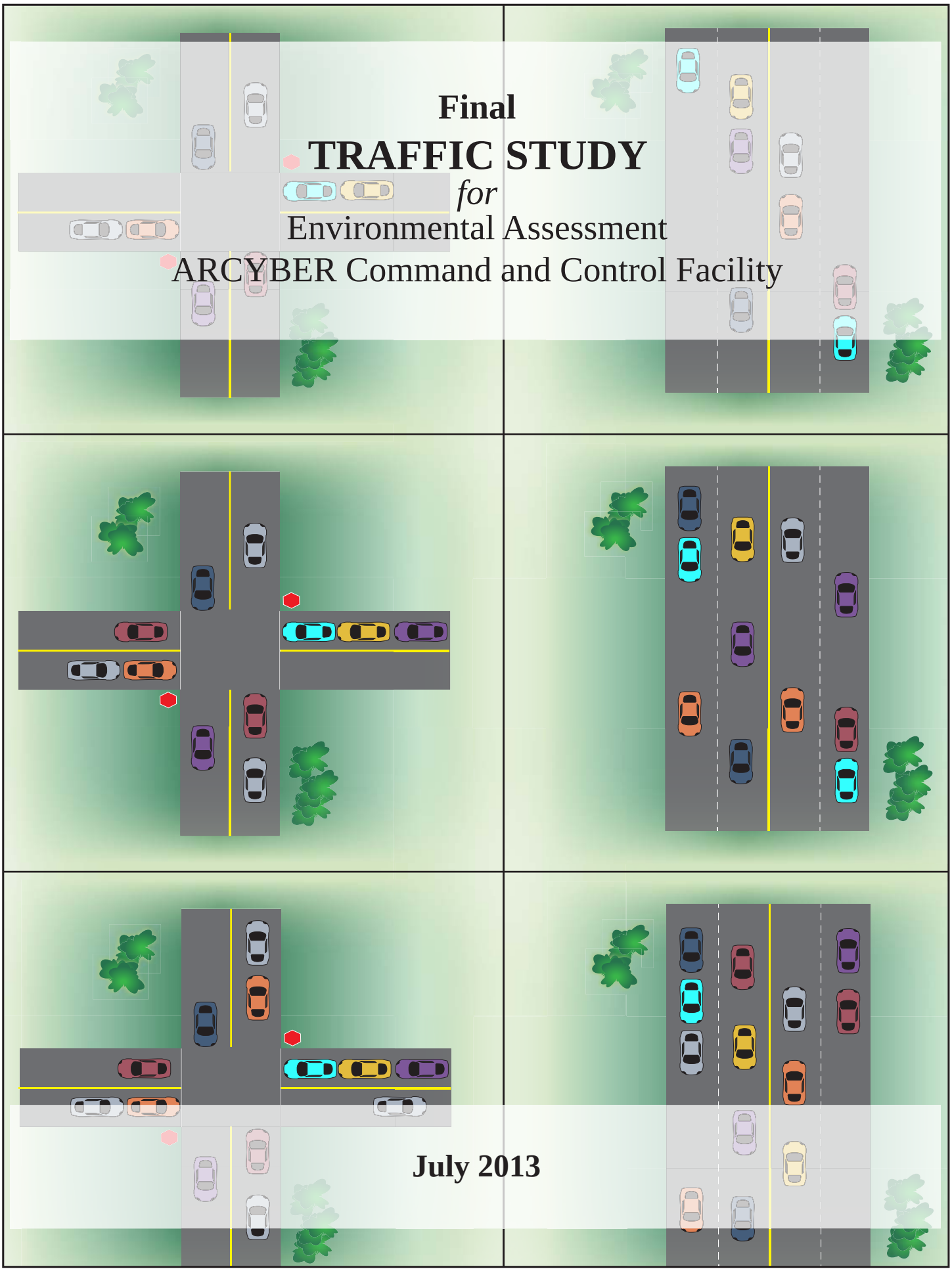

Final
TRAFFIC STUDY
for
Environmental Assessment
ARCYBER Command and Control Facility

July 2013

EXECUTIVE SUMMARY

This Traffic Study has been prepared to evaluate the potential traffic-related effects associated with the establishment and operation of a proposed U.S. Army Cyber (ARCYBER) Command / 2nd Army Command and Control Facility to be located at Fort George G. Meade, Maryland (hereinafter referred to as Fort Meade), or at Fort Gordon, Georgia. ARCYBER currently has approximately 151 active duty military, government civilians, and contract personnel employed at four different Fort Meade locations and approximately 316 active duty military, government civilians, and contract personnel employed at Fort Belvoir, Virginia. ARCYBER is expected to increase its current workforce to approximately 855 personnel by late 2012/early 2013. However, ARCYBER needs facilities to provide the capability of growing its workforce up to 1,500 personnel with the reorganization of ARCYBER and its major subordinate commands. To maximize operational efficiency, ARCYBER must consolidate its force structure currently at Fort Meade and Fort Belvoir into one location. Therefore, ARCYBER needs a command and control facility that can accommodate a workforce of up to 1,500 active duty military, government civilians, and contract personnel.

The Traffic Study was developed and prepared in consultation with staff members from various departments at both installations, and was conducted using procedures and calculations published in the *Highway Capacity Manual* (Transportation Research Board [TRB] 2010), *Trip Generation, 8th Edition: An ITE Informational Report* (Institute of Transportation Engineers [ITE] 2008), National Cooperative Highway Research Program (NCHRP) Report 672 (NCHRP 2010) and other sources and materials. Existing traffic counts were conducted at both installations during July and August of 2012. The Traffic Study considered six action alternatives, including one at Fort Meade[1] and five at Fort Gordon.

The analysis found substantial traffic congestion at numerous locations at both installations under baseline conditions. The addition of traffic from action alternatives would result in substantial effects during one or both peak hours at the following number of intersections:

- Alternative A (Fort Meade): two intersections out of the 16 analyzed
- Alternative C (Fort Gordon): five intersections out of the 20 analyzed
- Alternative D (Fort Gordon): four intersections out of the 20 analyzed
- Alternative E (Fort Gordon): five intersections out of the 20 analyzed
- Alternative F (Fort Gordon): three intersections out of the 20 analyzed
- Alternative G (Fort Gordon): six intersections out of the 20 analyzed

Measures to mitigate, minimize and/or avoid the traffic effects are summarized below:

Fort Meade

1. The action proponent will coordinate with Fort Meade representatives to develop and implement physical improvements and other measures necessary to mitigate the Proposed Action's traffic effects. Specific physical improvements are described in Table ES-1. The

[1] Alternative B at Fort Meade would be located within the area previously evaluated in the Campus Development Environmental Impact Statement (National Security Agency 2010). Because the impacts associated with this alternative have been previously disclosed in a National Environmental Policy Act document, no additional analysis of this alternative was performed in this Traffic Study.

measures in Table ES-1 may be modified as appropriate based on input from installation public works staff.

Table ES-1. Summary of Mitigation Measures for Fort Meade, by Location and Alternative

	Intersection	Alternative A	Alternative B
4	Mapes Rd./ 6th Armored Cavalry Rd.	Install traffic signal and provide protected plus permitted phasing for the westbound approach. (Signal timing and phasing should be coordinated with other signals along Mapes Rd.)	**Mitigation Measures for Alternative B were Previously Identified in the Campus Development Environmental Impact Statement (NSA 2010).**
13	Reece Rd./ Cooper Ave.	Revise signal operation from split phasing to permitted plus protected phasing for eastbound and westbound left turns.	

2. To the extent feasible, incorporate various measures into the design and operation of the ARCYBER facility to minimize the concentration of project traffic during peak commuting hours, and/or encourage travel using public transit or non-motorized modes. Such measures may include flexible working hours, telecommuting, incentives to encourage transit use or carpooling, bicycle storage facilities, showers and locker rooms, etc.
3. To minimize less-than-significant project-level and cumulative impacts at various intersections, traffic conditions should be monitored before and after the occupancy of the Proposed Action to confirm projected traffic conditions at selected locations and to identify other feasible measures as appropriate that may be implemented to minimize traffic effects (such as physical improvements, on-site trip reduction measures, and/or other approaches).
4. To minimize and avoid potential temporary impacts associated with construction traffic, the construction contractor should coordinate with installation representatives to develop and implement a traffic management plan, which may specify construction timeframes, internal routing, carpooling and/or other measures to minimize the effects of construction related traffic on internal streets and intersections.
5. To minimize and avoid potential impacts at site access driveways, the action proponent should coordinate with installation representatives during the preparation of project design plans to determine the appropriate design and traffic control at site access driveways.

Fort Gordon

1. The action proponent will coordinate with Fort Gordon representatives and appropriate state and local officials to develop and implement physical improvements and other measures necessary to mitigate the Proposed Action's traffic effects. Specific physical improvements are described in Table ES-2. The measures in Table ES-2 may be modified as appropriate based on input from installation public works staff.

Table ES-2. Summary of Mitigation Measures for Fort Gordon, by Location and Alternative

	Intersection	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
6	Chamberlain Ave./19th St.	Revise signal operation to provide permitted phasing for eastbound, westbound, and northbound left turns, and provide permitted plus protected phasing for southbound left turns. Also restripe the westbound approach to provide one shared through/left turn lane and one dedicated right turn lane.	Same as Alternative C.	(No mitigation required)	(No mitigation required)	(No mitigation required)
7	Chamberlain Ave./25th Street	(No mitigation required)	(No mitigation required)	(No mitigation required)	(No mitigation required)	Install traffic signal.
8	Chamberlain Ave./Rice Rd.	(No mitigation required)	(No mitigation required)	Revise signal operation to provide for northbound right turns to overlap with westbound left turns.	(No mitigation required)	(Same as Alternative E)
10	Barnes Ave./19th St.	(No mitigation required)	(No mitigation required)	(No mitigation required)	Install all-way stop control, and restripe the northbound approach to provide one shared left/through turn lane and one dedicated right turn lane.	Install traffic signal.
11	Barnes Ave./25th St.	(No mitigation required)	Install traffic signal.	(No mitigation required)	Install traffic signal.	Install traffic signal.
14	Lane Ave./ 19th St.	Install traffic signal, and provide protected plus permitted phasing for southbound left turns in the afternoon peak.	(No mitigation required)	Same as Alternative C.	(No mitigation required)	(No mitigation required)

	Intersection	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
15	Lane Ave./ 25th St.	Install traffic signal.	Same as Alternative C.	Same as Alternative C.	(No mitigation required)	Same as Alternative C.
17	North Range Rd./ 111th St.	Install traffic signal and remove westbound leg to form "T" intersection. Channelize southbound right turns.	(No mitigation required)	Install all-way stop control.	(No mitigation required)	(No mitigation required)
19	US Highway 1 Southbound/Ave. of the States[2]	Install traffic signal.	Same as Alternative C.	Same as Alternative C.	Same as Alternative C.	Same as Alternative C.

2. To the extent feasible, incorporate various measures into the design and operation of the ARCYBER facility to minimize the concentration of project traffic during peak commuting hours, and/or encourage travel using public transit or non-motorized modes. Such measures may include flexible working hours, telecommuting, incentives to encourage transit use or carpooling, bicycle storage facilities, showers and locker rooms, etc.
3. To minimize less-than-significant project-level and cumulative impacts at various intersections, traffic conditions should be monitored before and after the occupancy of the Proposed Action to confirm projected traffic conditions at selected locations and to identify other feasible measures as appropriate that may be implemented to minimize traffic effects (such as physical improvements, on-site trip reduction measures, and/or other approaches).
4. To minimize and avoid potential temporary impacts associated with construction traffic, the construction contractor should coordinate with installation representatives to develop and implement a traffic management plan, which may specify construction timeframes, internal routing, carpooling and/or other measures to minimize the effects of construction related traffic on internal streets and intersections.
5. To minimize and avoid potential impacts at site access driveways, the action proponent should coordinate with installation representatives during the preparation of project design plans to determine the appropriate design and traffic control at site access driveways.

[2] Interchange improvements should be coordinated with the Georgia Department of Transportation.

FINAL
TRAFFIC STUDY
for
ENVIRONMENTAL ASSESSMENT
ARCYBER COMMAND AND CONTROL FACILITY

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Acronyms and Abbreviations

ARCYBER	Army Cyber
EA	Environmental Assessment
EIS	Environmental Impact Statement
GDOT	Georgia Department of Transportation
ITE	Institute of Transportation Engineers
LOS	Level of Service
MD	Maryland Route
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NSA	National Security Agency
ROI	Region of Influence
SF	square foot
TRB	Transportation Research Board
U.S.	United States

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CHAPTER 1
INTRODUCTION

1.1 PROJECT LOCATION

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended, an Environmental Assessment (EA) has been prepared to evaluate potential environmental, cultural, transportation, and socioeconomic effects associated with the proposed United States (U.S.) Army Cyber (ARCYBER) Command / 2nd Army Command and Control Facility to be located at either Fort Gordon, Georgia, or Fort George G. Meade, Maryland (hereinafter "Fort Meade"). This Traffic Study has been prepared to document the analysis of the action alternatives relative to traffic and roadways, as summarized in the EA.

1.2 PROJECT DESCRIPTION

ARCYBER currently has programmed a 179,056 square foot (SF) facility containing 855 personnel. The current personnel strength has the potential of increasing with the reorganization of ARCYBER and its major subordinate commands. As such, the projected growth of ARCYBER could result in the necessity of a facility capable of supporting a workforce of approximately 1,500 personnel.

ARCYBER currently has approximately 151 personnel stationed at Fort Meade and approximately 316 personnel stationed at Fort Belvoir. As ARCYBER grows, personnel from Fort Belvoir would be transferred to one of the two proposed locations. The Proposed Action includes the potential for one or more scenarios encompassing the command and control facility and addition of personnel to either Fort Meade in Maryland or to Fort Gordon in Georgia. The alternatives evaluated in this EA include utilizing existing buildings, renovating existing buildings, and constructing new facilities. The alternatives are presented below:

Fort Meade Course of Action: Interim stationing would not be necessary at the Fort Meade location. Final stationing options at Fort Meade include the following two alternatives:

- Alternative A: Construct new 179,056 SF facility at Fort Meade at the northwest corner of Mapes Rd. and Taylor Ave.
- Alternative B: Construct a 179,056 SF facility within the East Campus area located within the National Security Agency's fence line and use Building 8605 for a portion of the administrative and logistics staff.

Fort Gordon Course of Action: Interim stationing would have the personnel currently located at Fort Belvoir and Fort Meade relocated to several buildings within Back Hall Campus at Fort Gordon. Renovation may be required. Final stationing options at Fort Gordon include the following five alternatives all located within the cantonment area:

- Alternative C: Construct a new 179,056 SF facility at Fort Gordon in a 16-acre site southwest of the intersection of 110th Ave. and 15th St.
- Alternative D: Renovate several buildings within Back Hall Campus between 22nd St. to 25th St. and Chamberlain Ave. to Barnes Ave. and construct an additional 47,000 SF facility.
- Alternative E: Construct a 179,056 SF wing on Whitelaw Hall for the entire ARCYBER Command as part of the planned Whitelaw Hall Phase 2 development.

- Alternative F: Construct a new 179,056 SF facility on Kilbourne St. to house the entire ARCYBER Command. Parking and access would also be provided at this location.
- Alternative G: Construct a new 179,056 SF on 19th St. to house the entire ARCYBER Command. Parking and access would also be provided at this location.

1.3 ANALYSIS SCENARIOS

To determine the traffic-related implications of the Proposed Action, this Traffic Study considers the following existing and near-term future traffic scenarios:

1. **Existing Conditions:** reflects traffic conditions as of July and August 2012, when traffic counts were performed at the installations.
2. **Baseline Conditions:** represents projected future traffic conditions at the time that the proposed construction is completed and operations have begun (i.e., 2016). The baseline conditions are described by location as follows:
   - Fort Meade: the baseline condition assumes traffic growth consistent with the year 2015 evaluated in the Campus Development Environmental Impact Statement (EIS) (National Security Association [NSA] 2010).
   - Fort Gordon: a conservative growth factor of 3 percent per year for 4 years was assumed to reflect this growth. This growth factor was uniformly applied to the existing 2012 traffic counts.
3. **Baseline plus Alternative A:** this scenario adds the traffic distribution resulting with Fort Meade Alternative A to baseline traffic volumes. Effects associated with both construction and operations of the Proposed Action are considered in this scenario.
4. **Baseline plus Alternative B:** the Proposed Action would be constructed within the action area previously evaluated in the Campus Development EIS. Because the impacts associated with this alternative have already been disclosed in a NEPA document, no new traffic analysis will be prepared for this alternative.
5. **Baseline plus Alternative C:** this scenario adds the traffic distribution resulting with Fort Gordon Alternative C to baseline traffic volumes. Effects associated with both construction and operations of the Proposed Action are considered in this scenario.
6. **Baseline plus Alternative D:** this scenario addresses the impacts associated with Fort Gordon Alternative D.
7. **Baseline plus Alternative E:** this scenario evaluates the traffic related effects of Fort Gordon Alternative E.
8. **Baseline plus Alternative F:** Fort Gordon Alternative F is analyzed in this scenario.
9. **Baseline plus Alternative G:** Fort Gordon Alternative G's traffic impacts are addressed in this scenario.

CHAPTER 2
TRAFFIC ANALYSIS METHODS

2.1 CAPACITY ANALYSIS PROCEDURES

Roadway and intersection operating conditions, and the adequacy of existing roadway systems to accommodate projected future traffic, are described in terms of Level of Service (LOS) ratings. LOS is a method used to rate the performance of streets, intersections, and other highway facilities. Developed by the Transportation Research Board, and documented in various editions of the *Highway Capacity Manual* (Transportation Resource Board [TRB] 2010) since 1950, LOS rates performance on a scale of A to F, with LOS A reflecting free flowing conditions and LOS F representing heavily congested conditions. Table 2-1 summarizes the general traffic conditions associated with each LOS rating, while the Figure 2-1 is an illustration of representative levels of congestion for each LOS grade.

Table 2-1. Traffic Conditions Associated with LOS Ratings

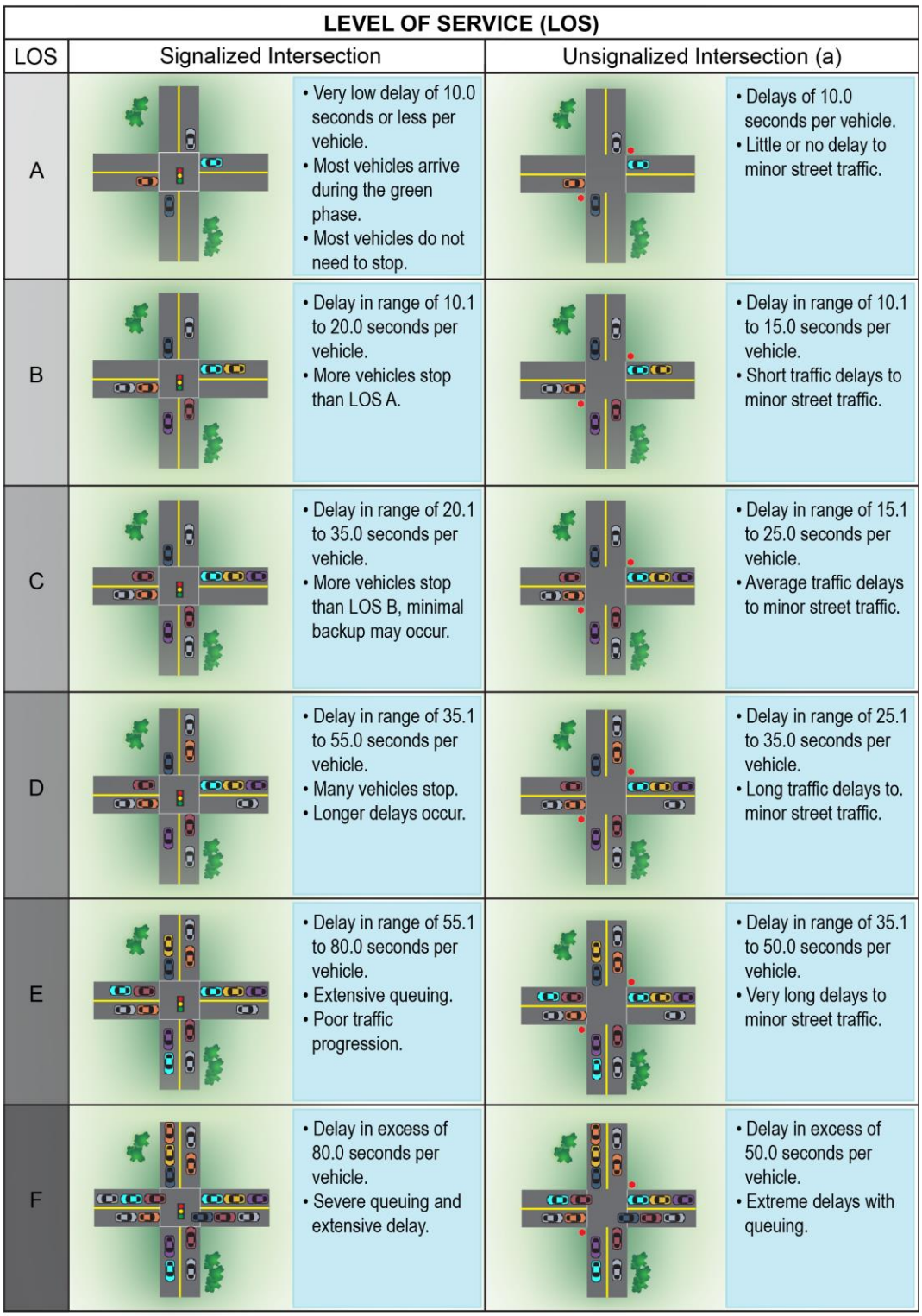
LOS Rating	Description of Traffic Conditions
A	Traffic flows freely, with little or no restrictions to vehicle maneuvers within the traffic stream.
B	Reasonably free-flowing conditions, with slight restrictions to vehicle maneuvers within the traffic stream.
C	Traffic speed approaches free-flowing conditions, but freedom to maneuver within the traffic stream noticeably restricted.
D	Traffic speed begins to be reduced, and freedom to maneuver is seriously limited due to a high concentration of traffic.
E	Unpredictable traffic flow, with virtually no usable gaps in the traffic stream to accommodate vehicle maneuvers.
F	Unstable flow resulting in delays and the formation of queues in locations where traffic demand exceeds roadway capacity.

Note: LOS = Level of Service
Source: TRB 2010

2.1.1 Intersection LOS

Intersection capacity analysis was conducted in accordance with procedures contained in Chapter 18 (Signalized Intersections), Chapter 19 (Two-Way Stop-Controlled Intersections[3]) and Chapter 20 (All-Way Stop-Controlled Intersections) of the *Highway Capacity Manual*. Data used in intersection analysis include peak hour turning movement traffic volumes, the number of lanes, and the type of traffic control used. Analysis was performed using the Synchro 8 software (published by Trafficware, Ltd.), which incorporates *Highway Capacity Manual* analysis procedures. LOS for signalized and unsignalized intersections is measured in terms of delay, in seconds per vehicle.

[3] Two-way stop-controlled intersection analysis procedures are also used for one-way stop-controlled intersections.



(a) Although a two-way stop controlled intersection is shown, LOS delay thresholds and congestion levels are the same for all-way stop controlled intersections.
Source: TRB 2010.

Figure 2-1 Representative Traffic Levels for Each LOS Rating

Peak hour factors and heavy vehicle factors collected in the field were manually entered into Synchro, and were maintained through all existing and baseline analyses. Worksheets documenting all analyses are attached to this report. In rare instances, the Synchro output did not present the LOS for the most congested approach at selected two-way stop controlled intersections. In these cases, LOS results were input directly from the software into the analysis summary tables.

A roundabout is a specific type of intersection that is not controlled by a traffic signal or a stop sign. Because a raised circular median is located in the center of the intersection, it is not possible for a motorist to drive directly to other legs of the intersection. Instead, a motorist enters a roundabout by turning right, circulates around the median, and then turns right again at the desired intersection leg. Analysis of roundabouts was conducted using analysis procedures described in the *Highway Capacity Manual* and the National Cooperative Highway Research Program (NCHRP) Report 672 (NCHRP 2010). Analysis of roundabouts was completed using Georgia Department of Transportation (GDOT) Roundabout Analysis Tool version 2.1, which incorporates procedures contained in the *Highway Capacity Manual* and NCHRP Report 672. Because roundabouts are present in the Fort Meade Region of Influence (ROI), and because one roundabout is under construction at Fort Gordon, the analysis assumed that drivers will be familiar with roundabouts by the time of the baseline scenario. For this reason, all baseline analyses of roundabouts reported delay based on the calibrated model, which assumes driver familiarity with roundabouts.

2.2 SUBSTANTIAL EFFECTS CRITERIA

Consistent with the Campus Development EIS (NSA 2010) and other NEPA documentation, a project is considered to have a substantial effect on the operations of an intersection if the addition of traffic causes LOS to degrade from LOS D or better to LOS E or F.

In addition, a project may contribute toward a substantial cumulative effect if its traffic, when taken together with traffic from past, present and reasonably foreseeable future projects, causes intersection LOS to decline from LOS D or better to LOS E or F.

2.3 REGION OF INFLUENCE

The ROI for traffic encompasses the major intersections that provide access to and from the action alternatives at Fort Gordon and Fort Meade. A preliminary ROI was proposed to representatives at both installations in June 2012. Adjustments were made based on feedback from the installations, and the final ROIs were approved by both Fort Meade and Fort Gordon on June 29, 2012. The ROI for Fort Meade includes 16 intersections and the ROI for Fort Gordon includes 20 intersections. Refer to Figures 2-2 and 2-3 for the ROI of Fort Meade and Fort Gordon, respectively.

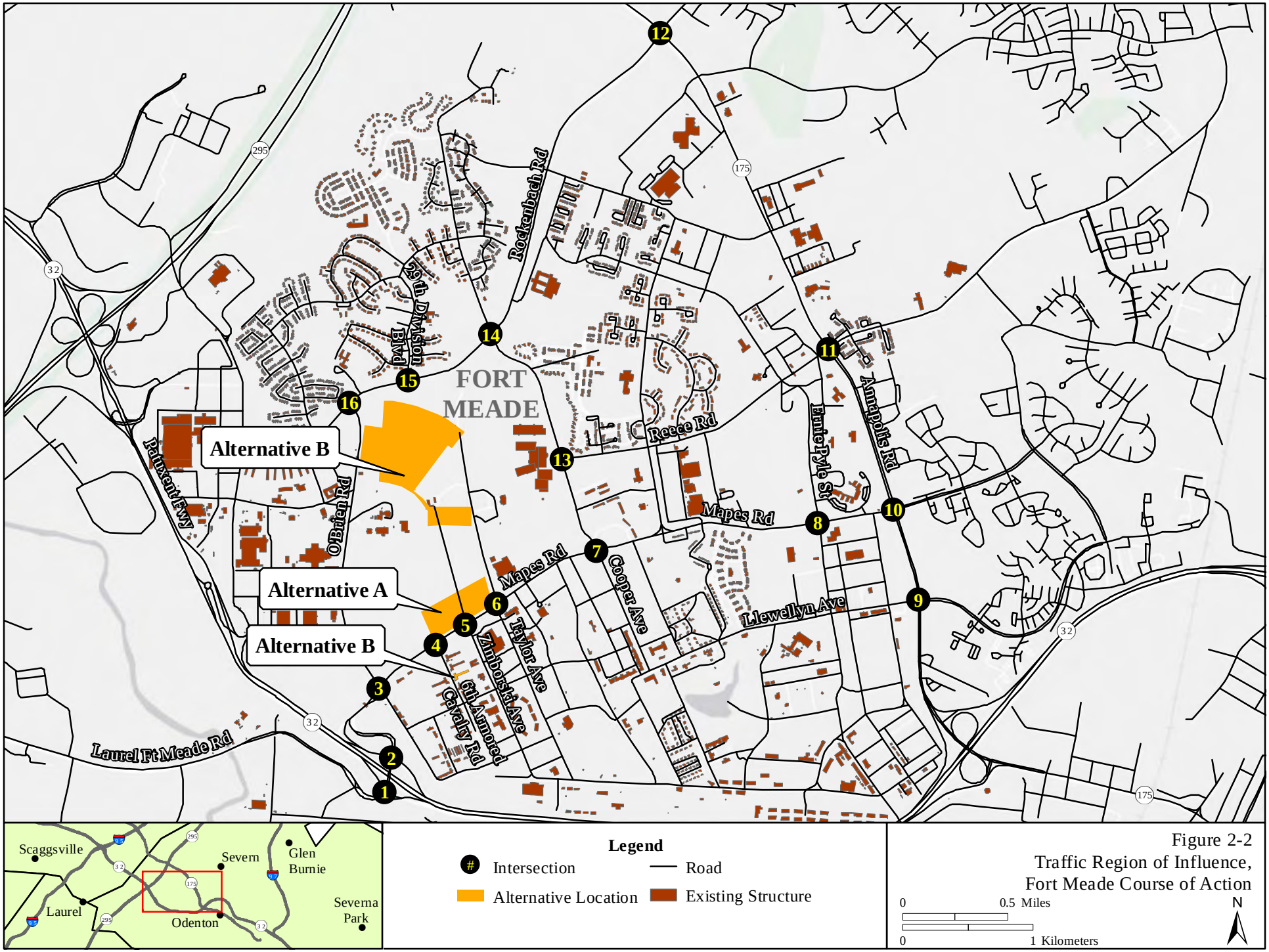


Figure 2-2
Traffic Region of Influence,
Fort Meade Course of Action

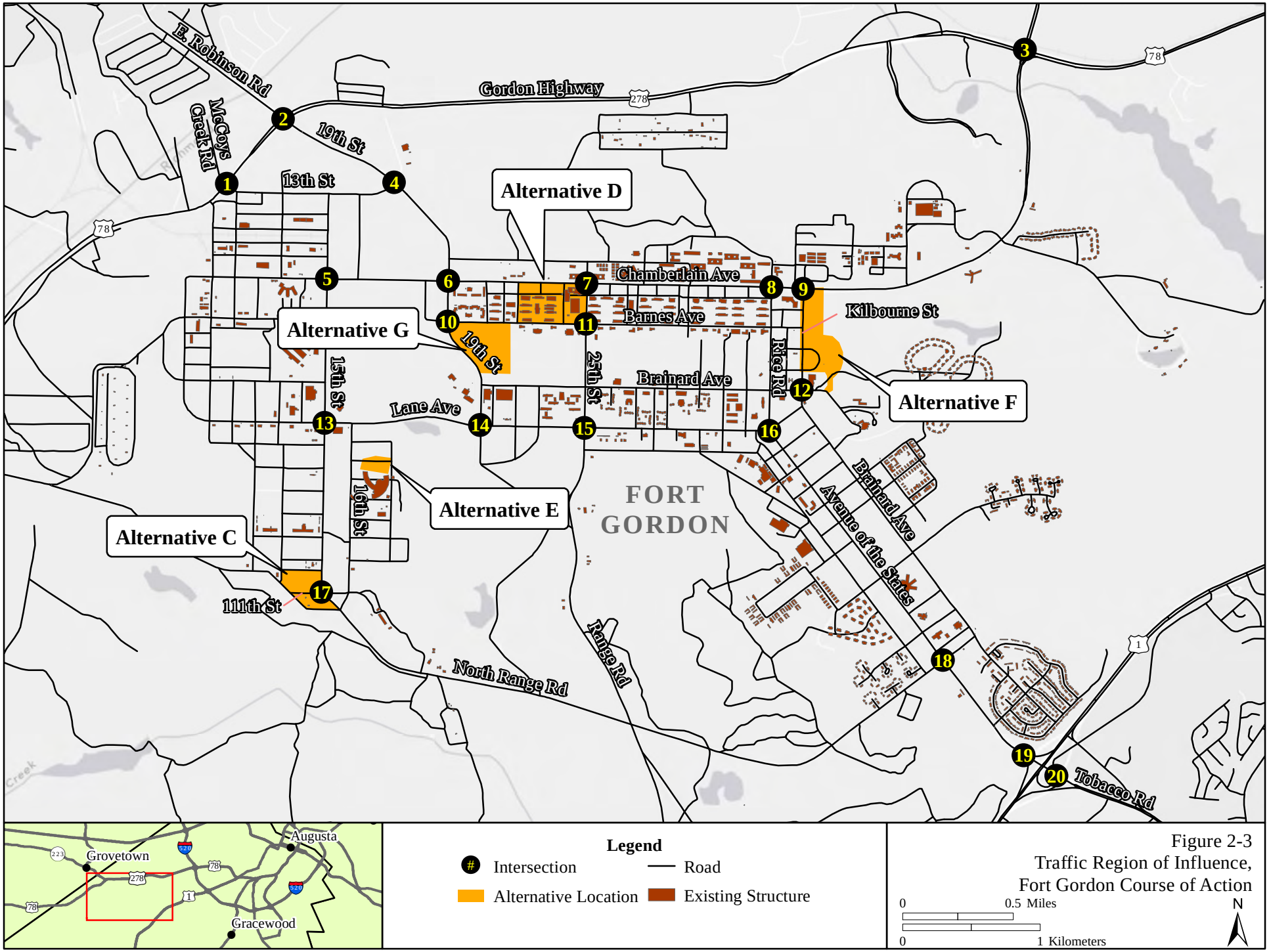


Figure 2-3
Traffic Region of Influence,
Fort Gordon Course of Action

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CHAPTER 3
EXISTING CONDITIONS

3.1 ROADWAY NETWORK

Field reviews were conducted in August 2012 at both installations by the Timmons Group. These surveys reviewed and recorded various aspects of the existing transportation infrastructure within and adjacent to the ROI, including roadway lane configuration, intersection lane geometry and traffic control, traffic signal timing and phasing, and other characteristics that are pertinent to traffic analysis. Attachment 1 contains a memo and illustrations documenting the field review at Fort Meade, while Attachment 2 includes the same information for Fort Gordon.

3.2 TRAFFIC VOLUMES

Existing morning (6:00 AM to 9:30 AM) and afternoon (3:30 PM to 5:30 PM) turning movement counts were collected at Fort Meade over the course of several weekdays in late July and early August 2012. The morning peak hour at most locations began between 6:45 AM and 7:30 AM, and the afternoon peak hour generally started between 3:30 and 4:30 PM. Counts at Fort Gordon took place in the middle of July 2012 between the hours of 6:00 AM and 9:00 AM, and from 3:00 PM to 6:00 PM. The morning peak hour at Fort Gordon generally began between 6:45 AM and 7:15 AM, while the afternoon peak hour typically started between 3:45 PM and 4:45 PM. In order to provide a conservative analysis, existing volumes at all locations were assumed to coincide with the Proposed Action's peak hour traffic generation. This is a conservative approach as it is anticipated that ARCYBER would be manned 24 hours a day, 7 days per week. At any given time, there would be approximately 50 workers at the facility.

Because traffic counts were conducted while school was not in session, monthly factors published by the Maryland State Highway Administration (Maryland State Highway Administration 2012) and the Georgia Department of Transportation (GDOT 2012) were consulted to determine whether or not the existing counts should be adjusted to provide a representative traffic condition. The review found that monthly variations did not suggest that any adjustments to existing counts were justified.

Figures 3-1 and 3-2 illustrate the existing traffic volumes that were collected at the study intersections, and the peak hour volume on ROI intersections for Fort Meade and Fort Gordon, respectively. Attachment 3 contains the count summaries for Fort Meade, while Attachment 4 provides the count information for Fort Gordon.

3.3 INTERSECTION ANALYSIS

Tables 3-1 and 3-2 presents the LOS analysis results for the ROI intersections under existing conditions for Fort Meade and Fort Gordon, respectively. Attachment 5 contains the analysis worksheets for Fort Meade, while Attachment 6 provides the worksheets for Fort Gordon.

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Figure 3-1
Existing Traffic Volumes, Fort Meade

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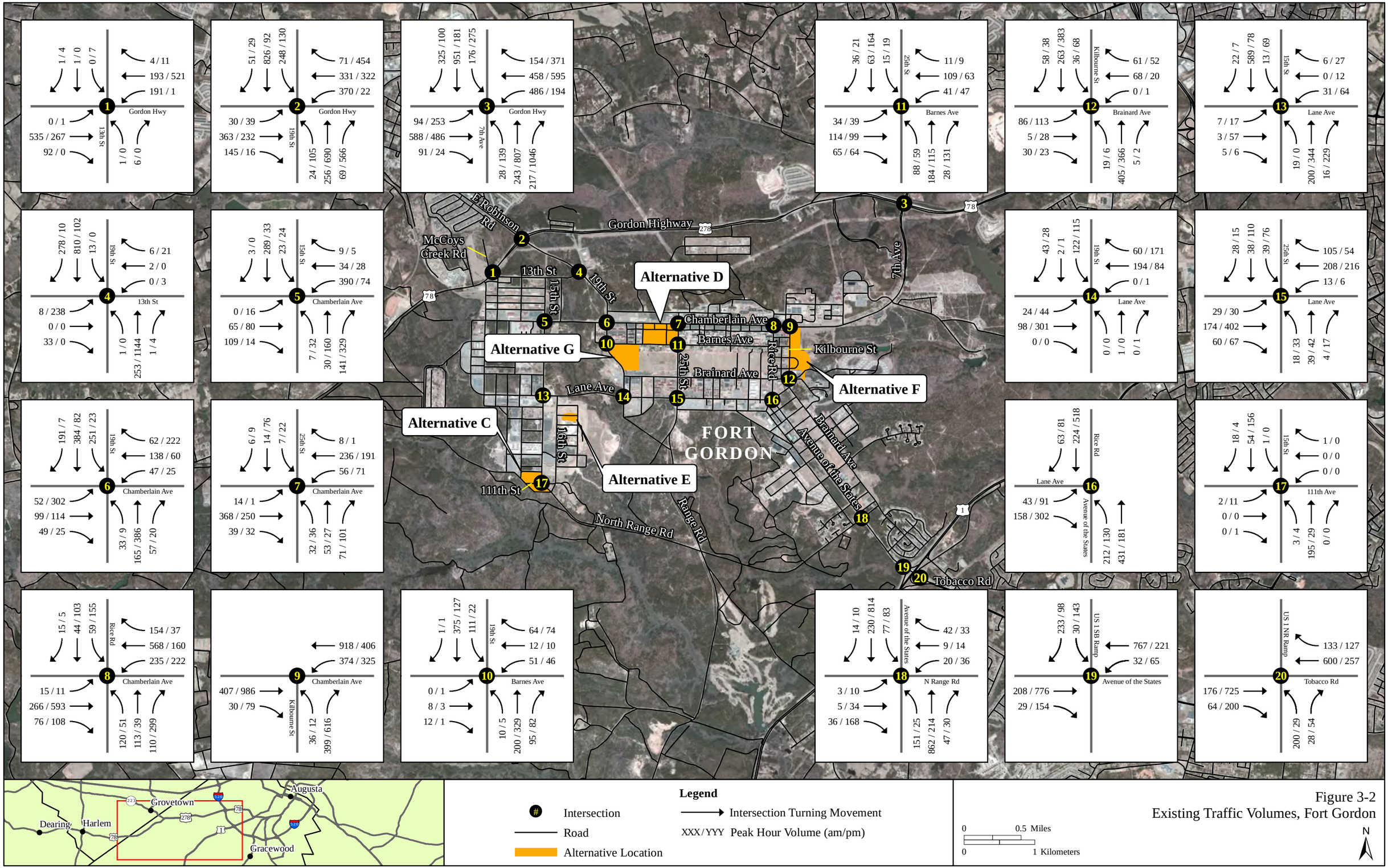

Figure 3-2
Existing Traffic Volumes, Fort Gordon

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Table 3-1. Intersection Level of Service Summary, Existing Conditions (Fort Meade)

	Intersection	Traffic Control	Peak Hour	LOS (b)
1	MD 32 Eastbound/Laurel Ft. Meade Rd.	Roundabout	AM	C
			PM	D
2	MD 32 Westbound/Mapes Rd.	Roundabout	AM	**E**
			PM	**F**
3	Mapes Rd./O'Brien Rd.	Signal	AM	B
			PM	D
4	Mapes Rd./6th Armored Cavalry Rd.	Two-Way Stop	AM	D
			PM	**F**
5	Mapes Rd./Zimborski Ave.	Two-Way Stop	AM	**F**
			PM	C
6	Mapes Rd./Taylor Ave.	Signal	AM	C
			PM	B
7	Mapes Rd./Cooper Ave.	Signal	AM	**E**
			PM	C
8	Mapes Rd./Ernie Pyle St.	Signal	AM	C
			PM	C
9	Llewellyn Ave./Annapolis Rd.	Signal	AM	**F**
			PM	**F**
10	Mapes Rd./Annapolis Rd.	Signal	AM	**E**
			PM	**E**
11	Reece Rd./Annapolis Rd.	Signal	AM	C
			PM	C
12	Rockenbach Rd./Annapolis Rd.	Signal	AM	**E**
			PM	**E**
13	Reece Rd./Cooper Ave.	Signal	AM	B
			PM	B
14	Rockenbach Rd./Cooper Ave.	Signal	AM	B
			PM	B
15	Rockenbach Rd./29th Division Blvd.	Two-Way Stop	AM	B
			PM	B
16	Rockenbach Rd./O'Brien Rd.	Two-Way Stop	AM	B
			PM	B

Notes: **Bold values indicate intersections operating at LOS E or F.**
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service.

Table 3-2. Intersection Level of Service Summary, Existing Conditions (Fort Gordon)

	Intersection	Traffic Control	Peak Hour	LOS (a)
1	Gordon Highway/13th St.	Two-Way Stop	AM	**F**
			PM	C
2	Gordon Highway/19th St.	Signal	AM	D
			PM	**F**
3	Gordon Highway/7th Ave.	Signal	AM	C
			PM	**E**
4	13th St./19th St.	Two-Way Stop	AM	D
			PM	**F**
5	Chamberlain Ave./15th St.	Two-Way Stop	AM	**F**
			PM	**F**
6	Chamberlain Ave./19th St.	Signal	AM	D
			PM	**F**
7	Chamberlain Ave./25th St.	Two-Way Stop	AM	C
			PM	C
8	Chamberlain Ave./Rice Rd.	Signal	AM	B
			PM	D
9	Chamberlain Ave./Kilbourne St.	One-Way Stop	AM	**F**
			PM	**F**
10	Barnes Ave./19th St.	Two-Way Stop	AM	**F**
			PM	C
11	Barnes Ave./25th St.	All-Way Stop	AM	C
			PM	C
12	Brainard Ave./Kilbourne St.	One-Way Stop	AM	**F**
			PM	**F**
13	Lane Ave./15th St.	All-Way Stop	AM	**E**
			PM	**E**
14	Lane Ave./19th St.	Two-Way Stop	AM	C
			PM	D
15	Lane Ave./25th St	Two-Way Stop	AM	C
			PM	**F**
16	Lane Ave./Rice Rd.	One-Way Stop	AM	**F**
			PM	**F**
17	North Range Rd./111th St.	Two-Way Stop	AM	A
			PM	B
18	North Range Rd./Ave. of the States	Two-Way Stop	AM	**F**
			PM	**F**
19	US Highway 1 Southbound/Ave. of the States	One-Way Stop	AM	D
			PM	**E**

	Intersection	Traffic Control	Peak Hour	LOS (a)
20	US Highway 1 Northbound/Tobacco Rd.	One-Way Stop	AM	D
			PM	D

Notes: **Bold values indicate intersections operating at LOS E or F.**
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

As shown in Table 3-1, the following intersections at Fort Meade are characterized by congested LOS E or F conditions during one or both peak hours:

- The Maryland Route 32 (MD 32) Westbound/Mapes Rd. roundabout currently operates at LOS E during the morning peak and LOS F during the afternoon peak.
- The Mapes Rd./6th Armored Cavalry Rd. intersection currently operates at LOS F during the afternoon peak.
- The Mapes Rd./Zimborski Ave. intersection currently operates at LOS F during the morning peak.
- The Mapes Rd./Cooper Ave. intersection currently operates at LOS E during the morning peak.
- The Llewellyn Ave./Annapolis Rd. intersection currently operates at LOS F during both the morning peak and the afternoon peak.
- The Mapes Rd./Annapolis Rd. intersection currently operates at LOS E during both the morning peak and the afternoon peak.
- The Rockenbach Rd./Annapolis Rd. intersection currently operates at LOS E during both the morning peak and the afternoon peak.

As presented in Table 3-2, the following intersections at Fort Gordon currently experience congested LOS E or F conditions during one or both peak hours:

- The Gordon Highway/13th St. intersection currently operates at LOS F during the morning peak.
- The Gordon Highway/19th St. intersection currently operates at LOS F during the afternoon peak.
- The Gordon Highway/7th Ave. intersection currently operates at LOS E during the afternoon peak.
- The 13th St./19th St. intersection currently operates at LOS F during the afternoon peak.
- The Chamberlain Ave./15th St. intersection currently operates at LOS F during both the morning peak and the afternoon peak.
- The Chamberlain Ave./19th St. intersection currently operates at LOS F during the afternoon peak.
- The Chamberlain Ave./Kilbourne St. intersection currently operates at LOS F during both the morning peak and the afternoon peak.
- The Barnes Ave./19th St. intersection currently operates at LOS F during the morning peak.
- The Brainard Ave./Kilbourne St. intersection currently operates currently operates at LOS F during both the morning peak and during the afternoon peak.
- The Lane Ave./15th St. intersection currently operates at LOS E during both the morning peak and the afternoon peak.
- The Lane Ave./25th St. intersection currently operates at LOS F during the afternoon peak.

- The Lane Ave./Rice Rd. intersection currently operates at LOS F during both the morning peak and the afternoon peak.
- The North Range Rd./Ave. of the States intersection currently operates at LOS F during both the morning peak and the afternoon peak.
- The US Highway 1 Southbound/Ave. of the States intersection currently operates at LOS E during the afternoon peak.

CHAPTER 4
BASELINE CONDITIONS

4.1 DEVELOPMENT OF THE BASELINE CONDITION

As discussed above, existing traffic data was collected in July and August 2012. However, the Proposed Action is expected to be constructed and operational by the year 2016. In order to evaluate the traffic effects of the Proposed Action under year 2016 conditions, a future year baseline traffic scenario was developed. This scenario includes traffic growth associated with present and reasonably foreseeable future projects. Traffic growth resulting from present and reasonably foreseeable future projects was determined for Fort Meade and Fort Gordon as follows:

- *Fort Meade:* the baseline condition assumes traffic growth consistent with the year 2015 evaluated in the Campus Development EIS (NSA 2010). This condition includes substantial traffic growth from both the Campus Development and reasonably foreseeable future projects within and adjacent to Fort Meade that were also evaluated in this EIS.
- *Fort Gordon:* a conservative growth factor of 3 percent per year for four years was assumed to reflect this growth. This growth factor was uniformly applied to the existing 2012 traffic counts.

The baseline condition also incorporates specific transportation improvements, consistent with recent NEPA documentation or projects under construction. Improvements that are anticipated to be in place under baseline conditions at Fort Meade were identified based on the year 2015 recommended improvements contained in Figure 4.2-9 of the Campus Development EIS. Specifically, the following improvements were assumed:

- Mapes Rd./O'Brien Rd.: add one eastbound and one westbound through lane.
- Mapes Rd./Taylor Ave.: add one eastbound and one westbound through lane.
- Mapes Rd./Cooper Ave.: add one northbound left turn lane, one eastbound through lane, and one westbound through lane.
- Mapes Rd./Ernie Pyle St.: add one eastbound through lane, one eastbound right turn lane, one westbound left turn lane, one westbound through lane, one northbound left turn lane, and one northbound right turn lane.
- Llewellyn Ave./Annapolis Rd.: add one northbound right turn lane.
- Mapes Rd./Annapolis Rd.: add one eastbound left turn lane, one eastbound right turn lane, one westbound right turn lane, one northbound left turn lane, one northbound right turn lane, one southbound through lane and one southbound right turn lane.
- Reece Rd./Annapolis Rd.: add one eastbound left turn lane, one westbound left turn lane, two westbound right turn lanes, one northbound through lane, one northbound right turn lane, one southbound left turn lane, one southbound through lane, and one southbound right turn lane.
- Rockenbach Rd./Annapolis Rd.: add one eastbound left turn lane, one eastbound right turn lane, one westbound left turn lane, one westbound through lane, one northbound left turn lane, one northbound through lane, one northbound right turn lane, one southbound left turn lane, one southbound through lane, and one southbound right turn lane.

Information from the Fort Gordon Department of Public Works staff indicated that construction is underway on the following improvement:

- Lane Ave./Ave. of the States: reconstruct the intersection to provide a multi-lane, three-leg roundabout with a eastbound to southbound bypass lane.

Each of the above improvements was assumed to be in place as part of the baseline condition.

4.2 TRAFFIC VOLUMES

Figures 4-1 and 4-2 displays the baseline peak hour traffic volumes at intersections within the defined ROI for Fort Meade and Fort Gordon, respectively.

4.3 INTERSECTION ANALYSIS

Tables 4-1 and 4-2 displays the LOS analysis results for ROI intersections under baseline conditions for Fort Meade and Fort Gordon respectively. Refer to Attachment 5 for Fort Meade intersection worksheets and to Attachment 6 for Fort Gordon intersection worksheets.

As shown in Table 4-1, intersections that experienced deterioration in LOS due to cumulative traffic growth at Fort Meade are listed below.

- The MD 32 Eastbound/Laurel Ft. Meade Rd. roundabout degraded from LOS C to LOS F during the morning peak and from LOS D to LOS F during the afternoon peak.
- The Mapes Rd./6th Armored Cavalry Rd. intersection degraded from LOS D to LOS F during the morning peak.
- The Mapes Rd./Zimborski Ave. intersection degraded from LOS C to LOS E during the afternoon peak.
- The Mapes Rd./Taylor Ave. intersection degraded from LOS B to LOS F during the afternoon peak.
- The Mapes Rd./Ernie Pyle St. intersection degraded from LOS C to LOS F during the afternoon peak.
- The Rockenbach Rd./O'Brien Rd. intersection degraded from LOS B to LOS E during the morning peak.

As indicated in Table 4-2, the addition of estimated traffic growth from existing conditions to 2016 would cause LOS of several intersections at Fort Gordon to degrade to LOS E or F as follows:

- The Gordon Highway/19th St. intersection degraded from LOS D to LOS E during the morning peak.
- The 13th St./19th St. intersection degraded from LOS D to LOS F during the morning peak.
- The Chamberlain Ave./25th St. intersection degraded from LOS C to LOS E during the afternoon peak.
- The Lane Ave./19th St. intersection degraded from LOS D to LOS E during the afternoon peak.
- The US Highway 1 Northbound/Tobacco Rd. intersection degraded from LOS D to LOS E for both the morning peak and the afternoon peak.

In general, LOS results under baseline conditions are consistent with projected year 2015 conditions analyzed in the 2011 Transportation Plan (Fort Gordon 2011).

Figure 4-1
Baseline Traffic Volumes, Fort Meade

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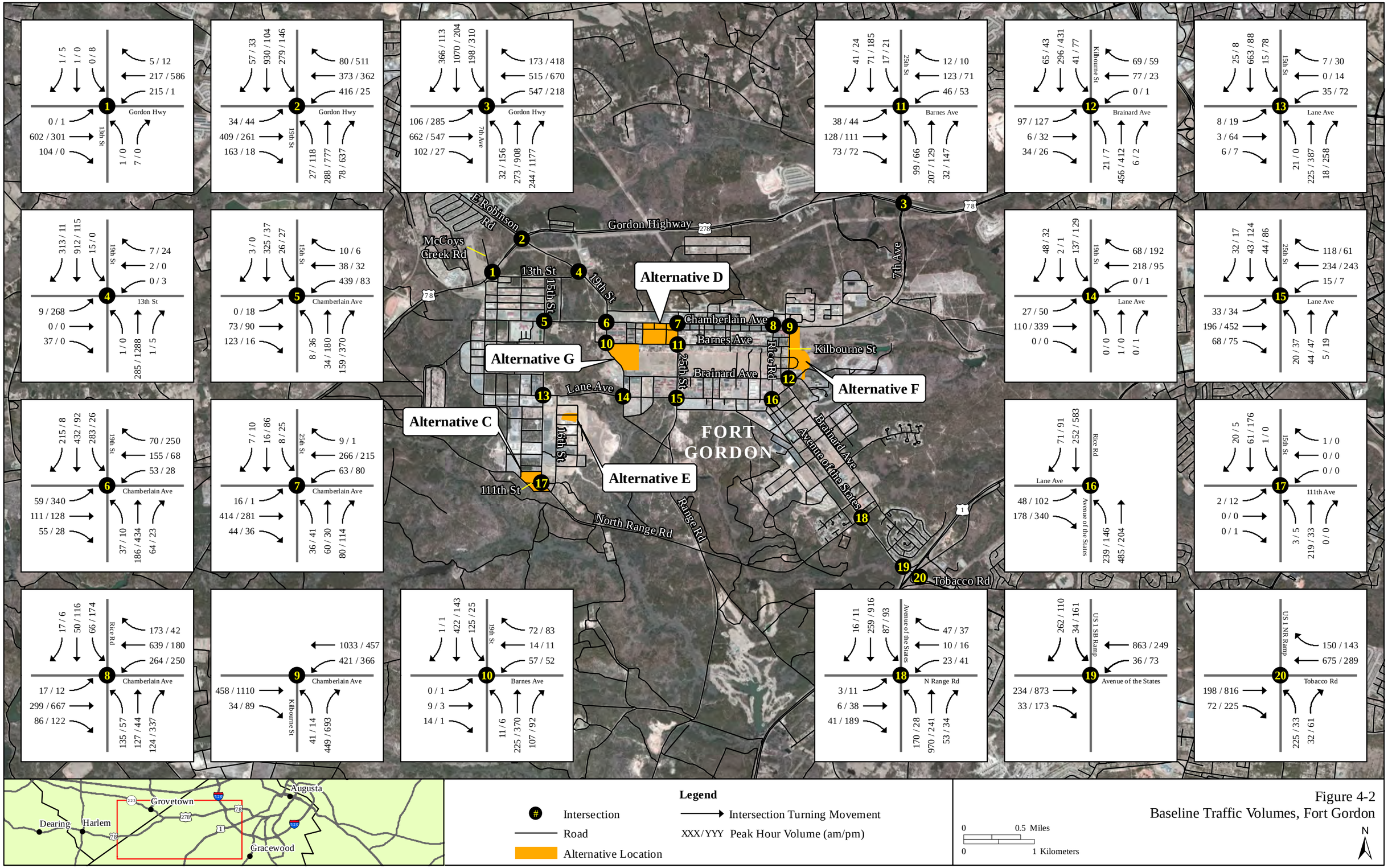

Figure 4-2
Baseline Traffic Volumes, Fort Gordon

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Table 4-1. Intersection Level of Service Summary, Baseline Conditions (Fort Meade)

	Intersection	Traffic Control	Peak Hour	LOS (a)
1	MD 32 Eastbound/Laurel Ft. Meade Rd.	Roundabout	AM	**F**
			PM	**F**
2	MD 32 Westbound/Mapes Rd.	Roundabout	AM	**F**
			PM	**F**
3	Mapes Rd./O'Brien Rd.	Signal	AM	C
			PM	C
4	Mapes Rd./6th Armored Cavalry Rd.	Two-Way Stop	AM	**F**
			PM	D
5	Mapes Rd./Zimborski Ave.	Two-Way Stop	AM	**F**
			PM	**E**
6	Mapes Rd./Taylor Ave.	Signal	AM	C
			PM	**F**
7	Mapes Rd./Cooper Ave.	Signal	AM	D
			PM	C
8	Mapes Rd./Ernie Pyle St.	Signal	AM	B
			PM	**F**
9	Llewellyn Ave./Annapolis Rd.	Signal	AM	**F**
			PM	**F**
10	Mapes Rd./Annapolis Rd.	Signal	AM	**E**
			PM	D
11	Reece Rd./Annapolis Rd.	Signal	AM	D
			PM	D
12	Rockenbach Rd./Annapolis Rd.	Signal	AM	**F**
			PM	**F**
13	Reece Rd./Cooper Ave.	Signal	AM	C
			PM	D
14	Rockenbach Rd./Cooper Ave.	Signal	AM	D
			PM	C
15	Rockenbach Rd./29th Division Blvd.	Two-Way Stop	AM	C
			PM	D
16	Rockenbach Rd./O'Brien Rd.	Two-Way Stop	AM	**E**
			PM	D

Notes: **Bold values indicate intersections operating at LOS E or F.**
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service.

Table 4-2. Intersection Level of Service Summary, Baseline Conditions (Fort Gordon)

	Intersection	Traffic Control	Peak Hour	LOS (a)
1	Gordon Highway/13th St.	Two-Way Stop	AM	**F**
			PM	D
2	Gordon Highway/19th St.	Signal	AM	**E**
			PM	**F**
3	Gordon Highway/7th Ave.	Signal	AM	D
			PM	**F**
4	13th St./19th St.	Two-Way Stop	AM	**F**
			PM	**F**
5	Chamberlain Ave./15th St.	Two-Way Stop	AM	**F**
			PM	**F**
6	Chamberlain Ave./19th St.	Signal	AM	D
			PM	**F**
7	Chamberlain Ave./25th St.	Two-Way Stop	AM	C
			PM	**E**
8	Chamberlain Ave./Rice Rd.	Signal	AM	B
			PM	D
9	Chamberlain Ave./Kilbourne St.	One-Way Stop	AM	**F**
			PM	**F**
10	Barnes Ave./19th St.	Two-Way Stop	AM	**F**
			PM	C
11	Barnes Ave./25th St.	All-Way Stop	AM	D
			PM	C
12	Brainard Ave./Kilbourne St.	One-Way Stop	AM	**F**
			PM	**F**
13	Lane Ave./15th St.	All-Way Stop	AM	**E**
			PM	**E**
14	Lane Ave./19th St.	Two-Way Stop	AM	C
			PM	**E**
15	Lane Ave./25th St	Two-Way Stop	AM	D
			PM	**F**
16	Lane Ave./Rice Rd.	Roundabout	AM	A
			PM	A
17	North Range Rd./111th St.	Two-Way Stop	AM	A
			PM	B
18	North Range Rd./Ave. of the States	Two-Way Stop	AM	**F**
			PM	**F**
19	US Highway 1 Southbound/Ave. of the States	One-Way Stop	AM	D
			PM	**F**

	Intersection	Traffic Control	Peak Hour	LOS (a)
20	US Highway 1 Northbound/Tobacco Rd.	One-Way Stop	AM	**E**
			PM	**E**

Notes: **Bold values indicate intersections operating at LOS E or F.**
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

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CHAPTER 5
BASELINE PLUS ALTERNATIVE A CONDITIONS

5.1 TRAFFIC VOLUMES

5.1.1 Traffic Generation

Daily and peak hour traffic generation was estimated using trip generation rates published in *Trip Generation, 8th Edition: An ITE Informational Report* (Institute of Transportation Engineers [ITE] 2008). Consistent with the Campus Development EIS (NSA 2010), trip generation is estimated based on the maximum employee count (i.e., 1,500 employees) using the ITE trip rates for land use code 715, single-tenant office. Refer to Table 5-1 for the Proposed Action's traffic generation. As shown in this table, Alternative A's total traffic generation was reduced by 5 percent to reflect a shift from passenger cars to public transit anticipated as the result of planned transit improvements (NSA 2010).

5.1.2 Traffic Distribution

Fort Meade's Alternative A traffic was then added to existing intersections in accordance with a distribution pattern that was developed based on the location of Fort Meade's access gates, existing traffic volumes, and likely travel routes between the gates and Alternative A. This distribution pattern is consistent with the distribution provided in the Campus Development EIS. Figure 5-1 presents the distribution patterns by movement at each ROI intersection.

5.1.3 Traffic Assignment

Figure 5-2 depicts the assignment of trips from the Proposed Action to the intersections that comprise the ROI. This volume was calculated by applying the percentages shown in Figure 5-1 to the net trip generation shown in Table 5-1. Combined peak hour volumes for the baseline plus Alternative A traffic scenario are presented in Figure 5-3. These volumes were calculated by adding the assignment of project traffic (Figure 5-1) to baseline traffic volumes (refer to Figure 4-1).

Table 5-1. ARCYBER Traffic Generation

Land Use	Number of Employees	Trip Rate [a]	Daily Trips	AM Peak Hour					PM Peak Hour				
				% of Daily [a]	In : Out Ratio [a]	In	Out	Total	% of Daily [a]	In : Out Ratio [a]	In	Out	Total
Proposed Land Use													
ARCYBER Facility	1,500	3.62 / employee	5,430	14.6%	0.89 : 0.11	708	87	795	13.8%	0.15 : 0.85	113	638	750
Alternative Mode Reduction (5%) [b]			272			35	4	40			6	32	38
Fort Meade (Alternative A) Trip Generation [c]			**5,159**			**672**	**83**	**755**			**107**	**606**	**713**
Fort Gordon (Alternatives C - G) Trip Generation			**5,430**			**708**	**87**	**795**			**113**	**638**	**750**

Notes: [a] Daily and peak hour trip generation rates and inbound/outbound directional splits were taken from ITE *Trip Generation Manual, Eighth Edition: An ITE Informational Report* for Land Use Code 715, Single-Tenant Office.
[b] Vehicular trip reduction ***(at Fort Meade only)*** anticipated due to planned transit improvements (NSA 2010).
[c] Proposed Land Uses Minus Alternative Mode Reduction.

Figure 5-1
Alternative A Trip Distribution, Fort Meade

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Figure 5-2
Alternative A Traffic Assignment, Fort Meade

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Figure 5-3
Baseline Plus Alternative A Traffic Volumes, Fort Meade

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5.2 CAPACITY ANALYSIS

5.2.1 Intersection Analysis

Table 5-2 summarizes the LOS analysis results for ROI intersections under baseline plus Alternative A conditions. Attachment 5 contains the intersection LOS calculation worksheets.

Table 5-2. Intersection Level of Service and Effects Summary, Alternative A (Fort Meade)

	Intersection	Peak Hour	Baseline	With Alt. A	Substantial Effect?	Alt. A with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
1	MD 32 Eastbound/Laurel Ft. Meade Rd.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
2	MD 32 Westbound/Mapes Rd.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
3	Mapes Rd./O'Brien Rd.	AM	C	C	NO	-	-
		PM	C	C	NO	-	-
4	Mapes Rd./6th Armored Cavalry Rd.	AM	**F**	**F**	NO	-	-
		PM	D	**F**	**YES**	B	NO
5	Mapes Rd./Zimborski Ave.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
6	Mapes Rd./Taylor Ave.	AM	C	D	NO	-	-
		PM	**F**	**F**	NO	-	-
7	Mapes Rd./Cooper Ave.	AM	D	D	NO	-	-
		PM	C	C	NO	-	-
8	Mapes Rd./Ernie Pyle St.	AM	B	C	NO	-	-
		PM	**F**	**F**	NO	-	-
9	Llewellyn Ave./Annapolis Rd.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
10	Mapes Rd./Annapolis Rd.	AM	**E**	**E**	NO	-	-
		PM	D	D	NO	-	-
11	Reece Rd./Annapolis Rd.	AM	D	D	NO	-	-
		PM	D	D	NO	-	-
12	Rockenbach Rd./Annapolis Rd.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
13	Reece Rd./Cooper Ave.	AM	C	D	NO	-	-
		PM	D	**E**	**YES**	C	NO
14	Rockenbach Rd./Cooper Ave.	AM	D	D	NO	-	-
		PM	C	C	NO	-	-
15	Rockenbach Rd./29th Division Blvd.	AM	C	B	NO	-	-
		PM	D	D	NO	-	-

	Intersection	Peak Hour	Baseline	With Alt. A	Substantial Effect?	Alt. A with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
16	Rockenbach Rd./O'Brien Rd.	AM	**E**	**F**	NO	-	-
		PM	D	D	NO	-	-

Notes: **Bold** values indicate intersections operating at LOS E or F.
Bold and shaded values indicate substantial project effect.
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

As indicated in this table, implementation of Alternative A would result in a substantial traffic effect at the following locations:

- Mapes Rd./6th Armored Cavalry Rd.
- Reece Rd./Cooper Ave.

As indicated in the rightmost column of this table, specific physical improvements will reduce Alternative A's effect to a less than substantial level. Refer to Chapter 12 for a description of these and other mitigation, avoidance, and/or minimization measures.

CHAPTER 6
BASELINE PLUS ALTERNATIVE C CONDITIONS

6.1 TRAFFIC VOLUMES

6.1.1 Traffic Generation

Fort Gordon's Alternative C traffic generation is generally consistent with that described for Alternative A in Chapter 5 of this Traffic Study. The sole difference is that no adjustment was made to reflect planned transit improvements, as those improvements would be implemented only at Fort Meade. Accordingly, this action alternative's trip generation would be 5 percent higher than Alternative A because no credit for diversion of trips to public transit has been taken. Refer to Table 5-1 for the traffic generation characteristics of Alternative C.

6.1.2 Traffic Distribution

Fort Gordon's Alternative C traffic was added to existing intersections in accordance with a distribution pattern that was developed based on the location of Alternative C, Fort Gordon gate locations, existing traffic volumes, and likely travel routes between the gates and Alternative C. Figure 6-1 presents the distribution patterns by movement at each ROI intersection.

6.1.3 Traffic Assignment

Figure 6-2 depicts the assignment of trips from the Proposed Action to the intersections that comprise the ROI. This volume was calculated by applying the percentages shown in Figure 6-1 to the total traffic generation (i.e., with no transit adjustment) shown on Table 5-1. Combined peak hour volumes for the baseline plus Alternative C traffic scenario are presented in Figure 6-3. These volumes were calculated by adding the assignment of project traffic (Figure 6-1) to baseline traffic volumes (refer to Figure 4-2).

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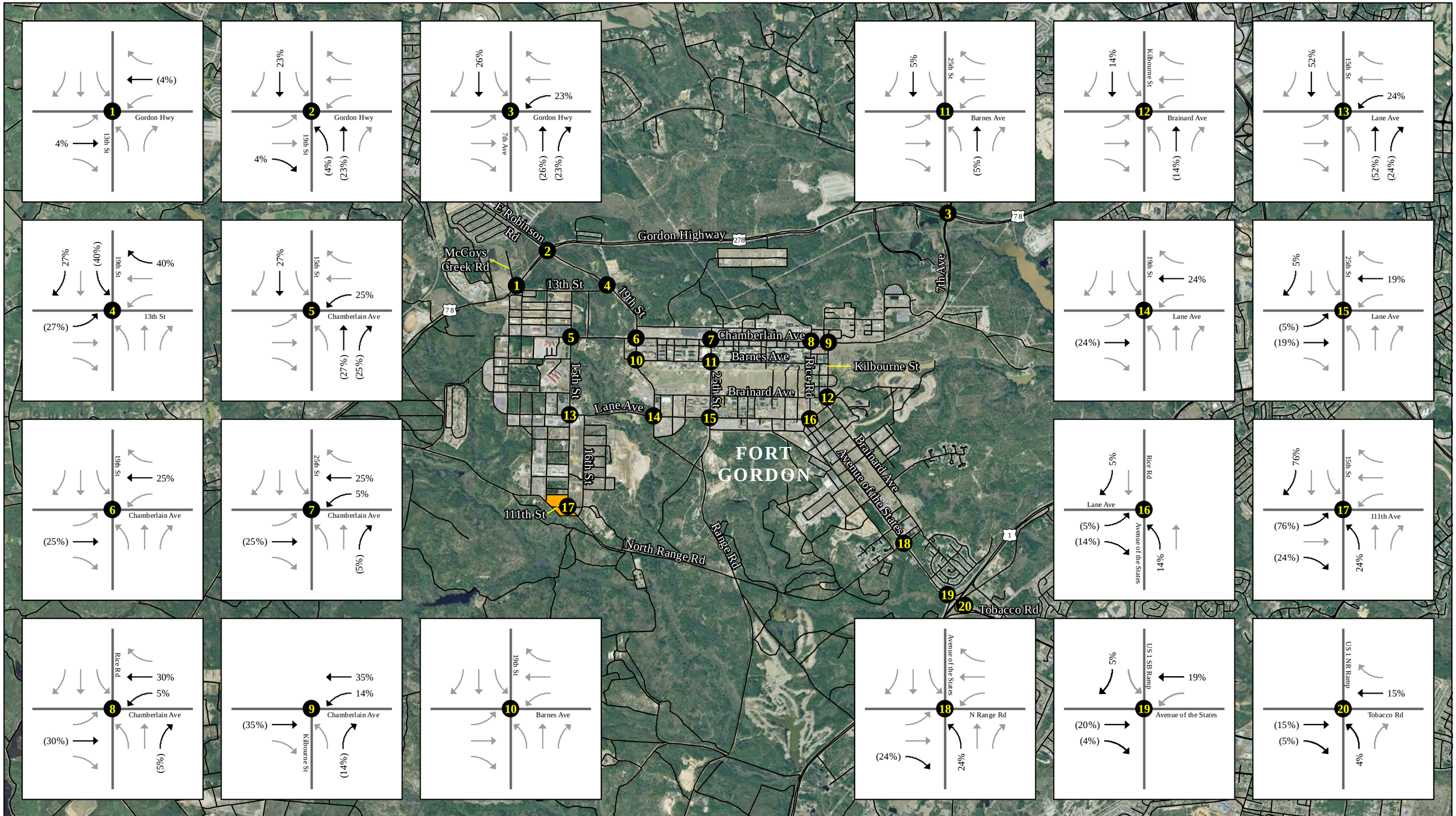

Figure 6-1
Alternative C Trip Distribution, Fort Gordon

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Figure 6-2
Alternative C Traffic Assignment, Fort Gordon

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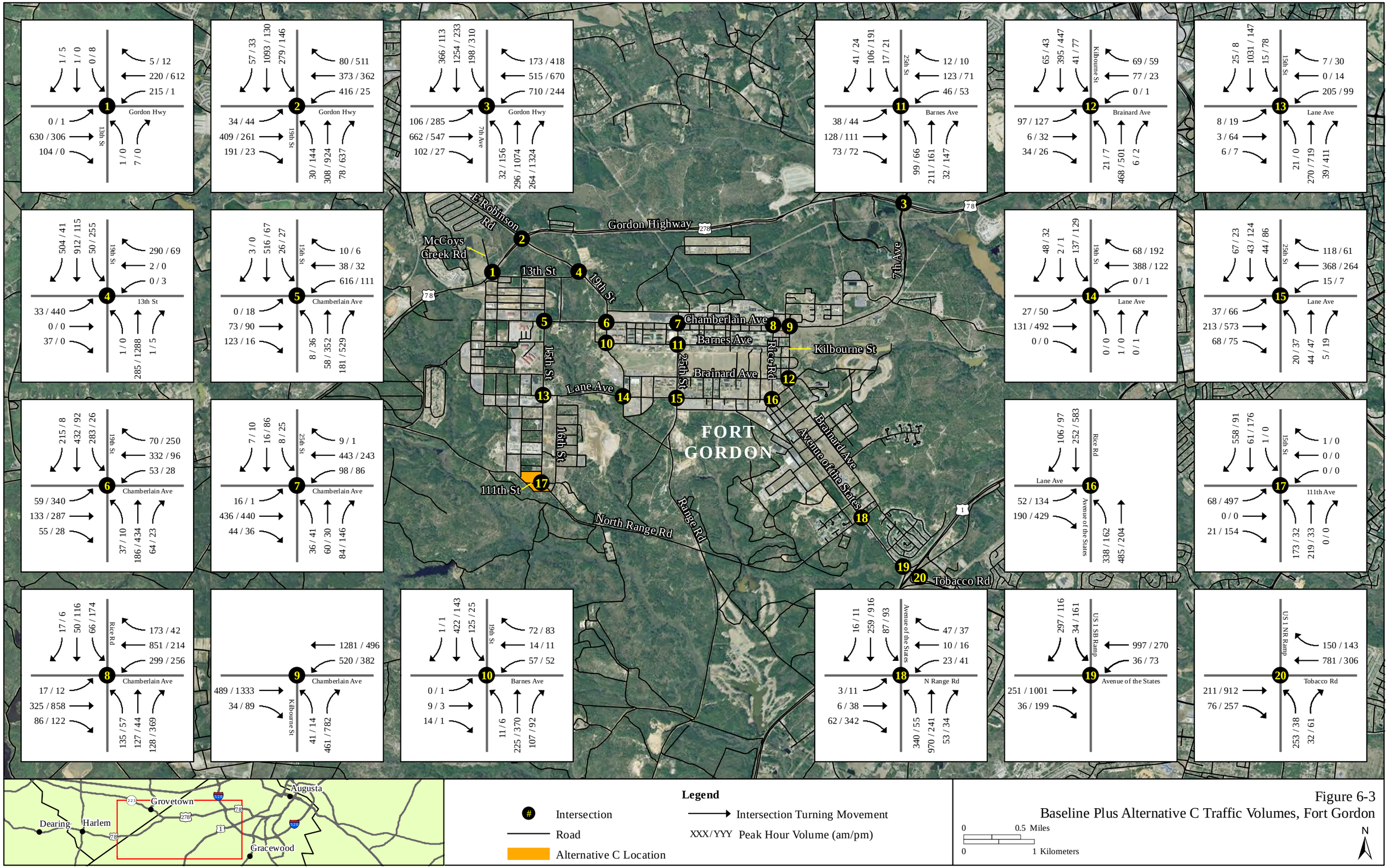

Figure 6-3
Baseline Plus Alternative C Traffic Volumes, Fort Gordon

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6.2 CAPACITY ANALYSIS

6.2.1 Intersection Analysis

Table 6-1 summarizes the LOS analysis results for ROI intersections under baseline plus Alternative C conditions. Attachment 6 contains the intersection LOS calculation worksheets.

