.1	30.5	30.5
Actuated g/C Ratio					0.27	0.27	0.25	0.54		0.06	0.34	0.34
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)					504	434	870	1857		100	1199	536
v/s Ratio Prot							c0.17	0.32		0.04	c0.26	
v/s Ratio Perm					0.24	0.07						0.10
v/c Ratio					0.86	0.24	0.68	0.60		0.67	0.77	0.29
Uniform Delay, d1					31.0	25.4	30.3	14.3		41.6	26.6	21.8
Progression Factor					1.00	1.00	0.55	0.19		1.00	1.00	1.00
Incremental Delay, d2					14.2	0.3	1.4	0.9		16.2	4.7	1.4
Delay (s)					45.2	25.7	18.0	3.6		57.8	31.3	23.2
Level of Service					D	C	B	A		E	C	C
Approach Delay (s)		0.0			38.0			8.5			30.9	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM Average Control Delay	21.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.3%	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												
Volume (vph)	395	3	471	0	0	0	0	1243	264	261	672	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.90	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1500	1504					4952		1770	3539	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1500	1504					4952		1770	3539	
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)	429	3	512	0	0	0	0	1351	287	284	730	0
RTOR Reduction (vph)	0	84	202	0	0	0	0	35	0	0	0	0
Lane Group Flow (vph)	330	228	100	0	0	0	0	1603	0	284	730	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.6	20.6	20.6					39.4		18.0	61.4	
Effective Green, g (s)	20.6	20.6	20.6					39.4		18.0	61.4	
Actuated g/C Ratio	0.23	0.23	0.23					0.44		0.20	0.68	
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)	385	343	344					2168		354	2414	
v/s Ratio Prot								c0.32		c0.16	0.21	
v/s Ratio Perm	c0.20	0.15	0.07									
v/c Ratio	0.86	0.66	0.29					0.74		0.80	0.30	
Uniform Delay, d1	33.3	31.6	28.7					21.0		34.3	5.7	
Progression Factor	1.00	1.00	1.00					0.46		1.18	0.44	
Incremental Delay, d2	16.9	4.8	0.5					1.5		8.2	0.2	
Delay (s)	50.2	36.4	29.1					11.2		48.8	2.7	
Level of Service	D	D	C					B		D	A	
Approach Delay (s)		38.9			0.0			11.2			15.6	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	19.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.2%	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												
Volume (vph)	311	411	109	154	492	246	168	866	109	147	629	332
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3428		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3428		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	338	447	118	167	535	267	183	941	118	160	684	361
RTOR Reduction (vph)	0	28	0	0	0	205	0	0	78	0	0	266
Lane Group Flow (vph)	338	537	0	167	535	62	183	941	40	160	684	95
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	18.7	19.1		15.3	15.7	15.7	16.0	30.3	30.3	9.3	23.6	23.6
Effective Green, g (s)	18.7	19.1		15.3	15.7	15.7	16.0	30.3	30.3	9.3	23.6	23.6
Actuated g/C Ratio	0.21	0.21		0.17	0.17	0.17	0.18	0.34	0.34	0.10	0.26	0.26
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)	368	727		301	617	276	315	1191	533	183	928	415
v/s Ratio Prot	c0.19	0.16		0.09	c0.15		0.10	c0.27		c0.09	c0.19	
v/s Ratio Perm						0.04			0.03			0.06
v/c Ratio	0.92	0.74		0.55	0.87	0.23	0.58	0.79	0.07	0.87	0.74	0.23
Uniform Delay, d1	34.9	33.1		34.2	36.1	31.9	33.9	27.0	20.3	39.8	30.4	26.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.69	0.63	1.23
Incremental Delay, d2	27.1	4.0		2.2	12.3	0.4	2.7	5.4	0.3	31.9	4.8	1.2
Delay (s)	62.0	37.1		36.4	48.4	32.3	36.6	32.4	20.6	59.5	24.0	33.1
Level of Service	E	D		D	D	C	D	C	C	E	C	C
Approach Delay (s)		46.4			41.9			31.9			31.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	37.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.2%	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												
Volume (vph)	0	0	0	256	0	138	3	966	203	161	762	1
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	0.95		1.00	0.95	
Frt				1.00		0.85	1.00	0.97		1.00	1.00	
Flt Protected				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583	1770	3447		1770	3539	
Flt Permitted				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583	1770	3447		1770	3539	
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	0	0	278	0	150	3	1050	221	175	828	1
RTOR Reduction (vph)	0	0	0	0	0	133	0	10	0	0	0	0
Lane Group Flow (vph)	0	0	0	278	0	17	3	1261	0	175	829	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				17.4		17.4	1.3	95.9		24.7	119.3	
Effective Green, g (s)				17.4		17.4	1.3	95.9		24.7	119.3	
Actuated g/C Ratio				0.12		0.12	0.01	0.64		0.16	0.80	
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)				398		184	15	2204		291	2815	
v/s Ratio Prot				c0.08			0.00	c0.37		c0.10	0.23	
v/s Ratio Perm						0.01						
v/c Ratio				0.70		0.09	0.20	0.57		0.60	0.29	
Uniform Delay, d1				63.8		59.3	73.8	15.4		58.1	4.1	
Progression Factor				1.00		1.00	0.97	0.61		1.00	1.00	
Incremental Delay, d2				5.3		0.2	6.4	1.1		3.5	0.3	
Delay (s)				69.1		59.5	78.0	10.4		61.6	4.4	
Level of Service				E		E	E	B		E	A	
Approach Delay (s)		0.0			65.7			10.6			14.3	
Approach LOS		A			E			B			B	

Intersection Summary			
HCM Average Control Delay	20.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.4%	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												
Volume (vph)	80	60	40	1182	90	248	30	386	515	129	795	70
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1697	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1697	1583	1770	3539	1583	1770	3539	1583
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)	87	65	43	1285	98	270	33	420	560	140	864	76
RTOR Reduction (vph)	0	0	39	0	0	101	0	0	405	0	0	43
Lane Group Flow (vph)	87	65	4	694	689	169	33	420	155	140	864	33
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.4	12.4	12.4	65.3	65.3	65.3	5.6	41.4	41.4	14.9	50.7	50.7
Effective Green, g (s)	12.4	12.4	12.4	65.3	65.3	65.3	5.6	41.4	41.4	14.9	50.7	50.7
Actuated g/C Ratio	0.08	0.08	0.08	0.44	0.44	0.44	0.04	0.28	0.28	0.10	0.34	0.34
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	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	3.0
Lane Grp Cap (vph)	146	154	131	732	739	689	66	977	437	176	1196	535
v/s Ratio Prot	c0.05	0.03		c0.41	0.41		0.02	c0.12		c0.08	c0.24	
v/s Ratio Perm			0.00			0.11			0.10			0.02
v/c Ratio	0.60	0.42	0.03	0.95	0.93	0.25	0.50	0.43	0.35	0.80	0.72	0.06
Uniform Delay, d1	66.4	65.4	63.3	40.7	40.3	26.8	70.8	44.6	43.6	66.1	43.5	33.6
Progression Factor	1.00	1.00	1.00	0.74	0.74	0.41	0.86	0.82	0.46	0.97	0.78	0.37
Incremental Delay, d2	6.4	1.9	0.1	17.4	15.0	0.1	5.7	1.3	2.2	20.7	3.6	0.2
Delay (s)	72.8	67.3	63.3	47.7	44.8	11.2	66.6	38.1	22.3	84.9	37.5	12.6
Level of Service	E	E	E	D	D	B	E	D	C	F	D	B
Approach Delay (s)		68.9			40.5			30.3			41.9	
Approach LOS		E			D			C			D	

Intersection Summary			
HCM Average Control Delay	39.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.1%	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												
Volume (vph)	162	0	41	0	0	0	13	699	0	0	1767	53
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	1.00		1.00				1.00	0.95			0.95	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		1583				1770	3539			3539	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		1583				1770	3539			3539	1583
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)	171	0	43	0	0	0	14	736	0	0	1860	56
RTOR Reduction (vph)	0	0	37	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	171	0	6	0	0	0	14	736	0	0	1860	45
Turn Type	Prot		custom				Prot					Perm
Protected Phases	7						5	2			6	
Permitted Phases			4									6
Actuated Green, G (s)	19.7		19.7				3.2	122.3			115.1	115.1
Effective Green, g (s)	19.7		19.7				3.2	122.3			115.1	115.1
Actuated g/C Ratio	0.13		0.13				0.02	0.82			0.77	0.77
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)	232		208				38	2885			2716	1215
v/s Ratio Prot	c0.10						0.01	c0.21			c0.53	
v/s Ratio Perm			0.00									0.03
v/c Ratio	0.74		0.03				0.37	0.26			0.68	0.04
Uniform Delay, d1	62.7		56.8				72.4	3.2			8.6	4.2
Progression Factor	1.00		1.00				1.00	1.00			0.28	0.26
Incremental Delay, d2	11.5		0.1				6.0	0.2			0.7	0.0
Delay (s)	74.2		56.8				78.4	3.4			3.2	1.1
Level of Service	E		E				E	A			A	A
Approach Delay (s)		70.7			0.0			4.8			3.1	
Approach LOS		E			A			A			A	

Intersection Summary			
HCM Average Control Delay	8.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.5%	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												
Volume (veh/h)	0	0	9	0	0	0	0	712	0	0	1808	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	10	0	0	0	0	774	0	0	1965	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											500	
pX, platoon unblocked	0.70	0.70	0.70	0.70	0.70		0.70					
vC, conflicting volume	2352	2739	983	1766	2746	387	1972			774		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2070	2626	104	1229	2635	387	1524			774		
tC, single (s)	7.5	6.5	*6.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	22	16	662	92	16	611	302			837		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	10	387	387	983	983	7
Volume Left	0	0	0	0	0	0
Volume Right	10	0	0	0	0	7
cSH	662	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.23	0.23	0.58	0.58	0.00
Queue Length 95th (ft)	1	0	0	0	0	0
Control Delay (s)	10.5	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	10.5	0.0		0.0		
Approach LOS	B					

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	60.0%	ICU Level of Service	B	
Analysis Period (min)	15			

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	0	98	0	0	0	56	491	3	0	1575	28
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	1.00	1.00					1.00	0.95	1.00		0.91	
Frt	1.00	0.85					1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583					1770	3539	1583		5072	
Flt Permitted	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583					1770	3539	1583		5072	
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)	26	0	107	0	0	0	61	534	3	0	1712	30
RTOR Reduction (vph)	0	96	0	0	0	0	0	0	1	0	1	0
Lane Group Flow (vph)	26	11	0	0	0	0	61	534	2	0	1741	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	4.8	11.0					17.7	91.0	91.0		69.3	
Effective Green, g (s)	4.8	11.0					17.7	91.0	91.0		69.3	
Actuated g/C Ratio	0.04	0.10					0.16	0.83	0.83		0.63	
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)	77	158					285	2928	1310		3195	
v/s Ratio Prot	c0.01	c0.01					c0.03	0.15			c0.34	
v/s Ratio Perm									0.00			
v/c Ratio	0.34	0.07					0.21	0.18	0.00		0.54	
Uniform Delay, d1	51.1	44.9					40.1	1.9	1.6		11.5	
Progression Factor	1.00	1.00					0.70	0.33	0.35		1.00	
Incremental Delay, d2	2.6	0.2					0.4	0.1	0.0		0.7	
Delay (s)	53.7	45.0					28.4	0.8	0.6		12.1	
Level of Service	D	D					C	A	A		B	
Approach Delay (s)		46.7			0.0			3.6			12.1	
Approach LOS		D			A			A			B	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.5%	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												
Volume (vph)	73	100	123	362	499	74	141	430	115	76	1222	343
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3246		1770	3539	1583	1770	4924		1770	4918	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3246		1770	3539	1583	1770	4924		1770	4918	
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)	79	109	134	393	542	80	153	467	125	83	1328	373
RTOR Reduction (vph)	0	123	0	0	0	58	0	40	0	0	45	0
Lane Group Flow (vph)	79	120	0	393	542	22	153	552	0	83	1656	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	8.5	9.2		30.1	30.8	30.8	10.8	46.0		8.7	43.9	
Effective Green, g (s)	8.5	9.2		30.1	30.8	30.8	10.8	46.0		8.7	43.9	
Actuated g/C Ratio	0.08	0.08		0.27	0.28	0.28	0.10	0.42		0.08	0.40	
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)	137	271		484	991	443	174	2059		140	1963	
v/s Ratio Prot	c0.04	0.04		c0.22	0.15		c0.09	0.11		0.05	c0.34	
v/s Ratio Perm						0.01						
v/c Ratio	0.58	0.44		0.81	0.55	0.05	0.88	0.27		0.59	0.84	
Uniform Delay, d1	49.0	48.0		37.3	33.7	28.9	49.0	21.0		48.9	29.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.80	0.63		0.77	1.19	
Incremental Delay, d2	5.8	1.2		10.0	0.6	0.0	32.7	0.3		5.8	4.1	
Delay (s)	54.8	49.1		47.3	34.3	29.0	71.9	13.5		43.6	39.8	
Level of Service	D	D		D	C	C	E	B		D	D	
Approach Delay (s)		50.5			38.9			25.4			40.0	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	37.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.2%	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												
Volume (vph)	209	351	34	443	1167	135	151	303	167	267	1038	515
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5006		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5006		3433	5085	1583	3433	5085	1583
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)	227	382	37	482	1268	147	164	329	182	290	1128	560
RTOR Reduction (vph)	0	0	32	0	13	0	0	0	123	0	0	130
Lane Group Flow (vph)	227	382	5	482	1402	0	164	329	59	290	1128	430
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	9.0	13.7	13.7	30.6	35.3		7.0	35.7	35.7	14.0	42.7	42.7
Effective Green, g (s)	9.0	13.7	13.7	30.6	35.3		7.0	35.7	35.7	14.0	42.7	42.7
Actuated g/C Ratio	0.08	0.12	0.12	0.28	0.32		0.06	0.32	0.32	0.13	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	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)	281	633	197	955	1606		218	1650	514	437	1974	614
v/s Ratio Prot	c0.07	c0.08		0.14	c0.28		c0.05	0.06		0.08	0.22	
v/s Ratio Perm			0.00						0.04			c0.27
v/c Ratio	0.81	0.60	0.02	0.50	0.87		0.75	0.20	0.11	0.66	0.57	0.70
Uniform Delay, d1	49.6	45.6	42.3	33.3	35.2		50.6	26.8	26.1	45.8	26.5	28.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.97	0.45	0.34
Incremental Delay, d2	15.5	1.6	0.0	0.4	5.6		13.6	0.3	0.5	2.5	0.8	4.3
Delay (s)	65.2	47.2	42.3	33.8	40.8		64.3	27.1	26.5	46.8	12.6	13.9
Level of Service	E	D	D	C	D		E	C	C	D	B	B
Approach Delay (s)		53.2			39.0			36.0			18.0	
Approach LOS		D			D			D			B	

Intersection Summary			
HCM Average Control Delay	32.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.8%	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												
Volume (vph)	329	62	10	10	47	1320	20	30	20	260	10	106
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3464		1770	3539	1583	1770	1751		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3464		1770	3539	1583	1770	1751		3433	1863	2787
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)	358	67	11	11	51	1435	22	33	22	283	11	115
RTOR Reduction (vph)	0	7	0	0	0	0	0	19	0	0	0	75
Lane Group Flow (vph)	358	71	0	11	51	1435	22	36	0	283	11	40
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	18.0	22.2		0.6	4.8	61.7	1.2	5.2		17.7	21.7	21.7
Effective Green, g (s)	18.0	22.2		0.6	4.8	61.7	1.2	5.2		17.7	21.7	21.7
Actuated g/C Ratio	0.29	0.36		0.01	0.08	1.00	0.02	0.08		0.29	0.35	0.35
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)	516	1246		17	275	1583	34	148		985	655	980
v/s Ratio Prot	0.20	0.02		0.01	0.01		0.01	0.02		0.08	0.01	
v/s Ratio Perm						c0.91						0.01
v/c Ratio	0.69	0.06		0.65	0.19	0.91	0.65	0.24		0.29	0.02	0.04
Uniform Delay, d1	19.4	12.9		30.4	26.6	0.0	30.0	26.4		17.1	13.0	13.2
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	4.0	0.0		62.0	0.3	9.1	35.3	0.9		0.7	0.0	0.1
Delay (s)	23.4	12.9		92.4	26.9	9.1	65.3	27.3		17.8	13.1	13.2
Level of Service	C	B		F	C	A	E	C		B	B	B
Approach Delay (s)		21.5			10.3			38.1			16.4	
Approach LOS		C			B			D			B	

Intersection Summary			
HCM Average Control Delay	14.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	61.7	Sum of lost time (s)	0.0
Intersection Capacity Utilization	45.6%	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												
Volume (vph)	100	585	7	1	987	107	74	89	5	83	22	147
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1859		1770	1863	1583	1770	1849		1770	1620	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1859		1770	1863	1583	1770	1849		1770	1620	
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)	109	636	8	1	1073	116	80	97	5	90	24	160
RTOR Reduction (vph)	0	0	0	0	0	30	0	1	0	0	142	0
Lane Group Flow (vph)	109	644	0	1	1073	86	80	101	0	90	42	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						6						
Actuated Green, G (s)	12.1	107.7		0.8	96.4	96.4	7.5	16.0		7.5	16.0	
Effective Green, g (s)	12.6	108.2		1.3	96.9	96.9	8.0	16.5		8.0	16.5	
Actuated g/C Ratio	0.08	0.72		0.01	0.65	0.65	0.05	0.11		0.05	0.11	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	149	1341		15	1203	1023	94	203		94	178	
v/s Ratio Prot	c0.06	0.35		0.00	c0.58		0.05	c0.05		c0.05	0.03	
v/s Ratio Perm						0.05						
v/c Ratio	0.73	0.48		0.07	0.89	0.08	0.85	0.50		0.96	0.23	
Uniform Delay, d1	67.0	8.9		73.7	22.2	9.9	70.4	62.9		70.8	61.0	
Progression Factor	0.98	1.23		1.34	0.25	0.04	1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.1	0.9		1.3	7.2	0.1	48.3	8.5		78.1	3.1	
Delay (s)	78.7	11.9		100.0	12.6	0.5	118.7	71.3		148.9	64.0	
Level of Service	E	B		F	B	A	F	E		F	E	
Approach Delay (s)		21.6			11.5			92.2			91.9	
Approach LOS		C			B			F			F	

Intersection Summary			
HCM Average Control Delay	30.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	270	443	877	252	170	187
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	482	953	274	185	203
RTOR Reduction (vph)	0	0	0	76	0	180
Lane Group Flow (vph)	293	482	953	198	185	23
Turn Type	Prot			Perm		Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	23.5	124.5	96.5	96.5	16.5	16.5
Effective Green, g (s)	24.0	125.0	97.0	97.0	17.0	17.0
Actuated g/C Ratio	0.16	0.83	0.65	0.65	0.11	0.11
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	283	1553	1205	1024	201	179
v/s Ratio Prot	c0.17	0.26	c0.51		c0.10	
v/s Ratio Perm				0.13		0.01
v/c Ratio	1.04	0.31	0.79	0.19	0.92	0.13
Uniform Delay, d1	63.0	2.8	19.2	10.7	65.8	59.8
Progression Factor	0.80	0.57	1.11	1.19	1.00	1.00
Incremental Delay, d2	59.7	0.5	0.5	0.0	45.6	1.5
Delay (s)	110.2	2.1	21.8	12.8	111.4	61.3
Level of Service	F	A	C	B	F	E
Approach Delay (s)		43.0	19.8		85.2	
Approach LOS		D	B		F	

Intersection Summary			
HCM Average Control Delay	37.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.5%	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												
Volume (vph)	0	0	0	182	235	221	545	847	362	110	716	258
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1823	1583	3433	3380		1770	3539	1583
Flt Permitted					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1823	1583	3433	3380		1770	3539	1583
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	0	0	198	255	240	592	921	393	120	778	280
RTOR Reduction (vph)	0	0	0	0	0	171	0	51	0	0	0	158
Lane Group Flow (vph)	0	0	0	0	453	69	592	1263	0	120	778	122
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					25.7	25.7	19.7	43.9		8.4	32.6	32.6
Effective Green, g (s)					25.7	25.7	19.7	43.9		8.4	32.6	32.6
Actuated g/C Ratio					0.29	0.29	0.22	0.49		0.09	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)					521	452	751	1649		165	1282	573
v/s Ratio Prot							c0.17	c0.37		0.07	0.22	
v/s Ratio Perm					0.25	0.04						0.08
v/c Ratio					0.87	0.15	0.79	0.77		0.73	0.61	0.21
Uniform Delay, d1					30.6	24.0	33.2	18.9		39.7	23.5	19.8
Progression Factor					1.00	1.00	1.02	0.88		1.00	1.00	1.00
Incremental Delay, d2					14.4	0.2	4.9	3.1		14.8	2.1	0.9
Delay (s)					44.9	24.2	38.6	19.6		54.4	25.6	20.7
Level of Service					D	C	D	B		D	C	C
Approach Delay (s)		0.0			37.7			25.5			27.4	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	28.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.5%	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												
Volume (vph)	365	541	363	0	0	0	0	730	657	187	781	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.99	0.85					0.93		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1675	1504					4724		1770	3539	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1675	1504					4724		1770	3539	
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)	397	588	395	0	0	0	0	793	714	203	849	0
RTOR Reduction (vph)	0	2	83	0	0	0	0	92	0	0	0	0
Lane Group Flow (vph)	357	666	272	0	0	0	0	1415	0	203	849	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Effective Green, g (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.36		0.13	0.53	
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)	635	633	568					1680		236	1887	
v/s Ratio Prot								c0.30		c0.11	0.24	
v/s Ratio Perm	0.21	0.40	0.18									
v/c Ratio	0.56	1.05	0.48					1.08dr		0.86	0.45	
Uniform Delay, d1	22.1	28.0	21.3					26.7		38.2	12.9	
Progression Factor	1.00	1.00	1.00					0.54		0.78	0.42	
Incremental Delay, d2	1.1	50.0	0.6					3.4		21.7	0.6	
Delay (s)	23.3	78.0	21.9					17.8		51.6	6.0	
Level of Service	C	E	C					B		D	A	
Approach Delay (s)		49.4			0.0			17.8			14.8	
Approach LOS		D			A			B			B	

Intersection Summary				
HCM Average Control Delay	28.1	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.94			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.5%	ICU Level of Service	D	
Analysis Period (min)	15			

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	371	473	188	125	506	168	140	745	180	201	739	398
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3388		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3388		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	403	514	204	136	550	183	152	810	196	218	803	433
RTOR Reduction (vph)	0	47	0	0	0	151	0	0	143	0	0	305
Lane Group Flow (vph)	403	671	0	136	550	32	152	810	53	218	803	128
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	21.8	28.0		9.6	15.8	15.8	9.8	24.2	24.2	12.2	26.6	26.6
Effective Green, g (s)	21.8	28.0		9.6	15.8	15.8	9.8	24.2	24.2	12.2	26.6	26.6
Actuated g/C Ratio	0.24	0.31		0.11	0.18	0.18	0.11	0.27	0.27	0.14	0.30	0.30
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)	429	1054		189	621	278	193	952	426	240	1046	468
v/s Ratio Prot	c0.23	0.20		0.08	c0.16		0.09	c0.23		c0.12	0.23	
v/s Ratio Perm						0.02			0.03			0.08
v/c Ratio	0.94	0.64		0.72	0.89	0.12	0.79	0.85	0.12	0.91	0.77	0.27
Uniform Delay, d1	33.5	26.6		38.9	36.2	31.2	39.1	31.2	24.9	38.3	28.9	24.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.88	0.78	1.07	1.34	0.70	0.23
Incremental Delay, d2	28.3	1.3		12.3	14.2	0.2	16.8	8.4	0.5	32.3	5.0	1.3
Delay (s)	61.8	27.9		51.2	50.4	31.4	51.3	32.8	27.1	83.6	25.2	7.0
Level of Service	E	C		D	D	C	D	C	C	F	C	A
Approach Delay (s)		40.1			46.6			34.3			28.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	36.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.6%	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												
Volume (vph)	0	0	0	234	0	195	0	666	291	357	712	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	
Lane Util. Factor				0.97		1.00		0.95		1.00	0.95	
Frt				1.00		0.85		0.95		1.00	1.00	
Flt Protected				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583		3378		1770	3539	
Flt Permitted				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583		3378		1770	3539	
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	0	0	254	0	212	0	724	316	388	774	0
RTOR Reduction (vph)	0	0	0	0	0	184	0	50	0	0	0	0
Lane Group Flow (vph)	0	0	0	254	0	28	0	990	0	388	774	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				11.9		11.9		40.1		26.0	70.1	
Effective Green, g (s)				11.9		11.9		40.1		26.0	70.1	
Actuated g/C Ratio				0.13		0.13		0.45		0.29	0.78	
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)				454		209		1505		511	2756	
v/s Ratio Prot				c0.07				c0.29		c0.22	0.22	
v/s Ratio Perm						0.02						
v/c Ratio				0.56		0.13		0.66		0.76	0.28	
Uniform Delay, d1				36.6		34.5		19.6		29.1	2.8	
Progression Factor				1.00		1.00		1.00		1.14	0.09	
Incremental Delay, d2				1.5		0.3		2.3		4.4	0.2	
Delay (s)				38.1		34.8		21.8		37.7	0.4	
Level of Service				D		C		C		D	A	
Approach Delay (s)		0.0			36.6			21.8			12.9	
Approach LOS		A			D			C			B	