Table 6-1. Intersection Level of Service and Effects Summary, Alternative C (Fort Gordon)

	Intersection	Peak Hour	Baseline	With Alt. C	Substantial Effect?	Alt. C with Mitigation	Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
1	Gordon Highway/13th St.	AM	**F**	**F**	NO	-	-
		PM	D	D	NO	-	-
2	Gordon Highway/19th St.	AM	**E**	**E**	NO	-	-
		PM	**F**	**F**	NO	-	-
3	Gordon Highway/7th Ave.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
4	13th St./19th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
5	Chamberlain Ave./15th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
6	Chamberlain Ave./19th St.	AM	D	**E**	**YES**	C	NO
		PM	**F**	**F**	NO	-	-
7	Chamberlain Ave./25th St.	AM	C	D	NO	-	-
		PM	**E**	**E**	NO	-	-
8	Chamberlain Ave./Rice Rd.	AM	B	B	NO	-	-
		PM	D	D	NO	-	-
9	Chamberlain Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
10	Barnes Ave./19th St.	AM	**F**	**F**	NO	-	-
		PM	C	C	NO	-	-
11	Barnes Ave./25th St.	AM	D	D	NO	-	-
		PM	C	D	NO	-	-
12	Brainard Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
13	Lane Ave./15th St.	AM	**E**	**F**	NO	-	-
		PM	**E**	**E**	NO	-	-
14	Lane Ave./19th St.	AM	C	**F**	**YES**	B	NO
		PM	**E**	**F**	NO	-	-
15	Lane Ave./25th St	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
16	Lane Ave./Rice Rd.	AM	A	A	NO	-	-
		PM	A	A	NO	-	-

	Intersection	Peak Hour	Baseline	With Alt. C	Substantial Effect?	Alt. C with Mitigation	Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
17	North Range Rd./111th St.	AM	A	**F**	**YES**	A	NO
		PM	B	**F**	**YES**	A	NO
18	North Range Rd./Ave. of the States	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
19	US Highway 1 Southbound/Ave. of the States	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
20	US Highway 1 Northbound/Tobacco Rd.	AM	**E**	**F**	NO	-	-
		PM	**E**	**E**	NO	-	-

Notes: **Bold** values indicate intersections operating at LOS E or F.
Bold and shaded values indicate substantial project effect.
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

As indicated in this table, implementation of Alternative C would result in substantial traffic effects at the following locations:

- Chamberlain Ave./19th St.
- Lane Ave./19th St.
- Lane Ave./25th St.
- North Range Rd./111th St.
- US Highway 1 Southbound/Ave. of the States

As indicated in the rightmost column of this table, specific physical improvements will reduce Alternative C's effect to a less than substantial level. Refer to Chapter 12 for a description of these and other mitigation, avoidance, and/or minimization measures.

CHAPTER 7
BASELINE PLUS ALTERNATIVE D CONDITIONS

7.1 TRAFFIC VOLUMES

7.1.1 Traffic Generation

As is the case for Alternative C, Fort Gordon's Alternative D traffic generation is generally consistent with that described for Alternative A in Chapter 5 of this Traffic Study. The only difference in terms of traffic generation is that no transit credit is applied to the traffic generation for Alternative C. Refer to Table 5-1 for the traffic generation characteristics of Alternative D.

7.1.2 Traffic Distribution

Fort Gordon's Alternative D traffic was then added to existing intersections in accordance with a distribution pattern that was developed based on the location of Alternative D, Fort Gordon gate locations, existing traffic volumes, and likely travel routes between the gates and Alternative D. Figure 7-1 presents the distribution patterns by movement at each ROI intersection.

7.1.3 Traffic Assignment

Figure 7-2 depicts the assignment of trips from the Proposed Action to the intersections that comprise the ROI. This volume was calculated by applying the percentages shown in Figure 7-1 to the total traffic generation (i.e., with no transit adjustment) shown on Table 5-1. Combined peak hour volumes for the baseline plus Alternative D traffic scenario are presented in Figure 7-3. These volumes were calculated by adding the assignment of project traffic (Figure 7-1) to baseline traffic volumes (refer to Figure 4-2).

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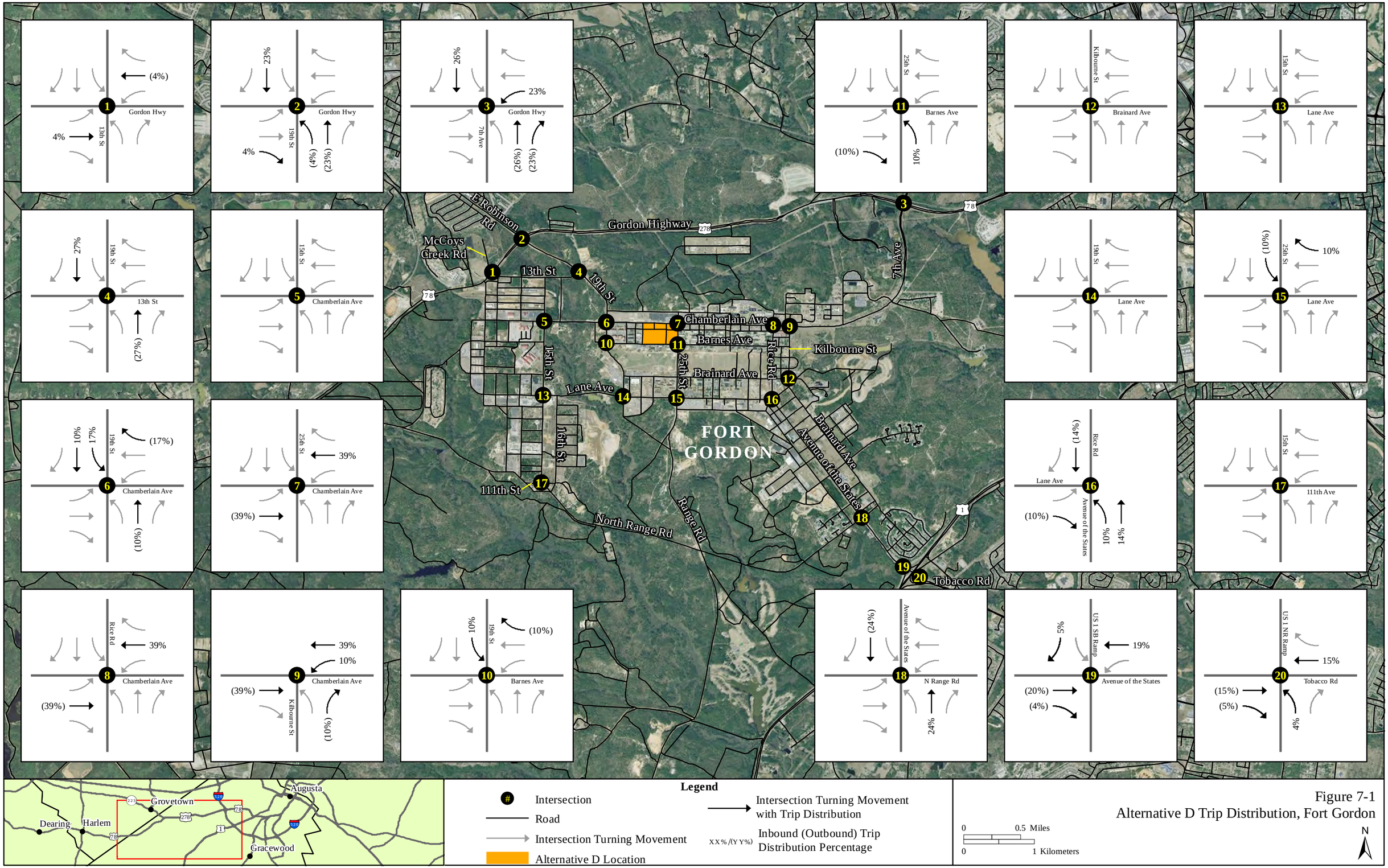

Figure 7-1
Alternative D Trip Distribution, Fort Gordon

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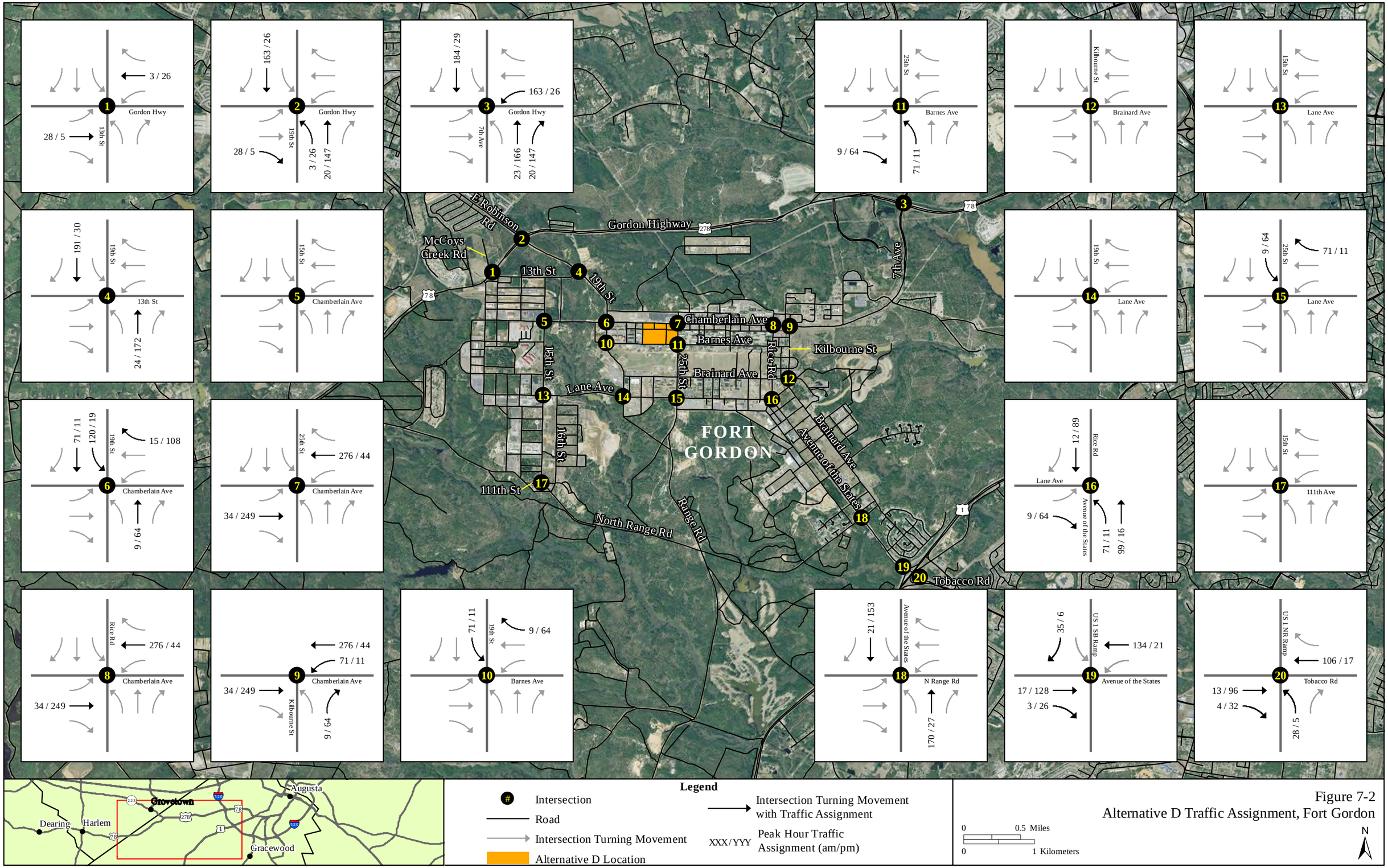

Figure 7-2
Alternative D Traffic Assignment, Fort Gordon

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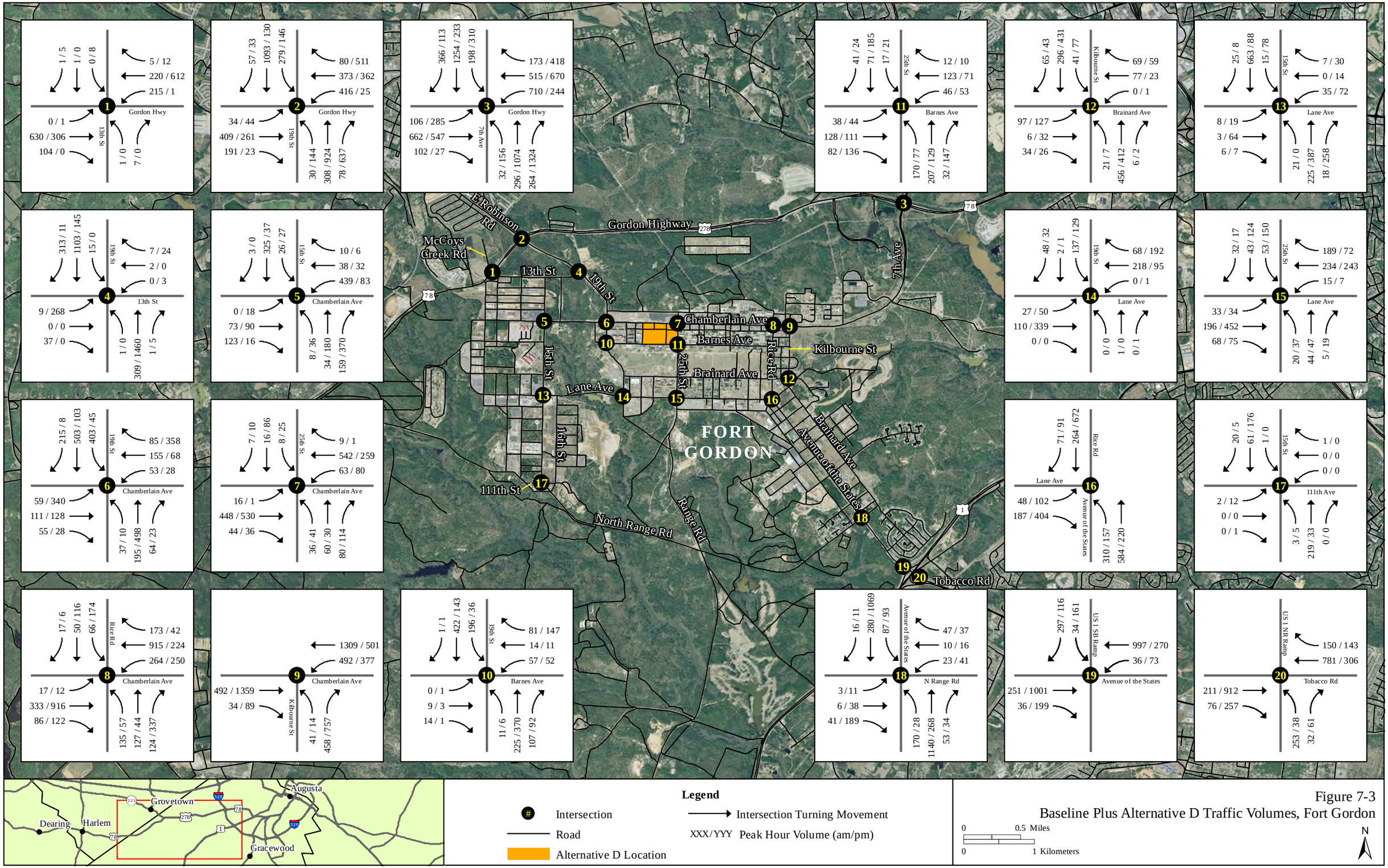

Figure 7-3
Baseline Plus Alternative D Traffic Volumes, Fort Gordon

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7.2 CAPACITY ANALYSIS

7.2.1 Intersection Analysis

Table 7-1 summarizes the LOS analysis results for ROI intersections under baseline plus Alternative D conditions. Attachment 6 contains the intersection LOS calculation worksheets.

Table 7-1. Intersection Level of Service and Effects Summary, Alternative D (Fort Gordon)

	Intersection	Peak Hour	Baseline	With Alt. D	Substantial Effect?	Alt. D with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
1	Gordon Highway/13th St.	AM	**F**	**F**	NO	-	-
		PM	D	D	NO	-	-
2	Gordon Highway/19th St.	AM	**E**	**E**	NO	-	-
		PM	**F**	**F**	NO	-	-
3	Gordon Highway/7th Ave.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
4	13th St./19th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
5	Chamberlain Ave./15th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
6	Chamberlain Ave./19th St.	AM	D	**E**	**YES**	D	NO
		PM	**F**	**F**	NO	-	-
7	Chamberlain Ave./25th St.	AM	C	D	NO	-	-
		PM	**E**	**E**	NO	-	-
8	Chamberlain Ave./Rice Rd.	AM	B	B	NO	-	-
		PM	D	D	NO	-	-
9	Chamberlain Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
10	Barnes Ave./19th St.	AM	**F**	**F**	NO	-	-
		PM	C	D	NO	-	-
11	Barnes Ave./25th St.	AM	D	**E**	**YES**	B	NO
		PM	C	D	NO	-	-
12	Brainard Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
13	Lane Ave./15th St.	AM	**E**	**E**	NO	-	-
		PM	**E**	**E**	NO	-	-
14	Lane Ave./19th St.	AM	C	C	NO	-	-
		PM	**E**	**E**	NO	-	-
15	Lane Ave./25th St	AM	D	**E**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
16	Lane Ave./Rice Rd.	AM	A	A	NO	-	-
		PM	A	A	NO	-	-

	Intersection	Peak Hour	Baseline	With Alt. D	Substantial Effect?	Alt. D with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
17	North Range Rd./111th St.	AM	A	A	NO	-	-
		PM	B	B	NO	-	-
18	North Range Rd./Ave. of the States	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
19	US Highway 1 Southbound/Ave. of the States	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
20	US Highway 1 Northbound/Tobacco Rd.	AM	**E**	**F**	NO	-	-
		PM	**E**	**F**	NO	-	-

Notes: **Bold** values indicate intersections operating at LOS E or F.
Bold and shaded values indicate substantial project effect.
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

As indicated in this table, implementation of Alternative D would result in substantial traffic effects at the following locations:

- Chamberlain Ave./19th St.
- Barnes Ave./25th St.
- Lane Ave./25th St.
- US Highway 1 Southbound/Ave. of the States

As indicated in the rightmost column of this table, specific physical improvements will reduce Alternative D's effect to a less than substantial level. Refer to Chapter 12 for a description of these and other mitigation, avoidance, and/or minimization measures.

CHAPTER 8
BASELINE PLUS ALTERNATIVE E CONDITIONS

8.1 TRAFFIC VOLUMES

8.1.1 Traffic Generation

As is the case for all Fort Gordon Alternatives, Fort Gordon's Alternative E's traffic generation is similar to Alternative A, the only difference being that no trip generation reduction for transit use is assumed. Refer to Table 5-1 for the traffic generation characteristics of Alternative E.

8.1.2 Traffic Distribution

Alternative E's traffic was then added to existing intersections in accordance with a distribution pattern that was developed considering the location of Alternative E, Fort Gordon gate locations, existing traffic volumes, and likely travel routes between the gates and Alternative E. Figure 8-1 presents the distribution patterns by movement at each ROI intersection.

8.1.3 Traffic Assignment

Figure 8-2 depicts the assignment of trips from the Proposed Action to the intersections that comprise the ROI. This volume was calculated by applying the percentages shown in Figure 8-1 to the total traffic generation (i.e., with no transit adjustment) shown on Table 5-1. Combined peak hour volumes for the baseline plus Alternative E traffic scenario are presented in Figure 8-3. These volumes were calculated by adding the assignment of project traffic (Figure 8-1) to baseline traffic volumes (refer to Figure 4-2).

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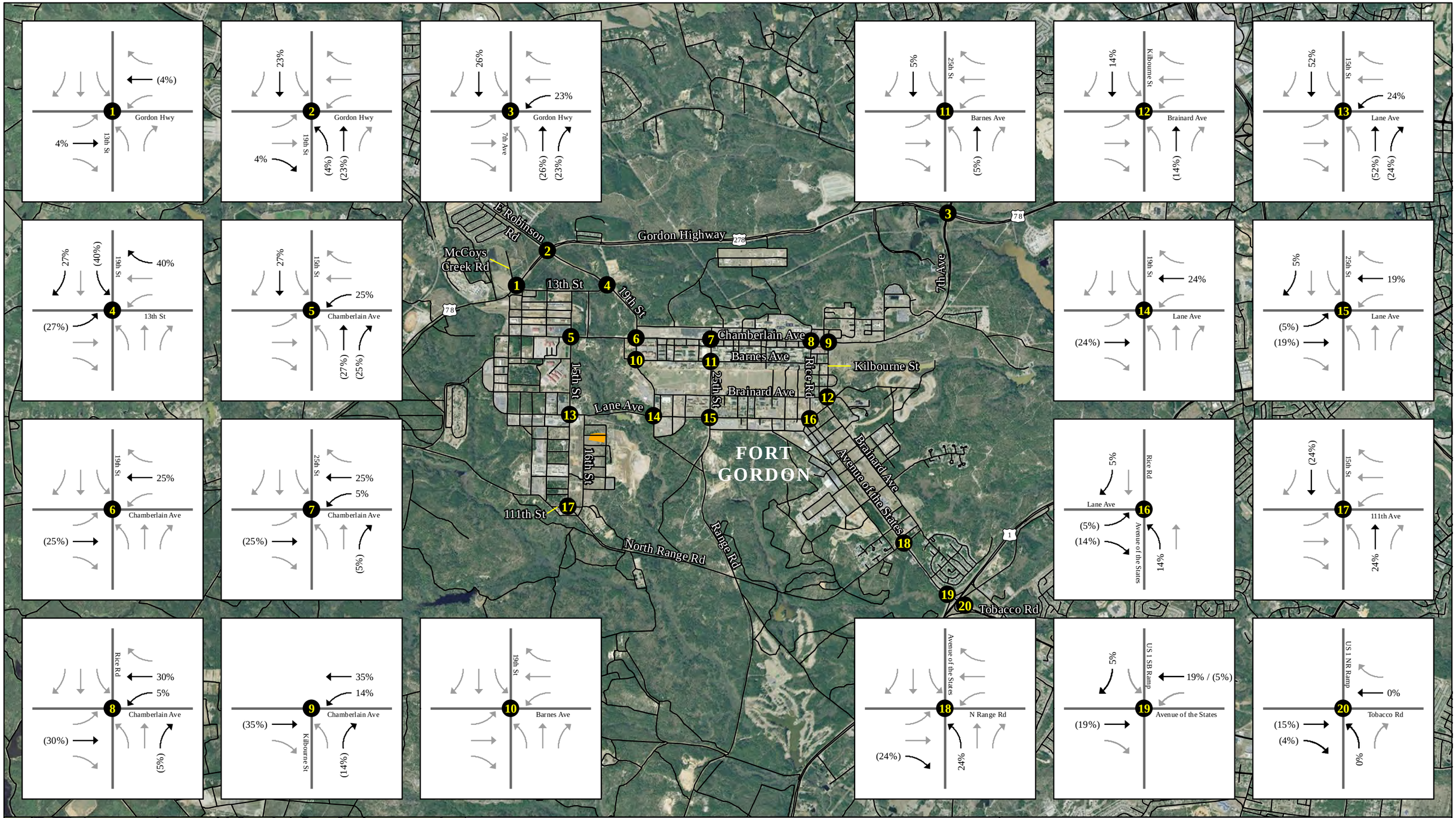

Figure 8-1
Alternative E Trip Distribution, Fort Gordon

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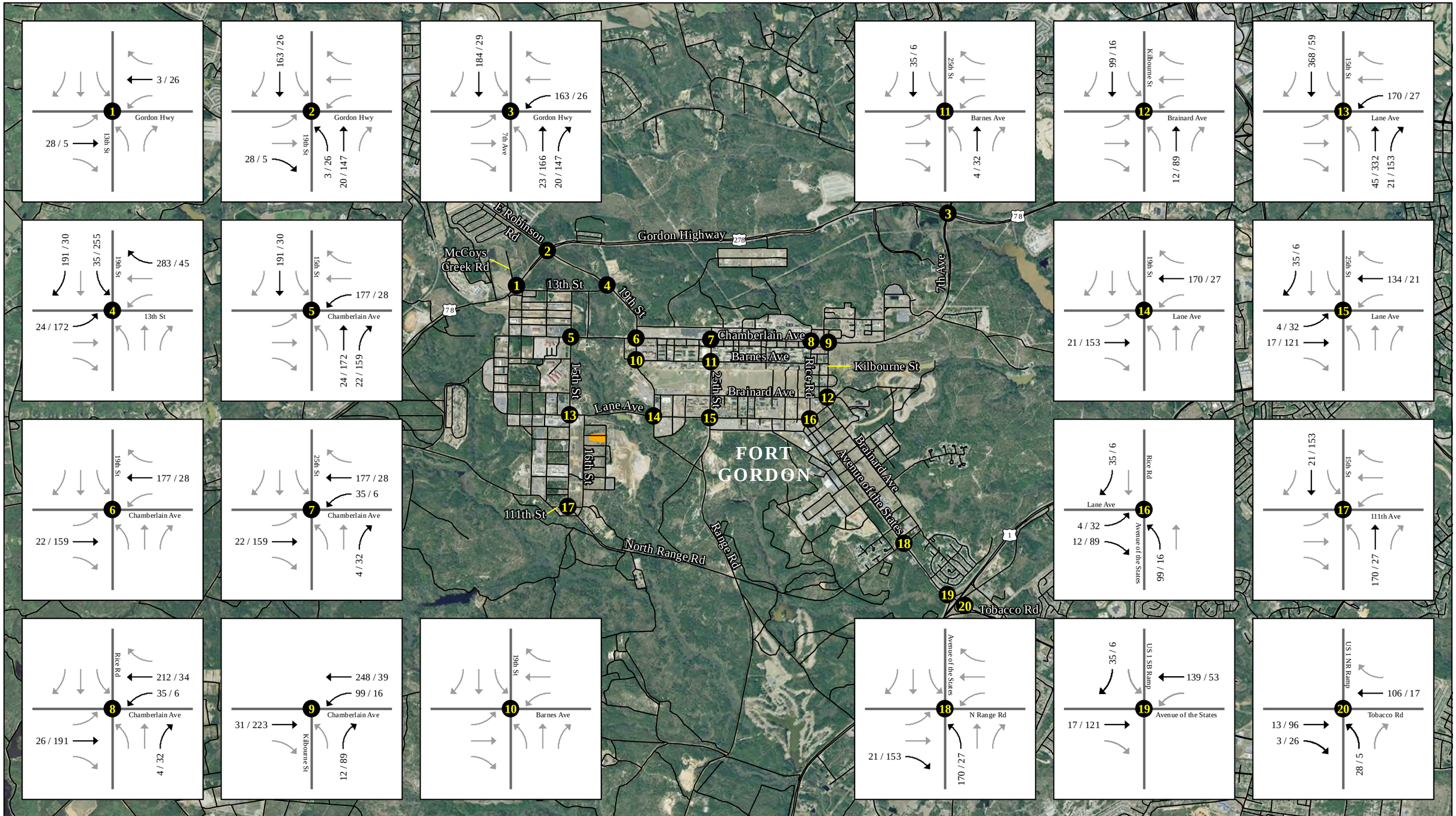

Figure 8-2
Alternative E Traffic Assignment, Fort Gordon

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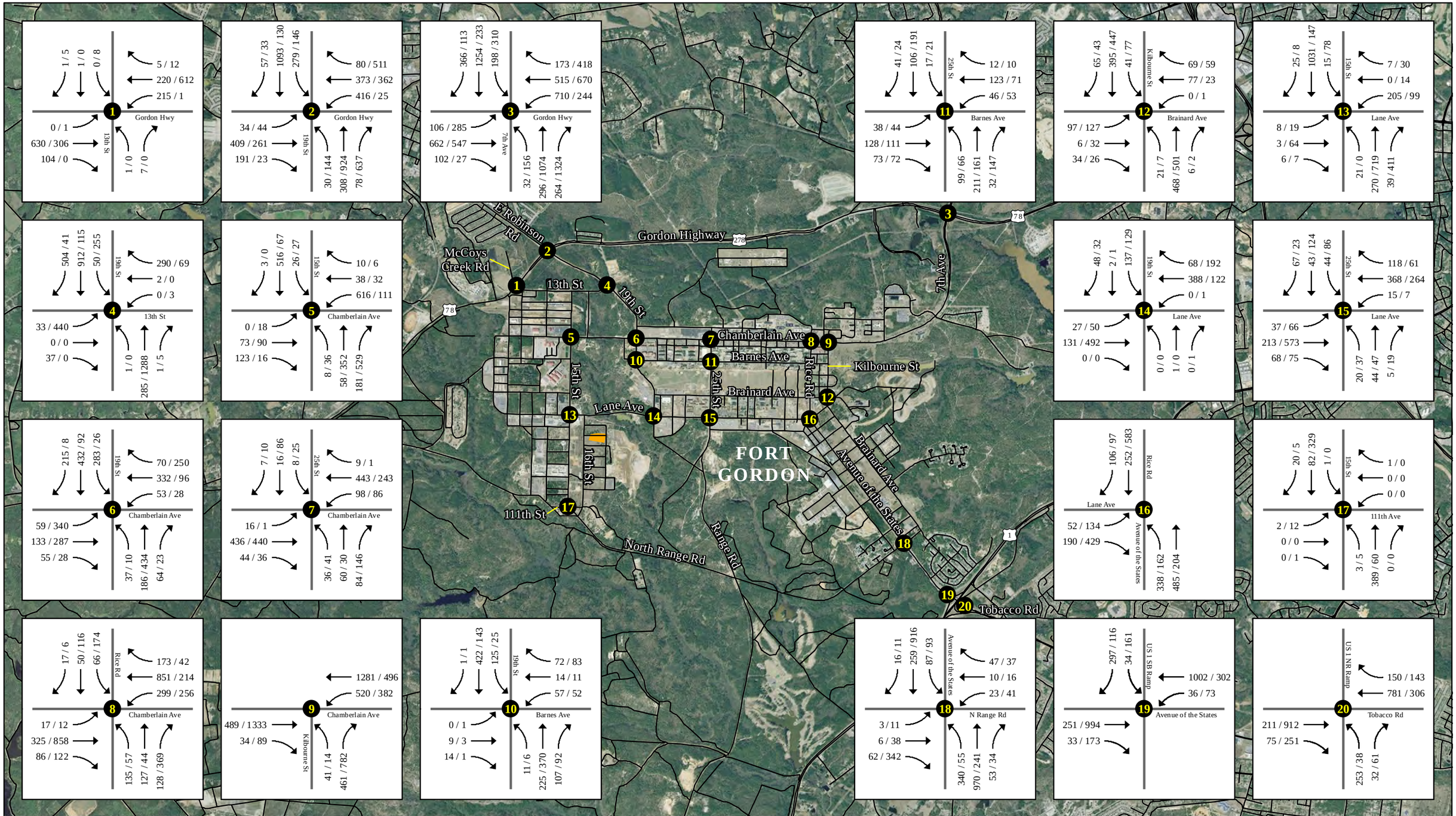

Figure 8-3
Baseline Plus Alternative E Traffic Volumes, Fort Gordon

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8.2 CAPACITY ANALYSIS

8.2.1 Intersection Analysis

Table 8-1 summarizes the LOS analysis results for ROI intersections under baseline plus Alternative E conditions. Attachment 6 contains the intersection LOS calculation worksheets.

Table 8-1. Intersection Level of Service and Effects Summary, Alternative E (Fort Gordon)

	Intersection	Peak Hour	Baseline	With Alt. E	Substantial Effect?	Alt. E with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
1	Gordon Highway/13th St.	AM	**F**	**F**	NO	-	-
		PM	D	D	NO	-	-
2	Gordon Highway/19th St.	AM	**E**	**E**	NO	-	-
		PM	**F**	**F**	NO	-	-
3	Gordon Highway/7th Ave.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
4	13th St./19th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
5	Chamberlain Ave./15th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
6	Chamberlain Ave./19th St.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
7	Chamberlain Ave./25th St.	AM	C	D	NO	-	-
		PM	**E**	**E**	NO	-	-
8	Chamberlain Ave./Rice Rd.	AM	B	B	NO	-	-
		PM	D	**E**	**YES**	D	NO
9	Chamberlain Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
10	Barnes Ave./19th St.	AM	**F**	**F**	NO	-	-
		PM	C	C	NO	-	-
11	Barnes Ave./25th St.	AM	D	D	NO	-	-
		PM	C	D	NO	-	-
12	Brainard Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
13	Lane Ave./15th St.	AM	**E**	**F**	NO	-	-
		PM	**E**	**E**	NO	-	-
14	Lane Ave./19th St.	AM	C	**F**	**YES**	A	NO
		PM	**E**	**F**	NO	-	-
15	Lane Ave./25th St	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
16	Lane Ave./Rice Rd.	AM	A	A	NO	-	-
		PM	A	A	NO	-	-

	Intersection	Peak Hour	Baseline	With Alt. E	Substantial Effect?	Alt. E with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
17	North Range Rd./111th St.	AM	A	**F**	**YES**	B	NO
		PM	B	B	NO	-	-
18	North Range Rd./Ave. of the States	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
19	US Highway 1 Southbound/Ave. of the States	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
20	US Highway 1 Northbound/Tobacco Rd.	AM	**E**	**F**	NO	-	-
		PM	**E**	**F**	NO	-	-

Notes: **Bold** values indicate intersections operating at LOS E or F.
Bold and shaded values indicate substantial project effect.
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

As indicated in this table, implementation of Alternative E would result in substantial traffic effects at the following locations:

- Chamberlain Ave./Rice Rd.
- Lane Ave./19th St.
- Lane Ave./25th St.
- North Range Rd./111th St.
- US Highway 1 Southbound/Ave. of the States

As indicated in the rightmost column of this table, specific physical improvements will reduce Alternative E's effect to a less than substantial level. Refer to Chapter 12 for a description of these and other mitigation, avoidance, and/or minimization measures.

CHAPTER 9
BASELINE PLUS ALTERNATIVE F CONDITIONS

9.1 TRAFFIC VOLUMES

9.1.1 Traffic Generation

As with the other Fort Gordon Alternatives, Fort Gordon's Alternative F traffic generation is similar to that of Alternative A, but no adjustment was made to the traffic generation to reflect a shift from passenger cars to public transit. Refer to Table 5-1 for the traffic generation characteristics of Alternative F.

9.1.2 Traffic Distribution

Fort Gordon's Alternative F peak hour traffic was added to existing intersections in accordance with a distribution pattern that was developed taking into account the location of Alternative F, Fort Gordon gate locations, existing traffic volumes, and likely travel routes between the gates and Alternative F. Figure 9-1 presents the distribution patterns by movement at each ROI intersection.

9.1.3 Traffic Assignment

Figure 9-2 depicts the assignment of trips from the Proposed Action to the intersections that comprise the ROI. This volume was calculated by applying the percentages shown in Figure 9-1 to the total traffic generation (i.e., with no transit adjustment) shown on Table 5-1. Combined peak hour volumes for the baseline plus Alternative F traffic scenario are presented in Figure 9-3. These volumes were calculated by adding the assignment of project traffic (Figure 9-1) to baseline traffic volumes (refer to Figure 4-2).

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Legend

- Intersection
- Road
- Intersection Turning Movement
- Alternative F Location
- Intersection Turning Movement with Trip Distribution
- XX%/(YY%) Inbound (Outbound) Trip Distribution Percentage

0 0.5 Miles
0 1 Kilometers

N

Figure 9-1
Alternative F Trip Distribution, Fort Gordon

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Figure 9-2
Alternative F Traffic Assignment, Fort Gordon

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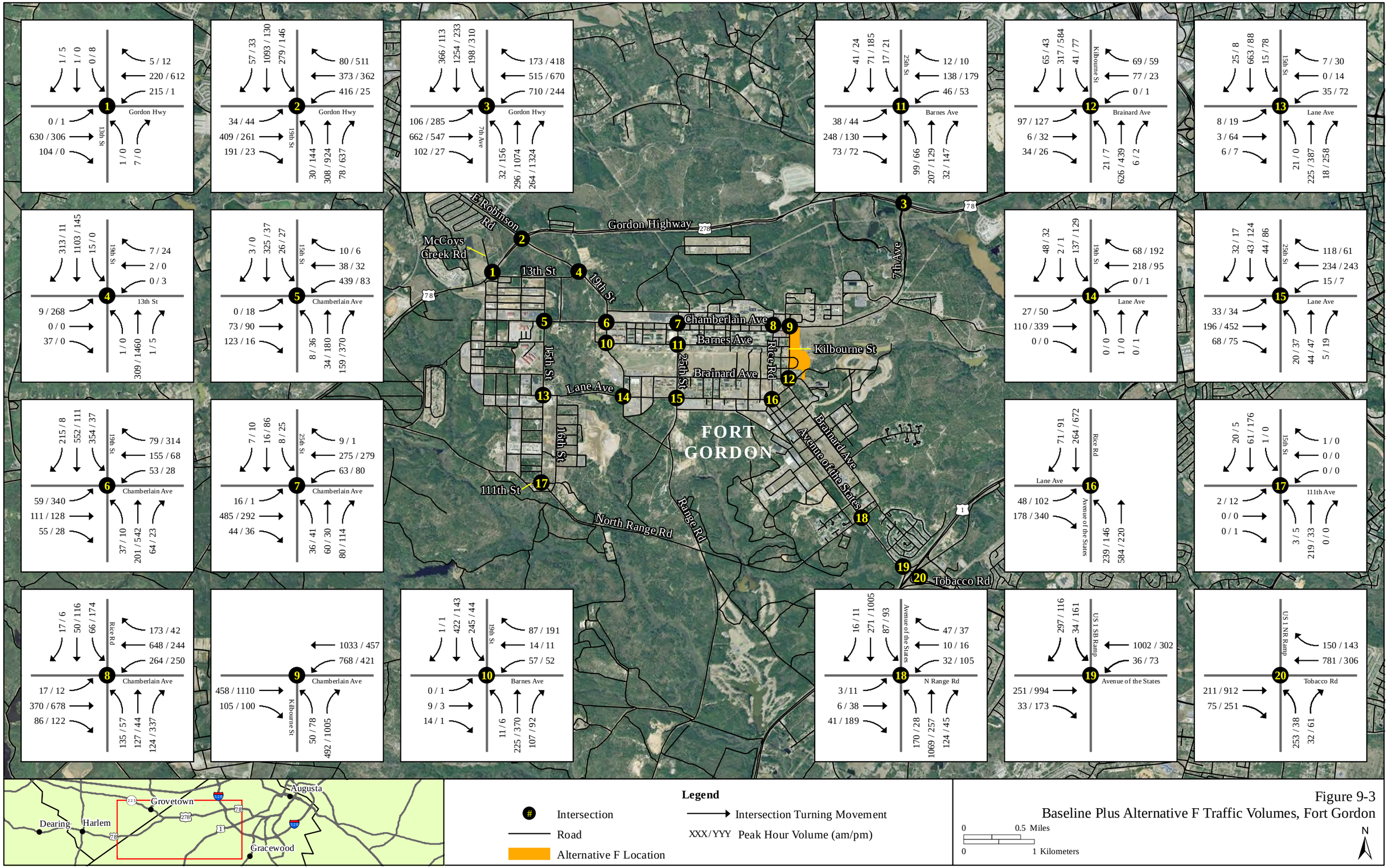

Figure 9-3
Baseline Plus Alternative F Traffic Volumes, Fort Gordon

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9.2 CAPACITY ANALYSIS

9.2.1 Intersection Analysis

Table 9-1 summarizes the LOS analysis results for ROI intersections under baseline plus Alternative F conditions. Attachment 6 contains the intersection LOS calculation worksheets.

Table 9-1. Intersection Level of Service and Effects Summary, Alternative F (Fort Gordon)

	Intersection	Peak Hour	Baseline	Alt. F	Substantial Effect?	Alt. F with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
1	Gordon Highway/13th St.	AM	**F**	**F**	NO	-	-
		PM	D	D	NO	-	-
2	Gordon Highway/19th St.	AM	**E**	**E**	NO	-	-
		PM	**F**	**F**	NO	-	-
3	Gordon Highway/7th Ave.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
4	13th St./19th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
5	Chamberlain Ave./15th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
6	Chamberlain Ave./19th St.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
7	Chamberlain Ave./25th St.	AM	C	D	NO	-	-
		PM	**E**	**E**	NO	-	-
8	Chamberlain Ave./Rice Rd.	AM	B	B	NO	-	-
		PM	D	D	NO	-	-
9	Chamberlain Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
10	Barnes Ave./19th St.	AM	**F**	**F**	NO	-	-
		PM	C	**E**	**YES**	D	NO
11	Barnes Ave./25th St.	AM	D	**F**	**YES**	B	NO
		PM	C	**E**	**YES**	A	NO
12	Brainard Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
13	Lane Ave./15th St.	AM	**E**	**E**	NO	-	-
		PM	**E**	**E**	NO	-	-
14	Lane Ave./19th St.	AM	C	C	NO	-	-
		PM	**E**	**E**	NO	-	-
15	Lane Ave./25th St	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
16	Lane Ave./Rice Rd.	AM	A	A	NO	-	-
		PM	A	A	NO	-	-

	Intersection	Peak Hour	Baseline	Alt. F	Substantial Effect?	Alt. F with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
17	North Range Rd./111th St.	AM	A	A	NO	-	-
		PM	B	B	NO	-	-
18	North Range Rd./Ave. of the States	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
19	US Highway 1 Southbound/Ave. of the States	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
20	US Highway 1 Northbound/Tobacco Rd.	AM	**E**	**F**	NO	-	-
		PM	**E**	**F**	NO	-	-

Notes: **Bold** values indicate intersections operating at LOS E or F.
Bold and shaded values indicate substantial project effect.
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

As shown in this table, Alternative F would result in substantial effects at the following intersections:

- Barnes Ave./19th St.
- Barnes Ave./25th St.
- US Highway 1 Southbound/Ave. of the States

As indicated in the rightmost column of this table, specific physical improvements will reduce Alternative F's effect to a less than substantial level. Refer to Chapter 12 for a description of these and other mitigation, avoidance, and/or minimization measures.

CHAPTER 10
BASELINE PLUS ALTERNATIVE G CONDITIONS

10.1 TRAFFIC VOLUMES

10.1.1 Traffic Generation

As discussed in preceding chapters, Fort Gordon's Alternative G traffic generation is consistent with that of Alternative A (refer to Chapter 5). However, unlike Alternative A, no adjustment was made to the traffic generation to reflect a shift from passenger cars to public transit. Refer to Table 5-1 for the traffic generation characteristics of Alternative G.

10.1.2 Traffic Distribution

Peak hour traffic associated with Alternative G was added to existing intersections in accordance with a distribution pattern that considered the location of this Alternative, installation gate locations, existing traffic volumes, and likely travel routes between the gates and the Alternative G site. Figure 10-1 presents the distribution patterns by movement at each ROI intersection.

10.1.3 Traffic Assignment

Figure 10-2 illustrates the assignment of trips from the Proposed Action to the intersections that comprise the ROI. This volume was calculated by applying the percentages shown in Figure 10-1 to the total traffic generation (i.e., with no transit adjustment) shown on Table 5-1. Combined peak hour volumes for the baseline plus Alternative G traffic scenario are presented in Figure 10-3. These volumes were calculated by adding the assignment of project traffic (Figure 10-1) to baseline traffic volumes (refer to Figure 4-2).

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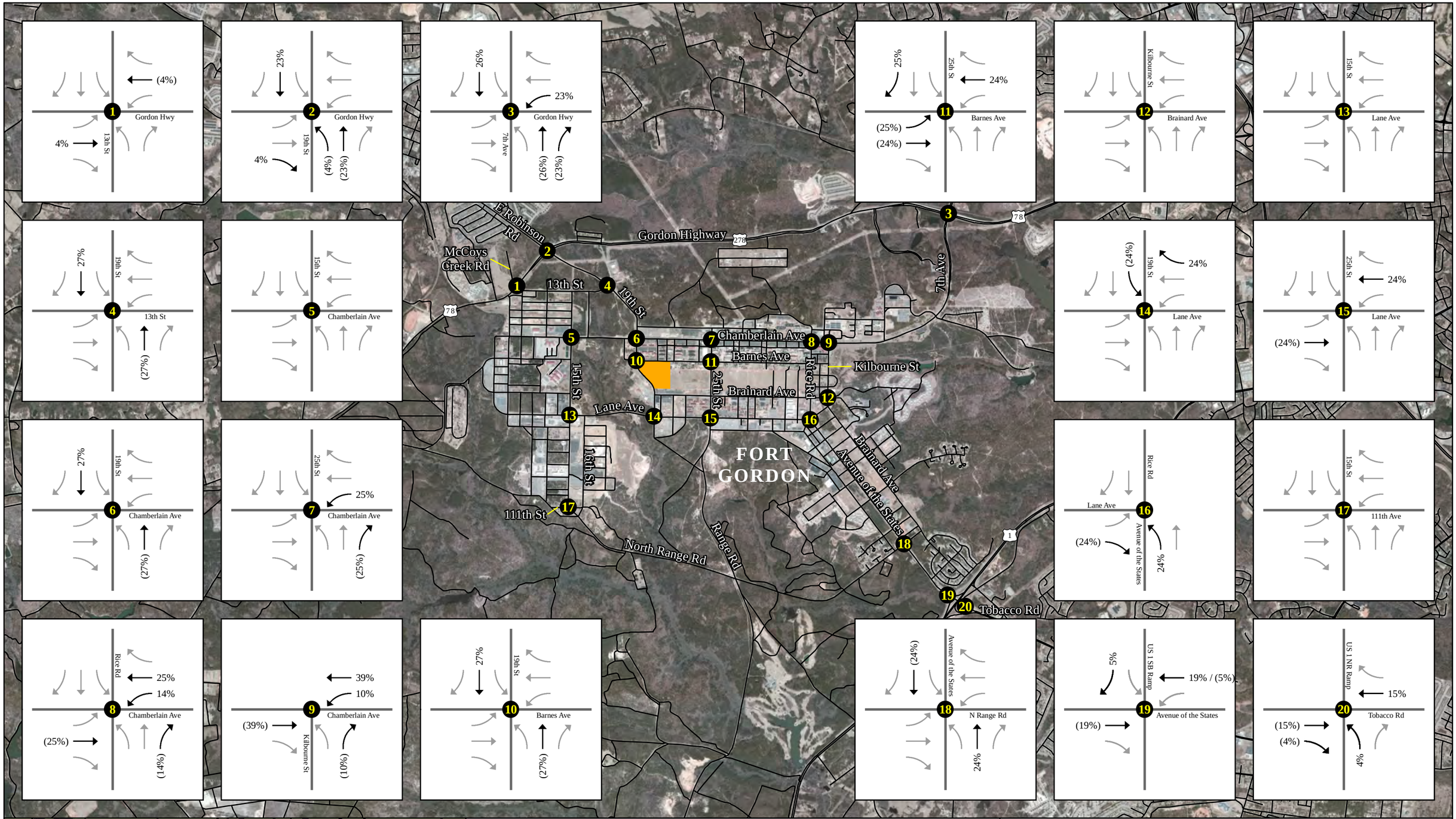

Figure 10-1
Alternative G Trip Distribution, Fort Gordon

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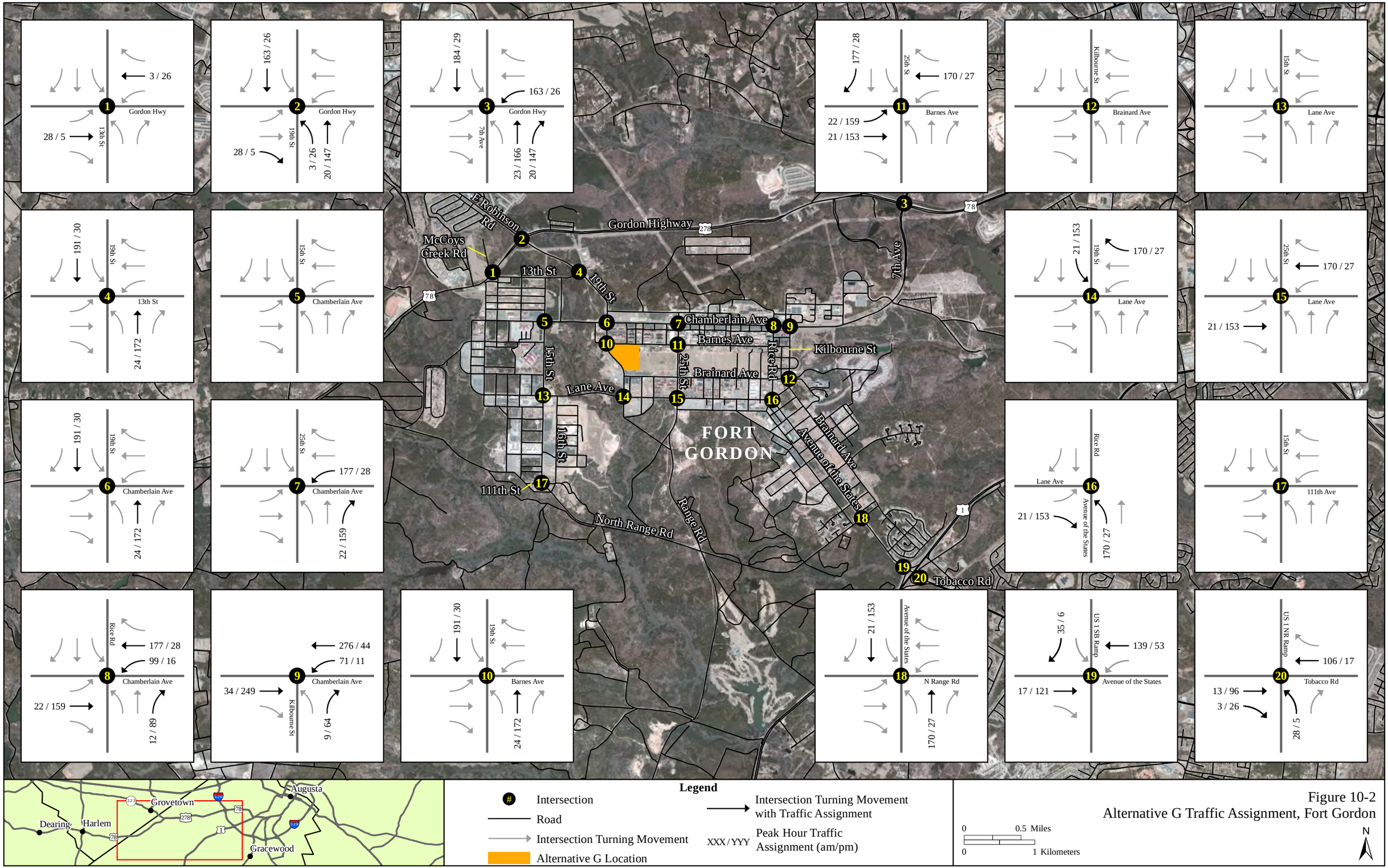

Figure 10-2
Alternative G Traffic Assignment, Fort Gordon

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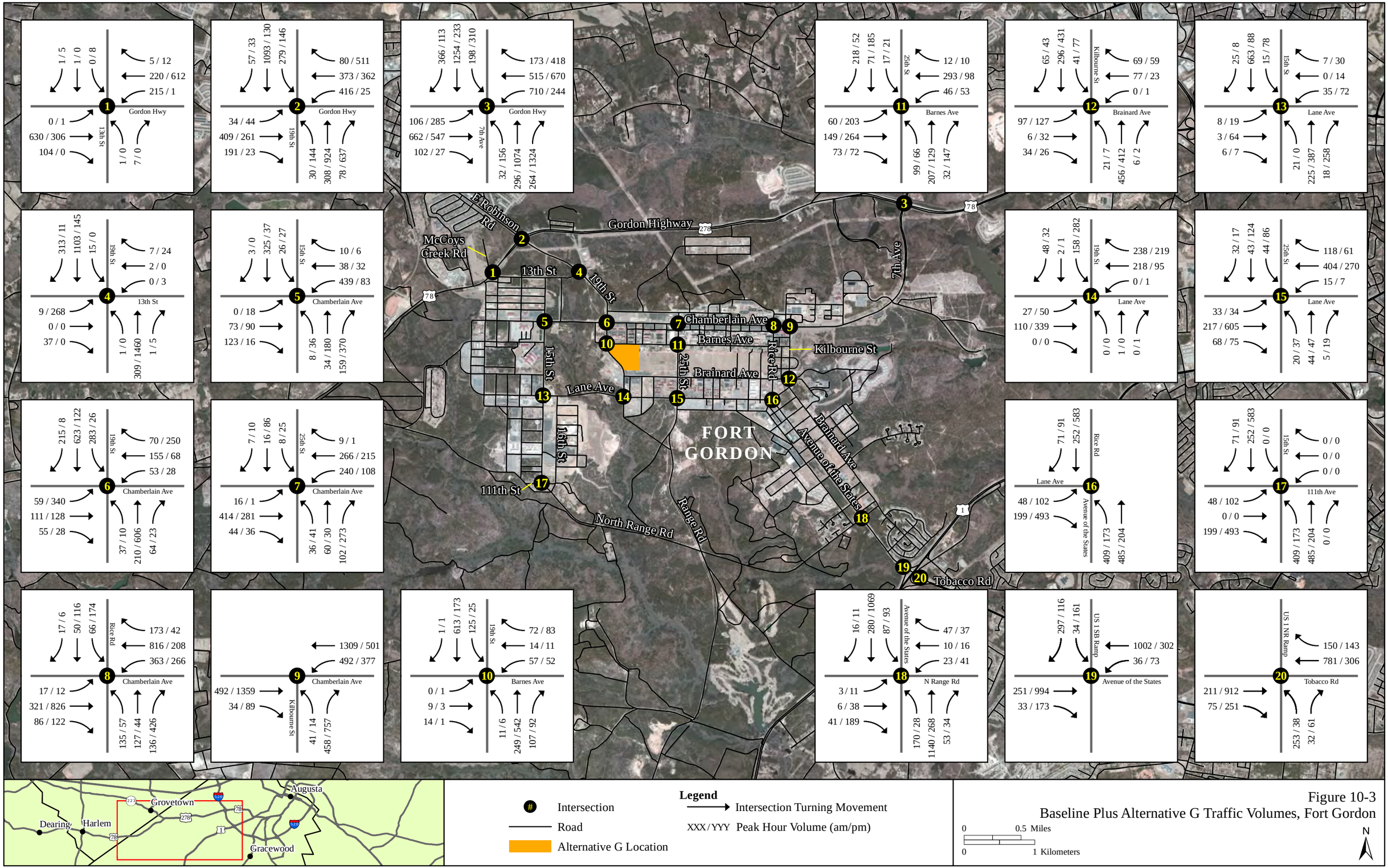

Figure 10-3
Baseline Plus Alternative G Traffic Volumes, Fort Gordon

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10.2 CAPACITY ANALYSIS

10.2.1 Intersection Analysis

Table 10-1 summarizes the LOS analysis results for ROI intersections under baseline plus Alternative G conditions. Attachment 6 contains the intersection LOS calculation worksheets.

Table 10-1. Intersection Level of Service and Effects Summary, Alternative G (Fort Gordon)

	Intersection	Peak Hour	Baseline	Alt. G	Substantial Effect?	Alt. G with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
1	Gordon Highway/13th St.	AM	**F**	**F**	NO	-	-
		PM	D	D	NO	-	-
2	Gordon Highway/19th St.	AM	**E**	**E**	NO	-	-
		PM	**F**	**F**	NO	-	-
3	Gordon Highway/7th Ave.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
4	13th St./19th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
5	Chamberlain Ave./15th St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
6	Chamberlain Ave./19th St.	AM	D	D	NO	-	-
		PM	**F**	**F**	NO	-	-
7	Chamberlain Ave./25th St.	AM	C	**F**	**YES**	D	NO
		PM	**E**	**F**	NO	-	-
8	Chamberlain Ave./Rice Rd.	AM	B	B	NO	-	-
		PM	D	**E**	**YES**	D	NO
9	Chamberlain Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
10	Barnes Ave./19th St.	AM	**F**	**F**	NO	-	-
		PM	C	**E**	**YES**	B	NO
11	Barnes Ave./25th St.	AM	D	**F**	**YES**	B	NO
		PM	C	**F**	**YES**	D	NO
12	Brainard Ave./Kilbourne St.	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
13	Lane Ave./15th St.	AM	**E**	**E**	NO	-	-
		PM	**E**	**E**	NO	-	-
14	Lane Ave./19th St.	AM	C	D	NO	-	-
		PM	**E**	**F**	NO	-	-
15	Lane Ave./25th St	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
16	Lane Ave./Rice Rd.	AM	A	A	NO	-	-
		PM	A	A	NO	-	-

	Intersection	Peak Hour	Baseline	Alt. G	Substantial Effect?	Alt. G with Mitigation	Substantial Effect with Mitigation?
			LOS (a)	LOS (a)		LOS (a)	
17	North Range Rd./111th St.	AM	A	A	NO	-	-
		PM	B	B	NO	-	-
18	North Range Rd./Ave. of the States	AM	**F**	**F**	NO	-	-
		PM	**F**	**F**	NO	-	-
19	US Highway 1 Southbound/Ave. of the States	AM	D	**F**	**YES**	A	NO
		PM	**F**	**F**	NO	-	-
20	US Highway 1 Northbound/Tobacco Rd.	AM	**E**	**F**	NO	-	-
		PM	**E**	**F**	NO	-	-

Notes: **Bold** values indicate intersections operating at LOS E or F.
Bold and shaded values indicate substantial project effect.
(a) LOS calculations are based on the methodology outlined in the *Highway Capacity Manual* and National Cooperative Highway Research Program Report 672, and performed using Synchro 8 and the Georgia Department of Transportation Roundabout Analysis Tool version 2.1.
LOS = Level of Service

As shown in this table, Alternative G would result in substantial effects at the following intersections:

- Chamberlain Ave./25th St.
- Chamberlain Ave./Rice Rd.
- Barnes Ave./19th St.
- Barnes Ave./25th St.
- Lane Ave./25th St.
- US Highway 1 Southbound/Ave. of the States

As indicated in the rightmost column of this table, specific physical improvements will reduce Alternative G's effect to a less than substantial level. Refer to Chapter 12 for a description of these and other mitigation, avoidance, and/or minimization measures.

CHAPTER 11
OTHER TRAFFIC EFFECTS

11.1 CUMULATIVE EFFECTS

As discussed in Chapter 4, projected traffic growth from present and reasonably foreseeable future projects is expected to result in deterioration in LOS at six intersections in the Fort Meade ROI and five locations at the Fort Gordon ROI (see Section 4.3). Depending on the alternative, the Proposed Action will contribute traffic to many of these locations. In instances where the Proposed Action would cause LOS to decline from LOS D or better to LOS E or F, mitigation measures are proposed to restore operations to LOS D or better (refer to Chapter 12 for a summary of these measures).

As discussed in Chapter 1, the Proposed Action is ultimately assumed to accommodate a maximum of 1,500 personnel, although current projections have identified a workforce of 855. In addition, although some staff would work in shifts, the trip generation estimate evaluated in the Traffic Study is based on typical civilian working hours. Therefore, the traffic generation of the Proposed Action is conservative, and actual traffic effects may be less. To minimize and avoid potential cumulative impacts at various intersections, traffic conditions should be monitored before and after the occupancy of the Proposed Action to confirm estimated traffic effects at locations listed in Section 4.3 and to identify other feasible measures as appropriate that may be implemented to minimize the traffic effects of the Proposed Action (such as physical improvements, on-site trip reduction measures, and/or other approaches).

11.2 CONSTRUCTION EFFECTS

Construction of the Proposed Action would involve short-term traffic increases within the ROI. These trips would include construction workers, delivery of construction materials and equipment and, if necessary, the removal of excess soil and/or construction debris. In general, construction trips would likely involve inbound trips only during the morning peak hour, and outbound trips only during the afternoon peak hour. Some materials and equipment may be staged on or near the construction site, alleviating the need for certain delivery trips to enter the installation on a recurring basis. To minimize and avoid potential temporary impacts associated with construction traffic, the construction contractor should coordinate with installation representatives to develop and implement a traffic management plan, which may specify construction timeframes, internal routing, carpooling and/or other measures to minimize the effects of construction related traffic on internal streets and intersections.

11.3 SITE ACCESS EFFECTS

During project development, design plans will be prepared for the selected alternative. In order to provide safe and efficient access to and from the ARCYBER facility, it is recommended that the action proponent coordinate with installation public works representatives to develop an appropriate design of access driveways, including traffic control, dedicated turn lanes, and other related improvements.

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CHAPTER 12
FINDINGS AND RECOMMENDATIONS

The analysis found substantial traffic congestion at numerous locations at both installations under baseline conditions. The addition of traffic from action alternatives would result in substantial effects during one or both peak hours at the following number of intersections:

- Alternative A (Fort Meade): two intersections out of the 16 analyzed
- Alternative C (Fort Gordon): five intersections out of the 20 analyzed
- Alternative D (Fort Gordon): four intersections out of the 20 analyzed
- Alternative E (Fort Gordon): five intersections out of the 20 analyzed
- Alternative F (Fort Gordon): three intersections out of the 20 analyzed
- Alternative G (Fort Gordon): six intersections out of the 20 analyzed

Measures to mitigate, minimize and/or avoid the traffic effects are summarized below:

Fort Meade

1. The action proponent will coordinate with Fort Meade representatives to develop and implement physical improvements and other measures necessary to mitigate the Proposed Action's traffic effects. Specific physical improvements are described in Table 12-1. The measures in Table 12-1 may be modified as appropriate based on input from installation public works staff. (Refer to Attachment 7 for intersection worksheets with mitigation measures incorporated.)

Table 12-1. Summary of Mitigation Measures for Fort Meade, by Location and Alternative

	Intersection	Alternative A	Alternative B
4	Mapes Rd./ 6th Armored Cavalry Rd.	Install traffic signal and provide protected plus permitted phasing for the westbound approach. (Signal timing and phasing should be coordinated with other signals along Mapes Rd.)	**Mitigation Measures for Alternative B were Previously Identified in the Campus Development Environmental Impact Statement (NSA 2010).**
13	Reece Rd./ Cooper Ave.	Revise signal operation from split phasing to permitted plus protected phasing for eastbound and westbound left turns.	

2. To the extent feasible, incorporate various measures into the design and operation of the ARCYBER facility to minimize the concentration of project traffic during peak commuting hours, and/or encourage travel using public transit or non-motorized modes. Such measures may include flexible working hours, telecommuting, incentives to encourage transit use or carpooling, bicycle storage facilities, showers and locker rooms, etc.
3. To minimize less-than-significant project-level and potential cumulative impacts at various intersections, traffic conditions should be monitored before and after the occupancy of the

Proposed Action to confirm projected traffic conditions at selected locations and to identify other feasible measures as appropriate that may be implemented to minimize traffic effects (such as physical improvements, on-site trip reduction measures, and/or other approaches).

4. To minimize and avoid potential temporary impacts associated with construction traffic, the construction contractor should coordinate with installation representatives to develop and implement a traffic management plan, which may specify construction timeframes, internal routing, carpooling and/or other measures to minimize the effects of construction related traffic on internal streets and intersections.
5. To minimize and avoid potential impacts at site access driveways, the action proponent should coordinate with installation representatives during the preparation of project design plans to determine the appropriate design and traffic control at site access driveways.

Fort Gordon

1. The action proponent will coordinate with Fort Gordon representatives and appropriate state and local officials to develop and implement physical improvements and other measures necessary to mitigate the Proposed Action's traffic effects. Specific physical improvements are described in Table 12-2. The measures in Table 12-2 may be modified as appropriate based on input from installation public works staff. (Refer to Attachment 8 for intersection worksheets with mitigation measures incorporated.)
2. To the extent feasible, incorporate various measures into the design and operation of the ARCYBER facility to minimize the concentration of project traffic during peak commuting hours, and/or encourage travel using public transit or non-motorized modes. Such measures may include flexible working hours, telecommuting, incentives to encourage transit use or carpooling, bicycle storage facilities, showers and locker rooms, etc.
3. To minimize less-than-significant project-level and potential cumulative impacts at various intersections, traffic conditions should be monitored before and after the occupancy of the Proposed Action to confirm projected traffic conditions at selected locations and to identify other feasible measures as appropriate that may be implemented to minimize traffic effects (such as physical improvements, on-site trip reduction measures, and/or other approaches).
4. To minimize and avoid potential temporary impacts associated with construction traffic, the construction contractor should coordinate with installation representatives to develop and implement a traffic management plan, which may specify construction timeframes, internal routing, carpooling and/or other measures to minimize the effects of construction related traffic on internal streets and intersections.
5. To minimize and avoid potential impacts at site access driveways, the action proponent should coordinate with installation representatives during the preparation of project design plans to determine the appropriate design and traffic control at site access driveways.

Table 12-2. Summary of Mitigation Measures for Fort Gordon, by Location and Alternative

	Intersection	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
6	Chamberlain Ave./19th St.	Revise signal operation to provide permitted phasing for eastbound, westbound, and northbound left turns, and provide permitted plus protected phasing for southbound left turns. Also restripe the westbound approach to provide one shared through/left turn lane and one dedicated right turn lane.	Same as Alternative C.	(No mitigation required)	(No mitigation required)	(No mitigation required)
7	Chamberlain Ave./25th Street	(No mitigation required)	(No mitigation required)	(No mitigation required)	(No mitigation required)	Install traffic signal.
8	Chamberlain Ave./Rice Rd.	(No mitigation required)	(No mitigation required)	Revise signal operation to provide for northbound right turns to overlap with westbound left turns.	(No mitigation required)	(Same as Alternative E)
10	Barnes Ave./19th St.	(No mitigation required)	(No mitigation required)	(No mitigation required)	Install all-way stop control, and restripe the northbound approach to provide one shared left/through turn lane and one dedicated right turn lane.	Install traffic signal.
11	Barnes Ave./25th St.	(No mitigation required)	Install traffic signal.	(No mitigation required)	Install traffic signal.	Install traffic signal.
14	Lane Ave./ 19th St.	Install traffic signal, and provide protected plus permitted phasing for southbound left turns in the afternoon peak.	(No mitigation required)	Same as Alternative C.	(No mitigation required)	(No mitigation required)

	Intersection	Alternative C	Alternative D	Alternative E	Alternative F	Alternative G
15	Lane Ave./ 25th St.	Install traffic signal.	Same as Alternative C.	Same as Alternative C.	(No mitigation required)	Same as Alternative C.
17	North Range Rd./ 111th St.	Install traffic signal and remove westbound leg to form "T" intersection. Channelize southbound right turns.	(No mitigation required)	Install all-way stop control.	(No mitigation required)	(No mitigation required)
19	US Highway 1 Southbound/Ave. of the States[4]	Install traffic signal.	Same as Alternative C.	Same as Alternative C.	Same as Alternative C.	Same as Alternative C.