Intersection Summary			
HCM Average Control Delay	20.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.2%	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												
Volume (vph)	100	60	20	471	100	179	30	815	937	318	446	120
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1714	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1714	1583	1770	3539	1583	1770	3539	1583
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)	109	65	22	512	109	195	33	886	1018	346	485	130
RTOR Reduction (vph)	0	0	20	0	0	155	0	0	391	0	0	57
Lane Group Flow (vph)	109	65	2	307	314	40	33	886	627	346	485	73
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	13.6	13.6	13.6	30.9	30.9	30.9	5.6	52.9	52.9	36.6	83.9	83.9
Effective Green, g (s)	13.6	13.6	13.6	30.9	30.9	30.9	5.6	52.9	52.9	36.6	83.9	83.9
Actuated g/C Ratio	0.09	0.09	0.09	0.21	0.21	0.21	0.04	0.35	0.35	0.24	0.56	0.56
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	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	3.0
Lane Grp Cap (vph)	160	169	144	346	353	326	66	1248	558	432	1979	885
v/s Ratio Prot	c0.06	0.03		0.18	c0.18		0.02	0.25		c0.20	0.14	
v/s Ratio Perm			0.00			0.03			c0.40			0.05
v/c Ratio	0.68	0.38	0.01	0.89	0.89	0.12	0.50	0.71	1.12	0.80	0.25	0.08
Uniform Delay, d1	66.1	64.3	62.1	57.9	57.9	48.5	70.8	41.9	48.6	53.3	16.9	15.3
Progression Factor	1.00	1.00	1.00	0.94	0.94	2.69	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.3	1.5	0.0	19.4	19.4	0.1	5.8	3.4	76.9	10.2	0.3	0.2
Delay (s)	77.4	65.7	62.1	73.9	73.8	130.7	76.7	45.4	125.4	63.5	17.2	15.4
Level of Service	E	E	E	E	E	F	E	D	F	E	B	B
Approach Delay (s)		71.8			87.5			88.0			33.6	
Approach LOS		E			F			F			C	

Intersection Summary			
HCM Average Control Delay	73.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	101	0	26	0	0	0	44	1701	0	0	854	174
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	1.00		1.00				1.00	0.95			0.95	1.00
Frt	1.00		0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1770		1583				1770	3539			3539	1583
Flt Permitted	0.95		1.00				0.95	1.00			1.00	1.00
Satd. Flow (perm)	1770		1583				1770	3539			3539	1583
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)	106	0	27	0	0	0	46	1791	0	0	899	183
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	106	0	3	0	0	0	46	1791	0	0	899	132
Turn Type	Prot		custom				Prot					Perm
Protected Phases	7						5	2			6	
Permitted Phases			4									6
Actuated Green, G (s)	9.2		9.2				3.6	72.5			64.9	64.9
Effective Green, g (s)	9.2		9.2				3.6	72.5			64.9	64.9
Actuated g/C Ratio	0.10		0.10				0.04	0.81			0.72	0.72
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)	182		162				71	2860			2561	1145
v/s Ratio Prot	c0.06						0.03	c0.51			0.25	
v/s Ratio Perm			0.00									0.08
v/c Ratio	0.58		0.02				0.65	0.63			0.35	0.12
Uniform Delay, d1	38.4		36.2				42.4	3.3			4.6	3.7
Progression Factor	1.00		1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2	4.7		0.0				18.5	1.0			0.4	0.2
Delay (s)	43.1		36.2				61.0	4.4			5.0	3.9
Level of Service	D		D				E	A			A	A
Approach Delay (s)		41.7			0.0			5.8			4.8	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM Average Control Delay	7.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	89.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	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												
Volume (veh/h)	0	0	6	0	0	0	0	1745	0	0	880	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	7	0	0	0	0	1897	0	0	957	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											500	
pX, platoon unblocked	0.92	0.92	0.92	0.92	0.92		0.92					
vC, conflicting volume	1905	2853	478	2382	2873	948	976			1897		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1805	2840	249	2325	2861	948	792			1897		
tC, single (s)	7.5	6.5	*6.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	46	16	724	18	15	261	756			311		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	7	948	948	478	478	20
Volume Left	0	0	0	0	0	0
Volume Right	7	0	0	0	0	20
cSH	724	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.56	0.56	0.28	0.28	0.01
Queue Length 95th (ft)	1	0	0	0	0	0
Control Delay (s)	10.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	10.0	0.0		0.0		
Approach LOS	B					

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	51.6%	ICU Level of Service	A	
Analysis Period (min)	15			

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	0	43	2	0	1	50	1933	3	0	660	9
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		0.94		1.00	1.00	0.95	1.00		0.91	
Frt	1.00	0.85		1.00		0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583		4990		1583	1770	3539	1583		5075	
Flt Permitted	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583		4990		1583	1770	3539	1583		5075	
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)	55	0	47	2	0	1	54	2101	3	0	717	10
RTOR Reduction (vph)	0	45	0	0	0	1	0	0	0	0	1	0
Lane Group Flow (vph)	55	2	0	2	0	0	54	2101	3	0	726	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	5.2	5.5		0.8		1.1	7.9	101.7	101.7		89.8	
Effective Green, g (s)	5.2	5.5		0.8		1.1	7.9	101.7	101.7		89.8	
Actuated g/C Ratio	0.04	0.05		0.01		0.01	0.07	0.85	0.85		0.75	
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)	77	73		33		15	117	2999	1342		3798	
v/s Ratio Prot	c0.03	c0.00		0.00			0.03	c0.59			0.14	
v/s Ratio Perm						0.00			0.00			
v/c Ratio	0.71	0.03		0.06		0.00	0.46	0.70	0.00		0.19	
Uniform Delay, d1	56.7	54.7		59.2		58.9	54.0	3.4	1.4		4.4	
Progression Factor	1.00	1.00		1.00		1.00	1.30	0.89	0.00		1.00	
Incremental Delay, d2	26.8	0.2		0.8		0.0	1.1	0.6	0.0		0.1	
Delay (s)	83.5	54.9		60.0		58.9	71.3	3.6	0.0		4.5	
Level of Service	F	D		E		E	E	A	A		A	
Approach Delay (s)		70.3			59.6			5.3			4.5	
Approach LOS		E			E			A			A	

Intersection Summary			
HCM Average Control Delay	7.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.1%	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												
Volume (vph)	380	334	148	193	114	39	133	1572	412	107	507	82
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3376		1770	3539	1583	1770	4927		1770	4979	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3376		1770	3539	1583	1770	4927		1770	4979	
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)	413	363	161	210	124	42	145	1709	448	116	551	89
RTOR Reduction (vph)	0	43	0	0	0	38	0	37	0	0	16	0
Lane Group Flow (vph)	413	481	0	210	124	4	145	2120	0	116	624	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	28.0	22.6		17.5	12.1	12.1	14.5	56.9		7.0	49.4	
Effective Green, g (s)	28.0	22.6		17.5	12.1	12.1	14.5	56.9		7.0	49.4	
Actuated g/C Ratio	0.23	0.19		0.15	0.10	0.10	0.12	0.47		0.06	0.41	
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)	413	636		258	357	160	214	2336		103	2050	
v/s Ratio Prot	c0.23	c0.14		0.12	0.04		0.08	c0.43		c0.07	0.13	
v/s Ratio Perm						0.00						
v/c Ratio	1.00	0.76		0.81	0.35	0.03	0.68	0.91		1.13	0.30	
Uniform Delay, d1	46.0	46.1		49.7	50.3	48.6	50.5	29.1		56.5	23.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.13	0.42		0.93	0.84	
Incremental Delay, d2	44.3	5.1		17.6	0.6	0.1	5.0	4.1		126.4	0.4	
Delay (s)	90.3	51.2		67.2	50.9	48.7	61.9	16.4		178.7	20.3	
Level of Service	F	D		E	D	D	E	B		F	C	
Approach Delay (s)		68.4			59.8			19.2			44.6	
Approach LOS		E			E			B			D	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.5%	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												
Volume (vph)	601	865	27	229	405	141	133	1490	543	252	409	212
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	4888		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	4888		3433	5085	1583	3433	5085	1583
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)	653	940	29	249	440	153	145	1620	590	274	445	230
RTOR Reduction (vph)	0	0	22	0	52	0	0	0	159	0	0	130
Lane Group Flow (vph)	653	940	7	249	541	0	145	1620	431	274	445	100
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	26.4	30.4	30.4	11.7	15.7		9.9	50.0	50.0	11.9	52.0	52.0
Effective Green, g (s)	26.4	30.4	30.4	11.7	15.7		9.9	50.0	50.0	11.9	52.0	52.0
Actuated g/C Ratio	0.22	0.25	0.25	0.10	0.13		0.08	0.42	0.42	0.10	0.43	0.43
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)	755	1288	401	335	640		283	2119	660	340	2204	686
v/s Ratio Prot	c0.19	c0.18		0.07	c0.11		0.04	c0.32		c0.08	0.09	
v/s Ratio Perm			0.00						0.27			0.06
v/c Ratio	0.86	0.73	0.02	0.74	0.85		0.51	0.76	0.65	0.81	0.20	0.15
Uniform Delay, d1	45.1	41.0	33.6	52.7	51.0		52.7	30.0	28.1	52.9	21.1	20.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.94	0.78	1.49
Incremental Delay, d2	10.1	2.1	0.0	8.6	10.0		1.6	2.7	5.0	11.8	0.2	0.4
Delay (s)	55.2	43.1	33.6	61.3	60.9		54.3	32.6	33.0	61.7	16.7	31.1
Level of Service	E	D	C	E	E		D	C	C	E	B	C
Approach Delay (s)		47.8			61.1			34.1			33.2	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM Average Control Delay	41.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.4%	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												
Volume (vph)	201	93	0	10	53	330	20	20	10	1370	10	325
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3539		1770	3539	1583	1770	1770		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3539		1770	3539	1583	1770	1770		3433	1863	2787
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)	218	101	0	11	58	359	22	22	11	1489	11	353
RTOR Reduction (vph)	0	0	0	0	0	0	0	10	0	0	0	140
Lane Group Flow (vph)	218	101	0	11	58	359	22	23	0	1489	11	213
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	18.9	26.5		0.7	8.3	116.3	3.0	5.5		67.6	70.1	70.1
Effective Green, g (s)	18.9	26.5		0.7	8.3	116.3	3.0	5.5		67.6	70.1	70.1
Actuated g/C Ratio	0.16	0.23		0.01	0.07	1.00	0.03	0.05		0.58	0.60	0.60
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)	288	806		11	253	1583	46	84		1995	1123	1680
v/s Ratio Prot	c0.12	0.03		0.01	0.02		0.01	0.01		c0.43	0.01	
v/s Ratio Perm						c0.23						0.08
v/c Ratio	0.76	0.13		1.00	0.23	0.23	0.48	0.27		0.75	0.01	0.13
Uniform Delay, d1	46.5	35.7		57.8	51.0	0.0	55.9	53.5		18.0	9.2	9.9
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	10.8	0.1		271.4	0.5	0.3	7.6	1.7		2.6	0.0	0.2
Delay (s)	57.3	35.8		329.2	51.4	0.3	63.5	55.2		20.6	9.2	10.1
Level of Service	E	D		F	D	A	E	E		C	A	B
Approach Delay (s)		50.5			15.7			58.5			18.5	
Approach LOS		D			B			E			B	

Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	116.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.2%	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												
Volume (vph)	72	1052	29	7	668	80	14	43	4	54	80	95
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1855		1770	1863	1583	1770	1841		1770	1711	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1855		1770	1863	1583	1770	1841		1770	1711	
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)	78	1143	32	8	726	87	15	47	4	59	87	103
RTOR Reduction (vph)	0	1	0	0	0	31	0	2	0	0	27	0
Lane Group Flow (vph)	78	1174	0	8	726	56	15	49	0	59	163	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	11.5	106.5		0.8	95.8	95.8	1.6	17.5		7.2	23.1	
Effective Green, g (s)	12.0	107.0		1.3	96.3	96.3	2.1	18.0		7.7	23.6	
Actuated g/C Ratio	0.08	0.71		0.01	0.64	0.64	0.01	0.12		0.05	0.16	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	142	1323		15	1196	1016	25	221		91	269	
v/s Ratio Prot	0.04	c0.63		0.00	c0.39		0.01	0.03		c0.03	c0.10	
v/s Ratio Perm						0.04						
v/c Ratio	0.55	0.89		0.53	0.61	0.05	0.60	0.22		0.65	0.61	
Uniform Delay, d1	66.4	16.8		74.0	15.8	10.0	73.5	59.7		69.8	58.9	
Progression Factor	1.13	0.55		0.68	0.33	0.08	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.3	2.5		27.7	0.8	0.0	33.2	2.3		14.8	9.8	
Delay (s)	76.6	11.8		78.4	6.0	0.8	106.7	62.0		84.6	68.6	
Level of Service	E	B		E	A	A	F	E		F	E	
Approach Delay (s)		15.8			6.1			72.2			72.4	
Approach LOS		B			A			E			E	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	138	989	542	205	339	255
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	150	1075	589	223	368	277
RTOR Reduction (vph)	0	0	0	134	0	198
Lane Group Flow (vph)	150	1075	589	89	368	79
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	41.8	105.5	59.2	59.2	35.5	35.5
Effective Green, g (s)	42.3	106.0	59.7	59.7	36.0	36.0
Actuated g/C Ratio	0.28	0.71	0.40	0.40	0.24	0.24
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	499	1317	741	630	425	380
v/s Ratio Prot	0.08	c0.58	0.32		c0.21	
v/s Ratio Perm				0.06		0.05
v/c Ratio	0.30	0.82	0.79	0.14	0.87	0.21
Uniform Delay, d1	42.2	15.2	39.8	28.8	54.7	45.6
Progression Factor	0.79	0.63	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.9	5.9	0.1	20.4	1.2
Delay (s)	33.4	11.5	45.7	28.9	75.1	46.8
Level of Service	C	B	D	C	E	D
Approach Delay (s)		14.2	41.1		63.0	
Approach LOS		B	D		E	

Intersection Summary			
HCM Average Control Delay	34.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Table 10
BASELINE INTERSECTION LEVEL OF SERVICE CONDITIONS - HCM METHODOLOGY
With Bypass

	INTERSECTION	CONTROL	PEAK HOUR	BASELINE		BASELINE PLUS PROJECT	
				DELAY (sec/veh)	LOS	DELAY (sec/veh)	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	21.7	C	21.7	C
			PM	27.1	C	28.0	C
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	20.0	C	19.9	B
			PM	27.1	C	27.4	C
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	36.5	D	36.9	D
			PM	33.4	C	34.1	C
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	15.2	B	15.2	B
			PM	18.2	B	17.6	B
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	26.8	C	26.3	C
			PM	27.6	C	27.6	C
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	N/A	N/A	22.5	C
			PM	N/A	N/A	13.8	B
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	13.0	B
			PM	N/A	N/A	11.1	B
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	9.7	A	9.4	A
			PM	8.9	A	9.0	A
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	36.7	D	37.0	D
			PM	44.3	D	44.6	D
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	32.9	C	33.0	C
			PM	49.6	D	49.8	D
11	SOMERSVILLE RD & JAMES DONLON BLVD	Traffic Signal	AM	28.3	C	28.9	C
			PM	24.9	C	25.2	C
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	30.8	C	30.9	C
			PM	34.1	C	34.5	C
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	20.3	C	20.6	C
			PM	20.2	C	20.8	C

SOURCE: Abrams Associates, 2010

NOTES: Intersection Delay is presented in terms of seconds per vehicle. For Stop Controlled intersections, the level of service and delay are reported for the worst approach.

Table 11
CUMULATIVE INTERSECTION LEVEL OF SERVICE CONDITIONS - HCM METHODOLOGY
With Bypass

	INTERSECTION	CONTROL	PEAK HOUR	CUMULATIVE		CUMULATIVE PLUS PROJECT	
				DELAY (sec/veh)	LOS	DELAY (sec/veh)	LOS
1	RAILROAD AVE & CALIFORNIA AVE/SR 4 WB ON-RAMP	Traffic Signal	AM	23.5	C	23.9	C
			PM	31.0	C	32.2	C
2	RAILROAD AVE & SR 4 EB RAMPS	Traffic Signal	AM	21.5	C	21.6	C
			PM	34.9	C	36.3	D
3	RAILROAD AVE & LELAND RD	Traffic Signal	AM	42.3	D	44.5	D
			PM	41.5	D	45.5	D
4	RAILROAD AVE & ATLANTIC AVE	Traffic Signal	AM	18.0	B	18.9	B
			PM	18.6	B	18.7	B
5	RAILROAD AVE & BUCHANAN RD	Traffic Signal	AM	39.5	D	42.2	D
			PM	36.5	D	38.4	D
6	KIRKER PASS RD & MONTREUX MAIN DRIVEWAY	Traffic Signal	AM	N/A	N/A	29.6	C
			PM	N/A	N/A	21.8	C
7	KIRKER PASS RD & MONTREUX SECONDARY DRIVEWAY	Side Street Stop	AM	N/A	N/A	14.8	B
			PM	N/A	N/A	12.7	B
8	KIRKER PASS RD & MYRTLE DR	Traffic Signal	AM	8.9	A	8.7	A
			PM	11.1	B	11.3	B
9	KIRKER PASS RD &CONCORD BLVD	Traffic Signal	AM	42.7	D	43.8	D
			PM	50.0	D	51.5	D
10	KIRKER PASS RD & CLAYTON RD	Traffic Signal	AM	36.6	D	36.8	D
			PM	49.5	D	49.9	D
11	SOMERSVILLE RD & JAMES DONLON BLVD	Traffic Signal	AM	47.0	D	48.9	D
			PM	30.9	C	31.4	C
12	BUCHANAN RD & HARBOR ST	Traffic Signal	AM	45.2	D	45.8	D
			PM	43.3	D	44.0	D
13	BUCHANAN RD & LOVERIDGE RD	Traffic Signal	AM	27.4	C	28.0	C
			PM	30.3	C	30.3	C