[4] Interchange improvements should be coordinated with the Georgia Department of Transportation.

CHAPTER 13
REFERENCES

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Attachment 1

Existing Lane Configuration and Traffic Control – Fort Meade

TIMMONS GROUP

YOUR VISION ACHIEVED THROUGH OURS.

To: Scott Barker, AICP (CardnoTEC)
From: W. Scott Dunn, AICP, PTP
Re: Fort Meade – Field Notes
Date: September 13, 2012
Cc: Jennifer DeVaughn, P.E. (Timmons Group)

The following notes summarize the observations collected during the field work completed by Timmons Group on August 5 – August 8, 2012. The intersection numbers listed below correspond with those shown on Figures 1 through 5.

Figure 1 shows a map of the study intersections. The existing intersection geometry is shown on Figure 2 with the intersection controls and posted speed limits shown on Figure 3. The facility types are shown on Figure 4. Lastly, Figure 5 illustrates the ordinal directions that were assigned to the individual roadway facilities/intersections within the study area.

Intersection photos are provided electronically (on CD).

The counts and field work were conducted when Anne Arundel County Public Schools (AACPS) were not in session. As indicated on Figure 1, there are seven AACPS facilities located at Fort Meade:

1. Manor View Elementary School (2900 MacArthur Road, Ft Meade);
2. Meade Heights Elementary School (1925 Reece Road, Ft. Meade);
3. Pershing Hill Elementary School (7600 29th Division Road, Ft. Meade);
4. West Meade Early Education Center (7722 Ray Street, Ft. Meade);
5. Mac Arthur Middle School (3033 Rockenbach Road, Ft. Meade);
6. Meade Middle School (1103 26th Street, Ft. Meade); and
7. Meade High School (1100 Clark Road, Ft. Meade).

1. *Laurel Fort Meade Road at MD 32 EB Ramps – Roundabout*

   The multi-lane roundabout serves as the junction for the MD 32 EB ramps at Laurel Fort Meade Road. All entering approaches are controlled with a yield sign and are signed indicating the recommended entering/operating speed within the roundabout is 15 mph.

2. *Mapes Road at MD 32 WB Ramps – Roundabout*

   The multi- lane roundabout serves as the junction for the MD 32 WB ramps at Mapes Road which provides access to Gate 1 for Fort Meade. Both the Mapes Road and the MD 32 WB ramp approaches are signed indicating the recommended entering/operating speed within the roundabout is 15 mph and all approaches are controlled with a yield sign.

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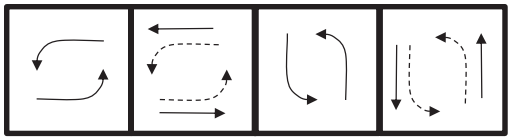
3. *Mapes Road at O'Brien Road – Signalized*

This signalized intersection is located just inside of Gate 1. At this intersection, Mapes Road is posted at 15 mph and O'Brien is posted at 30 mph. Both Mapes Road and O'Brien Road are two-lane facilities and auxiliary turn lanes are provided on each approach.

The diagram below summarizes the phasing at the intersection. (*Note: dashed lines in all of the phasing diagrams represent permissive left turn movements.)*



The observed cycle length ranged from 90 to 120 seconds.

The north approach of O'Brien Road is a gate-controlled facility that provides access to the National Security Agency (NSA) facility located to the north.

No pedestrian amenities are provided at this intersection.

Gate 1 is located west of the Mapes Road/O'Brien Road intersection. Gate 1 is open from 5 AM to 9 PM seven days a week and serves both inbound and outbound traffic.

4. *Mapes Road at 6th Armored Cavalry Road – Unsignalized*

This 3-legged intersection has posted speed limits of 25 mph on the east and west approaches; the south approach is posted at 10 mph. The south approach of 6th Armored Cavalry Road is controlled by a stop sign. A pedestrian crosswalk is provided across the west approach.

6th Armored Cavalry Road is a narrow facility with perpendicular parking spaces along both the east and west sides, immediately adjacent to the subject intersection. This situation is not ideal with respect to traffic flow and safety as the parking is located within the functional area of the intersection.

5. *Mapes Road at Zimborski Avenue - Unsignalized*

This 4-legged intersection has posted speed limits of 30 mph on the east and west approaches and 25 mph on the south approach. The north approach, which does not have a posted speed limit, is a gravel road currently being used as a construction entrance (into the golf course) and was posted for construction vehicles only. The north and south approaches of Zimborski Avenue are controlled by stop signs. No pedestrian amenities are provided.

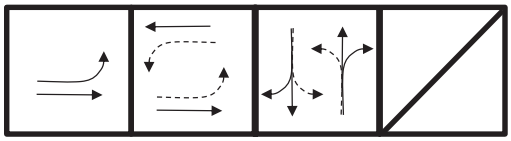
It should be noted that the flared geometry in the southwest corner provides a 50 foot deceleration taper for eastbound traffic turning right onto Zimborski Avenue.

6. *Mapes Road at Taylor Avenue – Signalized*

This signalized intersection serves as a transition point for Mapes Road, which widens from a 2-lane facility (serving primarily residential uses) to a 3-lane facility that accommodates a center two-way left turn lane to MacArthur Road. The posted speed limit along Mapes Road remains at 30 mph; Taylor Avenue has a posted speed limit of 10 mph on the south approach and 15 mph on the north approach.

Each of the four approaches has a channelized right turn lane; an acceleration lane is provided for traffic from the north approach entering westbound Mapes Road while the remaining three (east, west, and south) are yield conditions.

The diagram below summarizes the phasing at the intersection.



Please note that only the eastbound approach has a protected left turn phase. The observed cycle length ranged from 90 to 120 seconds.

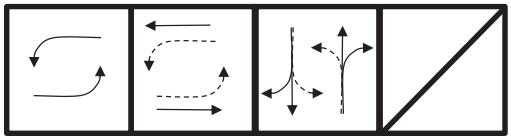
A crosswalk is provided on the north approach. Pedestrian ramps and sidewalk are being constructed adjacent to the intersection; additional crosswalks are anticipated.

7. *Mapes Road at Cooper Avenue – Signalized*

At this signalized intersection, Mapes Road is a 3-lane facility with a posted speed limit of 30 mph. Cooper Avenue, to the north, is a 3-lane facility with a posted speed limit of 30 mph; to the south Cooper Avenue is a 2-lane undivided road with a posted speed limit of 25 mph.

Both the north and south approaches (Cooper Avenue) have channelized right turn lanes with yield signs. The east and west approaches (Mapes Road) have dedicated/auxiliary left and right turn lanes.

The diagram below summarizes the phasing at the intersection.



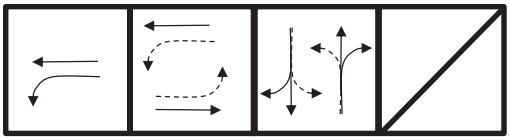
The observed cycle length ranged from 90 to 120 seconds.

Crosswalks are provided on the north, south, and west approaches; however, pedestrian push buttons and signals are not provided.

8. *Mapes Road at Ernie Pyle Street – Signalized*

This signalized intersection is located just inside of Gate 2. At this intersection, Mapes Road is posted at 30 mph on the west approach and 15 mph on the east approach (approaching from the security gate). Ernie Pyle Street is a 2-lane facility with a posted speed limit of 25 mph on both the north and south approaches. At the intersection each approach has the benefit of an auxiliary lane.

The diagram below summarizes the phasing at the intersection.



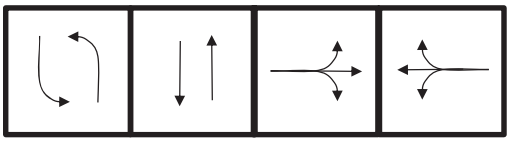
Please note that only the westbound approach (arriving from the gate) has a protected left turn phase. The observed cycle length ranged from 90 to 120 seconds.

No pedestrian amenities are provided at this intersection.

9. *Llewellyn Avenue/Blue Water Boulevard at Annapolis Road (MD 175) – Signalized*

This signalized intersection is located at Gate 6. Annapolis Road (north-south) is a 5-lane facility with auxiliary/dedicated left turn lanes and a posted speed limit of 40 mph. During the AM peak, the queue for northbound left turns exceeded the provided storage and spilled back into the through lane multiple times. To the east is Blue Water Boulevard, a 4-lane divided facility with a posted speed limit of 35 mph. To the west is Llewellyn Avenue/Gate 6. Gate 6 was open to inbound and outbound traffic between 6 AM and 8 AM and open to outbound traffic only between 3 PM and 6 PM. Gate 6 was closed to all traffic the rest of the day during the August 5 – August 8 field reviews.

The diagram below summarizes the phasing at the intersection.



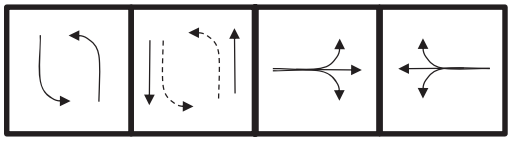
The mainline lefts are protected-only movements and the side streets are split phased (i.e. do not run concurrently). The observed cycle length ranged from 160 to 180 seconds.

Pedestrian pushbuttons are provided in the northeast, southeast and southwest quadrants. A single crosswalk is provided across the east approach; one should be provided across the south approach but is not.

10. *Mapes Road/Charter Oaks Boulevard at Annapolis Road (MD 175) – Signalized*

This signalized intersection is located at Gate 2. Annapolis Road (north-south) is a 5-lane facility with auxiliary/dedicated left turn lanes and a posted speed limit of 40 mph. To the east is Charter Oaks Boulevard, a 4-lane divided facility with a posted speed limit of 35 mph. To the west is Mapes Road/Gate 2. Gate 2 is open from 5 AM to 7 PM Monday through Friday and serves both inbound and outbound traffic.

The diagram below summarizes the phasing at the intersection.



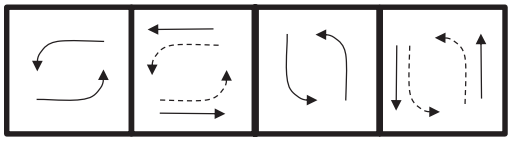
The mainline lefts are protected-permissive movements and the side streets are split phased (i.e. do not run concurrently). The observed cycle length ranged from 130 to 150 seconds.

Pedestrian pushbuttons are provided in the southeast and southwest quadrants and a single crosswalk is provided across the south approach.

11. *Reece Road at Annapolis Road (MD 175) – Signalized*

This signalized intersection is located at Gate 7 Annapolis Road (north-south) transitions from a 2-lane facility to a 5-lane facility at this intersection; the posted speed limit is 40 mph. Auxiliary/dedicated left turn lanes are provided on both Annapolis Road and Reece Road at this intersection. The southbound left turn lane is extremely long and accommodated the traffic observed in the field between August 5 and August 8. The northbound left turn queue, however, exceeded the provided storage and spilled back into the through lane multiple times during the AM peak hour. To the east is Reece Road, a 3-lane facility with a posted speed limit of 25 mph. To the west is Reece Road/Gate 7. Gate 7 is open from 5 AM to 9 PM Monday through Friday and serves both inbound and outbound traffic. Gate 7 is one of the main entrances to Fort Meade and is also provides visitor access to Fort Meade. Exiting traffic during the PM peak was heavy but did not flow back and impact operations at the guard gate.

The diagram below summarizes the phasing at the intersection.



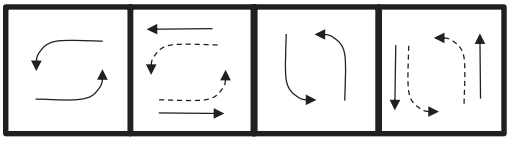
The mainline and side street lefts are protected-permissive movements. The observed cycle length ranged from 90 to 120 seconds.

Pedestrian pushbuttons are not provided at this intersection, however, crosswalks are provided on the north, east, and west approaches.

12. *Rockenbach Road at Annapolis Road (MD 175) – Signalized*

The signalized intersection is located east of Gate 3 and was under construction at the time of the August 5 – August 8 field review. Annapolis Road is a 5-lane facility with auxiliary/dedicated left turn lanes. Annapolis Road was posted at 45 mph to the north and 40 mph to the south. Rockenbach Road to the east is a 2-lane facility that widens in the vicinity of the intersection and has a posted speed limit of 45 mph. Rockenbach Road to the west is a 4-lane facility with a posted speed limit of 40 mph.

The diagram below summarizes the phasing at the intersection.



The left turn movements on both Annapolis Road and Rockenbach Road are protected-permissive movements.

The observed cycle length ranged from 110 to 150 seconds.

It was noted that eastbound traffic did typically slow down to cross Annapolis Road; this appears to be due to the skew of the receiving lanes and the lane merge immediately to the east. Operations on the east leg were also impacted by traffic entering/exiting the gas station and dry cleaners via driveways located in the functional area of the intersection.

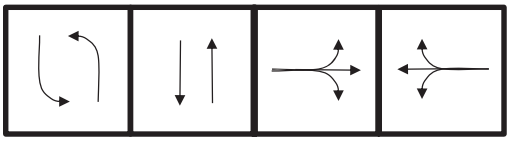
No pedestrian amenities were in place during the August 5 – August 8 field reviews.

Gate 3 is located west of the Rockenbach Road/Annapolis Road intersection. Gate 3 is open from 5 AM to 9 PM seven days a week and serves both inbound and outbound traffic.

13. *Reece Road at Cooper Avenue – Signalized*

This signalized intersection is located in at main entrance to the DISA facility. Cooper Avenue has a posted speed limit of 35 mph and Reece Road is posted at 25 mph. Traffic entering/exiting the DISA facility during the AM/PM peaks appeared light during the August 5 – August 8 field reviews. The provided auxiliary lanes at the intersection accommodated the peak hour flows without issue.

The diagram below summarizes the phasing at the intersection.



The northbound and southbound lefts are protected-only movements and the Reece Road/DISA Driveway operate split phased (i.e. do not run concurrently). It should be noted that the south bound right was signed "no right turn on red".

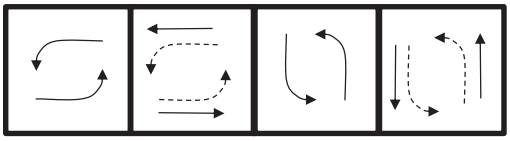
The observed cycle length ranged from 100 to 120 seconds.

Pedestrian pushbuttons are provided in the northeast, southeast and southwest quadrants and crosswalks are provided across the east and south approaches.

14. *Rockenbach Road at Cooper Avenue – Signalized*

The signalized intersection was under construction at the time of the August 5 – August 8 field review. The intersection geometrics at the time of review are summarized on Figure 2 and the respective speed limits are shown on Figure 3.

The diagram below summarizes the phasing at the intersection.



The left turn movements on both Cooper Avenue and Rockenbach Road are protected-permissive movements

The observed cycle length ranged from 120 to 150 seconds.

Pedestrian pushbuttons are not provided at this intersection, however, a crosswalk was provided on the east approach.

15. *Rockenbach Road at 29th Division Boulevard – Unsignalized*

This 3-legged intersection has posted speed limits of 30 mph on the east and west approaches; the north approach is posted at 15 mph. The north approach of 29th Division Boulevard is controlled by a stop sign.

Rockenbach Road (east-west) is a four-lane undivided road with wide shoulders. Pedestrians (i.e. joggers) were noted in the area. No crosswalks are provided at this intersection.

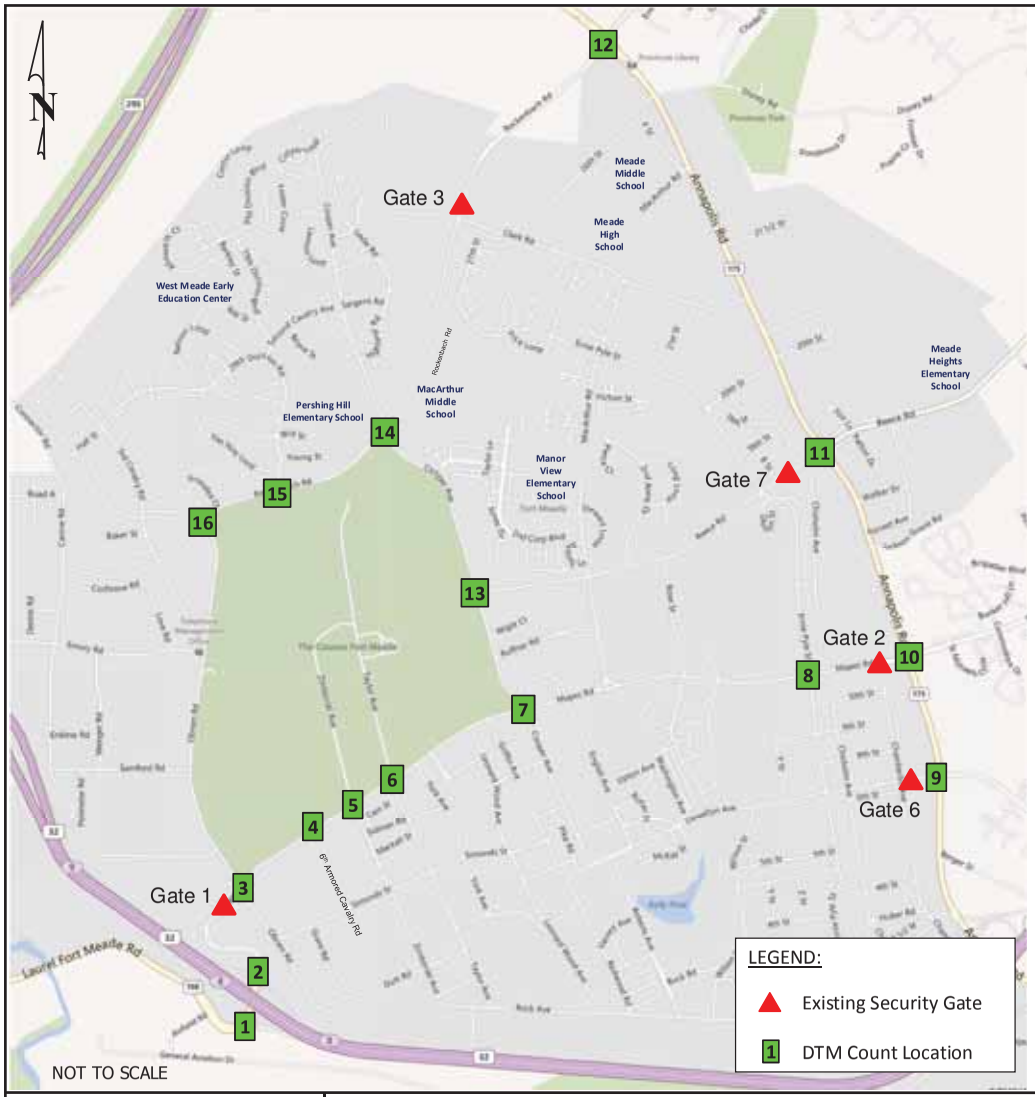
29th Division Road serves as an access to Midway Commons, an on-base residential development. Sidewalks are present on both the east and west sides of the facility. Also, Pershing Hill Elementary School is fed by this facility; school was not in session when the counts or field surveys were conducted.

16. *Rockenbach Road at O'Brien Road - Unsignalized*

This 3-legged intersection has posted speed limits of 25 mph on the east and west approaches; the south approach does not have a posted speed limit. The south approach of O'Brien Road is controlled by a stop sign.

Rockenbach Road (east-west) is a four-lane undivided road with wide shoulders. Pedestrians (i.e. joggers) were noted in the area. No crosswalks are provided at this intersection.

O'Brien Road is a gate-controlled facility that provides access to the NSA facility located to the south.



Fort Mead Intersections:

1. Laurel Fort Meade Road at MD 32 EB Ramps - Roundabout
2. Mapes Road at MD 32 WB Ramps - Roundabout
3. Mapes Road at O'Brien Road - Signalized
4. Mapes Road at 6th Armored Cavalry Road
5. Mapes Road at Zimborski Avenue
6. Mapes Road at Taylor Avenue - Signalized
7. Mapes Road at Cooper Avenue - Signalized
8. Mapes Road at Ernie Pyle Street - Signalized
9. Llewellyn Avenue at Annapolis Road (MD 175) - Signalized
10. Mapes Road at Annapolis Road (MD 175) - Signalized
11. Reece Road at Annapolis Road (MD 175) - Signalized
12. Rockenbach Road at Annapolis Road (MD 175) - Signalized
13. Reece Road at Cooper Avenue - Signalized
14. Rockenbach Road at Cooper Avenue - Signalized
15. Rockenbach Road at 29th Division Boulevard
16. Rockenbach Road at O'Brien Road

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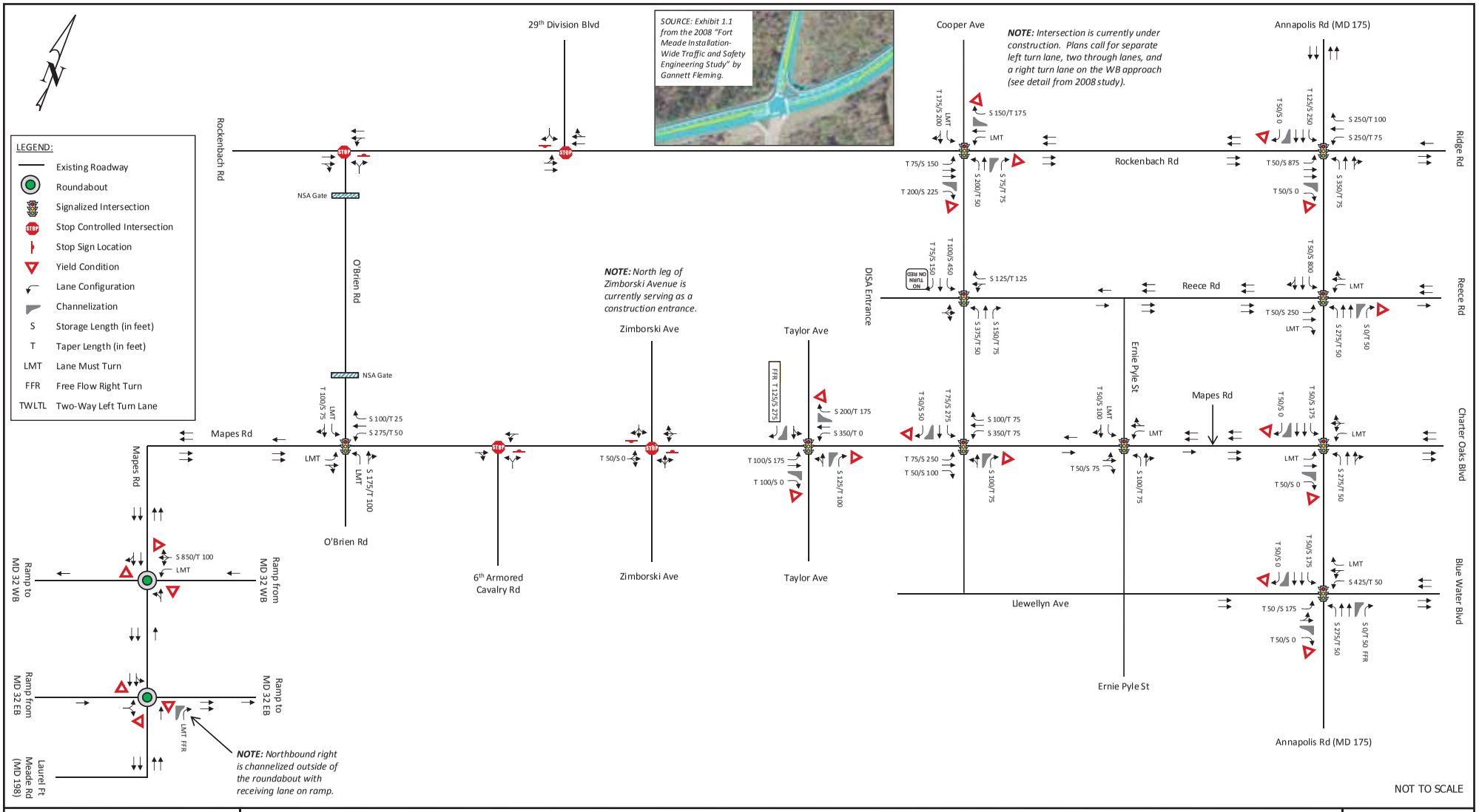
ARCYBER Fort Meade, Maryland
Study Intersections

Figure
1



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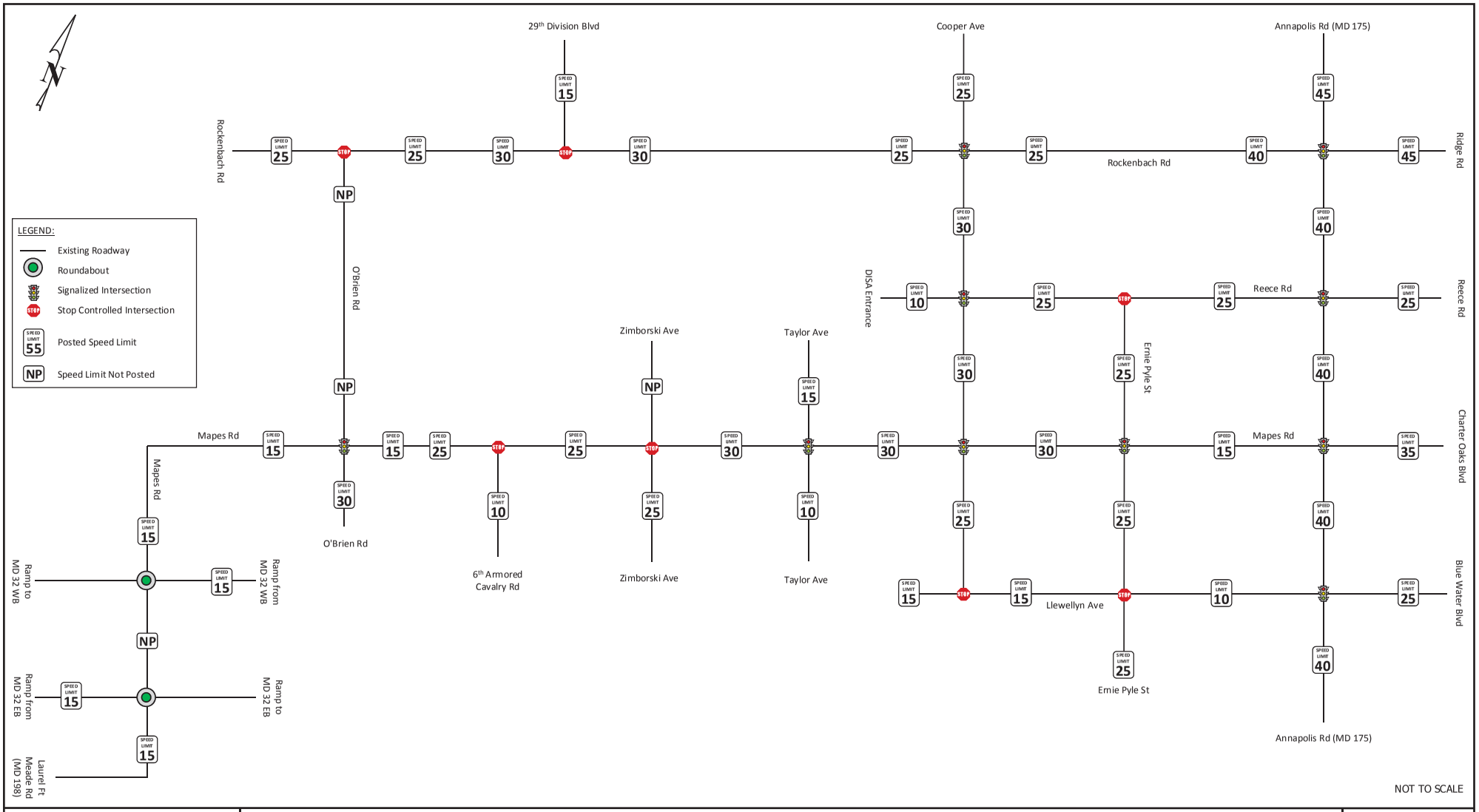
ARCYBER Fort Meade, Maryland
Intersection Geometry

Figure 2



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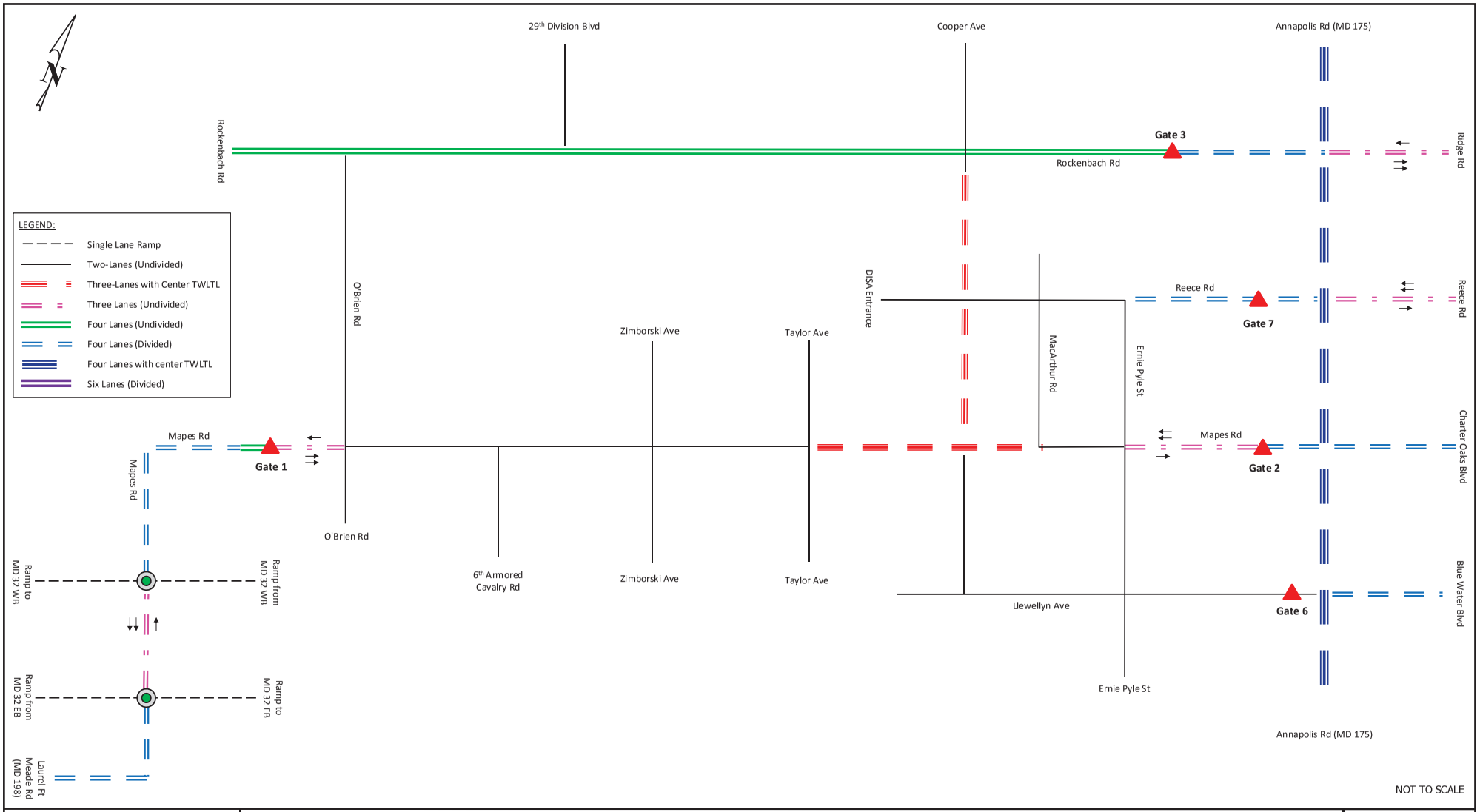
ARCYBER Fort Meade, Maryland
Intersection Control and Posted Speed Limits

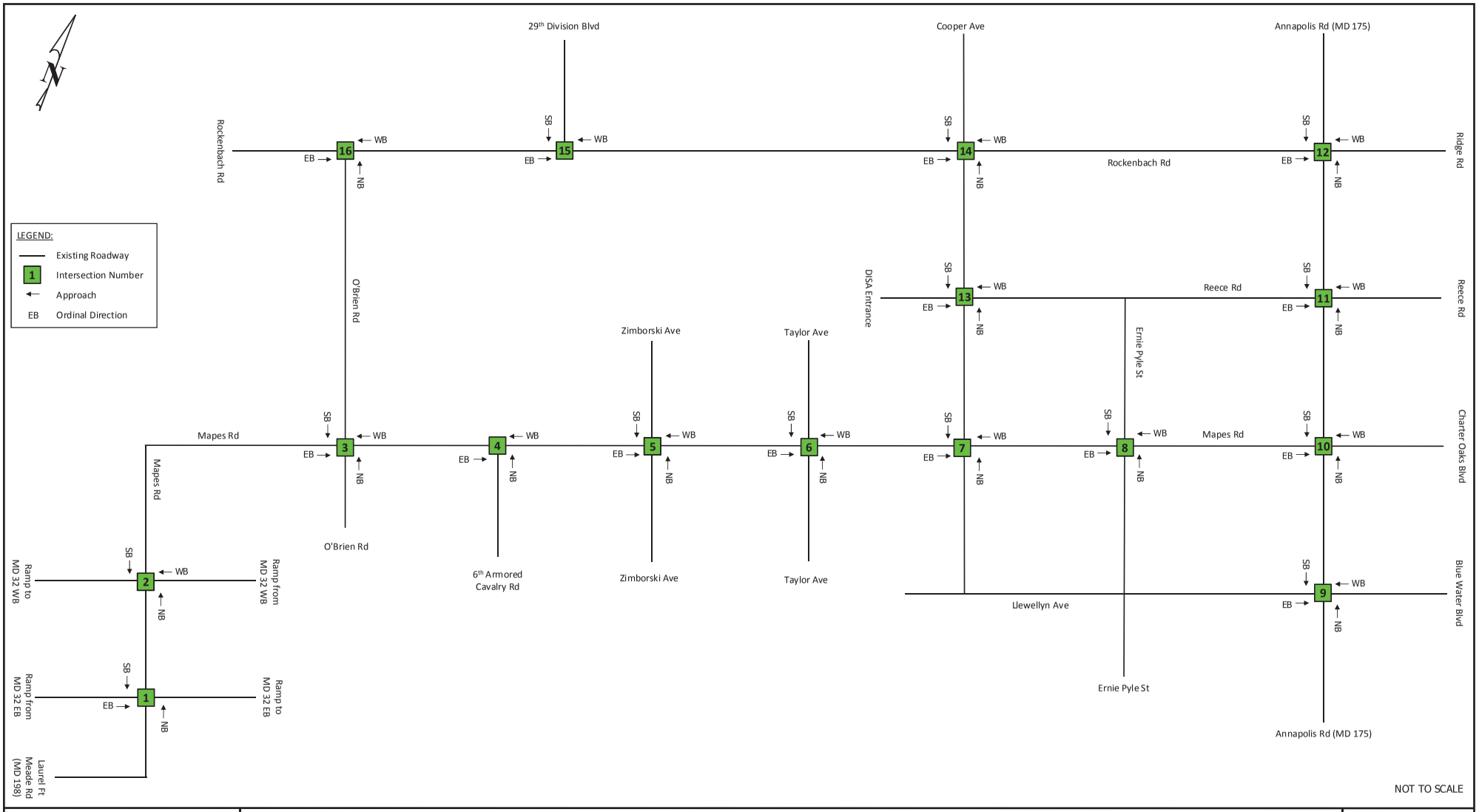
Figure 3



TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

ARCYBER Fort Meade, Maryland
Facility Types

Figure 4



TIMMONS GROUP
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ARCYBER Fort Meade, Maryland
Ordinal Directions

Figure 5

Attachment 2

Existing Lane Configuration and Traffic Control – Fort Gordon

TIMMONS GROUP

YOUR VISION ACHIEVED THROUGH OURS.

To: Scott Barker, AICP (Cardno TEC)
From: W. Scott Dunn, AICP, PTP
Re: Fort Gordon – Field Notes
Date: September 13, 2012
Cc: Jennifer DeVaughn, PE (Timmons Group)

The following notes summarize the observations collected during the field work completed by Timmons Group on July 29 – August 2, 2012. The intersection numbers listed below correspond with those shown on Figures 1 through 5.

Figure 1 shows a map of the study intersections. The existing intersection geometry is shown on Figure 2 with the intersection controls and posted speed limits shown on Figure 3. The facility types are shown on Figure 4. Lastly, Figure 5 illustrates the ordinal directions that were assigned to the individual roadway facilities/intersections within the study area.

Intersection photos are provided electronically (on CD).

Gordon Highway Corridor

Gordon Highway (US 78/US 278/SR 10) transitions from a 2-lane undivided facility to a 4-lane divided facility between McCoys Creek Road/13th Street and E Robinson Avenue/19th Street. At the intersection of Jimmie Dyess Parkway/7th Avenue, Gordon Highway becomes a 6-lane divided facility heading east towards Augusta. Within the study area, Gordon Highway has a posted speed limit of 55 mph and is intersected in several locations by driveways/streets that serve both commercial and residential development; Gordon Highway is not a limited access facility.

This major east-west arterial is the northern boundary for the ARCYBER study area and is located adjacent to Gates 1, 2, and 3. Descriptions of each of the study intersections located along the Gordon Highway are provided below:

1. *Gordon Highway (US 78/US 278/SR 10) at McCoys Creek Road/13th Street (Gate 3) - Unsignalized*

   Gate 3 is located approximately 4 miles west of the Main Gate (Gate 1) via Gordon Highway. Gate 3 serves as the primary access points for large trucks, deliveries, and contractors (per signage along Gordon Highway and at Gate 3) and is open from 6am to 2pm Monday through Friday. Gate 3 cannot be seen from Gordon Highway; the old guardhouse remains but is not used. Overall traffic at this intersection is light, but constant throughout the day. Sight distance to the east is limited due to the grades on Gordon Highway.

   Gordon Highway a 2-lane undivided east-west arterial with a 55 mph speed limit at the intersection. McCoys Creek Road is a 2-lane undivided facility without a posted speed limit that serves the McCoys Creek residential subdivision. 13th Street, which serves Fort Gordon, is a 4-lane divided facility without a posted speed limit. Pavement markings on the egress lanes direct exiting traffic to the left or right only, northbound throughs into McCoys Creek subdivision are not allowed. The north and south approaches are controlled by stop signs.

1001 Boulders Parkway, Suite 300 | Richmond, VA 23225
TEL 804.200.6500 FAX 804.560.1016
Site Development | Residential | Infrastructure | Technology
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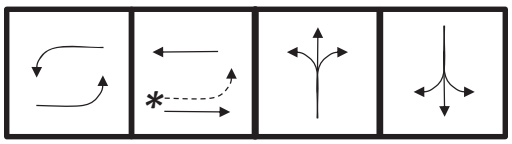
2. *Gordon Highway (US 78/US 278/SR 10) at E Robinson Avenue/19th Street (Gate 2) - Signalized*

Gate 2 is one of the three (3) primary access points to Fort Gordon. In the morning, traffic entering the installation is heavy from the north (E Robinson Avenue) and east (Gordon Highway). Traffic entering Fort Gordon routinely backed up from the gate to Gordon Highway; traffic queues were observed interfering with eastbound through traffic on Gordon Highway a limited number of times. In the afternoon, the reverse is seen as traffic attempting to exit routinely backs up through the guard gate.

Gordon Highway a 4-lane divided facility with a 55 mph speed limit at the intersection. East Robinson Road is a 2-lane undivided facility with a posted speed limit of 45 mph. Entering Fort Gordon 19th Street is a 4-lane divided facility with a posted speed limit of 35 mph that transitions to a 3-lane facility (with a reversible lane) south of Gate 2.

As noted, the intersection is signalized. During the peak hours, cycle lengths ranged from 150 second to 180 seconds. Mainline lefts are protected only movements during both the AM and PM peak periods; during the off peak hours, however, the EB left is also a permissive movement. East Robinson Avenue and 19th Street operate split phased (i.e. they do not run concurrently). Pedestrian signals, pushbuttons, and crosswalks are provided to accommodate pedestrians across all four intersection approaches.

The diagram below summarizes the phasing at the intersection and timing sheets from the City of Augusta are attached for your convenience. (*Note: dashed lines in all of the phasing diagrams represent permissive left turn movements.)*

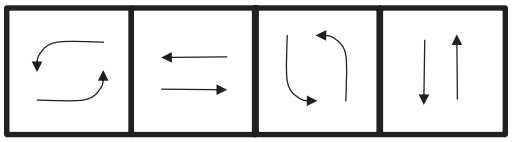


**Permissive during off peak only*

3. *Gordon Highway (US 78/US 278/SR 10) at Jimmie Dyess Parkway/7th Avenue (Gate 1) – Signalized*

This intersection serves the main gate to Fort Gordon. As noted previously, Gordon Highway, an east-west arterial with a 55 mph speed limit, is a 4-lane divided facility west of the intersection and a 6-lane divided facility east of the intersection. Jimmie Dyess Parkway is a 4-lane divided north-south arterial with a posted speed limit of 55 mph; the speed limit decreases from 55 mph to 25 mph as southbound motorists cross Gordon Highway and approach Kilbourne Street. Traffic congestion at this location is heavy during both the AM and PM peaks with traffic patterns similar to those noted at Gate 2 to the west. Despite the heavy volumes, cycle failures and accumulated queues were not noted during the July 29 – August 2 field reviews.

With regard to the traffic signal operations, cycle lengths were recorded ranging from 150 seconds to 190 seconds. Given the signal system is actuated/adaptive, consistent split times could not be collected in the field. The diagram below summarizes the phasing at the intersection and timing sheets from the City of Augusta are attached for your convenience.



No pedestrian amenities are provided at this location.

4. *13th Street at 19th Street - Unsignalized*

This is the first intersection inside Fort Gordon entering through Gate 3 via 19th Street. 19th Street is a 3-lane facility with a 35 mph posted speed limit that runs north-south on the western side of Fort Gordon. 19th Street is set up to accommodate a reversible center traffic lane; however, during the July 29 – August 2 field observations, 19th Street operated as a 2-lane facility with a two-way left turn lane (TWLTL) during typical AM and PM peaks. Overhead signage to support the reversible lanes is in place but was not used.

Chamberlain Avenue Corridor

Chamberlain Avenue is the northernmost east-west route on Fort Gordon within the study area. It runs from Gate 1, past the hospital, across the installation, and through 15th Street (which is the western boundary of the study area). Chamberlain Avenue from Kilbourne Street (east) to 19th Street (west) is a 4-lane undivided facility with a posted speed limit of 25 mph; both signalized and unsignalized intersections are present along this corridor. West of 19th Street, Chamberlain Avenue transitions to a 2-lane undivided facility with a posted speed limit of 35 mph.

Within the developed/urbanized area of Fort Gordon (between Kilbourne Street and 22nd Street), a significant number of pedestrian crosswalks were noted; each crossing was clearly identified with signage, flashing lights, and pavement markings. There is limited consistency with respect to signage and lighting at the pedestrian crossing locations along Chamberlain Avenue.

Additional details pertaining to each of the study intersections located along Chamberlain Avenue are provided below:

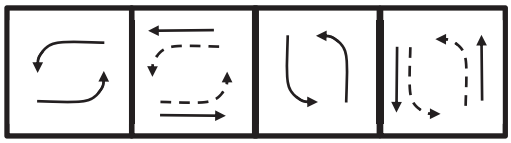
5. *Chamberlain Avenue at 15th Street - Unsignalized*

Chamberlain Avenue and 15th Street are both 2-lane undivided facilities with posted speed limits of 35 mph. The north and south approaches of 15th Street are controlled by stop signs. Auxiliary left turn lanes are provided on each approach of the intersection. It should be noted that the driveway to the parking area located in the southwest quadrant is fenced off and does not serve vehicular traffic.

6. *Chamberlain Avenue at 19th Street - Signalized*

This signalized intersection serves as a transition point for both the posted speed limit along Chamberlain Avenue (25 mph to the east, 35 mph to the west) and the cross section (4-lane undivided to the east, 2-lane undivided to the west).

Auxiliary left turn lanes are provided on each approach of the intersection. The diagram below summarizes the phasing at the intersection; left turns were observed as protected/permissive during both the AM and PM peak periods.



The timing data (below) for the intersection was provided by representatives from Fort Gordon; Chamberlain Avenue (east-west) is considered the major street:

Chamberlain & 19th								
	phase 1	phase 2	phase 3	phase 4	phase 5	phase 6	phase 7	phase 8
min grn.	10	10	5	10	5	10	5	10
passage	3	5	3	3	3	5	3	3
max 1	35	45	20	35	20	45	20	35
max 2	35	45	20	35	20	45	20	35
yel chg	4	4	4	4	4	4	4	4
red clr.	2	2	2	2	2	2	2	2

7. *Chamberlain Avenue at 25th Street - Unsignalized*

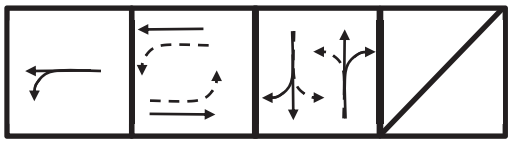
This 4-legged intersection has posted speed limits of 25 mph on the south, east, and west approaches; the north approach is posted at 10 mph. The north and south approaches of 25th Street are controlled by stop signs. A pedestrian crosswalk is provided across the east approach.

A one-way (entering) driveway to the parking lot in the southeast corner of the intersection is located 50 feet from Chamberlain Avenue on the south approach of 25th Street. If this parking lot were to become heavily used in the future, the close proximity of the driveway could result in operational problems at this intersection.

8. *Chamberlain Avenue at Rice Road - Signalized*

Chamberlain Avenue is a 4-lane undivided facility with a posted speed limit of 25 mph on both approaches. The south leg of Rice Road is a 3-lane facility with a center TWLTL and the north leg is a 2-lane undivided facility. Rice Road has a posted speed limit of 25 mph on both approaches.

Auxiliary left turn lanes are provided on the westbound, northbound, and southbound approaches of the intersection. The diagram below summarizes the phasing at the intersection.



The timing data (below) for the intersection was provided by representatives from Fort Gordon; Chamberlain Avenue (east-west) is considered the major street:

Chamberlain & Rice								
	phase 1	phase 2	phase 3	phase 4	phase 5	phase 6	phase 7	phase 8
min grn.	8	15	8	8	8	15	8	8
passage	6	5	4	3	3	5	3	5
max 1	25	50	25	35	25	50	25	35
max 2	30	50	30	50	30	50	30	50
yel chg	3	3	3	3	3	3	3	3
red clr.	3	2	3	1.5	1	2	1	1.5

9. *Chamberlain Avenue at Kilbourne Street - Unsignalized*

This 3-legged intersection is at the eastern edge of the study area boundary within Fort Gordon. All approaches are posted at 25 mph. The north approach of Kilbourne Street is controlled by a stop sign. The northbound right turn movement is accommodated via sweeping channelized right turn lane; a short acceleration lane (300-feet with a 100-foot taper) is provided on Chamberlain Avenue.

Heavy westbound left turns (and long queues) were noted at the intersection during both the AM and Midday peaks. The eastbound left is signed to instruct drivers not to block the intersection and impede northbound lefts; this sign is typically ignored.

Pedestrian accommodations are provided to connect the parking lot on the north side of Chamberlain Avenue; no pedestrian traffic was noted. Also, the pedestrian accommodations in the area are worn; the pavement markings are worn, and the flexible delineator posts are faded.

Barnes Avenue Corridor

Barnes Avenue is a 2-lane east/west facility that extends from 19th Street (west) to Kilbourne Street (east) with a posted speed limit of 25 mph.

10. *Barnes Avenue at 19th Street - Unsignalized*

This intersection is a 4-legged intersection with auxiliary left turn lanes accommodated in the center lane of 19th Street on both approaches (north-south). The east and west approaches of Barnes Avenue are controlled by stop signs. The posted speed limit on the west leg is 20 mph. Also, a driveway to a utility station in the southwest quadrant was noted during the field review. This driveway is located close to the intersection and has a steep grade; given the gravel surface and small size of the facility, it is likely that this driveway sees infrequent, light traffic volumes.

Sidewalk exists in the northeast quadrant of the intersection; however, no pedestrian traffic was observed. It should be noted that a retaining wall is located along the north side of Barnes Avenue.

11. *Barnes Avenue at 25th Street - Unsignalized*

This is a 4-legged all-way stop intersection. Each approach consists of a single lane (no auxiliary turn lanes) with a posted speed limit of 25 mph. Crosswalks are provided on each of the approaches.

It should be noted that a bus shelter is provided on the southeast corner and that an ATM machine is provided in the parking area in the southwest quadrant. Sidewalks are provided on both sides of 25th Street, but no crosswalk is available to accommodate pedestrians.

12. *Brainard Avenue/O'Club Drive at Kilbourne Street/Brainard Avenue - Unsignalized*

This is a 4-legged intersection. The north-south road (Kilbourne Street to the north, Brainard Avenue to the south) has a posted speed limit of 25 mph; no auxiliary turn lanes are provided. The east approach (O'Club Drive) consists of a single lane and has a 30 mph posted speed limit. The west approach (Brainard Avenue) consists of dual approach lanes (a shared left-through and right turn lane) and has a posted speed of 25 mph. The east and west approaches are controlled by stop signs. Sidewalks are present along each of the approaches, but no pedestrian traffic was noted during the July 29 – August 2 field reviews.

Lane Avenue Corridor

Lane Avenue is an east-west corridor located in the southern portion of the study area. The posted speed limit along the corridor is 35 mph, with the exception of the Lane Avenue/Rice Road intersection, which is posted at 25 mph. With respect to cross-sections, the western portion section from 15th Street to 19th Street is a 2-lane roadway, from this intersection west, Lane Avenue is a 3-lane roadway (1 through lane in each direction and a center TWLTL).

13. *Lane Avenue at 15th Street - Unsignalized*

The Lane Avenue and 15th Street intersection is an all-way stop intersection. Lane Avenue and 15th Street are both 2-lane undivided facilities with posted speed limits of 35 mph. Auxiliary left turn lanes are provided on each approach of the intersection.

Significant drainage features were noted in both the southeast and southwest corners of the intersection.

14. *Lane Avenue at 19th Street - Unsignalized*

The Lane Avenue and 19th Street intersection is a 4-legged intersection with three approaches having a posted speed limit of 35 mph (south approach is not posted). Auxiliary left turn lanes are provided on the north, east, and west approaches. The south approach, which consists of a single lane, is closed and is being used as a construction staging area. The north and south approaches of 19th Street are controlled by stop signs.

To the east of this intersection, Lane Avenue becomes a 3-lane facility consisting of an east-and westbound through lanes, in addition to a center TWLTL.

15. *Lane Avenue at 25th Street – Unsignalized*

The Lane Avenue and 25th Street intersection is a 4-legged intersection. The north and south approaches consist of a single lane with a posted speed limit of 25 mph. The east and west approaches have auxiliary left turn lanes and a posted speed limit of 35 mph. The north and south approaches of 25th Street are controlled by stop signs.

A sidewalk is provided along the northeast corner and gravel/asphalt trail was noted along the west side of the north approach.

The driveway located on the southeast quadrant of the intersection does not serve the adjacent building/parking area.

16. *Lane Avenue at Rice Road/Avenue of the States - Unsignalized*

Each of the three approaches has a posted speed limit of 25 mph. The southbound and eastbound right turns are accommodated with channelized right turn lanes; raised concrete medians are provided to direct traffic accordingly. In addition, each of these approaches contains “Proceed with Caution” signs on the approaches. The Lane Avenue approach is controlled by a stop sign.

Sidewalks are provided on both the east and west sides of the southbound approach, as well as (1) along the east side of the northbound approach and (2) in the southwest quadrant. Heavy pedestrian traffic was noted in the area.

As of August 9th, the intersection was scheduled to be closed until January 25, 2013 for construction of a traffic circle (per Fort Gordon's website: http://www.gordon.army.mil/NEWS/traffic/).

North Range Road Corridor

North Range Road is a 2-lane east/west facility that extends from 19th Street (west) to Avenue of the States. The posted speed limit in the eastern section adjacent to the residential units is 30 mph; the western section (from Lilac Court to 15th Street) has a posted speed limit of 40 mph. Multiple signs were posted to alert drivers to the potential presence of pedestrians/bicyclists. Overall, vehicular traffic on the facility was light.

17. North Range Road at 111th Avenue - Unsignalized

This is a 4-legged intersection with the southern leg angled toward the east. The north approach (15th Street) has a posted speed limit of 35 mph and the south approach (North Range Road) has a posted speed limit of 40 mph; this represents the through movement of the intersection. The east-west approaches (111th Avenue) are stop controlled and a speed limit is not posted.

There is an existing "parking area" on the southern side of the intersection that significantly expands the footprint of the intersection. A limited amount of vehicular traffic was noted at this intersection.

18. North Range Road at Avenue of the States - Unsignalized

This is a 4-legged intersection. Avenue of the States (through movement) is 5-lane facility consisting of two through lanes in each direction plus a center TWLTL; the posted speed limit is 35 mph. The North Range Road approaches are single lanes; the west leg of North Range Road is posted at 30 mph and the east leg does not have a posted speed limit.

US 1/SR 4 (Dean's Bridge Road) Interchange with Avenue of the States/Tobacco Road

19. US 1/SR 4 (Dean's Bridge Road) Southbound Ramps at Avenue of the States - Unsignalized

Standard stop controlled intersection for a diamond interchange. Posted speed limit along Avenue of the States is 45 mph; entering Fort Gordon traffic is posted at 15 mph. Avenue of the States is a 6-lane divided facility exiting Fort Gordon that transitions to a 4-lane divided facility heading east through the interchange.

The southbound off ramp is posted at 25 mph. The left turns from the ramp are controlled by a stop sign; the free-flowing right turn is channelized with a receiving lane on Avenue of the States.

Grass in the area is somewhat tall and the sidewalks appear to be receiving limited use.

20. US 1/SR 4 (Dean's Bridge Road) Northbound Ramps at Tobacco Road - Unsignalized

Standard interchange configuration. The eastbound right turn lane on Tobacco Road drops at northbound on-ramp (loop). Both ramps on the eastern side of the interchange are posted at 25 mph. The left turns from the ramp are controlled by a stop sign; the free-flowing right turn is channelized and controlled with a yield sign. West of the interchange, Tobacco Road is a 4-lane divided facility with a posted speed limit of 45 mph.

SIGNAL TIMING INFORMATION FROM THE CITY OF AUGUSTA

AUGUSTA TRAFFIC ENGINEERING
TRAFFIC SIGNAL CABINET
INVENTORY

LOCATION: GORDON HWY @ GATE 1 / JIMMIE DYESS PKWY.

CABINET #: 1498 (336) **CONTROLLER MANUFACTURER:** EAGLE

CONTROLLER MODEL #: 2070 L **CONTROLLER SERIAL #:** 9778

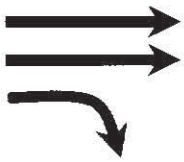
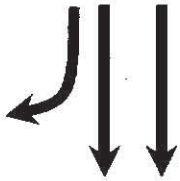
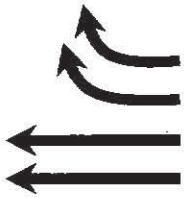
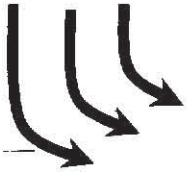
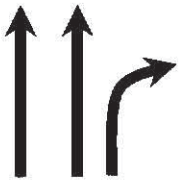
MONITOR MODEL #: 2010 ECL **MONITOR SERIAL #:** 215315

CONTROLLER ON LINE: O CONTROLLER OFF LINE: O

TIME BASE COORDINATION: O ISOLATED CONTROLLER (FREE): O

COMMENTS:

PHASING (VIEW FROM CABINET)

Gate 1 - NB – L.T.	Jimmie Dyess – SB	Gordon Hwy – EB – L.T.	Gordon Hwy – WB
Ø1	Ø2 	Ø3	Ø4 
Jimmie Dyess – SB – L.T.	**Gate 1 - NB**	**Gordon Hwy – WB – L.T.**	**Gordon Hwy - EB**
Ø5	Ø6 	Ø7 	Ø8 

PHASES ON RECALL: 1 2 3 4 5 6 7 8

REASON ON:

DATES PREVENTATIVE MAINTENANCE PERFORMED:

Programmed EPAC Data

8/6/2012
9:59:35AM

Intersection Name: Gordon Hwy @ Gate 1 **Intersection Alias: Gate1**

Access Code: 9999 Channel: 9 Address: 9 Revision: 3.32g

Access Data

Port 2 Comm :19200 Baud
Port 3 Comm :19200 Baud

Phase Data

Vehical Basic Timings / Vehical Density Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red	Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
1	8	3.0	25	25	4.0	3.0	0.0	0	0	0	0	0.0
2	15	5.0	40	60	5.0	2.0	2.0	45	15	0	30	2.5
3	8	3.0	35	35	4.0	3.0	0.0	0	0	0	0	0.0
4	15	6.0	40	40	5.0	2.0	2.0	45	15	0	30	2.5
5	8	4.0	45	45	4.0	3.0	0.0	0	0	0	0	0.0
6	15	5.0	40	60	5.0	2.0	2.0	45	15	0	30	2.5
7	8	3.0	20	40	4.0	3.0	0.0	0	0	0	0	0.0
8	15	6.0	40	40	5.0	2.0	2.0	45	15	0	30	2.5

Pedestrian Timing / Extended Actuated / General Control / Miscellaneous

Phase	Walk	Ped Clear	Flashing Walk	Ped Clear	Rest in Walk	Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay	Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
1	0	0	No	0	No	Inactive	None	None	None	0	No	No	No	No	No
2	0	0	No	0	No	Inactive	None	None	None	0	No	Yes	No	No	No
3	0	0	No	0	No	Inactive	None	None	None	0	No	No	No	No	No
4	0	0	No	0	No	Green	None	Min	None	0	No	Yes	No	No	No
5	0	0	No	0	No	Inactive	None	None	None	0	No	No	No	No	No
6	0	0	No	0	No	Inactive	None	None	None	0	No	Yes	No	No	No
7	0	0	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
8	0	0	No	0	No	Green	None	Min	None	0	No	Yes	No	No	No

Special Sequence
Default Data

Vehical Detector Phase Assignment

	Assigned Phase	Mode	Switched Phase	Extend	Delay
Vehical Detector Channel :3	5	Veh	0	0.0	0
Vehical Detector Channel :5	2	Veh	0	0.0	0
Vehical Detector Channel :6	2	Veh	0	0.0	0
Vehical Detector Channel :9	7	Veh	0	0.0	0
Vehical Detector Channel :11	7	Veh	0	0.0	0
Vehical Detector Channel :13	4	Veh	0	0.0	0
Vehical Detector Channel :14	4	Veh	0	0.0	0
Vehical Detector Channel :21	1	Veh	0	0.0	0
Vehical Detector Channel :23	6	Veh	0	0.0	0
Vehical Detector Channel :24	6	Veh	0	0.0	0
Vehical Detector Channel :29	3	Veh	0	0.0	0
Vehical Detector Channel :33	8	Veh	0	0.0	0
Vehical Detector Channel :34	8	Veh	0	0.0	0

Pedestrian Detector
Default Data

Special Detector Phase Assignment

	Assign Phase	Mode	Switched Phase	Extend	Delay
:					

Default Data

Unit Data

General Control

Startup Time: 0sec Startup State: All Red Red Revert: 4sec

Auto Ped Clear: No Stop Time Reset: No Alternate Sequence: 0

ABC connector Input Modes: 0

ABC connector Output Modes: 0

D connector Input Modes: 0

D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash

Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Phase(s)	Overlaps A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring

Phase	Ring	Next Phase
1	1	2
2	1	3
3	1	4
4	1	1
5	2	6
6	2	7
7	2	8
8	2	5

Concurrent Phases	Phase(s) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message 40

Default Data

Phase Pair(s)

No Alternate Sequences Programmed

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.8 Ped	12	16 - Ph.8 DPW	16
Ph.1 OLP	13	17 - Ph.1 RYG	17	Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19
Ph.4 OLP	16	20 - Ph.4 RYG	20	Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	11 - Ph.3 DPW	11
Ph.5 Ped	19	13 - Ph.5 DPW	13	Ph.7 Ped	20	15 - Ph.7 DPW	15				

Coordination Data

Dial/Split Cycle
/

General Coordination Data

Operation Mode: 0=Free
Coordination Mode: 0=Permissive
Maximun Mode: 1=Max 1
Correction Mode: 3=Short Way Plus

Offset Mode: 0=Beg Grn
Force Mode: 0=Plan
Max Dwell Time: 0
Yield Period: 0

Manual Dial: 1
Manual Split: 1
Manual Offset: 1

Split Times and Phase Mode

Dial / Split

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode

Traffic Plan Data

Plan: // Offset Time: Alt. Sequence: Mode: Rg 2 Lag Time: Rg 3 Lag Time: Rg 4 Lag Time:

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero ReferenceHours: 24 Min: 0
End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7

Traffic Data

PHASE FUNCTION

Event	Day	Time	D/S/O	flash	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		:	//																	

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	10
2	10
3	10
4	10

Flash > Preepmt 1	Preepmt 2 = Preempt 3	Preepmt 4 = Preempt 5
Preepmt 1 > Preempt 2	Preepmt 3 = Preempt 4	Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select: Ped Clear	Select: Yel	Select: Red	Track: Grn	Track: Ped	Track: Yel	Track: Red	Dwell Green	Return: Ped Clear	Return: Yel	Return: Red
1	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0

Preempt 1			Preempt 2			Preempt 3			Preempt 4			Preempt 5			Preempt 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1			Priority 2			Priority 3			Priority 4			Priority 5			Priority 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle

Default Data

Preempt 2

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 3

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 4

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 5

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph.	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp.	Track	Dwell	Cycle

Default Data

Preempt 6

Vehical Phases

Ph. Track Dwell Cycle

Default Data

Pedestrian Phases

Ph. Track Dwell Cycle

Default Data

Overlaps

Ovlp. Track Dwell Cycle

Default Data

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector Detector Channel Veh/Hr Average Time(mins) Occupancy Correction/10 Min Volume % Queue 1 Detectors System Detectors Weight Factor Queue 2 Detectors System Detectors Weight Factor

Default Data

Sample Interval:

Default Data

Queue: 1 Input Selection: 0=Average

Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average

Detector Failed Level : 0

Default Data

Queue:

Level Enter Leave Dial / Split / Offset

/ /

Default Data

Vehical Detector

Diagnostic Value 0

Detector Max Presence No Activity Erratic Count

Default Data - Diag 0 Values

Vehical Detector

Diagnostic Value 1

Detector Max Presence No Activity Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0

Detector Max Presence No Activity Erratic Count

Default Data - No Diag 0 Vali

Pedestrian Detector

Diagnostic Value 0

Detector Max Presence No Activity Erratic Count

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1

Detector Max Presence No Activity Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1

Detector Max Presence No Activity Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1 Detector_2 Distance :

Dial/Split/Offset

//

Default Data

Speed Trap Low Treshold Speed Trap High Treshold

Default Data

Volume Detector Data

Report Interval

Volume Detector Number Controller Detector Channel

Default Data

AUGUSTA TRAFFIC ENGINEERING
TRAFFIC SIGNAL CABINET
INVENTORY

LOCATION: GORDON HWY @ GATE 2 / ROBINSON AVE.