SOURCE: Abrams Associates, 2010

NOTES: Intersection Delay is presented in terms of seconds per vehicle. For Stop Controlled intersections, the level of service and delay are reported for the worst approach.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	110	282	236	486	891	140	62	842	251
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1837	1583	3433	3467		1770	3539	1583
Flt Permitted					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1837	1583	3433	3467		1770	3539	1583
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	0	0	120	307	257	528	968	152	67	915	273
RTOR Reduction (vph)	0	0	0	0	0	157	0	13	0	0	0	115
Lane Group Flow (vph)	0	0	0	0	427	100	528	1107	0	67	915	158
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.0	24.0	22.8	48.9		5.1	31.2	31.2
Effective Green, g (s)					24.0	24.0	22.8	48.9		5.1	31.2	31.2
Actuated g/C Ratio					0.27	0.27	0.25	0.54		0.06	0.35	0.35
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)					490	422	870	1884		100	1227	549
v/s Ratio Prot							0.15	c0.32		0.04	c0.26	
v/s Ratio Perm					0.23	0.06						0.10
v/c Ratio					0.87	0.24	0.61	0.59		0.67	0.75	0.29
Uniform Delay, d1					31.5	25.8	29.6	13.8		41.6	25.9	21.3
Progression Factor					1.00	1.00	0.57	0.19		1.00	1.00	1.00
Incremental Delay, d2					15.5	0.3	0.8	0.9		16.2	4.2	1.3
Delay (s)					47.1	26.1	17.7	3.6		57.8	30.1	22.7
Level of Service					D	C	B	A		E	C	C
Approach Delay (s)		0.0			39.2			8.1			29.9	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM Average Control Delay	21.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.1%	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												
Volume (vph)	395	3	451	0	0	0	0	1174	239	261	661	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.90	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1506	1504					4956		1770	3539	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1506	1504					4956		1770	3539	
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)	429	3	490	0	0	0	0	1276	260	284	718	0
RTOR Reduction (vph)	0	73	208	0	0	0	0	33	0	0	0	0
Lane Group Flow (vph)	322	233	86	0	0	0	0	1503	0	284	718	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.4	20.4	20.4					39.6		18.0	61.6	
Effective Green, g (s)	20.4	20.4	20.4					39.6		18.0	61.6	
Actuated g/C Ratio	0.23	0.23	0.23					0.44		0.20	0.68	
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)	381	341	341					2181		354	2422	
v/s Ratio Prot								c0.30		c0.16	0.20	
v/s Ratio Perm	c0.19	0.15	0.06									
v/c Ratio	0.85	0.68	0.25					0.69		0.80	0.30	
Uniform Delay, d1	33.3	31.9	28.5					20.3		34.3	5.6	
Progression Factor	1.00	1.00	1.00					0.50		1.19	0.44	
Incremental Delay, d2	15.7	5.6	0.4					1.3		8.4	0.2	
Delay (s)	49.0	37.4	28.9					11.5		49.4	2.7	
Level of Service	D	D	C					B		D	A	
Approach Delay (s)		38.7			0.0			11.5			15.9	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.1%	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												
Volume (vph)	311	411	103	149	492	246	150	772	95	147	598	332
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3433		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3433		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	338	447	112	162	535	267	163	839	103	160	650	361
RTOR Reduction (vph)	0	26	0	0	0	211	0	0	68	0	0	262
Lane Group Flow (vph)	338	533	0	162	535	56	163	839	35	160	650	99
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	18.7	19.0		15.4	15.7	15.7	15.0	30.3	30.3	9.3	24.6	24.6
Effective Green, g (s)	18.7	19.0		15.4	15.7	15.7	15.0	30.3	30.3	9.3	24.6	24.6
Actuated g/C Ratio	0.21	0.21		0.17	0.17	0.17	0.17	0.34	0.34	0.10	0.27	0.27
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)	368	725		303	617	276	295	1191	533	183	967	433
v/s Ratio Prot	c0.19	0.16		0.09	c0.15		0.09	c0.24		c0.09	c0.18	
v/s Ratio Perm						0.04			0.02			0.06
v/c Ratio	0.92	0.74		0.53	0.87	0.20	0.55	0.70	0.07	0.87	0.67	0.23
Uniform Delay, d1	34.9	33.2		34.0	36.1	31.8	34.4	26.0	20.2	39.8	29.1	25.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.64	1.30
Incremental Delay, d2	27.1	3.9		1.8	12.3	0.4	2.2	3.5	0.2	32.1	3.5	1.1
Delay (s)	62.0	37.0		35.8	48.4	32.2	36.7	29.5	20.5	58.6	22.1	34.1
Level of Service	E	D		D	D	C	D	C	C	E	C	C
Approach Delay (s)		46.5			41.8			29.7			30.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	36.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.6%	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												
Volume (vph)	0	0	0	256	0	138	3	690	203	161	600	1
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	0.95		1.00	0.95	
Frt				1.00		0.85	1.00	0.97		1.00	1.00	
Flt Protected				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583	1770	3418		1770	3538	
Flt Permitted				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583	1770	3418		1770	3538	
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	0	0	278	0	150	3	750	221	175	652	1
RTOR Reduction (vph)	0	0	0	0	0	128	0	32	0	0	0	0
Lane Group Flow (vph)	0	0	0	278	0	22	3	939	0	175	653	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				10.9		10.9	0.8	40.4		9.6	49.2	
Effective Green, g (s)				10.9		10.9	0.8	40.4		9.6	49.2	
Actuated g/C Ratio				0.15		0.15	0.01	0.55		0.13	0.67	
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)				513		237	19	1894		233	2388	
v/s Ratio Prot				c0.08			0.00	c0.27		c0.10	0.18	
v/s Ratio Perm						0.01						
v/c Ratio				0.54		0.09	0.16	0.50		0.75	0.27	
Uniform Delay, d1				28.7		26.7	35.7	10.0		30.5	4.7	
Progression Factor				1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2				1.2		0.2	3.9	0.9		12.8	0.3	
Delay (s)				29.9		26.9	39.6	10.9		43.3	5.0	
Level of Service				C		C	D	B		D	A	
Approach Delay (s)		0.0			28.8			11.0			13.1	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	72.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.8%	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												
Volume (vph)	80	70	40	460	130	304	30	254	290	78	451	30
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1721	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1721	1583	1770	3539	1583	1770	3539	1583
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)	87	76	43	500	141	330	33	276	315	85	490	33
RTOR Reduction (vph)	0	0	39	0	0	253	0	0	193	0	0	19
Lane Group Flow (vph)	87	76	4	315	326	77	33	276	122	85	490	14
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	7.6	7.6	7.6	18.6	18.6	18.6	2.7	31.0	31.0	6.7	35.0	35.0
Effective Green, g (s)	7.6	7.6	7.6	18.6	18.6	18.6	2.7	31.0	31.0	6.7	35.0	35.0
Actuated g/C Ratio	0.10	0.10	0.10	0.23	0.23	0.23	0.03	0.39	0.39	0.08	0.44	0.44
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	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	3.0
Lane Grp Cap (vph)	168	177	151	391	401	369	60	1373	614	148	1550	693
v/s Ratio Prot	c0.05	0.04		0.19	c0.19		c0.02	0.08		c0.05	c0.14	
v/s Ratio Perm			0.00			0.05			0.08			0.01
v/c Ratio	0.52	0.43	0.03	0.81	0.81	0.21	0.55	0.20	0.20	0.57	0.32	0.02
Uniform Delay, d1	34.4	34.1	32.8	28.9	29.0	24.7	38.0	16.2	16.2	35.2	14.6	12.7
Progression 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
Incremental Delay, d2	2.7	1.7	0.1	11.5	11.9	0.3	10.5	0.3	0.7	5.3	0.5	0.1
Delay (s)	37.1	35.8	32.9	40.4	40.9	25.0	48.5	16.6	16.9	40.5	15.2	12.8
Level of Service	D	D	C	D	D	C	D	B	B	D	B	B
Approach Delay (s)		35.7			35.3			18.4			18.6	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	26.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	79.9	Sum of lost time (s)	20.0
Intersection Capacity Utilization	49.7%	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												
Volume (vph)	24	0	98	0	0	0	56	478	3	0	1534	28
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	1.00	1.00					1.00	0.95	1.00		0.91	
Frt	1.00	0.85					1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583					1770	3539	1583		5072	
Flt Permitted	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583					1770	3539	1583		5072	
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)	26	0	107	0	0	0	61	520	3	0	1667	30
RTOR Reduction (vph)	0	94	0	0	0	0	0	0	1	0	2	0
Lane Group Flow (vph)	26	13	0	0	0	0	61	520	2	0	1695	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	2.3	8.5					9.2	53.8	53.8		40.6	
Effective Green, g (s)	2.3	8.5					9.2	53.8	53.8		40.6	
Actuated g/C Ratio	0.03	0.12					0.13	0.77	0.77		0.58	
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)	58	191					232	2708	1211		2929	
v/s Ratio Prot	c0.01	c0.01					c0.03	0.15			c0.33	
v/s Ratio Perm									0.00			
v/c Ratio	0.45	0.07					0.26	0.19	0.00		0.58	
Uniform Delay, d1	33.4	27.4					27.5	2.3	1.9		9.4	
Progression Factor	1.00	1.00					1.00	1.00	1.00		1.00	
Incremental Delay, d2	5.4	0.2					0.6	0.2	0.0		0.3	
Delay (s)	38.8	27.5					28.1	2.4	1.9		9.7	
Level of Service	D	C					C	A	A		A	
Approach Delay (s)		29.7			0.0			5.1			9.7	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	70.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	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												
Volume (vph)	71	100	123	362	499	74	141	419	115	76	1188	337
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3246		1770	3539	1583	1770	4921		1770	4917	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3246		1770	3539	1583	1770	4921		1770	4917	
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)	77	109	134	393	542	80	153	455	125	83	1291	366
RTOR Reduction (vph)	0	121	0	0	0	59	0	41	0	0	44	0
Lane Group Flow (vph)	77	122	0	393	542	21	153	539	0	83	1613	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	8.1	10.1		25.3	27.3	27.3	10.0	44.6		8.3	42.9	
Effective Green, g (s)	8.1	10.1		25.3	27.3	27.3	10.0	44.6		8.3	42.9	
Actuated g/C Ratio	0.08	0.10		0.24	0.26	0.26	0.10	0.43		0.08	0.41	
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)	137	314		429	926	414	170	2104		141	2022	
v/s Ratio Prot	0.04	0.04		c0.22	c0.15		c0.09	0.11		0.05	c0.33	
v/s Ratio Perm						0.01						
v/c Ratio	0.56	0.39		0.92	0.59	0.05	0.90	0.26		0.59	0.80	
Uniform Delay, d1	46.4	44.2		38.5	33.6	28.8	46.7	19.2		46.4	26.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.2	0.8		24.0	0.9	0.1	41.6	0.3		6.2	3.4	
Delay (s)	51.6	45.0		62.4	34.5	28.9	88.3	19.5		52.5	30.3	
Level of Service	D	D		E	C	C	F	B		D	C	
Approach Delay (s)		46.6			44.9			33.8			31.3	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	36.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	104.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.4%	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												
Volume (vph)	206	351	34	443	1167	134	151	296	167	263	1016	507
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5007		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5007		3433	5085	1583	3433	5085	1583
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)	224	382	37	482	1268	146	164	322	182	286	1104	551
RTOR Reduction (vph)	0	0	32	0	16	0	0	0	135	0	0	151
Lane Group Flow (vph)	224	382	5	482	1398	0	164	322	47	286	1104	400
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	8.0	12.1	12.1	24.4	28.5		5.0	23.0	23.0	14.0	32.0	32.0
Effective Green, g (s)	8.0	12.1	12.1	24.4	28.5		5.0	23.0	23.0	14.0	32.0	32.0
Actuated g/C Ratio	0.09	0.14	0.14	0.27	0.32		0.06	0.26	0.26	0.16	0.36	0.36
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)	307	687	214	936	1594		192	1307	407	537	1818	566
v/s Ratio Prot	c0.07	c0.08		0.14	c0.28		c0.05	0.06		0.08	0.22	
v/s Ratio Perm			0.00						0.03			c0.25
v/c Ratio	0.73	0.56	0.02	0.51	0.88		0.85	0.25	0.11	0.53	0.61	0.71
Uniform Delay, d1	39.7	36.2	33.6	27.5	28.8		41.9	26.4	25.5	34.7	23.6	24.7
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	8.4	1.0	0.0	0.5	5.8		29.0	0.4	0.6	1.0	1.5	7.3
Delay (s)	48.1	37.2	33.6	28.0	34.6		70.8	26.8	26.0	35.8	25.1	32.0
Level of Service	D	D	C	C	C		E	C	C	D	C	C
Approach Delay (s)		40.8			33.0			37.4			28.6	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	32.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	89.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.2%	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												
Volume (vph)	241	332	10	10	1077	360	40	10	20	190	10	252
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3524		1770	3539	1583	1770	1676		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3524		1770	3539	1583	1770	1676		3433	1863	2787
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)	262	361	11	11	1171	391	43	11	22	207	11	274
RTOR Reduction (vph)	0	2	0	0	0	0	0	21	0	0	0	228
Lane Group Flow (vph)	262	370	0	11	1171	391	43	12	0	207	11	46
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	22.1	68.2		0.7	46.8	110.2	6.6	5.7		19.6	18.7	18.7
Effective Green, g (s)	22.1	68.2		0.7	46.8	110.2	6.6	5.7		19.6	18.7	18.7
Actuated g/C Ratio	0.20	0.62		0.01	0.42	1.00	0.06	0.05		0.18	0.17	0.17
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)	355	2181		11	1503	1583	106	87		611	316	473
v/s Ratio Prot	c0.15	0.11		0.01	c0.33		0.02	0.01		c0.06	0.01	
v/s Ratio Perm						c0.25						0.02
v/c Ratio	0.74	0.17		1.00	0.78	0.25	0.41	0.14		0.34	0.03	0.10
Uniform Delay, d1	41.3	8.9		54.8	27.3	0.0	49.9	49.9		39.6	38.2	38.6
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	7.8	0.0		271.4	2.6	0.4	2.5	0.7		1.5	0.2	0.4
Delay (s)	49.1	9.0		326.1	29.9	0.4	52.4	50.6		41.1	38.4	39.0
Level of Service	D	A		F	C	A	D	D		D	D	D
Approach Delay (s)		25.6			24.6			51.7			39.9	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	28.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	110.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.2%	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												
Volume (vph)	100	436	7	1	591	107	74	89	5	83	22	147
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1858		1770	1863	1583	1770	1849		1770	1620	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1858		1770	1863	1583	1770	1849		1770	1620	
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)	109	474	8	1	642	116	80	97	5	90	24	160
RTOR Reduction (vph)	0	1	0	0	0	71	0	2	0	0	121	0
Lane Group Flow (vph)	109	482	0	1	642	45	80	100	0	90	63	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	10.0	41.3		0.7	32.0	32.0	3.8	17.3		6.3	19.8	
Effective Green, g (s)	10.5	41.8		1.2	32.5	32.5	4.3	17.8		6.8	20.3	
Actuated g/C Ratio	0.13	0.50		0.01	0.39	0.39	0.05	0.21		0.08	0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	222	929		25	724	615	91	394		144	393	
v/s Ratio Prot	0.06	c0.26		0.00	c0.34		c0.05	c0.05		c0.05	0.04	
v/s Ratio Perm						0.03						
v/c Ratio	0.49	0.52		0.04	0.89	0.07	0.88	0.25		0.62	0.16	
Uniform Delay, d1	34.1	14.1		40.6	23.8	16.1	39.4	27.4		37.2	24.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	0.5		0.7	12.6	0.1	56.1	1.5		8.2	0.9	
Delay (s)	35.8	14.6		41.3	36.4	16.1	95.5	28.9		45.4	25.8	
Level of Service	D	B		D	D	B	F	C		D	C	
Approach Delay (s)		18.5			33.3			58.2			32.2	
Approach LOS		B			C			E			C	

Intersection Summary			
HCM Average Control Delay	30.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	83.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	260	380	481	252	170	187
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	283	413	523	274	185	203
RTOR Reduction (vph)	0	0	0	172	0	154
Lane Group Flow (vph)	283	413	523	102	185	49
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	15.8	46.7	26.4	26.4	16.9	16.9
Effective Green, g (s)	16.3	47.2	26.9	26.9	17.4	17.4
Actuated g/C Ratio	0.22	0.65	0.37	0.37	0.24	0.24
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	397	1211	690	587	424	379
v/s Ratio Prot	c0.16	0.22	c0.28		c0.10	
v/s Ratio Perm				0.06		0.03
v/c Ratio	0.71	0.34	0.76	0.17	0.44	0.13
Uniform Delay, d1	26.0	5.7	20.0	15.4	23.4	21.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.0	0.2	4.8	0.1	3.2	0.7
Delay (s)	31.9	5.9	24.8	15.5	26.7	22.3
Level of Service	C	A	C	B	C	C
Approach Delay (s)		16.5	21.6		24.4	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	20.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	72.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.1%	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												
Volume (vph)	0	0	0	156	235	221	508	841	362	110	705	258
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.95		1.00	1.00	0.85
Flt Protected					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1826	1583	3433	3380		1770	3539	1583
Flt Permitted					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1826	1583	3433	3380		1770	3539	1583
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	0	0	170	255	240	552	914	393	120	766	280
RTOR Reduction (vph)	0	0	0	0	0	174	0	50	0	0	0	156
Lane Group Flow (vph)	0	0	0	0	425	66	552	1257	0	120	766	124
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.9	24.9	19.2	44.0		9.1	33.9	33.9
Effective Green, g (s)					24.9	24.9	19.2	44.0		9.1	33.9	33.9
Actuated g/C Ratio					0.28	0.28	0.21	0.49		0.10	0.38	0.38
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)					505	438	732	1652		179	1333	596
v/s Ratio Prot							c0.16	c0.37		0.07	0.22	
v/s Ratio Perm					0.23	0.04						0.08
v/c Ratio					0.84	0.15	0.75	0.76		0.67	0.57	0.21
Uniform Delay, d1					30.7	24.6	33.2	18.7		39.0	22.3	19.0
Progression Factor					1.00	1.00	1.01	0.88		1.00	1.00	1.00
Incremental Delay, d2					12.1	0.2	4.0	3.0		9.5	1.8	0.8
Delay (s)					42.7	24.7	37.6	19.5		48.5	24.1	19.8
Level of Service					D	C	D	B		D	C	B
Approach Delay (s)		0.0			36.2			24.9			25.6	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.9%	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												
Volume (vph)	365	541	300	0	0	0	0	687	642	187	744	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.99	0.85					0.93		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1677	1504					4717		1770	3539	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1677	1504					4717		1770	3539	
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)	397	588	326	0	0	0	0	747	698	203	809	0
RTOR Reduction (vph)	0	2	92	0	0	0	0	92	0	0	0	0
Lane Group Flow (vph)	357	659	201	0	0	0	0	1353	0	203	809	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Effective Green, g (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.36		0.13	0.53	
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)	635	634	568					1677		236	1887	
v/s Ratio Prot								c0.29		c0.11	0.23	
v/s Ratio Perm	0.21	0.39	0.13									
v/c Ratio	0.56	1.04	0.35					1.05dr		0.86	0.43	
Uniform Delay, d1	22.1	28.0	20.1					26.2		38.2	12.7	
Progression Factor	1.00	1.00	1.00					0.51		0.79	0.40	
Incremental Delay, d2	1.1	46.4	0.4					2.9		22.4	0.6	
Delay (s)	23.3	74.4	20.5					16.3		52.7	5.7	
Level of Service	C	E	C					B		D	A	
Approach Delay (s)		48.4			0.0			16.3			15.1	
Approach LOS		D			A			B			B	

Intersection Summary					
HCM Average Control Delay	27.1	HCM Level of Service		C	
HCM Volume to Capacity ratio	0.92				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	77.2%	ICU Level of Service		D	
Analysis Period (min)	15				

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	371	473	168	110	506	168	128	687	171	201	639	398
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3400		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3400		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	403	514	183	120	550	183	139	747	186	218	695	433
RTOR Reduction (vph)	0	40	0	0	0	151	0	0	136	0	0	306
Lane Group Flow (vph)	403	657	0	120	550	32	139	747	50	218	695	127
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	21.8	28.2		9.4	15.8	15.8	10.0	24.2	24.2	12.2	26.4	26.4
Effective Green, g (s)	21.8	28.2		9.4	15.8	15.8	10.0	24.2	24.2	12.2	26.4	26.4
Actuated g/C Ratio	0.24	0.31		0.10	0.18	0.18	0.11	0.27	0.27	0.14	0.29	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)	429	1065		185	621	278	197	952	426	240	1038	464
v/s Ratio Prot	c0.23	0.19		0.07	c0.16		0.08	c0.21		c0.12	0.20	
v/s Ratio Perm						0.02			0.03			0.08
v/c Ratio	0.94	0.62		0.65	0.89	0.12	0.71	0.78	0.12	0.91	0.67	0.27
Uniform Delay, d1	33.5	26.3		38.7	36.2	31.2	38.6	30.5	24.8	38.3	28.0	24.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.75	0.71	0.33	0.80	0.69	0.50
Incremental Delay, d2	28.3	1.1		7.6	14.2	0.2	10.1	5.9	0.5	32.8	3.2	1.4
Delay (s)	61.8	27.4		46.3	50.4	31.4	39.2	27.5	8.8	63.6	22.6	13.6
Level of Service	E	C		D	D	C	D	C	A	E	C	B
Approach Delay (s)		40.0			45.8			25.8			26.3	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	33.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.0%	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												
Volume (vph)	0	0	0	234	0	195	0	587	291	357	577	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	
Lane Util. Factor				0.97		1.00		0.95		1.00	0.95	
Frt				1.00		0.85		0.95		1.00	1.00	
Flt Protected				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583		3363		1770	3539	
Flt Permitted				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583		3363		1770	3539	
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	0	0	254	0	212	0	638	316	388	627	0
RTOR Reduction (vph)	0	0	0	0	0	184	0	60	0	0	0	0
Lane Group Flow (vph)	0	0	0	254	0	28	0	894	0	388	627	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				11.9		11.9		42.3		23.8	70.1	
Effective Green, g (s)				11.9		11.9		42.3		23.8	70.1	
Actuated g/C Ratio				0.13		0.13		0.47		0.26	0.78	
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)				454		209		1581		468	2756	
v/s Ratio Prot				c0.07				c0.27		c0.22	0.18	
v/s Ratio Perm						0.02						
v/c Ratio				0.56		0.13		0.57		0.83	0.23	
Uniform Delay, d1				36.6		34.5		17.2		31.2	2.7	
Progression Factor				1.00		1.00		1.00		0.42	0.48	
Incremental Delay, d2				1.5		0.3		1.5		9.0	0.1	
Delay (s)				38.1		34.8		18.7		22.1	1.4	
Level of Service				D		C		B		C	A	
Approach Delay (s)		0.0			36.6			18.7			9.3	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.0%	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												
Volume (vph)	100	80	20	110	50	197	30	372	350	354	244	120
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1735	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1735	1583	1770	3539	1583	1770	3539	1583
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)	109	87	22	120	54	214	33	404	380	385	265	130
RTOR Reduction (vph)	0	0	19	0	0	190	0	0	295	0	0	60
Lane Group Flow (vph)	109	87	3	85	89	24	33	404	85	385	265	70
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	10.6	10.6	10.6	9.9	9.9	9.9	3.3	19.3	19.3	30.8	46.8	46.8
Effective Green, g (s)	10.6	10.6	10.6	9.9	9.9	9.9	3.3	19.3	19.3	30.8	46.8	46.8
Actuated g/C Ratio	0.12	0.12	0.12	0.11	0.11	0.11	0.04	0.22	0.22	0.36	0.54	0.54
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	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	3.0
Lane Grp Cap (vph)	217	228	194	192	198	181	67	789	353	630	1913	855
v/s Ratio Prot	c0.06	0.05		0.05	c0.05		0.02	c0.11		c0.22	0.07	
v/s Ratio Perm			0.00			0.02			0.05			0.04
v/c Ratio	0.50	0.38	0.01	0.44	0.45	0.14	0.49	0.51	0.24	0.61	0.14	0.08
Uniform Delay, d1	35.5	35.0	33.4	35.8	35.8	34.5	40.8	29.5	27.6	23.0	9.9	9.6
Progression 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
Incremental Delay, d2	1.8	1.1	0.0	1.6	1.6	0.3	5.6	2.4	1.6	1.8	0.2	0.2
Delay (s)	37.4	36.1	33.4	37.4	37.4	34.8	46.4	31.9	29.2	24.7	10.0	9.8
Level of Service	D	D	C	D	D	C	D	C	C	C	B	A
Approach Delay (s)		36.4			36.0			31.2			17.2	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM Average Control Delay	27.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	86.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.8%	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												
Volume (vph)	51	0	43	2	0	1	50	1889	3	0	634	9
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		0.94		1.00	1.00	0.95	1.00		0.91	
Frt	1.00	0.85		1.00		0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583		4990		1583	1770	3539	1583		5074	
Flt Permitted	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583		4990		1583	1770	3539	1583		5074	
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)	55	0	47	2	0	1	54	2053	3	0	689	10
RTOR Reduction (vph)	0	45	0	0	0	1	0	0	1	0	1	0
Lane Group Flow (vph)	55	2	0	2	0	0	54	2053	2	0	698	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	5.2	5.5		0.8		1.1	21.4	85.4	85.4		60.0	
Effective Green, g (s)	5.2	5.5		0.8		1.1	21.4	85.4	85.4		60.0	
Actuated g/C Ratio	0.05	0.05		0.01		0.01	0.21	0.82	0.82		0.58	
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)	89	84		38		17	365	2914	1304		2936	
v/s Ratio Prot	c0.03	c0.00		0.00			0.03	c0.58			0.14	
v/s Ratio Perm						0.00			0.00			
v/c Ratio	0.62	0.03		0.05		0.00	0.15	0.70	0.00		0.24	
Uniform Delay, d1	48.3	46.6		51.1		50.8	33.7	3.8	1.6		10.7	
Progression Factor	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	12.1	0.1		0.6		0.0	0.2	1.5	0.0		0.0	
Delay (s)	60.4	46.7		51.7		50.8	33.9	5.3	1.6		10.7	
Level of Service	E	D		D		D	C	A	A		B	
Approach Delay (s)		54.1			51.4			6.0			10.7	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.9%	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												
Volume (vph)	373	334	148	193	114	39	133	1535	412	107	485	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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3376		1770	3539	1583	1770	4924		1770	4979	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3376		1770	3539	1583	1770	4924		1770	4979	
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)	405	363	161	210	124	42	145	1668	448	116	527	85
RTOR Reduction (vph)	0	35	0	0	0	39	0	30	0	0	14	0
Lane Group Flow (vph)	405	489	0	210	124	4	145	2086	0	116	598	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	36.1	26.2		22.4	12.5	12.5	21.0	75.4		10.0	64.4	
Effective Green, g (s)	36.1	26.2		22.4	12.5	12.5	21.0	75.4		10.0	64.4	
Actuated g/C Ratio	0.24	0.17		0.15	0.08	0.08	0.14	0.50		0.07	0.43	
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)	426	590		264	295	132	248	2475		118	2138	
v/s Ratio Prot	c0.23	0.14		c0.12	0.04		0.08	c0.42		c0.07	0.12	
v/s Ratio Perm						0.00						
v/c Ratio	0.95	0.83		0.80	0.42	0.03	0.58	0.84		0.98	0.28	
Uniform Delay, d1	56.1	59.7		61.6	65.3	63.2	60.4	32.2		69.9	27.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.93	0.64		1.00	1.00	
Incremental Delay, d2	31.2	9.4		15.2	1.0	0.1	2.3	2.5		77.1	0.3	
Delay (s)	87.2	69.1		76.8	66.3	63.2	58.4	23.1		147.0	28.1	
Level of Service	F	E		E	E	E	E	C		F	C	
Approach Delay (s)		77.0			71.8			25.4			47.0	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM Average Control Delay	44.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.8%	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												
Volume (vph)	592	865	27	229	405	137	133	1466	543	249	395	207
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	4892		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	4892		3433	5085	1583	3433	5085	1583
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)	643	940	29	249	440	149	145	1593	590	271	429	225
RTOR Reduction (vph)	0	0	22	0	41	0	0	0	165	0	0	120
Lane Group Flow (vph)	643	940	7	249	548	0	145	1593	425	271	429	105
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	32.6	37.5	37.5	15.7	20.6		11.0	65.4	65.4	15.4	69.8	69.8
Effective Green, g (s)	32.6	37.5	37.5	15.7	20.6		11.0	65.4	65.4	15.4	69.8	69.8
Actuated g/C Ratio	0.22	0.25	0.25	0.10	0.14		0.07	0.44	0.44	0.10	0.47	0.47
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)	746	1271	396	359	672		252	2217	690	352	2366	737
v/s Ratio Prot	c0.19	c0.18		0.07	0.11		0.04	c0.31		c0.08	0.08	
v/s Ratio Perm			0.00						0.27			0.07
v/c Ratio	0.86	0.74	0.02	0.69	0.81		0.58	0.72	0.62	0.77	0.18	0.14
Uniform Delay, d1	56.5	51.8	42.4	64.8	62.8		67.2	34.7	32.6	65.6	23.4	23.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.67	1.09	2.59
Incremental Delay, d2	10.1	2.3	0.0	5.7	7.5		3.2	2.0	4.1	8.9	0.2	0.4
Delay (s)	66.6	54.1	42.4	70.5	70.4		70.4	36.8	36.7	53.0	25.6	59.7
Level of Service	E	D	D	E	E		E	D	D	D	C	E
Approach Delay (s)		58.8			70.4			38.9			42.0	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM Average Control Delay	49.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.5%	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												
Volume (vph)	175	1133	10	10	413	190	30	10	10	550	10	276
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3535		1770	3539	1583	1770	1723		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3535		1770	3539	1583	1770	1723		3433	1863	2787
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)	190	1232	11	11	449	207	33	11	11	598	11	300
RTOR Reduction (vph)	0	1	0	0	0	0	0	11	0	0	0	200
Lane Group Flow (vph)	190	1242	0	11	449	207	33	11	0	598	11	100
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	13.5	32.6		0.6	19.7	80.2	4.2	2.9		28.1	26.8	26.8
Effective Green, g (s)	13.5	32.6		0.6	19.7	80.2	4.2	2.9		28.1	26.8	26.8
Actuated g/C Ratio	0.17	0.41		0.01	0.25	1.00	0.05	0.04		0.35	0.33	0.33
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)	298	1437		13	869	1583	93	62		1203	623	931
v/s Ratio Prot	c0.11	c0.35		0.01	0.13		0.02	0.01		c0.17	0.01	
v/s Ratio Perm						c0.13						0.04
v/c Ratio	0.64	0.86		0.85	0.52	0.13	0.35	0.18		0.50	0.02	0.11
Uniform Delay, d1	31.1	21.8		39.8	26.1	0.0	36.7	37.5		20.5	17.9	18.4
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	4.4	5.7		166.4	0.5	0.2	2.3	1.4		1.5	0.1	0.2
Delay (s)	35.5	27.5		206.2	26.7	0.2	39.0	38.9		22.0	17.9	18.7
Level of Service	D	C		F	C	A	D	D		C	B	B
Approach Delay (s)		28.5			21.4			39.0			20.8	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM Average Control Delay	24.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	80.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.3%	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												
Volume (vph)	70	806	28	7	344	78	14	42	4	53	78	93
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1853		1770	1863	1583	1770	1840		1770	1711	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1853		1770	1863	1583	1770	1840		1770	1711	
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)	76	876	30	8	374	85	15	46	4	58	85	101
RTOR Reduction (vph)	0	1	0	0	0	58	0	2	0	0	30	0
Lane Group Flow (vph)	76	905	0	8	374	27	15	48	0	58	156	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	17.4	44.7		0.5	27.8	27.8	0.5	18.6		6.1	24.2	
Effective Green, g (s)	17.9	45.2		1.0	28.3	28.3	1.0	19.1		6.6	24.7	
Actuated g/C Ratio	0.20	0.51		0.01	0.32	0.32	0.01	0.22		0.08	0.28	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	360	953		20	600	510	20	400		133	481	
v/s Ratio Prot	0.04	c0.49		0.00	c0.20		c0.01	0.03		0.03	c0.09	
v/s Ratio Perm						0.02						
v/c Ratio	0.21	0.95		0.40	0.62	0.05	0.75	0.12		0.44	0.32	
Uniform Delay, d1	29.1	20.3		43.2	25.3	20.6	43.3	27.6		38.9	25.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	17.9		12.6	2.0	0.0	91.0	0.6		2.3	1.8	
Delay (s)	29.4	38.1		55.8	27.3	20.6	134.4	28.2		41.2	26.8	
Level of Service	C	D		E	C	C	F	C		D	C	
Approach Delay (s)		37.5			26.6			52.7			30.2	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	87.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	132	684	269	205	339	255
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	143	743	292	223	368	277
RTOR Reduction (vph)	0	0	0	161	0	167
Lane Group Flow (vph)	143	743	292	62	368	110
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	10.1	33.4	18.8	18.8	27.0	27.0
Effective Green, g (s)	10.6	33.9	19.3	19.3	27.5	27.5
Actuated g/C Ratio	0.15	0.49	0.28	0.28	0.40	0.40
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	270	910	518	440	701	627
v/s Ratio Prot	0.08	c0.40	0.16		c0.21	
v/s Ratio Perm				0.04		0.07
v/c Ratio	0.53	0.82	0.56	0.14	0.52	0.18
Uniform Delay, d1	27.1	15.1	21.4	18.8	16.0	13.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9	5.7	1.4	0.1	2.8	0.6
Delay (s)	29.0	20.8	22.9	19.0	18.8	14.2
Level of Service	C	C	C	B	B	B
Approach Delay (s)		22.1	21.2		16.8	
Approach LOS		C	C		B	