CABINET #: 1533 (336) **CONTROLLER MANUFACTURER:** EAGLE

CONTROLLER MODEL #: 2070 L **CONTROLLER SERIAL #:** 009695

MONITOR MODEL #: 2010 ECL **MONITOR SERIAL #:** 214299

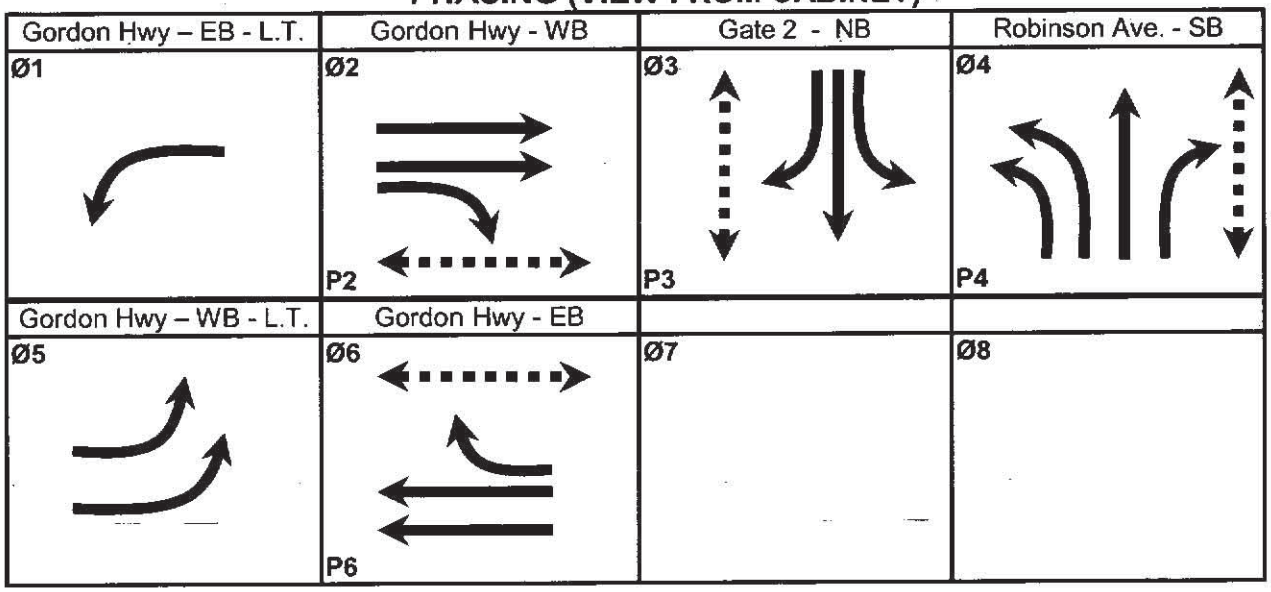
CONTROLLER ON LINE: O CONTROLLER OFF LINE: O

TIME BASE COORDINATION: O ISOLATED CONTROLLER (FREE): O

COMMENTS:

PHASING (VIEW FROM CABINET)

Gordon Hwy – EB - L.T.	Gordon Hwy - WB	Gate 2 - NB	Robinson Ave. - SB
Ø1	Ø2 P2	Ø3 P3	Ø4 P4
Gordon Hwy – WB - L.T.	Gordon Hwy - EB		
Ø5	Ø6 P6	Ø7	Ø8



PHASES ON RECALL: 1 2 3 4 5 6 7 8

REASON ON:

DATES PREVENTATIVE MAINTENANCE PERFORMED:

Programmed EPAC Data

8/6/2012
10:00:10AM

Intersection Name: Gordon Hwy @ Gate 2 **Intersection Alias: Gate 2**

Access Code: 9999 Channel: 1 Address: 0 Revision: 3.30"

Access Data

Port 2 Comm :19200 Baud
Port 3 Comm :19200 Baud

Phase Data

Vehical Basic Timings / Vehical Density Timings

Phase	Min_Grn	Passage	Max1	Max2	Yellow	All Red	Added Initial	Max_Initial	Time B4 Reduction	Cars Before	Time To Reduce	Min_Gap
1	4	3.0	15	25	4.2	2.5	0.0	0	0	0	0	0.0
2	15	6.0	40	60	5.0	1.8	2.0	40	18	0	8	3.0
3	6	3.0	65	65	3.0	3.6	0.0	0	0	0	0	0.0
4	6	3.0	65	65	4.1	3.9	0.0	0	0	0	0	0.0
5	4	3.0	20	45	4.3	2.7	0.0	0	0	0	0	0.0
6	15	6.0	40	60	5.0	1.8	2.0	40	18	0	8	3.0

Pedestrian Timing / Extended Actuated / General Control / Miscellaneous

Phase	Walk	Ped Clear	Flashing Walk	Ped Clear	Rest in Walk	Initialize	Non-Act Response	Veh Recall	Ped Recall	Recall Delay	Non Lock	Dual Entry	Last Car Passage	Conditional Service	No Simultaneous Gap Out
1	0	0	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
2	12	25	No	0	No	Green	None	Min	None	0	No	Yes	No	No	No
3	7	28	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
4	12	35	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
5	0	0	No	0	No	Inactive	None	None	None	0	Yes	No	No	No	No
6	7	19	No	0	No	Green	None	Min	None	0	No	Yes	No	No	No

Special Sequence
Default Data

Vehical Detector Phase Assignment

	Assigned Phase	Mode	Switched Phase	Extend	Delay
Vehical Detector Channel :1	1	Veh	6	0.0	0
Vehical Detector Channel :3	2	Veh	0	0.0	0
Vehical Detector Channel :4	2	Veh	0	0.0	0
Vehical Detector Channel :9	3	Veh	0	0.0	0
Vehical Detector Channel :11	4	Veh	0	0.0	0
Vehical Detector Channel :12	4	Veh	0	0.0	0
Vehical Detector Channel :13	4	Veh	0	0.0	0
Vehical Detector Channel :19	5	Veh	0	0.0	0
Vehical Detector Channel :21	6	Veh	0	0.0	0
Vehical Detector Channel :22	6	Veh	0	0.0	0

Pedestrian Detector

Pedestrian Detector Channel :8	3	Ped	0	0.0	0

Special Detector Phase Assignment

	Assign Phase	Mode	Switched Phase	Extend	Delay
:					

Default Data

Unit Data

General Control

Startup Time: 0sec Startup State: Flash Red Revert: 5sec

Auto Ped Clear: No Stop Time Reset: No Alternate Sequence: 0

ABC connector Input Modes: 0

ABC connector Output Modes: 0

D connector Input Modes: 0

D connector Output Modes: 0

Ring	Input Respons	Output Selection
1	Ring 1	Ring 1
2	Ring 2	Ring 2
3	None	None
4	None	None

Remote Flash

Test A = Flash

Phase	Flash Entry Phase	Flash Exit Phase

Default Data - No Flash

Channel	Flash Color	Flash Alternat

Default Data - No Flash

Overlaps

Phase(s)	Overlaps A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Trail Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Trail Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Plus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minus Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Ring

Phase	Ring	Next Phase
1	1	2
2	1	3
3	1	4
4	1	1
5	2	6
6	2	7

Concurrent Phases

Phase(s)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
	5	5	7	7	2	2	4	4								
	6	6	8	8	5	6	7	8								

Alternate Sequences

Alternate Sequences

Port 1 Data

BIU Addr	Port Status	Message 40

Default Data

Phase Pair(s)

No Alternate Sequences Programmed

Channel Assignment

Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set		Control	Channel	Hardware Pin Set	
Ph.1 Veh	1	1 - Ph.1 RYG	1	Ph.2 Veh	2	2 - Ph.2 RYG	2	Ph.3 Veh	3	3 - Ph.3 RYG	3
Ph.4 Veh	4	4 - Ph.4 RYG	4	Ph.5 Veh	5	5 - Ph.5 RYG	5	Ph.6 Veh	6	6 - Ph.6 RYG	6
Ph.7 Veh	7	7 - Ph.7 RYG	7	Ph.8 Veh	8	8 - Ph.8 RYG	8	Ph.2 Ped	9	10 - Ph.2 DPW	10
Ph.4 Ped	10	12 - Ph.4 DPW	12	Ph.6 Ped	11	14 - Ph.6 DPW	14	Ph.1 OLP	13	17 - Ph.1 RYG	17
Ph.2 OLP	14	18 - Ph.2 RYG	18	Ph.3 OLP	15	19 - Ph.3 RYG	19	Ph.4 OLP	16	20 - Ph.4 RYG	20
Ph.1 Ped	17	9 - Ph.1 DPW	9	Ph.3 Ped	18	16 - Ph.3 DPW	16	Ph.5 Ped	19	13 - Ph.5 DPW	13
Ph.7 Ped	20	15 - Ph.7 DPW	15								

Coordination Data

Dial/Split Cycle

/

General Coordination Data

Operation Mode: 0=Free

Coordination Mode: 0=Permissive

Maximun Mode: 2=Max 2

Correction Mode: 0=Dwell

Offset Mode: 0=Beg Grn

Force Mode: 0=Plan

Max Dwell Time: 0

Yield Period: 0

Manual Dial: 1

Manual Split: 1

Manual Offset: 1

Split Times and Phase Mode

Dial / Split

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode

Traffic Plan Data

Plan: // Offset Time: Alt. Sequence: Mode: Rg 2 Lag Time: Rg 3 Lag Time: Rg 4 Lag Time:

Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero ReferenceHours: 0 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days 1	2	3	4	5	6	7

Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		:	//																	

AUX. Events

Event	Program Day	Hour	Min.	Aux Ouputs 1	2	3	Det. Diag. D1	Det. Rpt. D2	Det. Mult100 D3	Dimming	Special Function Outputs 1	2	3	4	5	6	7	8

Default Data - No Special Day(s) or Week(s) Programmed

Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8
Special Function 1	X							
Special Function 2		X						
Special Function 3			X					
Special Function 4				X				
Special Function 5					X			
Special Function 6						X		
Special Function 7							X	
Special Function 8								X

Phase Function

Phase Function Map	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

Dimming Data

Channel	Red	Yellow	Green	Alternate
	☐	☐	☐	☐

Default Data - No Dimming Programmed

Preemption Data

General Preemption Data

Ring	Min Grn/Walk Time
1	10
2	10
3	10
4	10

Flash > Preepmt 1 Preepmt 2 = Preempt 3 Preepmt 4 = Preempt 5
Preepmt 1 > Preempt 2 Preepmt 3 = Preempt 4 Preepmt 5 = Preempt 6

Preempt Timers

Preempt	Non-Locking	Link to Preempt	Delay	Extend	Duration	MaxCall	Lock-Out	Select Ped Clear	Select Yel	Select Red	Track Grn	Track Ped	Track Yel	Track Red	Dwell Green	Return Ped Clear	Return Yel	Return Red
1	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
2	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
3	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
4	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
5	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0
6	No	0	0	0	0	0	0	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0

Preempt 1			Preempt 2			Preempt 3			Preempt 4			Preempt 5			Preempt 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls

Priority Timers

Priority	Non-Locking	Delay	Extend	Duration	Dwell	Max_Call	Lock-Out	Skip Phases
1	No	0	0	0	0	0	0	0=Do not Skip Phases
2	No	0	0	0	0	0	0	0=Do not Skip Phases
3	No	0	0	0	0	0	0	0=Do not Skip Phases
4	No	0	0	0	0	0	0	0=Do not Skip Phases
5	No	0	0	0	0	0	0	0=Do not Skip Phases
6	No	0	0	0	0	0	0	0=Do not Skip Phases

Priority 1			Priority 2			Priority 3			Priority 4			Priority 5			Priority 6		
Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls	Phase	Exit Phase	Exit Calls

Preempt 1

Vehical Phases

Ph.	Track	Dwell	Cycle

Default Data

Pedestrian Phases

Ph	Track	Dwell	Cycle

Default Data

Overlaps

Ovlp	Track	Dwell	Cycle

Default Data

Preempt 2

Vehical Phases				Pedestrian Phases				Overlaps			
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle
Default Data				**Default Data**				**Default Data**			

Preempt 3

Vehical Phases				Pedestrian Phases				Overlaps			
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle
Default Data				**Default Data**				**Default Data**			

Preempt 4

Vehical Phases				Pedestrian Phases				Overlaps			
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle
Default Data				**Default Data**				**Default Data**			

Preempt 5

Vehical Phases				Pedestrian Phases				Overlaps			
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle
Default Data				**Default Data**				**Default Data**			

Preempt 6

Vehical Phases				Pedestrian Phases				Overlaps			
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle
Default Data				**Default Data**				**Default Data**			

System/Detectors Data

Local Critical Alarms

Revert to Backup: 15 1st Phone:

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No 2nd Phone:

Local Fash: No Cycle Fault: No Coord Fault: No Premption: No Voltage Monitor: No

Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

Traffic Responsive

System Detector	Detector Channel	Veh/Hr	Average Time(mins)	Occupancy Correction/10	Min Volume %	Queue 1 Detectors	System Detectors	Weight Factor	Queue 2 Detectors	System Detectors	Weight Factor
Default Data											

Sample Interval:

Queue: 1 Input Selection: 0=Average
Detector Failed Level : 0

Queue: 2 Input Selection: 0=Average
Detector Failed Level : 0

Default Data

Queue:

Level	Enter	Leave
Default Data		

Default Data

Dial / Split / Offset
/ /

Vehical Detector

Diagnostic Value 0			
Detector	Max Presence	No Activity	Erratic Count

Default Data - Diag 0 Values

Vehical Detector

Diagnostic Value 1			
Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 0			
Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Val

Pedestrian Detector

Diagnostic Value 0			
Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 0 Values

Pedestrian Detector

Diagnostic Value 1			
Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Special Detector

Diagnostic Value 1			
Detector	Max Presence	No Activity	Erratic Count

Default Data - No Diag 1 Values

Speed Trap Data

Speed Trap:

Measurement:

Detector 1 Detector_2 Distance :

Default Data

Volume Detector Data

Report Interval

Volume Controller

Detector Detector

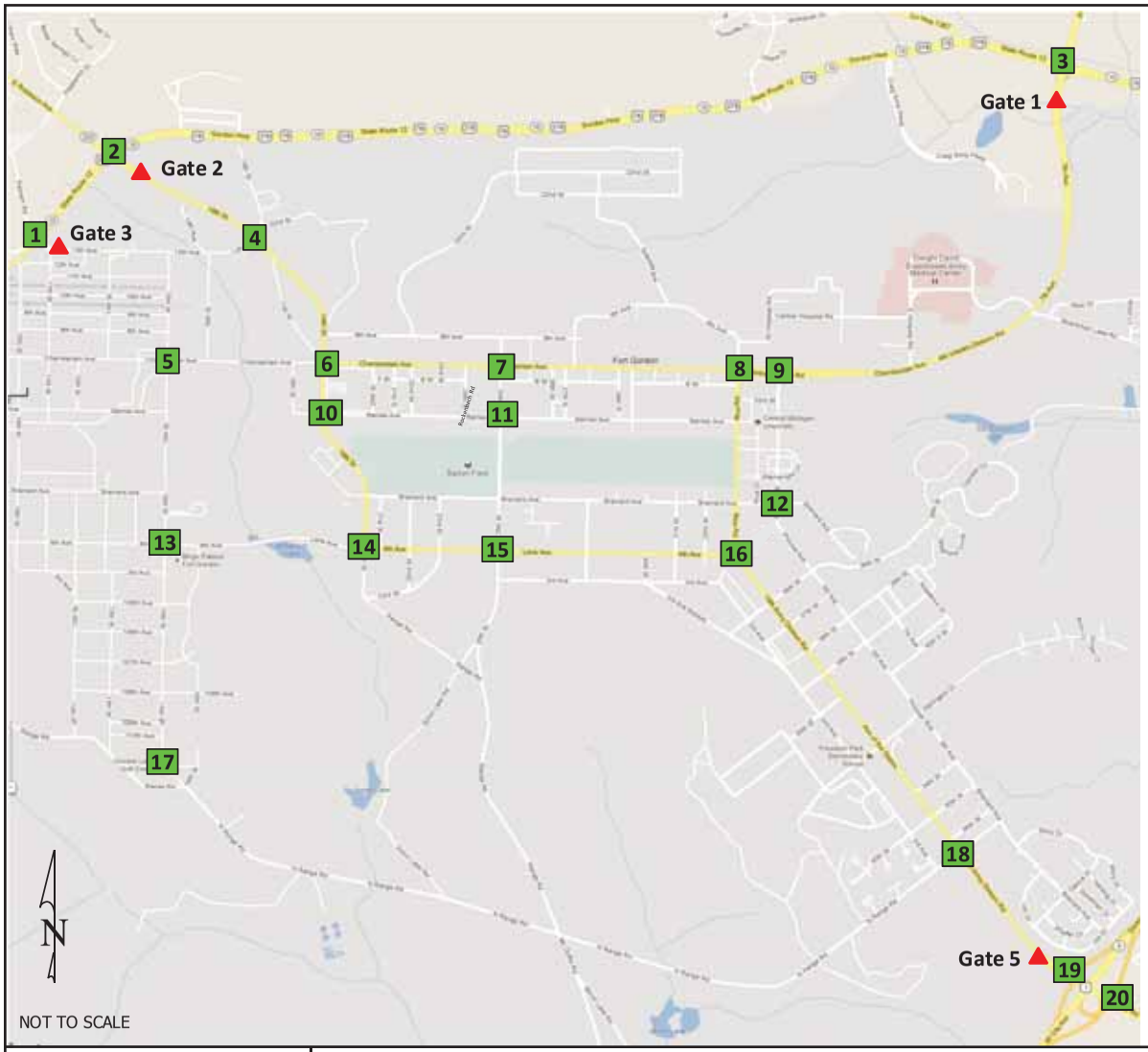
Number Channel

Default Data

Dial/Split/Offset Speed Trap Low Treshold Speed Trap High Treshold

//

Default Data



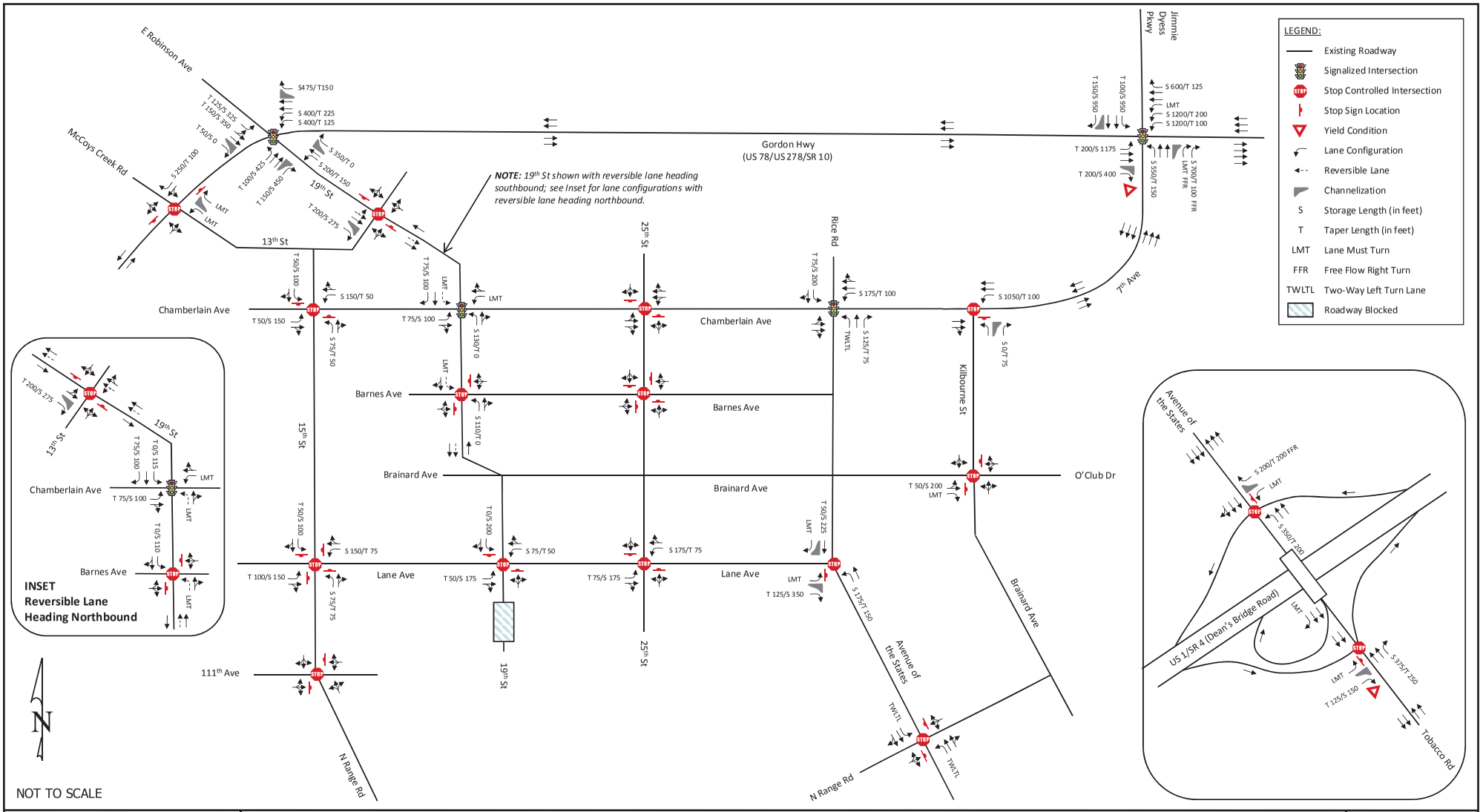
Fort Gordon Intersections:

1. Gordon Highway (US 78/US 278/SR 10) at McCoys Creek Road/ 13th Street (Gate 3)
2. Gordon Highway (US 78/US 278/SR 10) at E Robinson Avenue/ 19th Street (Gate 2) - Signalized
3. Gordon Highway (US 78/US 278/SR 10) at Jimmie Dyess Parkway/ 7th Avenue (Gate 1) – Signalized
4. 13th Street at 19th Street
5. Chamberlain Avenue at 15th Street
6. Chamberlain Avenue at 19th Street– Signalized
7. Chamberlain Avenue at 25th Street
8. Chamberlain Avenue at Rice Road - Signalized
9. Chamberlain Avenue at Kilbourne Street
10. Barnes Avenue at 19th Street
11. Barnes Avenue at 25th Street
12. Brainard Avenue/O'Club Drive at Kilbourne Street/ Brainard Avenue
13. Lane Avenue at 15th Street
14. Lane Avenue at 19th Street
15. Lane Avenue at 25th Street
16. Lane Avenue at Rice Road/Avenue of the States
17. North Range Road at 111th Avenue
18. North Range Road at Avenue of the States
19. US 1/SR 4 (Dean's Bridge Road) Southbound Ramps at Avenue of the States
20. US 1/SR 4 (Dean's Bridge Road) Northbound Ramps at Tobacco Road

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

ARCYBER Fort Gordon, Georgia
Study Intersections

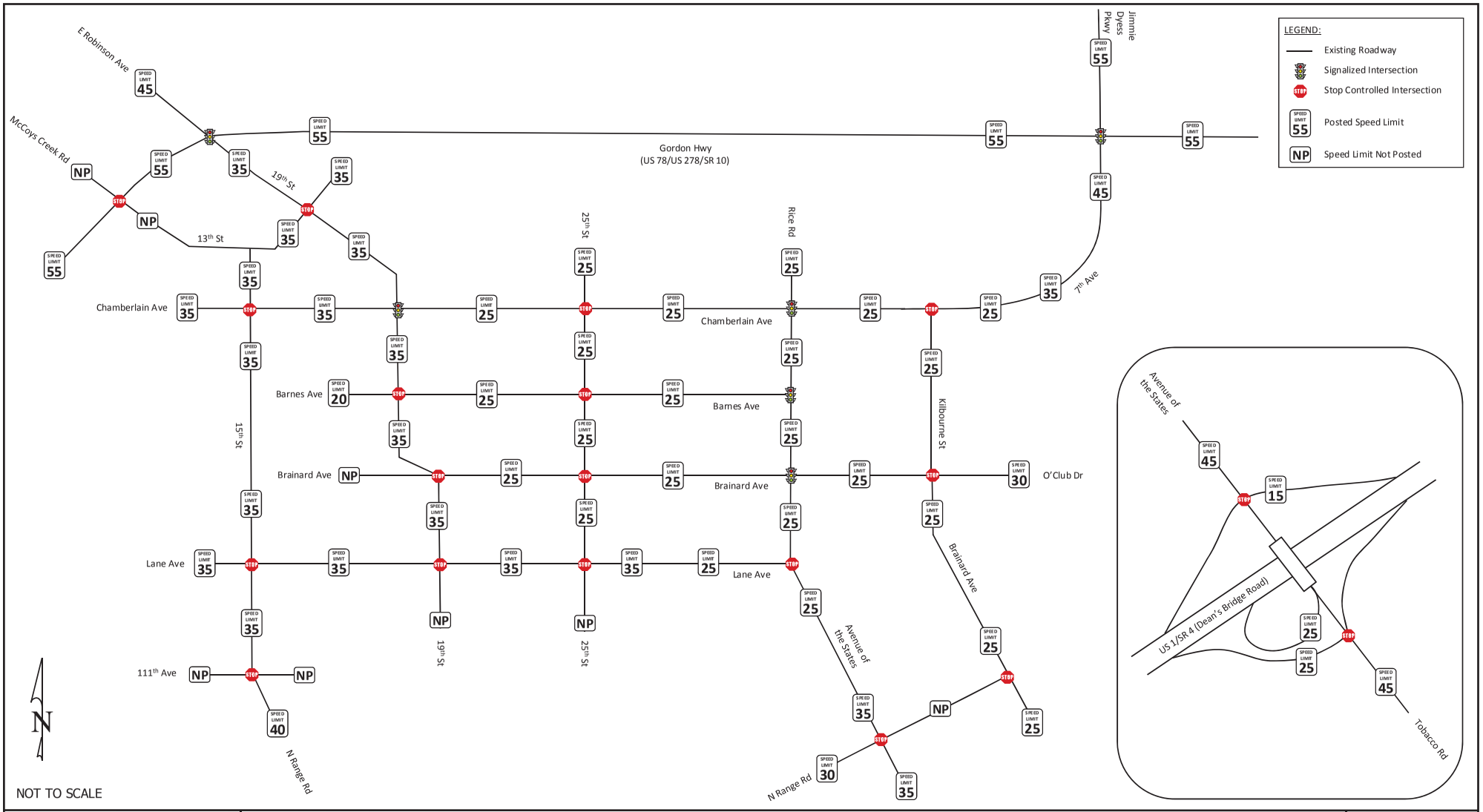
Figure
1



TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

ARCYBER Fort Gordon, Georgia
Intersection Geometry

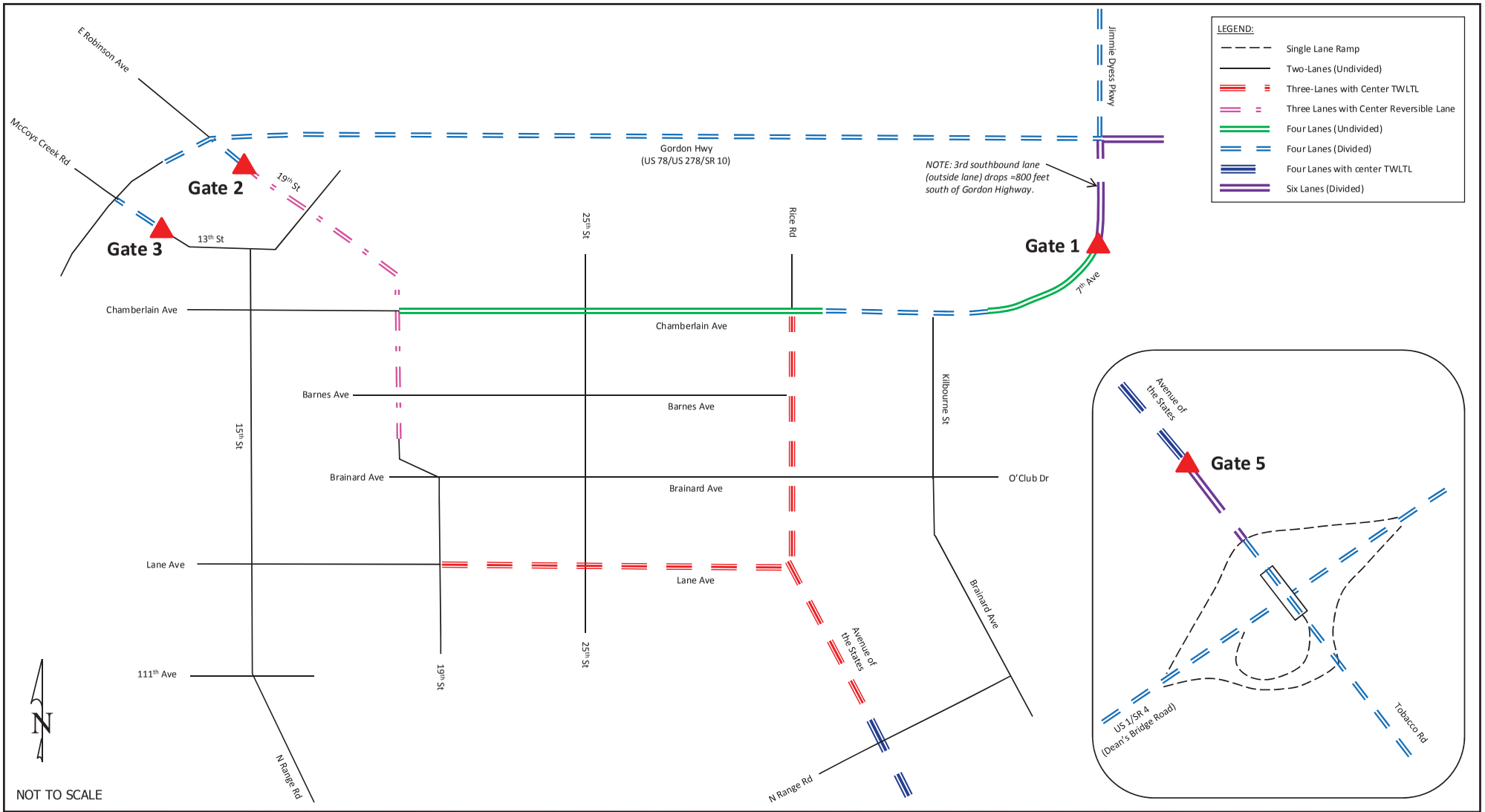
Figure 2



TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

ARCYBER Fort Gordon, Georgia
Intersection Control and Posted Speed Limits

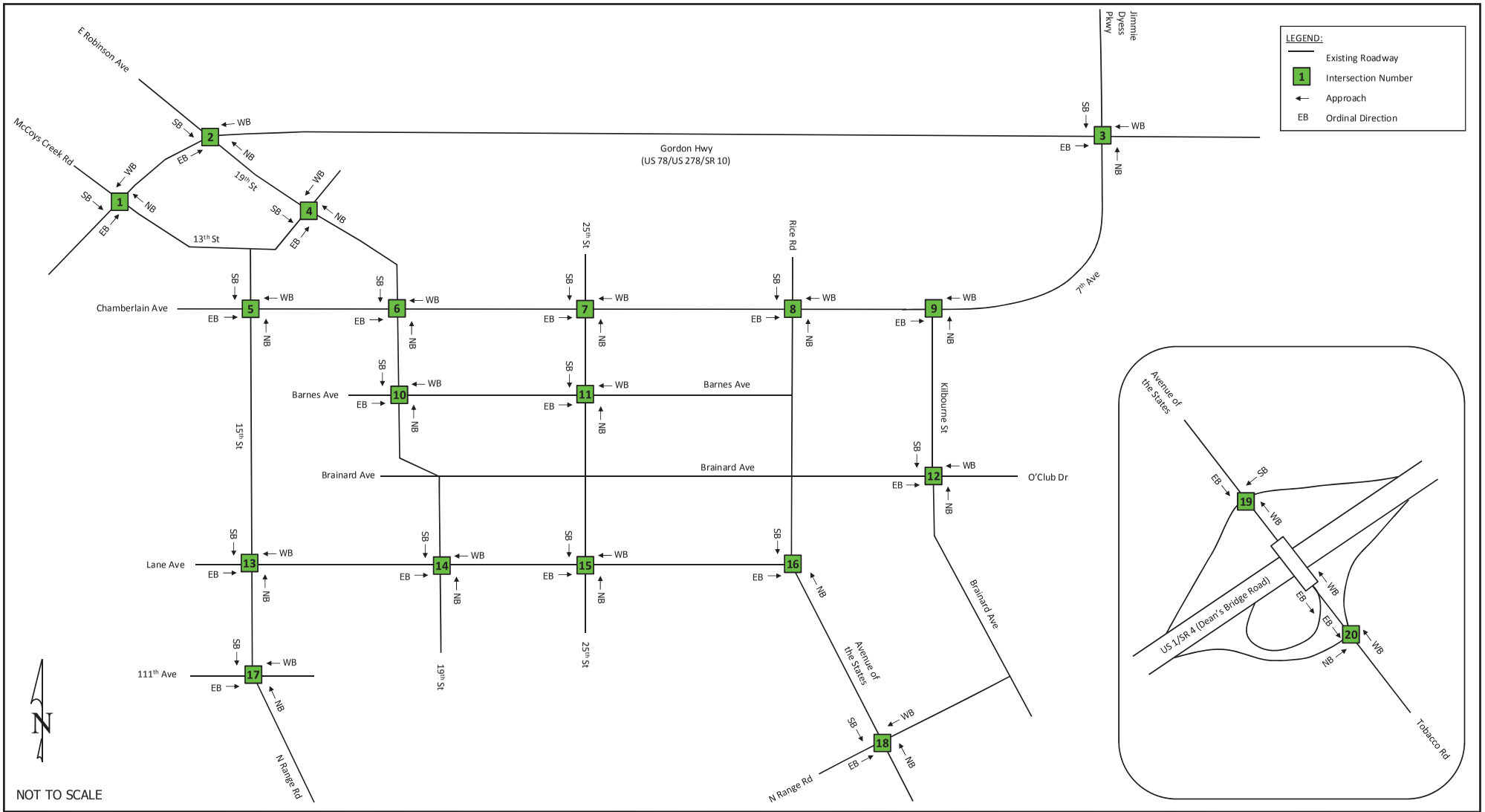
Figure 3



TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

ARCYBER Fort Gordon, Georgia
Facility Types

Figure
4



TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

ARCYBER Fort Gordon, Georgia
Ordinal Directions

Figure
5

Attachment 3

Existing Traffic Data – Fort Meade

Table A-1A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Laurel Fort Meade Rd				Mapes Rd				Ramp from MD 32 EB				Ramp to MD 32 EB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	103	69	172	4	100	0	104	88	0	11	99	0	0	0	0	375
06:15	0	135	54	189	2	148	0	150	87	0	12	99	0	0	0	0	438
06:30	0	109	99	208	3	148	0	151	67	0	22	89	0	0	0	0	448
06:45	0	167	104	271	3	208	0	211	92	0	10	102	0	0	0	0	584
07:00	0	137	118	255	7	199	0	206	68	0	13	81	0	0	0	0	542
07:15	0	152	112	264	6	202	0	208	96	0	12	108	0	0	0	0	580
07:30	0	135	96	231	11	215	0	226	68	0	12	80	0	0	0	0	537
07:45	0	147	95	242	5	233	0	238	68	0	13	81	0	0	0	0	561
08:00	0	134	98	232	2	175	0	177	73	0	16	89	0	0	0	0	498
08:15	0	97	83	180	5	190	0	195	65	0	6	71	0	0	0	0	446
08:30	0	134	81	215	3	154	0	157	75	0	16	91	0	0	0	0	463
08:45	0	98	78	176	7	149	0	156	63	0	6	69	0	0	0	0	401
09:00	0	80	73	153	8	109	0	117	34	0	10	44	0	0	0	0	314
09:15	0	50	82	132	7	121	0	128	44	0	14	58	0	0	0	0	318

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	591	430	1021	27	824	0	851	324	0	47	371	0	0	0	0	2243
PHF	0	0.88	0.91	0.94	0.61	0.96	0	0.94	0.84	0	0.90	0.86	0	0	0	0	0.96

Start Date 7/31/2012
Start Time 15:00

Street Name	Laurel Fort Meade Rd				Mapes Rd				Ramp from MD 32 EB				Ramp to MD 32 EB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	41	170	211	42	196	0	238	32	0	32	64	0	0	0	0	513
15:45	0	49	242	291	39	202	0	241	33	0	31	64	0	0	0	0	596
16:00	0	39	239	278	54	258	0	312	27	0	27	54	0	0	0	0	644
16:15	0	53	258	311	79	241	0	320	40	0	37	77	0	0	0	0	708
16:30	0	39	255	294	81	254	0	335	29	0	33	62	0	0	0	0	691
16:45	0	52	254	306	60	264	0	324	29	0	35	64	0	0	0	0	694
17:00	0	50	253	303	60	241	0	301	29	0	32	61	0	0	0	0	665
17:15	0	44	269	313	47	283	0	330	31	0	32	63	0	0	0	0	706

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	0	194	1020	1214	280	1000	0	1280	127	0	137	264	0	0	0	0	2758
PHF	0	0.92	0.99	0.98	0.86	0.95	0	0.96	0.79	0	0.93	0.86	0	0	0	0	0.97

Table A-1B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Laurel Fort Meade Rd				Mapes Rd				Ramp from MD 32 EB				Ramp to MD 32 EB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	2	1	3	1	4	0	5	4	0	0	4	0	0	0	0	12
06:15	0	2	0	2	0	3	0	3	1	0	1	2	0	0	0	0	7
06:30	0	5	0	5	0	4	0	4	12	0	1	13	0	0	0	0	22
06:45	0	4	1	5	0	6	0	6	7	0	1	8	0	0	0	0	19
07:00	0	3	3	6	2	3	0	5	7	0	3	10	0	0	0	0	21
07:15	0	4	0	4	1	3	0	4	4	0	2	6	0	0	0	0	14
07:30	0	0	1	1	4	6	0	10	7	0	3	10	0	0	0	0	21
07:45	0	4	5	9	0	6	0	6	4	0	1	5	0	0	0	0	20
08:00	0	3	7	10	1	5	0	6	7	0	0	7	0	0	0	0	23
08:15	0	3	5	8	1	9	0	10	3	0	1	4	0	0	0	0	22
08:30	0	3	5	8	0	7	0	7	3	0	2	5	0	0	0	0	20
08:45	0	1	3	4	1	5	0	6	10	0	0	10	0	0	0	0	20
09:00	0	0	2	2	0	9	0	9	1	0	0	1	0	0	0	0	12
09:15	0	0	2	2	0	4	0	4	8	0	4	12	0	0	0	0	18

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	11	5	16	7	18	0	25	25	0	9	34	0	0	0	0	75
PHF	0	0.69	0.42	0.67	0.44	0.75	0	0.63	0.89	0	0.75	0.85	0	0	0	0	0.89

Start Date 7/31/2012
Start Time 15:00

Street Name	Laurel Fort Meade Rd				Mapes Rd				Ramp from MD 32 EB				Ramp to MD 32 EB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	4	4	0	1	0	1	4	0	1	5	0	0	0	0	10
15:45	0	0	6	6	1	5	0	6	2	0	0	2	0	0	0	0	14
16:00	0	0	3	3	0	3	0	3	0	0	1	1	0	0	0	0	7
16:15	0	1	2	3	0	6	0	6	0	0	1	1	0	0	0	0	10
16:30	0	2	4	6	1	3	0	4	0	0	1	1	0	0	0	0	11
16:45	0	1	3	4	0	5	0	5	0	0	1	1	0	0	0	0	10
17:00	0	1	8	9	0	1	0	1	0	0	1	1	0	0	0	0	11
17:15	0	0	3	3	0	3	0	3	0	0	0	0	0	0	0	0	6

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	0	5	17	22	1	15	0	16	0	0	4	4	0	0	0	0	42
PHF	0	0.63	0.53	0.61	0.25	0.63	0	0.67	0	0	1.00	1.00	0	0	0	0	0.95

Table A-1C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Laurel Fort Meade Rd				Mapes Rd				Ramp from MD 32 EB				Ramp to MD 32 EB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	105	70	175	5	104	0	109	92	0	11	103	0	0	0	0	387
06:15	0	137	54	191	2	151	0	153	88	0	13	101	0	0	0	0	445
06:30	0	114	99	213	3	152	0	155	79	0	23	102	0	0	0	0	470
06:45	0	171	105	276	3	214	0	217	99	0	11	110	0	0	0	0	603
07:00	0	140	121	261	9	202	0	211	75	0	16	91	0	0	0	0	563
07:15	0	156	112	268	7	205	0	212	100	0	14	114	0	0	0	0	594
07:30	0	135	97	232	15	221	0	236	75	0	15	90	0	0	0	0	558
07:45	0	151	100	251	5	239	0	244	72	0	14	86	0	0	0	0	581
08:00	0	137	105	242	3	180	0	183	80	0	16	96	0	0	0	0	521
08:15	0	100	88	188	6	199	0	205	68	0	7	75	0	0	0	0	468
08:30	0	137	86	223	3	161	0	164	78	0	18	96	0	0	0	0	483
08:45	0	99	81	180	8	154	0	162	73	0	6	79	0	0	0	0	421
09:00	0	80	75	155	8	118	0	126	35	0	10	45	0	0	0	0	326
09:15	0	50	84	134	7	125	0	132	52	0	18	70	0	0	0	0	336

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	602	435	1037	34	842	0	876	349	0	56	405	0	0	0	0	2318
PHF	0	0.88	0.90	0.94	0.57	0.95	0	0.93	0.87	0	0.88	0.89	0	0	0	0	0.96
% HV	0%	1.8%	1.1%	1.5%	20.6%	2.1%	0%	2.9%	7.2%	0%	16.1%	8.4%	0%	0%	0%	0%	3.2%

Start Date 7/31/2012
Start Time 15:00

Street Name	Laurel Fort Meade Rd				Mapes Rd				Ramp from MD 32 EB				Ramp to MD 32 EB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	41	174	215	42	197	0	239	36	0	33	69	0	0	0	0	523
15:45	0	49	248	297	40	207	0	247	35	0	31	66	0	0	0	0	610
16:00	0	39	242	281	54	261	0	315	27	0	28	55	0	0	0	0	651
16:15	0	54	260	314	79	247	0	326	40	0	38	78	0	0	0	0	718
16:30	0	41	259	300	82	257	0	339	29	0	34	63	0	0	0	0	702
16:45	0	53	257	310	60	269	0	329	29	0	36	65	0	0	0	0	704
17:00	0	51	261	312	60	242	0	302	29	0	33	62	0	0	0	0	676
17:15	0	44	272	316	47	286	0	333	31	0	32	63	0	0	0	0	712

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	0	199	1037	1236	281	1015	0	1296	127	0	141	268	0	0	0	0	2800
PHF	0	0.92	0.99	0.98	0.86	0.94	0	0.96	0.79	0	0.93	0.86	0	0	0	0	0.97
% HV	0%	2.5%	1.6%	1.8%	0.4%	1.5%	0%	1.2%	0.0%	0%	2.8%	1.5%	0%	0%	0%	0%	1.5%

Table A-2A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Mapes Rd				Mapes Rd				Ramp to MD 32 WB				Ramp from MD 32 WB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	21	182	0	203	0	14	15	29	0	0	0	0	99	4	16	119	351
06:15	16	206	0	222	0	13	13	26	0	0	0	0	142	5	9	156	404
06:30	13	157	0	170	0	27	28	55	0	0	0	0	135	2	16	153	378
06:45	0	223	0	223	0	18	17	35	0	0	0	0	209	21	20	250	508
07:00	25	188	0	213	0	24	22	46	0	0	0	0	177	0	21	198	457
07:15	19	231	0	250	0	31	36	67	0	0	0	0	175	7	16	198	515
07:30	16	189	0	205	0	28	43	71	0	0	0	0	202	2	12	216	492
07:45	20	205	0	225	0	26	22	48	0	0	0	0	207	2	5	214	487
08:00	28	181	0	209	0	22	22	44	0	0	0	0	156	6	16	178	431
08:15	11	158	0	169	0	26	20	46	0	0	0	0	170	2	9	181	396
08:30	24	189	0	213	0	25	27	52	0	0	0	0	134	0	8	142	407
08:45	21	143	0	164	0	24	15	39	0	0	0	0	135	0	17	152	355
09:00	9	107	0	116	0	22	14	36	0	0	0	0	91	6	4	101	253
09:15	18	74	0	92	0	21	13	34	0	0	0	0	108	0	6	114	240

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	60	831	0	891	0	101	118	219	0	0	0	0	763	30	69	862	1972
PHF	0.60	0.90	0	0.89	0	0.81	0.69	0.77	0	0	0	0	0.91	0.36	0.82	0.86	0.96

Start Date 7/31/2012
Start Time 15:00

Street Name	Mapes Rd				Mapes Rd				Ramp to MD 32 WB				Ramp from MD 32 WB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	17	44	0	61	0	149	91	240	0	0	0	0	86	0	6	92	393
15:45	28	60	0	88	0	157	79	236	0	0	0	0	84	0	2	86	410
16:00	16	49	0	65	0	206	108	314	0	0	0	0	104	1	4	109	488
16:15	32	59	0	91	0	204	91	295	0	0	0	0	116	0	2	118	504
16:30	14	55	0	69	0	212	91	303	0	0	0	0	120	0	6	126	498
16:45	32	47	0	79	0	207	90	297	0	0	0	0	117	0	3	120	496
17:00	22	54	0	76	0	189	89	278	0	0	0	0	118	0	0	118	472
17:15	29	49	0	78	0	172	90	262	0	0	0	0	137	0	9	146	486

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	94	210	0	304	0	829	380	1209	0	0	0	0	457	1	15	473	1986
PHF	0.73	0.89	0	0.84	0	0.98	0.88	0.96	0	0	0	0	0.95	0.25	0.63	0.94	0.99

Table A-2B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Mapes Rd				Mapes Rd				Ramp to MD 32 WB				Ramp from MD 32 WB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	5	0	0	5	0	2	1	3	0	0	0	0	6	5	0	11	19
06:15	2	0	0	2	0	0	1	1	0	0	0	0	1	2	0	3	6
06:30	15	0	0	15	0	4	0	4	0	0	0	0	0	0	0	0	19
06:45	13	0	0	13	0	4	0	4	0	0	0	0	0	0	0	0	17
07:00	9	2	0	11	0	2	0	2	0	0	0	0	2	1	0	3	16
07:15	8	0	0	8	0	0	3	3	0	0	0	0	4	2	0	6	17
07:30	9	0	0	9	0	4	3	7	0	0	0	0	4	1	0	5	21
07:45	5	2	0	7	0	0	2	2	0	0	0	0	6	0	0	6	15
08:00	7	3	0	10	0	1	2	3	0	0	0	0	5	2	0	7	20
08:15	5	1	0	6	0	0	4	4	0	0	0	0	12	2	0	14	24
08:30	5	0	0	5	0	1	0	1	0	0	0	0	7	5	0	12	18
08:45	9	0	0	9	0	2	3	5	0	0	0	0	4	2	1	7	21
09:00	3	0	0	3	0	4	2	6	0	0	0	0	6	6	1	13	22
09:15	7	1	0	8	0	0	1	1	0	0	0	0	2	6	0	8	17

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	39	2	0	41	0	10	6	16	0	0	0	0	10	4	0	14	71
PHF	0.75	0.25	0	0.79	0	0.63	0.50	0.57	0	0	0	0	0.63	0.50	0	0.58	0.85

Start Date 7/31/2012
Start Time 15:00

Street Name	Mapes Rd				Mapes Rd				Ramp to MD 32 WB				Ramp from MD 32 WB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	2	2	0	4	0	0	1	1	0	0	0	0	1	3	1	5	10
15:45	1	0	0	1	0	2	2	4	0	0	0	0	3	0	0	3	8
16:00	0	1	0	1	0	1	1	2	0	0	0	0	2	0	0	2	5
16:15	0	1	0	1	0	2	0	2	0	0	0	0	3	1	0	4	7
16:30	1	1	0	2	0	2	0	2	0	0	0	0	2	2	0	4	8
16:45	2	1	0	3	0	1	1	2	0	0	0	0	3	0	0	3	8
17:00	0	0	0	0	0	1	2	3	0	0	0	0	0	1	0	1	4
17:15	1	0	0	1	0	1	1	2	0	0	0	0	2	0	0	2	5

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	3	4	0	7	0	6	2	8	0	0	0	0	10	3	0	13	28
PHF	0.38	1.00	0	0.58	0	0.75	0.50	1.00	0	0	0	0	0.83	0.38	0	0.81	0.88

Table A-2C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Mapes Rd				Mapes Rd				Ramp to MD 32 WB				Ramp from MD 32 WB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	26	182	0	208	0	16	16	32	0	0	0	0	105	9	16	130	370
06:15	18	206	0	224	0	13	14	27	0	0	0	0	143	7	9	159	410
06:30	28	157	0	185	0	31	28	59	0	0	0	0	135	2	16	153	397
06:45	13	223	0	236	0	22	17	39	0	0	0	0	209	21	20	250	525
07:00	34	190	0	224	0	26	22	48	0	0	0	0	179	1	21	201	473
07:15	27	231	0	258	0	31	39	70	0	0	0	0	179	9	16	204	532
07:30	25	189	0	214	0	32	46	78	0	0	0	0	206	3	12	221	513
07:45	25	207	0	232	0	26	24	50	0	0	0	0	213	2	5	220	502
08:00	35	184	0	219	0	23	24	47	0	0	0	0	161	8	16	185	451
08:15	16	159	0	175	0	26	24	50	0	0	0	0	182	4	9	195	420
08:30	29	189	0	218	0	26	27	53	0	0	0	0	141	5	8	154	425
08:45	30	143	0	173	0	26	18	44	0	0	0	0	139	2	18	159	376
09:00	12	107	0	119	0	26	16	42	0	0	0	0	97	12	5	114	275
09:15	25	75	0	100	0	21	14	35	0	0	0	0	110	6	6	122	257

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	99	833	0	932	0	111	124	235	0	0	0	0	773	34	69	876	2043
PHF	0.73	0.90	0	0.90	0	0.87	0.67	0.75	0	0	0	0	0.92	0.40	0.82	0.88	0.96
% HV	39.4%	0.2%	0%	4.4%	0%	9.0%	4.8%	6.8%	0%	0%	0%	0%	1.3%	11.8%	0.0%	1.6%	3.5%

Start Date 7/31/2012
Start Time 15:00

Street Name	Mapes Rd				Mapes Rd				Ramp to MD 32 WB				Ramp from MD 32 WB				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	19	46	0	65	0	149	92	241	0	0	0	0	87	3	7	97	403
15:45	29	60	0	89	0	159	81	240	0	0	0	0	87	0	2	89	418
16:00	16	50	0	66	0	207	109	316	0	0	0	0	106	1	4	111	493
16:15	32	60	0	92	0	206	91	297	0	0	0	0	119	1	2	122	511
16:30	15	56	0	71	0	214	91	305	0	0	0	0	122	2	6	130	506
16:45	34	48	0	82	0	208	91	299	0	0	0	0	120	0	3	123	504
17:00	22	54	0	76	0	190	91	281	0	0	0	0	118	1	0	119	476
17:15	30	49	0	79	0	173	91	264	0	0	0	0	139	0	9	148	491

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	97	214	0	311	0	835	382	1217	0	0	0	0	467	4	15	486	2014
PHF	0.71	0.89	0	0.85	0	0.98	0.88	0.96	0	0	0	0	0.96	0.50	0.63	0.93	0.99
% HV	3.1%	1.9%	0%	2.3%	0%	0.7%	0.5%	0.7%	0%	0%	0%	0%	2.1%	75.0%	0.0%	2.7%	1.4%

Table A-3A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	O'Brien Rd				O'Brien Rd				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	7	0	9	46	6	7	59	7	133	1	141	2	23	29	54	263
06:15	5	5	0	10	22	6	6	34	11	180	1	192	1	29	24	54	290
06:30	9	15	0	24	13	6	9	28	2	160	0	162	0	42	51	93	307
06:45	12	7	0	19	23	2	9	34	9	173	2	184	0	27	43	70	307
07:00	8	13	0	21	32	10	1	43	12	167	0	179	0	38	54	92	335
07:15	6	18	1	25	13	4	1	18	18	176	3	197	1	43	72	116	356
07:30	21	26	0	47	26	12	7	45	14	148	1	163	1	39	78	118	373
07:45	12	20	0	32	34	11	10	55	7	149	1	157	1	42	68	111	355
08:00	11	33	0	44	23	7	10	40	10	122	1	133	1	35	93	129	346
08:15	3	26	2	31	18	6	11	35	9	141	0	150	2	33	61	96	312
08:30	7	18	21	46	31	6	6	43	9	163	1	173	5	31	86	122	384
08:45	5	22	0	27	27	12	6	45	9	159	1	169	5	48	76	129	370
09:00	5	6	0	11	21	5	8	34	12	108	2	122	3	23	47	73	240
09:15	8	6	2	16	50	11	6	67	5	81	2	88	0	25	48	73	244

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	50	97	1	148	96	34	28	158	49	595	6	650	4	159	311	474	1430
PHF	0.60	0.73	0.25	0.79	0.71	0.71	0.70	0.72	0.68	0.85	0.50	0.82	1.00	0.92	0.84	0.92	0.96

Start Date 8/1/2012
Start Time 15:00

Street Name	O'Brien Rd				O'Brien Rd				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	42	4	1	47	144	13	31	188	5	50	1	56	2	185	25	212	503
15:45	35	14	0	49	121	10	54	185	1	41	3	45	0	175	21	196	475
16:00	65	3	1	69	78	12	51	141	1	42	0	43	2	213	16	231	484
16:15	63	8	4	75	67	5	59	131	8	46	1	55	0	178	22	200	461
16:30	52	5	1	58	80	4	59	143	2	51	0	53	0	209	18	227	481
16:45	39	13	1	53	97	7	59	163	1	58	1	60	1	178	22	201	477
17:00	44	7	3	54	73	7	51	131	6	64	0	70	1	186	10	197	452
17:15	23	4	0	27	59	5	70	134	1	66	0	67	0	145	16	161	389

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:30	205	29	6	240	410	40	195	645	15	179	5	199	4	751	84	839	1923
PHF	0.79	0.52	0.38	0.80	0.71	0.77	0.83	0.86	0.47	0.90	0.42	0.89	0.50	0.88	0.84	0.91	0.96

Table A-3B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	O'Brien Rd				O'Brien Rd				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	2	0	2	0	1	0	1	3	1	0	4	0	2	0	2	9
06:15	0	0	0	0	3	0	0	3	0	0	0	0	0	2	0	2	5
06:30	0	0	0	0	4	0	0	4	0	0	0	0	0	1	0	1	5
06:45	3	0	0	3	1	0	2	3	3	0	0	3	0	2	0	2	11
07:00	0	0	0	0	4	0	1	5	2	2	0	4	0	2	0	2	11
07:15	0	2	0	2	2	0	0	2	2	1	0	3	0	2	0	2	9
07:30	0	0	0	0	3	0	0	3	1	0	0	1	0	3	0	3	7
07:45	0	0	0	0	0	2	2	4	5	2	0	7	0	2	0	2	13
08:00	1	0	0	1	6	1	2	9	1	0	0	1	0	2	0	2	13
08:15	0	0	0	0	6	0	0	6	2	2	0	4	0	2	0	2	12
08:30	0	0	0	0	1	0	0	1	10	1	0	11	0	2	0	2	14
08:45	1	1	0	2	3	0	2	5	7	4	0	11	0	1	0	1	19
09:00	1	0	0	1	2	1	0	3	1	0	0	1	0	3	0	3	8
09:15	0	0	1	1	2	0	1	3	1	0	0	1	0	1	1	2	7

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	1	2	0	3	11	3	4	18	9	3	0	12	0	9	0	9	42
PHF	0.25	0.25	0	0.38	0.46	0.38	0.50	0.50	0.45	0.38	0	0.43	0	0.75	0	0.75	0.81

Start Date 8/1/2012
Start Time 15:00

Street Name	O'Brien Rd				O'Brien Rd				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
15:45	0	0	0	0	1	0	0	1	0	1	0	1	0	0	0	0	2
16:00	2	0	0	2	1	0	0	1	0	0	0	0	0	1	0	1	4
16:15	0	0	0	0	1	1	0	2	0	0	0	0	0	2	0	2	4
16:30	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	3
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
17:15	2	0	0	2	0	0	0	0	0	0	0	0	0	2	0	2	4

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:30	2	0	0	2	3	3	0	6	0	1	0	1	0	4	0	4	13
PHF	0.25	0	0	0.25	0.75	0.38	0	0.75	0	0.25	0	0.25	0	0.50	0	0.50	0.81

Table A-3C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	O'Brien Rd				O'Brien Rd				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	9	0	11	46	7	7	60	10	134	1	145	2	25	29	56	272
06:15	5	5	0	10	25	6	6	37	11	180	1	192	1	31	24	56	295
06:30	9	15	0	24	17	6	9	32	2	160	0	162	0	43	51	94	312
06:45	15	7	0	22	24	2	11	37	12	173	2	187	0	29	43	72	318
07:00	8	13	0	21	36	10	2	48	14	169	0	183	0	40	54	94	346
07:15	6	20	1	27	15	4	1	20	20	177	3	200	1	45	72	118	365
07:30	21	26	0	47	29	12	7	48	15	148	1	164	1	42	78	121	380
07:45	12	20	0	32	34	13	12	59	12	151	1	164	1	44	68	113	368
08:00	12	33	0	45	29	8	12	49	11	122	1	134	1	37	93	131	359
08:15	3	26	2	31	24	6	11	41	11	143	0	154	2	35	61	98	324
08:30	7	18	21	46	32	6	6	44	19	164	1	184	5	33	86	124	398
08:45	6	23	0	29	30	12	8	50	16	163	1	180	5	49	76	130	389
09:00	6	6	0	12	23	6	8	37	13	108	2	123	3	26	47	76	248
09:15	8	6	3	17	52	11	7	70	6	81	2	89	0	26	49	75	251

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	51	99	1	151	107	37	32	176	58	598	6	662	4	168	311	483	1472
PHF	0.61	0.75	0.25	0.80	0.79	0.71	0.67	0.75	0.73	0.84	0.50	0.83	1.00	0.93	0.84	0.92	0.97
% HV	2.0%	2.0%	0.0%	2.0%	10.3%	8.1%	12.5%	10.2%	15.5%	0.5%	0.0%	1.8%	0.0%	5.4%	0.0%	1.9%	2.9%

Start Date 8/1/2012
Start Time 15:00

Street Name	O'Brien Rd				O'Brien Rd				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	42	4	1	47	144	15	31	190	5	50	1	56	2	186	25	213	506
15:45	35	14	0	49	122	10	54	186	1	42	3	46	0	175	21	196	477
16:00	67	3	1	71	79	12	51	142	1	42	0	43	2	214	16	232	488
16:15	63	8	4	75	68	6	59	133	8	46	1	55	0	180	22	202	465
16:30	52	5	1	58	81	4	59	144	2	52	0	54	0	210	18	228	484
16:45	39	13	1	53	97	7	59	163	1	58	1	60	1	178	22	201	477
17:00	44	7	3	54	74	7	51	132	6	64	0	70	1	187	10	198	454
17:15	25	4	0	29	59	5	70	134	1	66	0	67	0	147	16	163	393

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:30	207	29	6	242	413	43	195	651	15	180	5	200	4	755	84	843	1936
PHF	0.77	0.52	0.38	0.81	0.72	0.72	0.83	0.86	0.47	0.90	0.42	0.89	0.50	0.88	0.84	0.91	0.96
% HV	1.0%	0.0%	0.0%	0.8%	0.7%	7.0%	0.0%	0.9%	0.0%	0.6%	0.0%	0.5%	0.0%	0.5%	0.0%	0.5%	0.7%

Table A-4A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	6th Armored Calvary Rd				---				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	0	0	2	0	0	0	0	0	177	3	180	7	40	0	47	229
06:15	2	0	2	4	0	0	0	0	0	212	4	216	8	52	0	60	280
06:30	0	0	1	1	0	0	0	0	0	167	1	168	7	93	0	100	269
06:45	1	0	3	4	0	0	0	0	0	215	2	217	8	70	0	78	299
07:00	1	0	4	5	0	0	0	0	0	194	4	198	18	94	0	112	315
07:15	0	0	4	4	0	0	0	0	0	182	2	184	7	133	0	140	328
07:30	1	0	6	7	0	0	0	0	0	205	4	209	8	125	0	133	349
07:45	2	0	2	4	0	0	0	0	0	181	7	188	10	112	0	122	314
08:00	1	0	3	4	0	0	0	0	0	172	3	175	7	112	0	119	298
08:15	2	0	4	6	0	0	0	0	0	172	4	176	9	96	0	105	287
08:30	2	0	2	4	0	0	0	0	0	167	6	173	15	102	0	117	294
08:45	0	0	10	10	0	0	0	0	0	135	6	141	14	93	0	107	258
09:00	2	0	2	4	0	0	0	0	0	120	3	123	9	88	0	97	224
09:15	2	0	3	5	0	0	0	0	0	96	2	98	6	66	0	72	175

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	4	0	16	20	0	0	0	0	0	762	17	779	43	464	0	507	1306
PHF	0.50	0	0.67	0.71	0	0	0	0	0	0.93	0.61	0.93	0.60	0.87	0	0.91	0.94

Start Date 7/31/2012
Start Time 15:00

Street Name	6th Armored Calvary Rd				---				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	3	0	3	6	0	0	0	0	0	162	4	166	5	196	0	201	373
15:45	2	0	9	11	0	0	0	0	0	180	0	180	6	178	0	184	375
16:00	2	0	8	10	0	0	0	0	0	129	0	129	2	217	0	219	358
16:15	5	0	9	14	0	0	0	0	0	120	4	124	8	203	0	211	349
16:30	6	0	19	25	0	0	0	0	0	158	1	159	2	210	0	212	396
16:45	4	0	14	18	0	0	0	0	0	129	0	129	4	197	0	201	348
17:00	6	0	17	23	0	0	0	0	0	140	1	141	4	211	0	215	379
17:15	2	0	9	11	0	0	0	0	0	155	1	156	4	190	0	194	361

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	18	0	59	77	0	0	0	0	0	582	3	585	14	808	0	822	1484
PHF	0.75	0	0.78	0.77	0	0	0	0	0	0.92	0.75	0.92	0.88	0.96	0	0.96	0.94

Table A-4B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	6th Armored Calvary Rd				---				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	3	0	3	0	3	0	3	6
06:15	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
06:30	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
06:45	0	0	1	1	0	0	0	0	0	7	0	7	0	1	0	1	9
07:00	0	0	1	1	0	0	0	0	0	10	1	11	0	2	0	2	14
07:15	1	0	0	1	0	0	0	0	0	10	2	12	0	4	0	4	17
07:30	0	0	1	1	0	0	0	0	0	3	0	3	0	2	0	2	6
07:45	0	0	1	1	0	0	0	0	0	5	1	6	0	1	0	1	8
08:00	0	0	1	1	0	0	0	0	0	3	1	4	0	4	0	4	9
08:15	0	0	2	2	0	0	0	0	0	4	1	5	0	6	0	6	13
08:30	0	0	0	0	0	0	0	0	0	6	0	6	0	2	0	2	8
08:45	0	0	0	0	0	0	0	0	0	3	0	3	0	2	0	2	5
09:00	0	0	2	2	0	0	0	0	0	4	0	4	0	1	0	1	7
09:15	0	0	0	0	0	0	0	0	0	4	0	4	0	3	0	3	7

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	1	0	3	4	0	0	0	0	0	28	4	32	0	9	0	9	45
PHF	0.25	0	0.75	1.00	0	0	0	0	0	0.70	0.50	0.67	0	0.56	0	0.56	0.66

Start Date 7/31/2012
Start Time 15:00

Street Name	6th Armored Calvary Rd				---				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	0	0	0	0	0	4	0	4	0	1	0	1	5
15:45	0	0	0	0	0	0	0	0	0	4	0	4	0	2	0	2	6
16:00	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
16:30	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
16:45	0	0	0	0	0	0	0	0	0	3	0	3	0	2	0	2	5
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:15	0	0	1	1	0	0	0	0	0	0	0	0	1	2	0	3	4

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	0	0	1	1	0	0	0	0	0	4	0	4	2	6	0	8	13
PHF	0	0	0.25	0.25	0	0	0	0	0	0.33	0	0.33	0.50	0.75	0	0.67	0.65

Table A-4C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	6th Armored Calvary Rd				---				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	0	0	2	0	0	0	0	0	180	3	183	7	43	0	50	235
06:15	2	0	2	4	0	0	0	0	0	214	4	218	8	54	0	62	284
06:30	0	0	1	1	0	0	0	0	0	170	1	171	7	93	0	100	272
06:45	1	0	4	5	0	0	0	0	0	222	2	224	8	71	0	79	308
07:00	1	0	5	6	0	0	0	0	0	204	5	209	18	96	0	114	329
07:15	1	0	4	5	0	0	0	0	0	192	4	196	7	137	0	144	345
07:30	1	0	7	8	0	0	0	0	0	208	4	212	8	127	0	135	355
07:45	2	0	3	5	0	0	0	0	0	186	8	194	10	113	0	123	322
08:00	1	0	4	5	0	0	0	0	0	175	4	179	7	116	0	123	307
08:15	2	0	6	8	0	0	0	0	0	176	5	181	9	102	0	111	300
08:30	2	0	2	4	0	0	0	0	0	173	6	179	15	104	0	119	302
08:45	0	0	10	10	0	0	0	0	0	138	6	144	14	95	0	109	263
09:00	2	0	4	6	0	0	0	0	0	124	3	127	9	89	0	98	231
09:15	2	0	3	5	0	0	0	0	0	100	2	102	6	69	0	75	182

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	5	0	19	24	0	0	0	0	0	790	21	811	43	473	0	516	1351
PHF	0.63	0	0.68	0.75	0	0	0	0	0	0.95	0.66	0.96	0.60	0.86	0	0.90	0.95
% HV	20.0%	0%	15.8%	16.7%	0%	0%	0%	0%	0%	3.5%	19.0%	3.9%	0.0%	1.9%	0%	1.7%	3.3%

Start Date 7/31/2012
Start Time 15:00

Street Name	6th Armored Calvary Rd				---				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	3	0	3	6	0	0	0	0	0	166	4	170	5	197	0	202	378
15:45	2	0	9	11	0	0	0	0	0	184	0	184	6	180	0	186	381
16:00	2	0	9	11	0	0	0	0	0	129	0	129	2	218	0	220	360
16:15	5	0	9	14	0	0	0	0	0	120	4	124	8	205	0	213	351
16:30	6	0	19	25	0	0	0	0	0	159	1	160	3	211	0	214	399
16:45	4	0	14	18	0	0	0	0	0	132	0	132	4	199	0	203	353
17:00	6	0	17	23	0	0	0	0	0	140	1	141	4	212	0	216	380
17:15	2	0	10	12	0	0	0	0	0	155	1	156	5	192	0	197	365

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	18	0	60	78	0	0	0	0	0	586	3	589	16	814	0	830	1497
PHF	0.75	0	0.79	0.78	0	0	0	0	0	0.92	0.75	0.92	0.80	0.96	0	0.96	0.94
% HV	0.0%	0%	1.7%	1.3%	0%	0%	0%	0%	0%	0.7%	0.0%	0.7%	12.5%	0.7%	0%	1.0%	0.9%

Table A-5A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Zimborski Ave				Zimborski Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	7	7	0	0	0	0	0	160	10	170	17	49	3	69	246
06:15	2	0	3	5	0	0	0	0	2	203	14	219	18	58	0	76	300
06:30	3	0	3	6	0	0	0	0	3	154	13	170	11	97	1	109	285
06:45	2	0	16	18	0	0	0	0	1	200	15	216	19	76	1	96	330
07:00	7	0	8	15	0	0	0	0	0	183	16	199	24	105	0	129	343
07:15	6	0	19	25	0	0	0	0	1	164	22	187	29	134	1	164	376
07:30	1	0	10	11	0	0	0	0	0	182	18	200	39	133	0	172	383
07:45	3	0	13	16	0	0	0	0	0	184	11	195	43	119	0	162	373
08:00	7	0	9	16	0	0	1	1	0	155	15	170	32	110	1	143	330
08:15	5	0	13	18	0	0	0	0	0	172	5	177	12	100	0	112	307
08:30	12	0	10	22	0	0	0	0	0	158	7	165	18	112	0	130	317
08:45	6	0	10	16	0	0	0	0	0	142	4	146	12	98	1	111	273
09:00	3	1	11	15	1	0	0	1	0	119	5	124	13	94	0	107	247
09:15	0	0	10	10	1	0	0	1	0	93	3	96	12	73	0	85	192

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	17	0	50	67	0	0	0	0	1	713	67	781	135	491	1	627	1475
PHF	0.61	0	0.66	0.67	0	0	0	0	0.25	0.97	0.76	0.98	0.78	0.92	0.25	0.91	0.96

Start Date 7/31/2012
Start Time 15:00

Street Name	Zimborski Ave				Zimborski Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	3	0	20	23	2	0	1	3	0	161	8	169	7	193	0	200	395
15:45	19	0	59	78	1	0	1	2	0	173	17	190	11	170	1	182	452
16:00	16	0	53	69	0	0	1	1	0	127	9	136	9	214	0	223	429
16:15	14	0	39	53	0	0	0	0	0	118	6	124	11	184	0	195	372
16:30	17	0	43	60	0	0	2	2	0	169	10	179	13	190	0	203	444
16:45	16	0	42	58	0	0	0	0	1	140	5	146	10	188	0	198	402
17:00	15	0	24	39	1	0	1	2	0	146	4	150	9	196	0	205	396
17:15	8	0	11	19	0	0	1	1	0	156	8	164	15	186	0	201	385

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	66	0	194	260	1	0	4	5	0	587	42	629	44	758	1	803	1697
PHF	0.87	0	0.82	0.83	0.25	0	0.50	0.63	0	0.85	0.62	0.83	0.85	0.89	0.25	0.90	0.94

Table A-5B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Zimborski Ave				Zimborski Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	3	0	3	0	3	0	3	6
06:15	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
06:30	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
06:45	0	0	0	0	0	0	0	0	0	8	0	8	0	1	0	1	9
07:00	0	0	1	1	0	0	0	0	1	9	1	11	0	2	0	2	14
07:15	0	0	0	0	0	0	0	0	0	11	0	11	0	4	0	4	15
07:30	0	0	0	0	0	0	1	1	0	5	0	5	0	1	0	1	7
07:45	0	0	0	0	0	0	0	0	0	6	0	6	0	1	0	1	7
08:00	1	0	0	1	0	0	0	0	0	4	0	4	0	3	0	3	8
08:15	1	0	0	1	0	0	0	0	0	6	0	6	0	5	0	5	12
08:30	0	0	0	0	0	0	0	0	0	6	0	6	0	2	0	2	8
08:45	0	0	1	1	0	0	0	0	0	3	0	3	1	2	0	3	7
09:00	0	0	0	0	0	0	0	0	0	6	1	7	1	2	0	3	10
09:15	0	0	0	0	0	0	0	0	0	3	1	4	1	3	0	4	8

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	0	0	1	1	0	0	1	1	1	31	1	33	0	8	0	8	43
PHF	0	0	0.25	0.25	0	0	0.25	0.25	0.25	0.70	0.25	0.75	0	0.50	0	0.50	0.72

Start Date 7/31/2012
Start Time 15:00

Street Name	Zimborski Ave				Zimborski Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	0	0	1	1	0	4	0	4	0	0	0	0	5
15:45	0	0	0	0	0	0	0	0	1	3	0	4	0	2	0	2	6
16:00	0	0	1	1	0	0	1	1	0	1	0	1	0	0	0	0	3
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
16:30	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
16:45	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:15	0	0	0	0	0	0	0	0	0	1	0	1	1	3	0	4	5

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	0	1	1	0	0	1	1	1	5	0	6	0	6	0	6	14
PHF	0	0	0.25	0.25	0	0	0.25	0.25	0.25	0.42	0	0.38	0	0.75	0	0.75	0.58

Table A-5C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Zimborski Ave				Zimborski Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	7	7	0	0	0	0	0	163	10	173	17	52	3	72	252
06:15	2	0	3	5	0	0	0	0	2	205	14	221	18	60	0	78	304
06:30	3	0	3	6	0	0	0	0	3	156	14	173	11	97	1	109	288
06:45	2	0	16	18	0	0	0	0	1	208	15	224	19	77	1	97	339
07:00	7	0	9	16	0	0	0	0	1	192	17	210	24	107	0	131	357
07:15	6	0	19	25	0	0	0	0	1	175	22	198	29	138	1	168	391
07:30	1	0	10	11	0	0	1	1	0	187	18	205	39	134	0	173	390
07:45	3	0	13	16	0	0	0	0	0	190	11	201	43	120	0	163	380
08:00	8	0	9	17	0	0	1	1	0	159	15	174	32	113	1	146	338
08:15	6	0	13	19	0	0	0	0	0	178	5	183	12	105	0	117	319
08:30	12	0	10	22	0	0	0	0	0	164	7	171	18	114	0	132	325
08:45	6	0	11	17	0	0	0	0	0	145	4	149	13	100	1	114	280
09:00	3	1	11	15	1	0	0	1	0	125	6	131	14	96	0	110	257
09:15	0	0	10	10	1	0	0	1	0	96	4	100	13	76	0	89	200

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	17	0	51	68	0	0	1	1	2	744	68	814	135	499	1	635	1518
PHF	0.61	0	0.67	0.68	0	0	0.25	0.25	0.50	0.97	0.77	0.97	0.78	0.90	0.25	0.92	0.97
% HV	0.0%	0%	2.0%	1.5%	0%	0%	100.0%	100.0%	50.0%	4.2%	1.5%	4.1%	0.0%	1.6%	0.0%	1.3%	2.8%

Start Date 7/31/2012
Start Time 15:00

Street Name	Zimborski Ave				Zimborski Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	3	0	20	23	2	0	2	4	0	165	8	173	7	193	0	200	400
15:45	19	0	59	78	1	0	1	2	1	176	17	194	11	172	1	184	458
16:00	16	0	54	70	0	0	2	2	0	128	9	137	9	214	0	223	432
16:15	14	0	39	53	0	0	0	0	0	118	6	124	11	186	0	197	374
16:30	17	0	43	60	0	0	2	2	0	170	10	180	13	192	0	205	447
16:45	16	0	42	58	0	0	0	0	1	142	5	148	10	190	0	200	406
17:00	15	0	24	39	1	0	1	2	0	146	4	150	9	197	0	206	397
17:15	8	0	11	19	0	0	1	1	0	157	8	165	16	189	0	205	390

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	66	0	195	261	1	0	5	6	1	592	42	635	44	764	1	809	1711
PHF	0.87	0	0.83	0.84	0.25	0	0.63	0.75	0.25	0.84	0.62	0.82	0.85	0.89	0.25	0.91	0.93
% HV	0.0%	0%	0.5%	0.4%	0.0%	0%	20.0%	16.7%	100.0%	0.8%	0.0%	0.9%	0.0%	0.8%	0.0%	0.7%	0.8%

Table A-6A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Taylor Ave				Taylor Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	3	0	14	17	1	0	0	1	12	142	13	167	13	63	7	83	268
06:15	5	0	3	8	1	0	0	1	12	179	15	206	22	71	15	108	323
06:30	13	0	6	19	2	1	1	4	10	141	5	156	12	94	16	122	301
06:45	6	1	16	23	1	0	1	2	12	193	5	210	21	90	13	124	359
07:00	12	0	6	18	3	0	3	6	24	172	5	201	27	118	30	175	400
07:15	21	0	18	39	0	0	0	0	14	169	4	187	40	145	17	202	428
07:30	18	3	22	43	2	1	1	4	21	165	7	193	36	157	27	220	460
07:45	14	4	14	32	1	0	1	2	20	179	0	199	19	138	27	184	417
08:00	7	1	15	23	4	0	1	5	12	152	0	164	15	135	16	166	358
08:15	9	1	6	16	0	0	2	2	16	171	0	187	11	101	12	124	329
08:30	9	0	16	25	1	0	2	3	10	157	0	167	9	117	12	138	333
08:45	11	1	9	21	0	0	1	1	13	139	1	153	10	106	10	126	301
09:00	3	0	8	11	0	2	0	2	6	124	1	131	12	102	9	123	267
09:15	4	1	8	13	2	0	2	4	6	96	1	103	5	79	5	89	209

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	65	7	60	132	6	1	5	12	79	685	16	780	122	558	101	781	1705
PHF	0.77	0.44	0.68	0.77	0.50	0.25	0.42	0.50	0.82	0.96	0.57	0.97	0.76	0.89	0.84	0.89	0.93