Intersection Summary			
HCM Average Control Delay	20.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	69.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.4%	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												
Volume (vph)	0	0	0	114	282	236	539	901	140	62	845	251
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1836	1583	3433	3468		1770	3539	1583
Flt Permitted					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1836	1583	3433	3468		1770	3539	1583
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	0	0	124	307	257	586	979	152	67	918	273
RTOR Reduction (vph)	0	0	0	0	0	154	0	13	0	0	0	110
Lane Group Flow (vph)	0	0	0	0	431	103	586	1118	0	67	918	163
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					24.1	24.1	22.8	48.8		5.1	31.1	31.1
Effective Green, g (s)					24.1	24.1	22.8	48.8		5.1	31.1	31.1
Actuated g/C Ratio					0.27	0.27	0.25	0.54		0.06	0.35	0.35
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)					492	424	870	1880		100	1223	547
v/s Ratio Prot							c0.17	0.32		0.04	c0.26	
v/s Ratio Perm					0.23	0.06						0.10
v/c Ratio					0.88	0.24	0.67	0.59		0.67	0.75	0.30
Uniform Delay, d1					31.5	25.8	30.2	13.9		41.6	26.0	21.5
Progression Factor					1.00	1.00	0.55	0.18		1.00	1.00	1.00
Incremental Delay, d2					15.9	0.3	1.4	0.9		16.2	4.3	1.4
Delay (s)					47.4	26.1	18.0	3.4		57.8	30.3	22.9
Level of Service					D	C	B	A		E	C	C
Approach Delay (s)		0.0			39.5			8.4			30.1	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM Average Control Delay	21.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.9%	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												
Volume (vph)	395	3	469	0	0	0	0	1237	251	261	668	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.90	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1502	1504					4957		1770	3539	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1502	1504					4957		1770	3539	
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)	429	3	510	0	0	0	0	1345	273	284	726	0
RTOR Reduction (vph)	0	80	204	0	0	0	0	33	0	0	0	0
Lane Group Flow (vph)	326	235	97	0	0	0	0	1585	0	284	726	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.5	20.5	20.5					39.5		18.0	61.5	
Effective Green, g (s)	20.5	20.5	20.5					39.5		18.0	61.5	
Actuated g/C Ratio	0.23	0.23	0.23					0.44		0.20	0.68	
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)	383	342	343					2176		354	2418	
v/s Ratio Prot								c0.32		c0.16	0.21	
v/s Ratio Perm	c0.19	0.16	0.06									
v/c Ratio	0.85	0.69	0.28					0.73		0.80	0.30	
Uniform Delay, d1	33.3	31.8	28.7					20.8		34.3	5.7	
Progression Factor	1.00	1.00	1.00					0.47		1.19	0.45	
Incremental Delay, d2	16.4	5.6	0.5					1.5		8.4	0.2	
Delay (s)	49.7	37.4	29.1					11.2		49.3	2.7	
Level of Service	D	D	C					B		D	A	
Approach Delay (s)		39.0			0.0			11.2			15.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.8%	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												
Volume (vph)	311	411	106	154	492	246	158	847	109	147	623	332
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3431		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3431		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	338	447	115	167	535	267	172	921	118	160	677	361
RTOR Reduction (vph)	0	27	0	0	0	206	0	0	78	0	0	263
Lane Group Flow (vph)	338	535	0	167	535	61	172	921	40	160	677	98
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	18.8	19.1		15.4	15.7	15.7	15.0	30.2	30.2	9.3	24.5	24.5
Effective Green, g (s)	18.8	19.1		15.4	15.7	15.7	15.0	30.2	30.2	9.3	24.5	24.5
Actuated g/C Ratio	0.21	0.21		0.17	0.17	0.17	0.17	0.34	0.34	0.10	0.27	0.27
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)	370	728		303	617	276	295	1188	531	183	963	431
v/s Ratio Prot	c0.19	0.16		0.09	c0.15		0.10	c0.26		c0.09	0.19	
v/s Ratio Perm						0.04			0.03			0.06
v/c Ratio	0.91	0.74		0.55	0.87	0.22	0.58	0.78	0.07	0.87	0.70	0.23
Uniform Delay, d1	34.8	33.1		34.1	36.1	31.9	34.6	26.9	20.4	39.8	29.5	25.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.65	1.32
Incremental Delay, d2	26.3	3.9		2.2	12.3	0.4	2.9	5.0	0.3	31.9	4.0	1.1
Delay (s)	61.1	37.0		36.3	48.4	32.3	37.5	31.8	20.6	58.7	23.1	34.8
Level of Service	E	D		D	D	C	D	C	C	E	C	C
Approach Delay (s)		46.0			41.9			31.6			31.4	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	36.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.7%	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												
Volume (vph)	0	0	0	256	0	138	3	787	203	161	633	1
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	0.95		1.00	0.95	
Frt				1.00		0.85	1.00	0.97		1.00	1.00	
Flt Protected				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583	1770	3430		1770	3538	
Flt Permitted				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583	1770	3430		1770	3538	
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	0	0	278	0	150	3	855	221	175	688	1
RTOR Reduction (vph)	0	0	0	0	0	128	0	27	0	0	0	0
Lane Group Flow (vph)	0	0	0	278	0	22	3	1049	0	175	689	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				10.9		10.9	0.8	40.4		9.6	49.2	
Effective Green, g (s)				10.9		10.9	0.8	40.4		9.6	49.2	
Actuated g/C Ratio				0.15		0.15	0.01	0.55		0.13	0.67	
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)				513		237	19	1901		233	2388	
v/s Ratio Prot				c0.08			0.00	c0.31		c0.10	0.19	
v/s Ratio Perm						0.01						
v/c Ratio				0.54		0.09	0.16	0.55		0.75	0.29	
Uniform Delay, d1				28.7		26.7	35.7	10.4		30.5	4.8	
Progression Factor				1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2				1.2		0.2	3.9	1.2		12.8	0.3	
Delay (s)				29.9		26.9	39.6	11.6		43.3	5.1	
Level of Service				C		C	D	B		D	A	
Approach Delay (s)		0.0			28.8			11.7			12.8	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	72.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.5%	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												
Volume (vph)	80	70	40	464	130	304	30	361	302	78	487	30
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1721	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1721	1583	1770	3539	1583	1770	3539	1583
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)	87	76	43	504	141	330	33	392	328	85	529	33
RTOR Reduction (vph)	0	0	39	0	0	253	0	0	201	0	0	19
Lane Group Flow (vph)	87	76	4	318	327	77	33	392	127	85	529	14
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	7.6	7.6	7.6	18.7	18.7	18.7	2.7	31.0	31.0	6.7	35.0	35.0
Effective Green, g (s)	7.6	7.6	7.6	18.7	18.7	18.7	2.7	31.0	31.0	6.7	35.0	35.0
Actuated g/C Ratio	0.09	0.09	0.09	0.23	0.23	0.23	0.03	0.39	0.39	0.08	0.44	0.44
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	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	3.0
Lane Grp Cap (vph)	168	177	150	393	402	370	60	1371	613	148	1548	693
v/s Ratio Prot	c0.05	0.04		0.19	c0.19		c0.02	0.11		c0.05	c0.15	
v/s Ratio Perm			0.00			0.05			0.08			0.01
v/c Ratio	0.52	0.43	0.03	0.81	0.81	0.21	0.55	0.29	0.21	0.57	0.34	0.02
Uniform Delay, d1	34.5	34.2	32.8	29.0	29.0	24.7	38.1	16.9	16.3	35.3	14.9	12.8
Progression 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
Incremental Delay, d2	2.7	1.7	0.1	11.6	11.9	0.3	10.5	0.5	0.8	5.3	0.6	0.1
Delay (s)	37.1	35.8	32.9	40.6	40.9	25.0	48.5	17.4	17.1	40.6	15.5	12.8
Level of Service	D	D	C	D	D	C	D	B	B	D	B	B
Approach Delay (s)		35.8			35.4			18.6			18.6	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	26.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	50.8%	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												
Volume (vph)	119	43	41	1007	14	134	13	310	389	21	760	40
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.88	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	1555	1504	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	3433	1555	1504	1770	3539	1583	1770	3539	1583
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)	125	45	43	1060	15	141	14	326	409	22	800	42
RTOR Reduction (vph)	0	0	40	0	54	67	0	0	0	0	0	28
Lane Group Flow (vph)	125	45	3	1060	24	11	14	326	409	22	800	14
Turn Type	Prot		Perm	Prot		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			6
Actuated Green, G (s)	22.4	5.8	5.8	26.9	10.3	10.3	0.7	23.0	73.7	2.0	24.3	24.3
Effective Green, g (s)	22.4	5.8	5.8	26.9	10.3	10.3	0.7	23.0	73.7	2.0	24.3	24.3
Actuated g/C Ratio	0.30	0.08	0.08	0.36	0.14	0.14	0.01	0.31	1.00	0.03	0.33	0.33
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)	538	147	125	1253	217	210	17	1104	1583	48	1167	522
v/s Ratio Prot	0.07	0.02		c0.31	0.02		0.01	0.09		0.01	c0.23	
v/s Ratio Perm			0.00			0.01			c0.26			0.01
v/c Ratio	0.23	0.31	0.03	0.85	0.11	0.05	0.82	0.30	0.26	0.46	0.69	0.03
Uniform Delay, d1	19.2	32.1	31.3	21.5	27.7	27.5	36.4	19.2	0.0	35.3	21.4	16.7
Progression 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
Incremental Delay, d2	0.2	1.2	0.1	5.4	0.2	0.1	132.1	0.7	0.4	6.8	3.3	0.1
Delay (s)	19.4	33.2	31.4	26.9	27.9	27.6	168.5	19.9	0.4	42.1	24.7	16.8
Level of Service	B	C	C	C	C	C	F	B	A	D	C	B
Approach Delay (s)		24.8			27.0			12.0			24.7	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	22.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	73.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.1%	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												
Volume (veh/h)	0	0	9	0	0	0	0	712	0	0	1808	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	10	0	0	0	0	774	0	0	1965	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											500	
pX, platoon unblocked	0.81	0.81	0.81	0.81	0.81		0.81					
vC, conflicting volume	2352	2739	983	1766	2746	387	1972			774		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2198	2677	503	1473	2685	387	1727			774		
tC, single (s)	7.5	6.5	*6.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	98	100	100	100	100			100		
cM capacity (veh/h)	20	18	460	70	17	611	292			837		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	10	387	387	983	983	7
Volume Left	0	0	0	0	0	0
Volume Right	10	0	0	0	0	7
cSH	460	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.23	0.23	0.58	0.58	0.00
Queue Length 95th (ft)	2	0	0	0	0	0
Control Delay (s)	13.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	13.0	0.0		0.0		
Approach LOS	B					

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	60.0%	ICU Level of Service	B	
Analysis Period (min)	15			

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	24	0	98	0	0	0	56	491	3	0	1575	28
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	1.00	1.00					1.00	0.95	1.00		0.91	
Frt	1.00	0.85					1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583					1770	3539	1583		5072	
Flt Permitted	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583					1770	3539	1583		5072	
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)	26	0	107	0	0	0	61	534	3	0	1712	30
RTOR Reduction (vph)	0	94	0	0	0	0	0	0	1	0	2	0
Lane Group Flow (vph)	26	13	0	0	0	0	61	534	2	0	1740	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	2.3	8.5					8.4	53.8	53.8		41.4	
Effective Green, g (s)	2.3	8.5					8.4	53.8	53.8		41.4	
Actuated g/C Ratio	0.03	0.12					0.12	0.77	0.77		0.59	
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)	58	191					211	2708	1211		2987	
v/s Ratio Prot	c0.01	c0.01					c0.03	0.15			c0.34	
v/s Ratio Perm									0.00			
v/c Ratio	0.45	0.07					0.29	0.20	0.00		0.58	
Uniform Delay, d1	33.4	27.4					28.2	2.3	1.9		9.0	
Progression Factor	1.00	1.00					1.00	1.00	1.00		1.00	
Incremental Delay, d2	5.4	0.2					0.8	0.2	0.0		0.3	
Delay (s)	38.8	27.5					29.0	2.4	1.9		9.3	
Level of Service	D	C					C	A	A		A	
Approach Delay (s)		29.7			0.0			5.1			9.3	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	70.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.5%	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												
Volume (vph)	73	100	123	362	499	74	141	430	115	76	1223	343
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3246		1770	3539	1583	1770	4924		1770	4918	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3246		1770	3539	1583	1770	4924		1770	4918	
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)	79	109	134	393	542	80	153	467	125	83	1329	373
RTOR Reduction (vph)	0	121	0	0	0	59	0	39	0	0	44	0
Lane Group Flow (vph)	79	122	0	393	542	21	153	553	0	83	1658	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	8.2	10.1		25.3	27.2	27.2	10.0	44.6		8.3	42.9	
Effective Green, g (s)	8.2	10.1		25.3	27.2	27.2	10.0	44.6		8.3	42.9	
Actuated g/C Ratio	0.08	0.10		0.24	0.26	0.26	0.10	0.43		0.08	0.41	
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)	139	314		429	923	413	170	2106		141	2023	
v/s Ratio Prot	0.04	0.04		c0.22	c0.15		c0.09	0.11		0.05	c0.34	
v/s Ratio Perm						0.01						
v/c Ratio	0.57	0.39		0.92	0.59	0.05	0.90	0.26		0.59	0.82	
Uniform Delay, d1	46.3	44.2		38.5	33.6	28.9	46.7	19.2		46.4	27.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.2	0.8		24.0	1.0	0.1	41.6	0.3		6.2	3.9	
Delay (s)	51.6	45.0		62.4	34.6	28.9	88.3	19.5		52.5	31.1	
Level of Service	D	D		E	C	C	F	B		D	C	
Approach Delay (s)		46.6			44.9			33.7			32.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	37.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	104.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.2%	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												
Volume (vph)	209	351	34	443	1167	135	151	303	167	267	1039	515
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5006		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5006		3433	5085	1583	3433	5085	1583
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)	227	382	37	482	1268	147	164	329	182	290	1129	560
RTOR Reduction (vph)	0	0	32	0	16	0	0	0	135	0	0	151
Lane Group Flow (vph)	227	382	5	482	1399	0	164	329	47	290	1129	409
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	8.0	12.1	12.1	24.4	28.5		5.0	23.0	23.0	14.0	32.0	32.0
Effective Green, g (s)	8.0	12.1	12.1	24.4	28.5		5.0	23.0	23.0	14.0	32.0	32.0
Actuated g/C Ratio	0.09	0.14	0.14	0.27	0.32		0.06	0.26	0.26	0.16	0.36	0.36
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)	307	687	214	936	1594		192	1307	407	537	1818	566
v/s Ratio Prot	c0.07	c0.08		0.14	c0.28		c0.05	0.06		0.08	0.22	
v/s Ratio Perm			0.00						0.03			c0.26
v/c Ratio	0.74	0.56	0.02	0.51	0.88		0.85	0.25	0.11	0.54	0.62	0.72
Uniform Delay, d1	39.7	36.2	33.6	27.5	28.9		41.9	26.4	25.5	34.8	23.7	24.9
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	9.0	1.0	0.0	0.5	5.8		29.0	0.5	0.6	1.1	1.6	7.8
Delay (s)	48.7	37.2	33.6	28.0	34.7		70.8	26.9	26.0	35.9	25.3	32.7
Level of Service	D	D	C	C	C		E	C	C	D	C	C
Approach Delay (s)		41.0			33.0			37.3			29.0	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	33.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	89.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.8%	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												
Volume (vph)	257	359	10	10	1086	360	40	10	20	190	10	257
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3525		1770	3539	1583	1770	1676		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3525		1770	3539	1583	1770	1676		3433	1863	2787
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)	279	390	11	11	1180	391	43	11	22	207	11	279
RTOR Reduction (vph)	0	1	0	0	0	0	0	21	0	0	0	233
Lane Group Flow (vph)	279	400	0	11	1180	391	43	12	0	207	11	46
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	23.4	70.5		0.7	47.8	112.5	6.7	5.7		19.6	18.6	18.6
Effective Green, g (s)	23.4	70.5		0.7	47.8	112.5	6.7	5.7		19.6	18.6	18.6
Actuated g/C Ratio	0.21	0.63		0.01	0.42	1.00	0.06	0.05		0.17	0.17	0.17
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)	368	2209		11	1504	1583	105	85		598	308	461
v/s Ratio Prot	c0.16	0.11		0.01	c0.33		0.02	0.01		c0.06	0.01	
v/s Ratio Perm						c0.25						0.02
v/c Ratio	0.76	0.18		1.00	0.78	0.25	0.41	0.14		0.35	0.04	0.10
Uniform Delay, d1	41.9	8.8		55.9	27.9	0.0	51.0	51.1		40.8	39.4	39.8
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	8.7	0.0		271.4	2.8	0.4	2.6	0.8		1.6	0.2	0.4
Delay (s)	50.6	8.9		327.3	30.7	0.4	53.6	51.8		42.4	39.6	40.3
Level of Service	D	A		F	C	A	D	D		D	D	D
Approach Delay (s)		26.0			25.2			52.8			41.2	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	28.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.3%	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												
Volume (vph)	100	448	7	1	595	107	74	89	5	83	22	147
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1858		1770	1863	1583	1770	1849		1770	1620	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1858		1770	1863	1583	1770	1849		1770	1620	
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)	109	487	8	1	647	116	80	97	5	90	24	160
RTOR Reduction (vph)	0	0	0	0	0	71	0	2	0	0	121	0
Lane Group Flow (vph)	109	495	0	1	647	45	80	100	0	90	63	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	10.0	41.5		0.7	32.2	32.2	3.8	17.3		6.3	19.8	
Effective Green, g (s)	10.5	42.0		1.2	32.7	32.7	4.3	17.8		6.8	20.3	
Actuated g/C Ratio	0.13	0.50		0.01	0.39	0.39	0.05	0.21		0.08	0.24	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	222	931		25	727	618	91	393		144	392	
v/s Ratio Prot	0.06	c0.27		0.00	c0.35		c0.05	c0.05		c0.05	0.04	
v/s Ratio Perm						0.03						
v/c Ratio	0.49	0.53		0.04	0.89	0.07	0.88	0.25		0.62	0.16	
Uniform Delay, d1	34.2	14.2		40.7	23.9	16.0	39.5	27.5		37.3	25.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.7	0.6		0.7	12.8	0.1	56.1	1.5		8.2	0.9	
Delay (s)	35.9	14.8		41.4	36.7	16.1	95.6	29.0		45.5	25.9	
Level of Service	D	B		D	D	B	F	C		D	C	
Approach Delay (s)		18.6			33.6			58.3			32.3	
Approach LOS		B			C			E			C	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	83.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	270	382	482	252	170	190
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	415	524	274	185	207
RTOR Reduction (vph)	0	0	0	173	0	158
Lane Group Flow (vph)	293	415	524	101	185	49
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	16.2	47.2	26.5	26.5	16.9	16.9
Effective Green, g (s)	16.7	47.7	27.0	27.0	17.4	17.4
Actuated g/C Ratio	0.23	0.65	0.37	0.37	0.24	0.24
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	404	1216	688	585	421	377
v/s Ratio Prot	c0.17	0.22	c0.28		c0.10	
v/s Ratio Perm				0.06		0.03
v/c Ratio	0.73	0.34	0.76	0.17	0.44	0.13
Uniform Delay, d1	26.1	5.7	20.2	15.5	23.7	21.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.4	0.2	5.0	0.1	3.3	0.7
Delay (s)	32.4	5.8	25.2	15.7	27.0	22.6
Level of Service	C	A	C	B	C	C
Approach Delay (s)		16.8	21.9		24.7	
Approach LOS		B	C		C	

Intersection Summary			
HCM Average Control Delay	20.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	73.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.7%	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												
Volume (vph)	0	0	0	169	235	221	541	847	362	110	716	258
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1825	1583	3433	3380		1770	3539	1583
Flt Permitted					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1825	1583	3433	3380		1770	3539	1583
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	0	0	184	255	240	588	921	393	120	778	280
RTOR Reduction (vph)	0	0	0	0	0	173	0	50	0	0	0	156
Lane Group Flow (vph)	0	0	0	0	439	67	588	1264	0	120	778	124
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					25.3	25.3	19.7	43.8		8.9	33.0	33.0
Effective Green, g (s)					25.3	25.3	19.7	43.8		8.9	33.0	33.0
Actuated g/C Ratio					0.28	0.28	0.22	0.49		0.10	0.37	0.37
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)					513	445	751	1645		175	1298	580
v/s Ratio Prot							c0.17	c0.37		0.07	0.22	
v/s Ratio Perm					0.24	0.04						0.08
v/c Ratio					0.86	0.15	0.78	0.77		0.69	0.60	0.21
Uniform Delay, d1					30.6	24.3	33.1	18.9		39.2	23.1	19.6
Progression Factor					1.00	1.00	1.01	0.90		1.00	1.00	1.00
Incremental Delay, d2					13.2	0.2	4.8	3.1		10.6	2.1	0.8
Delay (s)					43.8	24.5	38.4	20.2		49.8	25.2	20.4
Level of Service					D	C	D	C		D	C	C
Approach Delay (s)		0.0			36.9			25.8			26.6	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	28.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.8%	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												
Volume (vph)	365	541	356	0	0	0	0	726	650	187	768	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.99	0.85					0.93		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1675	1504					4725		1770	3539	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1675	1504					4725		1770	3539	
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)	397	588	387	0	0	0	0	789	707	203	835	0
RTOR Reduction (vph)	0	2	86	0	0	0	0	92	0	0	0	0
Lane Group Flow (vph)	357	665	262	0	0	0	0	1404	0	203	835	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Effective Green, g (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.36		0.13	0.53	
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)	635	633	568					1680		236	1887	
v/s Ratio Prot								c0.30		c0.11	0.24	
v/s Ratio Perm	0.21	0.40	0.17									
v/c Ratio	0.56	1.05	0.46					1.06dr		0.86	0.44	
Uniform Delay, d1	22.1	28.0	21.1					26.6		38.2	12.8	
Progression Factor	1.00	1.00	1.00					0.48		0.78	0.40	
Incremental Delay, d2	1.1	49.5	0.6					3.3		22.0	0.6	
Delay (s)	23.3	77.5	21.7					16.2		51.8	5.7	
Level of Service	C	E	C					B		D	A	
Approach Delay (s)		49.2			0.0			16.2			14.7	
Approach LOS		D			A			B			B	

Intersection Summary					
HCM Average Control Delay	27.4	HCM Level of Service		C	
HCM Volume to Capacity ratio	0.93				
Actuated Cycle Length (s)	90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	78.2%	ICU Level of Service		D	
Analysis Period (min)	15				

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	371	473	177	125	506	168	133	734	180	201	719	398
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3395		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3395		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	403	514	192	136	550	183	145	798	196	218	782	433
RTOR Reduction (vph)	0	43	0	0	0	151	0	0	143	0	0	306
Lane Group Flow (vph)	403	663	0	136	550	32	145	798	53	218	782	127
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	21.8	28.0		9.6	15.8	15.8	10.0	24.2	24.2	12.2	26.4	26.4
Effective Green, g (s)	21.8	28.0		9.6	15.8	15.8	10.0	24.2	24.2	12.2	26.4	26.4
Actuated g/C Ratio	0.24	0.31		0.11	0.18	0.18	0.11	0.27	0.27	0.14	0.29	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)	429	1056		189	621	278	197	952	426	240	1038	464
v/s Ratio Prot	c0.23	0.20		0.08	c0.16		0.08	c0.23		c0.12	0.22	
v/s Ratio Perm						0.02			0.03			0.08
v/c Ratio	0.94	0.63		0.72	0.89	0.12	0.74	0.84	0.12	0.91	0.75	0.27
Uniform Delay, d1	33.5	26.5		38.9	36.2	31.2	38.7	31.1	24.9	38.3	28.8	24.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.73	0.68	0.32	0.81	0.73	0.47
Incremental Delay, d2	28.3	1.2		12.3	14.2	0.2	12.1	7.9	0.5	32.4	4.7	1.3
Delay (s)	61.8	27.7		51.2	50.4	31.4	40.2	29.0	8.4	63.5	25.9	13.0
Level of Service	E	C		D	D	C	D	C	A	E	C	B
Approach Delay (s)		40.1			46.6			26.9			27.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.3%	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												
Volume (vph)	0	0	0	234	0	195	0	648	291	357	681	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	
Lane Util. Factor				0.97		1.00		0.95		1.00	0.95	
Frt				1.00		0.85		0.95		1.00	1.00	
Flt Protected				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583		3375		1770	3539	
Flt Permitted				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583		3375		1770	3539	
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	0	0	254	0	212	0	704	316	388	740	0
RTOR Reduction (vph)	0	0	0	0	0	184	0	50	0	0	0	0
Lane Group Flow (vph)	0	0	0	254	0	28	0	970	0	388	740	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				11.9		11.9		42.3		23.8	70.1	
Effective Green, g (s)				11.9		11.9		42.3		23.8	70.1	
Actuated g/C Ratio				0.13		0.13		0.47		0.26	0.78	
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)				454		209		1586		468	2756	
v/s Ratio Prot				c0.07				c0.29		c0.22	0.21	
v/s Ratio Perm						0.02						
v/c Ratio				0.56		0.13		0.61		0.83	0.27	
Uniform Delay, d1				36.6		34.5		17.7		31.2	2.8	
Progression Factor				1.00		1.00		1.00		0.40	0.45	
Incremental Delay, d2				1.5		0.3		1.8		8.2	0.2	
Delay (s)				38.1		34.8		19.5		20.6	1.4	
Level of Service				D		C		B		C	A	
Approach Delay (s)		0.0			36.6			19.5			8.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM Average Control Delay	17.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.7%	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												
Volume (vph)	100	80	20	123	50	197	30	439	357	354	359	120
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1732	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1732	1583	1770	3539	1583	1770	3539	1583
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)	109	87	22	134	54	214	33	477	388	385	390	130
RTOR Reduction (vph)	0	0	19	0	0	189	0	0	302	0	0	60
Lane Group Flow (vph)	109	87	3	92	96	25	33	477	86	385	390	70
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	10.7	10.7	10.7	10.3	10.3	10.3	3.3	19.3	19.3	30.8	46.8	46.8
Effective Green, g (s)	10.7	10.7	10.7	10.3	10.3	10.3	3.3	19.3	19.3	30.8	46.8	46.8
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.12	0.12	0.04	0.22	0.22	0.35	0.54	0.54
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	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	3.0
Lane Grp Cap (vph)	217	229	194	199	205	187	67	784	351	626	1902	851
v/s Ratio Prot	c0.06	0.05		0.05	c0.06		0.02	c0.13		c0.22	0.11	
v/s Ratio Perm			0.00			0.02			0.05			0.04
v/c Ratio	0.50	0.38	0.01	0.46	0.47	0.14	0.49	0.61	0.24	0.62	0.21	0.08
Uniform Delay, d1	35.7	35.1	33.6	35.8	35.8	34.4	41.1	30.5	27.9	23.3	10.5	9.8
Progression 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
Incremental Delay, d2	1.8	1.1	0.0	1.7	1.7	0.3	5.6	3.5	1.7	1.8	0.2	0.2
Delay (s)	37.5	36.2	33.6	37.5	37.5	34.7	46.7	34.0	29.6	25.1	10.7	9.9
Level of Service	D	D	C	D	D	C	D	C	C	C	B	A
Approach Delay (s)		36.6			36.0			32.5			16.7	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM Average Control Delay	27.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	87.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.3%	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												
Volume (vph)	74	27	26	534	45	42	44	660	1041	24	320	128
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	1749	1504	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	3433	1749	1504	1770	3539	1583	1770	3539	1583
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)	78	28	27	562	47	44	46	695	1096	25	337	135
RTOR Reduction (vph)	0	0	26	0	3	34	0	0	0	0	0	76
Lane Group Flow (vph)	78	28	1	562	48	6	46	695	1096	25	337	59
Turn Type	Prot		Perm	Prot		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			6
Actuated Green, G (s)	9.5	3.8	3.8	16.3	10.6	10.6	3.7	31.9	70.6	2.6	30.8	30.8
Effective Green, g (s)	9.5	3.8	3.8	16.3	10.6	10.6	3.7	31.9	70.6	2.6	30.8	30.8
Actuated g/C Ratio	0.13	0.05	0.05	0.23	0.15	0.15	0.05	0.45	1.00	0.04	0.44	0.44
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)	238	100	85	793	263	226	93	1599	1583	65	1544	691
v/s Ratio Prot	0.04	0.02		0.16	0.03		0.03	0.20		0.01	0.10	
v/s Ratio Perm			0.00			0.00			c0.69			0.04
v/c Ratio	0.33	0.28	0.02	0.71	0.18	0.03	0.49	0.43	0.69	0.38	0.22	0.09
Uniform Delay, d1	27.7	32.1	31.6	25.0	26.2	25.6	32.5	13.2	0.0	33.2	12.4	11.7
Progression 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
Incremental Delay, d2	0.8	1.5	0.1	2.9	0.3	0.0	4.1	0.9	2.5	3.8	0.3	0.2
Delay (s)	28.5	33.6	31.7	27.9	26.5	25.6	36.6	14.1	2.5	37.0	12.7	11.9
Level of Service	C	C	C	C	C	C	D	B	A	D	B	B
Approach Delay (s)		30.2			27.6			7.7			13.7	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	70.6	Sum of lost time (s)	0.0
Intersection Capacity Utilization	53.5%	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												
Volume (veh/h)	0	0	6	0	0	0	0	1788	0	0	902	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	7	0	0	0	0	1943	0	0	980	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											500	
pX, platoon unblocked	0.99	0.99	0.99	0.99	0.99		0.99					
vC, conflicting volume	1952	2924	490	2440	2943	972	1000			1943		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1938	2923	457	2433	2943	972	974			1943		
tC, single (s)	7.5	6.5	*6.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	39	15	597	16	14	252	695			298		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	7	972	972	490	490	20
Volume Left	0	0	0	0	0	0
Volume Right	7	0	0	0	0	20
cSH	597	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.57	0.57	0.29	0.29	0.01
Queue Length 95th (ft)	1	0	0	0	0	0
Control Delay (s)	11.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	11.1	0.0		0.0		
Approach LOS	B					

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	52.8%	ICU Level of Service	A	
Analysis Period (min)	15			

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	0	43	2	0	1	50	1933	3	0	660	9
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		0.94		1.00	1.00	0.95	1.00		0.91	
Frt	1.00	0.85		1.00		0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583		4990		1583	1770	3539	1583		5075	
Flt Permitted	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583		4990		1583	1770	3539	1583		5075	
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)	55	0	47	2	0	1	54	2101	3	0	717	10
RTOR Reduction (vph)	0	45	0	0	0	1	0	0	1	0	1	0
Lane Group Flow (vph)	55	2	0	2	0	0	54	2101	2	0	726	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	5.2	5.5		0.8		1.1	21.0	85.4	85.4		60.4	
Effective Green, g (s)	5.2	5.5		0.8		1.1	21.0	85.4	85.4		60.4	
Actuated g/C Ratio	0.05	0.05		0.01		0.01	0.20	0.82	0.82		0.58	
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)	89	84		38		17	358	2914	1304		2956	
v/s Ratio Prot	c0.03	c0.00		0.00			0.03	c0.59			0.14	
v/s Ratio Perm						0.00			0.00			
v/c Ratio	0.62	0.03		0.05		0.00	0.15	0.72	0.00		0.25	
Uniform Delay, d1	48.3	46.6		51.1		50.8	34.0	4.0	1.6		10.5	
Progression Factor	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	12.1	0.1		0.6		0.0	0.2	1.6	0.0		0.0	
Delay (s)	60.4	46.7		51.7		50.8	34.2	5.6	1.6		10.6	
Level of Service	E	D		D		D	C	A	A		B	
Approach Delay (s)		54.1			51.4			6.3			10.6	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM Average Control Delay	9.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.1%	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												
Volume (vph)	380	334	148	193	114	39	133	1572	412	107	507	82
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3376		1770	3539	1583	1770	4927		1770	4979	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3376		1770	3539	1583	1770	4927		1770	4979	
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)	413	363	161	210	124	42	145	1709	448	116	551	89
RTOR Reduction (vph)	0	35	0	0	0	39	0	30	0	0	14	0
Lane Group Flow (vph)	413	489	0	210	124	4	145	2127	0	116	626	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	36.4	26.2		22.7	12.5	12.5	21.0	75.1		10.0	64.1	
Effective Green, g (s)	36.4	26.2		22.7	12.5	12.5	21.0	75.1		10.0	64.1	
Actuated g/C Ratio	0.24	0.17		0.15	0.08	0.08	0.14	0.50		0.07	0.43	
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)	430	590		268	295	132	248	2467		118	2128	
v/s Ratio Prot	c0.23	0.14		c0.12	0.04		0.08	c0.43		c0.07	0.13	
v/s Ratio Perm						0.00						
v/c Ratio	0.96	0.83		0.78	0.42	0.03	0.58	0.86		0.98	0.29	
Uniform Delay, d1	56.1	59.7		61.3	65.3	63.2	60.4	32.9		69.9	28.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.92	0.64		1.00	1.00	
Incremental Delay, d2	33.2	9.4		13.9	1.0	0.1	2.2	2.8		77.1	0.4	
Delay (s)	89.3	69.1		75.2	66.3	63.2	58.0	23.8		147.0	28.5	
Level of Service	F	E		E	E	E	E	C		F	C	
Approach Delay (s)		78.0			70.9			26.0			46.7	
Approach LOS		E			E			C			D	

Intersection Summary					
HCM Average Control Delay	44.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.88				
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization	83.5%	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												
Volume (vph)	601	865	27	229	405	141	133	1490	543	252	409	212
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	4888		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	4888		3433	5085	1583	3433	5085	1583
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)	653	940	29	249	440	153	145	1620	590	274	445	230
RTOR Reduction (vph)	0	0	22	0	42	0	0	0	166	0	0	123
Lane Group Flow (vph)	653	940	7	249	551	0	145	1620	424	274	445	107
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	32.8	37.8	37.8	15.7	20.7		11.0	65.0	65.0	15.5	69.5	69.5
Effective Green, g (s)	32.8	37.8	37.8	15.7	20.7		11.0	65.0	65.0	15.5	69.5	69.5
Actuated g/C Ratio	0.22	0.25	0.25	0.10	0.14		0.07	0.43	0.43	0.10	0.46	0.46
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)	751	1281	399	359	675		252	2204	686	355	2356	733
v/s Ratio Prot	c0.19	c0.18		0.07	0.11		0.04	c0.32		c0.08	0.09	
v/s Ratio Perm			0.00						0.27			0.07
v/c Ratio	0.87	0.73	0.02	0.69	0.82		0.58	0.74	0.62	0.77	0.19	0.15
Uniform Delay, d1	56.5	51.5	42.2	64.8	62.8		67.2	35.3	32.9	65.5	23.7	23.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.67	1.07	2.53
Incremental Delay, d2	10.5	2.2	0.0	5.7	7.5		3.2	2.2	4.1	9.0	0.2	0.4
Delay (s)	67.0	53.7	42.2	70.5	70.3		70.4	37.6	37.0	53.0	25.5	59.0
Level of Service	E	D	D	E	E		E	D	D	D	C	E
Approach Delay (s)		58.9			70.4			39.5			41.5	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM Average Control Delay	49.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.4%	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												
Volume (vph)	185	1150	10	10	441	190	30	10	10	550	10	293
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3535		1770	3539	1583	1770	1723		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3535		1770	3539	1583	1770	1723		3433	1863	2787
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)	201	1250	11	11	479	207	33	11	11	598	11	318
RTOR Reduction (vph)	0	1	0	0	0	0	0	11	0	0	0	213
Lane Group Flow (vph)	201	1260	0	11	479	207	33	11	0	598	11	105
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	13.9	33.2		0.6	19.9	80.7	4.2	2.9		28.0	26.7	26.7
Effective Green, g (s)	13.9	33.2		0.6	19.9	80.7	4.2	2.9		28.0	26.7	26.7
Actuated g/C Ratio	0.17	0.41		0.01	0.25	1.00	0.05	0.04		0.35	0.33	0.33
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)	305	1454		13	873	1583	92	62		1191	616	922
v/s Ratio Prot	c0.11	c0.36		0.01	0.14		0.02	0.01		c0.17	0.01	
v/s Ratio Perm						c0.13						0.04
v/c Ratio	0.66	0.87		0.85	0.55	0.13	0.36	0.18		0.50	0.02	0.11
Uniform Delay, d1	31.2	21.7		40.0	26.5	0.0	36.9	37.8		20.8	18.2	18.8
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	5.1	5.7		166.4	0.7	0.2	2.4	1.4		1.5	0.1	0.3
Delay (s)	36.3	27.4		206.4	27.2	0.2	39.3	39.2		22.4	18.2	19.0
Level of Service	D	C		F	C	A	D	D		C	B	B
Approach Delay (s)		28.7			22.0			39.3			21.2	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM Average Control Delay	25.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.8%	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												
Volume (vph)	70	813	28	7	357	78	14	42	4	53	78	93
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1854		1770	1863	1583	1770	1840		1770	1711	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1854		1770	1863	1583	1770	1840		1770	1711	
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)	76	884	30	8	388	85	15	46	4	58	85	101
RTOR Reduction (vph)	0	1	0	0	0	57	0	2	0	0	30	0
Lane Group Flow (vph)	76	913	0	8	388	28	15	48	0	58	156	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	17.1	45.2		0.5	28.6	28.6	0.5	18.5		6.2	24.2	
Effective Green, g (s)	17.6	45.7		1.0	29.1	29.1	1.0	19.0		6.7	24.7	
Actuated g/C Ratio	0.20	0.52		0.01	0.33	0.33	0.01	0.21		0.08	0.28	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	352	958		20	613	521	20	395		134	478	
v/s Ratio Prot	0.04	c0.49		0.00	c0.21		c0.01	0.03		0.03	c0.09	
v/s Ratio Perm						0.02						
v/c Ratio	0.22	0.95		0.40	0.63	0.05	0.75	0.12		0.43	0.33	
Uniform Delay, d1	29.6	20.3		43.4	25.1	20.2	43.6	28.0		39.0	25.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	18.6		12.6	2.1	0.0	91.0	0.6		2.2	1.8	
Delay (s)	29.9	38.9		56.0	27.3	20.3	134.6	28.6		41.3	27.1	
Level of Service	C	D		E	C	C	F	C		D	C	
Approach Delay (s)		38.2			26.5			53.1			30.4	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	34.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	138	685	271	205	339	266
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	150	745	295	223	368	289
RTOR Reduction (vph)	0	0	0	168	0	173
Lane Group Flow (vph)	150	745	295	55	368	116
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	11.9	32.8	16.4	16.4	27.0	27.0
Effective Green, g (s)	12.4	33.3	16.9	16.9	27.5	27.5
Actuated g/C Ratio	0.18	0.48	0.25	0.25	0.40	0.40
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	319	902	458	389	707	633
v/s Ratio Prot	0.08	c0.40	0.16		c0.21	
v/s Ratio Perm				0.03		0.07
v/c Ratio	0.47	0.83	0.64	0.14	0.52	0.18
Uniform Delay, d1	25.3	15.3	23.3	20.3	15.7	13.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	6.2	3.1	0.2	2.7	0.6
Delay (s)	26.4	21.5	26.4	20.4	18.4	14.0
Level of Service	C	C	C	C	B	B
Approach Delay (s)		22.3	23.8		16.5	
Approach LOS		C	C		B	