Start Date 7/31/2012
Start Time 15:00

Street Name	Taylor Ave				Taylor Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	3	1	14	18	18	0	18	36	4	172	5	181	6	183	6	195	430
15:45	11	1	28	40	10	1	10	21	2	221	2	225	7	159	2	168	454
16:00	11	0	57	68	23	0	19	42	1	191	1	193	14	191	4	209	512
16:15	12	0	47	59	16	1	18	35	1	154	1	156	9	173	2	184	434
16:30	8	0	43	51	27	3	33	63	0	202	3	205	9	154	1	164	483
16:45	11	0	29	40	16	0	17	33	2	183	1	186	9	176	2	187	446
17:00	6	1	29	36	22	1	21	44	2	159	2	163	19	180	2	201	444
17:15	5	0	21	26	5	1	15	21	1	172	1	174	13	175	2	190	411

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	42	1	175	218	76	5	80	161	4	768	7	779	39	677	9	725	1883
PHF	0.88	0.25	0.77	0.80	0.70	0.42	0.61	0.64	0.50	0.87	0.58	0.87	0.70	0.89	0.56	0.87	0.92

Table A-6B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Taylor Ave				Taylor Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	3	0	3	0	5	0	5	8
06:15	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
06:30	0	0	1	1	0	0	0	0	0	2	0	2	0	0	0	0	3
06:45	0	0	0	0	1	0	0	1	0	8	0	8	1	1	1	3	12
07:00	0	0	0	0	0	0	0	0	0	9	0	9	2	2	0	4	13
07:15	0	0	0	0	0	0	0	0	1	10	0	11	0	4	2	6	17
07:30	0	0	0	0	0	0	0	0	0	6	0	6	2	1	1	4	10
07:45	0	0	0	0	2	0	0	2	0	5	1	6	1	1	0	2	10
08:00	1	0	0	1	2	0	0	2	0	4	0	4	0	3	1	4	11
08:15	1	0	0	1	0	0	0	0	0	6	0	6	0	3	0	3	10
08:30	0	0	0	0	1	1	0	2	0	6	0	6	0	2	2	4	12
08:45	0	0	0	0	0	0	1	1	0	4	0	4	0	2	1	3	8
09:00	0	0	1	1	0	0	1	1	1	4	0	5	0	2	1	3	10
09:15	0	0	0	0	1	0	1	2	0	3	0	3	1	3	1	5	10

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	0	0	0	0	2	0	0	2	1	30	1	32	5	8	3	16	50
PHF	0	0	0	0	0.25	0	0	0.25	0.25	0.75	0.25	0.73	0.63	0.50	0.38	0.67	0.74

Start Date 7/31/2012
Start Time 15:00

Street Name	Taylor Ave				Taylor Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	1	0	1	1	0	0	1	0	4	0	4	1	0	0	1	7
15:45	0	0	0	0	0	0	1	1	0	3	0	3	1	1	1	3	7
16:00	0	1	0	1	2	1	0	3	0	2	0	2	0	0	1	1	7
16:15	0	0	1	1	0	0	1	1	0	0	0	0	0	1	1	2	4
16:30	0	0	0	0	1	0	0	1	0	1	0	1	0	2	0	2	4
16:45	0	0	0	0	0	0	0	0	1	1	0	2	0	2	0	2	4
17:00	0	1	0	1	2	0	0	2	0	0	0	0	0	1	0	1	4
17:15	0	0	0	0	0	0	0	0	0	1	0	1	0	5	0	5	6

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	1	1	2	3	1	2	6	0	6	0	6	1	4	3	8	22
PHF	0	0.25	0.25	0.50	0.38	0.25	0.50	0.50	0	0.50	0	0.50	0.25	0.50	0.75	0.67	0.79

Table A-6C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Taylor Ave				Taylor Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	3	0	14	17	1	0	0	1	12	145	13	170	13	68	7	88	276
06:15	5	0	3	8	1	0	0	1	12	181	15	208	22	72	15	109	326
06:30	13	0	7	20	2	1	1	4	10	143	5	158	12	94	16	122	304
06:45	6	1	16	23	2	0	1	3	12	201	5	218	22	91	14	127	371
07:00	12	0	6	18	3	0	3	6	24	181	5	210	29	120	30	179	413
07:15	21	0	18	39	0	0	0	0	15	179	4	198	40	149	19	208	445
07:30	18	3	22	43	2	1	1	4	21	171	7	199	38	158	28	224	470
07:45	14	4	14	32	3	0	1	4	20	184	1	205	20	139	27	186	427
08:00	8	1	15	24	6	0	1	7	12	156	0	168	15	138	17	170	369
08:15	10	1	6	17	0	0	2	2	16	177	0	193	11	104	12	127	339
08:30	9	0	16	25	2	1	2	5	10	163	0	173	9	119	14	142	345
08:45	11	1	9	21	0	0	2	2	13	143	1	157	10	108	11	129	309
09:00	3	0	9	12	0	2	1	3	7	128	1	136	12	104	10	126	277
09:15	4	1	8	13	3	0	3	6	6	99	1	106	6	82	6	94	219

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	65	7	60	132	8	1	5	14	80	715	17	812	127	566	104	797	1755
PHF	0.77	0.44	0.68	0.77	0.67	0.25	0.42	0.58	0.83	0.97	0.61	0.97	0.79	0.90	0.87	0.89	0.93
% HV	0.0%	0.0%	0.0%	0.0%	25.0%	0.0%	0.0%	14.3%	1.3%	4.2%	5.9%	3.9%	3.9%	1.4%	2.9%	2.0%	2.8%

Start Date 7/31/2012
Start Time 15:00

Street Name	Taylor Ave				Taylor Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	3	2	14	19	19	0	18	37	4	176	5	185	7	183	6	196	437
15:45	11	1	28	40	10	1	11	22	2	224	2	228	8	160	3	171	461
16:00	11	1	57	69	25	1	19	45	1	193	1	195	14	191	5	210	519
16:15	12	0	48	60	16	1	19	36	1	154	1	156	9	174	3	186	438
16:30	8	0	43	51	28	3	33	64	0	203	3	206	9	156	1	166	487
16:45	11	0	29	40	16	0	17	33	3	184	1	188	9	178	2	189	450
17:00	6	2	29	37	24	1	21	46	2	159	2	163	19	181	2	202	448
17:15	5	0	21	26	5	1	15	21	1	173	1	175	13	180	2	195	417

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	42	2	176	220	79	6	82	167	4	774	7	785	40	681	12	733	1905
PHF	0.88	0.50	0.77	0.80	0.71	0.50	0.62	0.65	0.50	0.86	0.58	0.86	0.71	0.89	0.60	0.87	0.92
% HV	0.0%	50.0%	0.6%	0.9%	3.8%	16.7%	2.4%	3.6%	0.0%	0.8%	0.0%	0.8%	2.5%	0.6%	25.0%	1.1%	1.2%

Table A-7A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	2	4	8	7	53	48	108	79	39	14	132	57	65	9	131	379
06:15	2	6	10	18	4	33	67	104	101	45	16	162	38	93	23	154	438
06:30	5	22	27	54	6	17	40	63	112	66	8	186	14	85	20	119	422
06:45	3	7	8	18	5	36	59	100	113	70	14	197	22	102	35	159	474
07:00	5	8	5	18	7	20	68	95	122	80	6	208	15	135	32	182	503
07:15	15	14	16	45	5	19	87	111	103	90	10	203	18	141	31	190	549
07:30	9	35	33	77	9	28	72	109	116	81	8	205	10	149	35	194	585
07:45	9	12	9	30	8	20	58	86	105	64	14	183	18	118	37	173	472
08:00	13	19	12	44	8	25	44	77	107	73	14	194	13	115	35	163	478
08:15	3	11	8	22	7	19	40	66	109	75	8	192	24	93	32	149	429
08:30	4	7	6	17	8	21	52	81	97	64	12	173	15	99	23	137	408
08:45	2	3	9	14	13	31	54	98	79	62	16	157	25	102	16	143	412
09:00	10	5	5	20	2	25	50	77	72	57	8	137	9	76	13	98	332
09:15	5	8	11	24	6	17	38	61	55	48	9	112	12	70	7	89	286

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	32	64	62	158	26	103	286	415	454	321	38	813	65	527	133	725	2111
PHF	0.53	0.46	0.47	0.51	0.72	0.72	0.82	0.93	0.93	0.89	0.68	0.98	0.74	0.88	0.95	0.93	0.90

Start Date 7/31/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	14	18	11	43	28	7	122	157	69	142	5	216	3	71	8	82	498
15:45	6	17	18	41	33	6	108	147	88	163	6	257	4	62	10	76	521
16:00	15	29	22	66	36	10	138	184	75	216	1	292	3	84	9	96	638
16:15	4	25	22	51	40	10	100	150	88	153	3	244	10	79	10	99	544
16:30	5	39	24	68	40	10	96	146	105	198	9	312	5	82	7	94	620
16:45	7	27	14	48	35	15	102	152	78	157	4	239	7	94	14	115	554
17:00	16	23	17	56	37	9	123	169	62	156	4	222	6	95	16	117	564
17:15	6	24	25	55	32	15	102	149	56	165	6	227	9	77	6	92	523

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	31	120	82	233	151	45	436	632	346	724	17	1087	25	339	40	404	2356
PHF	0.52	0.77	0.85	0.86	0.94	0.75	0.79	0.86	0.82	0.84	0.47	0.87	0.63	0.90	0.71	0.88	0.92

Table A-7B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	2	2	1	2	0	3	0	2	0	2	7
06:15	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
06:30	0	1	1	2	0	0	1	1	2	1	0	3	0	0	0	0	6
06:45	0	1	0	1	0	0	0	0	2	7	1	10	0	2	0	2	13
07:00	0	4	0	4	1	0	2	3	1	5	0	6	0	2	0	2	15
07:15	0	2	0	2	1	1	1	3	2	4	3	9	0	5	0	5	19
07:30	0	1	0	1	0	0	2	2	4	1	1	6	0	1	0	1	10
07:45	0	0	0	0	0	1	1	2	3	3	2	8	0	1	1	2	12
08:00	0	0	1	1	0	0	1	1	3	1	1	5	0	2	0	2	9
08:15	0	0	0	0	1	0	3	4	2	2	0	4	0	1	0	1	9
08:30	0	2	0	2	0	0	2	2	3	5	0	8	0	1	0	1	13
08:45	0	0	0	0	1	0	1	2	0	3	0	3	0	2	0	2	7
09:00	0	1	0	1	0	1	1	2	1	4	0	5	0	3	3	6	14
09:15	0	0	0	0	0	1	1	2	2	1	0	3	2	5	0	7	12

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	8	0	8	2	1	5	8	9	17	5	31	0	10	0	10	57
PHF	0	0.50	0	0.50	0.50	0.25	0.63	0.67	0.56	0.61	0.42	0.78	0	0.50	0	0.50	0.75

Start Date 7/31/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	0	1	1	2	1	3	0	4	1	0	0	1	7
15:45	0	1	0	1	0	0	2	2	2	2	0	4	0	1	0	1	8
16:00	0	0	0	0	1	1	0	2	3	0	0	3	0	0	1	1	6
16:15	0	0	1	1	0	0	1	1	0	1	0	1	0	1	0	1	4
16:30	0	0	0	0	0	0	2	2	1	1	0	2	0	0	0	0	4
16:45	0	0	0	0	0	1	2	3	1	1	0	2	0	1	0	1	6
17:00	0	0	0	0	0	1	0	1	3	0	0	3	0	0	0	0	4
17:15	0	0	0	0	0	0	4	4	1	0	0	1	0	1	0	1	6

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	0	1	1	1	2	5	8	5	3	0	8	0	2	1	3	20
PHF	0	0	0.25	0.25	0.25	0.50	0.63	0.67	0.42	0.75	0	0.67	0	0.50	0.25	0.75	0.83

Table A-7C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	2	4	8	7	53	50	110	80	41	14	135	57	67	9	133	386
06:15	2	6	10	18	4	33	67	104	101	47	16	164	38	94	23	155	441
06:30	5	23	28	56	6	17	41	64	114	67	8	189	14	85	20	119	428
06:45	3	8	8	19	5	36	59	100	115	77	15	207	22	104	35	161	487
07:00	5	12	5	22	8	20	70	98	123	85	6	214	15	137	32	184	518
07:15	15	16	16	47	6	20	88	114	105	94	13	212	18	146	31	195	568
07:30	9	36	33	78	9	28	74	111	120	82	9	211	10	150	35	195	595
07:45	9	12	9	30	8	21	59	88	108	67	16	191	18	119	38	175	484
08:00	13	19	13	45	8	25	45	78	110	74	15	199	13	117	35	165	487
08:15	3	11	8	22	8	19	43	70	111	77	8	196	24	94	32	150	438
08:30	4	9	6	19	8	21	54	83	100	69	12	181	15	100	23	138	421
08:45	2	3	9	14	14	31	55	100	79	65	16	160	25	104	16	145	419
09:00	10	6	5	21	2	26	51	79	73	61	8	142	9	79	16	104	346
09:15	5	8	11	24	6	18	39	63	57	49	9	115	14	75	7	96	298

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	32	72	62	166	28	104	291	423	463	338	43	844	65	537	133	735	2168
PHF	0.53	0.50	0.47	0.53	0.78	0.72	0.83	0.93	0.94	0.90	0.72	0.99	0.74	0.90	0.95	0.94	0.91
% HV	0.0%	11.1%	0.0%	4.8%	7.1%	1.0%	1.7%	1.9%	1.9%	5.0%	11.6%	3.7%	0.0%	1.9%	0.0%	1.4%	2.6%

Start Date 7/31/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	14	18	11	43	28	8	123	159	70	145	5	220	4	71	8	83	505
15:45	6	18	18	42	33	6	110	149	90	165	6	261	4	63	10	77	529
16:00	15	29	22	66	37	11	138	186	78	216	1	295	3	84	10	97	644
16:15	4	25	23	52	40	10	101	151	88	154	3	245	10	80	10	100	548
16:30	5	39	24	68	40	10	98	148	106	199	9	314	5	82	7	94	624
16:45	7	27	14	48	35	16	104	155	79	158	4	241	7	95	14	116	560
17:00	16	23	17	56	37	10	123	170	65	156	4	225	6	95	16	117	568
17:15	6	24	25	55	32	15	106	153	57	165	6	228	9	78	6	93	529

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	31	120	83	234	152	47	441	640	351	727	17	1095	25	341	41	407	2376
PHF	0.52	0.77	0.86	0.86	0.95	0.73	0.80	0.86	0.83	0.84	0.47	0.87	0.63	0.90	0.73	0.88	0.92
% HV	0.0%	0.0%	1.2%	0.4%	0.7%	4.3%	1.1%	1.3%	1.4%	0.4%	0.0%	0.7%	0.0%	0.6%	2.4%	0.7%	0.8%

Table A-8A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Ernie Pyle St				Ernie Pyle St				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	2	3	7	0	13	2	15	1	19	19	39	74	58	4	136	197
06:15	4	2	3	9	0	19	1	20	0	12	29	41	85	75	8	168	238
06:30	3	1	3	7	0	14	1	15	1	28	34	63	63	68	4	135	220
06:45	6	2	3	11	0	24	3	27	1	19	26	46	91	97	3	191	275
07:00	7	5	5	17	0	29	1	30	4	23	38	65	77	110	3	190	302
07:15	10	3	7	20	1	30	1	32	13	25	29	67	75	108	9	192	311
07:30	31	10	9	50	0	31	2	33	12	36	42	90	70	91	9	170	343
07:45	24	2	15	41	0	29	1	30	9	23	30	62	60	103	9	172	305
08:00	22	9	24	55	1	19	4	24	2	28	38	68	100	87	12	199	346
08:15	18	12	15	45	1	36	5	42	7	21	37	65	100	79	5	184	336
08:30	15	9	25	49	1	31	10	42	8	16	39	63	115	74	8	197	351
08:45	22	8	25	55	3	19	5	27	15	21	37	73	90	71	6	167	322
09:00	28	7	18	53	0	20	6	26	4	23	36	63	51	44	6	101	243
09:15	24	23	23	70	1	33	3	37	4	23	29	56	57	50	2	109	272

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
08:00	77	38	89	204	6	105	24	135	32	86	151	269	405	311	31	747	1355
PHF	0.88	0.79	0.89	0.93	0.50	0.73	0.60	0.80	0.53	0.77	0.97	0.92	0.88	0.89	0.65	0.94	0.97

Start Date 7/31/2012
Start Time 15:00

Street Name	Ernie Pyle St				Ernie Pyle St				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	33	8	67	108	8	11	6	25	11	97	16	124	20	28	0	48	305
15:45	30	18	58	106	11	8	12	31	7	125	21	153	14	19	0	33	323
16:00	19	17	97	133	5	7	2	14	8	139	23	170	14	35	4	53	370
16:15	47	10	68	125	7	9	8	24	1	142	17	160	12	23	2	37	346
16:30	25	18	71	114	6	8	19	33	3	158	11	172	10	29	0	39	358
16:45	20	7	45	72	6	8	16	30	1	148	17	166	8	37	2	47	315
17:00	28	4	33	65	9	9	11	29	1	148	12	161	13	35	3	51	306
17:15	22	13	38	73	3	5	3	11	2	140	12	154	12	33	0	45	283

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	121	63	294	478	29	32	41	102	19	564	72	655	50	106	6	162	1397
PHF	0.64	0.88	0.76	0.90	0.66	0.89	0.54	0.77	0.59	0.89	0.78	0.95	0.89	0.76	0.38	0.76	0.94

Table A-8B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Ernie Pyle St				Ernie Pyle St				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2
06:15	0	0	0	0	0	1	0	1	0	1	0	1	0	1	0	1	3
06:30	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
06:45	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
07:00	0	0	0	0	0	0	0	0	0	1	2	3	0	0	0	0	3
07:15	1	1	0	2	0	0	0	0	0	2	1	3	0	0	0	0	5
07:30	3	1	3	7	0	0	0	0	0	2	0	2	0	0	0	0	9
07:45	1	1	0	2	0	1	0	1	0	2	0	2	1	0	0	1	6
08:00	0	2	1	3	0	0	0	0	0	0	1	1	0	0	0	0	4
08:15	1	0	0	1	1	1	1	3	0	0	1	1	1	0	0	1	6
08:30	0	0	1	1	0	0	0	0	0	3	0	3	0	0	0	0	4
08:45	2	0	0	2	0	1	0	1	0	0	0	0	1	0	0	1	4
09:00	3	1	1	5	0	1	0	1	0	1	2	3	2	0	0	2	11
09:15	2	1	2	5	0	0	0	0	0	1	0	1	0	0	0	0	6

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
08:00	3	2	2	7	1	2	1	4	0	3	2	5	2	0	0	2	18
PHF	0.38	0.25	0.50	0.58	0.25	0.50	0.25	0.33	0	0.25	0.50	0.42	0.50	0	0	0.50	0.75

Start Date 7/31/2012
Start Time 15:00

Street Name	Ernie Pyle St				Ernie Pyle St				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	1	1	2	0	0	0	0	0	1	2	3	0	0	0	0	5
15:45	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
16:00	1	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
16:15	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
16:30	1	0	1	2	0	1	0	1	0	0	0	0	1	0	0	1	4
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	2	2	2	6	0	3	0	3	0	0	1	1	1	1	0	2	12
PHF	0.50	0.25	0.50	0.75	0	0.38	0	0.38	0	0	0.25	0.25	0.25	0.25	0	0.50	0.75

Table A-8C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Ernie Pyle St				Ernie Pyle St				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	2	3	7	0	13	2	15	1	20	19	40	75	58	4	137	199
06:15	4	2	3	9	0	20	1	21	0	13	29	42	85	76	8	169	241
06:30	4	1	3	8	0	14	1	15	1	29	34	64	63	68	4	135	222
06:45	6	2	3	11	0	24	3	27	1	20	27	48	91	97	3	191	277
07:00	7	5	5	17	0	29	1	30	4	24	40	68	77	110	3	190	305
07:15	11	4	7	22	1	30	1	32	13	27	30	70	75	108	9	192	316
07:30	34	11	12	57	0	31	2	33	12	38	42	92	70	91	9	170	352
07:45	25	3	15	43	0	30	1	31	9	25	30	64	61	103	9	173	311
08:00	22	11	25	58	1	19	4	24	2	28	39	69	100	87	12	199	350
08:15	19	12	15	46	2	37	6	45	7	21	38	66	101	79	5	185	342
08:30	15	9	26	50	1	31	10	42	8	19	39	66	115	74	8	197	355
08:45	24	8	25	57	3	20	5	28	15	21	37	73	91	71	6	168	326
09:00	31	8	19	58	0	21	6	27	4	24	38	66	53	44	6	103	254
09:15	26	24	25	75	1	33	3	37	4	24	29	57	57	50	2	109	278

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
08:00	80	40	91	211	7	107	25	139	32	89	153	274	407	311	31	749	1373
PHF	0.83	0.83	0.88	0.91	0.58	0.72	0.63	0.77	0.53	0.79	0.98	0.94	0.88	0.89	0.65	0.94	0.97
% HV	3.8%	5.0%	2.2%	3.3%	14.3%	1.9%	4.0%	2.9%	0.0%	3.4%	1.3%	1.8%	0.5%	0.0%	0.0%	0.3%	1.3%

Start Date 7/31/2012
Start Time 15:00

Street Name	Ernie Pyle St				Ernie Pyle St				Mapes Rd				Mapes Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	33	9	68	110	8	11	6	25	11	98	18	127	20	28	0	48	310
15:45	30	18	59	107	11	8	12	31	7	125	21	153	14	20	0	34	325
16:00	20	17	97	134	5	9	2	16	8	139	23	170	14	35	4	53	373
16:15	47	12	68	127	7	9	8	24	1	142	18	161	12	23	2	37	349
16:30	26	18	72	116	6	9	19	34	3	158	11	172	11	29	0	40	362
16:45	20	7	45	72	6	8	16	30	1	148	17	166	8	37	2	47	315
17:00	28	4	33	65	9	10	11	30	1	148	12	161	13	36	3	52	308
17:15	22	13	38	73	3	5	3	11	2	140	12	154	12	33	0	45	283

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	123	65	296	484	29	35	41	105	19	564	73	656	51	107	6	164	1409
PHF	0.65	0.90	0.76	0.90	0.66	0.97	0.54	0.77	0.59	0.89	0.79	0.95	0.91	0.76	0.38	0.77	0.94
% HV	1.6%	3.1%	0.7%	1.2%	0.0%	8.6%	0.0%	2.9%	0.0%	0.0%	1.4%	0.2%	2.0%	0.9%	0.0%	1.2%	0.9%

Table A-9A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Llewellyn Ave				Blue Water Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	58	104	8	170	4	116	6	126	0	0	1	1	85	24	26	135	432
06:15	54	125	18	197	9	122	10	141	2	2	2	6	81	9	28	118	462
06:30	54	131	16	201	11	172	15	198	1	9	12	22	117	10	41	168	589
06:45	76	167	26	269	9	146	16	171	1	4	2	7	111	26	35	172	619
07:00	74	204	23	301	9	172	16	197	5	4	11	20	125	17	46	188	706
07:15	99	230	28	357	9	173	20	202	1	5	13	19	146	25	49	220	798
07:30	84	259	45	388	13	204	19	236	4	10	10	24	144	3	41	188	836
07:45	86	226	36	348	14	173	9	196	0	6	11	17	129	13	43	185	746
08:00	4	286	26	316	17	193	0	210	3	0	0	3	118	1	53	172	701
08:15	0	231	29	260	18	167	0	185	0	0	0	0	89	0	51	140	585
08:30	0	211	34	245	26	136	0	162	0	0	0	0	110	0	47	157	564
08:45	1	190	34	225	9	113	0	122	0	0	0	0	111	0	34	145	492
09:00	0	184	35	219	21	124	0	145	0	0	0	0	65	0	30	95	459
09:15	1	154	31	186	21	113	0	134	0	0	0	0	65	0	32	97	417

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	343	919	132	1394	45	722	64	831	10	25	45	80	544	58	179	781	3086
PHF	0.87	0.89	0.73	0.90	0.80	0.88	0.80	0.88	0.50	0.63	0.87	0.83	0.93	0.58	0.91	0.89	0.92

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Llewellyn Ave				Blue Water Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	1	175	95	271	33	227	0	260	33	8	66	107	63	0	37	100	738
15:45	0	147	73	220	52	227	0	279	13	7	28	48	80	0	32	112	659
16:00	0	187	101	288	50	231	0	281	39	13	111	163	54	1	29	84	816
16:15	2	160	123	285	67	324	1	392	31	13	97	141	56	0	32	88	906
16:30	1	175	96	272	46	277	0	323	22	17	102	141	62	0	50	112	848
16:45	0	208	115	323	49	288	0	337	25	20	91	136	93	0	47	140	936
17:00	0	219	143	362	61	274	0	335	23	11	57	91	80	0	41	121	909
17:15	0	207	132	339	94	314	0	408	29	14	64	107	74	0	38	112	966

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	1	809	486	1296	250	1153	0	1403	99	62	314	475	309	0	176	485	3659
PHF	0.25	0.92	0.85	0.90	0.66	0.92	0	0.86	0.85	0.78	0.77	0.84	0.83	0	0.88	0.87	0.95

Table A-9B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Llewellyn Ave				Blue Water Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	3	0	3	1	1	0	2	0	0	1	1	0	0	1	1	7
06:15	1	2	0	3	0	8	0	8	0	0	0	0	0	0	1	1	12
06:30	0	5	0	5	0	4	0	4	0	0	0	0	0	0	0	0	9
06:45	1	7	1	9	0	3	0	3	0	0	1	1	0	0	0	0	13
07:00	2	7	0	9	0	2	0	2	0	0	0	0	0	0	0	0	11
07:15	0	3	1	4	0	4	0	4	0	0	0	0	0	0	0	0	8
07:30	0	12	1	13	1	9	0	10	1	0	0	1	1	0	1	2	26
07:45	1	5	0	6	0	2	0	2	0	0	0	0	2	0	0	2	10
08:00	0	7	0	7	0	4	0	4	0	0	0	0	0	0	0	0	11
08:15	0	8	2	10	0	5	0	5	0	0	0	0	2	0	1	3	18
08:30	0	5	1	6	0	4	0	4	0	0	0	0	0	0	0	0	10
08:45	0	5	3	8	0	10	0	10	0	0	0	0	1	0	0	1	19
09:00	0	2	5	7	2	1	0	3	0	0	0	0	2	0	0	2	12
09:15	0	7	2	9	0	9	0	9	0	0	0	0	1	0	0	1	19

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	3	27	2	32	1	17	0	18	1	0	0	1	3	0	1	4	55
PHF	0.38	0.56	0.50	0.62	0.25	0.47	0	0.45	0.25	0	0	0.25	0.38	0	0.25	0.50	0.53

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Llewellyn Ave				Blue Water Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	5	1	6	0	5	0	5	0	0	1	1	0	0	1	1	13
15:45	0	3	1	4	0	8	0	8	0	0	0	0	3	0	0	3	15
16:00	0	4	0	4	1	5	0	6	0	0	0	0	1	0	0	1	11
16:15	0	2	1	3	0	6	0	6	0	0	1	1	3	0	0	3	13
16:30	0	3	0	3	1	3	0	4	0	0	0	0	0	0	0	0	7
16:45	0	6	1	7	1	4	0	5	0	0	1	1	2	0	0	2	15
17:00	0	3	0	3	1	2	0	3	0	0	0	0	0	0	1	1	7
17:15	0	1	0	1	0	2	0	2	0	0	1	1	0	0	0	0	4

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	0	13	1	14	3	11	0	14	0	0	2	2	2	0	1	3	33
PHF	0	0.54	0.25	0.50	0.75	0.69	0	0.70	0	0	0.50	0.50	0.25	0	0.25	0.38	0.55

Table A-9C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Llewellyn Ave				Blue Water Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	58	107	8	173	5	117	6	128	0	0	2	2	85	24	27	136	439
06:15	55	127	18	200	9	130	10	149	2	2	2	6	81	9	29	119	474
06:30	54	136	16	206	11	176	15	202	1	9	12	22	117	10	41	168	598
06:45	77	174	27	278	9	149	16	174	1	4	3	8	111	26	35	172	632
07:00	76	211	23	310	9	174	16	199	5	4	11	20	125	17	46	188	717
07:15	99	233	29	361	9	177	20	206	1	5	13	19	146	25	49	220	806
07:30	84	271	46	401	14	213	19	246	5	10	10	25	145	3	42	190	862
07:45	87	231	36	354	14	175	9	198	0	6	11	17	131	13	43	187	756
08:00	4	293	26	323	17	197	0	214	3	0	0	3	118	1	53	172	712
08:15	0	239	31	270	18	172	0	190	0	0	0	0	91	0	52	143	603
08:30	0	216	35	251	26	140	0	166	0	0	0	0	110	0	47	157	574
08:45	1	195	37	233	9	123	0	132	0	0	0	0	112	0	34	146	511
09:00	0	186	40	226	23	125	0	148	0	0	0	0	67	0	30	97	471
09:15	1	161	33	195	21	122	0	143	0	0	0	0	66	0	32	98	436

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	346	946	134	1426	46	739	64	849	11	25	45	81	547	58	180	785	3141
PHF	0.87	0.87	0.73	0.89	0.82	0.87	0.80	0.86	0.55	0.63	0.87	0.81	0.94	0.58	0.92	0.89	0.91
% HV	0.9%	2.9%	1.5%	2.2%	2.2%	2.3%	0.0%	2.1%	9.1%	0.0%	0.0%	1.2%	0.5%	0.0%	0.6%	0.5%	1.8%

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Llewellyn Ave				Blue Water Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	1	180	96	277	33	232	0	265	33	8	67	108	63	0	38	101	751
15:45	0	150	74	224	52	235	0	287	13	7	28	48	83	0	32	115	674
16:00	0	191	101	292	51	236	0	287	39	13	111	163	55	1	29	85	827
16:15	2	162	124	288	67	330	1	398	31	13	98	142	59	0	32	91	919
16:30	1	178	96	275	47	280	0	327	22	17	102	141	62	0	50	112	855
16:45	0	214	116	330	50	292	0	342	25	20	92	137	95	0	47	142	951
17:00	0	222	143	365	62	276	0	338	23	11	57	91	80	0	42	122	916
17:15	0	208	132	340	94	316	0	410	29	14	65	108	74	0	38	112	970

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	1	822	487	1310	253	1164	0	1417	99	62	316	477	311	0	177	488	3692
PHF	0.25	0.93	0.85	0.90	0.67	0.92	0	0.86	0.85	0.78	0.77	0.85	0.82	0	0.89	0.86	0.95
% HV	0.0%	1.6%	0.2%	1.1%	1.2%	0.9%	0%	1.0%	0.0%	0.0%	0.6%	0.4%	0.6%	0%	0.6%	0.6%	0.9%

Table A-10A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Mapes Rd				Charter Oaks Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	67	58	8	133	6	51	52	109	5	2	15	22	59	22	11	92	356
06:15	67	80	16	163	15	83	71	169	4	2	4	10	51	25	11	87	429
06:30	45	87	13	145	9	81	47	137	7	7	25	39	94	15	23	132	453
06:45	87	118	8	213	9	82	84	175	4	3	10	17	77	28	35	140	545
07:00	119	124	10	253	20	110	64	194	12	6	17	35	86	35	30	151	633
07:15	90	166	13	269	12	108	85	205	16	4	12	32	100	28	20	148	654
07:30	82	164	19	265	11	100	61	172	21	9	28	58	95	17	41	153	648
07:45	99	173	16	288	15	92	39	146	13	7	20	40	102	31	29	162	636
08:00	134	158	15	307	12	80	56	148	12	9	25	46	90	35	40	165	666
08:15	112	157	18	287	14	97	53	164	11	10	22	43	83	23	33	139	633
08:30	114	138	14	266	11	73	60	144	16	4	28	48	66	18	19	103	561
08:45	85	124	22	231	10	66	45	121	17	5	25	47	39	29	33	101	500
09:00	77	122	11	210	12	51	36	99	16	9	25	50	52	11	24	87	446
09:15	60	108	22	190	14	90	21	125	18	4	25	47	35	10	20	65	427

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	405	661	63	1129	50	380	241	671	62	29	85	176	387	111	130	628	2604
PHF	0.76	0.96	0.83	0.92	0.83	0.88	0.71	0.82	0.74	0.81	0.76	0.76	0.95	0.79	0.79	0.95	0.98

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Mapes Rd				Charter Oaks Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	43	146	40	229	31	138	9	178	80	12	100	192	27	2	24	53	652
15:45	23	141	49	213	15	144	12	171	50	13	87	150	40	8	22	70	604
16:00	31	159	78	268	24	173	8	205	82	20	118	220	29	5	18	52	745
16:15	40	139	43	222	44	224	7	275	72	20	107	199	31	4	11	46	742
16:30	15	163	70	248	33	181	7	221	74	26	103	203	45	5	16	66	738
16:45	43	196	71	310	42	196	6	244	49	19	127	195	42	4	23	69	818
17:00	38	185	63	286	39	204	7	250	50	22	114	186	35	4	28	67	789
17:15	25	188	70	283	30	250	8	288	42	20	105	167	42	9	17	68	806

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	121	732	274	1127	144	831	28	1003	215	87	449	751	164	22	84	270	3151
PHF	0.70	0.93	0.96	0.91	0.86	0.83	0.88	0.87	0.73	0.84	0.88	0.92	0.91	0.61	0.75	0.98	0.96

Table A-10B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Mapes Rd				Charter Oaks Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	2	0	2	0	1	1	2	0	0	2	2	1	0	0	1	7
06:15	0	2	1	3	0	2	0	2	0	0	1	1	1	0	0	1	7
06:30	0	6	0	6	1	4	0	5	0	0	0	0	0	0	0	0	11
06:45	0	5	0	5	0	3	0	3	2	0	0	2	0	0	1	1	11
07:00	0	8	0	8	1	2	1	4	0	0	0	0	0	0	2	2	14
07:15	0	3	0	3	0	6	0	6	0	0	0	0	0	0	0	0	9
07:30	0	10	1	11	2	8	1	11	0	0	0	0	1	0	0	1	23
07:45	0	8	0	8	0	3	3	6	0	0	1	1	0	0	1	1	16
08:00	1	4	2	7	0	3	0	3	2	0	1	3	0	0	1	1	14
08:15	2	7	1	10	0	4	1	5	2	0	1	3	0	0	0	0	18
08:30	0	3	1	4	1	7	3	11	1	0	0	1	0	0	0	0	16
08:45	0	5	0	5	1	4	1	6	3	0	4	7	0	0	1	1	19
09:00	0	2	1	3	0	4	1	5	3	0	0	3	0	0	0	0	11
09:15	0	7	1	8	0	7	4	11	0	0	2	2	1	0	0	1	22

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	1	25	3	29	2	20	4	26	2	0	2	4	1	0	2	3	62
PHF	0.25	0.63	0.38	0.66	0.25	0.63	0.33	0.59	0.25	0	0.50	0.33	0.25	0	0.50	0.75	0.67

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Mapes Rd				Charter Oaks Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	3	1	4	1	4	0	5	1	0	0	1	1	0	0	1	11
15:45	1	3	0	4	0	6	0	6	0	0	0	0	1	0	1	2	12
16:00	0	4	1	5	0	6	0	6	0	0	0	0	0	0	0	0	11
16:15	0	2	0	2	0	4	0	4	0	0	1	1	1	0	0	1	8
16:30	1	2	0	3	0	5	0	5	0	0	0	0	0	0	0	0	8
16:45	1	6	0	7	1	5	0	6	0	0	1	1	0	0	0	0	14
17:00	0	3	0	3	0	3	0	3	0	0	0	0	0	0	1	1	7
17:15	0	1	0	1	0	3	0	3	0	0	1	1	0	0	0	0	5

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	2	12	0	14	1	16	0	17	0	0	2	2	0	0	1	1	34
PHF	0.50	0.50	0	0.50	0.25	0.80	0	0.71	0	0	0.50	0.50	0	0	0.25	0.25	0.61

Table A-10C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Mapes Rd				Charter Oaks Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	67	60	8	135	6	52	53	111	5	2	17	24	60	22	11	93	363
06:15	67	82	17	166	15	85	71	171	4	2	5	11	52	25	11	88	436
06:30	45	93	13	151	10	85	47	142	7	7	25	39	94	15	23	132	464
06:45	87	123	8	218	9	85	84	178	6	3	10	19	77	28	36	141	556
07:00	119	132	10	261	21	112	65	198	12	6	17	35	86	35	32	153	647
07:15	90	169	13	272	12	114	85	211	16	4	12	32	100	28	20	148	663
07:30	82	174	20	276	13	108	62	183	21	9	28	58	96	17	41	154	671
07:45	99	181	16	296	15	95	42	152	13	7	21	41	102	31	30	163	652
08:00	135	162	17	314	12	83	56	151	14	9	26	49	90	35	41	166	680
08:15	114	164	19	297	14	101	54	169	13	10	23	46	83	23	33	139	651
08:30	114	141	15	270	12	80	63	155	17	4	28	49	66	18	19	103	577
08:45	85	129	22	236	11	70	46	127	20	5	29	54	39	29	34	102	519
09:00	77	124	12	213	12	55	37	104	19	9	25	53	52	11	24	87	457
09:15	60	115	23	198	14	97	25	136	18	4	27	49	36	10	20	66	449

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	406	686	66	1158	52	400	245	697	64	29	87	180	388	111	132	631	2666
PHF	0.75	0.95	0.83	0.92	0.87	0.88	0.72	0.83	0.76	0.81	0.78	0.78	0.95	0.79	0.80	0.95	0.98
% HV	0.2%	3.6%	4.5%	2.5%	3.8%	5.0%	1.6%	3.7%	3.1%	0.0%	2.3%	2.2%	0.3%	0.0%	1.5%	0.5%	2.3%

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Mapes Rd				Charter Oaks Blvd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	43	149	41	233	32	142	9	183	81	12	100	193	28	2	24	54	663
15:45	24	144	49	217	15	150	12	177	50	13	87	150	41	8	23	72	616
16:00	31	163	79	273	24	179	8	211	82	20	118	220	29	5	18	52	756
16:15	40	141	43	224	44	228	7	279	72	20	108	200	32	4	11	47	750
16:30	16	165	70	251	33	186	7	226	74	26	103	203	45	5	16	66	746
16:45	44	202	71	317	43	201	6	250	49	19	128	196	42	4	23	69	832
17:00	38	188	63	289	39	207	7	253	50	22	114	186	35	4	29	68	796
17:15	25	189	70	284	30	253	8	291	42	20	106	168	42	9	17	68	811

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	123	744	274	1141	145	847	28	1020	215	87	451	753	164	22	85	271	3185
PHF	0.70	0.92	0.96	0.90	0.84	0.84	0.88	0.88	0.73	0.84	0.88	0.93	0.91	0.61	0.73	0.98	0.96
% HV	1.6%	1.6%	0.0%	1.2%	0.7%	1.9%	0.0%	1.7%	0.0%	0.0%	0.4%	0.3%	0.0%	0.0%	1.2%	0.4%	1.1%

Table A-11A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Reece Rd				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	23	42	9	74	11	75	53	139	13	11	5	29	40	65	17	122	364
06:15	26	48	11	85	7	103	41	151	9	7	9	25	54	47	30	131	392
06:30	36	79	13	128	11	81	37	129	20	14	12	46	49	53	31	133	436
06:45	30	113	11	154	7	90	64	161	16	14	7	37	71	85	39	195	547
07:00	27	119	12	158	14	128	61	203	17	22	15	54	72	75	40	187	602
07:15	43	144	14	201	17	120	75	212	22	26	9	57	68	75	38	181	651
07:30	32	167	27	226	10	101	76	187	25	28	8	61	46	81	39	166	640
07:45	37	145	19	201	13	99	51	163	24	23	16	63	38	92	40	170	597
08:00	53	147	23	223	15	90	63	168	23	11	14	48	47	74	29	150	589
08:15	44	150	13	207	6	99	59	164	20	18	15	53	45	71	30	146	570
08:30	27	123	14	164	5	93	48	146	14	17	10	41	44	57	24	125	476
08:45	35	112	15	162	12	86	44	142	17	17	6	40	26	60	24	110	454
09:00	44	123	18	185	14	69	46	129	21	8	8	37	23	36	14	73	424
09:15	19	104	18	141	10	86	56	152	20	12	9	41	24	33	17	74	408

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	139	575	72	786	54	448	263	765	88	99	48	235	224	323	157	704	2490
PHF	0.81	0.86	0.67	0.87	0.79	0.88	0.87	0.90	0.88	0.88	0.75	0.93	0.78	0.88	0.98	0.94	0.96

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Reece Rd				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	19	154	54	227	34	89	40	163	66	67	40	173	21	26	20	67	630
15:45	18	141	48	207	30	129	45	204	65	67	35	167	17	30	21	68	646
16:00	24	161	69	254	29	152	33	214	76	67	47	190	24	31	29	84	742
16:15	21	160	45	226	35	179	37	251	75	65	59	199	24	36	19	79	755
16:30	20	165	73	258	41	155	36	232	72	95	60	227	24	33	18	75	792
16:45	29	161	66	256	34	154	38	226	90	91	59	240	21	52	26	99	821
17:00	20	173	69	262	46	177	36	259	75	79	47	201	32	34	27	93	815
17:15	26	162	60	248	45	197	35	277	69	60	47	176	31	42	20	93	794

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	95	661	268	1024	166	683	145	994	306	325	213	844	108	161	91	360	3222
PHF	0.82	0.96	0.92	0.98	0.90	0.87	0.95	0.90	0.85	0.86	0.89	0.88	0.84	0.77	0.84	0.91	0.98

Table A-11B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Reece Rd				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	2	1	3	0	2	0	2	1	0	0	1	0	0	0	0	6
06:15	0	2	0	2	0	2	0	2	0	0	0	0	0	0	1	1	5
06:30	1	5	0	6	0	6	0	6	0	0	0	0	2	0	1	3	15
06:45	0	6	0	6	1	0	0	1	0	0	0	0	0	0	0	0	7
07:00	4	4	2	10	0	3	0	3	0	0	1	1	0	0	0	0	14
07:15	0	4	0	4	0	3	0	3	0	1	3	4	0	0	0	0	11
07:30	0	6	3	9	0	8	0	8	0	0	0	0	1	0	0	1	18
07:45	0	9	0	9	1	7	0	8	0	0	0	0	0	0	2	2	19
08:00	0	6	0	6	1	3	0	4	1	0	0	1	0	0	2	2	13
08:15	3	9	1	13	0	5	3	8	1	0	1	2	0	0	2	2	25
08:30	1	2	1	4	0	13	1	14	3	0	0	3	1	0	1	2	23
08:45	2	5	0	7	0	4	1	5	0	1	1	2	0	1	1	2	16
09:00	1	4	1	6	0	5	1	6	1	0	1	2	1	1	0	2	16
09:15	0	5	1	6	1	12	2	15	1	0	0	1	0	0	1	1	23

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	4	23	5	32	1	21	0	22	0	1	4	5	1	0	2	3	62
PHF	0.25	0.64	0.42	0.80	0.25	0.66	0	0.69	0	0.25	0.33	0.31	0.25	0	0.25	0.38	0.82

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Reece Rd				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	2	2	1	5	0	5	0	5	0	0	0	0	0	0	0	0	10
15:45	0	2	0	2	0	4	0	4	1	0	2	3	1	1	1	3	12
16:00	0	4	0	4	1	6	1	8	0	0	0	0	0	0	0	0	12
16:15	0	2	0	2	0	6	1	7	0	1	0	1	0	0	0	0	10
16:30	1	1	1	3	0	4	0	4	2	0	0	2	0	0	0	0	9
16:45	0	4	0	4	0	3	0	3	0	0	1	1	0	0	0	0	8
17:00	0	1	2	3	0	2	0	2	0	0	0	0	0	0	1	1	6
17:15	0	1	0	1	0	1	0	1	1	0	0	1	3	0	0	3	6

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	1	7	3	11	0	10	0	10	3	0	1	4	3	0	1	4	29
PHF	0.25	0.44	0.38	0.69	0	0.63	0	0.63	0.38	0	0.25	0.50	0.25	0	0.25	0.33	0.81

Table A-11C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Reece Rd				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	23	44	10	77	11	77	53	141	14	11	5	30	40	65	17	122	370
06:15	26	50	11	87	7	105	41	153	9	7	9	25	54	47	31	132	397
06:30	37	84	13	134	11	87	37	135	20	14	12	46	51	53	32	136	451
06:45	30	119	11	160	8	90	64	162	16	14	7	37	71	85	39	195	554
07:00	31	123	14	168	14	131	61	206	17	22	16	55	72	75	40	187	616
07:15	43	148	14	205	17	123	75	215	22	27	12	61	68	75	38	181	662
07:30	32	173	30	235	10	109	76	195	25	28	8	61	47	81	39	167	658
07:45	37	154	19	210	14	106	51	171	24	23	16	63	38	92	42	172	616
08:00	53	153	23	229	16	93	63	172	24	11	14	49	47	74	31	152	602
08:15	47	159	14	220	6	104	62	172	21	18	16	55	45	71	32	148	595
08:30	28	125	15	168	5	106	49	160	17	17	10	44	45	57	25	127	499
08:45	37	117	15	169	12	90	45	147	17	18	7	42	26	61	25	112	470
09:00	45	127	19	191	14	74	47	135	22	8	9	39	24	37	14	75	440
09:15	19	109	19	147	11	98	58	167	21	12	9	42	24	33	18	75	431

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	143	598	77	818	55	469	263	787	88	100	52	240	225	323	159	707	2552
PHF	0.83	0.86	0.64	0.87	0.81	0.90	0.87	0.92	0.88	0.89	0.81	0.95	0.78	0.88	0.95	0.95	0.96
% HV	2.8%	3.8%	6.5%	3.9%	1.8%	4.5%	0.0%	2.8%	0.0%	1.0%	7.7%	2.1%	0.4%	0.0%	1.3%	0.4%	2.4%

Start Date 8/1/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Reece Rd				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	21	156	55	232	34	94	40	168	66	67	40	173	21	26	20	67	640
15:45	18	143	48	209	30	133	45	208	66	67	37	170	18	31	22	71	658
16:00	24	165	69	258	30	158	34	222	76	67	47	190	24	31	29	84	754
16:15	21	162	45	228	35	185	38	258	75	66	59	200	24	36	19	79	765
16:30	21	166	74	261	41	159	36	236	74	95	60	229	24	33	18	75	801
16:45	29	165	66	260	34	157	38	229	90	91	60	241	21	52	26	99	829
17:00	20	174	71	265	46	179	36	261	75	79	47	201	32	34	28	94	821
17:15	26	163	60	249	45	198	35	278	70	60	47	177	34	42	20	96	800

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	96	668	271	1035	166	693	145	1004	309	325	214	848	111	161	92	364	3251
PHF	0.83	0.96	0.92	0.98	0.90	0.88	0.95	0.90	0.86	0.86	0.89	0.88	0.82	0.77	0.82	0.92	0.98
% HV	1.0%	1.0%	1.1%	1.1%	0.0%	1.4%	0.0%	1.0%	1.0%	0.0%	0.5%	0.5%	2.7%	0.0%	1.1%	1.1%	0.9%

Table A-12A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Rockenbach Rd				Ridge Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	20	5	8	33	26	38	80	144	16	110	40	166	11	77	10	98	441
06:15	13	6	3	22	40	49	74	163	5	107	47	159	13	120	16	149	493
06:30	31	11	4	46	38	59	88	185	16	107	60	183	17	141	14	172	586
06:45	26	11	7	44	43	72	106	221	17	141	58	216	21	152	11	184	665
07:00	49	12	9	70	51	73	92	216	14	117	73	204	18	198	18	234	724
07:15	43	14	6	63	49	81	91	221	14	123	52	189	29	205	17	251	724
07:30	52	15	12	79	67	88	98	253	26	115	54	195	22	203	24	249	776
07:45	28	15	8	51	56	59	107	222	18	154	68	240	19	221	32	272	785
08:00	23	10	10	43	38	52	88	178	25	129	58	212	14	208	30	252	685
08:15	27	13	8	48	49	31	91	171	13	110	36	159	14	181	28	223	601
08:30	23	14	7	44	49	37	88	174	14	99	26	139	14	146	21	181	538
08:45	27	9	11	47	41	30	66	137	30	120	34	184	11	135	22	168	536
09:00	20	6	8	34	21	18	57	96	23	88	28	139	8	116	29	153	422
09:15	19	11	4	34	30	22	62	114	24	88	26	138	6	105	30	141	427

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	172	56	35	263	223	301	388	912	72	509	247	828	88	827	91	1006	3009
PHF	0.83	0.93	0.73	0.83	0.83	0.86	0.91	0.90	0.69	0.83	0.85	0.86	0.76	0.94	0.71	0.92	0.96

Start Date 7/31/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Rockenbach Rd				Ridge Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	47	38	8	93	50	19	44	113	79	138	26	243	20	179	68	267	716
15:45	61	50	12	123	57	15	35	107	78	153	26	257	11	161	65	237	724
16:00	88	75	25	188	43	24	34	101	95	163	31	289	17	175	68	260	838
16:15	92	101	31	224	54	24	34	112	95	168	41	304	16	197	70	283	923
16:30	89	78	24	191	53	26	37	116	103	205	20	328	29	169	78	276	911
16:45	86	106	20	212	56	33	34	123	107	195	35	337	25	188	82	295	967
17:00	92	99	33	224	52	32	49	133	101	222	34	357	28	189	83	300	1014
17:15	66	95	27	188	65	36	46	147	103	233	30	366	26	197	80	303	1004

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	333	378	104	815	226	127	166	519	414	855	119	1388	108	743	323	1174	3896
PHF	0.90	0.89	0.79	0.91	0.87	0.88	0.85	0.88	0.97	0.92	0.85	0.95	0.93	0.94	0.97	0.97	0.96

Table A-12B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Rockenbach Rd				Ridge Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	3	0	3	0	3	0	3	6
06:15	0	0	0	0	1	0	0	1	0	2	0	2	0	4	0	4	7
06:30	0	0	0	0	3	0	1	4	1	2	0	3	0	0	0	0	7
06:45	0	0	0	0	1	0	0	1	1	4	0	5	0	4	0	4	10
07:00	0	3	0	3	1	0	2	3	2	3	0	5	2	2	3	7	18
07:15	2	0	0	2	1	0	0	1	3	4	1	8	0	6	1	7	18
07:30	2	0	0	2	1	1	2	4	3	7	0	10	0	9	1	10	26
07:45	0	1	1	2	3	0	2	5	2	8	0	10	1	12	2	15	32
08:00	0	0	0	0	1	0	2	3	1	11	0	12	1	11	4	16	31
08:15	1	0	0	1	1	0	1	2	1	10	0	11	1	13	3	17	31
08:30	1	0	0	1	2	1	0	3	0	9	3	12	0	11	5	16	32
08:45	0	0	1	1	1	0	2	3	1	12	0	13	0	10	1	11	28
09:00	0	0	1	1	3	0	1	4	0	7	0	7	2	11	2	15	27
09:15	1	0	0	1	1	0	0	1	2	11	0	13	0	7	4	11	26

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	4	4	1	9	6	1	6	13	10	22	1	33	3	29	7	39	94
PHF	0.50	0.33	0.25	0.75	0.50	0.25	0.75	0.65	0.83	0.69	0.25	0.83	0.38	0.60	0.58	0.65	0.73

Start Date 7/31/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Rockenbach Rd				Ridge Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	1	1	0	2	1	0	0	1	0	10	0	10	1	10	0	11	24
15:45	1	0	0	1	0	1	0	1	0	10	0	10	0	10	2	12	24
16:00	0	0	0	0	0	0	0	0	1	2	0	3	0	7	0	7	10
16:15	1	0	0	1	0	0	0	0	0	2	1	3	0	1	1	2	6
16:30	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	3
16:45	1	0	0	1	0	0	1	1	0	2	0	2	0	3	0	3	7
17:00	0	1	0	1	0	0	0	0	0	3	0	3	0	1	0	1	5
17:15	0	0	0	0	1	0	1	2	0	2	0	2	0	4	1	5	9

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	1	1	0	2	2	0	2	4	0	8	0	8	0	9	1	10	24
PHF	0.25	0.25	0	0.50	0.50	0	0.50	0.50	0	0.67	0	0.67	0	0.56	0.25	0.50	0.67

Table A-12C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 7/31/2012
Start Time 06:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Rockenbach Rd				Ridge Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	20	5	8	33	26	38	80	144	16	113	40	169	11	80	10	101	447
06:15	13	6	3	22	41	49	74	164	5	109	47	161	13	124	16	153	500
06:30	31	11	4	46	41	59	89	189	17	109	60	186	17	141	14	172	593
06:45	26	11	7	44	44	72	106	222	18	145	58	221	21	156	11	188	675
07:00	49	15	9	73	52	73	94	219	16	120	73	209	20	200	21	241	742
07:15	45	14	6	65	50	81	91	222	17	127	53	197	29	211	18	258	742
07:30	54	15	12	81	68	89	100	257	29	122	54	205	22	212	25	259	802
07:45	28	16	9	53	59	59	109	227	20	162	68	250	20	233	34	287	817
08:00	23	10	10	43	39	52	90	181	26	140	58	224	15	219	34	268	716
08:15	28	13	8	49	50	31	92	173	14	120	36	170	15	194	31	240	632
08:30	24	14	7	45	51	38	88	177	14	108	29	151	14	157	26	197	570
08:45	27	9	12	48	42	30	68	140	31	132	34	197	11	145	23	179	564
09:00	20	6	9	35	24	18	58	100	23	95	28	146	10	127	31	168	449
09:15	20	11	4	35	31	22	62	115	26	99	26	151	6	112	34	152	453

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	176	60	36	272	229	302	394	925	82	531	248	861	91	856	98	1045	3103
PHF	0.81	0.94	0.75	0.84	0.84	0.85	0.90	0.90	0.71	0.82	0.85	0.86	0.78	0.92	0.72	0.91	0.95
% HV	2.3%	6.7%	2.8%	3.3%	2.6%	0.3%	1.5%	1.4%	12.2%	4.1%	0.4%	3.8%	3.3%	3.4%	7.1%	3.7%	3.0%

Start Date 7/31/2012
Start Time 15:00

Street Name	Annapolis Rd (MD 175)				Annapolis Rd (MD 175)				Rockenbach Rd				Ridge Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	48	39	8	95	51	19	44	114	79	148	26	253	21	189	68	278	740
15:45	62	50	12	124	57	16	35	108	78	163	26	267	11	171	67	249	748
16:00	88	75	25	188	43	24	34	101	96	165	31	292	17	182	68	267	848
16:15	93	101	31	225	54	24	34	112	95	170	42	307	16	198	71	285	929
16:30	89	78	24	191	54	26	37	117	103	206	20	329	29	170	78	277	914
16:45	87	106	20	213	56	33	35	124	107	197	35	339	25	191	82	298	974
17:00	92	100	33	225	52	32	49	133	101	225	34	360	28	190	83	301	1019
17:15	66	95	27	188	66	36	47	149	103	235	30	368	26	201	81	308	1013

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	334	379	104	817	228	127	168	523	414	863	119	1396	108	752	324	1184	3920
PHF	0.91	0.89	0.79	0.91	0.86	0.88	0.86	0.88	0.97	0.92	0.85	0.95	0.93	0.94	0.98	0.96	0.96
% HV	0.3%	0.3%	0.0%	0.2%	0.9%	0.0%	1.2%	0.8%	0.0%	0.9%	0.0%	0.6%	0.0%	1.2%	0.3%	0.8%	0.6%

Table A-13A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				DISA Entrance				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	55	4	59	6	136	0	142	0	0	0	0	13	3	25	41	242
06:15	4	93	4	101	7	96	3	106	0	1	1	2	12	6	38	56	265
06:30	3	129	4	136	7	47	0	54	0	0	0	0	9	6	32	47	237
06:45	3	112	5	120	7	95	6	108	0	0	0	0	11	7	34	52	280
07:00	3	116	4	123	11	93	2	106	1	0	0	1	9	4	38	51	281
07:15	2	111	3	116	22	109	0	131	0	1	0	1	22	5	39	66	314
07:30	2	136	4	142	14	81	0	95	0	1	2	3	25	4	40	69	309
07:45	2	113	2	117	8	83	2	93	0	0	0	0	20	4	47	71	281
08:00	1	106	8	115	6	73	0	79	0	0	2	2	19	4	54	77	273
08:15	0	79	4	83	7	93	1	101	0	3	0	3	23	4	55	82	269
08:30	0	86	3	89	7	86	1	94	0	0	0	0	14	2	24	40	223
08:45	2	72	2	76	7	91	0	98	0	0	0	0	12	1	37	50	224
09:00	0	55	2	57	15	67	0	82	0	1	0	1	5	3	25	33	173
09:15	0	55	4	59	9	55	0	64	0	1	0	1	11	7	15	33	157

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	10	475	16	501	54	378	8	440	1	2	2	5	67	20	151	238	1184
PHF	0.83	0.87	0.80	0.88	0.61	0.87	0.33	0.84	0.25	0.50	0.25	0.42	0.67	0.71	0.94	0.86	0.94

Start Date 8/1/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				DISA Entrance				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	71	19	90	37	100	0	137	0	3	7	10	4	0	26	30	267
15:45	1	92	21	114	28	73	0	101	1	4	2	7	8	0	10	18	240
16:00	2	117	27	146	53	120	1	174	2	5	4	11	3	1	28	32	363
16:15	1	115	16	132	54	122	1	177	2	6	2	10	12	3	24	39	358
16:30	0	105	23	128	68	147	0	215	2	2	4	8	7	0	16	23	374
16:45	1	110	17	128	48	107	3	158	0	6	1	7	5	0	24	29	322
17:00	0	112	12	124	37	117	1	155	3	7	1	11	7	1	25	33	323
17:15	0	105	24	129	42	120	1	163	0	3	3	6	2	1	21	24	322

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	4	447	83	534	223	496	5	724	6	19	11	36	27	4	92	123	1417
PHF	0.50	0.96	0.77	0.91	0.82	0.84	0.42	0.84	0.75	0.79	0.69	0.82	0.56	0.33	0.82	0.79	0.95

Table A-13B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				DISA Entrance				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
06:45	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:00	1	1	1	3	0	0	0	0	0	0	0	0	0	0	2	2	5
07:15	0	3	0	3	1	0	0	1	0	0	0	0	0	0	0	0	4
07:30	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	1	1	0	2	1	1	0	2	0	0	0	0	0	0	0	0	4
08:15	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	2	4
08:30	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:45	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00	0	2	1	3	0	3	0	3	0	0	0	0	0	1	2	3	9
09:15	0	3	0	3	1	1	0	2	0	0	0	0	1	0	0	1	6

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	1	5	1	7	1	2	0	3	0	0	0	0	0	0	2	2	12
PHF	0.25	0.42	0.25	0.58	0.25	0.50	0	0.75	0	0	0	0	0	0	0.25	0.25	0.60

Start Date 8/1/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				DISA Entrance				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
15:45	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:00	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
16:15	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
16:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
17:00	1	3	0	4	1	0	0	1	0	0	0	0	0	0	0	0	5
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	6	0	6	0	2	0	2	0	0	0	0	0	0	1	1	9
PHF	0	0.50	0	0.50	0	0.50	0	0.50	0	0	0	0	0	0	0.25	0.25	0.56

Table A-13C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				DISA Entrance				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	55	4	59	6	136	0	142	0	0	0	0	13	3	25	41	242
06:15	4	94	4	102	7	96	3	106	0	1	1	2	12	6	38	56	266
06:30	3	131	4	138	7	47	0	54	0	0	0	0	9	6	32	47	239
06:45	3	112	5	120	7	96	6	109	0	0	0	0	11	7	34	52	281
07:00	4	117	5	126	11	93	2	106	1	0	0	1	9	4	40	53	286
07:15	2	114	3	119	23	109	0	132	0	1	0	1	22	5	39	66	318
07:30	2	137	4	143	14	82	0	96	0	1	2	3	25	4	40	69	311
07:45	2	113	2	117	8	83	2	93	0	0	0	0	20	4	47	71	281
08:00	2	107	8	117	7	74	0	81	0	0	2	2	19	4	54	77	277
08:15	0	81	4	85	7	93	1	101	0	3	0	3	23	4	57	84	273
08:30	0	88	3	91	7	86	1	94	0	0	0	0	14	2	24	40	225
08:45	2	73	3	78	7	91	0	98	0	0	0	0	12	1	37	50	226
09:00	0	57	3	60	15	70	0	85	0	1	0	1	5	4	27	36	182
09:15	0	58	4	62	10	56	0	66	0	1	0	1	12	7	15	34	163

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	11	480	17	508	55	380	8	443	1	2	2	5	67	20	153	240	1196
PHF	0.69	0.88	0.85	0.89	0.60	0.87	0.33	0.84	0.25	0.50	0.25	0.42	0.67	0.71	0.96	0.87	0.94
% HV	9.1%	1.0%	5.9%	1.4%	1.8%	0.5%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.8%	1.0%

Start Date 8/1/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				DISA Entrance				Reece Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	71	19	90	37	100	0	137	0	3	7	10	4	0	27	31	268
15:45	2	92	21	115	28	73	0	101	1	4	2	7	8	0	10	18	241
16:00	2	120	27	149	53	121	1	175	2	5	4	11	3	1	28	32	367
16:15	1	116	16	133	54	123	1	178	2	6	2	10	12	3	24	39	360
16:30	0	106	23	129	68	147	0	215	2	2	4	8	7	0	16	23	375
16:45	1	111	17	129	48	107	3	158	0	6	1	7	5	0	25	30	324
17:00	1	115	12	128	38	117	1	156	3	7	1	11	7	1	25	33	328
17:15	0	105	24	129	42	120	1	163	0	3	3	6	2	1	21	24	322

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	4	453	83	540	223	498	5	726	6	19	11	36	27	4	93	124	1426
PHF	0.50	0.94	0.77	0.91	0.82	0.85	0.42	0.84	0.75	0.79	0.69	0.82	0.56	0.33	0.83	0.79	0.95
% HV	0.0%	1.3%	0.0%	1.1%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.8%	0.6%

Table A-14A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	10	4	8	22	21	56	4	81	1	9	49	59	53	24	5	82	244
06:15	15	7	5	27	16	28	7	51	2	6	21	29	77	40	6	123	230
06:30	28	23	30	81	15	19	7	41	1	10	16	27	60	43	4	107	256
06:45	40	21	11	72	24	29	11	64	0	13	24	37	82	59	7	148	321
07:00	28	13	20	61	24	33	13	70	2	20	28	50	76	58	2	136	317
07:15	46	11	12	69	22	39	18	79	3	15	27	45	100	68	4	172	365
07:30	45	41	21	107	20	36	15	71	2	13	14	29	74	88	6	168	375
07:45	35	19	12	66	18	34	6	58	3	15	19	37	79	57	11	147	308
08:00	28	19	10	57	10	18	4	32	1	5	22	28	66	36	6	108	225
08:15	27	19	18	64	19	33	4	56	0	6	19	25	62	32	11	105	250
08:30	22	16	8	46	18	33	9	60	0	8	21	29	50	30	2	82	217
08:45	20	14	3	37	14	44	4	62	1	11	27	39	54	21	5	80	218
09:00	10	14	7	31	13	29	1	43	1	10	15	26	35	8	2	45	145
09:15	11	17	17	45	14	24	1	39	0	9	12	21	33	5	3	41	146

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	159	86	64	309	90	137	57	284	7	61	93	161	332	273	19	624	1378
PHF	0.86	0.52	0.76	0.72	0.94	0.88	0.79	0.90	0.58	0.76	0.83	0.81	0.83	0.78	0.68	0.91	0.92

Start Date 8/1/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	19	35	60	114	13	15	1	29	0	10	20	30	24	9	19	52	225
15:45	29	40	67	136	17	18	0	35	3	25	18	46	13	10	14	37	254
16:00	22	43	105	170	12	22	2	36	8	79	43	130	16	12	25	53	389
16:15	26	52	99	177	18	11	4	33	5	96	65	166	24	11	15	50	426
16:30	30	38	83	151	26	33	0	59	9	99	55	163	15	16	19	50	423
16:45	30	58	80	168	19	23	2	44	7	103	58	168	19	16	29	64	444
17:00	31	53	81	165	24	29	2	55	10	79	39	128	26	13	33	72	420
17:15	31	43	76	150	33	25	1	59	7	66	47	120	22	18	28	68	397

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	117	201	343	661	87	96	8	191	31	377	217	625	84	56	96	236	1713
PHF	0.94	0.87	0.87	0.93	0.84	0.73	0.50	0.81	0.78	0.92	0.83	0.93	0.81	0.88	0.73	0.82	0.96

Table A-14B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:15	0	0	1	1	0	1	0	1	0	1	0	1	0	0	0	0	3
07:30	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:45	0	0	0	0	1	0	0	1	0	0	0	0	1	0	1	2	3
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30	0	4	0	4	1	0	0	1	0	1	0	1	0	0	0	0	6
08:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
09:00	1	0	0	1	0	1	0	1	0	0	0	0	2	0	0	2	4
09:15	1	0	0	1	0	0	0	0	0	0	1	1	1	0	1	2	4

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	1	2	3	0	1	0	1	0	1	1	2	0	0	0	0	6
PHF	0	0.25	0.50	0.38	0	0.25	0	0.25	0	0.25	0.25	0.50	0	0	0	0	0.50

Start Date 8/1/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	1	0	1	2	0	0	2	0	0	0	0	0	0	0	0	3
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
16:45	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:00	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	2
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	1	0	1	2	0	0	0	0	0	0	2	2	0	0	1	1	5
PHF	0.25	0	0.25	0.50	0	0	0	0	0	0	0.50	0.50	0	0	0.25	0.25	0.63

Table A-14C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	Cooper Ave				Cooper Ave				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	10	4	8	22	21	56	4	81	1	9	49	59	53	24	5	82	244
06:15	15	7	5	27	16	28	7	51	2	6	21	29	77	40	6	123	230
06:30	28	23	30	81	15	19	7	41	1	10	16	27	60	43	4	107	256
06:45	40	21	11	72	24	29	11	64	0	13	24	37	82	59	7	148	321
07:00	28	14	21	63	24	33	13	70	2	20	28	50	76	58	2	136	319
07:15	46	11	13	70	22	40	18	80	3	16	27	46	100	68	4	172	368
07:30	45	41	21	107	20	36	15	71	2	13	15	30	74	88	6	168	376
07:45	35	19	12	66	19	34	6	59	3	15	19	37	80	57	12	149	311
08:00	28	19	10	57	10	18	4	32	1	5	22	28	66	36	6	108	225
08:15	27	19	18	64	19	33	4	56	0	6	19	25	62	33	11	106	251
08:30	22	20	8	50	19	33	9	61	0	9	21	30	50	30	2	82	223
08:45	20	15	3	38	14	44	4	62	1	11	27	39	54	21	5	80	219
09:00	11	14	7	32	13	30	1	44	1	10	15	26	37	8	2	47	149
09:15	12	17	17	46	14	24	1	39	0	9	13	22	34	5	4	43	150

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	159	87	66	312	90	138	57	285	7	62	94	163	332	273	19	624	1384
PHF	0.86	0.53	0.79	0.73	0.94	0.86	0.79	0.89	0.58	0.78	0.84	0.82	0.83	0.78	0.68	0.91	0.92
% HV	0.0%	1.1%	3.0%	1.0%	0.0%	0.7%	0.0%	0.4%	0.0%	1.6%	1.1%	1.2%	0.0%	0.0%	0.0%	0.0%	0.4%

Start Date 8/1/2012
Start Time 15:00

Street Name	Cooper Ave				Cooper Ave				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	19	36	60	115	15	15	1	31	0	10	20	30	24	9	19	52	228
15:45	29	40	67	136	17	18	0	35	3	25	18	46	13	10	14	37	254
16:00	22	43	105	170	12	23	2	37	8	79	43	130	16	12	25	53	390
16:15	26	52	99	177	18	11	4	33	5	96	66	167	24	11	15	50	427
16:30	30	38	83	151	26	33	0	59	9	99	55	163	15	16	20	51	424
16:45	31	58	80	169	19	23	2	44	7	103	58	168	19	16	29	64	445
17:00	31	53	82	166	24	29	2	55	10	79	40	129	26	13	33	72	422
17:15	31	43	76	150	33	25	1	59	7	66	47	120	22	18	28	68	397

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	118	201	344	663	87	96	8	191	31	377	219	627	84	56	97	237	1718
PHF	0.95	0.87	0.87	0.94	0.84	0.73	0.50	0.81	0.78	0.92	0.83	0.93	0.81	0.88	0.73	0.82	0.97
% HV	0.8%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.3%	0.0%	0.0%	1.0%	0.4%	0.3%

Table A-15A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	--				29th Division Blvd				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	8	0	2	10	0	55	0	55	0	38	2	40	105
06:15	0	0	0	0	11	0	5	16	1	12	0	13	0	56	5	61	90
06:30	0	0	0	0	6	0	1	7	1	23	0	24	0	71	3	74	105
06:45	0	0	0	0	10	0	7	17	4	32	0	36	0	108	8	116	169
07:00	0	0	0	0	17	0	8	25	1	30	0	31	0	89	5	94	150
07:15	0	0	0	0	12	0	10	22	1	32	0	33	0	127	10	137	192
07:30	0	0	0	0	8	0	14	22	1	22	0	23	0	139	6	145	190
07:45	0	0	0	0	15	0	9	24	1	20	0	21	0	94	8	102	147
08:00	0	0	0	0	9	0	6	15	0	18	0	18	0	61	7	68	101
08:15	0	0	0	0	9	0	5	14	1	17	0	18	0	52	11	63	95
08:30	0	0	0	0	15	0	3	18	2	16	0	18	0	53	4	57	93
08:45	0	0	0	0	11	0	6	17	1	24	0	25	0	43	6	49	91
09:00	0	0	0	0	7	0	2	9	1	21	0	22	0	10	7	17	48
09:15	0	0	0	0	8	0	2	10	1	15	0	16	0	16	4	20	46

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	47	0	39	86	7	116	0	123	0	463	29	492	701
PHF	0	0	0	0	0.69	0	0.70	0.86	0.44	0.91	0	0.85	0	0.83	0.73	0.85	0.91

Start Date 8/1/2012
Start Time 15:00

Street Name	--				29th Division Blvd				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	8	0	1	9	1	17	0	18	0	19	10	29	56
15:45	0	0	0	0	5	0	0	5	2	47	0	49	0	27	13	40	94
16:00	0	0	0	0	9	0	3	12	3	131	0	134	0	26	5	31	177
16:15	0	0	0	0	12	0	2	14	9	146	0	155	0	30	15	45	214
16:30	0	0	0	0	13	0	2	15	4	156	0	160	0	28	16	44	219
16:45	0	0	0	0	17	0	2	19	8	142	0	150	0	31	16	47	216
17:00	0	0	0	0	9	0	1	10	11	124	0	135	0	29	20	49	194
17:15	0	0	0	0	10	0	2	12	8	114	0	122	0	40	9	49	183

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	0	0	0	0	51	0	7	58	32	568	0	600	0	118	67	185	843
PHF	0	0	0	0	0.75	0	0.88	0.76	0.73	0.91	0	0.94	0	0.95	0.84	0.94	0.96

Table A-15B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	--				29th Division Blvd				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
09:15	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
PHF	0	0	0	0	0	0	0	0	0	0.50	0	0.50	0	0	0	0	0.50

Start Date 8/1/2012
Start Time 15:00

Street Name	--				29th Division Blvd				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
16:45	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	2
17:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	0	0	0	0	1	0	1	2	0	1	0	1	0	1	1	2	5
PHF	0	0	0	0	0.25	0	0.25	0.50	0	0.25	0	0.25	0	0.25	0.25	0.50	0.63

Table A-15C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	--				29th Division Blvd				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	8	0	2	10	0	55	0	55	0	38	2	40	105
06:15	0	0	0	0	11	0	5	16	1	12	0	13	0	56	5	61	90
06:30	0	0	0	0	6	0	1	7	1	23	0	24	0	71	3	74	105
06:45	0	0	0	0	10	0	7	17	4	32	0	36	0	108	8	116	169
07:00	0	0	0	0	17	0	8	25	1	30	0	31	0	89	5	94	150
07:15	0	0	0	0	12	0	10	22	1	33	0	34	0	127	10	137	193
07:30	0	0	0	0	8	0	14	22	1	23	0	24	0	139	6	145	191
07:45	0	0	0	0	15	0	9	24	1	20	0	21	0	94	8	102	147
08:00	0	0	0	0	9	0	6	15	0	18	0	18	0	61	7	68	101
08:15	0	0	0	0	9	0	5	14	1	17	0	18	0	52	11	63	95
08:30	0	0	0	0	15	0	3	18	2	16	0	18	0	53	4	57	93
08:45	0	0	0	0	11	0	6	17	1	24	0	25	0	43	6	49	91
09:00	0	0	0	0	7	0	2	9	1	21	0	22	0	10	8	18	49
09:15	0	0	0	0	8	0	2	10	1	16	0	17	0	17	4	21	48

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	47	0	39	86	7	118	0	125	0	463	29	492	703
PHF	0	0	0	0	0.69	0	0.70	0.86	0.44	0.89	0	0.87	0	0.83	0.73	0.85	0.91
% HV	0%	0%	0%	0%	0.0%	0%	0.0%	0.0%	0.0%	1.7%	0%	1.6%	0%	0.0%	0.0%	0.0%	0.3%

Start Date 8/1/2012
Start Time 15:00

Street Name	--				29th Division Blvd				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	8	0	1	9	1	17	0	18	0	19	10	29	56
15:45	0	0	0	0	5	0	0	5	2	47	0	49	0	27	13	40	94
16:00	0	0	0	0	9	0	3	12	3	131	0	134	0	26	5	31	177
16:15	0	0	0	0	13	0	2	15	9	146	0	155	0	30	15	45	215
16:30	0	0	0	0	13	0	2	15	4	156	0	160	0	29	16	45	220
16:45	0	0	0	0	17	0	3	20	8	142	0	150	0	31	17	48	218
17:00	0	0	0	0	9	0	1	10	11	125	0	136	0	29	20	49	195
17:15	0	0	0	0	10	0	2	12	8	114	0	122	0	40	9	49	183

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:15	0	0	0	0	52	0	8	60	32	569	0	601	0	119	68	187	848
PHF	0	0	0	0	0.76	0	0.67	0.75	0.73	0.91	0	0.94	0	0.96	0.85	0.95	0.96
% HV	0%	0%	0%	0%	1.9%	0%	12.5%	3.3%	0.0%	0.2%	0%	0.2%	0%	0.8%	1.5%	1.1%	0.6%

Table A-16A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	O'Brien Rd				--				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	1	0	2	3	0	0	0	0	0	50	4	54	21	19	0	40	97
06:15	1	0	2	3	0	0	0	0	0	12	2	14	18	43	0	61	78
06:30	2	0	8	10	0	0	0	0	0	23	4	27	21	54	0	75	112
06:45	5	0	7	12	0	0	0	0	0	29	3	32	31	78	0	109	153
07:00	0	0	4	4	0	0	0	0	0	30	4	34	40	61	0	101	139
07:15	4	0	3	7	0	0	0	0	0	27	7	34	39	97	0	136	177
07:30	7	0	7	14	0	0	0	0	0	17	10	27	49	106	0	155	196
07:45	6	0	3	9	0	0	0	0	0	17	6	23	37	63	0	100	132
08:00	8	0	1	9	0	0	0	0	0	17	0	17	7	60	0	67	93
08:15	3	0	3	6	0	0	0	0	0	17	1	18	2	55	0	57	81
08:30	4	0	1	5	0	0	0	0	0	16	0	16	4	51	0	55	76
08:45	3	0	1	4	0	0	0	0	0	25	3	28	4	40	0	44	76
09:00	0	0	2	2	0	0	0	0	0	15	0	15	1	6	0	7	24
09:15	0	0	0	0	0	0	0	0	0	14	0	14	1	9	0	10	24

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	16	0	21	37	0	0	0	0	0	103	24	127	159	342	0	501	665
PHF	0.57	0	0.75	0.66	0	0	0	0	0	0.86	0.60	0.93	0.81	0.81	0	0.81	0.85

Start Date 8/1/2012
Start Time 15:00

Street Name	O'Brien Rd				--				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	2	2	0	0	0	0	0	14	0	14	0	22	0	22	38
15:45	2	0	13	15	0	0	0	0	0	40	2	42	1	23	0	24	81
16:00	1	0	33	34	0	0	0	0	0	106	2	108	6	23	0	29	171
16:15	0	0	49	49	0	0	0	0	0	101	2	103	7	25	0	32	184
16:30	2	0	59	61	0	0	0	0	0	91	3	94	4	26	0	30	185
16:45	2	0	43	45	0	0	0	0	0	114	4	118	5	31	0	36	199
17:00	1	0	48	49	0	0	0	0	0	78	4	82	2	27	0	29	160
17:15	5	0	41	46	0	0	0	0	0	80	5	85	5	36	0	41	172

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	5	0	184	189	0	0	0	0	0	412	11	423	22	105	0	127	739
PHF	0.63	0	0.78	0.77	0	0	0	0	0	0.90	0.69	0.90	0.79	0.85	0	0.88	0.93

Table A-16B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	O'Brien Rd				--				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
PHF	0	0	0	0	0	0	0	0	0	0.50	0	0.50	0	0	0	0	0.50

Start Date 8/1/2012
Start Time 15:00

Street Name	O'Brien Rd				--				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
PHF	0	0	0	0	0	0	0	0	0	0	0	0	0	0.25	0	0.25	0.25

Table A-16C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Meade, Maryland

Start Date 8/1/2012
Start Time 06:00

Street Name	O'Brien Rd				--				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	1	0	2	3	0	0	0	0	0	50	4	54	21	19	0	40	97
06:15	1	0	2	3	0	0	0	0	0	12	2	14	18	43	0	61	78
06:30	2	0	8	10	0	0	0	0	0	23	4	27	21	54	0	75	112
06:45	5	0	7	12	0	0	0	0	0	29	3	32	31	78	0	109	153
07:00	0	0	4	4	0	0	0	0	0	30	4	34	40	61	0	101	139
07:15	4	0	3	7	0	0	0	0	0	28	7	35	39	97	0	136	178
07:30	7	0	7	14	0	0	0	0	0	18	10	28	49	106	0	155	197
07:45	6	0	3	9	0	0	0	0	0	17	6	23	37	63	0	100	132
08:00	8	0	1	9	0	0	0	0	0	17	0	17	7	60	0	67	93
08:15	3	0	3	6	0	0	0	0	0	17	1	18	2	55	0	57	81
08:30	4	0	1	5	0	0	0	0	0	16	0	16	4	51	0	55	76
08:45	3	0	1	4	0	0	0	0	0	25	3	28	4	40	0	44	76
09:00	0	0	2	2	0	0	0	0	0	15	0	15	1	6	0	7	24
09:15	0	0	0	0	0	0	0	0	0	14	0	14	1	9	0	10	24

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	16	0	21	37	0	0	0	0	0	105	24	129	159	342	0	501	667
PHF	0.57	0	0.75	0.66	0	0	0	0	0	0.88	0.60	0.92	0.81	0.81	0	0.81	0.85
% HV	0.0%	0%	0.0%	0.0%	0%	0%	0%	0%	0%	1.9%	0.0%	1.6%	0.0%	0.0%	0%	0.0%	0.3%

Start Date 8/1/2012
Start Time 15:00

Street Name	O'Brien Rd				--				Rockenbach Rd				Rockenbach Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:30	0	0	2	2	0	0	0	0	0	14	0	14	0	22	0	22	38
15:45	2	0	13	15	0	0	0	0	0	40	2	42	1	23	0	24	81
16:00	1	0	33	34	0	0	0	0	0	106	2	108	6	23	0	29	171
16:15	0	0	49	49	0	0	0	0	0	101	2	103	7	25	0	32	184
16:30	2	0	59	61	0	0	0	0	0	91	3	94	4	26	0	30	185
16:45	2	0	43	45	0	0	0	0	0	114	4	118	5	32	0	37	200
17:00	1	0	48	49	0	0	0	0	0	79	4	83	2	27	0	29	161
17:15	5	0	41	46	0	0	0	0	0	80	5	85	5	36	0	41	172

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	5	0	184	189	0	0	0	0	0	412	11	423	22	106	0	128	740
PHF	0.63	0	0.78	0.77	0	0	0	0	0	0.90	0.69	0.90	0.79	0.83	0	0.86	0.93
% HV	0.0%	0%	0.0%	0.0%	0%	0%	0%	0%	0%	0.0%	0.0%	0.0%	0.0%	0.9%	0%	0.8%	0.1%

Attachment 4

Existing Traffic Data – Fort Gordon

Table A-1A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	13th St				McCoys Creek				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	1	0	1	0	75	9	84	13	22	0	35	120
06:15	0	0	0	0	1	0	0	1	0	118	13	131	17	33	0	50	182
06:30	2	0	0	2	2	0	1	3	0	118	13	131	33	27	1	61	197
06:45	0	0	0	0	0	0	0	0	0	116	24	140	62	65	0	127	267
07:00	0	0	2	2	0	0	0	0	0	126	29	155	31	41	1	73	230
07:15	1	0	2	3	0	1	0	1	0	129	28	157	57	35	0	92	253
07:30	0	0	2	2	0	0	1	1	0	151	11	162	26	49	3	78	243
07:45	0	0	1	1	2	0	0	2	0	100	13	113	28	56	2	86	202
08:00	1	0	0	1	1	1	0	2	0	97	20	117	13	31	2	46	166
08:15	0	0	0	0	1	0	0	1	0	72	7	79	10	24	1	35	115
08:30	0	0	1	1	0	1	0	1	0	83	1	84	15	29	2	46	132
08:45	1	1	1	3	3	1	2	6	0	57	8	65	11	20	3	34	108

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	1	0	6	7	0	1	1	2	0	522	92	614	176	190	4	370	993
PHF	0.25	0	0.75	0.58	0	0.25	0.25	0.50	0	0.86	0.79	0.95	0.71	0.73	0.33	0.73	0.93

Start Date 7/18/2012
Start Time 15:00

Street Name	13th St				McCoys Creek				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	4	0	0	4	0	41	0	41	0	50	2	52	97
15:15	0	0	0	0	3	0	0	3	0	45	0	45	0	80	4	84	132
15:30	0	0	1	1	4	0	0	4	0	58	0	58	1	75	1	77	140
15:45	0	0	0	0	1	0	0	1	0	71	0	71	0	96	0	96	168
16:00	0	0	0	0	2	0	0	2	0	60	0	60	0	109	3	112	174
16:15	0	0	0	0	2	0	0	2	0	61	0	61	0	111	2	113	176
16:30	0	0	0	0	2	0	1	3	0	59	0	59	0	103	3	106	168
16:45	0	0	0	0	0	0	0	0	0	72	0	72	0	109	0	109	181
17:00	0	0	0	0	2	0	1	3	1	58	0	59	0	101	2	103	165
17:15	0	0	0	0	1	0	2	3	0	57	0	57	0	168	6	174	234
17:30	0	0	0	0	4	0	1	5	0	67	0	67	1	136	3	140	212
17:45	0	0	0	0	1	0	1	2	0	45	0	45	0	109	2	111	158

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:45	0	0	0	0	7	0	4	11	1	254	0	255	1	514	11	526	792
PHF	0	0	0	0	0.44	0	0.50	0.55	0.25	0.88	0	0.89	0.25	0.76	0.46	0.76	0.85

Table A-1B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	13th St				McCoys Creek				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	6	6
06:15	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
06:30	0	0	0	0	0	0	0	0	0	2	0	2	2	2	0	4	6
06:45	0	0	0	0	0	0	0	0	0	1	0	1	3	0	0	3	4
07:00	0	0	0	0	0	0	0	0	0	8	0	8	2	2	0	4	12
07:15	0	0	0	0	0	0	0	0	0	3	0	3	4	1	0	5	8
07:30	0	0	0	0	0	0	0	0	0	1	0	1	6	0	0	6	7
07:45	0	0	0	0	0	0	0	0	0	4	0	4	8	3	0	11	15
08:00	1	0	0	1	0	0	0	0	0	4	1	5	3	2	1	6	12
08:15	1	0	0	1	0	0	0	0	0	8	0	8	2	3	0	5	14
08:30	0	0	0	0	0	0	0	0	0	2	0	2	4	3	0	7	9
08:45	0	0	1	1	0	0	0	0	0	1	0	1	2	5	1	8	10

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	0	0	0	0	0	13	0	13	15	3	0	18	31
PHF	0	0	0	0	0	0	0	0	0	0.41	0	0.41	0.63	0.38	0	0.75	0.65

Start Date 7/18/2012
Start Time 15:00

Street Name	13th St				McCoys Creek				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	0	0	0	0	0	5	0	5	0	4	0	4	9
15:15	0	0	0	0	0	0	0	0	0	3	0	3	0	5	0	5	8
15:30	0	0	0	0	0	0	1	1	0	4	0	4	1	2	1	4	9
15:45	0	0	0	0	0	0	0	0	0	4	0	4	0	4	0	4	8
16:00	0	0	0	0	0	0	0	0	0	6	0	6	0	2	0	2	8
16:15	0	0	0	0	0	0	0	0	0	6	0	6	0	5	0	5	11
16:30	0	0	0	0	0	0	0	0	0	6	0	6	0	3	0	3	9
16:45	0	0	0	0	0	0	0	0	0	4	0	4	0	1	0	1	5
17:00	0	0	0	0	0	0	0	0	0	6	0	6	0	3	0	3	9
17:15	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
17:30	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
17:45	0	0	0	0	0	0	0	0	0	5	0	5	0	4	0	4	9

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:45	0	0	0	0	0	0	0	0	0	13	0	13	0	7	0	7	20
PHF	0	0	0	0	0	0	0	0	0	0.54	0	0.54	0	0.58	0	0.58	0.56

Table A-1C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	13th St				McCoys Creek				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	1	0	1	0	75	9	84	17	24	0	41	126
06:15	0	0	0	0	1	0	0	1	0	120	13	133	17	34	0	51	185
06:30	2	0	0	2	2	0	1	3	0	120	13	133	35	29	1	65	203
06:45	0	0	0	0	0	0	0	0	0	117	24	141	65	65	0	130	271
07:00	0	0	2	2	0	0	0	0	0	134	29	163	33	43	1	77	242
07:15	1	0	2	3	0	1	0	1	0	132	28	160	61	36	0	97	261
07:30	0	0	2	2	0	0	1	1	0	152	11	163	32	49	3	84	250
07:45	0	0	1	1	2	0	0	2	0	104	13	117	36	59	2	97	217
08:00	2	0	0	2	1	1	0	2	0	101	21	122	16	33	3	52	178
08:15	1	0	0	1	1	0	0	1	0	80	7	87	12	27	1	40	129
08:30	0	0	1	1	0	1	0	1	0	85	1	86	19	32	2	53	141
08:45	1	1	2	4	3	1	2	6	0	58	8	66	13	25	4	42	118

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	1	0	6	7	0	1	1	2	0	535	92	627	191	193	4	388	1024
PHF	0.25	0	0.75	0.58	0	0.25	0.25	0.50	0	0.88	0.79	0.96	0.73	0.74	0.33	0.75	0.94
% HV	0.0%	0%	0.0%	0.0%	0%	0.0%	0.0%	0.0%	0%	2.4%	0.0%	2.1%	7.9%	1.6%	0.0%	4.6%	3.0%

Start Date 7/18/2012
Start Time 15:00

Street Name	13th St				McCoys Creek				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	4	0	0	4	0	46	0	46	0	54	2	56	106
15:15	0	0	0	0	3	0	0	3	0	48	0	48	0	85	4	89	140
15:30	0	0	1	1	4	0	1	5	0	62	0	62	2	77	2	81	149
15:45	0	0	0	0	1	0	0	1	0	75	0	75	0	100	0	100	176
16:00	0	0	0	0	2	0	0	2	0	66	0	66	0	111	3	114	182
16:15	0	0	0	0	2	0	0	2	0	67	0	67	0	116	2	118	187
16:30	0	0	0	0	2	0	1	3	0	65	0	65	0	106	3	109	177
16:45	0	0	0	0	0	0	0	0	0	76	0	76	0	110	0	110	186
17:00	0	0	0	0	2	0	1	3	1	64	0	65	0	104	2	106	174
17:15	0	0	0	0	1	0	2	3	0	59	0	59	0	170	6	176	238
17:30	0	0	0	0	4	0	1	5	0	68	0	68	1	137	3	141	214
17:45	0	0	0	0	1	0	1	2	0	50	0	50	0	113	2	115	167

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:45	0	0	0	0	7	0	4	11	1	267	0	268	1	521	11	533	812
PHF	0	0	0	0	0.44	0	0.50	0.55	0.25	0.88	0	0.88	0.25	0.77	0.46	0.76	0.85
% HV	0%	0%	0%	0%	0.0%	0%	0.0%	0.0%	0.0%	4.9%	0%	4.9%	0.0%	1.3%	0.0%	1.3%	2.5%

Table A-2A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	19th St				E Robinson Ave				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	5	20	7	32	43	198	3	244	2	52	19	73	64	28	4	96	445
06:15	1	40	13	54	42	131	1	174	2	104	24	130	89	50	21	160	518
06:30	1	81	17	99	59	138	6	203	4	93	20	117	90	51	7	148	567
06:45	10	71	19	100	47	212	22	281	10	70	27	107	80	88	11	179	667
07:00	2	59	8	69	61	187	8	256	4	84	39	127	108	66	11	185	637
07:15	0	35	10	45	67	231	11	309	8	86	43	137	107	101	20	228	719
07:30	12	91	32	135	67	196	8	271	5	113	36	154	75	58	14	147	707
07:45	8	55	14	77	56	190	10	256	6	101	17	124	75	69	23	167	624
08:00	5	23	7	35	55	171	4	230	4	69	21	94	65	38	16	119	478
08:15	0	25	5	30	42	152	7	201	1	60	8	69	53	27	12	92	392
08:30	2	25	8	35	33	124	7	164	5	67	10	82	55	35	14	104	385
08:45	2	40	8	50	37	128	1	166	3	48	11	62	55	30	23	108	386

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	24	256	69	349	242	826	49	1117	27	353	145	525	370	313	56	739	2730
PHF	0.50	0.70	0.54	0.65	0.90	0.89	0.56	0.90	0.68	0.78	0.84	0.85	0.86	0.77	0.70	0.81	0.95

Start Date 7/18/2012
Start Time 15:00

Street Name	19th St				E Robinson Ave				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	95	63	168	30	29	4	63	6	40	1	47	7	37	47	91	369
15:15	15	98	59	172	19	23	6	48	10	38	3	51	3	63	40	106	377
15:30	16	105	51	172	39	20	11	70	13	43	3	59	11	48	55	114	415
15:45	22	131	81	234	40	18	7	65	18	44	8	70	9	68	59	136	505
16:00	28	167	150	345	26	27	9	62	6	55	4	65	9	75	69	153	625
16:15	26	183	135	344	26	29	3	58	8	52	6	66	6	82	105	193	661
16:30	35	174	156	365	39	12	3	54	13	42	2	57	4	71	118	193	669
16:45	16	166	124	306	32	24	13	69	11	59	4	74	3	84	149	236	685
17:00	27	200	69	296	34	25	4	63	9	48	6	63	5	71	87	163	585
17:15	27	184	68	279	29	21	15	65	5	53	3	61	8	133	98	239	644
17:30	14	142	48	204	49	29	13	91	12	49	5	66	9	111	104	224	585
17:45	7	110	37	154	48	23	11	82	7	40	3	50	7	93	97	197	483

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	105	690	565	1360	123	92	28	243	38	208	16	262	22	312	441	775	2640
PHF	0.75	0.94	0.91	0.93	0.79	0.79	0.54	0.88	0.73	0.88	0.67	0.89	0.61	0.93	0.74	0.82	0.96

Table A-2B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	19th St				E Robinson Ave				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	2	2	0	0	0	0	0	4	0	4	6
06:15	0	0	0	0	1	0	0	1	1	2	0	3	0	2	0	2	6
06:30	0	0	0	0	1	0	1	2	0	1	0	1	0	7	2	9	12
06:45	0	0	0	0	2	0	0	2	0	1	0	1	0	4	1	5	8
07:00	0	0	0	0	1	0	0	1	3	5	0	8	0	4	6	10	19
07:15	0	0	0	0	1	0	0	1	0	3	0	3	0	7	4	11	15
07:30	0	0	0	0	2	0	2	4	0	1	0	1	0	3	4	7	12
07:45	0	0	0	0	4	0	2	6	0	4	0	4	0	8	3	11	21
08:00	0	0	0	0	2	0	0	2	1	2	0	3	0	5	0	5	10
08:15	0	0	1	1	5	0	1	6	0	6	0	6	0	4	2	6	19
08:30	0	0	0	0	8	0	1	9	0	4	0	4	0	5	3	8	21
08:45	0	0	0	0	4	0	0	4	1	1	0	2	0	9	4	13	19

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	6	0	2	8	3	10	0	13	0	18	15	33	54
PHF	0	0	0	0	0.75	0	0.25	0.50	0.25	0.50	0	0.41	0	0.64	0.63	0.75	0.71

Start Date 7/18/2012
Start Time 15:00

Street Name	19th St				E Robinson Ave				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	3	0	0	3	2	3	0	5	0	4	2	6	14
15:15	0	0	1	1	1	0	0	1	1	2	0	3	0	5	1	6	11
15:30	0	1	0	1	2	0	0	2	0	3	0	3	0	4	3	7	13
15:45	0	0	1	1	1	0	0	1	0	6	0	6	0	4	1	5	13
16:00	0	0	0	0	3	0	0	3	1	5	0	6	0	4	6	10	19
16:15	0	0	1	1	0	0	0	0	0	7	0	7	0	3	2	5	13
16:30	0	0	0	0	2	0	1	3	0	6	0	6	0	2	3	5	14
16:45	0	0	0	0	2	0	0	2	0	6	0	6	0	1	2	3	11
17:00	0	0	1	1	1	0	0	1	0	6	0	6	0	3	2	5	13
17:15	0	0	0	0	1	0	0	1	0	2	0	2	0	2	1	3	6
17:30	0	0	1	1	1	0	0	1	0	1	0	1	0	1	0	1	4
17:45	0	0	0	0	0	0	0	0	0	5	0	5	0	4	0	4	9

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	0	1	1	7	0	1	8	1	24	0	25	0	10	13	23	57
PHF	0	0	0.25	0.25	0.58	0	0.25	0.67	0.25	0.86	0	0.89	0	0.63	0.54	0.58	0.75

Table A-2C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	19th St				E Robinson Ave				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	5	20	7	32	43	198	5	246	2	52	19	73	64	32	4	100	451
06:15	1	40	13	54	43	131	1	175	3	106	24	133	89	52	21	162	524
06:30	1	81	17	99	60	138	7	205	4	94	20	118	90	58	9	157	579
06:45	10	71	19	100	49	212	22	283	10	71	27	108	80	92	12	184	675
07:00	2	59	8	69	62	187	8	257	7	89	39	135	108	70	17	195	656
07:15	0	35	10	45	68	231	11	310	8	89	43	140	107	108	24	239	734
07:30	12	91	32	135	69	196	10	275	5	114	36	155	75	61	18	154	719
07:45	8	55	14	77	60	190	12	262	6	105	17	128	75	77	26	178	645
08:00	5	23	7	35	57	171	4	232	5	71	21	97	65	43	16	124	488
08:15	0	25	6	31	47	152	8	207	1	66	8	75	53	31	14	98	411
08:30	2	25	8	35	41	124	8	173	5	71	10	86	55	40	17	112	406
08:45	2	40	8	50	41	128	1	170	4	49	11	64	55	39	27	121	405

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	24	256	69	349	248	826	51	1125	30	363	145	538	370	331	71	772	2784
PHF	0.50	0.70	0.54	0.65	0.90	0.89	0.58	0.91	0.75	0.80	0.84	0.87	0.86	0.77	0.74	0.81	0.95
% HV	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	3.9%	0.7%	10.0%	2.8%	0.0%	2.4%	0.0%	5.4%	21.1%	4.3%	1.9%

Start Date 7/18/2012
Start Time 15:00

Street Name	19th St				E Robinson Ave				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	95	63	168	33	29	4	66	8	43	1	52	7	41	49	97	383
15:15	15	98	60	173	20	23	6	49	11	40	3	54	3	68	41	112	388
15:30	16	106	51	173	41	20	11	72	13	46	3	62	11	52	58	121	428
15:45	22	131	82	235	41	18	7	66	18	50	8	76	9	72	60	141	518
16:00	28	167	150	345	29	27	9	65	7	60	4	71	9	79	75	163	644
16:15	26	183	136	345	26	29	3	58	8	59	6	73	6	85	107	198	674
16:30	35	174	156	365	41	12	4	57	13	48	2	63	4	73	121	198	683
16:45	16	166	124	306	34	24	13	71	11	65	4	80	3	85	151	239	696
17:00	27	200	70	297	35	25	4	64	9	54	6	69	5	74	89	168	598
17:15	27	184	68	279	30	21	15	66	5	55	3	63	8	135	99	242	650
17:30	14	142	49	205	50	29	13	92	12	50	5	67	9	112	104	225	589
17:45	7	110	37	154	48	23	11	82	7	45	3	55	7	97	97	201	492

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	105	690	566	1361	130	92	29	251	39	232	16	287	22	322	454	798	2697
PHF	0.75	0.94	0.91	0.93	0.79	0.79	0.56	0.88	0.75	0.89	0.67	0.90	0.61	0.95	0.75	0.83	0.97
% HV	0.0%	0.0%	0.2%	0.1%	5.4%	0.0%	3.4%	3.2%	2.6%	10.3%	0.0%	8.7%	0.0%	3.1%	2.9%	2.9%	2.1%

Table A-3A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	7th Ave				Jimmie Dyess Pkwy				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	5	22	27	54	27	134	51	212	11	76	15	102	100	64	33	197	565
06:15	4	18	25	47	24	164	51	239	15	126	20	161	86	89	46	221	668
06:30	9	42	40	91	38	198	64	300	14	143	22	179	129	106	51	286	856
06:45	5	68	52	125	42	268	83	393	27	116	21	164	130	115	33	278	960
07:00	9	48	45	102	38	251	82	371	17	129	25	171	106	116	35	257	901
07:15	4	40	42	86	42	230	89	361	14	145	22	181	143	101	36	280	908
07:30	10	86	75	171	41	202	69	312	35	183	23	241	106	90	40	236	960
07:45	4	53	51	108	61	208	55	324	24	174	27	225	136	83	65	284	941
08:00	9	29	29	67	64	178	40	282	24	136	9	169	113	68	41	222	740
08:15	3	33	30	66	33	150	45	228	19	87	15	121	92	56	47	195	610
08:30	5	40	34	79	51	125	33	209	14	94	9	117	89	73	48	210	615
08:45	4	43	43	90	36	117	28	181	20	81	18	119	94	58	44	196	586

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	28	242	214	484	163	951	323	1437	93	573	91	757	485	422	144	1051	3729
PHF	0.70	0.70	0.71	0.71	0.97	0.89	0.91	0.91	0.66	0.78	0.91	0.79	0.85	0.91	0.90	0.94	0.97

Start Date 7/18/2012
Start Time 15:00

Street Name	7th Ave				Jimmie Dyess Pkwy				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	114	113	237	61	51	20	132	36	97	4	137	44	72	38	154	660
15:15	6	159	98	263	56	52	21	129	33	75	1	109	48	93	58	199	700
15:30	16	156	141	313	66	32	21	119	42	100	7	149	66	84	55	205	786
15:45	19	171	169	359	67	53	14	134	53	103	9	165	56	122	62	240	898
16:00	30	205	261	496	61	47	18	126	76	113	3	192	53	99	83	235	1049
16:15	34	192	270	496	65	50	30	145	71	120	12	203	30	140	77	247	1091
16:30	41	209	286	536	61	42	16	119	66	122	5	193	62	129	77	268	1116
16:45	33	193	261	487	67	47	22	136	60	119	3	182	53	147	104	304	1109
17:00	31	212	222	465	73	42	31	146	50	102	4	156	47	160	102	309	1076
17:15	28	205	196	429	73	51	32	156	44	112	5	161	43	196	106	345	1091
17:30	18	151	153	322	70	50	20	140	46	94	8	148	50	212	89	351	961
17:45	19	139	106	264	80	41	26	147	46	110	6	162	55	155	79	289	862

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:45	139	806	1039	1984	266	181	99	546	247	463	24	734	192	576	360	1128	4392
PHF	0.85	0.95	0.91	0.93	0.91	0.91	0.80	0.93	0.87	0.95	0.50	0.90	0.77	0.90	0.87	0.91	0.98

Table A-3B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	7th Ave				Jimmie Dyess Pkwy				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	1	1	0	2	0	2	0	2	1	3	6
06:15	0	0	0	0	1	0	2	3	1	1	0	2	0	3	2	5	10
06:30	0	0	1	1	2	0	2	4	0	3	0	3	0	2	3	5	13
06:45	0	0	0	0	3	0	0	3	0	3	0	3	0	4	2	6	12
07:00	0	1	2	3	1	0	1	2	0	5	0	5	0	11	2	13	23
07:15	0	0	0	0	7	0	1	8	0	5	0	5	0	10	3	13	26
07:30	0	0	1	1	2	0	0	2	1	2	0	3	1	11	3	15	21
07:45	0	0	1	1	5	0	3	8	1	5	0	6	1	8	6	15	30
08:00	0	1	1	2	1	0	2	3	0	6	0	6	0	7	5	12	23
08:15	0	1	0	1	2	0	1	3	1	13	0	14	0	7	2	9	27
08:30	1	1	1	3	5	0	0	5	1	10	0	11	0	8	1	9	28
08:45	0	0	0	0	2	0	4	6	1	4	0	5	0	15	2	17	28

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	1	3	4	13	0	2	15	1	15	0	16	1	36	10	47	82
PHF	0	0.25	0.38	0.33	0.46	0	0.50	0.47	0.25	0.75	0	0.80	0.25	0.82	0.83	0.78	0.79

Start Date 7/18/2012
Start Time 15:00

Street Name	7th Ave				Jimmie Dyess Pkwy				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	2	2	13	0	2	15	2	10	0	12	4	4	2	10	39
15:15	0	2	5	7	8	1	1	10	0	7	0	7	0	4	3	7	31
15:30	0	0	1	1	6	0	3	9	1	4	0	5	2	3	3	8	23
15:45	0	0	2	2	2	0	0	2	0	8	1	9	3	7	3	13	26
16:00	0	0	1	1	5	0	3	8	2	5	0	7	1	8	1	10	26
16:15	0	0	1	1	3	0	0	3	3	4	0	7	1	6	0	7	18
16:30	0	0	4	4	4	0	0	4	1	9	0	10	0	5	7	12	30
16:45	0	0	1	1	0	0	0	0	0	6	0	6	1	3	2	6	13
17:00	0	1	1	2	2	0	1	3	2	4	0	6	0	5	2	7	18
17:15	0	0	0	0	3	0	1	4	0	8	0	8	0	3	3	6	18
17:30	0	1	0	1	3	0	2	5	0	2	0	2	1	1	3	5	13
17:45	0	1	2	3	1	0	0	1	3	2	0	5	0	6	0	6	15

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:45	0	1	7	8	9	0	1	10	6	23	0	29	2	19	11	32	79
PHF	0	0.25	0.44	0.50	0.56	0	0.25	0.63	0.50	0.64	0	0.73	0.50	0.79	0.39	0.67	0.66

Table A-3C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	7th Ave				Jimmie Dyess Pkwy				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	5	22	27	54	27	134	52	213	11	78	15	104	100	66	34	200	571
06:15	4	18	25	47	25	164	53	242	16	127	20	163	86	92	48	226	678
06:30	9	42	41	92	40	198	66	304	14	146	22	182	129	108	54	291	869
06:45	5	68	52	125	45	268	83	396	27	119	21	167	130	119	35	284	972
07:00	9	49	47	105	39	251	83	373	17	134	25	176	106	127	37	270	924
07:15	4	40	42	86	49	230	90	369	14	150	22	186	143	111	39	293	934
07:30	10	86	76	172	43	202	69	314	36	185	23	244	107	101	43	251	981
07:45	4	53	52	109	66	208	58	332	25	179	27	231	137	91	71	299	971
08:00	9	30	30	69	65	178	42	285	24	142	9	175	113	75	46	234	763
08:15	3	34	30	67	35	150	46	231	20	100	15	135	92	63	49	204	637
08:30	6	41	35	82	56	125	33	214	15	104	9	128	89	81	49	219	643
08:45	4	43	43	90	38	117	32	187	21	85	18	124	94	73	46	213	614

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	28	243	217	488	176	951	325	1452	94	588	91	773	486	458	154	1098	3811
PHF	0.70	0.71	0.71	0.71	0.90	0.89	0.90	0.92	0.65	0.79	0.91	0.79	0.85	0.90	0.90	0.94	0.97
% HV	0.0%	0.4%	1.4%	0.8%	7.4%	0.0%	0.6%	1.0%	1.1%	2.6%	0.0%	2.1%	0.2%	7.9%	6.5%	4.3%	2.2%

Start Date 7/18/2012
Start Time 15:00

Street Name	7th Ave				Jimmie Dyess Pkwy				Gordon Hwy				Gordon Hwy				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	114	115	239	74	51	22	147	38	107	4	149	48	76	40	164	699
15:15	6	161	103	270	64	53	22	139	33	82	1	116	48	97	61	206	731
15:30	16	156	142	314	72	32	24	128	43	104	7	154	68	87	58	213	809
15:45	19	171	171	361	69	53	14	136	53	111	10	174	59	129	65	253	924
16:00	30	205	262	497	66	47	21	134	78	118	3	199	54	107	84	245	1075
16:15	34	192	271	497	68	50	30	148	74	124	12	210	31	146	77	254	1109
16:30	41	209	290	540	65	42	16	123	67	131	5	203	62	134	84	280	1146
16:45	33	193	262	488	67	47	22	136	60	125	3	188	54	150	106	310	1122
17:00	31	213	223	467	75	42	32	149	52	106	4	162	47	165	104	316	1094
17:15	28	205	196	429	76	51	33	160	44	120	5	169	43	199	109	351	1109
17:30	18	152	153	323	73	50	22	145	46	96	8	150	51	213	92	356	974
17:45	19	140	108	267	81	41	26	148	49	112	6	167	55	161	79	295	877

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:45	139	807	1046	1992	275	181	100	556	253	486	24	763	194	595	371	1160	4471
PHF	0.85	0.95	0.90	0.92	0.92	0.91	0.78	0.93	0.85	0.93	0.50	0.91	0.78	0.90	0.88	0.92	0.98
% HV	0.0%	0.1%	0.7%	0.4%	3.3%	0.0%	1.0%	1.8%	2.4%	4.7%	0.0%	3.8%	1.0%	3.2%	3.0%	2.8%	1.8%

Table A-4A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				13th St				13th St				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	31	1	32	1	219	46	266	6	0	4	10	1	2	0	3	311
06:15	0	40	0	40	3	186	70	259	2	0	1	3	0	1	0	1	303
06:30	0	85	0	85	3	147	63	213	4	0	8	12	0	0	6	6	316
06:45	0	63	1	64	4	228	77	309	1	0	8	9	0	0	0	0	382
07:00	1	64	0	65	3	249	68	320	1	0	12	13	0	1	0	1	399
07:15	0	80	1	81	2	283	60	345	4	0	3	7	0	0	0	0	433
07:30	0	89	1	90	6	286	49	341	6	0	7	13	0	0	0	0	444
07:45	0	54	2	56	4	285	45	334	1	0	11	12	0	0	0	0	402
08:00	1	40	5	46	8	297	43	348	4	1	6	11	1	1	0	2	407
08:15	0	21	3	24	3	200	38	241	2	0	10	12	1	1	0	2	279
08:30	0	21	1	22	2	144	43	189	4	1	7	12	1	0	0	1	224
08:45	1	30	1	32	0	140	59	199	4	0	7	11	1	0	0	1	243

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	1	252	1	254	13	810	278	1101	8	0	29	37	0	2	6	8	1400
PHF	0.25	0.74	0.25	0.75	0.81	0.81	0.90	0.86	0.50	0	0.60	0.71	0	0.50	0.25	0.33	0.88

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				13th St				13th St				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	90	4	94	0	24	3	27	35	0	0	35	6	0	1	7	163
15:15	3	123	0	126	0	32	7	39	53	3	3	59	1	0	4	5	229
15:30	0	129	1	130	0	30	1	31	36	0	0	36	0	0	1	1	198
15:45	0	158	0	158	0	34	11	45	41	0	0	41	0	0	2	2	246
16:00	0	301	4	305	0	36	4	40	68	0	0	68	0	0	5	5	418
16:15	0	250	0	250	0	30	3	33	61	0	0	61	0	0	5	5	349
16:30	0	327	0	327	0	18	2	20	47	0	0	47	2	0	8	10	404
16:45	0	265	0	265	0	17	1	18	62	0	0	62	1	0	3	4	349
17:00	1	222	0	223	0	19	3	22	47	0	0	47	2	0	2	4	296
17:15	0	190	0	190	0	32	3	35	52	0	0	52	1	0	1	2	279
17:30	0	160	1	161	0	30	7	37	37	0	0	37	0	0	6	6	241
17:45	0	130	1	131	0	29	4	33	22	0	0	22	0	0	1	1	187

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	1143	4	1147	0	101	10	111	238	0	0	238	3	0	21	24	1520
PHF	0	0.87	0.25	0.88	0	0.70	0.63	0.69	0.88	0	0	0.88	0.38	0	0.66	0.60	0.91

Table A-4B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				13th St				13th St				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
06:45	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
07:00	0	1	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3
07:15	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
07:30	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
07:45	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
08:00	0	1	1	2	0	0	0	0	0	0	2	2	0	0	0	0	4
08:15	0	0	0	0	0	0	0	0	0	0	3	3	0	1	0	1	4
08:30	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
08:45	0	1	0	1	0	0	0	0	0	0	2	2	0	0	0	0	3

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	0	1	0	1	0	0	0	0	0	0	4	4	0	0	0	0	5
PHF	0	0.25	0	0.25	0	0	0	0	0	0	0.50	0.50	0	0	0	0	0.42

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				13th St				13th St				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:15	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
PHF	0	0.25	0	0.25	0	0.25	0	0.25	0	0	0	0	0	0	0	0	0.50

Table A-4C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				13th St				13th St				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	31	1	32	1	219	46	266	6	0	5	11	1	2	0	3	312
06:15	0	40	0	40	3	186	70	259	2	0	1	3	0	1	0	1	303
06:30	0	85	0	85	3	147	63	213	4	0	9	13	0	0	6	6	317
06:45	0	63	1	64	4	228	77	309	1	0	9	10	0	0	0	0	383
07:00	1	65	0	66	3	249	68	320	1	0	14	15	0	1	0	1	402
07:15	0	80	1	81	2	283	60	345	4	0	6	10	0	0	0	0	436
07:30	0	89	1	90	6	286	49	341	6	0	10	16	0	0	0	0	447
07:45	0	54	2	56	4	285	45	334	1	0	12	13	0	0	0	0	403
08:00	1	41	6	48	8	297	43	348	4	1	8	13	1	1	0	2	411
08:15	0	21	3	24	3	200	38	241	2	0	13	15	1	2	0	3	283
08:30	0	21	1	22	2	144	43	189	4	1	9	14	1	0	0	1	226
08:45	1	31	1	33	0	140	59	199	4	0	9	13	1	0	0	1	246

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	1	253	1	255	13	810	278	1101	8	0	33	41	0	2	6	8	1405
PHF	0.25	0.74	0.25	0.75	0.81	0.81	0.90	0.86	0.50	0	0.59	0.68	0	0.50	0.25	0.33	0.87
% HV	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0%	12.1%	9.8%	0%	0.0%	0.0%	0.0%	0.4%

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				13th St				13th St				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	90	4	95	0	24	3	27	35	0	0	35	6	0	1	7	164
15:15	3	124	0	127	0	32	7	39	54	3	3	60	1	0	4	5	231
15:30	0	129	1	130	0	30	1	31	36	0	0	36	0	0	1	1	198
15:45	0	160	0	160	0	34	11	45	42	0	0	42	0	0	2	2	249
16:00	0	301	4	305	0	36	4	40	68	0	0	68	0	0	5	5	418
16:15	0	251	0	251	0	30	3	33	61	0	0	61	0	0	5	5	350
16:30	0	327	0	327	0	18	2	20	47	0	0	47	2	0	8	10	404
16:45	0	265	0	265	0	18	1	19	62	0	0	62	1	0	3	4	350
17:00	1	222	0	223	0	19	3	22	47	0	0	47	2	0	2	4	296
17:15	0	190	0	190	0	32	3	35	52	0	0	52	1	0	1	2	279
17:30	0	160	1	161	0	30	7	37	37	0	0	37	0	0	6	6	241
17:45	0	130	1	131	0	29	4	33	22	0	0	22	0	0	1	1	187

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	1144	4	1148	0	102	10	112	238	0	0	238	3	0	21	24	1522
PHF	0	0.87	0.25	0.88	0	0.71	0.63	0.70	0.88	0	0	0.88	0.38	0	0.66	0.60	0.91
% HV	0%	0.1%	0.0%	0.1%	0%	1.0%	0.0%	0.9%	0.0%	0%	0%	0.0%	0.0%	0%	0.0%	0.0%	0.1%

Table A-5A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	15th St				15th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	1	8	11	20	10	41	2	53	0	6	3	9	51	5	0	56	138
06:15	0	2	8	10	8	74	3	85	0	4	3	7	68	4	0	72	174
06:30	1	4	16	21	5	72	0	77	0	7	6	13	91	8	1	100	211
06:45	1	7	37	45	2	74	1	77	0	22	23	45	94	10	1	105	272
07:00	3	9	45	57	2	71	2	75	0	12	29	41	110	3	2	115	288
07:15	0	7	42	49	2	74	0	76	0	9	38	47	106	7	3	116	288
07:30	3	7	14	24	11	65	0	76	0	13	16	29	74	12	3	89	218
07:45	6	8	24	38	9	69	1	79	0	8	6	14	52	8	3	63	194
08:00	4	8	34	46	6	59	0	65	0	7	6	13	38	13	0	51	175
08:15	3	6	21	30	10	44	5	59	1	6	4	11	31	11	0	42	142
08:30	16	3	10	29	3	27	14	44	0	6	7	13	21	39	2	62	148
08:45	22	8	17	47	1	50	15	66	0	11	8	19	29	66	1	96	228

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	7	30	138	175	17	284	3	304	0	56	106	162	384	32	9	425	1066
PHF	0.58	0.83	0.77	0.77	0.39	0.96	0.38	0.99	0	0.64	0.70	0.86	0.87	0.67	0.75	0.92	0.93

Start Date 7/17/2012
Start Time 15:00

Street Name	15th St				15th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	4	38	38	80	4	2	1	7	1	12	2	15	13	14	3	30	132
15:15	6	47	55	108	3	8	0	11	8	15	7	30	21	5	2	28	177
15:30	1	32	41	74	4	3	1	8	2	18	2	22	19	14	3	36	140
15:45	23	32	51	106	3	7	0	10	2	16	5	23	33	5	2	40	179
16:00	4	34	109	147	13	13	0	26	8	31	4	43	20	6	0	26	242
16:15	2	47	74	123	4	4	0	8	2	17	1	20	9	7	1	17	168
16:30	1	47	91	139	2	4	0	6	4	13	3	20	12	7	1	20	185
16:45	1	45	52	98	4	2	0	6	6	16	7	29	7	6	0	13	146
17:00	0	38	38	76	2	4	1	7	1	5	3	9	8	11	0	19	111
17:15	3	37	30	70	2	5	0	7	2	2	2	6	8	2	0	10	93
17:30	0	33	41	74	0	8	0	8	0	1	0	1	11	0	0	11	94
17:45	0	21	18	39	1	5	0	6	1	1	0	2	8	2	0	10	57

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	30	160	325	515	22	28	0	50	16	77	13	106	74	25	4	103	774
PHF	0.33	0.85	0.75	0.88	0.42	0.54	0	0.48	0.50	0.62	0.65	0.62	0.56	0.89	0.50	0.64	0.80

Table A-5B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	15th St				15th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	1	1	2	0	0	2	0	2	0	2	0	0	0	0	5
06:15	0	0	2	2	5	1	0	6	0	1	0	1	2	0	0	2	11
06:30	0	0	1	1	3	0	0	3	0	1	0	1	0	0	0	0	5
06:45	0	0	1	1	1	2	0	3	0	3	0	3	2	2	0	4	11
07:00	0	0	2	2	1	0	0	1	0	1	0	1	1	0	0	1	5
07:15	0	0	0	0	2	1	0	3	0	3	0	3	2	0	0	2	8
07:30	0	0	0	0	2	2	0	4	0	2	3	5	1	0	0	1	10
07:45	0	0	1	1	3	3	0	6	0	4	0	4	1	1	0	2	13
08:00	0	0	0	0	1	1	0	2	0	0	0	0	1	1	0	2	4
08:15	4	0	2	6	2	2	0	4	0	0	0	0	1	6	0	7	17
08:30	2	0	0	2	2	1	0	3	0	0	0	0	0	3	2	5	10
08:45	0	0	1	1	4	3	0	7	0	0	0	0	0	2	0	2	10

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	3	3	6	5	0	11	0	9	3	12	6	2	0	8	34
PHF	0	0	0.38	0.38	0.75	0.63	0	0.69	0	0.75	0.25	0.60	0.75	0.25	0	0.50	0.77

Start Date 7/17/2012
Start Time 15:00

Street Name	15th St				15th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	3	1	0	4	0	1	0	1	0	2	0	2	2	1	0	3	10
15:15	2	0	0	2	0	0	0	0	0	0	2	2	1	0	0	1	5
15:30	0	0	0	0	1	0	0	1	0	0	1	1	0	1	0	1	3
15:45	2	0	0	2	0	0	0	0	0	1	0	1	0	3	1	4	7
16:00	0	0	0	0	2	5	0	7	0	0	0	0	0	0	0	0	7
16:15	0	0	4	4	0	0	0	0	0	2	1	3	0	0	0	0	7
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	6
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:15	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:45	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	2	0	4	6	2	5	0	7	0	3	1	4	0	3	1	4	21
PHF	0.25	0	0.25	0.38	0.25	0.25	0	0.25	0	0.38	0.25	0.33	0	0.25	0.25	0.25	0.75

Table A-5C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	15th St				15th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	1	8	12	21	12	41	2	55	0	8	3	11	51	5	0	56	143
06:15	0	2	10	12	13	75	3	91	0	5	3	8	70	4	0	74	185
06:30	1	4	17	22	8	72	0	80	0	8	6	14	91	8	1	100	216
06:45	1	7	38	46	3	76	1	80	0	25	23	48	96	12	1	109	283
07:00	3	9	47	59	3	71	2	76	0	13	29	42	111	3	2	116	293
07:15	0	7	42	49	4	75	0	79	0	12	38	50	108	7	3	118	296
07:30	3	7	14	24	13	67	0	80	0	15	19	34	75	12	3	90	228
07:45	6	8	25	39	12	72	1	85	0	12	6	18	53	9	3	65	207
08:00	4	8	34	46	7	60	0	67	0	7	6	13	39	14	0	53	179
08:15	7	6	23	36	12	46	5	63	1	6	4	11	32	17	0	49	159
08:30	18	3	10	31	5	28	14	47	0	6	7	13	21	42	4	67	158
08:45	22	8	18	48	5	53	15	73	0	11	8	19	29	68	1	98	238

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	7	30	141	178	23	289	3	315	0	65	109	174	390	34	9	433	1100
PHF	0.58	0.83	0.75	0.75	0.44	0.95	0.38	0.98	0	0.65	0.72	0.87	0.88	0.71	0.75	0.92	0.93
% HV	0.0%	0.0%	2.1%	1.7%	26.1%	1.7%	0.0%	3.5%	0%	13.8%	2.8%	6.9%	1.5%	5.9%	0.0%	1.8%	3.1%

Start Date 7/17/2012
Start Time 15:00

Street Name	15th St				15th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	7	39	38	84	4	3	1	8	1	14	2	17	15	15	3	33	142
15:15	8	47	55	110	3	8	0	11	8	15	9	32	22	5	2	29	182
15:30	1	32	41	74	5	3	1	9	2	18	3	23	19	15	3	37	143
15:45	25	32	51	108	3	7	0	10	2	17	5	24	33	8	3	44	186
16:00	4	34	109	147	15	18	0	33	8	31	4	43	20	6	0	26	249
16:15	2	47	78	127	4	4	0	8	2	19	2	23	9	7	1	17	175
16:30	1	47	91	139	2	4	0	6	4	13	3	20	12	7	1	20	185
16:45	1	45	52	98	4	2	0	6	6	16	7	29	7	12	0	19	152
17:00	0	38	38	76	2	4	1	7	1	5	3	9	8	12	0	20	112
17:15	4	37	30	71	2	6	0	8	2	2	2	6	8	3	0	11	96
17:30	0	33	41	74	0	8	0	8	0	1	0	1	11	1	0	12	95
17:45	0	21	18	39	1	5	0	6	1	3	0	4	8	2	0	10	59

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	32	160	329	521	24	33	0	57	16	80	14	110	74	28	5	107	795
PHF	0.32	0.85	0.75	0.89	0.40	0.46	0	0.43	0.50	0.65	0.70	0.64	0.56	0.88	0.42	0.61	0.80
% HV	6.3%	0.0%	1.2%	1.2%	8.3%	15.2%	0%	12.3%	0.0%	3.8%	7.1%	3.6%	0.0%	10.7%	20.0%	3.7%	2.6%

Table A-6A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	15	25	6	46	52	127	16	195	5	8	12	25	0	25	4	29	295
06:15	19	19	10	48	45	94	27	166	6	5	8	19	2	19	5	26	259
06:30	20	33	8	61	32	46	44	122	5	12	9	26	10	27	26	63	272
06:45	17	32	7	56	54	67	50	171	7	27	15	49	4	33	7	44	320
07:00	7	31	11	49	62	67	62	191	20	34	9	63	10	40	13	63	366
07:15	14	44	18	76	71	92	60	223	11	18	17	46	20	25	23	68	413
07:30	9	58	10	77	60	110	43	213	7	19	6	32	10	36	15	61	383
07:45	3	32	17	52	51	112	26	189	12	20	8	40	7	32	10	49	330
08:00	1	25	7	33	64	109	23	196	7	29	9	45	3	17	11	31	305
08:15	3	13	7	23	60	79	19	158	7	23	6	36	0	20	14	34	251
08:30	5	11	5	21	40	66	21	127	2	14	1	17	4	31	8	43	208
08:45	12	23	23	58	31	60	23	114	4	19	7	30	3	56	11	70	272

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	33	165	56	254	244	381	191	816	50	91	40	181	47	133	61	241	1492
PHF	0.59	0.71	0.78	0.82	0.86	0.85	0.77	0.91	0.63	0.67	0.59	0.72	0.59	0.83	0.66	0.89	0.90

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	7	39	3	49	7	16	5	28	22	26	4	52	7	17	16	40	169
15:15	1	49	2	52	5	21	8	34	39	24	7	70	5	15	32	52	208
15:30	5	59	6	70	9	19	4	32	30	33	5	68	10	25	30	65	235
15:45	2	65	6	73	8	20	8	36	44	16	5	65	3	22	22	47	221
16:00	0	76	3	79	4	23	4	31	120	31	5	156	12	19	64	95	361
16:15	1	92	4	97	12	24	1	37	55	32	6	93	2	14	43	59	286
16:30	2	113	6	121	4	22	0	26	75	24	5	104	6	16	72	94	345
16:45	3	104	7	114	3	12	0	15	52	23	5	80	5	10	43	58	267
17:00	3	102	7	112	2	18	1	21	27	15	1	43	8	13	41	62	238
17:15	1	86	5	92	4	26	1	31	21	11	2	34	10	6	39	55	212
17:30	1	82	2	85	10	22	1	33	27	14	0	41	2	10	29	41	200
17:45	0	57	1	58	6	22	0	28	13	7	1	21	22	10	39	71	178

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	6	385	20	411	23	81	5	109	302	110	21	433	25	59	222	306	1259
PHF	0.50	0.85	0.71	0.85	0.48	0.84	0.31	0.74	0.63	0.86	0.88	0.69	0.52	0.78	0.77	0.81	0.87

Table A-6B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	1	0	1	1	2	1	4	0	0	0	0	5
06:15	1	0	0	1	0	0	0	0	0	0	7	7	0	0	0	0	8
06:30	0	1	4	5	0	0	0	0	0	5	0	5	1	0	0	1	11
06:45	1	0	0	1	0	0	0	0	0	3	1	4	0	3	0	3	8
07:00	0	0	1	1	1	1	0	2	2	2	0	4	0	2	1	3	10
07:15	0	0	0	0	2	1	0	3	0	4	1	5	0	1	0	1	9
07:30	0	0	0	0	4	0	0	4	0	2	1	3	0	1	0	1	8
07:45	0	0	0	0	0	1	0	1	0	0	7	7	0	1	0	1	9
08:00	0	1	0	1	1	1	0	2	0	1	1	2	1	2	1	4	9
08:15	3	0	0	3	1	2	1	4	0	1	0	1	0	3	0	3	11
08:30	1	0	0	1	1	1	0	2	0	2	1	3	0	1	0	1	7
08:45	1	0	0	1	0	2	0	2	0	2	2	4	0	1	1	2	9

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	0	0	1	1	7	3	0	10	2	8	9	19	0	5	1	6	36
PHF	0	0	0.25	0.25	0.44	0.75	0	0.63	0.25	0.50	0.32	0.68	0	0.63	0.25	0.50	0.90

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	0	0	1	0	0	1	1	1	0	0	1	0	1	1	2	5
15:15	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
15:30	1	2	0	3	0	0	0	0	1	1	0	2	1	0	0	1	6
15:45	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
16:00	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	3
16:15	0	0	0	0	0	0	0	0	0	4	1	5	0	0	0	0	5
16:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:45	3	0	0	3	0	1	2	3	0	0	0	0	0	1	0	1	7
17:00	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:15	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	3	1	0	4	0	1	2	3	0	4	4	8	0	1	0	1	16
PHF	0.25	0.25	0	0.33	0	0.25	0.25	0.25	0	0.25	0.33	0.40	0	0.25	0	0.25	0.57

Table A-6C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	15	25	6	46	52	128	16	196	6	10	13	29	0	25	4	29	300
06:15	20	19	10	49	45	94	27	166	6	5	15	26	2	19	5	26	267
06:30	20	34	12	66	32	46	44	122	5	17	9	31	11	27	26	64	283
06:45	18	32	7	57	54	67	50	171	7	30	16	53	4	36	7	47	328
07:00	7	31	12	50	63	68	62	193	22	36	9	67	10	42	14	66	376
07:15	14	44	18	76	73	93	60	226	11	22	18	51	20	26	23	69	422
07:30	9	58	10	77	64	110	43	217	7	21	7	35	10	37	15	62	391
07:45	3	32	17	52	51	113	26	190	12	20	15	47	7	33	10	50	339
08:00	1	26	7	34	65	110	23	198	7	30	10	47	4	19	12	35	314
08:15	6	13	7	26	61	81	20	162	7	24	6	37	0	23	14	37	262
08:30	6	11	5	22	41	67	21	129	2	16	2	20	4	32	8	44	215
08:45	13	23	23	59	31	62	23	116	4	21	9	34	3	57	12	72	281

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	33	165	57	255	251	384	191	826	52	99	49	200	47	138	62	247	1528
PHF	0.59	0.71	0.79	0.83	0.86	0.85	0.77	0.91	0.59	0.69	0.68	0.75	0.59	0.82	0.67	0.89	0.91
% HV	0.0%	0.0%	1.8%	0.4%	2.8%	0.8%	0.0%	1.2%	3.8%	8.1%	18.4%	9.5%	0.0%	3.6%	1.6%	2.4%	2.4%

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	8	39	3	50	7	16	6	29	23	26	4	53	7	18	17	42	174
15:15	1	49	2	52	5	21	8	34	39	25	7	71	5	16	32	53	210
15:30	6	61	6	73	9	19	4	32	31	34	5	70	11	25	30	66	241
15:45	2	65	6	73	8	20	8	36	44	17	5	66	3	23	22	48	223
16:00	0	76	3	79	4	23	4	31	120	31	8	159	12	19	64	95	364
16:15	1	92	4	97	12	24	1	37	55	36	7	98	2	14	43	59	291
16:30	2	114	6	122	4	22	0	26	75	24	5	104	6	16	72	94	346
16:45	6	104	7	117	3	13	2	18	52	23	5	80	5	11	43	59	274
17:00	5	102	7	114	2	18	1	21	27	15	1	43	8	13	41	62	240
17:15	2	86	5	93	4	26	1	31	21	11	2	34	10	7	39	56	214
17:30	1	82	2	85	10	22	1	33	27	14	0	41	2	10	29	41	200
17:45	0	57	1	58	6	22	0	28	13	9	1	23	22	10	39	71	180

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	9	386	20	415	23	82	7	112	302	114	25	441	25	60	222	307	1275
PHF	0.38	0.85	0.71	0.85	0.48	0.85	0.44	0.76	0.63	0.79	0.78	0.69	0.52	0.79	0.77	0.81	0.88
% HV	33.3%	0.3%	0.0%	1.0%	0.0%	1.2%	28.6%	2.7%	0.0%	3.5%	16.0%	1.8%	0.0%	1.7%	0.0%	0.3%	1.3%

Table A-7A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	1	2	3	0	0	0	0	0	25	1	26	8	66	0	74	103
06:15	2	2	7	11	1	0	1	2	0	23	2	25	12	61	2	75	113
06:30	0	8	20	28	0	2	0	2	0	82	3	85	10	67	3	80	195
06:45	3	3	14	20	1	0	2	3	0	88	9	97	14	54	2	70	190
07:00	3	1	4	8	1	3	1	5	0	73	11	84	11	69	1	81	178
07:15	5	8	9	22	2	2	0	4	2	84	9	95	11	68	2	81	202
07:30	9	8	14	31	2	3	0	5	3	81	12	96	15	79	2	96	228
07:45	8	17	16	41	1	2	1	4	5	86	11	102	16	52	3	71	218
08:00	6	19	32	57	2	4	2	8	4	101	7	112	14	31	1	46	223
08:15	5	15	15	35	2	7	0	9	2	80	12	94	24	24	6	54	192
08:30	4	7	6	17	1	4	0	5	1	55	11	67	18	29	2	49	138
08:45	9	7	5	21	1	5	0	6	1	72	6	79	18	42	3	63	169

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	28	52	71	151	7	11	3	21	14	352	39	405	56	230	8	294	871
PHF	0.78	0.68	0.55	0.66	0.88	0.69	0.38	0.66	0.70	0.87	0.81	0.90	0.88	0.73	0.67	0.77	0.96

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	4	4	19	27	4	14	0	18	0	45	6	51	16	34	1	51	147
15:15	5	5	7	17	3	7	0	10	0	49	2	51	14	40	1	55	133
15:30	10	6	8	24	5	20	0	25	0	49	6	55	15	50	1	66	170
15:45	6	6	18	30	1	7	0	8	0	39	2	41	12	43	1	56	135
16:00	7	9	25	41	4	11	4	19	0	52	6	58	20	73	0	93	211
16:15	10	9	18	37	4	29	1	34	0	62	7	69	17	39	0	56	196
16:30	8	8	29	45	9	22	4	35	0	78	8	86	20	48	0	68	234
16:45	11	1	29	41	5	10	0	15	1	54	11	66	13	28	1	42	164
17:00	10	12	25	47	1	2	2	5	1	53	6	60	7	49	1	57	169
17:15	6	7	14	27	3	6	2	11	0	50	10	60	16	39	2	57	155
17:30	7	4	14	25	2	1	1	4	0	45	12	57	11	35	0	46	132
17:45	1	2	9	12	0	1	0	1	0	33	7	40	9	39	1	49	102

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	36	27	101	164	22	72	9	103	1	246	32	279	70	188	1	259	805
PHF	0.82	0.75	0.87	0.91	0.61	0.62	0.56	0.74	0.25	0.79	0.73	0.81	0.88	0.64	0.25	0.70	0.86

Table A-7B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	1	0	1	1	5	0	6	0	1	0	1	8
06:45	0	0	0	0	0	0	0	0	0	6	0	6	0	2	0	2	8
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
07:15	0	0	0	0	0	1	0	1	0	8	0	8	0	1	0	1	10
07:30	0	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	6
07:45	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
08:00	4	0	0	4	0	2	3	5	0	2	0	2	0	4	0	4	15
08:15	0	0	0	0	0	1	0	1	0	4	0	4	0	1	0	1	6
08:30	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:45	0	0	0	0	0	1	0	1	0	2	0	2	0	2	0	2	5

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	4	1	0	5	0	3	3	6	0	16	0	16	0	6	0	6	33
PHF	0.25	0.25	0	0.31	0	0.38	0.25	0.30	0	0.50	0	0.50	0	0.38	0	0.38	0.55

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
15:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
15:30	0	0	0	0	0	0	0	0	0	1	1	2	0	2	0	2	4
15:45	1	0	0	1	0	0	0	0	0	0	1	1	0	1	0	1	3
16:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
16:15	0	0	0	0	0	2	0	2	0	3	0	3	1	2	0	3	8
16:30	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	2	3
17:15	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:45	0	0	0	0	1	0	0	1	0	2	0	2	0	1	0	1	4

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	0	0	0	0	4	0	4	0	4	0	4	1	3	0	4	12
PHF	0	0	0	0	0	0.50	0	0.50	0	0.33	0	0.33	0.25	0.38	0	0.33	0.38

Table A-7C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	1	2	3	0	0	0	0	0	26	1	27	8	66	0	74	104
06:15	2	2	7	11	1	0	1	2	0	23	2	25	12	61	2	75	113
06:30	0	8	20	28	0	3	0	3	1	87	3	91	10	68	3	81	203
06:45	3	3	14	20	1	0	2	3	0	94	9	103	14	56	2	72	198
07:00	3	1	4	8	1	3	1	5	0	73	11	84	11	73	1	85	182
07:15	5	8	9	22	2	3	0	5	2	92	9	103	11	69	2	82	212
07:30	9	8	14	31	2	3	0	5	3	87	12	102	15	79	2	96	234
07:45	8	18	16	42	1	2	1	4	5	86	11	102	16	53	3	72	220
08:00	10	19	32	61	2	6	5	13	4	103	7	114	14	35	1	50	238
08:15	5	15	15	35	2	8	0	10	2	84	12	98	24	25	6	55	198
08:30	4	8	6	18	1	4	0	5	1	57	11	69	18	29	2	49	141
08:45	9	7	5	21	1	6	0	7	1	74	6	81	18	44	3	65	174

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	32	53	71	156	7	14	6	27	14	368	39	421	56	236	8	300	904
PHF	0.80	0.70	0.55	0.64	0.88	0.58	0.30	0.52	0.70	0.89	0.81	0.92	0.88	0.75	0.67	0.78	0.95
% HV	12.5%	1.9%	0.0%	3.2%	0.0%	21.4%	50.0%	22.2%	0.0%	4.3%	0.0%	3.8%	0.0%	2.5%	0.0%	2.0%	3.7%

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	4	4	19	27	4	14	0	18	0	45	6	51	16	36	1	53	149
15:15	5	5	7	17	3	7	0	10	0	50	2	52	14	40	1	55	134
15:30	10	6	8	24	5	20	0	25	0	50	7	57	15	52	1	68	174
15:45	7	6	18	31	1	7	0	8	0	39	3	42	12	44	1	57	138
16:00	7	9	25	41	4	11	4	19	0	53	6	59	20	73	0	93	212
16:15	10	9	18	37	4	31	1	36	0	65	7	72	18	41	0	59	204
16:30	8	8	29	45	9	24	4	37	0	78	8	86	20	49	0	69	237
16:45	11	1	29	41	5	10	0	15	1	54	11	66	13	28	1	42	164
17:00	10	12	25	47	1	2	2	5	1	54	6	61	9	49	1	59	172
17:15	6	7	14	27	3	6	2	11	0	51	10	61	16	40	2	58	157
17:30	7	4	14	25	2	1	1	4	0	45	12	57	11	36	0	47	133
17:45	1	2	9	12	1	1	0	2	0	35	7	42	9	40	1	50	106

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	36	27	101	164	22	76	9	107	1	250	32	283	71	191	1	263	817
PHF	0.82	0.75	0.87	0.91	0.61	0.61	0.56	0.72	0.25	0.80	0.73	0.82	0.89	0.65	0.25	0.71	0.86
% HV	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%	3.7%	0.0%	1.6%	0.0%	1.4%	1.4%	1.6%	0.0%	1.5%	1.5%

Table A-8A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Rice Rd				Rice Rd				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	20	8	11	39	3	3	3	9	0	15	9	24	48	76	8	132	204
06:15	29	7	16	52	6	6	0	12	1	18	7	26	39	84	4	127	217
06:30	30	16	51	97	5	5	0	10	1	59	15	75	37	77	17	131	313
06:45	23	23	24	70	11	7	1	19	4	86	19	109	27	113	15	155	353
07:00	27	26	31	84	24	6	0	30	1	67	18	86	45	100	30	175	375
07:15	25	24	27	76	24	15	0	39	1	57	16	74	45	100	18	163	352
07:30	31	29	37	97	20	8	3	31	1	73	24	98	69	155	29	253	479
07:45	27	28	20	75	9	9	0	18	8	59	18	85	48	101	38	187	365
08:00	33	28	25	86	16	11	7	34	3	67	13	83	52	148	46	246	449
08:15	27	22	20	69	13	11	1	25	3	62	20	85	64	162	41	267	446
08:30	13	11	19	43	2	2	0	4	2	48	15	65	54	66	16	136	248
08:45	10	11	26	47	10	8	0	18	1	50	19	70	41	86	14	141	276

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	118	107	102	327	58	39	11	108	15	261	75	351	233	566	154	953	1739
PHF	0.89	0.92	0.69	0.84	0.73	0.89	0.39	0.79	0.47	0.89	0.78	0.90	0.84	0.87	0.84	0.89	0.91

Start Date 7/17/2012
Start Time 15:00

Street Name	Rice Rd				Rice Rd				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	16	48	74	18	8	5	31	2	71	22	95	38	38	12	88	288
15:15	12	6	55	73	15	18	1	34	1	67	14	82	45	38	6	89	278
15:30	20	7	54	81	13	6	5	24	1	101	24	126	30	41	8	79	310
15:45	10	5	51	66	16	19	5	40	3	85	19	107	36	51	9	96	309
16:00	15	13	77	105	37	16	2	55	3	155	28	186	68	56	18	142	488
16:15	9	9	68	86	27	19	2	48	0	146	24	170	57	38	6	101	405
16:30	15	10	80	105	47	36	0	83	2	165	33	200	62	34	7	103	491
16:45	12	3	72	87	44	27	0	71	3	124	23	150	34	31	6	71	379
17:00	6	4	97	107	27	21	1	49	1	140	17	158	46	43	4	93	407
17:15	9	5	88	102	16	18	1	35	0	103	16	119	38	38	4	80	336
17:30	9	7	47	63	16	11	1	28	0	89	18	107	47	35	2	84	282
17:45	2	3	60	65	7	2	0	9	0	46	13	59	30	33	6	69	202

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	51	35	297	383	155	98	4	257	8	590	108	706	221	159	37	417	1763
PHF	0.85	0.67	0.93	0.91	0.82	0.68	0.50	0.77	0.67	0.89	0.82	0.88	0.81	0.71	0.51	0.73	0.90

Table A-8B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Rice Rd				Rice Rd				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
06:30	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
06:45	1	1	0	2	1	0	0	1	0	0	1	1	0	1	0	1	5
07:00	1	0	0	1	0	0	0	0	0	2	0	2	0	3	0	3	6
07:15	0	0	1	1	0	3	0	3	3	4	3	10	1	1	0	2	16
07:30	1	0	2	3	1	4	0	5	0	3	1	4	0	0	0	0	12
07:45	0	1	2	3	0	1	0	1	0	0	0	0	0	0	0	0	4
08:00	1	4	4	9	0	0	4	4	0	1	0	1	1	1	0	2	16
08:15	0	1	0	1	0	0	0	0	0	1	0	1	1	1	0	2	4
08:30	0	0	0	0	0	0	0	0	1	2	0	3	2	0	0	2	5
08:45	0	0	2	2	0	0	0	0	0	2	0	2	0	0	0	0	4

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	2	6	8	16	1	5	4	10	0	5	1	6	2	2	0	4	36
PHF	0.50	0.38	0.50	0.44	0.25	0.31	0.25	0.50	0	0.42	0.25	0.38	0.50	0.50	0	0.50	0.56