Intersection Summary			
HCM Average Control Delay	20.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	68.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.5%	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												
Volume (vph)	0	0	0	119	304	254	632	984	151	67	915	270
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1837	1583	3433	3469		1770	3539	1583
Flt Permitted					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1837	1583	3433	3469		1770	3539	1583
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	0	0	129	330	276	687	1070	164	73	995	293
RTOR Reduction (vph)	0	0	0	0	0	141	0	13	0	0	0	96
Lane Group Flow (vph)	0	0	0	0	459	135	687	1221	0	73	995	197
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					25.0	25.0	22.8	48.2		4.8	30.2	30.2
Effective Green, g (s)					25.0	25.0	22.8	48.2		4.8	30.2	30.2
Actuated g/C Ratio					0.28	0.28	0.25	0.54		0.05	0.34	0.34
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)					510	440	870	1858		94	1188	531
v/s Ratio Prot							c0.20	0.35		0.04	c0.28	
v/s Ratio Perm					0.25	0.09						0.12
v/c Ratio					0.90	0.31	0.79	0.66		0.78	0.84	0.37
Uniform Delay, d1					31.3	25.7	31.4	15.0		42.1	27.6	22.7
Progression Factor					1.00	1.00	0.52	0.16		1.00	1.00	1.00
Incremental Delay, d2					18.8	0.4	2.6	1.0		32.2	7.1	2.0
Delay (s)					50.1	26.1	18.8	3.3		74.2	34.8	24.7
Level of Service					D	C	B	A		E	C	C
Approach Delay (s)		0.0			41.1			8.9			34.7	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.9%	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												
Volume (vph)	426	3	522	0	0	0	0	1397	258	281	720	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.90	0.85					0.98		1.00	1.00	
Flt Protected	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1496	1504					4967		1770	3539	
Flt Permitted	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1496	1504					4967		1770	3539	
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)	463	3	567	0	0	0	0	1518	280	305	783	0
RTOR Reduction (vph)	0	92	180	0	0	0	0	29	0	0	0	0
Lane Group Flow (vph)	361	251	149	0	0	0	0	1769	0	305	783	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	21.3	21.3	21.3					38.7		18.0	60.7	
Effective Green, g (s)	21.3	21.3	21.3					38.7		18.0	60.7	
Actuated g/C Ratio	0.24	0.24	0.24					0.43		0.20	0.67	
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)	398	354	356					2136		354	2387	
v/s Ratio Prot								c0.36		c0.17	0.22	
v/s Ratio Perm	c0.21	0.17	0.10									
v/c Ratio	0.91	0.71	0.42					0.83		0.86	0.33	
Uniform Delay, d1	33.4	31.5	29.1					22.7		34.8	6.1	
Progression Factor	1.00	1.00	1.00					0.46		1.16	0.41	
Incremental Delay, d2	23.7	6.6	0.8					2.2		11.3	0.2	
Delay (s)	57.1	38.1	29.9					12.7		51.8	2.7	
Level of Service	E	D	C					B		D	A	
Approach Delay (s)		42.1			0.0			12.7			16.5	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	21.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.5%	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												
Volume (vph)	335	443	126	161	530	265	206	964	102	158	688	358
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3422		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3422		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	364	482	137	175	576	288	224	1048	111	172	748	389
RTOR Reduction (vph)	0	30	0	0	0	196	0	0	74	0	0	285
Lane Group Flow (vph)	364	589	0	175	576	92	224	1048	37	172	748	104
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	19.0	20.2		14.8	16.0	16.0	15.0	30.0	30.0	9.0	24.0	24.0
Effective Green, g (s)	19.0	20.2		14.8	16.0	16.0	15.0	30.0	30.0	9.0	24.0	24.0
Actuated g/C Ratio	0.21	0.22		0.16	0.18	0.18	0.17	0.33	0.33	0.10	0.27	0.27
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)	374	768		291	629	281	295	1180	528	177	944	422
v/s Ratio Prot	c0.21	c0.17		0.10	c0.16		0.13	c0.30		c0.10	0.21	
v/s Ratio Perm						0.06			0.02			0.07
v/c Ratio	0.97	0.77		0.60	0.92	0.33	0.76	0.89	0.07	0.97	0.79	0.25
Uniform Delay, d1	35.2	32.7		34.9	36.3	32.3	35.8	28.4	20.5	40.4	30.7	25.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.69	0.65	1.42
Incremental Delay, d2	39.2	4.6		3.5	18.0	0.7	10.7	10.1	0.3	55.6	6.1	1.2
Delay (s)	74.4	37.3		38.3	54.4	33.0	46.5	38.5	20.7	83.6	26.2	38.1
Level of Service	E	D		D	D	C	D	D	C	F	C	D
Approach Delay (s)		51.0			45.8			38.4			37.3	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	42.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.9%	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												
Volume (vph)	0	0	0	276	0	149	3	1170	219	174	626	1
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	0.95		1.00	0.95	
Frt				1.00		0.85	1.00	0.98		1.00	1.00	
Flt Protected				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583	1770	3456		1770	3538	
Flt Permitted				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583	1770	3456		1770	3538	
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	0	0	300	0	162	3	1272	238	189	680	1
RTOR Reduction (vph)	0	0	0	0	0	137	0	18	0	0	0	0
Lane Group Flow (vph)	0	0	0	300	0	25	3	1492	0	189	681	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				11.3		11.3	0.8	40.3		9.8	49.3	
Effective Green, g (s)				11.3		11.3	0.8	40.3		9.8	49.3	
Actuated g/C Ratio				0.15		0.15	0.01	0.55		0.13	0.67	
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)				529		244	19	1898		236	2376	
v/s Ratio Prot				c0.09			0.00	c0.43		c0.11	0.19	
v/s Ratio Perm						0.02						
v/c Ratio				0.57		0.10	0.16	0.79		0.80	0.29	
Uniform Delay, d1				28.8		26.7	36.0	13.1		30.9	4.9	
Progression Factor				1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2				1.4		0.2	3.9	3.4		17.5	0.3	
Delay (s)				30.2		26.9	39.8	16.5		48.3	5.2	
Level of Service				C		C	D	B		D	A	
Approach Delay (s)		0.0			29.0			16.5			14.6	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	73.4	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												
Volume (vph)	120	80	40	510	130	560	30	908	440	143	353	30
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1718	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1718	1583	1770	3539	1583	1770	3539	1583
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)	130	87	43	554	141	609	33	987	478	155	384	33
RTOR Reduction (vph)	0	0	37	0	0	247	0	0	319	0	0	19
Lane Group Flow (vph)	130	87	6	343	352	362	33	987	159	155	384	14
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.4	11.4	11.4	21.0	21.0	21.0	2.9	29.0	29.0	9.7	35.8	35.8
Effective Green, g (s)	11.4	11.4	11.4	21.0	21.0	21.0	2.9	29.0	29.0	9.7	35.8	35.8
Actuated g/C Ratio	0.13	0.13	0.13	0.24	0.24	0.24	0.03	0.33	0.33	0.11	0.41	0.41
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	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	3.0
Lane Grp Cap (vph)	232	244	207	405	414	382	59	1178	527	197	1455	651
v/s Ratio Prot	c0.07	0.05		0.20	0.20		0.02	c0.28		c0.09	0.11	
v/s Ratio Perm			0.00			c0.23			0.10			0.01
v/c Ratio	0.56	0.36	0.03	0.85	0.85	0.95	0.56	0.84	0.30	0.79	0.26	0.02
Uniform Delay, d1	35.5	34.5	33.0	31.5	31.5	32.5	41.5	26.9	21.5	37.7	16.9	15.2
Progression 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
Incremental Delay, d2	3.1	0.9	0.1	15.0	15.3	32.2	11.0	7.2	1.5	18.4	0.4	0.1
Delay (s)	38.6	35.4	33.1	46.5	46.8	64.7	52.5	34.1	23.0	56.1	17.4	15.3
Level of Service	D	D	C	D	D	E	D	C	C	E	B	B
Approach Delay (s)		36.6			55.1			30.9			27.8	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM Average Control Delay	39.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	87.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.4%	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												
Volume (vph)	26	0	106	0	0	0	60	547	3	0	1750	30
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	1.00	1.00					1.00	0.95	1.00		0.91	
Frt	1.00	0.85					1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583					1770	3539	1583		5072	
Flt Permitted	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583					1770	3539	1583		5072	
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)	28	0	115	0	0	0	65	595	3	0	1902	33
RTOR Reduction (vph)	0	101	0	0	0	0	0	0	1	0	1	0
Lane Group Flow (vph)	28	14	0	0	0	0	65	595	2	0	1934	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	2.2	8.5					6.2	54.8	54.8		44.6	
Effective Green, g (s)	2.2	8.5					6.2	54.8	54.8		44.6	
Actuated g/C Ratio	0.03	0.12					0.09	0.77	0.77		0.63	
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)	55	189					154	2720	1217		3173	
v/s Ratio Prot	c0.02	c0.01					c0.04	0.17			c0.38	
v/s Ratio Perm									0.00			
v/c Ratio	0.51	0.07					0.42	0.22	0.00		0.61	
Uniform Delay, d1	34.0	27.9					30.9	2.3	1.9		8.1	
Progression Factor	1.00	1.00					1.00	1.00	1.00		1.00	
Incremental Delay, d2	7.2	0.2					1.9	0.2	0.0		0.3	
Delay (s)	41.2	28.1					32.7	2.5	1.9		8.4	
Level of Service	D	C					C	A	A		A	
Approach Delay (s)		30.6			0.0			5.4			8.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	71.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	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												
Volume (vph)	82	108	133	390	538	80	152	479	124	82	1362	378
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3245		1770	3539	1583	1770	4928		1770	4920	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3245		1770	3539	1583	1770	4928		1770	4920	
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)	89	117	145	424	585	87	165	521	135	89	1480	411
RTOR Reduction (vph)	0	130	0	0	0	64	0	38	0	0	44	0
Lane Group Flow (vph)	89	132	0	424	585	23	165	618	0	89	1847	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	8.6	10.7		26.0	28.1	28.1	10.0	44.3		8.6	42.9	
Effective Green, g (s)	8.6	10.7		26.0	28.1	28.1	10.0	44.3		8.6	42.9	
Actuated g/C Ratio	0.08	0.10		0.25	0.27	0.27	0.09	0.42		0.08	0.41	
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)	144	329		436	942	421	168	2067		144	1999	
v/s Ratio Prot	0.05	0.04		c0.24	c0.17		c0.09	0.13		0.05	c0.38	
v/s Ratio Perm						0.01						
v/c Ratio	0.62	0.40		0.97	0.62	0.05	0.98	0.30		0.62	0.92	
Uniform Delay, d1	46.9	44.4		39.4	34.1	28.9	47.7	20.3		46.9	29.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.7	0.8		35.7	1.3	0.1	63.8	0.4		7.7	8.7	
Delay (s)	54.6	45.2		75.2	35.3	28.9	111.5	20.7		54.6	38.5	
Level of Service	D	D		E	D	C	F	C		D	D	
Approach Delay (s)		47.6			50.2			39.0			39.2	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	42.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	105.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.4%	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												
Volume (vph)	228	378	37	477	1258	147	163	337	180	292	1148	566
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5005		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5005		3433	5085	1583	3433	5085	1583
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)	248	411	40	518	1367	160	177	366	196	317	1248	615
RTOR Reduction (vph)	0	0	34	0	16	0	0	0	146	0	0	150
Lane Group Flow (vph)	248	411	6	518	1511	0	177	366	50	317	1248	465
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	8.0	12.7	12.7	24.3	29.0		5.0	23.0	23.0	14.0	32.0	32.0
Effective Green, g (s)	8.0	12.7	12.7	24.3	29.0		5.0	23.0	23.0	14.0	32.0	32.0
Actuated g/C Ratio	0.09	0.14	0.14	0.27	0.32		0.06	0.26	0.26	0.16	0.36	0.36
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)	305	718	223	927	1613		191	1300	405	534	1808	563
v/s Ratio Prot	c0.07	0.08		0.15	c0.30		c0.05	0.07		0.09	0.25	
v/s Ratio Perm			0.00						0.03			c0.29
v/c Ratio	0.81	0.57	0.03	0.56	0.94		0.93	0.28	0.12	0.59	0.69	0.83
Uniform Delay, d1	40.3	36.1	33.3	28.2	29.6		42.3	26.9	25.8	35.4	24.8	26.5
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	15.1	1.1	0.0	0.7	10.7		44.3	0.5	0.6	1.8	2.2	13.0
Delay (s)	55.4	37.2	33.4	29.0	40.3		86.6	27.4	26.4	37.1	27.0	39.4
Level of Service	E	D	C	C	D		F	C	C	D	C	D
Approach Delay (s)		43.5			37.4			41.3			32.0	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM Average Control Delay	36.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.3%	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												
Volume (vph)	509	366	20	10	1175	680	70	10	20	190	20	355
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3511		1770	3539	1583	1770	1676		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3511		1770	3539	1583	1770	1676		3433	1863	2787
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)	553	398	22	11	1277	739	76	11	22	207	22	386
RTOR Reduction (vph)	0	3	0	0	0	0	0	20	0	0	0	339
Lane Group Flow (vph)	553	417	0	11	1277	739	76	13	0	207	22	47
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	47.3	101.2		1.6	55.5	148.2	11.5	10.8		18.6	17.9	17.9
Effective Green, g (s)	47.3	101.2		1.6	55.5	148.2	11.5	10.8		18.6	17.9	17.9
Actuated g/C Ratio	0.32	0.68		0.01	0.37	1.00	0.08	0.07		0.13	0.12	0.12
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)	565	2398		19	1325	1583	137	122		431	225	337
v/s Ratio Prot	c0.31	0.12		0.01	c0.36		0.04	0.01		0.06	0.01	
v/s Ratio Perm						c0.47						0.02
v/c Ratio	0.98	0.17		0.58	0.96	0.47	0.55	0.10		0.48	0.10	0.14
Uniform Delay, d1	50.0	8.5		73.0	45.4	0.0	65.9	64.2		60.3	58.0	58.3
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	32.1	0.0		36.3	16.7	1.0	4.8	0.4		3.8	0.9	0.9
Delay (s)	82.0	8.5		109.3	62.1	1.0	70.7	64.6		64.1	58.8	59.1
Level of Service	F	A		F	E	A	E	E		E	E	E
Approach Delay (s)		50.3			40.1			68.8			60.8	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM Average Control Delay	47.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	148.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.8%	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												
Volume (vph)	108	535	8	1	833	115	80	96	5	89	24	158
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1858		1770	1863	1583	1770	1850		1770	1620	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1858		1770	1863	1583	1770	1850		1770	1620	
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)	117	582	9	1	905	125	87	104	5	97	26	172
RTOR Reduction (vph)	0	0	0	0	0	63	0	2	0	0	139	0
Lane Group Flow (vph)	117	591	0	1	905	62	87	107	0	97	59	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	9.8	52.5		0.8	43.5	43.5	4.9	17.1		5.2	17.4	
Effective Green, g (s)	10.3	53.0		1.3	44.0	44.0	5.4	17.6		5.7	17.9	
Actuated g/C Ratio	0.11	0.57		0.01	0.47	0.47	0.06	0.19		0.06	0.19	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	195	1052		25	876	744	102	348		108	310	
v/s Ratio Prot	0.07	c0.32		0.00	c0.49		c0.05	c0.06		c0.05	0.04	
v/s Ratio Perm						0.04						
v/c Ratio	0.60	0.56		0.04	1.03	0.08	0.85	0.31		0.90	0.19	
Uniform Delay, d1	39.7	12.9		45.5	24.8	13.7	43.7	32.8		43.7	31.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.9	0.7		0.7	39.2	0.0	45.9	2.3		55.0	1.4	
Delay (s)	44.6	13.6		46.2	64.0	13.7	89.6	35.0		98.7	33.1	
Level of Service	D	B		D	E	B	F	D		F	C	
Approach Delay (s)		18.7			57.9			59.3			54.7	
Approach LOS		B			E			E			D	

Intersection Summary			
HCM Average Control Delay	45.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	93.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	280	475	714	321	200	202
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	516	776	349	217	220
RTOR Reduction (vph)	0	0	0	191	0	176
Lane Group Flow (vph)	304	516	776	158	217	44
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	17.4	60.5	38.6	38.6	16.6	16.6
Effective Green, g (s)	17.9	61.0	39.1	39.1	17.1	17.1
Actuated g/C Ratio	0.21	0.71	0.45	0.45	0.20	0.20
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	368	1320	846	719	352	314
v/s Ratio Prot	c0.17	0.28	c0.42		c0.12	
v/s Ratio Perm				0.10		0.03
v/c Ratio	0.83	0.39	0.92	0.22	0.62	0.14
Uniform Delay, d1	32.6	5.1	22.0	14.3	31.5	28.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.0	0.2	14.5	0.2	7.9	0.9
Delay (s)	46.6	5.3	36.5	14.4	39.4	29.4
Level of Service	D	A	D	B	D	C
Approach Delay (s)		20.6	29.7		34.3	
Approach LOS		C	C		C	

Intersection Summary			
HCM Average Control Delay	27.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	86.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.2%	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												
Volume (vph)	0	0	0	168	253	238	614	922	390	119	786	278
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1826	1583	3433	3381		1770	3539	1583
Flt Permitted					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1826	1583	3433	3381		1770	3539	1583
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	0	0	183	275	259	667	1002	424	129	854	302
RTOR Reduction (vph)	0	0	0	0	0	185	0	50	0	0	0	145
Lane Group Flow (vph)	0	0	0	0	458	74	667	1376	0	129	854	157
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					25.8	25.8	20.8	43.1		9.1	31.4	31.4
Effective Green, g (s)					25.8	25.8	20.8	43.1		9.1	31.4	31.4
Actuated g/C Ratio					0.29	0.29	0.23	0.48		0.10	0.35	0.35
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)					523	454	793	1619		179	1235	552
v/s Ratio Prot							c0.19	c0.41		0.07	0.24	
v/s Ratio Perm					0.25	0.05						0.10
v/c Ratio					0.88	0.16	0.84	0.85		0.72	0.69	0.29
Uniform Delay, d1					30.6	24.0	33.0	20.6		39.2	25.1	21.2
Progression Factor					1.00	1.00	1.02	0.94		1.00	1.00	1.00
Incremental Delay, d2					15.1	0.2	7.0	5.0		13.3	3.2	1.3
Delay (s)					45.7	24.2	40.7	24.4		52.5	28.3	22.5
Level of Service					D	C	D	C		D	C	C
Approach Delay (s)		0.0			37.9			29.6			29.4	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.2%	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												
Volume (vph)	393	583	437	0	0	0	0	823	692	202	828	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.99	0.85					0.93		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1673	1504					4737		1770	3539	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1673	1504					4737		1770	3539	
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)	427	634	475	0	0	0	0	895	752	220	900	0
RTOR Reduction (vph)	0	3	73	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	384	722	354	0	0	0	0	1570	0	220	900	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Effective Green, g (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.36		0.13	0.53	
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)	635	632	568					1684		236	1887	
v/s Ratio Prot								c0.33		c0.12	0.25	
v/s Ratio Perm	0.23	0.43	0.24									
v/c Ratio	0.60	1.14	0.62					1.16dr		0.93	0.48	
Uniform Delay, d1	22.6	28.0	22.8					28.0		38.6	13.1	
Progression Factor	1.00	1.00	1.00					0.47		0.75	0.34	
Incremental Delay, d2	1.6	81.9	2.1					6.4		33.3	0.6	
Delay (s)	24.2	109.9	24.9					19.6		62.3	5.1	
Level of Service	C	F	C					B		E	A	
Approach Delay (s)		64.8			0.0			19.6			16.4	
Approach LOS		E			A			B			B	

Intersection Summary			
HCM Average Control Delay	34.9	HCM Level of Service	C
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	400	510	228	119	545	181	166	823	184	217	829	429
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3375		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3375		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	435	554	248	129	592	197	180	895	200	236	901	466
RTOR Reduction (vph)	0	57	0	0	0	162	0	0	147	0	0	331
Lane Group Flow (vph)	435	745	0	129	592	35	180	895	53	236	901	135
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	22.0	28.5		9.5	16.0	16.0	10.0	24.0	24.0	12.0	26.0	26.0
Effective Green, g (s)	22.0	28.5		9.5	16.0	16.0	10.0	24.0	24.0	12.0	26.0	26.0
Actuated g/C Ratio	0.24	0.32		0.11	0.18	0.18	0.11	0.27	0.27	0.13	0.29	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)	433	1069		187	629	281	197	944	422	236	1022	457
v/s Ratio Prot	c0.25	0.22		0.07	c0.17		0.10	c0.25		c0.13	c0.25	
v/s Ratio Perm						0.02			0.03			0.09
v/c Ratio	1.00	0.70		0.69	0.94	0.12	0.91	0.95	0.13	1.00	0.88	0.29
Uniform Delay, d1	34.0	27.0		38.8	36.5	31.1	39.6	32.4	25.0	39.0	30.5	24.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.71	0.66	0.32	0.86	0.75	0.47
Incremental Delay, d2	44.4	2.0		10.1	22.4	0.2	36.2	17.0	0.5	55.3	9.9	1.5
Delay (s)	78.4	29.0		49.0	58.9	31.3	64.3	38.3	8.5	88.7	32.7	13.1
Level of Service	E	C		D	E	C	E	D	A	F	C	B
Approach Delay (s)		46.4			51.6			37.3			35.2	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	41.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.3%	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												
Volume (vph)	0	0	0	252	0	210	0	744	314	385	809	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	
Lane Util. Factor				0.97		1.00		0.95		1.00	0.95	
Frt				1.00		0.85		0.96		1.00	1.00	
Flt Protected				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583		3382		1770	3539	
Flt Permitted				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583		3382		1770	3539	
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	0	0	274	0	228	0	809	341	418	879	0
RTOR Reduction (vph)	0	0	0	0	0	197	0	47	0	0	0	0
Lane Group Flow (vph)	0	0	0	274	0	31	0	1103	0	418	879	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				12.4		12.4		40.8		24.8	69.6	
Effective Green, g (s)				12.4		12.4		40.8		24.8	69.6	
Actuated g/C Ratio				0.14		0.14		0.45		0.28	0.77	
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)				473		218		1533		488	2737	
v/s Ratio Prot				c0.08				c0.33		c0.24	0.25	
v/s Ratio Perm						0.02						
v/c Ratio				0.58		0.14		0.72		0.86	0.32	
Uniform Delay, d1				36.4		34.1		20.0		30.9	3.1	
Progression Factor				1.00		1.00		1.00		0.41	0.52	
Incremental Delay, d2				1.7		0.3		2.9		8.2	0.2	
Delay (s)				38.1		34.4		22.9		20.9	1.8	
Level of Service				D		C		C		C	A	
Approach Delay (s)		0.0			36.4			22.9			8.0	
Approach LOS		A			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.1%	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												
Volume (vph)	100	50	30	300	20	251	30	555	520	573	598	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	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1695	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1695	1583	1770	3539	1583	1770	3539	1583
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)	109	54	33	326	22	273	33	603	565	623	650	141
RTOR Reduction (vph)	0	0	30	0	0	233	0	0	387	0	0	64
Lane Group Flow (vph)	109	54	3	173	175	40	33	603	178	623	650	77
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.3	9.3	9.3	13.6	13.6	13.6	3.4	19.3	19.3	35.2	51.1	51.1
Effective Green, g (s)	9.3	9.3	9.3	13.6	13.6	13.6	3.4	19.3	19.3	35.2	51.1	51.1
Actuated g/C Ratio	0.10	0.10	0.10	0.15	0.15	0.15	0.04	0.21	0.21	0.38	0.55	0.55
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	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	3.0
Lane Grp Cap (vph)	176	186	158	245	247	231	64	731	327	667	1936	866
v/s Ratio Prot	c0.06	0.03		0.10	c0.10		0.02	c0.17		c0.35	0.18	
v/s Ratio Perm			0.00			0.03			0.11			0.05
v/c Ratio	0.62	0.29	0.02	0.71	0.71	0.17	0.52	0.82	0.54	0.93	0.34	0.09
Uniform Delay, d1	40.4	39.0	37.9	38.0	38.0	35.0	44.2	35.4	33.1	28.0	11.7	10.1
Progression 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
Incremental Delay, d2	6.4	0.9	0.1	8.9	9.0	0.4	6.9	10.3	6.4	20.2	0.5	0.2
Delay (s)	46.7	39.9	38.0	46.9	47.0	35.3	51.0	45.7	39.5	48.2	12.2	10.3
Level of Service	D	D	D	D	D	D	D	D	D	D	B	B
Approach Delay (s)		43.4			41.8			42.9			27.9	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM Average Control Delay	36.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	93.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.5%	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												
Volume (vph)	55	0	46	2	0	1	54	2140	3	0	1343	10
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		0.94		1.00	1.00	0.95	1.00		0.91	
Frt	1.00	0.85		1.00		0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583		4990		1583	1770	3539	1583		5080	
Flt Permitted	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583		4990		1583	1770	3539	1583		5080	
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)	60	0	50	2	0	1	59	2326	3	0	1460	11
RTOR Reduction (vph)	0	47	0	0	0	1	0	0	0	0	1	0
Lane Group Flow (vph)	60	3	0	2	0	0	59	2326	3	0	1470	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	5.2	5.5		0.8		1.1	21.2	84.8	84.8		59.6	
Effective Green, g (s)	5.2	5.5		0.8		1.1	21.2	84.8	84.8		59.6	
Actuated g/C Ratio	0.05	0.05		0.01		0.01	0.21	0.82	0.82		0.58	
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)	89	84		39		17	364	2911	1302		2937	
v/s Ratio Prot	c0.03	c0.00		0.00			0.03	c0.66			0.29	
v/s Ratio Perm						0.00			0.00			
v/c Ratio	0.67	0.03		0.05		0.00	0.16	0.80	0.00		0.50	
Uniform Delay, d1	48.1	46.3		50.8		50.5	33.7	4.7	1.6		12.9	
Progression Factor	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	18.3	0.2		0.5		0.0	0.2	2.4	0.0		0.1	
Delay (s)	66.4	46.4		51.3		50.5	33.9	7.1	1.6		13.0	
Level of Service	E	D		D		D	C	A	A		B	
Approach Delay (s)		57.3			51.0			7.8			13.0	
Approach LOS		E			D			A			B	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	103.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.8%	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												
Volume (vph)	417	360	159	208	123	42	143	1743	444	115	1074	93
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3376		1770	3539	1583	1770	4930		1770	5025	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3376		1770	3539	1583	1770	4930		1770	5025	
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)	453	391	173	226	134	46	155	1895	483	125	1167	101
RTOR Reduction (vph)	0	34	0	0	0	42	0	29	0	0	6	0
Lane Group Flow (vph)	453	530	0	226	134	4	155	2349	0	125	1262	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	37.0	27.3		23.1	13.4	13.4	21.0	73.6		10.0	62.6	
Effective Green, g (s)	37.0	27.3		23.1	13.4	13.4	21.0	73.6		10.0	62.6	
Actuated g/C Ratio	0.25	0.18		0.15	0.09	0.09	0.14	0.49		0.07	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)	437	614		273	316	141	248	2419		118	2097	
v/s Ratio Prot	c0.26	0.16		c0.13	0.04		0.09	c0.48		c0.07	0.25	
v/s Ratio Perm						0.00						
v/c Ratio	1.04	0.86		0.83	0.42	0.03	0.62	0.97		1.06	0.60	
Uniform Delay, d1	56.5	59.5		61.5	64.6	62.4	60.8	37.2		70.0	34.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.90	0.62		1.00	1.00	
Incremental Delay, d2	52.8	12.0		18.3	0.9	0.1	2.4	7.8		99.7	1.3	
Delay (s)	109.3	71.5		79.8	65.6	62.4	57.0	30.7		169.7	35.3	
Level of Service	F	E		E	E	E	E	C		F	D	
Approach Delay (s)		88.4			73.1			32.3			47.3	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM Average Control Delay	50.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.8%	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												
Volume (vph)	659	932	29	247	436	159	143	1637	585	274	759	235
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	4881		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	4881		3433	5085	1583	3433	5085	1583
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)	716	1013	32	268	474	173	155	1779	636	298	825	255
RTOR Reduction (vph)	0	0	23	0	45	0	0	0	169	0	0	141
Lane Group Flow (vph)	716	1013	9	268	602	0	155	1779	467	298	825	114
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	34.5	39.8	39.8	16.1	21.4		11.0	62.3	62.3	15.8	67.1	67.1
Effective Green, g (s)	34.5	39.8	39.8	16.1	21.4		11.0	62.3	62.3	15.8	67.1	67.1
Actuated g/C Ratio	0.23	0.27	0.27	0.11	0.14		0.07	0.42	0.42	0.11	0.45	0.45
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)	790	1349	420	368	696		252	2112	657	362	2275	708
v/s Ratio Prot	c0.21	0.20		0.08	c0.12		0.05	c0.35		c0.09	0.16	
v/s Ratio Perm			0.01						0.29			0.07
v/c Ratio	0.91	0.75	0.02	0.73	0.87		0.62	0.84	0.71	0.82	0.36	0.16
Uniform Delay, d1	56.2	50.6	40.7	64.8	62.9		67.4	39.4	36.4	65.7	27.3	24.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.61	0.75	1.10
Incremental Delay, d2	13.9	2.4	0.0	7.0	10.9		4.4	4.3	6.4	10.9	0.3	0.4
Delay (s)	70.1	53.0	40.7	71.9	73.8		71.9	43.7	42.8	51.0	20.9	27.5
Level of Service	E	D	D	E	E		E	D	D	D	C	C
Approach Delay (s)		59.7			73.3			45.2			28.6	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM Average Control Delay	49.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.6%	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												
Volume (vph)	286	1149	130	10	649	190	30	10	20	800	70	460
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3485		1770	3539	1583	1770	1676		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3485		1770	3539	1583	1770	1676		3433	1863	2787
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)	311	1249	141	11	705	207	33	11	22	870	76	500
RTOR Reduction (vph)	0	7	0	0	0	0	0	21	0	0	0	359
Lane Group Flow (vph)	311	1383	0	11	705	207	33	12	0	870	76	141
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	18.4	43.2		0.7	25.5	89.7	4.5	4.5		25.3	25.3	25.3
Effective Green, g (s)	18.4	43.2		0.7	25.5	89.7	4.5	4.5		25.3	25.3	25.3
Actuated g/C Ratio	0.21	0.48		0.01	0.28	1.00	0.05	0.05		0.28	0.28	0.28
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)	363	1678		14	1006	1583	89	84		968	525	786
v/s Ratio Prot	c0.18	c0.40		0.01	0.20		0.02	0.01		c0.25	0.04	
v/s Ratio Perm						0.13						c0.05
v/c Ratio	0.86	0.82		0.79	0.70	0.13	0.37	0.14		0.90	0.14	0.18
Uniform Delay, d1	34.4	20.0		44.4	28.7	0.0	41.2	40.8		31.0	24.1	24.4
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	17.7	3.4		130.6	2.2	0.2	2.6	0.8		12.9	0.6	0.5
Delay (s)	52.1	23.4		175.0	30.9	0.2	43.8	41.5		43.8	24.7	24.9
Level of Service	D	C		F	C	A	D	D		D	C	C
Approach Delay (s)		28.7			25.7			42.7			36.3	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	89.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.7%	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												
Volume (vph)	75	1078	30	8	495	84	15	45	4	57	84	100
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1855		1770	1863	1583	1770	1842		1770	1710	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1855		1770	1863	1583	1770	1842		1770	1710	
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)	82	1172	33	9	538	91	16	49	4	62	91	109
RTOR Reduction (vph)	0	1	0	0	0	52	0	3	0	0	34	0
Lane Group Flow (vph)	82	1204	0	9	538	39	16	50	0	62	166	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	26.1	76.6		0.8	51.3	51.3	1.6	17.0		7.3	22.7	
Effective Green, g (s)	26.6	77.1		1.3	51.8	51.8	2.1	17.5		7.8	23.2	
Actuated g/C Ratio	0.22	0.64		0.01	0.43	0.43	0.02	0.15		0.07	0.19	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	393	1195		19	806	685	31	269		115	331	
v/s Ratio Prot	0.05	c0.65		0.01	c0.29		c0.01	0.03		0.04	c0.10	
v/s Ratio Perm						0.02						
v/c Ratio	0.21	1.01		0.47	0.67	0.06	0.52	0.19		0.54	0.50	
Uniform Delay, d1	38.0	21.3		58.9	27.1	19.7	58.3	44.9		54.2	43.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	27.9		17.5	2.1	0.0	13.7	1.5		4.8	5.4	
Delay (s)	38.2	49.2		76.3	29.2	19.8	72.0	46.4		59.0	48.4	
Level of Service	D	D		E	C	B	E	D		E	D	
Approach Delay (s)		48.5			28.5			52.3			50.9	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	43.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	119.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	142	946	414	251	417	275
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	154	1028	450	273	453	299
RTOR Reduction (vph)	0	0	0	187	0	204
Lane Group Flow (vph)	154	1028	450	86	453	95
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	18.9	49.7	26.3	26.3	26.7	26.7
Effective Green, g (s)	19.4	50.2	26.8	26.8	27.2	27.2
Actuated g/C Ratio	0.23	0.59	0.31	0.31	0.32	0.32
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	402	1095	585	497	564	504
v/s Ratio Prot	0.09	c0.55	0.24		c0.26	
v/s Ratio Perm				0.05		0.06
v/c Ratio	0.38	0.94	0.77	0.17	0.80	0.19
Uniform Delay, d1	27.9	16.2	26.5	21.3	26.6	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	14.6	6.0	0.2	11.5	0.8
Delay (s)	28.5	30.8	32.6	21.4	38.2	21.9
Level of Service	C	C	C	C	D	C
Approach Delay (s)		30.5	28.3		31.7	
Approach LOS		C	C		C	