Start Date 7/17/2012
Start Time 15:00

Street Name	Rice Rd				Rice Rd				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	2	2	0	0	0	0	0	2	0	2	1	2	0	3	7
15:15	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
15:30	0	0	0	0	0	1	0	1	0	0	0	0	0	3	0	3	4
15:45	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
16:15	0	0	1	1	0	0	1	1	0	3	0	3	0	0	0	0	5
16:30	0	2	0	2	0	3	0	3	3	0	0	3	0	0	0	0	8
16:45	0	2	1	3	0	2	0	2	0	0	0	0	0	0	0	0	5
17:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
17:15	0	3	0	3	0	0	1	1	1	1	0	2	1	0	0	1	7
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
17:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	4	2	6	0	5	1	6	3	3	0	6	1	1	0	2	20
PHF	0	0.50	0.50	0.50	0	0.42	0.25	0.50	0.25	0.25	0	0.50	0.25	0.25	0	0.25	0.63

Table A-8C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Rice Rd				Rice Rd				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	20	8	11	39	3	3	3	9	0	16	9	25	48	76	8	132	205
06:15	29	7	16	52	6	6	0	12	1	18	7	26	40	84	4	128	218
06:30	30	17	51	98	5	5	0	10	1	60	16	77	37	77	17	131	316
06:45	24	24	24	72	12	7	1	20	4	86	20	110	27	114	15	156	358
07:00	28	26	31	85	24	6	0	30	1	69	18	88	45	103	30	178	381
07:15	25	24	28	77	24	18	0	42	4	61	19	84	46	101	18	165	368
07:30	32	29	39	100	21	12	3	36	1	76	25	102	69	155	29	253	491
07:45	27	29	22	78	9	10	0	19	8	59	18	85	48	101	38	187	369
08:00	34	32	29	95	16	11	11	38	3	68	13	84	53	149	46	248	465
08:15	27	23	20	70	13	11	1	25	3	63	20	86	65	163	41	269	450
08:30	13	11	19	43	2	2	0	4	3	50	15	68	56	66	16	138	253
08:45	10	11	28	49	10	8	0	18	1	52	19	72	41	86	14	141	280

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	120	113	110	343	59	44	15	118	15	266	76	357	235	568	154	957	1775
PHF	0.88	0.88	0.71	0.86	0.70	0.92	0.34	0.78	0.47	0.88	0.76	0.88	0.85	0.87	0.84	0.89	0.90
% HV	1.7%	5.3%	7.3%	4.7%	1.7%	11.4%	26.7%	8.5%	0.0%	1.9%	1.3%	1.7%	0.9%	0.4%	0.0%	0.4%	2.0%

Start Date 7/17/2012
Start Time 15:00

Street Name	Rice Rd				Rice Rd				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	16	50	76	18	8	5	31	2	73	22	97	39	40	12	91	295
15:15	12	6	56	74	15	18	1	34	1	68	14	83	45	38	6	89	280
15:30	20	7	54	81	13	7	5	25	1	101	24	126	30	44	8	82	314
15:45	10	5	51	66	16	19	5	40	3	86	19	108	36	52	9	97	311
16:00	15	13	77	105	37	16	2	55	3	155	28	186	69	57	18	144	490
16:15	9	9	69	87	27	19	3	49	0	149	24	173	57	38	6	101	410
16:30	15	12	80	107	47	39	0	86	5	165	33	203	62	34	7	103	499
16:45	12	5	73	90	44	29	0	73	3	124	23	150	34	31	6	71	384
17:00	6	4	97	107	27	21	1	49	1	140	17	158	47	43	4	94	408
17:15	9	8	88	105	16	18	2	36	1	104	16	121	39	38	4	81	343
17:30	9	7	47	63	16	11	1	28	0	89	18	107	47	36	3	86	284
17:45	2	3	61	66	7	2	0	9	0	46	13	59	30	33	6	69	203

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	51	39	299	389	155	103	5	263	11	593	108	712	222	160	37	419	1783
PHF	0.85	0.75	0.93	0.91	0.82	0.66	0.42	0.76	0.55	0.90	0.82	0.88	0.80	0.70	0.51	0.73	0.89
% HV	0.0%	10.3%	0.7%	1.5%	0.0%	4.9%	20.0%	2.3%	27.3%	0.5%	0.0%	0.8%	0.5%	0.6%	0.0%	0.5%	1.1%

Table A-9A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Kilbourne St				--				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	5	0	42	47	0	0	0	0	0	27	5	32	60	121	0	181	260
06:15	1	0	58	59	0	0	0	0	0	43	11	54	61	123	0	184	297
06:30	3	0	93	96	0	0	0	0	0	116	13	129	52	120	0	172	397
06:45	6	0	67	73	0	0	0	0	0	115	11	126	62	145	0	207	406
07:00	4	0	91	95	0	0	0	0	0	109	10	119	97	177	0	274	488
07:15	3	0	136	139	0	0	0	0	0	96	14	110	88	171	0	259	508
07:30	6	0	135	141	0	0	0	0	0	118	9	127	90	242	0	332	600
07:45	6	0	106	112	0	0	0	0	0	86	7	93	107	187	0	294	499
08:00	15	0	84	99	0	0	0	0	0	101	7	108	86	235	0	321	528
08:15	9	0	70	79	0	0	0	0	0	90	6	96	90	248	0	338	513
08:30	0	0	60	60	0	0	0	0	0	64	5	69	85	149	0	234	363
08:45	2	0	87	89	0	0	0	0	0	78	6	84	104	128	0	232	405

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	36	0	395	431	0	0	0	0	0	395	29	424	373	912	0	1285	2140
PHF	0.60	0	0.73	0.76	0	0	0	0	0	0.84	0.81	0.83	0.87	0.92	0	0.95	0.89

Start Date 7/17/2012
Start Time 15:00

Street Name	Kilbourne St				--				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	2	0	97	99	0	0	0	0	0	127	8	135	78	85	0	163	397
15:15	5	0	97	102	0	0	0	0	0	135	5	140	88	85	0	173	415
15:30	2	0	108	110	0	0	0	0	0	151	18	169	90	78	0	168	447
15:45	4	0	121	125	0	0	0	0	0	147	10	157	78	94	0	172	454
16:00	5	0	170	175	0	0	0	0	0	251	22	273	85	141	0	226	674
16:15	3	0	113	116	0	0	0	0	0	219	29	248	91	98	0	189	553
16:30	3	0	179	182	0	0	0	0	0	276	20	296	71	96	0	167	645
16:45	1	0	147	148	0	0	0	0	0	236	8	244	77	69	0	146	538
17:00	4	0	148	152	0	0	0	0	0	247	15	262	72	86	0	158	572
17:15	5	0	157	162	0	0	0	0	0	202	15	217	73	78	0	151	530
17:30	2	0	133	135	0	0	0	0	0	142	9	151	84	80	0	164	450
17:45	3	0	119	122	0	0	0	0	0	120	4	124	55	68	0	123	369

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	12	0	609	621	0	0	0	0	0	982	79	1061	324	404	0	728	2410
PHF	0.60	0	0.85	0.85	0	0	0	0	0	0.89	0.68	0.90	0.89	0.72	0	0.81	0.89

Table A-9B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Kilbourne St				--				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	1	1	0	0	0	0	0	1	0	1	1	0	0	1	3
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
06:30	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
06:45	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
07:00	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	3	5
07:15	0	0	0	0	0	0	0	0	0	5	0	5	0	2	0	2	7
07:30	0	0	1	1	0	0	0	0	0	6	0	6	0	0	0	0	7
07:45	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00	0	0	1	1	0	0	0	0	0	5	0	5	1	3	0	4	10
08:15	0	0	2	2	0	0	0	0	0	0	1	1	0	3	0	3	6
08:30	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
08:45	0	0	2	2	0	0	0	0	0	4	1	5	0	0	0	0	7

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	0	0	4	4	0	0	0	0	0	12	1	13	1	6	0	7	24
PHF	0	0	0.50	0.50	0	0	0	0	0	0.50	0.25	0.54	0.25	0.50	0	0.44	0.60

Start Date 7/17/2012
Start Time 15:00

Street Name	Kilbourne St				--				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	1	1	0	0	0	0	0	4	0	4	1	2	0	3	8
15:15	0	0	1	1	0	0	0	0	0	3	0	3	0	0	0	0	4
15:30	0	0	1	1	0	0	0	0	0	0	0	0	2	3	0	5	6
15:45	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
16:00	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
16:15	0	0	2	2	0	0	0	0	0	4	0	4	0	0	0	0	6
16:30	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
16:45	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
17:15	0	0	1	1	0	0	0	0	0	1	0	1	1	1	0	2	4
17:30	0	0	2	2	0	0	0	0	0	0	0	0	0	1	0	1	3
17:45	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	0	7	7	0	0	0	0	0	4	0	4	1	2	0	3	14
PHF	0	0	0.58	0.58	0	0	0	0	0	0.25	0	0.25	0.25	0.25	0	0.25	0.58

Table A-9C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Kilbourne St				--				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	5	0	43	48	0	0	0	0	0	28	5	33	61	121	0	182	263
06:15	1	0	58	59	0	0	0	0	0	43	11	54	61	124	0	185	298
06:30	3	0	93	96	0	0	0	0	0	117	13	130	52	120	0	172	398
06:45	6	0	67	73	0	0	0	0	0	116	11	127	62	146	0	208	408
07:00	4	0	91	95	0	0	0	0	0	111	10	121	97	180	0	277	493
07:15	3	0	136	139	0	0	0	0	0	101	14	115	88	173	0	261	515
07:30	6	0	136	142	0	0	0	0	0	124	9	133	90	242	0	332	607
07:45	6	0	106	112	0	0	0	0	0	87	7	94	107	187	0	294	500
08:00	15	0	85	100	0	0	0	0	0	106	7	113	87	238	0	325	538
08:15	9	0	72	81	0	0	0	0	0	90	7	97	90	251	0	341	519
08:30	0	0	60	60	0	0	0	0	0	66	5	71	85	150	0	235	366
08:45	2	0	89	91	0	0	0	0	0	82	7	89	104	128	0	232	412

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	36	0	399	435	0	0	0	0	0	407	30	437	374	918	0	1292	2164
PHF	0.60	0	0.73	0.77	0	0	0	0	0	0.82	0.83	0.82	0.87	0.91	0	0.95	0.89
% HV	0.0%	0%	1.0%	0.9%	0%	0%	0%	0%	0%	2.9%	3.3%	3.0%	0.3%	0.7%	0%	0.5%	1.1%

Start Date 7/17/2012
Start Time 15:00

Street Name	Kilbourne St				--				Chamberlain Ave				Chamberlain Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	2	0	98	100	0	0	0	0	0	131	8	139	79	87	0	166	405
15:15	5	0	98	103	0	0	0	0	0	138	5	143	88	85	0	173	419
15:30	2	0	109	111	0	0	0	0	0	151	18	169	92	81	0	173	453
15:45	4	0	121	125	0	0	0	0	0	148	10	158	78	96	0	174	457
16:00	5	0	170	175	0	0	0	0	0	251	22	273	86	143	0	229	677
16:15	3	0	115	118	0	0	0	0	0	223	29	252	91	98	0	189	559
16:30	3	0	182	185	0	0	0	0	0	276	20	296	71	96	0	167	648
16:45	1	0	149	150	0	0	0	0	0	236	8	244	77	69	0	146	540
17:00	4	0	148	152	0	0	0	0	0	248	15	263	73	87	0	160	575
17:15	5	0	158	163	0	0	0	0	0	203	15	218	74	79	0	153	534
17:30	2	0	135	137	0	0	0	0	0	142	9	151	84	81	0	165	453
17:45	3	0	120	123	0	0	0	0	0	121	4	125	55	68	0	123	371

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	12	0	616	628	0	0	0	0	0	986	79	1065	325	406	0	731	2424
PHF	0.60	0	0.85	0.85	0	0	0	0	0	0.89	0.68	0.90	0.89	0.71	0	0.80	0.90
% HV	0.0%	0%	1.1%	1.1%	0%	0%	0%	0%	0%	0.4%	0.0%	0.4%	0.3%	0.5%	0%	0.4%	0.6%

Table A-10A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	32	10	44	53	83	0	136	0	1	0	1	11	3	13	27	208
06:15	4	40	10	54	40	66	0	106	0	0	0	0	15	1	9	25	185
06:30	7	37	14	58	21	46	0	67	0	2	1	3	9	4	24	37	165
06:45	5	40	9	54	23	58	0	81	0	0	6	6	9	7	13	29	170
07:00	4	33	28	65	16	70	0	86	0	0	4	4	10	3	15	28	183
07:15	1	50	28	79	29	100	1	130	0	1	0	1	11	6	27	44	254
07:30	3	72	14	89	25	95	0	120	0	4	2	6	11	3	19	33	248
07:45	1	45	24	70	38	100	0	138	0	3	3	6	17	0	3	20	234
08:00	0	19	12	31	38	84	0	122	0	0	0	0	13	1	6	20	173
08:15	1	16	8	25	29	63	0	92	0	2	0	2	5	2	3	10	129
08:30	1	13	11	25	19	55	0	74	0	0	0	0	10	5	10	25	124
08:45	2	50	15	67	20	55	0	75	0	0	0	0	18	4	8	30	172

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	9	200	94	303	108	365	1	474	0	8	9	17	49	12	64	125	919
PHF	0.56	0.69	0.84	0.85	0.71	0.91	0.25	0.86	0	0.50	0.56	0.71	0.72	0.50	0.59	0.71	0.90

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	44	10	55	6	28	0	34	0	1	1	2	9	3	11	23	114
15:15	0	47	10	57	8	23	1	32	0	2	0	2	10	2	9	21	112
15:30	3	72	14	89	5	30	0	35	1	0	0	1	11	5	11	27	152
15:45	0	68	20	88	2	25	0	27	0	0	0	0	20	5	12	37	152
16:00	0	88	17	105	3	35	0	38	0	3	0	3	13	1	14	28	174
16:15	0	68	29	97	10	21	0	31	1	0	0	1	9	0	22	31	160
16:30	4	103	14	121	6	43	1	50	0	0	0	0	4	3	26	33	204
16:45	0	90	12	102	0	20	0	20	0	1	0	1	7	0	19	26	149
17:00	4	86	13	103	4	24	0	28	0	0	0	0	12	1	25	38	169
17:15	0	91	13	104	6	33	0	39	0	2	0	2	8	1	12	21	166
17:30	0	69	8	77	3	24	0	27	0	0	0	0	13	0	12	25	129
17:45	0	53	4	57	3	45	0	48	0	0	0	0	7	0	14	21	126

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	4	327	80	411	21	124	1	146	1	3	0	4	46	9	74	129	690
PHF	0.25	0.79	0.69	0.85	0.53	0.72	0.25	0.73	0.25	0.25	0	0.33	0.58	0.45	0.71	0.87	0.85

Table A-10B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	1	3
06:15	1	1	0	2	1	6	0	7	0	0	0	0	0	0	0	0	9
06:30	0	5	0	5	0	1	0	1	0	1	0	1	0	0	0	0	7
06:45	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	3
07:00	0	0	0	0	1	1	0	2	0	0	1	1	0	0	0	0	3
07:15	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	1	3
07:30	0	0	1	1	0	1	0	1	0	0	1	1	1	0	0	1	4
07:45	1	0	0	1	2	6	0	8	0	0	1	1	0	0	0	0	10
08:00	0	1	0	1	0	3	0	3	0	0	0	0	0	0	0	0	4
08:15	0	3	0	3	1	0	0	1	0	2	0	2	0	0	2	2	8
08:30	1	0	1	2	1	1	0	2	0	0	0	0	1	0	1	2	6
08:45	0	0	0	0	2	2	0	4	0	0	1	1	0	1	1	2	7

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	1	0	1	2	3	10	0	13	0	0	3	3	2	0	0	2	20
PHF	0.25	0	0.25	0.50	0.38	0.42	0	0.41	0	0	0.75	0.75	0.50	0	0	0.50	0.50

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:15	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
15:30	0	3	0	3	0	1	0	1	0	0	0	0	0	1	0	1	5
15:45	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
16:00	0	1	1	2	1	1	0	2	0	0	0	0	0	0	0	0	4
16:15	0	0	0	0	0	2	0	2	0	0	1	1	0	0	0	0	3
16:30	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
16:45	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
17:00	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	1	2	2	5	1	3	0	4	0	0	1	1	0	1	0	1	11
PHF	0.25	0.50	0.50	0.63	0.25	0.38	0	0.50	0	0	0.25	0.25	0	0.25	0	0.25	0.69

Table A-10C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	2	32	10	44	53	85	0	138	0	1	0	1	12	3	13	28	211
06:15	5	41	10	56	41	72	0	113	0	0	0	0	15	1	9	25	194
06:30	7	42	14	63	21	47	0	68	0	3	1	4	9	4	24	37	172
06:45	5	42	9	56	23	59	0	82	0	0	6	6	9	7	13	29	173
07:00	4	33	28	65	17	71	0	88	0	0	5	5	10	3	15	28	186
07:15	1	50	28	79	29	102	1	132	0	1	0	1	12	6	27	45	257
07:30	3	72	15	90	25	96	0	121	0	4	3	7	12	3	19	34	252
07:45	2	45	24	71	40	106	0	146	0	3	4	7	17	0	3	20	244
08:00	0	20	12	32	38	87	0	125	0	0	0	0	13	1	6	20	177
08:15	1	19	8	28	30	63	0	93	0	4	0	4	5	2	5	12	137
08:30	2	13	12	27	20	56	0	76	0	0	0	0	11	5	11	27	130
08:45	2	50	15	67	22	57	0	79	0	0	1	1	18	5	9	32	179

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	10	200	95	305	111	375	1	487	0	8	12	20	51	12	64	127	939
PHF	0.63	0.69	0.85	0.85	0.69	0.88	0.25	0.83	0	0.50	0.60	0.71	0.75	0.50	0.59	0.71	0.91
% HV	10.0%	0.0%	1.1%	0.7%	2.7%	2.7%	0.0%	2.7%	0%	0.0%	25.0%	15.0%	3.9%	0.0%	0.0%	1.6%	2.1%

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	45	10	56	6	28	0	34	0	1	1	2	9	3	11	23	115
15:15	1	48	11	60	8	23	1	32	0	2	0	2	10	2	9	21	115
15:30	3	75	14	92	5	31	0	36	1	0	0	1	11	6	11	28	157
15:45	1	68	20	89	2	25	0	27	0	0	0	0	20	6	12	38	154
16:00	0	89	18	107	4	36	0	40	0	3	0	3	13	1	14	28	178
16:15	0	68	29	97	10	23	0	33	1	0	1	2	9	0	22	31	163
16:30	4	104	15	123	6	43	1	50	0	0	0	0	4	3	26	33	206
16:45	0	93	12	105	0	21	0	21	0	1	0	1	7	0	19	26	153
17:00	4	88	13	105	4	24	0	28	0	0	0	0	12	1	25	38	171
17:15	0	92	13	105	6	33	0	39	0	2	0	2	8	1	12	21	167
17:30	0	69	8	77	3	24	0	27	0	0	0	0	13	0	12	25	129
17:45	0	53	4	57	3	45	0	48	0	0	0	0	7	0	14	21	126

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	5	329	82	416	22	127	1	150	1	3	1	5	46	10	74	130	701
PHF	0.31	0.79	0.71	0.85	0.55	0.74	0.25	0.75	0.25	0.25	0.25	0.42	0.58	0.42	0.71	0.86	0.85
% HV	20.0%	0.6%	2.4%	1.2%	4.5%	2.4%	0.0%	2.7%	0.0%	0.0%	100.0%	20.0%	0.0%	10.0%	0.0%	0.8%	1.6%

Table A-11A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	1	1	1	0	5	6	2	21	1	24	0	60	2	62	93
06:15	7	0	2	9	1	0	13	14	2	16	1	19	2	47	0	49	91
06:30	0	1	0	1	1	0	11	12	4	44	0	48	0	25	6	31	92
06:45	0	0	0	0	4	0	20	24	17	39	1	57	1	31	9	41	122
07:00	0	0	0	0	5	1	15	21	4	27	0	31	3	34	2	39	91
07:15	1	1	1	3	3	1	9	13	7	46	5	58	4	42	9	55	129
07:30	26	27	8	61	1	13	8	22	11	39	16	66	7	38	0	45	194
07:45	23	42	12	77	5	16	7	28	5	24	16	45	8	20	1	29	179
08:00	20	61	5	86	2	11	7	20	9	27	19	55	15	23	7	45	206
08:15	19	49	3	71	4	22	14	40	8	21	13	42	5	23	2	30	183
08:30	9	12	8	29	3	13	12	28	3	15	14	32	10	26	1	37	126
08:45	12	14	9	35	0	21	3	24	5	23	16	44	4	22	0	26	129

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	88	179	28	295	12	62	36	110	33	111	64	208	35	104	10	149	762
PHF	0.85	0.73	0.58	0.86	0.60	0.70	0.64	0.69	0.75	0.71	0.84	0.79	0.58	0.68	0.36	0.83	0.92

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	25	10	45	2	22	13	37	5	25	17	47	5	16	1	22	151
15:15	9	15	5	29	0	18	5	23	5	26	12	43	12	17	3	32	127
15:30	12	12	6	30	3	43	7	53	7	29	15	51	17	18	1	36	170
15:45	7	24	5	36	2	20	5	27	6	15	15	36	7	14	0	21	120
16:00	20	26	14	60	4	42	6	52	5	26	15	46	14	13	3	30	188
16:15	9	34	42	85	4	43	4	51	5	27	11	43	11	16	2	29	208
16:30	12	31	50	93	5	50	5	60	9	18	23	50	11	18	1	30	233
16:45	18	20	20	58	4	26	6	36	20	25	15	60	11	14	3	28	182
17:00	10	21	3	34	0	21	7	28	7	20	21	48	18	25	4	47	157
17:15	13	15	2	30	1	28	8	37	7	24	19	50	5	16	2	23	140
17:30	8	17	7	32	1	16	7	24	9	15	27	51	5	10	3	18	125
17:45	11	7	11	29	2	13	1	16	5	10	13	28	7	7	3	17	90

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	59	111	126	296	17	161	21	199	39	96	64	199	47	61	9	117	811
PHF	0.74	0.82	0.63	0.80	0.85	0.81	0.88	0.83	0.49	0.89	0.70	0.83	0.84	0.85	0.75	0.98	0.87

Table A-11B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	1	3
07:30	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0	2	3
07:45	0	0	0	0	1	0	0	1	0	2	1	3	0	0	1	1	5
08:00	0	5	0	5	1	0	0	1	0	0	0	0	2	1	0	3	9
08:15	0	0	0	0	1	1	0	2	0	1	0	1	3	3	0	6	9
08:30	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	2	3
08:45	0	1	0	1	0	0	0	0	0	2	1	3	0	0	0	0	4

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	0	5	0	5	3	1	0	4	1	3	1	5	6	5	1	12	26
PHF	0	0.25	0	0.25	0.75	0.25	0	0.50	0.25	0.38	0.25	0.42	0.50	0.42	0.25	0.50	0.72

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	1	1	0	0	0	0	0	0	1	1	1	0	0	1	3
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
15:45	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
16:00	0	0	1	1	0	0	0	0	0	2	0	2	0	0	0	0	3
16:15	0	1	2	3	2	1	0	3	0	1	0	1	0	1	0	1	8
16:30	0	3	2	5	0	2	0	2	0	0	0	0	0	0	0	0	7
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:00	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	4	5	9	2	3	0	5	0	3	0	3	0	2	0	2	19
PHF	0	0.33	0.63	0.45	0.25	0.38	0	0.42	0	0.38	0	0.38	0	0.50	0	0.50	0.59

Table A-11C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	1	1	1	0	5	6	2	21	1	24	0	61	2	63	94
06:15	7	0	2	9	1	0	13	14	2	16	1	19	2	47	0	49	91
06:30	0	1	0	1	1	0	11	12	4	46	0	50	0	25	6	31	94
06:45	0	0	0	0	4	0	20	24	17	39	1	57	1	31	9	41	122
07:00	0	0	0	0	5	1	15	21	4	27	0	31	3	34	2	39	91
07:15	1	1	1	3	5	1	9	15	7	46	5	58	4	43	9	56	132
07:30	26	27	8	61	1	13	8	22	12	39	16	67	8	39	0	47	197
07:45	23	42	12	77	6	16	7	29	5	26	17	48	8	20	2	30	184
08:00	20	66	5	91	3	11	7	21	9	27	19	55	17	24	7	48	215
08:15	19	49	3	71	5	23	14	42	8	22	13	43	8	26	2	36	192
08:30	9	12	8	29	3	13	12	28	3	15	15	33	10	27	2	39	129
08:45	12	15	9	36	0	21	3	24	5	25	17	47	4	22	0	26	133

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	88	184	28	300	15	63	36	114	34	114	65	213	41	109	11	161	788
PHF	0.85	0.70	0.58	0.82	0.63	0.68	0.64	0.68	0.71	0.73	0.86	0.79	0.60	0.70	0.39	0.84	0.92
% HV	0.0%	2.7%	0.0%	1.7%	20.0%	1.6%	0.0%	3.5%	2.9%	2.6%	1.5%	2.3%	14.6%	4.6%	9.1%	7.5%	3.3%

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Barnes Ave				Barnes Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	25	11	46	2	22	13	37	5	25	18	48	6	16	1	23	154
15:15	9	15	5	29	0	18	5	23	5	26	12	43	12	17	3	32	127
15:30	13	12	6	31	3	43	8	54	7	29	15	51	17	18	1	36	172
15:45	7	24	5	36	2	20	6	28	7	15	15	37	7	14	0	21	122
16:00	20	26	15	61	4	42	6	52	5	28	15	48	14	13	3	30	191
16:15	9	35	44	88	6	44	4	54	5	28	11	44	11	17	2	30	216
16:30	12	34	52	98	5	52	5	62	9	18	23	50	11	18	1	30	240
16:45	18	20	20	58	4	26	6	36	20	25	15	60	11	15	3	29	183
17:00	10	21	3	34	1	21	7	29	7	20	21	48	18	26	4	48	159
17:15	13	15	2	30	1	28	8	37	7	24	19	50	5	16	2	23	140
17:30	8	17	7	32	1	16	7	24	9	15	27	51	5	10	3	18	125
17:45	11	8	11	30	2	13	1	16	5	10	13	28	7	7	3	17	91

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	59	115	131	305	19	164	21	204	39	99	64	202	47	63	9	119	830
PHF	0.74	0.82	0.63	0.78	0.79	0.79	0.88	0.82	0.49	0.88	0.70	0.84	0.84	0.88	0.75	0.99	0.86
% HV	0.0%	3.5%	3.8%	3.0%	10.5%	1.8%	0.0%	2.5%	0.0%	3.0%	0.0%	1.5%	0.0%	3.2%	0.0%	1.7%	2.3%

Table A-12A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Brainard Ave				Kilbourne St				Brainard Ave				Officer Club Dr				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	18	38	1	57	5	12	43	60	10	2	3	15	2	3	3	8	140
06:15	12	40	1	53	9	27	40	76	16	3	7	26	0	3	3	6	161
06:30	1	51	2	54	8	44	12	64	22	5	16	43	0	2	2	4	165
06:45	2	63	3	68	15	57	11	83	7	20	5	32	0	7	12	19	202
07:00	2	80	1	83	14	66	17	97	12	1	7	20	0	3	4	7	207
07:15	5	108	4	117	5	65	13	83	26	0	11	37	0	10	6	16	253
07:30	6	110	0	116	11	60	17	88	36	1	13	50	0	18	19	37	291
07:45	5	96	1	102	13	74	17	104	15	1	4	20	0	11	13	24	250
08:00	3	86	0	89	7	63	11	81	9	3	1	13	0	29	23	52	235
08:15	1	71	0	72	4	60	13	77	9	1	1	11	0	12	16	28	188
08:30	2	47	1	50	6	50	20	76	14	0	6	20	0	1	3	4	150
08:45	4	71	0	75	5	55	33	93	16	1	3	20	0	2	7	9	197

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	19	400	5	424	36	262	58	356	86	5	29	120	0	68	61	129	1029
PHF	0.79	0.91	0.31	0.91	0.69	0.89	0.85	0.86	0.60	0.42	0.56	0.60	0	0.59	0.66	0.62	0.88

Start Date 7/17/2012
Start Time 15:00

Street Name	Brainard Ave				Kilbourne St				Brainard Ave				Officer Club Dr				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	3	68	0	71	4	79	11	94	19	0	1	20	0	5	4	9	194
15:15	2	74	2	78	7	78	17	102	10	6	2	18	0	3	3	6	204
15:30	2	72	0	74	21	75	9	105	25	7	0	32	1	1	3	5	216
15:45	1	85	1	87	8	70	8	86	20	4	2	26	0	2	4	6	205
16:00	1	108	1	110	18	102	11	131	23	6	6	35	1	5	14	20	296
16:15	2	83	0	85	26	106	9	141	11	8	3	22	0	4	9	13	261
16:30	2	107	0	109	14	95	11	120	38	9	3	50	0	8	16	24	303
16:45	1	68	1	70	10	78	7	95	41	5	11	57	0	3	13	16	238
17:00	2	91	2	95	9	75	10	94	37	8	4	49	1	4	16	21	259
17:15	6	86	0	92	13	79	11	103	46	6	4	56	0	4	12	16	267
17:30	2	73	0	75	4	86	11	101	28	4	2	34	1	3	12	16	226
17:45	2	66	1	69	4	49	14	67	35	3	3	41	1	2	7	10	187

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	6	366	2	374	68	381	38	487	113	28	23	164	1	20	52	73	1098
PHF	0.75	0.85	0.50	0.85	0.65	0.90	0.86	0.86	0.69	0.78	0.52	0.72	0.25	0.63	0.81	0.76	0.91

Table A-12B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Brainard Ave				Kilbourne St				Brainard Ave				Officer Club Dr				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	3	0	3	0	1	0	1	0	0	0	0	0	0	0	0	4
08:15	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
08:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:45	0	2	0	2	0	0	1	1	0	0	0	0	0	0	0	0	3

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	0	5	0	5	0	1	0	1	0	0	1	1	0	0	0	0	7
PHF	0	0.42	0	0.42	0	0.25	0	0.25	0	0	0.25	0.25	0	0	0	0	0.44

Start Date 7/17/2012
Start Time 15:00

Street Name	Brainard Ave				Kilbourne St				Brainard Ave				Officer Club Dr				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:30	0	1	0	1	1	1	0	2	0	0	0	0	0	0	0	0	3
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
17:15	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
17:30	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
PHF	0	0	0	0	0	0.50	0	0.50	0	0	0	0	0	0	0	0	0.50

Table A-12C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Brainard Ave				Kilbourne St				Brainard Ave				Officer Club Dr				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	18	39	1	58	5	13	43	61	10	2	3	15	2	3	3	8	142
06:15	12	40	1	53	9	27	40	76	16	3	7	26	0	3	3	6	161
06:30	1	51	2	54	8	44	12	64	22	5	16	43	0	2	2	4	165
06:45	2	63	3	68	15	57	11	83	7	20	5	32	0	7	12	19	202
07:00	2	80	1	83	14	66	17	97	12	1	7	20	0	3	4	7	207
07:15	5	108	4	117	5	65	13	83	26	0	11	37	0	10	6	16	253
07:30	6	112	0	118	11	60	17	88	36	1	14	51	0	18	19	37	294
07:45	5	96	1	102	13	74	17	104	15	1	4	20	0	11	13	24	250
08:00	3	89	0	92	7	64	11	82	9	3	1	13	0	29	23	52	239
08:15	1	72	0	73	4	61	13	78	9	1	1	11	0	12	16	28	190
08:30	2	48	1	51	6	50	20	76	14	0	6	20	0	1	4	5	152
08:45	4	73	0	77	5	55	34	94	16	1	3	20	0	2	7	9	200

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	19	405	5	429	36	263	58	357	86	5	30	121	0	68	61	129	1036
PHF	0.79	0.90	0.31	0.91	0.69	0.89	0.85	0.86	0.60	0.42	0.54	0.59	0	0.59	0.66	0.62	0.88
% HV	0.0%	1.2%	0.0%	1.2%	0.0%	0.4%	0.0%	0.3%	0.0%	0.0%	3.3%	0.8%	0%	0.0%	0.0%	0.0%	0.7%

Start Date 7/17/2012
Start Time 15:00

Street Name	Brainard Ave				Kilbourne St				Brainard Ave				Officer Club Dr				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	3	69	0	72	4	79	11	94	19	0	1	20	0	5	4	9	195
15:15	2	75	2	79	7	78	17	102	10	6	2	18	0	3	3	6	205
15:30	2	73	0	75	22	76	9	107	25	7	0	32	1	1	3	5	219
15:45	1	85	1	87	8	70	8	86	20	4	2	26	0	2	4	6	205
16:00	1	108	1	110	18	103	11	132	23	6	6	35	1	5	14	20	297
16:15	2	83	0	85	26	106	9	141	11	8	3	22	0	4	9	13	261
16:30	2	107	0	109	14	96	11	121	38	9	3	50	0	8	16	24	304
16:45	1	68	1	70	10	78	7	95	41	5	11	57	0	3	13	16	238
17:00	2	91	2	95	9	77	10	96	37	8	4	49	1	4	16	21	261
17:15	6	86	0	92	13	80	11	104	47	6	4	57	0	4	12	16	269
17:30	2	75	0	77	4	86	11	101	28	4	2	34	1	3	12	16	228
17:45	2	67	1	70	4	49	14	67	35	3	3	41	1	2	7	10	188

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	6	366	2	374	68	383	38	489	113	28	23	164	1	20	52	73	1100
PHF	0.75	0.85	0.50	0.85	0.65	0.90	0.86	0.87	0.69	0.78	0.52	0.72	0.25	0.63	0.81	0.76	0.90
% HV	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%

Table A-13A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	15th St				15th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	20	0	20	0	83	1	84	0	0	0	0	0	0	0	0	104
06:15	1	8	0	9	0	120	0	120	0	0	0	0	0	0	0	0	129
06:30	0	28	0	28	0	146	0	146	0	0	0	0	0	0	0	0	174
06:45	3	42	0	45	0	163	4	167	2	0	1	3	0	0	0	0	215
07:00	4	65	0	69	0	161	4	165	0	0	3	3	0	0	0	0	237
07:15	8	68	0	76	0	133	10	143	1	0	0	1	0	0	0	0	220
07:30	4	24	15	43	8	127	4	139	0	3	0	3	30	0	6	36	221
07:45	0	17	19	36	7	101	5	113	0	2	1	3	22	9	9	40	192
08:00	2	20	15	37	5	77	2	84	1	8	0	9	32	4	6	42	172
08:15	1	15	13	29	6	56	0	62	2	3	0	5	23	5	12	40	136
08:30	0	10	12	22	8	35	2	45	0	7	2	9	30	7	11	48	124
08:45	0	19	23	42	11	61	2	74	1	8	0	9	66	7	17	90	215

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	19	199	15	233	8	584	22	614	3	3	4	10	30	0	6	36	893
PHF	0.59	0.73	0.25	0.77	0.25	0.90	0.55	0.92	0.38	0.25	0.33	0.83	0.25	0	0.25	0.25	0.94

Start Date 7/17/2012
Start Time 15:00

Street Name	15th St				15th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	69	51	120	3	8	3	14	1	1	0	2	20	4	9	33	169
15:15	1	81	43	125	9	14	3	26	11	8	3	22	28	11	13	52	225
15:30	1	64	38	103	2	6	1	9	3	12	1	16	29	3	13	45	173
15:45	0	64	45	109	15	22	3	40	2	14	0	16	22	8	15	45	210
16:00	0	90	51	141	36	28	3	67	2	14	2	18	15	1	6	22	248
16:15	0	97	47	144	5	13	0	18	4	11	0	15	19	2	5	26	203
16:30	0	90	78	168	10	13	1	24	6	16	4	26	7	1	1	9	227
16:45	0	70	49	119	10	7	0	17	3	5	0	8	6	0	0	6	150
17:00	0	54	73	127	9	10	0	19	1	3	0	4	9	5	4	18	168
17:15	0	45	20	65	10	5	2	17	1	8	2	11	0	1	4	5	98
17:30	0	50	13	63	9	7	0	16	1	5	1	7	8	3	3	14	100
17:45	2	24	6	32	3	6	1	10	0	1	0	1	1	0	2	3	46

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	341	221	562	66	76	7	149	14	55	6	75	63	12	27	102	888
PHF	0	0.88	0.71	0.84	0.46	0.68	0.58	0.56	0.58	0.86	0.38	0.72	0.72	0.38	0.45	0.57	0.90

Table A-13B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	15th St				15th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	1	3	0	4	0	2	0	2	0	0	1	1	0	0	0	0	7
06:30	1	1	0	2	0	1	0	1	0	0	1	1	0	0	0	0	4
06:45	0	1	0	1	0	3	0	3	1	0	1	2	0	0	0	0	6
07:00	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	3
07:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30	0	0	1	1	5	1	0	6	0	0	0	0	1	0	0	1	8
07:45	0	0	0	0	2	3	0	5	0	0	0	0	0	0	0	0	5
08:00	0	1	0	1	0	0	0	0	0	0	0	0	5	0	0	5	6
08:15	0	3	1	4	1	3	0	4	0	1	0	1	1	0	4	5	14
08:30	0	3	0	3	1	0	0	1	0	0	0	0	0	1	0	1	5
08:45	0	2	0	2	0	4	1	5	0	0	0	0	2	0	0	2	9

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	1	1	2	5	5	0	10	4	0	1	5	1	0	0	1	18
PHF	0	0.25	0.25	0.50	0.25	0.42	0	0.42	0.33	0	0.25	0.42	0.25	0	0	0.25	0.56

Start Date 7/17/2012
Start Time 15:00

Street Name	15th St				15th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	3	0	3	0	1	0	1	0	1	0	1	0	0	2	2	7
15:15	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
15:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
15:45	0	2	2	4	0	0	0	0	0	0	0	0	1	0	0	1	5
16:00	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	3
16:15	0	0	1	1	3	2	0	5	3	2	0	5	0	0	0	0	11
16:30	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	3
16:45	0	0	3	3	0	0	0	0	0	0	0	0	2	0	0	2	5
17:00	0	0	1	1	0	0	0	0	0	0	0	0	3	1	0	4	5
17:15	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	3	8	11	3	2	0	5	3	2	0	5	1	0	0	1	22
PHF	0	0.38	0.67	0.69	0.25	0.25	0	0.25	0.25	0.25	0	0.25	0.25	0	0	0.25	0.50

Table A-13C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	15th St				15th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	20	0	20	0	83	1	84	0	0	0	0	0	0	0	0	104
06:15	2	11	0	13	0	122	0	122	0	0	1	1	0	0	0	0	136
06:30	1	29	0	30	0	147	0	147	0	0	1	1	0	0	0	0	178
06:45	3	43	0	46	0	166	4	170	3	0	2	5	0	0	0	0	221
07:00	4	65	0	69	0	161	4	165	3	0	3	6	0	0	0	0	240
07:15	8	68	0	76	0	134	10	144	1	0	0	1	0	0	0	0	221
07:30	4	24	16	44	13	128	4	145	0	3	0	3	31	0	6	37	229
07:45	0	17	19	36	9	104	5	118	0	2	1	3	22	9	9	40	197
08:00	2	21	15	38	5	77	2	84	1	8	0	9	37	4	6	47	178
08:15	1	18	14	33	7	59	0	66	2	4	0	6	24	5	16	45	150
08:30	0	13	12	25	9	35	2	46	0	7	2	9	30	8	11	49	129
08:45	0	21	23	44	11	65	3	79	1	8	0	9	68	7	17	92	224

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	19	200	16	235	13	589	22	624	7	3	5	15	31	0	6	37	911
PHF	0.59	0.74	0.25	0.77	0.25	0.89	0.55	0.92	0.58	0.25	0.42	0.63	0.25	0	0.25	0.25	0.95
% HV	0.0%	0.5%	6.3%	0.9%	38.5%	0.8%	0.0%	1.6%	57.1%	0.0%	20.0%	33.3%	3.2%	0%	0.0%	2.7%	2.0%

Start Date 7/17/2012
Start Time 15:00

Street Name	15th St				15th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	72	51	123	3	9	3	15	1	2	0	3	20	4	11	35	176
15:15	1	81	43	125	9	17	3	29	11	8	3	22	28	11	13	52	228
15:30	1	64	38	103	2	7	1	10	3	12	1	16	29	3	13	45	174
15:45	0	66	47	113	15	22	3	40	2	14	0	16	23	8	15	46	215
16:00	0	91	53	144	36	28	3	67	2	14	2	18	15	1	6	22	251
16:15	0	97	48	145	8	15	0	23	7	13	0	20	19	2	5	26	214
16:30	0	90	81	171	10	13	1	24	6	16	4	26	7	1	1	9	230
16:45	0	70	52	122	10	7	0	17	3	5	0	8	8	0	0	8	155
17:00	0	54	74	128	9	10	0	19	1	3	0	4	12	6	4	22	173
17:15	0	45	20	65	11	5	2	18	1	8	2	11	0	1	5	6	100
17:30	0	50	13	63	9	7	0	16	1	5	1	7	8	3	3	14	100
17:45	2	24	6	32	3	6	1	10	0	1	0	1	1	0	2	3	46

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	344	229	573	69	78	7	154	17	57	6	80	64	12	27	103	910
PHF	0	0.89	0.71	0.84	0.48	0.70	0.58	0.57	0.61	0.89	0.38	0.77	0.70	0.38	0.45	0.56	0.91
% HV	0%	0.9%	3.5%	1.9%	4.3%	2.6%	0.0%	3.2%	17.6%	3.5%	0.0%	6.3%	1.6%	0.0%	0.0%	1.0%	2.4%

Table A-14A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	0	1	30	1	10	41	10	13	0	23	0	29	14	43	108
07:45	0	0	0	0	52	1	9	62	13	15	0	28	0	32	39	71	161
08:00	0	0	0	0	36	0	12	48	5	22	0	27	0	32	17	49	124
08:15	0	0	0	0	34	0	8	42	5	15	0	20	0	32	8	40	102
08:30	0	1	0	1	24	1	9	34	6	24	0	30	0	41	16	57	122
08:45	0	0	0	0	26	1	10	37	8	34	0	42	0	81	16	97	176

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
08:00	0	1	0	1	120	2	39	161	24	95	0	119	0	186	57	243	524
PHF	0	0.25	0	0.25	0.83	0.50	0.81	0.84	0.75	0.70	0	0.71	0	0.57	0.84	0.63	0.74

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	18	0	8	26	12	47	0	59	1	26	27	54	139
15:15	0	0	0	0	18	0	13	31	11	44	0	55	0	40	24	64	150
15:30	0	1	3	4	20	0	4	24	8	49	0	57	3	42	38	83	168
15:45	0	0	0	0	18	0	15	33	9	53	0	62	0	33	41	74	169
16:00	0	0	0	0	32	1	6	39	13	90	0	103	0	18	41	59	201
16:15	0	0	0	0	26	0	6	32	13	60	0	73	1	21	36	58	163
16:30	0	0	1	1	39	0	1	40	8	86	0	94	0	10	50	60	195
16:45	0	1	1	2	23	0	3	26	4	61	0	65	3	5	42	50	143
17:00	0	0	0	0	24	0	9	33	10	78	0	88	2	17	51	70	191
17:15	0	0	0	0	19	0	2	21	6	34	0	40	1	12	45	58	119
17:30	0	0	2	2	29	0	2	31	2	25	0	27	3	16	58	77	137
17:45	0	1	2	3	18	0	3	21	3	9	0	12	0	8	37	45	81

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	0	1	1	115	1	28	144	43	289	0	332	1	82	168	251	728
PHF	0	0	0.25	0.25	0.74	0.25	0.47	0.90	0.83	0.80	0	0.81	0.25	0.62	0.84	0.85	0.91

Table A-14B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date
Start Time 06:00

Street Name	19th St				19th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	1	0	0	1	0	4	0	4	0	1	0	1	6
07:45	0	0	0	0	4	0	0	4	0	4	0	4	0	0	0	0	8
08:00	0	0	0	0	1	0	3	4	0	2	0	2	0	1	0	1	7
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	6	6
08:30	0	0	0	0	1	0	1	2	0	1	0	1	0	0	2	2	5
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
08:00	0	0	0	0	2	0	4	6	0	3	0	3	0	8	3	11	20
PHF	0	0	0	0	0.50	0	0.33	0.38	0	0.38	0	0.38	0	0.40	0.38	0.46	0.71

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
15:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	3	4
15:30	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2	3
15:45	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0	2	4
16:00	0	0	0	0	0	0	0	0	1	1	0	2	0	0	1	1	3
16:15	0	0	0	0	0	0	0	0	0	7	0	7	0	0	0	0	7
16:30	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
16:45	0	0	0	0	1	0	0	1	0	4	0	4	0	2	2	4	9
17:00	0	0	0	0	0	0	1	1	0	1	0	1	0	0	1	1	3
17:15	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	0	0	0	0	0	0	0	1	12	0	13	0	2	3	5	18
PHF	0	0	0	0	0	0	0	0	0.25	0.43	0	0.46	0	0.25	0.38	0.63	0.64

Table A-14C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	19th St				19th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	0	1	31	1	10	42	10	17	0	27	0	30	14	44	114
07:45	0	0	0	0	56	1	9	66	13	19	0	32	0	32	39	71	169
08:00	0	0	0	0	37	0	15	52	5	24	0	29	0	33	17	50	131
08:15	0	0	0	0	34	0	8	42	5	15	0	20	0	37	9	46	108
08:30	0	1	0	1	25	1	10	36	6	25	0	31	0	41	18	59	127
08:45	0	0	0	0	26	1	10	37	8	34	0	42	0	83	16	99	178

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
08:00	0	1	0	1	122	2	43	167	24	98	0	122	0	194	60	254	544
PHF	0	0.25	0	0.25	0.82	0.50	0.72	0.80	0.75	0.72	0	0.73	0	0.58	0.83	0.64	0.76
% HV	0%	0.0%	0%	0.0%	1.6%	0.0%	9.3%	3.6%	0.0%	3.1%	0%	2.5%	0%	4.1%	5.0%	4.3%	3.7%

Start Date 7/17/2012
Start Time 15:00

Street Name	19th St				19th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	18	0	8	26	12	49	0	61	1	28	27	56	143
15:15	0	0	0	0	18	0	13	31	11	45	0	56	0	40	27	67	154
15:30	0	1	3	4	21	0	4	25	8	49	0	57	3	42	40	85	171
15:45	0	0	0	0	18	0	15	33	9	55	0	64	0	35	41	76	173
16:00	0	0	0	0	32	1	6	39	14	91	0	105	0	18	42	60	204
16:15	0	0	0	0	26	0	6	32	13	67	0	80	1	21	36	58	170
16:30	0	0	1	1	39	0	1	40	8	88	0	96	0	10	52	62	199
16:45	0	1	1	2	24	0	3	27	4	65	0	69	3	7	44	54	152
17:00	0	0	0	0	24	0	10	34	10	79	0	89	2	17	52	71	194
17:15	0	0	0	0	19	0	2	21	7	34	0	41	1	13	45	59	121
17:30	0	0	2	2	29	0	2	31	2	25	0	27	3	16	58	77	137
17:45	0	1	2	3	18	0	3	21	3	9	0	12	0	8	38	46	82

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	0	1	1	115	1	28	144	44	301	0	345	1	84	171	256	746
PHF	0	0	0.25	0.25	0.74	0.25	0.47	0.90	0.79	0.83	0	0.82	0.25	0.60	0.82	0.84	0.91
% HV	0%	0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	4.0%	0%	3.8%	0.0%	2.4%	1.8%	2.0%	2.4%

Table A-15A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	11	0	11	0	21	0	21	0	0	0	0	0	0	1	1	33
06:15	0	11	0	11	0	8	0	8	0	0	0	0	0	0	0	0	19
06:30	0	2	0	2	0	14	0	14	0	0	0	0	0	0	0	0	16
06:45	0	13	0	13	0	15	0	15	0	0	0	0	0	0	0	0	28
07:00	0	14	0	14	0	13	0	13	0	0	0	0	1	0	0	1	28
07:15	0	21	0	21	2	18	2	22	0	0	0	0	2	4	5	11	54
07:30	1	5	0	6	9	15	5	29	9	32	19	60	4	51	21	76	171
07:45	5	8	2	15	8	7	9	24	7	52	20	79	4	62	36	102	220
08:00	5	11	0	16	10	5	6	21	9	38	12	59	0	53	22	75	171
08:15	5	15	2	22	12	6	7	25	4	38	9	51	5	38	21	64	162
08:30	8	7	2	17	7	6	8	21	6	31	14	51	3	53	13	69	158
08:45	9	2	1	12	10	6	10	26	6	46	11	63	2	82	15	99	200

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	16	39	4	59	39	33	27	99	29	160	60	249	13	204	100	317	724
PHF	0.80	0.65	0.50	0.67	0.81	0.55	0.75	0.85	0.81	0.77	0.75	0.79	0.65	0.82	0.69	0.78	0.82

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	6	5	5	16	15	15	8	38	9	56	11	76	0	40	9	49	179
15:15	11	2	1	14	7	9	6	22	9	51	10	70	1	64	11	76	182
15:30	15	7	2	24	14	7	6	27	7	58	9	74	1	78	7	86	211
15:45	14	6	2	22	13	22	2	37	6	70	7	83	1	52	12	65	207
16:00	8	13	12	33	12	24	3	39	6	104	22	132	2	60	13	75	279
16:15	11	8	1	20	22	23	6	51	8	76	11	95	2	45	10	57	223
16:30	8	10	3	21	23	37	2	62	3	129	15	147	0	56	16	72	302
16:45	4	8	1	13	19	26	4	49	8	84	15	107	1	48	14	63	232
17:00	23	11	1	35	15	26	3	44	11	87	16	114	0	57	16	73	266
17:15	11	10	3	24	20	14	2	36	1	54	10	65	0	56	20	76	201
17:30	7	8	0	15	18	15	2	35	6	50	11	67	0	66	20	86	203
17:45	11	6	1	18	15	10	2	27	2	24	7	33	0	34	15	49	127

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	31	39	17	87	76	110	15	201	25	393	63	481	5	209	53	267	1036
PHF	0.70	0.75	0.35	0.66	0.83	0.74	0.63	0.81	0.78	0.76	0.72	0.82	0.63	0.87	0.83	0.89	0.86

Table A-15B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
06:15	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
07:30	0	0	0	0	0	1	0	1	0	4	0	4	0	1	0	1	6
07:45	0	0	0	0	0	0	0	0	0	8	0	8	0	1	1	2	10
08:00	0	0	0	0	0	4	0	4	0	2	0	2	0	0	4	4	10
08:15	2	0	0	2	0	0	1	1	0	0	0	0	0	2	0	2	5
08:30	0	0	0	0	1	0	0	1	0	1	0	1	0	1	0	1	3
08:45	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	2	0	0	2	0	5	1	6	0	14	0	14	0	4	5	9	31
PHF	0.25	0	0	0.25	0	0.31	0.25	0.38	0	0.44	0	0.44	0	0.50	0.31	0.56	0.78

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	0	0	1	1	1	0	2	0	2	0	2	0	0	0	0	5
15:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
15:30	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	3	4
15:45	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
16:00	0	0	0	0	0	0	0	0	0	1	0	1	1	2	1	4	5
16:15	1	1	0	2	0	0	0	0	3	1	4	8	0	0	0	0	10
16:30	1	2	0	3	0	0	0	0	2	3	0	5	0	1	0	1	9
16:45	0	0	0	0	0	0	0	0	0	4	0	4	0	4	0	4	8
17:00	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
17:45	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	2	3	0	5	0	0	0	0	5	9	4	18	1	7	1	9	32
PHF	0.50	0.38	0	0.42	0	0	0	0	0.42	0.56	0.25	0.56	0.25	0.44	0.25	0.56	0.80

Table A-15C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	25th St				25th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	11	0	11	0	23	0	23	0	0	0	0	0	0	1	1	35
06:15	0	11	0	11	0	10	0	10	0	0	0	0	0	0	0	0	21
06:30	0	2	0	2	0	14	0	14	0	0	0	0	0	0	0	0	16
06:45	0	14	0	14	0	15	0	15	0	0	0	0	0	0	0	0	29
07:00	0	15	0	15	0	13	0	13	0	0	0	0	1	0	0	1	29
07:15	0	21	0	21	2	19	2	23	0	0	0	0	2	4	6	12	56
07:30	1	5	0	6	9	16	5	30	9	36	19	64	4	52	21	77	177
07:45	5	8	2	15	8	7	9	24	7	60	20	87	4	63	37	104	230
08:00	5	11	0	16	10	9	6	25	9	40	12	61	0	53	26	79	181
08:15	7	15	2	24	12	6	8	26	4	38	9	51	5	40	21	66	167
08:30	8	7	2	17	8	6	8	22	6	32	14	52	3	54	13	70	161
08:45	9	2	1	12	10	6	10	26	6	47	11	64	2	84	15	101	203

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:30	18	39	4	61	39	38	28	105	29	174	60	263	13	208	105	326	755
PHF	0.64	0.65	0.50	0.64	0.81	0.59	0.78	0.88	0.81	0.73	0.75	0.76	0.65	0.83	0.71	0.78	0.82
% HV	11.1%	0.0%	0.0%	3.3%	0.0%	13.2%	3.6%	5.7%	0.0%	8.0%	0.0%	5.3%	0.0%	1.9%	4.8%	2.8%	4.1%

Start Date 7/17/2012
Start Time 15:00

Street Name	25th St				25th St				Lane Ave				Lane Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	7	5	5	17	16	16	8	40	9	58	11	78	0	40	9	49	184
15:15	11	2	1	14	7	9	6	22	9	51	10	70	1	66	11	78	184
15:30	15	7	2	24	14	7	6	27	7	59	9	75	1	81	7	89	215
15:45	14	6	2	22	13	22	2	37	6	71	7	84	1	53	12	66	209
16:00	8	13	12	33	12	24	3	39	6	105	22	133	3	62	14	79	284
16:15	12	9	1	22	22	23	6	51	11	77	15	103	2	45	10	57	233
16:30	9	12	3	24	23	37	2	62	5	132	15	152	0	57	16	73	311
16:45	4	8	1	13	19	26	4	49	8	88	15	111	1	52	14	67	240
17:00	23	11	1	35	15	26	3	44	11	88	16	115	0	59	16	75	269
17:15	11	10	3	24	20	14	2	36	1	54	10	65	0	58	20	78	203
17:30	7	8	0	15	18	15	2	35	6	50	11	67	0	67	20	87	204
17:45	14	6	1	21	15	10	2	27	2	24	7	33	0	34	15	49	130

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	33	42	17	92	76	110	15	201	30	402	67	499	6	216	54	276	1068
PHF	0.69	0.81	0.35	0.70	0.83	0.74	0.63	0.81	0.68	0.76	0.76	0.82	0.50	0.87	0.84	0.87	0.86
% HV	6.1%	7.1%	0.0%	5.4%	0.0%	0.0%	0.0%	0.0%	16.7%	2.2%	6.0%	3.6%	16.7%	3.2%	1.9%	3.3%	3.0%

Table A-16A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Avenue of the States				Avenue of the States				Lane Ave				--				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	27	120	0	147	0	33	9	42	4	0	7	11	0	0	0	0	200
06:15	19	89	0	108	0	34	11	45	5	0	13	18	0	0	0	0	171
06:30	10	70	0	80	0	82	4	86	6	0	10	16	0	0	0	0	182
06:45	16	103	0	119	0	61	9	70	19	0	11	30	0	0	0	0	219
07:00	20	101	0	121	0	48	7	55	5	0	5	10	0	0	0	0	186
07:15	28	114	0	142	0	74	7	81	11	0	17	28	0	0	0	0	251
07:30	59	110	0	169	0	79	17	96	7	0	56	63	0	0	0	0	328
07:45	67	114	0	181	0	37	17	54	14	0	47	61	0	0	0	0	296
08:00	58	89	0	147	0	30	18	48	9	0	35	44	0	0	0	0	239
08:15	51	87	0	138	0	31	17	48	8	0	39	47	0	0	0	0	233
08:30	57	61	0	118	0	58	11	69	7	0	29	36	0	0	0	0	223
08:45	56	60	0	116	0	40	16	56	16	0	32	48	0	0	0	0	220

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	212	427	0	639	0	220	59	279	41	0	155	196	0	0	0	0	1114
PHF	0.79	0.94	0	0.88	0	0.70	0.82	0.73	0.73	0	0.69	0.78	0	0	0	0	0.85

Start Date 7/17/2012
Start Time 15:00

Street Name	Avenue of the States				Avenue of the States				Lane Ave				--				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	28	44	0	72	0	71	8	79	25	0	31	56	0	0	0	0	207
15:15	38	44	0	82	0	83	16	99	12	0	30	42	0	0	0	0	223
15:30	31	47	0	78	0	81	13	94	27	0	37	64	0	0	0	0	236
15:45	26	45	0	71	0	71	17	88	19	0	43	62	0	0	0	0	221
16:00	30	36	0	66	0	120	29	149	27	0	76	103	0	0	0	0	318
16:15	29	49	0	78	0	114	17	131	15	0	52	67	0	0	0	0	276
16:30	34	47	0	81	0	166	15	181	27	0	88	115	0	0	0	0	377
16:45	36	48	0	84	0	118	11	129	22	0	86	108	0	0	0	0	321
17:00	31	44	0	75	0	117	14	131	20	0	55	75	0	0	0	0	281
17:15	35	45	0	80	0	94	11	105	20	0	60	80	0	0	0	0	265
17:30	44	43	0	87	0	90	19	109	19	0	58	77	0	0	0	0	273
17:45	31	30	0	61	0	64	12	76	23	0	52	75	0	0	0	0	212

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	129	180	0	309	0	518	72	590	91	0	302	393	0	0	0	0	1292
PHF	0.90	0.92	0	0.92	0	0.78	0.62	0.81	0.84	0	0.86	0.85	0	0	0	0	0.86

Table A-16B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Avenue of the States				Avenue of the States				Lane Ave				--				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
06:30	0	2	0	2	0	0	0	0	0	0	1	1	0	0	0	0	3
06:45	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
07:00	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
07:15	0	2	0	2	0	4	0	4	0	0	0	0	0	0	0	0	6
07:30	0	1	0	1	0	0	2	2	0	0	0	0	0	0	0	0	3
07:45	0	0	0	0	0	0	1	1	1	0	2	3	0	0	0	0	4
08:00	0	1	0	1	0	0	1	1	1	0	1	2	0	0	0	0	4
08:15	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
08:45	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	0	4	0	4	0	4	4	8	2	0	3	5	0	0	0	0	17
PHF	0	0.50	0	0.50	0	0.25	0.50	0.50	0.50	0	0.38	0.42	0	0	0	0	0.71

Start Date 7/17/2012
Start Time 15:00

Street Name	Avenue of the States				Avenue of the States				Lane Ave				--				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	1	0	1	0	2	0	2	1	0	1	2	0	0	0	0	5
15:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
15:30	2	0	0	2	0	0	1	1	0	0	1	1	0	0	0	0	4
15:45	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
16:00	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	5
16:45	0	1	0	1	0	0	3	3	0	0	0	0	0	0	0	0	4
17:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
17:15	1	1	0	2	0	0	0	0	3	0	0	3	0	0	0	0	5
17:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
17:45	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	1	1	0	2	0	0	9	9	0	0	0	0	0	0	0	0	11
PHF	0.25	0.25	0	0.50	0	0	0.45	0.45	0	0	0	0	0	0	0	0	0.55

Table A-16C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Avenue of the States				Avenue of the States				Lane Ave				--				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	27	120	0	147	0	33	9	42	4	0	7	11	0	0	0	0	200
06:15	19	89	0	108	0	35	11	46	5	0	13	18	0	0	0	0	172
06:30	10	72	0	82	0	82	4	86	6	0	11	17	0	0	0	0	185
06:45	16	103	0	119	0	62	10	72	19	0	11	30	0	0	0	0	221
07:00	20	102	0	122	0	49	7	56	5	0	5	10	0	0	0	0	188
07:15	28	116	0	144	0	78	7	85	11	0	17	28	0	0	0	0	257
07:30	59	111	0	170	0	79	19	98	7	0	56	63	0	0	0	0	331
07:45	67	114	0	181	0	37	18	55	15	0	49	64	0	0	0	0	300
08:00	58	90	0	148	0	30	19	49	10	0	36	46	0	0	0	0	243
08:15	51	87	0	138	0	34	17	51	8	0	39	47	0	0	0	0	236
08:30	57	61	0	118	0	58	11	69	7	0	31	38	0	0	0	0	225
08:45	56	60	0	116	0	40	16	56	16	0	33	49	0	0	0	0	221

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:15	212	431	0	643	0	224	63	287	43	0	158	201	0	0	0	0	1131
PHF	0.79	0.93	0	0.89	0	0.71	0.83	0.73	0.72	0	0.71	0.79	0	0	0	0	0.85
% HV	0.0%	0.9%	0%	0.6%	0%	1.8%	6.3%	2.8%	4.7%	0%	1.9%	2.5%	0%	0%	0%	0%	1.5%

Start Date 7/17/2012
Start Time 15:00

Street Name	Avenue of the States				Avenue of the States				Lane Ave				--				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	28	45	0	73	0	73	8	81	26	0	32	58	0	0	0	0	212
15:15	38	44	0	82	0	83	16	99	13	0	30	43	0	0	0	0	224
15:30	33	47	0	80	0	81	14	95	27	0	38	65	0	0	0	0	240
15:45	27	45	0	72	0	71	18	89	19	0	43	62	0	0	0	0	223
16:00	31	36	0	67	0	120	30	150	27	0	76	103	0	0	0	0	320
16:15	29	49	0	78	0	114	17	131	15	0	52	67	0	0	0	0	276
16:30	34	47	0	81	0	166	20	186	27	0	88	115	0	0	0	0	382
16:45	36	49	0	85	0	118	14	132	22	0	86	108	0	0	0	0	325
17:00	31	44	0	75	0	118	14	132	20	0	55	75	0	0	0	0	282
17:15	36	46	0	82	0	94	11	105	23	0	60	83	0	0	0	0	270
17:30	44	43	0	87	0	91	19	110	19	0	58	77	0	0	0	0	274
17:45	32	31	0	63	0	64	12	76	23	0	52	75	0	0	0	0	214

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	130	181	0	311	0	518	81	599	91	0	302	393	0	0	0	0	1303
PHF	0.90	0.92	0	0.91	0	0.78	0.68	0.81	0.84	0	0.86	0.85	0	0	0	0	0.85
% HV	0.8%	0.6%	0%	0.6%	0%	0.0%	11.1%	1.5%	0.0%	0%	0.0%	0.0%	0%	0%	0%	0%	0.8%

Table A-17A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	N Range Rd				15th St				111th Ave				111th Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	22	0	22	0	6	1	7	1	0	0	1	0	0	0	0	30
06:15	0	28	0	28	0	3	0	3	0	0	0	0	0	0	0	0	31
06:30	0	34	0	34	0	11	2	13	1	0	0	1	0	0	0	0	48
06:45	0	50	0	50	1	15	1	17	0	0	0	0	0	0	1	1	68
07:00	0	49	0	49	0	11	2	13	1	0	0	1	0	0	0	0	63
07:15	3	60	0	63	0	11	11	22	0	0	0	0	0	0	0	0	85
07:30	1	30	0	31	0	8	1	9	2	0	0	2	0	0	0	0	42
07:45	2	16	0	18	0	7	7	14	0	0	0	0	0	0	0	0	32
08:00	3	19	0	22	0	9	3	12	1	0	0	1	0	0	0	0	35
08:15	1	21	0	22	0	6	4	10	4	0	0	4	0	0	0	0	36
08:30	2	23	0	25	0	2	2	4	4	0	0	4	0	0	0	0	33
08:45	4	58	0	62	1	10	1	12	0	0	0	0	0	0	0	0	74

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:30	3	193	0	196	1	48	16	65	2	0	0	2	0	0	1	1	264
PHF	0.25	0.80	0	0.78	0.25	0.80	0.36	0.74	0.50	0	0	0.50	0	0	0.25	0.25	0.78

Start Date 7/17/2012
Start Time 15:00

Street Name	N Range Rd				15th St				111th Ave				111th Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	5	0	6	1	16	1	18	1	0	0	1	0	0	0	0	25
15:15	1	4	0	5	0	15	1	16	2	0	0	2	0	0	0	0	23
15:30	0	6	0	6	0	10	1	11	1	0	0	1	0	0	0	0	18
15:45	2	8	0	10	0	21	0	21	4	0	0	4	0	0	0	0	35
16:00	0	8	0	8	0	59	0	59	3	0	1	4	0	0	0	0	71
16:15	2	6	0	8	0	24	2	26	1	0	0	1	0	0	0	0	35
16:30	0	6	0	6	0	52	2	54	1	0	0	1	0	0	0	0	61
16:45	0	4	0	4	0	15	0	15	2	0	0	2	0	0	0	0	21
17:00	1	0	0	1	0	24	3	27	0	0	0	0	0	0	0	0	28
17:15	0	5	0	5	0	12	1	13	1	0	0	1	0	0	0	0	19
17:30	0	5	0	5	1	5	1	7	1	0	0	1	0	0	0	0	13
17:45	0	4	0	4	0	4	0	4	1	0	0	1	0	0	0	0	9

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	4	28	0	32	0	156	4	160	9	0	1	10	0	0	0	0	202
PHF	0.50	0.88	0	0.80	0	0.66	0.50	0.68	0.56	0	0.25	0.63	0	0	0	0	0.71

Table A-17B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	N Range Rd				15th St				111th Ave				111th Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	2	0	2	0	2	0	2	0	0	0	0	0	0	0	0	4
06:45	0	0	0	0	0	3	1	4	0	0	0	0	0	0	0	0	4
07:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:15	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
07:30	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	2
07:45	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	1	0	1	0	0	2	2	0	0	0	0	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	1	1	2	1	0	0	1	0	0	0	0	3

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:30	0	2	0	2	0	6	2	8	0	0	0	0	0	0	0	0	10
PHF	0	0.25	0	0.25	0	0.50	0.50	0.50	0	0	0	0	0	0	0	0	0.63

Start Date 7/17/2012
Start Time 15:00

Street Name	N Range Rd				15th St				111th Ave				111th Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	0	1	0	1	3	0	0	3	0	0	0	0	4
15:15	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
15:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:45	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
16:00	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	0	1	0	1	0	0	0	0	2	0	0	2	0	0	0	0	3
PHF	0	0.25	0	0.25	0	0	0	0	0.50	0	0	0.50	0	0	0	0	0.38

Table A-17C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	N Range Rd				15th St				111th Ave				111th Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	22	0	22	0	6	1	7	1	0	0	1	0	0	0	0	30
06:15	0	29	0	29	0	3	0	3	0	0	0	0	0	0	0	0	32
06:30	0	36	0	36	0	13	2	15	1	0	0	1	0	0	0	0	52
06:45	0	50	0	50	1	18	2	21	0	0	0	0	0	0	1	1	72
07:00	0	49	0	49	0	12	2	14	1	0	0	1	0	0	0	0	64
07:15	3	60	0	63	0	11	12	23	0	0	0	0	0	0	0	0	86
07:30	1	30	0	31	0	9	1	10	3	0	0	3	0	0	0	0	44
07:45	2	16	0	18	0	7	8	15	0	0	0	0	0	0	0	0	33
08:00	3	19	0	22	0	9	3	12	1	0	0	1	0	0	0	0	35
08:15	1	22	0	23	0	6	6	12	4	0	0	4	0	0	0	0	39
08:30	2	23	0	25	0	2	2	4	4	0	0	4	0	0	0	0	33
08:45	4	58	0	62	1	11	2	14	1	0	0	1	0	0	0	0	77

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:30	3	195	0	198	1	54	18	73	2	0	0	2	0	0	1	1	274
PHF	0.25	0.81	0	0.79	0.25	0.75	0.38	0.79	0.50	0	0	0.50	0	0	0.25	0.25	0.80
% HV	0.0%	1.0%	0%	1.0%	0.0%	11.1%	11.1%	11.0%	0.0%	0%	0%	0.0%	0%	0%	0.0%	0.0%	3.6%

Start Date 7/17/2012
Start Time 15:00

Street Name	N Range Rd				15th St				111th Ave				111th Ave				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	1	5	0	6	1	17	1	19	4	0	0	4	0	0	0	0	29
15:15	1	4	0	5	0	15	4	19	2	0	0	2	0	0	0	0	26
15:30	0	7	0	7	0	10	1	11	1	0	0	1	0	0	0	0	19
15:45	2	8	0	10	0	21	0	21	5	0	0	5	0	0	0	0	36
16:00	0	9	0	9	0	59	0	59	4	0	1	5	0	0	0	0	73
16:15	2	6	0	8	0	24	2	26	1	0	0	1	0	0	0	0	35
16:30	0	6	0	6	0	52	2	54	1	0	0	1	0	0	0	0	61
16:45	0	4	0	4	0	15	0	15	4	0	0	4	0	0	0	0	23
17:00	1	0	0	1	0	24	3	27	0	0	0	0	0	0	0	0	28
17:15	0	5	0	5	0	12	1	13	1	0	0	1	0	0	0	0	19
17:30	0	5	0	5	1	5	1	7	1	0	0	1	0	0	0	0	13
17:45	0	4	0	4	0	4	0	4	1	0	0	1	0	0	0	0	9

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
15:45	4	29	0	33	0	156	4	160	11	0	1	12	0	0	0	0	205
PHF	0.50	0.81	0	0.83	0	0.66	0.50	0.68	0.55	0	0.25	0.60	0	0	0	0	0.70
% HV	0.0%	3.4%	0%	3.0%	0%	0.0%	0.0%	0.0%	18.2%	0%	0.0%	16.7%	0%	0%	0%	0%	1.5%