Intersection Summary			
HCM Average Control Delay	30.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	85.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.6%	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												
Volume (vph)	0	0	0	123	304	254	685	994	151	67	918	270
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1836	1583	3433	3469		1770	3539	1583
Flt Permitted					0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1836	1583	3433	3469		1770	3539	1583
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	0	0	134	330	276	745	1080	164	73	998	293
RTOR Reduction (vph)	0	0	0	0	0	139	0	13	0	0	0	94
Lane Group Flow (vph)	0	0	0	0	464	137	745	1231	0	73	998	199
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					25.0	25.0	22.8	48.2		4.8	30.2	30.2
Effective Green, g (s)					25.0	25.0	22.8	48.2		4.8	30.2	30.2
Actuated g/C Ratio					0.28	0.28	0.25	0.54		0.05	0.34	0.34
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)					510	440	870	1858		94	1188	531
v/s Ratio Prot							c0.22	0.35		0.04	c0.28	
v/s Ratio Perm					0.25	0.09						0.13
v/c Ratio					0.91	0.31	0.86	0.66		0.78	0.84	0.38
Uniform Delay, d1					31.4	25.7	32.0	15.0		42.1	27.7	22.7
Progression Factor					1.00	1.00	0.51	0.15		1.00	1.00	1.00
Incremental Delay, d2					20.0	0.4	4.1	0.9		32.2	7.2	2.0
Delay (s)					51.4	26.1	20.3	3.2		74.2	34.9	24.8
Level of Service					D	C	C	A		E	C	C
Approach Delay (s)		0.0			42.0			9.6			34.8	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.7%	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												
Volume (vph)	426	3	540	0	0	0	0	1460	270	281	727	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.89	0.85					0.98		1.00	1.00	
Flt Protected	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1493	1504					4966		1770	3539	
Flt Permitted	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1493	1504					4966		1770	3539	
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)	463	3	587	0	0	0	0	1587	293	305	790	0
RTOR Reduction (vph)	0	100	177	0	0	0	0	29	0	0	0	0
Lane Group Flow (vph)	366	247	163	0	0	0	0	1851	0	305	790	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	21.3	21.3	21.3					38.7		18.0	60.7	
Effective Green, g (s)	21.3	21.3	21.3					38.7		18.0	60.7	
Actuated g/C Ratio	0.24	0.24	0.24					0.43		0.20	0.67	
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)	398	353	356					2135		354	2387	
v/s Ratio Prot								c0.37		c0.17	0.22	
v/s Ratio Perm	c0.22	0.17	0.11									
v/c Ratio	0.92	0.70	0.46					0.87		0.86	0.33	
Uniform Delay, d1	33.5	31.4	29.4					23.3		34.8	6.1	
Progression Factor	1.00	1.00	1.00					0.44		1.16	0.43	
Incremental Delay, d2	25.8	6.0	0.9					2.6		11.1	0.2	
Delay (s)	59.3	37.4	30.3					12.7		51.6	2.8	
Level of Service	E	D	C					B		D	A	
Approach Delay (s)		42.7			0.0			12.7			16.4	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM Average Control Delay	21.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.2%	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												
Volume (vph)	335	443	129	166	530	265	214	1039	116	158	713	358
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3420		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3420		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	364	482	140	180	576	288	233	1129	126	172	775	389
RTOR Reduction (vph)	0	31	0	0	0	193	0	0	84	0	0	285
Lane Group Flow (vph)	364	591	0	180	576	95	233	1129	42	172	775	104
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	19.0	20.2		14.8	16.0	16.0	15.0	30.0	30.0	9.0	24.0	24.0
Effective Green, g (s)	19.0	20.2		14.8	16.0	16.0	15.0	30.0	30.0	9.0	24.0	24.0
Actuated g/C Ratio	0.21	0.22		0.16	0.18	0.18	0.17	0.33	0.33	0.10	0.27	0.27
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)	374	768		291	629	281	295	1180	528	177	944	422
v/s Ratio Prot	c0.21	c0.17		0.10	c0.16		0.13	c0.32		c0.10	0.22	
v/s Ratio Perm						0.06			0.03			0.07
v/c Ratio	0.97	0.77		0.62	0.92	0.34	0.79	0.96	0.08	0.97	0.82	0.25
Uniform Delay, d1	35.2	32.7		35.0	36.3	32.4	36.0	29.4	20.5	40.4	31.0	25.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.70	0.66	1.44
Incremental Delay, d2	39.2	4.7		3.9	18.0	0.7	13.1	17.7	0.3	55.4	7.2	1.2
Delay (s)	74.4	37.4		38.9	54.4	33.1	49.1	47.1	20.8	83.5	27.7	38.6
Level of Service	E	D		D	D	C	D	D	C	F	C	D
Approach Delay (s)		51.1			45.8			45.2			38.1	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	44.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.0%	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												
Volume (vph)	0	0	0	276	0	149	3	1267	219	174	659	1
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	0.95		1.00	0.95	
Frt				1.00		0.85	1.00	0.98		1.00	1.00	
Flt Protected				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583	1770	3461		1770	3538	
Flt Permitted				0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583	1770	3461		1770	3538	
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	0	0	300	0	162	3	1377	238	189	716	1
RTOR Reduction (vph)	0	0	0	0	0	137	0	17	0	0	0	0
Lane Group Flow (vph)	0	0	0	300	0	25	3	1598	0	189	717	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				11.3		11.3	0.8	40.3		9.8	49.3	
Effective Green, g (s)				11.3		11.3	0.8	40.3		9.8	49.3	
Actuated g/C Ratio				0.15		0.15	0.01	0.55		0.13	0.67	
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)				529		244	19	1900		236	2376	
v/s Ratio Prot				c0.09			0.00	c0.46		c0.11	0.20	
v/s Ratio Perm						0.02						
v/c Ratio				0.57		0.10	0.16	0.84		0.80	0.30	
Uniform Delay, d1				28.8		26.7	36.0	13.9		30.9	5.0	
Progression Factor				1.00		1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2				1.4		0.2	3.9	4.7		17.5	0.3	
Delay (s)				30.2		26.9	39.8	18.6		48.3	5.3	
Level of Service				C		C	D	B		D	A	
Approach Delay (s)		0.0			29.0			18.6			14.3	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	73.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.5%	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												
Volume (vph)	120	80	40	514	130	560	30	1015	452	143	389	30
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1718	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1718	1583	1770	3539	1583	1770	3539	1583
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)	130	87	43	559	141	609	33	1103	491	155	423	33
RTOR Reduction (vph)	0	0	37	0	0	244	0	0	328	0	0	19
Lane Group Flow (vph)	130	87	6	347	353	365	33	1103	163	155	423	14
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.4	11.4	11.4	21.0	21.0	21.0	2.9	29.0	29.0	9.7	35.8	35.8
Effective Green, g (s)	11.4	11.4	11.4	21.0	21.0	21.0	2.9	29.0	29.0	9.7	35.8	35.8
Actuated g/C Ratio	0.13	0.13	0.13	0.24	0.24	0.24	0.03	0.33	0.33	0.11	0.41	0.41
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	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	3.0
Lane Grp Cap (vph)	232	244	207	405	414	382	59	1178	527	197	1455	651
v/s Ratio Prot	c0.07	0.05		0.21	0.21		0.02	c0.31		c0.09	0.12	
v/s Ratio Perm			0.00			c0.23			0.10			0.01
v/c Ratio	0.56	0.36	0.03	0.86	0.85	0.95	0.56	0.94	0.31	0.79	0.29	0.02
Uniform Delay, d1	35.5	34.5	33.0	31.6	31.6	32.6	41.5	28.2	21.6	37.7	17.2	15.2
Progression 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
Incremental Delay, d2	3.1	0.9	0.1	16.2	15.5	34.1	11.0	14.8	1.5	18.4	0.5	0.1
Delay (s)	38.6	35.4	33.1	47.8	47.1	66.7	52.5	43.0	23.1	56.1	17.7	15.3
Level of Service	D	D	C	D	D	E	D	D	C	E	B	B
Approach Delay (s)		36.6			56.4			37.2			27.3	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM Average Control Delay	42.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	87.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.4%	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												
Volume (vph)	119	43	41	1104	14	338	13	920	521	33	880	40
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.86	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	1526	1504	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	3433	1526	1504	1770	3539	1583	1770	3539	1583
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)	125	45	43	1162	15	356	14	968	548	35	926	42
RTOR Reduction (vph)	0	0	40	0	144	156	0	0	0	0	0	28
Lane Group Flow (vph)	125	45	3	1162	42	29	14	968	548	35	926	14
Turn Type	Prot		Perm	Prot		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			6
Actuated Green, G (s)	23.7	5.9	5.9	30.2	12.4	12.4	0.7	22.7	78.4	3.6	25.6	25.6
Effective Green, g (s)	23.7	5.9	5.9	30.2	12.4	12.4	0.7	22.7	78.4	3.6	25.6	25.6
Actuated g/C Ratio	0.30	0.08	0.08	0.39	0.16	0.16	0.01	0.29	1.00	0.05	0.33	0.33
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)	535	140	119	1322	241	238	16	1025	1583	81	1156	517
v/s Ratio Prot	0.07	0.02		c0.34	0.03		0.01	c0.27		0.02	0.26	
v/s Ratio Perm			0.00			0.02			c0.35			0.01
v/c Ratio	0.23	0.32	0.03	0.88	0.17	0.12	0.88	0.94	0.35	0.43	0.80	0.03
Uniform Delay, d1	20.5	34.4	33.6	22.4	28.6	28.3	38.8	27.2	0.0	36.4	24.1	17.9
Progression 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
Incremental Delay, d2	0.2	1.3	0.1	6.9	0.3	0.2	161.3	17.5	0.6	3.7	5.9	0.1
Delay (s)	20.8	35.7	33.7	29.3	28.9	28.6	200.1	44.8	0.6	40.1	30.0	18.0
Level of Service	C	D	C	C	C	C	F	D	A	D	C	B
Approach Delay (s)		26.5			29.2			30.4			29.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	29.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	78.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.3%	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												
Volume (veh/h)	0	0	9	0	0	0	0	1566	0	0	2179	6
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	10	0	0	0	0	1702	0	0	2368	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											500	
pX, platoon unblocked	0.76	0.76	0.76	0.76	0.76		0.76					
vC, conflicting volume	3220	4071	1184	2896	4077	851	2375			1702		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3289	4409	610	2863	4418	851	2177			1702		
tC, single (s)	7.5	6.5	*6.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	97	100	100	100	100			100		
cM capacity (veh/h)	3	1	377	6	1	303	183			370		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	10	851	851	1184	1184	7
Volume Left	0	0	0	0	0	0
Volume Right	10	0	0	0	0	7
cSH	377	1700	1700	1700	1700	1700
Volume to Capacity	0.03	0.50	0.50	0.70	0.70	0.00
Queue Length 95th (ft)	2	0	0	0	0	0
Control Delay (s)	14.8	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	14.8	0.0		0.0		
Approach LOS	B					

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	70.2%	ICU Level of Service	C	
Analysis Period (min)	15			

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	26	0	106	0	0	0	60	560	3	0	1791	30
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	1.00	1.00					1.00	0.95	1.00		0.91	
Frt	1.00	0.85					1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583					1770	3539	1583		5073	
Flt Permitted	0.95	1.00					0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583					1770	3539	1583		5073	
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)	28	0	115	0	0	0	65	609	3	0	1947	33
RTOR Reduction (vph)	0	101	0	0	0	0	0	0	1	0	1	0
Lane Group Flow (vph)	28	14	0	0	0	0	65	609	2	0	1979	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	2.2	8.5					5.6	55.3	55.3		45.7	
Effective Green, g (s)	2.2	8.5					5.6	55.3	55.3		45.7	
Actuated g/C Ratio	0.03	0.12					0.08	0.77	0.77		0.64	
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)	54	187					138	2726	1219		3229	
v/s Ratio Prot	c0.02	c0.01					c0.04	0.17			c0.39	
v/s Ratio Perm									0.00			
v/c Ratio	0.52	0.07					0.47	0.22	0.00		0.61	
Uniform Delay, d1	34.3	28.1					31.7	2.3	1.9		7.8	
Progression Factor	1.00	1.00					1.00	1.00	1.00		1.00	
Incremental Delay, d2	8.2	0.2					2.5	0.2	0.0		0.3	
Delay (s)	42.4	28.3					34.2	2.5	1.9		8.1	
Level of Service	D	C					C	A	A		A	
Approach Delay (s)		31.1			0.0			5.5			8.1	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	8.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	71.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.2%	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												
Volume (vph)	84	108	133	390	538	80	152	490	124	82	1397	384
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.92		1.00	1.00	0.85	1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3245		1770	3539	1583	1770	4931		1770	4921	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3245		1770	3539	1583	1770	4931		1770	4921	
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)	91	117	145	424	585	87	165	533	135	89	1518	417
RTOR Reduction (vph)	0	130	0	0	0	64	0	37	0	0	43	0
Lane Group Flow (vph)	91	132	0	424	585	23	165	631	0	89	1892	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	8.6	10.7		26.0	28.1	28.1	10.0	44.3		8.6	42.9	
Effective Green, g (s)	8.6	10.7		26.0	28.1	28.1	10.0	44.3		8.6	42.9	
Actuated g/C Ratio	0.08	0.10		0.25	0.27	0.27	0.09	0.42		0.08	0.41	
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)	144	329		436	942	421	168	2069		144	1999	
v/s Ratio Prot	0.05	0.04		c0.24	c0.17		c0.09	0.13		0.05	c0.38	
v/s Ratio Perm						0.01						
v/c Ratio	0.63	0.40		0.97	0.62	0.05	0.98	0.31		0.62	0.95	
Uniform Delay, d1	47.0	44.4		39.4	34.1	28.9	47.7	20.4		46.9	30.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.7	0.8		35.7	1.3	0.1	63.8	0.4		7.7	10.9	
Delay (s)	55.7	45.2		75.2	35.3	28.9	111.5	20.8		54.6	41.2	
Level of Service	E	D		E	D	C	F	C		D	D	
Approach Delay (s)		47.9			50.2			38.8			41.8	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	43.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	105.6	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												
Volume (vph)	231	378	37	477	1258	148	163	344	180	296	1171	574
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	5005		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	5005		3433	5085	1583	3433	5085	1583
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)	251	411	40	518	1367	161	177	374	196	322	1273	624
RTOR Reduction (vph)	0	0	34	0	16	0	0	0	146	0	0	150
Lane Group Flow (vph)	251	411	6	518	1512	0	177	374	50	322	1273	474
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	8.0	12.7	12.7	24.3	29.0		5.0	23.0	23.0	14.0	32.0	32.0
Effective Green, g (s)	8.0	12.7	12.7	24.3	29.0		5.0	23.0	23.0	14.0	32.0	32.0
Actuated g/C Ratio	0.09	0.14	0.14	0.27	0.32		0.06	0.26	0.26	0.16	0.36	0.36
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)	305	718	223	927	1613		191	1300	405	534	1808	563
v/s Ratio Prot	c0.07	0.08		0.15	c0.30		c0.05	0.07		0.09	0.25	
v/s Ratio Perm			0.00						0.03			c0.30
v/c Ratio	0.82	0.57	0.03	0.56	0.94		0.93	0.29	0.12	0.60	0.70	0.84
Uniform Delay, d1	40.3	36.1	33.3	28.2	29.6		42.3	26.9	25.8	35.4	24.9	26.7
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	16.2	1.1	0.0	0.7	10.7		44.3	0.6	0.6	1.9	2.3	14.2
Delay (s)	56.5	37.2	33.4	29.0	40.3		86.6	27.5	26.4	37.3	27.3	40.8
Level of Service	E	D	C	C	D		F	C	C	D	C	D
Approach Delay (s)		43.9			37.5			41.2			32.5	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM Average Control Delay	36.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.8%	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												
Volume (vph)	525	393	20	10	1184	680	70	10	20	190	20	360
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3513		1770	3539	1583	1770	1676		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3513		1770	3539	1583	1770	1676		3433	1863	2787
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)	571	427	22	11	1287	739	76	11	22	207	22	391
RTOR Reduction (vph)	0	2	0	0	0	0	0	20	0	0	0	344
Lane Group Flow (vph)	571	447	0	11	1287	739	76	13	0	207	22	47
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	48.0	101.9		1.6	55.5	148.8	11.5	10.8		18.5	17.8	17.8
Effective Green, g (s)	48.0	101.9		1.6	55.5	148.8	11.5	10.8		18.5	17.8	17.8
Actuated g/C Ratio	0.32	0.68		0.01	0.37	1.00	0.08	0.07		0.12	0.12	0.12
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)	571	2406		19	1320	1583	137	122		427	223	333
v/s Ratio Prot	c0.32	0.13		0.01	c0.36		0.04	0.01		0.06	0.01	
v/s Ratio Perm						c0.47						0.02
v/c Ratio	1.00	0.19		0.58	0.97	0.47	0.55	0.10		0.48	0.10	0.14
Uniform Delay, d1	50.4	8.5		73.3	46.0	0.0	66.2	64.5		60.7	58.4	58.7
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	37.7	0.0		36.3	18.9	1.0	4.8	0.4		3.9	0.9	0.9
Delay (s)	88.1	8.5		109.6	64.9	1.0	71.0	64.8		64.6	59.2	59.5
Level of Service	F	A		F	E	A	E	E		E	E	E
Approach Delay (s)		53.0			41.9			69.1			61.2	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM Average Control Delay	48.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	148.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.9%	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												
Volume (vph)	108	547	8	1	837	115	80	96	5	89	24	158
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1859		1770	1863	1583	1770	1850		1770	1620	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1859		1770	1863	1583	1770	1850		1770	1620	
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)	117	595	9	1	910	125	87	104	5	97	26	172
RTOR Reduction (vph)	0	0	0	0	0	63	0	2	0	0	139	0
Lane Group Flow (vph)	117	604	0	1	910	62	87	107	0	97	59	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	9.8	52.5		0.8	43.5	43.5	4.9	17.1		5.2	17.4	
Effective Green, g (s)	10.3	53.0		1.3	44.0	44.0	5.4	17.6		5.7	17.9	
Actuated g/C Ratio	0.11	0.57		0.01	0.47	0.47	0.06	0.19		0.06	0.19	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	195	1053		25	876	744	102	348		108	310	
v/s Ratio Prot	0.07	c0.32		0.00	c0.49		c0.05	c0.06		c0.05	0.04	
v/s Ratio Perm						0.04						
v/c Ratio	0.60	0.57		0.04	1.04	0.08	0.85	0.31		0.90	0.19	
Uniform Delay, d1	39.7	13.0		45.5	24.8	13.7	43.7	32.8		43.7	31.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.9	0.8		0.7	40.9	0.0	45.9	2.3		55.0	1.4	
Delay (s)	44.6	13.8		46.2	65.7	13.7	89.6	35.0		98.7	33.1	
Level of Service	D	B		D	E	B	F	D		F	C	
Approach Delay (s)		18.8			59.4			59.3			54.7	
Approach LOS		B			E			E			D	

Intersection Summary			
HCM Average Control Delay	45.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	93.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	290	477	715	321	200	205
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	518	777	349	217	223
RTOR Reduction (vph)	0	0	0	191	0	179
Lane Group Flow (vph)	315	518	777	158	217	44
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	17.6	60.8	38.7	38.7	16.6	16.6
Effective Green, g (s)	18.1	61.3	39.2	39.2	17.1	17.1
Actuated g/C Ratio	0.21	0.71	0.45	0.45	0.20	0.20
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	371	1322	845	718	350	313
v/s Ratio Prot	c0.18	0.28	c0.42		c0.12	
v/s Ratio Perm				0.10		0.03
v/c Ratio	0.85	0.39	0.92	0.22	0.62	0.14
Uniform Delay, d1	32.8	5.0	22.1	14.3	31.7	28.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	16.4	0.2	14.8	0.2	8.0	0.9
Delay (s)	49.2	5.2	36.9	14.5	39.7	29.5
Level of Service	D	A	D	B	D	C
Approach Delay (s)		21.9	30.0		34.5	
Approach LOS		C	C		C	

Intersection Summary			
HCM Average Control Delay	28.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.8%	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												
Volume (vph)	0	0	0	181	253	238	647	928	390	119	797	278
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					1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frt					1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)					1825	1583	3433	3382		1770	3539	1583
Flt Permitted					0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)					1825	1583	3433	3382		1770	3539	1583
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	0	0	197	275	259	703	1009	424	129	866	302
RTOR Reduction (vph)	0	0	0	0	0	184	0	49	0	0	0	146
Lane Group Flow (vph)	0	0	0	0	472	75	703	1384	0	129	866	156
Turn Type				Perm		Perm	Prot			Prot		Perm
Protected Phases					8		5	2		1	6	
Permitted Phases				8		8						6
Actuated Green, G (s)					26.2	26.2	21.4	42.7		9.1	30.4	30.4
Effective Green, g (s)					26.2	26.2	21.4	42.7		9.1	30.4	30.4
Actuated g/C Ratio					0.29	0.29	0.24	0.47		0.10	0.34	0.34
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)					531	461	816	1605		179	1195	535
v/s Ratio Prot							c0.20	c0.41		0.07	0.24	
v/s Ratio Perm					0.26	0.05						0.10
v/c Ratio					0.89	0.16	0.86	0.86		0.72	0.72	0.29
Uniform Delay, d1					30.5	23.7	32.9	21.0		39.2	26.1	21.9
Progression Factor					1.00	1.00	1.03	0.95		1.00	1.00	1.00
Incremental Delay, d2					16.5	0.2	7.9	5.4		13.3	3.8	1.4
Delay (s)					47.0	23.9	41.9	25.4		52.5	30.0	23.3
Level of Service					D	C	D	C		D	C	C
Approach Delay (s)		0.0			38.8			30.8			30.7	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM Average Control Delay	32.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.0%	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												
Volume (vph)	393	583	493	0	0	0	0	862	700	202	852	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	0.95	0.91	0.95					0.91		1.00	0.95	
Frt	1.00	0.99	0.85					0.93		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1671	1504					4743		1770	3539	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1671	1504					4743		1770	3539	
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)	427	634	536	0	0	0	0	937	761	220	926	0
RTOR Reduction (vph)	0	3	68	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	384	728	414	0	0	0	0	1621	0	220	926	0
Turn Type	Perm		Perm							Prot		
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Effective Green, g (s)	34.0	34.0	34.0					32.0		12.0	48.0	
Actuated g/C Ratio	0.38	0.38	0.38					0.36		0.13	0.53	
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)	635	631	568					1686		236	1887	
v/s Ratio Prot								c0.34		c0.12	0.26	
v/s Ratio Perm	0.23	0.44	0.28									
v/c Ratio	0.60	1.15	0.73					1.17dr		0.93	0.49	
Uniform Delay, d1	22.6	28.0	24.0					28.4		38.6	13.3	
Progression Factor	1.00	1.00	1.00					0.45		0.74	0.34	
Incremental Delay, d2	1.6	86.3	4.7					8.4		32.2	0.7	
Delay (s)	24.2	114.3	28.7					21.2		61.0	5.2	
Level of Service	C	F	C					C		E	A	
Approach Delay (s)		66.8			0.0			21.2			15.9	
Approach LOS		E			A			C			B	

Intersection Summary			
HCM Average Control Delay	36.3	HCM Level of Service	D
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.3%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	400	510	237	134	545	181	171	870	193	217	909	429
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	1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3371		1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3371		1770	3539	1583	1770	3539	1583	1770	3539	1583
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)	435	554	258	146	592	197	186	946	210	236	988	466
RTOR Reduction (vph)	0	61	0	0	0	162	0	0	154	0	0	331
Lane Group Flow (vph)	435	751	0	146	592	35	186	946	56	236	988	135
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	22.0	28.3		9.7	16.0	16.0	10.0	24.0	24.0	12.0	26.0	26.0
Effective Green, g (s)	22.0	28.3		9.7	16.0	16.0	10.0	24.0	24.0	12.0	26.0	26.0
Actuated g/C Ratio	0.24	0.31		0.11	0.18	0.18	0.11	0.27	0.27	0.13	0.29	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)	433	1060		191	629	281	197	944	422	236	1022	457
v/s Ratio Prot	c0.25	0.22		0.08	c0.17		0.11	c0.27		0.13	c0.28	
v/s Ratio Perm						0.02			0.04			0.09
v/c Ratio	1.00	0.71		0.76	0.94	0.12	0.94	1.00	0.13	1.00	0.97	0.29
Uniform Delay, d1	34.0	27.2		39.0	36.5	31.1	39.7	33.0	25.1	39.0	31.6	24.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.70	0.64	0.31	0.86	0.76	0.45
Incremental Delay, d2	44.4	2.2		16.5	22.4	0.2	42.4	27.0	0.5	54.5	19.3	1.4
Delay (s)	78.4	29.4		55.5	58.9	31.3	70.1	48.2	8.4	87.9	43.4	12.7
Level of Service	E	C		E	E	C	E	D	A	F	D	B
Approach Delay (s)		46.5			52.6			45.0			41.2	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	45.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.6%	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												
Volume (vph)	0	0	0	252	0	210	0	805	314	385	913	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	
Lane Util. Factor				0.97		1.00		0.95		1.00	0.95	
Frt				1.00		0.85		0.96		1.00	1.00	
Flt Protected				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (prot)				3433		1583		3390		1770	3539	
Flt Permitted				0.95		1.00		1.00		0.95	1.00	
Satd. Flow (perm)				3433		1583		3390		1770	3539	
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	0	0	274	0	228	0	875	341	418	992	0
RTOR Reduction (vph)	0	0	0	0	0	197	0	42	0	0	0	0
Lane Group Flow (vph)	0	0	0	274	0	31	0	1174	0	418	992	0
Turn Type				Prot		custom	Prot			Prot		
Protected Phases				3			5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)				12.4		12.4		40.8		24.8	69.6	
Effective Green, g (s)				12.4		12.4		40.8		24.8	69.6	
Actuated g/C Ratio				0.14		0.14		0.45		0.28	0.77	
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)				473		218		1537		488	2737	
v/s Ratio Prot				c0.08				c0.35		c0.24	0.28	
v/s Ratio Perm						0.02						
v/c Ratio				0.58		0.14		0.76		0.86	0.36	
Uniform Delay, d1				36.4		34.1		20.6		30.9	3.2	
Progression Factor				1.00		1.00		1.00		0.47	0.54	
Incremental Delay, d2				1.7		0.3		3.7		6.6	0.2	
Delay (s)				38.1		34.4		24.2		21.1	1.9	
Level of Service				D		C		C		C	A	
Approach Delay (s)		0.0			36.4			24.2			7.6	
Approach LOS		A			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.8%	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												
Volume (vph)	100	50	30	313	20	251	30	622	527	573	713	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	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1681	1695	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	1681	1695	1583	1770	3539	1583	1770	3539	1583
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)	109	54	33	340	22	273	33	676	573	623	775	141
RTOR Reduction (vph)	0	0	30	0	0	233	0	0	388	0	0	64
Lane Group Flow (vph)	109	54	3	180	182	40	33	676	185	623	775	77
Turn Type	Split		Perm	Split		Perm	Prot		Perm	Prot		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.3	9.3	9.3	13.8	13.8	13.8	3.4	19.2	19.2	35.3	51.1	51.1
Effective Green, g (s)	9.3	9.3	9.3	13.8	13.8	13.8	3.4	19.2	19.2	35.3	51.1	51.1
Actuated g/C Ratio	0.10	0.10	0.10	0.15	0.15	0.15	0.04	0.21	0.21	0.38	0.55	0.55
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	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	3.0
Lane Grp Cap (vph)	176	185	157	248	250	233	64	726	325	668	1932	864
v/s Ratio Prot	c0.06	0.03		0.11	c0.11		0.02	c0.19		c0.35	0.22	
v/s Ratio Perm			0.00			0.03			0.12			0.05
v/c Ratio	0.62	0.29	0.02	0.73	0.73	0.17	0.52	0.93	0.57	0.93	0.40	0.09
Uniform Delay, d1	40.5	39.1	38.0	38.1	38.1	34.9	44.3	36.6	33.5	28.0	12.4	10.1
Progression 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
Incremental Delay, d2	6.4	0.9	0.1	10.1	10.1	0.4	6.9	20.3	7.1	20.0	0.6	0.2
Delay (s)	46.8	40.0	38.1	48.2	48.2	35.3	51.1	56.8	40.6	48.0	13.0	10.3
Level of Service	D	D	D	D	D	D	D	E	D	D	B	B
Approach Delay (s)		43.5			42.6			49.4			26.9	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM Average Control Delay	38.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	93.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.9%	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												
Volume (vph)	74	27	26	774	45	55	44	970	1175	138	730	128
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	4.0
Lane Util. Factor	1.00	1.00	1.00	0.97	0.95	0.95	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	3433	1727	1504	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1583	3433	1727	1504	1770	3539	1583	1770	3539	1583
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)	78	28	27	815	47	58	46	1021	1237	145	768	135
RTOR Reduction (vph)	0	0	26	0	8	42	0	0	0	0	0	77
Lane Group Flow (vph)	78	28	1	815	48	7	46	1021	1237	145	768	58
Turn Type	Prot		Perm	Prot		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			6
Actuated Green, G (s)	15.5	4.2	4.2	21.8	10.5	10.5	3.3	27.3	79.1	9.8	33.8	33.8
Effective Green, g (s)	15.5	4.2	4.2	21.8	10.5	10.5	3.3	27.3	79.1	9.8	33.8	33.8
Actuated g/C Ratio	0.20	0.05	0.05	0.28	0.13	0.13	0.04	0.35	1.00	0.12	0.43	0.43
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)	347	99	84	946	229	200	74	1221	1583	219	1512	676
v/s Ratio Prot	0.04	0.02		0.24	0.03		0.03	0.29		0.08	0.22	
v/s Ratio Perm			0.00			0.00			c0.78			0.04
v/c Ratio	0.22	0.28	0.02	0.86	0.21	0.03	0.62	0.84	0.78	0.66	0.51	0.09
Uniform Delay, d1	26.7	36.0	35.5	27.2	30.6	29.9	37.3	23.8	0.0	33.1	16.6	13.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	1.6	0.1	8.1	0.5	0.1	15.1	6.9	3.9	7.3	1.2	0.2
Delay (s)	27.1	37.6	35.6	35.3	31.1	29.9	52.4	30.7	3.9	40.4	17.8	13.7
Level of Service	C	D	D	D	C	C	D	C	A	D	B	B
Approach Delay (s)		31.0			34.8			16.8			20.4	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	21.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	79.1	Sum of lost time (s)	0.0
Intersection Capacity Utilization	73.2%	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												
Volume (veh/h)	0	0	6	0	0	0	0	2356	0	0	1647	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	7	0	0	0	0	2561	0	0	1790	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)											500	
pX, platoon unblocked	0.85	0.85	0.85	0.85	0.85		0.85					
vC, conflicting volume	3071	4351	895	3462	4371	1280	1810			2561		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3083	4593	518	3545	4616	1280	1597			2561		
tC, single (s)	7.5	6.5	*6.2	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	100	100			100		
cM capacity (veh/h)	4	1	474	2	1	157	345			170		

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	7	1280	1280	895	895	20
Volume Left	0	0	0	0	0	0
Volume Right	7	0	0	0	0	20
cSH	474	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.75	0.75	0.53	0.53	0.01
Queue Length 95th (ft)	1	0	0	0	0	0
Control Delay (s)	12.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	B					
Approach Delay (s)	12.7	0.0		0.0		
Approach LOS	B					

Intersection Summary				
Average Delay	0.0			
Intersection Capacity Utilization	68.5%	ICU Level of Service	C	
Analysis Period (min)	15			

* User Entered Value

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	55	0	46	2	0	1	54	2184	3	0	1369	10
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		0.94		1.00	1.00	0.95	1.00		0.91	
Frt	1.00	0.85		1.00		0.85	1.00	1.00	0.85		1.00	
Flt Protected	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1770	1583		4990		1583	1770	3539	1583		5080	
Flt Permitted	0.95	1.00		0.95		1.00	0.95	1.00	1.00		1.00	
Satd. Flow (perm)	1770	1583		4990		1583	1770	3539	1583		5080	
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)	60	0	50	2	0	1	59	2374	3	0	1488	11
RTOR Reduction (vph)	0	47	0	0	0	1	0	0	0	0	1	0
Lane Group Flow (vph)	60	3	0	2	0	0	59	2374	3	0	1498	0
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	5.2	5.5		0.8		1.1	20.9	84.8	84.8		59.9	
Effective Green, g (s)	5.2	5.5		0.8		1.1	20.9	84.8	84.8		59.9	
Actuated g/C Ratio	0.05	0.05		0.01		0.01	0.20	0.82	0.82		0.58	
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)	89	84		39		17	359	2911	1302		2951	
v/s Ratio Prot	c0.03	c0.00		0.00			0.03	c0.67			0.29	
v/s Ratio Perm						0.00			0.00			
v/c Ratio	0.67	0.03		0.05		0.00	0.16	0.82	0.00		0.51	
Uniform Delay, d1	48.1	46.3		50.8		50.5	33.9	4.9	1.6		12.8	
Progression Factor	1.00	1.00		1.00		1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	18.3	0.2		0.5		0.0	0.2	2.6	0.0		0.1	
Delay (s)	66.4	46.4		51.3		50.5	34.1	7.6	1.6		13.0	
Level of Service	E	D		D		D	C	A	A		B	
Approach Delay (s)		57.3			51.0			8.2			13.0	
Approach LOS		E			D			A			B	

Intersection Summary			
HCM Average Control Delay	11.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	103.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.0%	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												
Volume (vph)	424	360	159	208	123	42	143	1780	444	115	1096	97
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	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3376		1770	3539	1583	1770	4933		1770	5023	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3376		1770	3539	1583	1770	4933		1770	5023	
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)	461	391	173	226	134	46	155	1935	483	125	1191	105
RTOR Reduction (vph)	0	34	0	0	0	42	0	28	0	0	6	0
Lane Group Flow (vph)	461	530	0	226	134	4	155	2390	0	125	1290	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	37.0	27.3		23.1	13.4	13.4	21.0	73.6		10.0	62.6	
Effective Green, g (s)	37.0	27.3		23.1	13.4	13.4	21.0	73.6		10.0	62.6	
Actuated g/C Ratio	0.25	0.18		0.15	0.09	0.09	0.14	0.49		0.07	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)	437	614		273	316	141	248	2420		118	2096	
v/s Ratio Prot	c0.26	0.16		c0.13	0.04		0.09	c0.48		c0.07	0.26	
v/s Ratio Perm						0.00						
v/c Ratio	1.05	0.86		0.83	0.42	0.03	0.62	0.99		1.06	0.62	
Uniform Delay, d1	56.5	59.5		61.5	64.6	62.4	60.8	37.7		70.0	34.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.89	0.61		1.00	1.00	
Incremental Delay, d2	58.3	12.0		18.3	0.9	0.1	2.3	10.0		99.7	1.4	
Delay (s)	114.8	71.5		79.8	65.6	62.4	56.7	33.2		169.7	35.6	
Level of Service	F	E		E	E	E	E	C		F	D	
Approach Delay (s)		91.0			73.1			34.6			47.4	
Approach LOS		F			E			C			D	

Intersection Summary			
HCM Average Control Delay	51.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.9%	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												
Volume (vph)	668	932	29	247	436	163	143	1661	585	277	773	240
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	0.91	1.00	0.97	0.91		0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1583	3433	4878		3433	5085	1583	3433	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1583	3433	4878		3433	5085	1583	3433	5085	1583
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)	726	1013	32	268	474	177	155	1805	636	301	840	261
RTOR Reduction (vph)	0	0	23	0	45	0	0	0	170	0	0	145
Lane Group Flow (vph)	726	1013	9	268	606	0	155	1805	466	301	840	116
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	34.7	40.1	40.1	16.1	21.5		11.1	62.0	62.0	15.8	66.7	66.7
Effective Green, g (s)	34.7	40.1	40.1	16.1	21.5		11.1	62.0	62.0	15.8	66.7	66.7
Actuated g/C Ratio	0.23	0.27	0.27	0.11	0.14		0.07	0.41	0.41	0.11	0.44	0.44
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)	794	1359	423	368	699		254	2102	654	362	2261	704
v/s Ratio Prot	c0.21	0.20		0.08	c0.12		0.05	c0.35		c0.09	0.17	
v/s Ratio Perm			0.01						0.29			0.07
v/c Ratio	0.91	0.75	0.02	0.73	0.87		0.61	0.86	0.71	0.83	0.37	0.16
Uniform Delay, d1	56.2	50.3	40.5	64.8	62.8		67.4	40.0	36.6	65.8	27.7	25.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.62	0.74	1.09
Incremental Delay, d2	14.9	2.3	0.0	7.0	11.0		4.3	4.8	6.5	11.5	0.3	0.4
Delay (s)	71.1	52.5	40.5	71.9	73.8		71.6	44.9	43.1	52.2	20.9	27.6
Level of Service	E	D	D	E	E		E	D	D	D	C	C
Approach Delay (s)		59.9			73.2			46.0			28.9	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM Average Control Delay	49.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.5%	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												
Volume (vph)	296	1166	130	10	677	190	30	10	20	800	70	477
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		1.00	0.95	1.00	1.00	1.00		0.97	1.00	0.88
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.90		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3486		1770	3539	1583	1770	1676		3433	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3486		1770	3539	1583	1770	1676		3433	1863	2787
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)	322	1267	141	11	736	207	33	11	22	870	76	518
RTOR Reduction (vph)	0	7	0	0	0	0	0	21	0	0	0	372
Lane Group Flow (vph)	322	1401	0	11	736	207	33	12	0	870	76	146
Turn Type	Prot			Prot		Free	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						Free						6
Actuated Green, G (s)	18.9	43.4		0.7	25.2	89.9	4.5	4.5		25.3	25.3	25.3
Effective Green, g (s)	18.9	43.4		0.7	25.2	89.9	4.5	4.5		25.3	25.3	25.3
Actuated g/C Ratio	0.21	0.48		0.01	0.28	1.00	0.05	0.05		0.28	0.28	0.28
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)	372	1683		14	992	1583	89	84		966	524	784
v/s Ratio Prot	c0.18	c0.40		0.01	0.21		0.02	0.01		c0.25	0.04	
v/s Ratio Perm						0.13						c0.05
v/c Ratio	0.87	0.83		0.79	0.74	0.13	0.37	0.14		0.90	0.15	0.19
Uniform Delay, d1	34.3	20.1		44.5	29.4	0.0	41.3	40.9		31.1	24.2	24.5
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	18.5	3.7		130.6	3.0	0.2	2.6	0.8		13.1	0.6	0.5
Delay (s)	52.8	23.8		175.1	32.4	0.2	43.9	41.6		44.2	24.8	25.0
Level of Service	D	C		F	C	A	D	D		D	C	C
Approach Delay (s)		29.2			27.1			42.8			36.4	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	31.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.2%	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												
Volume (vph)	75	1085	30	8	508	84	15	45	4	57	84	100
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	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.99		1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1855		1770	1863	1583	1770	1842		1770	1710	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1855		1770	1863	1583	1770	1842		1770	1710	
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)	82	1179	33	9	552	91	16	49	4	62	91	109
RTOR Reduction (vph)	0	1	0	0	0	51	0	3	0	0	34	0
Lane Group Flow (vph)	82	1211	0	9	552	40	16	50	0	62	166	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8						
Actuated Green, G (s)	25.3	76.6		0.8	52.1	52.1	1.6	17.0		7.3	22.7	
Effective Green, g (s)	25.8	77.1		1.3	52.6	52.6	2.1	17.5		7.8	23.2	
Actuated g/C Ratio	0.22	0.64		0.01	0.44	0.44	0.02	0.15		0.07	0.19	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
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)	382	1195		19	819	696	31	269		115	331	
v/s Ratio Prot	0.05	c0.65		0.01	c0.30		c0.01	0.03		0.04	c0.10	
v/s Ratio Perm						0.03						
v/c Ratio	0.21	1.01		0.47	0.67	0.06	0.52	0.19		0.54	0.50	
Uniform Delay, d1	38.6	21.3		58.9	26.7	19.3	58.3	44.9		54.2	43.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	29.5		17.5	2.2	0.0	13.7	1.5		4.8	5.4	
Delay (s)	38.9	50.8		76.3	28.9	19.3	72.0	46.4		59.0	48.4	
Level of Service	D	D		E	C	B	E	D		E	D	
Approach Delay (s)		50.0			28.2			52.3			50.9	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	44.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	119.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	148	947	416	251	417	286
Ideal Flow (vphpl)	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	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)	1770	1863	1863	1583	1770	1583
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1863	1863	1583	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	161	1029	452	273	453	311
RTOR Reduction (vph)	0	0	0	187	0	212
Lane Group Flow (vph)	161	1029	452	86	453	99
Turn Type	Prot			Perm		Perm
Protected Phases	7	4	8		6	
Permitted Phases				8		6
Actuated Green, G (s)	19.0	49.8	26.3	26.3	26.7	26.7
Effective Green, g (s)	19.5	50.3	26.8	26.8	27.2	27.2
Actuated g/C Ratio	0.23	0.59	0.31	0.31	0.32	0.32
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	404	1096	584	496	563	504
v/s Ratio Prot	0.09	c0.55	0.24		c0.26	
v/s Ratio Perm				0.05		0.06
v/c Ratio	0.40	0.94	0.77	0.17	0.80	0.20
Uniform Delay, d1	28.0	16.2	26.6	21.3	26.7	21.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	14.6	6.3	0.2	11.6	0.9
Delay (s)	28.7	30.8	32.9	21.5	38.3	22.1
Level of Service	C	C	C	C	D	C
Approach Delay (s)		30.5	28.6		31.7	
Approach LOS		C	C		C	

Intersection Summary			
HCM Average Control Delay	30.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	85.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			