Table A-18A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Avenue of the States				Avenue of the States				N Range Rd				N Range Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	15	111	6	132	6	21	4	31	3	2	6	11	3	5	25	33	207
06:15	27	98	4	129	6	24	7	37	0	0	4	4	2	2	9	13	183
06:30	39	129	7	175	20	48	10	78	2	0	4	6	4	6	1	11	270
06:45	44	174	13	231	9	54	5	68	1	3	7	11	0	2	9	11	321
07:00	44	174	9	227	7	39	3	49	0	1	4	5	3	2	7	12	293
07:15	54	267	17	338	24	54	3	81	0	0	9	9	6	3	8	17	445
07:30	21	213	13	247	29	81	5	115	1	2	14	17	7	2	14	23	402
07:45	32	207	8	247	16	53	3	72	2	2	9	13	4	2	13	19	351
08:00	18	133	15	166	9	38	3	50	1	3	8	12	9	3	12	24	252
08:15	29	119	12	160	7	43	2	52	2	2	9	13	9	5	8	22	247
08:30	27	122	4	153	3	50	5	58	1	0	8	9	5	18	16	39	259
08:45	30	104	10	144	4	36	2	42	0	5	13	18	5	18	15	38	242

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	151	861	47	1059	76	227	14	317	3	5	36	44	20	9	42	71	1491
PHF	0.70	0.81	0.69	0.78	0.66	0.70	0.70	0.69	0.38	0.63	0.64	0.65	0.71	0.75	0.75	0.77	0.84

Start Date 7/17/2012
Start Time 15:00

Street Name	Avenue of the States				Avenue of the States				N Range Rd				N Range Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	7	70	7	84	4	106	2	112	0	6	15	21	12	3	9	24	241
15:15	7	83	6	96	6	98	1	105	2	3	18	23	3	3	9	15	239
15:30	6	62	7	75	14	135	1	150	0	2	21	23	4	2	8	14	262
15:45	8	59	10	77	9	110	2	121	0	3	17	20	7	6	4	17	235
16:00	8	47	7	62	12	205	3	220	3	7	46	56	14	4	4	22	360
16:15	5	62	8	75	20	192	1	213	5	8	31	44	7	6	5	18	350
16:30	6	44	7	57	24	216	4	244	2	8	50	60	10	0	7	17	378
16:45	6	59	8	73	26	199	2	227	0	11	41	52	5	4	17	26	378
17:00	9	71	15	95	24	177	4	205	1	5	32	38	5	1	9	15	353
17:15	7	64	8	79	27	170	2	199	3	7	31	41	17	0	15	32	351
17:30	11	75	22	108	18	136	2	156	2	0	26	28	7	1	7	15	307
17:45	11	61	16	88	19	112	3	134	0	1	16	17	15	2	6	23	262

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	25	212	30	267	82	812	10	904	10	34	168	212	36	14	33	83	1466
PHF	0.78	0.85	0.94	0.89	0.79	0.94	0.63	0.93	0.50	0.77	0.84	0.88	0.64	0.58	0.49	0.80	0.97

Table A-18B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Avenue of the States				Avenue of the States				N Range Rd				N Range Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
06:15	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
06:45	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	1	0	1	1	2	0	3	0	0	0	0	0	0	0	0	4
07:45	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:00	0	0	2	2	0	2	0	2	0	0	1	1	0	0	0	0	5
08:15	0	0	1	1	0	1	0	1	0	0	1	1	0	0	0	0	3
08:30	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	0	1	0	1	1	3	0	4	0	0	0	0	0	0	0	0	5
PHF	0	0.25	0	0.25	0.25	0.38	0	0.33	0	0	0	0	0	0	0	0	0.31

Start Date 7/17/2012
Start Time 15:00

Street Name	Avenue of the States				Avenue of the States				N Range Rd				N Range Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:15	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
15:30	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
15:45	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	2
16:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
16:30	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
16:45	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
17:00	0	0	1	1	0	1	0	1	0	0	0	0	0	0	1	1	3
17:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
17:30	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
17:45	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	0	2	0	2	1	2	0	3	0	0	0	0	0	0	0	0	5
PHF	0	0.50	0	0.50	0.25	0.50	0	0.75	0	0	0	0	0	0	0	0	0.63

Table A-18C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/17/2012
Start Time 06:00

Street Name	Avenue of the States				Avenue of the States				N Range Rd				N Range Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	15	111	6	132	6	22	4	32	3	2	6	11	3	5	25	33	208
06:15	28	98	4	130	6	24	7	37	0	0	4	4	2	2	9	13	184
06:30	39	129	7	175	20	49	10	79	2	0	4	6	4	6	1	11	271
06:45	44	174	13	231	10	54	5	69	1	3	7	11	0	2	9	11	322
07:00	44	174	9	227	7	39	3	49	0	1	4	5	3	2	7	12	293
07:15	54	267	17	338	24	54	3	81	0	0	9	9	6	3	8	17	445
07:30	21	214	13	248	30	83	5	118	1	2	14	17	7	2	14	23	406
07:45	32	207	8	247	16	54	3	73	2	2	9	13	4	2	13	19	352
08:00	18	133	17	168	9	40	3	52	1	3	9	13	9	3	12	24	257
08:15	29	119	13	161	7	44	2	53	2	2	10	14	9	5	8	22	250
08:30	27	123	4	154	3	50	5	58	1	0	8	9	5	18	16	39	260
08:45	30	104	10	144	4	36	2	42	0	5	13	18	6	18	15	39	243

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
07:00	151	862	47	1060	77	230	14	321	3	5	36	44	20	9	42	71	1496
PHF	0.70	0.81	0.69	0.78	0.64	0.69	0.70	0.68	0.38	0.63	0.64	0.65	0.71	0.75	0.75	0.77	0.84
% HV	0.0%	0.1%	0.0%	0.1%	1.3%	1.3%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%

Start Date 7/17/2012
Start Time 15:00

Street Name	Avenue of the States				Avenue of the States				N Range Rd				N Range Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	7	70	7	84	4	106	2	112	0	6	15	21	12	3	9	24	241
15:15	8	83	6	97	6	98	1	105	2	3	18	23	3	3	9	15	240
15:30	6	62	7	75	14	136	1	151	0	2	21	23	4	2	8	14	263
15:45	8	59	10	77	9	111	2	122	0	3	18	21	7	6	4	17	237
16:00	8	48	7	63	12	205	3	220	3	7	46	56	14	4	4	22	361
16:15	5	62	8	75	20	193	1	214	5	8	31	44	7	6	5	18	351
16:30	6	44	7	57	25	216	4	245	2	8	50	60	10	0	7	17	379
16:45	6	60	8	74	26	200	2	228	0	11	41	52	5	4	17	26	380
17:00	9	71	16	96	24	178	4	206	1	5	32	38	5	1	10	16	356
17:15	7	64	8	79	27	170	2	199	3	7	32	42	17	0	15	32	352
17:30	12	76	22	110	18	136	2	156	2	0	26	28	7	1	7	15	309
17:45	11	61	16	88	19	112	3	134	1	1	16	18	15	2	6	23	263

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:00	25	214	30	269	83	814	10	907	10	34	168	212	36	14	33	83	1471
PHF	0.78	0.86	0.94	0.90	0.80	0.94	0.63	0.93	0.50	0.77	0.84	0.88	0.64	0.58	0.49	0.80	0.97
% HV	0.0%	0.9%	0.0%	0.7%	1.2%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%

Table A-19A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	US 1/SR 4 SB On Ramp				US 1/SR 4 SB Off Ramp				Avenue of the States				Avenue of the States				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	3	0	29	32	0	30	5	35	3	94	0	97	164
06:15	0	0	0	0	5	0	25	30	0	28	5	33	4	105	0	109	172
06:30	0	0	0	0	1	0	26	27	0	35	9	44	2	143	0	145	216
06:45	0	0	0	0	8	0	52	60	0	37	4	41	3	171	0	174	275
07:00	0	0	0	0	13	0	54	67	0	54	7	61	8	221	0	229	357
07:15	0	0	0	0	6	0	74	80	0	42	5	47	8	218	0	226	353
07:30	0	0	0	0	3	0	52	55	0	75	13	88	10	157	0	167	310
07:45	0	0	0	0	10	0	68	78	0	47	4	51	1	137	0	138	267
08:00	0	0	0	0	14	0	41	55	0	40	6	46	9	114	0	123	224
08:15	0	0	0	0	5	0	35	40	0	28	7	35	6	89	0	95	170
08:30	0	0	0	0	17	0	36	53	0	37	4	41	10	102	0	112	206
08:45	0	0	0	0	10	0	22	32	1	30	6	37	3	90	0	93	162

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	30	0	232	262	0	208	29	237	29	767	0	796	1295
PHF	0	0	0	0	0.58	0	0.78	0.82	0	0.69	0.56	0.67	0.73	0.87	0	0.87	0.91

Start Date 7/18/2012
Start Time 15:00

Street Name	US 1/SR 4 SB On Ramp				US 1/SR 4 SB Off Ramp				Avenue of the States				Avenue of the States				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	29	0	11	40	0	93	12	105	14	48	0	62	207
15:15	0	0	0	0	32	0	28	60	0	115	16	131	10	52	0	62	253
15:30	0	0	0	0	21	0	20	41	0	113	22	135	16	49	0	65	241
15:45	0	0	0	0	30	0	21	51	0	111	21	132	14	41	0	55	238
16:00	0	0	0	0	27	0	22	49	0	219	36	255	13	45	0	58	362
16:15	0	0	0	0	31	0	28	59	0	208	45	253	15	24	0	39	351
16:30	0	0	0	0	24	0	17	41	0	224	48	272	12	48	0	60	373
16:45	0	0	0	0	32	0	13	45	0	196	29	225	9	51	0	60	330
17:00	0	0	0	0	39	1	27	67	0	189	42	231	20	46	0	66	364
17:15	0	0	0	0	43	1	39	83	0	164	35	199	23	76	0	99	381
17:30	0	0	0	0	56	1	29	86	0	140	23	163	11	52	0	63	312
17:45	0	0	0	0	38	0	19	57	0	122	22	144	17	56	0	73	274

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	0	0	0	0	138	2	96	236	0	773	154	927	64	221	0	285	1448
PHF	0	0	0	0	0.80	0.50	0.62	0.71	0	0.86	0.80	0.85	0.70	0.73	0	0.72	0.95

Table A-19B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	US 1/SR 4 SB On Ramp				US 1/SR 4 SB Off Ramp				Avenue of the States				Avenue of the States				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:30	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	2
07:45	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	2	3
08:00	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	1	3
08:15	0	0	0	0	0	0	0	0	0	2	1	3	0	1	0	1	4
08:30	0	0	0	0	1	0	0	1	0	1	0	1	1	4	0	5	7
08:45	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	0	0	1	1	0	0	0	0	3	0	0	3	4
PHF	0	0	0	0	0	0	0.25	0.25	0	0	0	0	0.75	0	0	0.75	0.50

Start Date 7/18/2012
Start Time 15:00

Street Name	US 1/SR 4 SB On Ramp				US 1/SR 4 SB Off Ramp				Avenue of the States				Avenue of the States				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	2	0	0	2	0	2	0	2	1	0	0	1	5
15:15	0	0	0	0	2	0	0	2	0	1	0	1	0	0	0	0	3
15:30	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	2
15:45	0	0	0	0	1	0	1	2	0	1	0	1	0	0	0	0	3
16:00	0	0	0	0	1	0	1	2	0	4	0	4	0	1	0	1	7
16:15	0	0	0	0	3	0	0	3	0	1	0	1	0	0	0	0	4
16:30	0	0	0	0	2	0	1	3	0	0	0	0	0	0	0	0	3
16:45	0	0	0	0	2	0	0	2	0	1	0	1	0	0	0	0	3
17:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	1	1	0	2	0	2	1	0	0	1	4
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	0	0	0	0	5	0	2	7	0	3	0	3	1	0	0	1	11
PHF	0	0	0	0	0.63	0	0.50	0.58	0	0.38	0	0.38	0.25	0	0	0.25	0.69

Table A-19C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	US 1/SR 4 SB On Ramp				US 1/SR 4 SB Off Ramp				Avenue of the States				Avenue of the States				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	0	0	0	0	3	0	29	32	0	30	5	35	3	95	0	98	165
06:15	0	0	0	0	5	0	25	30	0	28	5	33	4	105	0	109	172
06:30	0	0	0	0	1	0	26	27	0	35	9	44	4	143	0	147	218
06:45	0	0	0	0	8	0	52	60	0	37	4	41	3	171	0	174	275
07:00	0	0	0	0	13	0	54	67	0	54	7	61	9	221	0	230	358
07:15	0	0	0	0	6	0	74	80	0	42	5	47	9	218	0	227	354
07:30	0	0	0	0	3	0	53	56	0	75	13	88	11	157	0	168	312
07:45	0	0	0	0	10	0	68	78	0	48	4	52	3	137	0	140	270
08:00	0	0	0	0	14	0	41	55	0	42	6	48	10	114	0	124	227
08:15	0	0	0	0	5	0	35	40	0	30	8	38	6	90	0	96	174
08:30	0	0	0	0	18	0	36	54	0	38	4	42	11	106	0	117	213
08:45	0	0	0	0	10	0	22	32	1	31	6	38	4	90	0	94	164

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	0	0	30	0	233	263	0	208	29	237	32	767	0	799	1299
PHF	0	0	0	0	0.58	0	0.79	0.82	0	0.69	0.56	0.67	0.73	0.87	0	0.87	0.91
% HV	0%	0%	0%	0%	0.0%	0%	0.4%	0.4%	0%	0.0%	0.0%	0.0%	9.4%	0.0%	0%	0.4%	0.3%

Start Date 7/18/2012
Start Time 15:00

Street Name	US 1/SR 4 SB On Ramp				US 1/SR 4 SB Off Ramp				Avenue of the States				Avenue of the States				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	0	0	31	0	11	42	0	95	12	107	15	48	0	63	212
15:15	0	0	0	0	34	0	28	62	0	116	16	132	10	52	0	62	256
15:30	0	0	0	0	23	0	20	43	0	113	22	135	16	49	0	65	243
15:45	0	0	0	0	31	0	22	53	0	112	21	133	14	41	0	55	241
16:00	0	0	0	0	28	0	23	51	0	223	36	259	13	46	0	59	369
16:15	0	0	0	0	34	0	28	62	0	209	45	254	15	24	0	39	355
16:30	0	0	0	0	26	0	18	44	0	224	48	272	12	48	0	60	376
16:45	0	0	0	0	34	0	13	47	0	197	29	226	9	51	0	60	333
17:00	0	0	0	0	40	1	27	68	0	189	42	231	20	46	0	66	365
17:15	0	0	0	0	43	1	40	84	0	166	35	201	24	76	0	100	385
17:30	0	0	0	0	56	1	29	86	0	140	23	163	11	52	0	63	312
17:45	0	0	0	0	38	0	19	57	0	122	22	144	17	56	0	73	274

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	0	0	0	0	143	2	98	243	0	776	154	930	65	221	0	286	1459
PHF	0	0	0	0	0.83	0.50	0.61	0.72	0	0.87	0.80	0.85	0.68	0.73	0	0.72	0.95
% HV	0%	0%	0%	0%	3.5%	0.0%	2.0%	2.9%	0%	0.4%	0.0%	0.3%	1.5%	0.0%	0%	0.3%	0.8%

Table A-20A

Directional Turning Movement Counts - Passenger Cars
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	US 1/SR 4 NB Off Ramp				US 1/SR 4 NB On Ramp				Tobacco Rd				Tobacco Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	16	0	3	19	0	0	0	0	0	22	11	33	0	81	10	91	143
06:15	27	0	5	32	0	0	0	0	0	24	10	34	0	81	14	95	161
06:30	35	0	4	39	0	0	0	0	0	25	11	36	0	114	32	146	221
06:45	40	0	4	44	0	0	0	0	0	38	8	46	0	133	24	157	247
07:00	54	0	4	58	0	0	0	0	0	47	18	65	0	173	26	199	322
07:15	59	0	10	69	0	0	0	0	0	33	17	50	0	172	37	209	328
07:30	47	0	8	55	0	0	0	0	0	58	21	79	0	119	44	163	297
07:45	35	0	11	46	0	0	0	0	0	37	21	58	0	102	34	136	240
08:00	30	0	8	38	0	0	0	0	0	37	17	54	0	96	27	123	215
08:15	19	0	8	27	0	0	0	0	0	32	7	39	0	75	39	114	180
08:30	18	0	6	24	0	0	0	0	0	41	13	54	0	96	34	130	208
08:45	20	0	9	29	0	0	0	0	0	31	8	39	0	73	28	101	169

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	200	0	26	226	0	0	0	0	0	176	64	240	0	597	131	728	1194
PHF	0.85	0	0.65	0.82	0	0	0	0	0	0.76	0.76	0.76	0	0.86	0.74	0.87	0.91

Start Date 7/18/2012
Start Time 15:00

Street Name	US 1/SR 4 NB Off Ramp				US 1/SR 4 NB On Ramp				Tobacco Rd				Tobacco Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	0	9	19	0	0	0	0	0	97	27	124	0	52	25	77	220
15:15	13	0	7	20	0	0	0	0	0	114	32	146	0	51	22	73	239
15:30	8	0	10	18	0	0	0	0	0	112	21	133	0	59	20	79	230
15:45	5	0	16	21	0	0	0	0	0	113	26	139	0	50	14	64	224
16:00	8	0	15	23	0	0	0	0	0	200	42	242	0	53	17	70	335
16:15	2	0	12	14	0	0	0	0	0	189	50	239	0	35	28	63	316
16:30	9	0	14	23	0	0	0	0	0	198	53	251	0	49	25	74	348
16:45	8	0	11	19	0	0	0	0	0	178	49	227	0	52	31	83	329
17:00	7	0	12	19	0	0	0	0	0	181	51	232	0	62	37	99	350
17:15	5	0	15	20	0	0	0	0	0	162	45	207	0	93	30	123	350
17:30	11	0	13	24	0	0	0	0	0	149	46	195	0	53	25	78	297
17:45	3	0	13	16	0	0	0	0	0	120	41	161	0	70	38	108	285

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	29	0	52	81	0	0	0	0	0	719	198	917	0	256	123	379	1377
PHF	0.81	0	0.87	0.88	0	0	0	0	0	0.91	0.93	0.91	0	0.69	0.83	0.77	0.98

Table A-20B

Directional Turning Movement Counts - Heavy Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	US 1/SR 4 NB Off Ramp				US 1/SR 4 NB On Ramp				Tobacco Rd				Tobacco Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
06:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
06:30	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
06:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	2
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2
07:30	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	2	3
07:45	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	4	5
08:00	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	1	3
08:15	0	0	2	2	0	0	0	0	0	1	1	2	0	1	1	2	6
08:30	1	0	1	2	0	0	0	0	0	2	0	2	0	3	1	4	8
08:45	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	0	0	2	2	0	0	0	0	0	0	0	0	0	3	2	5	7
PHF	0	0	0.50	0.50	0	0	0	0	0	0	0	0	0	0.75	0.50	0.63	0.58

Start Date 7/18/2012
Start Time 15:00

Street Name	US 1/SR 4 NB Off Ramp				US 1/SR 4 NB On Ramp				Tobacco Rd				Tobacco Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	0	0	1	1	0	0	0	0	0	2	2	4	0	1	2	3	8
15:15	0	0	0	0	0	0	0	0	0	2	1	3	0	0	2	2	5
15:30	0	0	1	1	0	0	0	0	0	2	0	2	0	0	1	1	4
15:45	0	0	0	0	0	0	0	0	0	2	1	3	0	0	2	2	5
16:00	1	0	1	2	0	0	0	0	0	4	1	5	0	0	1	1	8
16:15	0	0	0	0	0	0	0	0	0	3	1	4	0	0	2	2	6
16:30	0	0	1	1	0	0	0	0	0	2	0	2	0	0	1	1	4
16:45	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	3
17:00	0	0	1	1	0	0	0	0	0	0	1	1	0	0	3	3	5
17:15	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	1	3
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	0	0	2	2	0	0	0	0	0	6	2	8	0	1	4	5	15
PHF	0	0	0.50	0.50	0	0	0	0	0	0.75	0.50	0.67	0	0.25	0.33	0.42	0.75

Table A-20C

Directional Turning Movement Counts - All Vehicles
ARCYBER at Fort Gordon, Georgia

Start Date 7/18/2012
Start Time 06:00

Street Name	US 1/SR 4 NB Off Ramp				US 1/SR 4 NB On Ramp				Tobacco Rd				Tobacco Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
06:00	17	0	3	20	0	0	0	0	0	22	11	33	0	81	10	91	144
06:15	27	0	5	32	0	0	0	0	0	24	10	34	0	81	15	96	162
06:30	35	0	4	39	0	0	0	0	0	25	11	36	0	116	32	148	223
06:45	40	0	4	44	0	0	0	0	0	38	8	46	0	133	24	157	247
07:00	54	0	5	59	0	0	0	0	0	47	18	65	0	174	26	200	324
07:15	59	0	10	69	0	0	0	0	0	33	17	50	0	173	38	211	330
07:30	47	0	9	56	0	0	0	0	0	58	21	79	0	120	45	165	300
07:45	35	0	11	46	0	0	0	0	0	37	22	59	0	104	36	140	245
08:00	30	0	8	38	0	0	0	0	0	38	18	56	0	97	27	124	218
08:15	19	0	10	29	0	0	0	0	0	33	8	41	0	76	40	116	186
08:30	19	0	7	26	0	0	0	0	0	43	13	56	0	99	35	134	216
08:45	20	0	9	29	0	0	0	0	0	32	8	40	0	74	28	102	171

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
06:45	200	0	28	228	0	0	0	0	0	176	64	240	0	600	133	733	1201
PHF	0.85	0	0.70	0.83	0	0	0	0	0	0.76	0.76	0.76	0	0.86	0.74	0.87	0.91
% HV	0.0%	0%	7.1%	0.9%	0%	0%	0%	0%	0%	0.0%	0.0%	0.0%	0%	0.5%	1.5%	0.7%	0.6%

Start Date 7/18/2012
Start Time 15:00

Street Name	US 1/SR 4 NB Off Ramp				US 1/SR 4 NB On Ramp				Tobacco Rd				Tobacco Rd				Total
	Northbound				Southbound				Eastbound				Westbound				
Start Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	
15:00	10	0	10	20	0	0	0	0	0	99	29	128	0	53	27	80	228
15:15	13	0	7	20	0	0	0	0	0	116	33	149	0	51	24	75	244
15:30	8	0	11	19	0	0	0	0	0	114	21	135	0	59	21	80	234
15:45	5	0	16	21	0	0	0	0	0	115	27	142	0	50	16	66	229
16:00	9	0	16	25	0	0	0	0	0	204	43	247	0	53	18	71	343
16:15	2	0	12	14	0	0	0	0	0	192	51	243	0	35	30	65	322
16:30	9	0	15	24	0	0	0	0	0	200	53	253	0	49	26	75	352
16:45	8	0	11	19	0	0	0	0	0	180	50	230	0	52	31	83	332
17:00	7	0	13	20	0	0	0	0	0	181	52	233	0	62	40	102	355
17:15	5	0	15	20	0	0	0	0	0	164	45	209	0	94	30	124	353
17:30	11	0	13	24	0	0	0	0	0	149	46	195	0	53	25	78	297
17:45	3	0	13	16	0	0	0	0	0	120	41	161	0	70	38	108	285

Peak Hour	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Total
16:30	29	0	54	83	0	0	0	0	0	725	200	925	0	257	127	384	1392
PHF	0.81	0	0.90	0.86	0	0	0	0	0	0.91	0.94	0.91	0	0.68	0.79	0.77	0.98
% HV	0.0%	0%	3.7%	2.4%	0%	0%	0%	0%	0%	0.8%	1.0%	0.9%	0%	0.4%	3.1%	1.3%	1.1%

Attachment 5

Intersection Worksheets – Fort Meade

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	58	598	6	4	168	311	51	99	1	107	37	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1638	1881	1881	1900	1810	1900	1863	1864	1864	1727	1729	1729
Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Capacity, veh/h	778	1276	22	436	1193	1065	190	178	5	172	85	78
Arriving On Green	0.04	0.69	0.69	0.01	1.00	1.00	0.04	0.10	0.10	0.04	0.10	0.10
Sat Flow, veh/h	1559.9	1844.9	31.1	1809.5	1615.0	1615.0	1774.0	1799.7	54.5	1645.0	831.7	762.3
Grp Volume(v), veh/h	79.5	0.0	723.9	4.0	180.6	370.2	83.6	0.0	136.0	135.4	0.0	99.9
Grp Sat Flow(s),veh/h/ln	1559.9	0.0	1876.0	1809.5	1809.5	1615.0	1774.0	0.0	1854.2	1645.0	0.0	1594.0
Q Serve(g_s), s	1.7	0.0	18.8	0.0	0.0	0.0	0.0	0.0	6.9	1.5	0.0	5.8
Cycle Q Clear(g_c), s	1.7	0.0	18.8	0.0	0.0	0.0	0.0	0.0	6.9	1.5	0.0	5.8
Proportion In Lane	1.000		0.017	1.000		1.000	1.000		0.029	1.000		0.478
Lane Grp Cap(c), veh/h	778.1	0.0	1297.6	435.7	1193.4	1065.1	190.0	0.0	183.7	172.4	0.0	163.1
V/C Ratio(X)	0.102	0.000	0.558	0.009	0.151	0.348	0.440	0.000	0.740	0.786	0.000	0.612
Avail Cap(c_a), veh/h	785.7	0.0	1297.6	502.6	1193.4	1065.1	234.3	0.0	305.7	275.9	0.0	328.5
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	5.6	0.0	7.5	13.1	0.0	0.0	43.9	0.0	42.5	44.5	0.0	41.7
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.0	0.1	0.2	1.6	0.0	5.8	7.7	0.0	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	5.6	0.0	8.0	13.1	0.1	0.2	45.5	0.0	48.3	52.2	0.0	45.4
Lane Group LOS	A		A	B	A	A	D		D	D		D
Approach Volume, veh/h		803			555			220			235	
Approach Delay, s/veh		7.8			0.2			47.2			49.3	
Approach LOS		A			A			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	7.53	71.12		4.41	68.00		7.58	13.61		7.90	13.93	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	64.00		4.00	64.00		6.00	16.00		10.00	20.00	
Max Q Clear Time (g_c+I1), s	3.71	20.80		2.00	2.00		2.00	8.92		3.52	7.82	
Green Extension Time (p_c)	0.00	9.78		0.00	10.12		0.05	0.69		0.17	0.99	

Intersection Summary	
HCM 2010 Control Delay	15.6
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	715	17	127	566	104	65	7	60	8	1	5
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1827	1792	1827	1881	1863	1897	1897	1900	1863	1863	1863
Lanes	1	1	1	1	1	1	0	1	1	0	1	1
Capacity, veh/h	576	1159	967	188	1330	1120	63	3	237	62	4	233
Arriving On Green	0.07	1.00	0.00	0.22	1.00	0.00	0.15	0.15	0.00	0.15	0.15	0.00
Sat Flow, veh/h	1774.0	1523.6	1523.6	1739.9	1583.3	1583.3	19.6	1.8	1615.0	25.9	3.2	1583.3
Grp Volume(v), veh/h	87.0	737.1	0.0	160.8	628.9	0.0	92.0	0.0	0.0	9.8	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1826.9	1523.6	1739.9	1881.2	1583.3	21.4	0.0	1615.0	29.1	0.0	1583.3
Q Serve(g_s), s	2.2	0.0	0.0	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	0.0	9.7	0.0	0.0	16.0	0.0	0.0	16.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.917		1.000	0.889		1.000
Lane Grp Cap(c), veh/h	575.8	1159.4	966.9	188.3	1330.2	1119.6	66.5	0.0	237.3	66.7	0.0	232.6
V/C Ratio(X)	0.151	0.636	0.000	0.854	0.473	0.000	1.383	0.000	0.000	0.147	0.000	0.000
Avail Cap(c_a), veh/h	593.8	1159.4	966.9	287.6	1330.2	1119.6	66.5	0.0	237.3	66.7	0.0	232.6
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.685	0.685	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	8.1	0.0	0.0	41.8	0.0	0.0	53.7	0.0	0.0	47.5	0.0	0.0
Incr Delay (d2), s/veh	0.1	1.2	0.0	10.2	0.2	0.0	242.1	0.0	0.0	1.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	8.3	1.2	0.0	52.0	0.2	0.0	295.8	0.0	0.0	48.5	0.0	0.0
Lane Group LOS	A	A		D	A		F			D		
Approach Volume, veh/h		824			790			92			10	
Approach Delay, s/veh		1.9			10.7			295.8			48.5	
Approach LOS		A			B			F			D	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	7.90	73.11		15.79	81.00			20.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	5.00	64.00		18.00	77.00			16.00			16.00	
Max Q Clear Time (g_c+I1), s	4.19	2.00		11.67	2.00			18.00			18.00	
Green Extension Time (p_c)	0.01	14.39		0.21	14.66			0.00			0.00	

Intersection Summary	
HCM 2010 Control Delay	22.0
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	463	338	43	65	537	133	32	72	62	28	104	291
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1810	1696	1900	1863	1900	1763	1763	1900	1859	1859	1863
Lanes	1	1	1	1	1	1	0	1	1	0	1	1
Capacity, veh/h	524	1144	912	651	1080	936	43	76	355	40	128	348
Arriving On Green	0.15	1.00	1.00	0.04	0.58	0.58	0.22	0.22	0.00	0.22	0.22	0.00
Sat Flow, veh/h	1774.0	1442.0	1442.0	1809.5	1615.0	1615.0	102.0	243.2	1615.0	115.4	464.5	1583.3
Grp Volume(v), veh/h	492.6	375.6	59.7	87.8	596.7	140.0	204.4	0.0	0.0	180.3	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1809.5	1442.0	1809.5	1862.7	1615.0	345.2	0.0	1615.0	579.9	0.0	1583.3
Q Serve(g_s), s	6.3	0.0	0.0	2.4	21.6	4.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.3	0.0	0.0	2.4	21.6	4.4	24.0	0.0	0.0	24.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.295		1.000	0.199		1.000
Lane Grp Cap(c), veh/h	523.5	1144.0	911.6	651.4	1080.0	936.3	118.6	0.0	355.1	167.1	0.0	348.2
V/C Ratio(X)	0.941	0.328	0.066	0.135	0.552	0.150	1.723	0.000	0.000	1.079	0.000	0.000
Avail Cap(c_a), veh/h	818.4	1144.0	911.6	665.7	1080.0	936.3	118.6	0.0	355.1	167.1	0.0	348.2
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.746	0.746	0.746	0.952	0.952	0.952	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	30.5	0.0	0.0	11.1	14.2	10.6	40.7	0.0	0.0	39.1	0.0	0.0
Incr Delay (d2), s/veh	10.9	0.1	0.0	0.1	0.6	0.1	358.1	0.0	0.0	92.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	41.4	0.1	0.0	11.1	14.8	10.6	398.8	0.0	0.0	131.5	0.0	0.0
Lane Group LOS	D	A	A	B	B	B	F			F		
Approach Volume, veh/h		928			825			204			180	
Approach Delay, s/veh		22.0			13.7			398.8			131.5	
Approach LOS		C			B			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	13.86	73.00		8.14	67.28			28.00			28.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	28.00	69.00		5.00	46.00			24.00			24.00	
Max Q Clear Time (g_c+I1), s	8.31	2.00		4.44	23.61			26.00			26.00	
Green Extension Time (p_c)	1.55	9.21		0.01	7.57			0.00			0.00	

Intersection Summary			
HCM 2010 Control Delay			64.1
HCM 2010 Level of Service			E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	89	153	407	311	31	80	40	91	7	107	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1863	1881	1900	1900	1900	1827	1845	1845	1667	1855	1855
Lanes	0	1	1	1	1	0	1	1	0	1	1	0
Capacity, veh/h	144	250	480	871	1086	148	272	138	296	274	372	99
Arriving On Green	0.10	0.10	0.10	0.11	0.22	0.22	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	408.0	761.2	1599.0	1809.5	1637.1	223.4	1167.3	523.6	1123.6	1101.1	1411.6	376.9
Grp Volume(v), veh/h	173.0	0.0	156.1	462.5	0.0	397.1	96.4	0.0	151.6	12.1	0.0	188.3
Grp Sat Flow(s),veh/h/ln	1169.2	0.0	1599.0	1809.5	0.0	1860.6	1167.3	0.0	1647.2	1101.1	0.0	1788.5
Q Serve(g_s), s	10.2	0.0	10.0	14.4	0.0	19.7	8.1	0.0	8.2	1.0	0.0	9.5
Cycle Q Clear(g_c), s	13.9	0.0	10.0	14.4	0.0	19.7	17.7	0.0	8.2	9.2	0.0	9.5
Proportion In Lane	0.349		1.000	1.000		0.120	1.000		0.682	1.000		0.211
Lane Grp Cap(c), veh/h	394.9	0.0	479.7	871.4	0.0	1234.7	272.1	0.0	434.3	273.6	0.0	471.5
V/C Ratio(X)	0.438	0.000	0.325	0.531	0.000	0.322	0.354	0.000	0.349	0.044	0.000	0.399
Avail Cap(c_a), veh/h	394.9	0.0	479.7	871.4	0.0	1234.7	272.1	0.0	434.3	273.6	0.0	471.5
HCM Platoon Ratio	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	40.2	0.0	39.2	15.6	0.0	22.2	40.6	0.0	32.8	36.6	0.0	33.3
Incr Delay (d2), s/veh	3.5	0.0	1.8	2.3	0.0	0.7	3.6	0.0	2.2	0.3	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	43.7	0.0	41.0	17.9	0.0	22.8	44.2	0.0	35.1	36.9	0.0	35.8
Lane Group LOS	D		D	B		C	D		D	D		D
Approach Volume, veh/h		329			860			248			200	
Approach Delay, s/veh		42.4			20.2			38.6			35.9	
Approach LOS		D			C			D			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		37.00		40.00	77.00			33.00			33.00	
Change Period (Y+Rc), s		4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s		33.00		36.00	73.00			29.00			29.00	
Max Q Clear Time (g_c+I1), s		15.90		16.43	21.73			19.68			11.53	
Green Extension Time (p_c)		3.97		1.43	4.85			1.69			2.29	

Intersection Summary			
HCM 2010 Control Delay			29.4
HCM 2010 Level of Service			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	25	45	547	58	180	346	946	134	46	739	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1743	1892	1900	1900	1900	1881	1881	1845	1863	1863	1863	1900
Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Capacity, veh/h	176	275	235	290	397	334	423	1466	662	145	933	426
Arriving On Green	0.15	0.15	0.00	0.21	0.21	0.21	0.24	0.42	0.42	0.03	0.09	0.00
Sat Flow, veh/h	1206.8	1891.9	1615.0	1389.3	1900.0	1599.0	1791.6	1583.3	1583.3	1774.0	1615.0	1615.0
Grp Volume(v), veh/h	20.0	39.7	0.0	581.9	100.0	195.7	397.7	1087.4	183.6	56.1	849.4	0.0
Grp Sat Flow(s),veh/h/ln	1206.8	1891.9	1615.0	1389.3	1900.0	1599.0	1791.6	1752.4	1583.3	1774.0	1769.6	1615.0
Q Serve(g_s), s	1.6	2.0	0.0	23.0	4.8	12.1	24.0	28.8	8.4	3.4	26.2	0.0
Cycle Q Clear(g_c), s	1.6	2.0	0.0	23.0	4.8	12.1	24.0	28.8	8.4	3.4	26.2	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	175.5	275.2	234.9	290.5	397.3	334.3	423.5	1465.7	662.1	145.1	933.1	425.8
V/C Ratio(X)	0.114	0.144	0.000	2.003	0.252	0.585	0.939	0.742	0.277	0.386	0.910	0.000
Avail Cap(c_a), veh/h	175.5	275.2	234.9	290.5	397.3	334.3	423.5	1465.7	662.1	145.1	933.1	425.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	40.8	41.0	0.0	43.5	36.3	39.2	41.2	27.0	21.1	50.8	48.9	0.0
Incr Delay (d2), s/veh	1.3	1.1	0.0	463.5	1.5	7.3	30.8	3.4	1.0	7.6	14.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	42.2	42.1	0.0	507.0	37.8	46.5	72.1	30.4	22.1	58.4	63.4	0.0
Lane Group LOS	D	D		F	D	D	E	C	C	E	E	
Approach Volume, veh/h		60			878			1669			906	
Approach Delay, s/veh		42.1			350.9			39.4			63.0	
Approach LOS		D			F			D			E	

Timer								
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		20.00			27.00		30.00	50.00		13.00	33.00	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			23.00		26.00	46.00		9.00	29.00	
Max Q Clear Time (g_c+I1), s		4.01			25.00		25.97	30.79		5.42	28.18	
Green Extension Time (p_c)		0.12			0.00		0.01	11.55		0.03	0.76	

Intersection Summary								
HCM 2010 Control Delay			123.4					
HCM 2010 Level of Service			F					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	29	87	388	111	132	406	686	66	52	400	245
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1845	1900	1863	1900	1882	1882	1900	1827	1827	1827	1810	1863
Lanes	1	1	1	1	1	0	1	2	0	1	2	1
Capacity, veh/h	102	182	152	345	195	230	580	1470	162	77	612	282
Arriving On Green	0.10	0.10	0.00	0.25	0.25	0.25	0.21	0.30	0.30	0.04	0.18	0.00
Sat Flow, veh/h	1059.1	1900.0	1583.3	1394.2	790.4	928.1	1809.5	3235.0	356.0	1739.9	1583.3	1583.3
Grp Volume(v), veh/h	84.2	35.8	0.0	408.4	0.0	305.5	541.3	407.6	394.0	59.8	454.5	0.0
Grp Sat Flow(s),veh/h/ln	1059.1	1900.0	1583.3	1394.2	0.0	1718.5	1809.5	1826.9	1764.1	1739.9	1719.0	1583.3
Q Serve(g_s), s	7.9	1.8	0.0	25.0	0.0	16.5	29.7	18.4	18.5	3.4	12.7	0.0
Cycle Q Clear(g_c), s	7.9	1.8	0.0	25.0	0.0	16.5	29.7	18.4	18.5	3.4	12.7	0.0
Proportion In Lane	1.000		1.000	1.000		0.540	1.000		0.202	1.000		1.000
Lane Grp Cap(c), veh/h	101.7	182.5	152.0	344.8	0.0	425.0	579.6	830.1	801.6	76.5	612.2	281.9
V/C Ratio(X)	0.828	0.196	0.000	1.185	0.000	0.719	0.934	0.491	0.492	0.781	0.742	0.000
Avail Cap(c_a), veh/h	167.6	300.7	250.6	344.8	0.0	425.0	626.5	830.1	801.6	154.9	612.2	281.9
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(I)	0.933	0.933	0.000	1.000	0.000	1.000	0.674	0.674	0.674	1.000	1.000	0.000
Uniform Delay (d), s/veh	44.9	42.1	0.0	38.0	0.0	34.8	38.6	25.6	25.6	47.8	39.3	0.0
Incr Delay (d2), s/veh	14.7	0.5	0.0	108.6	0.0	5.8	15.4	1.4	1.5	15.7	7.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	59.6	42.6	0.0	146.7	0.0	40.6	54.0	27.0	27.1	63.5	47.3	0.0
Lane Group LOS	E	D		F		D	D	C	C	E	D	
Approach Volume, veh/h		120			714			1343			514	
Approach Delay, s/veh		54.5			101.3			37.9			49.2	
Approach LOS		D			F			D			D	

Timer								
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		13.71			29.00		36.38	49.93		8.45	22.00	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			25.00		35.00	44.00		9.00	18.00	
Max Q Clear Time (g_c+I1), s		9.89			27.00		31.70	20.47		5.44	14.66	
Green Extension Time (p_c)		0.16			0.00		0.67	9.05		0.03	2.26	

Intersection Summary								
HCM 2010 Control Delay			57.6					
HCM 2010 Level of Service			E					

Intersection	
Intersection Delay (sec/veh):	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	790	21	43	473	5	19
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.95	0.66	0.60	0.86	0.63	0.68
Heavy Vehicles(%)	4	19	0	2	20	16
Movement Flow Rate	832	32	72	550	8	28
Number of Lanes	1	0	0	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	864	0	1542	848
Stage 1	-	-	-	-	848	-
Stage 2	-	-	-	-	694	-
Follow-up Headway	-	-	2.2	-	3.68	3.444
Pot Capacity-1 Maneuver	-	-	*583	-	*68	*583
Stage 1	-	-	-	-	*583	-
Stage 2	-	-	-	-	*483	-
Time blocked-Platoon(%)	-	-	61	-	38	61
Mov Capacity-1 Maneuver	-	-	*583	-	*56	*583
Mov Capacity-2 Maneuver	-	-	-	-	*56	-
Stage 1	-	-	-	-	*583	-
Stage 2	-	-	-	-	*397	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	1.4	28.5
HCM LOS	A	A	D

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	*189				
HCM Control Delay (s)	28.5	-	-	12.039	-
HCM Lane VC Ratio	0.19	-	-	0.123	-
HCM Lane LOS	D	-	-	B	-
HCM 95th Percentile Queue (veh)	0.679	-	-	0.418	-

Intersection	
Intersection Delay (sec/veh):	159.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	2	744	68	135	499	1	17	0	51	0	0	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.97	0.77	0.78	0.90	0.92	0.61	0.92	0.67	0.92	0.92	0.92
Heavy Vehicles(%)	2	4	2	0	2	2	0	2	2	2	2	2
Movement Flow Rate	2	767	88	173	554	1	28	0	76	0	0	1
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	555	0	0	855	0	0	1716	1716	811	1754	1760	555
Stage 1	-	-	-	-	-	-	815	815	-	901	901	-
Stage 2	-	-	-	-	-	-	901	901	-	853	859	-
Follow-up Headway	2.218	-	-	2.2	-	-	3.5	4.018	3.318	3.518	4.018	3.318
Pot Capacity-1 Maneuver	*938	-	-	*623	-	-	*# 7	*9	*623	*5	*7	*938
Stage 1	-	-	-	-	-	-	*623	*623	-	*328	*326	-
Stage 2	-	-	-	-	-	-	*330	*325	-	*623	*623	-
Time blocked-Platoon(%)	37	-	-	58	-	-	74	74	58	74	74	37
Mov Capacity-1 Maneuver	*938	-	-	*623	-	-	*# 5	*6	*623	*3	*4	*938
Mov Capacity-2 Maneuver	-	-	-	-	-	-	*# 5	*6	-	*3	*4	-
Stage 1	-	-	-	-	-	-	*620	*620	-	*327	*195	-
Stage 2	-	-	-	-	-	-	*197	*194	-	*544	*620	-

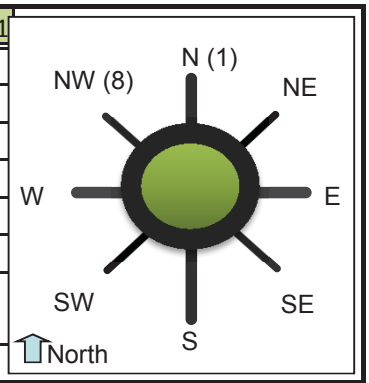
Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	3.1	$ 2574.2	8.8
HCM LOS	A	A	F	A

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	*18							*938
HCM Control Delay (s)	$ 2574.2	8.847	0	-	12.986	0	-	8.8
HCM Lane VC Ratio	5.777	0.002	-	-	0.278	-	-	0.001
HCM Lane LOS	F	A	A	-	B	A	-	A
HCM 95th Percentile Queue (veh)	13.613	0.007	-	-	1.131	-	-	0.003

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	Existing, AM
County/District:	Anne Arundel, MD
Intersection:	Laurel Fort Meade Rd. and MD 32 East Existing AM Peak



Volumes

	Entry Legs (FROM)							
	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph								
NE (2), vph								
E (3), vph								
SE (4), vph	34							
S (5), vph								
SW (6), vph	378	464						
W (7), vph								
NW (8), vph								
Entry Volume, vph	412	464	0	0	0	0	0	0

Exit Legs (TO)

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph			602					
NE (2), vph								
E (3), vph								
SE (4), vph							349	
S (5), vph								
SW (6), vph							56	
W (7), vph								
NW (8), vph								
Entry Volume, vph	0	0	602	0	0	0	405	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	0	0	1	0	1
# of Conflict Flow Lanes	1	2	2	2	1	1	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	1.000	1.000	0.952	1.000	0.952
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	0	0	687	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	39	0	0	0	0	0	0	398
	S (5), pcu/h	0	0	0	0	0	0	0	0
	SW (6), pcu/h	961	0	0	0	0	0	0	64
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1000	0	0	0	0	687	0	462
	Entry flow Lane 1, pcu/h	470	0	0	0	0	687	0	462
	Entry flow Lane 2, pcu/h	530	0	0	0	0	0	0	0
	Conflicting flow, pcu/h	0	0	0	0	0	437	0	1000

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1076	1076	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	448	504	NA	NA	NA	NA	NA	NA
V/C ratio	**0.42**	**0.47**			#VALUE!	#VALUE!		
Control Delay, s/veh	**7.8**	**8.6**			#VALUE!	#VALUE!		
LOS	A	A			#VALUE!	#VALUE!		
95th % Queue (ft)	**55**	**67**			#VALUE!	#VALUE!		
Approach Delay, LOS	8.2 sec, LOS A				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	793	NA	535	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	654	NA	440	NA
V/C ratio			#VALUE!	#VALUE!	**0.83**		**0.82**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**26.2**		**35.0**	#VALUE!
LOS			#VALUE!	#VALUE!	D		D	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**243**		**216**	#VALUE!
Approach Delay, LOS			#VALUE!		26.2 sec, LOS D		35 sec, LOS D	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1371	1371	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	448	504	NA	NA	NA	NA	NA	NA
V/C ratio	**0.33**	**0.37**			#VALUE!	#VALUE!		
Control Delay, s/veh	**5.5**	**6.0**			#VALUE!	#VALUE!		
LOS	A	A			#VALUE!	#VALUE!		
95th % Queue (ft)	**38**	**45**			#VALUE!	#VALUE!		
Approach Delay, LOS	5.8 sec, LOS A				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	1054	NA	635	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	654	NA	440	NA
V/C ratio			#VALUE!	#VALUE!	**0.62**		**0.69**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**11.9**		**20.9**	#VALUE!
LOS			#VALUE!	#VALUE!	B		C	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**118**		**145**	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

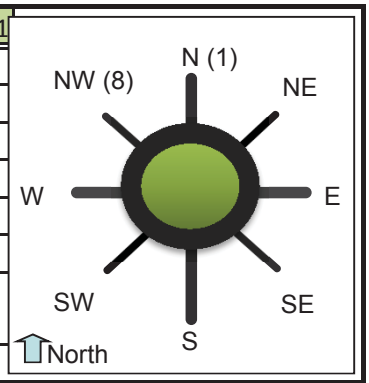
Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	Existing, AM
County/District:	Anne Arundel, MD
Intersection:	Mapes Rd. and MD 32 West Existing AM Peak



Volumes

	Entry Legs (FROM)							
	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
Exit Legs (TO) N (1), vph								69
NE (2), vph								
E (3), vph								
SE (4), vph								
S (5), vph	111						443	289
SW (6), vph								
W (7), vph		124						34
NW (8), vph								
Entry Volume, vph	111	124	0	0	0	0	443	392

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph	833							
NE (2), vph								
E (3), vph								
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph	99							
NW (8), vph								
Entry Volume, vph	932	0	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	2	1	0	0	0
# of Conflict Flow Lanes	2	2	2	2	1	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	0.952	0.952	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	79	951	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	127	0	0	835	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	142	0	0	39	113	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	268	0	0	953	1064	0	0	0
	Entry flow Lane 1, pcu/h	127	0	0	506	1064	0	0	0
	Entry flow Lane 2, pcu/h	142	0	0	447	0	0	0	0
	Conflicting flow, pcu/h	987	0	0	1064	0	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	513	539	NA	NA	1076	NA	NA	NA
Entry Flow Rates, veh/h	121	135	NA	NA	1013	NA	NA	NA
V/C ratio	**0.24**	**0.25**			**0.94**	#VALUE!		
Control Delay, s/veh	**10.3**	**10.1**			**34.7**	#VALUE!		
LOS	B	B			D	#VALUE!		
95th % Queue (ft)	**24**	**26**			**418**	#VALUE!		
Approach Delay, LOS	10.2 sec, LOS B				34.7 sec, LOS D			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	485	511	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	482	426	NA	NA	NA	NA
V/C ratio			**0.99**	**0.83**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**68.6**	**37.4**			#VALUE!	#VALUE!
LOS			F	E			#VALUE!	#VALUE!
95th % Queue (ft)			**348**	**220**			#VALUE!	#VALUE!
Approach Delay, LOS			53.9 sec, LOS F				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	582	642	NA	NA	1562	NA	NA	NA
Entry Flow Rates, veh/h	121	135	NA	NA	1013	NA	NA	NA
V/C ratio	**0.21**	**0.21**			**0.65**	#VALUE!		
Control Delay, s/veh	**8.8**	**8.1**			**9.7**	#VALUE!		
LOS	A	A			A	#VALUE!		
95th % Queue (ft)	**20**	**21**			**135**	#VALUE!		
Approach Delay, LOS	8.5 sec, LOS A				9.7 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	539	600	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	482	426	NA	NA	NA	NA
V/C ratio			**0.89**	**0.71**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**44.2**	**22.9**			#VALUE!	#VALUE!
LOS			E	C			#VALUE!	#VALUE!
95th % Queue (ft)			**271**	**152**			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	100	52	225	323	159	143	598	77	55	469	263
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1881	1759	1900	1894	1894	1845	1827	1792	1863	1853	1853
Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Capacity, veh/h	269	486	386	632	405	185	242	1037	455	287	504	428
Arriving On Green	0.06	0.26	0.26	0.13	0.33	0.33	0.07	0.30	0.00	0.04	0.27	0.27
Sat Flow, veh/h	1809.5	1495.4	1495.4	1809.5	1232.8	562.1	1756.8	1523.6	1523.6	1774.0	1853.1	1575.1
Grp Volume(v), veh/h	100.0	112.4	64.2	288.5	0.0	534.4	172.3	695.3	0.0	67.9	521.1	302.3
Grp Sat Flow(s),veh/h/ln	1809.5	1881.2	1495.4	1809.5	0.0	1794.9	1756.8	1735.6	1523.6	1774.0	1853.1	1575.1
Q Serve(g_s), s	2.3	2.8	2.0	5.7	0.0	16.7	4.0	10.3	0.0	1.6	16.0	10.2
Cycle Q Clear(g_c), s	2.3	2.8	2.0	5.7	0.0	16.7	4.0	10.3	0.0	1.6	16.0	10.2
Proportion In Lane	1.000		1.000	1.000		0.313	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	268.8	486.0	386.3	631.8	0.0	589.7	241.8	1037.3	455.3	287.3	504.0	428.4
V/C Ratio(X)	0.372	0.231	0.166	0.457	0.000	0.906	0.712	0.670	0.000	0.236	1.034	0.706
Avail Cap(c_a), veh/h	284.2	511.7	406.7	643.2	0.0	610.2	241.8	1037.3	455.3	334.9	504.0	428.4
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	16.0	17.2	16.9	9.9	0.0	18.9	15.8	18.1	0.0	15.1	21.4	19.3
Incr Delay (d2), s/veh	0.9	0.2	0.2	0.5	0.0	16.9	9.4	1.7	0.0	0.4	49.1	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	16.9	17.4	17.1	10.4	0.0	35.8	25.3	19.8	0.0	15.6	70.5	24.5
Lane Group LOS	B	B	B	B		D	C	B		B	F	C
Approach Volume, veh/h		277			823			868			891	
Approach Delay, s/veh		17.2			26.9			20.9			50.7	
Approach LOS		B			C			C			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	7.50	19.20		11.63	23.33		8.00	21.58		6.42	20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	16.00		8.00	20.00		4.00	16.00		4.00	16.00	
Max Q Clear Time (g_c+I1), s	4.35	4.77		7.66	18.75		6.00	12.33		3.61	18.00	
Green Extension Time (p_c)	0.00	3.43		0.03	0.58		0.00	2.80		0.00	0.00	

Intersection Summary		
HCM 2010 Control Delay		31.6
HCM 2010 Level of Service		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	82	531	248	91	856	98	176	60	36	229	302	394
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1696	1827	1900	1845	1845	1776	1863	1805	1805	1845	1900	1863
Lanes	1	2	1	1	1	1	1	2	0	1	2	1
Capacity, veh/h	181	1825	849	490	979	801	291	323	274	386	646	283
Arriving On Green	0.04	0.53	0.00	0.05	0.53	0.53	0.07	0.18	0.18	0.07	0.18	0.18
Sat Flow, veh/h	1615.6	1615.0	1615.0	1756.8	1509.3	1509.3	1774.0	1804.6	1533.9	1756.8	1583.3	1583.3
Grp Volume(v), veh/h	115.5	647.6	0.0	116.7	930.4	136.1	217.3	63.8	48.0	272.6	355.3	437.8
Grp Sat Flow(s),veh/h/ln	1615.6	1735.6	1615.0	1756.8	1844.7	1509.3	1774.0	1804.6	1533.9	1756.8	1805.0	1583.3
Q Serve(g_s), s	3.0	9.7	0.0	2.7	42.7	4.2	6.0	2.7	2.4	6.0	8.0	16.0
Cycle Q Clear(g_c), s	3.0	9.7	0.0	2.7	42.7	4.2	6.0	2.7	2.4	6.0	8.0	16.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	181.5	1825.0	849.1	489.6	978.6	800.7	290.6	322.8	274.4	386.3	645.7	283.2
V/C Ratio(X)	0.636	0.355	0.000	0.238	0.951	0.170	0.748	0.198	0.175	0.706	0.550	1.546
Avail Cap(c_a), veh/h	181.5	1825.0	849.1	500.9	989.8	809.9	290.6	322.8	274.4	386.3	645.7	283.2
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	20.7	12.4	0.0	9.1	19.9	10.8	32.6	31.3	31.1	32.1	33.5	36.7
Incr Delay (d2), s/veh	7.2	0.1	0.0	0.2	17.8	0.1	10.2	0.3	0.3	5.8	1.0	262.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	27.8	12.5	0.0	9.4	37.7	10.9	42.8	31.6	31.4	37.9	34.5	299.2
Lane Group LOS	C	B		A	D	B	D	C	C	D	C	F
Approach Volume, veh/h		763			1183			329			1066	
Approach Delay, s/veh		14.8			31.9			39.0			144.1	
Approach LOS		B			C			D			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.00	51.03		8.42	51.46		10.00	20.00		10.00	20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	47.00		5.00	48.00		6.00	16.00		6.00	16.00	
Max Q Clear Time (g_c+I1), s	4.96	11.73		4.67	44.74		8.00	4.69		8.00	18.00	
Green Extension Time (p_c)	0.00	17.15		0.01	2.71		0.00	3.65		0.00	0.00	

Intersection Summary		
HCM 2010 Control Delay		64.5
HCM 2010 Level of Service		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	2	2	67	20	153	11	480	17	55	380	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1900	1881	1743	1881	1792	1863	1900	1900
Lanes	0	1	0	0	1	1	1	1	1	1	1	1
Capacity, veh/h	7	7	13	196	55	220	26	998	808	119	1106	940
Arriving On Green	0.02	0.02	0.02	0.14	0.14	0.14	0.02	0.53	0.53	0.02	0.19	0.19
Sat Flow, veh/h	431.5	431.5	863.1	1426.8	401.9	1599.0	1660.1	1523.6	1523.6	1774.0	1615.0	1615.0
Grp Volume(v), veh/h	16.0	0.0	0.0	128.2	0.0	159.4	15.9	545.5	20.0	91.7	436.8	24.2
Grp Sat Flow(s),veh/h/ln	1726.1	0.0	0.0	1828.7	0.0	1599.0	1660.1	1881.2	1523.6	1774.0	1900.0	1615.0
Q Serve(g_s), s	0.6	0.0	0.0	4.2	0.0	6.1	0.6	12.3	0.4	3.3	12.9	0.8
Cycle Q Clear(g_c), s	0.6	0.0	0.0	4.2	0.0	6.1	0.6	12.3	0.4	3.3	12.9	0.8
Proportion In Lane	0.250		0.500	0.780		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	26.7	0.0	0.0	251.4	0.0	219.8	25.6	997.9	808.2	118.9	1105.8	940.0
V/C Ratio(X)	0.599	0.000	0.000	0.510	0.000	0.725	0.623	0.547	0.025	0.771	0.395	0.026
Avail Cap(c_a), veh/h	430.9	0.0	0.0	456.5	0.0	399.1	103.6	997.9	808.2	221.4	1126.4	957.4
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	0.844	0.844	0.844
Uniform Delay (d), s/veh	31.4	0.0	0.0	25.6	0.0	26.5	31.4	10.0	7.2	30.9	16.0	11.1
Incr Delay (d2), s/veh	19.6	0.0	0.0	1.6	0.0	4.5	22.2	0.6	0.0	8.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	51.0	0.0	0.0	27.2	0.0	31.0	53.5	10.6	7.2	39.4	16.2	11.1
Lane Group LOS	D			C		C	D	B	A	D	B	B
Approach Volume, veh/h		16			288			581			553	
Approach Delay, s/veh		51.0			29.3			11.6			19.8	
Approach LOS		D			C			B			B	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		4.99			12.81		4.99	38.00		8.29	41.31	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		4.00	34.00		8.00	38.00	
Max Q Clear Time (g_c+I1), s		2.59			8.12		2.61	14.29		5.29	14.88	
Green Extension Time (p_c)		0.02			0.74		0.00	6.61		0.04	7.03	

Intersection Summary												
HCM 2010 Control Delay			18.8									
HCM 2010 Level of Service			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	62	94	332	273	19	159	87	66	90	138	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1863	1881	1900	1900	1900	1900	1881	1845	1900	1887	1887
Lanes	1	2	1	1	1	1	1	1	1	1	1	0
Capacity, veh/h	514	1343	607	830	956	813	335	401	334	365	210	95
Arriving On Green	0.01	0.38	0.00	0.14	0.50	0.00	0.03	0.07	0.00	0.06	0.17	0.17
Sat Flow, veh/h	1809.5	1599.0	1599.0	1809.5	1615.0	1615.0	1809.5	1568.0	1568.0	1809.5	1234.1	554.9
Grp Volume(v), veh/h	12.1	79.5	0.0	400.0	350.0	0.0	184.9	164.2	0.0	95.7	0.0	232.6
Grp Sat Flow(s),veh/h/ln	1809.5	1769.6	1599.0	1809.5	1900.0	1615.0	1809.5	1881.2	1568.0	1809.5	0.0	1789.1
Q Serve(g_s), s	0.3	1.1	0.0	7.2	8.5	0.0	5.7	6.3	0.0	3.2	0.0	9.4
Cycle Q Clear(g_c), s	0.3	1.1	0.0	7.2	8.5	0.0	5.7	6.3	0.0	3.2	0.0	9.4
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		0.310
Lane Grp Cap(c), veh/h	514.3	1343.3	606.9	829.9	955.9	812.5	335.5	400.8	334.1	364.9	0.0	304.9
V/C Ratio(X)	0.023	0.059	0.000	0.482	0.366	0.000	0.551	0.410	0.000	0.262	0.000	0.763
Avail Cap(c_a), veh/h	588.7	1343.3	606.9	1111.9	955.9	812.5	436.9	672.5	560.5	375.9	0.0	473.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	0.874	0.874	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	14.1	14.9	0.0	6.9	11.4	0.0	21.8	30.6	0.0	23.7	0.0	29.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.2	0.0	1.2	0.6	0.0	0.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	14.1	14.9	0.0	7.3	11.7	0.0	23.1	31.1	0.0	24.1	0.0	33.8
Lane Group LOS	B	B		A	B		C	C		C		C
Approach Volume, veh/h		92			750			349			328	
Approach Delay, s/veh		14.8			9.4			26.9			31.0	
Approach LOS		B			A			C			C	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	4.89	32.67		14.23	42.00		11.77	20.09		8.54	16.87	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	20.00		22.00	38.00		12.00	27.00		5.00	20.00	
Max Q Clear Time (g_c+I1), s	2.31	3.08		9.18	10.47		7.74	8.31		5.25	11.36	
Green Extension Time (p_c)	0.00	2.40		1.05	2.77		0.19	2.22		0.00	1.51	

Intersection Summary												
HCM 2010 Control Delay			18.4									
HCM 2010 Level of Service			B									

Intersection	
Intersection Delay (sec/veh):	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	7	118	463	29	47	39
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.44	0.89	0.83	0.73	0.69	0.70
Heavy Vehicles(%)	0	2	0	0	0	0
Movement Flow Rate	16	133	558	40	68	56
Number of Lanes	0	2	2	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	598	0	0	0	677	299
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	99	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1242	-	-	-	642	*1246
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	920	-
Time blocked-Platoon(%)	17	-	-	-	17	17
Mov Capacity-1 Maneuver	1242	-	-	-	633	*1246
Mov Capacity-2 Maneuver	-	-	-	-	633	-
Stage 1	-	-	-	-	777	-
Stage 2	-	-	-	-	907	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.9	0	10.2
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					813
HCM Control Delay (s)	7.936	-	-	-	10.2
HCM Lane VC Ratio	0.013	-	-	-	0.152
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.039	-	-	-	0.536

Intersection	
Intersection Delay (sec/veh):	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	105	24	159	342	16	21
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.88	0.60	0.81	0.81	0.57	0.75
Heavy Vehicles(%)	2	0	0	0	0	0
Movement Flow Rate	119	40	196	422	28	28
Number of Lanes	2	0	0	2	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	159	0	742	80
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	603	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1433	-	468	971
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	639	-
Time blocked-Platoon(%)	-	-	0	-	11	0
Mov Capacity-1 Maneuver	-	-	1433	-	384	971
Mov Capacity-2 Maneuver	-	-	-	-	384	-
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	524	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	2.5	12.3
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	550				
HCM Control Delay (s)	12.3	-	-	7.911	-
HCM Lane VC Ratio	0.102	-	-	0.137	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	0.339	-	-	0.475	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	180	5	4	755	84	207	29	6	413	43	195
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1882	1882	1900	1900	1900	1881	1900	1900	1881	1873	1873
Lanes	1	1	0	1	1	1	1	1	0	1	1	0
Capacity, veh/h	248	856	51	588	895	761	355	224	63	568	66	259
Arriving On Green	0.02	0.49	0.49	0.02	0.94	0.94	0.14	0.16	0.16	0.18	0.20	0.20
Sat Flow, veh/h	1809.5	1759.1	104.7	1809.5	1615.0	1615.0	1791.6	1425.3	403.5	1791.6	332.9	1309.4
Grp Volume(v), veh/h	31.9	0.0	211.9	8.0	858.0	100.0	268.8	0.0	71.6	573.6	0.0	294.7
Grp Sat Flow(s),veh/h/ln	1809.5	0.0	1863.8	1809.5	1900.0	1615.0	1791.6	0.0	1828.8	1791.6	0.0	1642.3
Q Serve(g_s), s	0.9	0.0	6.4	0.2	26.3	0.4	12.1	0.0	3.4	18.0	0.0	17.1
Cycle Q Clear(g_c), s	0.9	0.0	6.4	0.2	26.3	0.4	12.1	0.0	3.4	18.0	0.0	17.1
Proportion In Lane	1.000		0.056	1.000		1.000	1.000		0.221	1.000		0.797
Lane Grp Cap(c), veh/h	248.4	0.0	907.3	588.4	895.0	760.8	355.3	0.0	287.2	568.0	0.0	325.1
V/C Ratio(X)	0.128	0.000	0.234	0.014	0.959	0.131	0.757	0.000	0.249	1.010	0.000	0.906
Avail Cap(c_a), veh/h	279.6	0.0	907.3	648.1	895.0	760.8	355.3	0.0	299.6	568.0	0.0	336.4
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	16.1	0.0	14.5	13.3	2.3	1.5	29.2	0.0	36.1	29.5	0.0	38.3
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.0	20.6	0.1	9.0	0.0	0.4	40.3	0.0	26.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	16.3	0.0	14.6	13.3	22.9	1.6	38.2	0.0	36.6	69.7	0.0	64.8
Lane Group LOS	B		B	B	C	A	D		D	F		E
Approach Volume, veh/h		244			966			340			868	
Approach Delay, s/veh		14.9			20.6			37.9			68.0	
Approach LOS		B			C			D			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	6.32	51.54		4.78	50.00		18.00	19.33		22.00	23.33	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	46.00		4.00	46.00		14.00	16.00		18.00	20.00	
Max Q Clear Time (g_c+I1), s	2.86	8.43		2.23	28.33		14.06	5.35		20.00	19.12	
Green Extension Time (p_c)	0.00	10.43		0.00	7.79		0.00	1.68		0.00	0.21	

Intersection Summary												
HCM 2010 Control Delay			39.5									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	774	7	40	681	12	42	2	176	79	6	82
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1881	1900	1863	1881	1863	1898	1898	1881	1863	1863	1863
Lanes	1	1	1	1	1	1	0	1	1	0	1	1
Capacity, veh/h	566	1392	1195	501	1308	1101	70	2	288	69	3	285
Arriving On Green	0.01	0.98	0.00	1.00	1.00	0.00	0.18	0.18	0.00	0.18	0.18	0.00
Sat Flow, veh/h	1774.0	1615.0	1615.0	616.4	1881.2	1583.3	9.2	0.4	1599.0	14.6	1.1	1583.3
Grp Volume(v), veh/h	4.3	900.0	0.0	56.3	765.2	0.0	49.9	0.0	0.0	92.4	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1881.2	1615.0	616.4	1881.2	1583.3	9.6	0.0	1599.0	15.7	0.0	1583.3
Q Serve(g_s), s	0.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	2.1	0.0	0.0	0.0	0.0	18.0	0.0	0.0	18.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.956		1.000	0.929		1.000
Lane Grp Cap(c), veh/h	566.4	1392.1	1195.1	500.7	1308.3	1101.1	72.2	0.0	287.8	72.3	0.0	285.0
V/C Ratio(X)	0.008	0.647	0.000	0.113	0.585	0.000	0.692	0.000	0.000	1.278	0.000	0.000
Avail Cap(c_a), veh/h	629.3	1392.1	1195.1	500.7	1308.3	1101.1	72.2	0.0	287.8	72.3	0.0	285.0
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.585	0.585	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	3.9	0.2	0.0	0.0	0.0	0.0	49.4	0.0	0.0	49.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.1	0.4	0.0	24.5	0.0	0.0	197.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	3.9	1.3	0.0	0.1	0.4	0.0	73.9	0.0	0.0	246.9	0.0	0.0
Lane Group LOS	A	A		A	A		E			F		
Approach Volume, veh/h		904			822			50			92	
Approach Delay, s/veh		1.3			0.4			73.9			246.9	
Approach LOS		A			A			E			F	

Timer												
Assigned Phase	5	2			6			8			4	
Phase Duration (G+Y+Rc), s	4.46	78.00			73.54			22.00			22.00	
Change Period (Y+Rc), s	4.00	4.00			4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	74.00			66.00			18.00			18.00	
Max Q Clear Time (g_c+I1), s	2.07	4.08			2.00			20.00			20.00	
Green Extension Time (p_c)	0.00	23.88			23.34			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			15.0									
HCM 2010 Level of Service			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	351	727	17	25	341	41	31	120	83	152	47	441
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1900	1900	1900	1881	1863	1900	1900	1881	1881	1827	1881
Lanes	1	1	1	1	1	1	0	1	1	1	1	1
Capacity, veh/h	447	969	823	50	542	456	71	186	219	182	284	249
Arriving On Green	0.50	1.00	1.00	0.03	0.29	0.29	0.14	0.14	0.00	0.16	0.16	0.00
Sat Flow, veh/h	1791.6	1615.0	1615.0	1809.5	1583.3	1583.3	518.5	1355.5	1599.0	1172.6	1826.9	1599.0
Grp Volume(v), veh/h	422.9	865.5	36.2	39.7	378.9	56.2	215.5	0.0	0.0	160.0	64.4	0.0
Grp Sat Flow(s),veh/h/ln	1791.6	1900.0	1615.0	1809.5	1881.2	1583.3	1874.1	0.0	1599.0	1172.6	1826.9	1599.0
Q Serve(g_s), s	21.1	0.0	0.0	2.1	16.9	2.5	10.6	0.0	0.0	12.6	2.9	0.0
Cycle Q Clear(g_c), s	21.1	0.0	0.0	2.1	16.9	2.5	10.6	0.0	0.0	12.6	2.9	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.277		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	447.4	968.6	823.3	50.3	541.6	455.8	256.8	0.0	219.1	182.3	284.0	248.5
V/C Ratio(X)	0.945	0.894	0.044	0.789	0.700	0.123	0.839	0.000	0.000	0.878	0.227	0.000
Avail Cap(c_a), veh/h	494.7	968.6	823.3	76.9	541.6	455.8	318.5	0.0	271.7	199.3	310.5	271.7
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.771	0.771	0.771	0.875	0.875	0.875	1.000	0.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	23.0	0.0	0.0	45.5	29.9	24.8	39.6	0.0	0.0	38.9	34.8	0.0
Incr Delay (d2), s/veh	21.9	8.5	0.0	22.8	3.5	0.1	14.9	0.0	0.0	31.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.9	8.5	0.0	68.3	33.4	24.9	54.5	0.0	0.0	70.1	35.2	0.0
Lane Group LOS	D	A	A	E	C	C	D			E	D	
Approach Volume, veh/h		1325			475			215			224	
Approach Delay, s/veh		19.9			35.3			54.5			60.1	
Approach LOS		B			D			D			E	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	27.51	52.00		6.62	31.10			16.90			18.63	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	26.00	48.00		4.00	26.00			16.00			16.00	
Max Q Clear Time (g_c+I1), s	23.07	2.00		4.05	18.91			12.55			14.56	
Green Extension Time (p_c)	0.44	12.99		0.00	4.64			0.35			0.11	

Intersection Summary	
HCM 2010 Control Delay	30.5
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	564	73	51	107	6	123	65	296	29	35	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1863	1883	1883	1863	1875	1875	1900	1847	1847
Lanes	0	1	1	1	1	0	1	1	0	1	1	0
Capacity, veh/h	69	948	854	572	1040	117	378	73	391	84	151	318
Arriving On Green	1.00	1.00	1.00	0.05	0.62	0.62	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	88.1	1733.7	1599.0	1774.0	1663.6	186.6	1275.7	255.4	1377.0	945.1	531.3	1118.0
Grp Volume(v), veh/h	665.9	0.0	92.4	56.0	0.0	156.6	189.2	0.0	461.7	43.9	0.0	112.0
Grp Sat Flow(s),veh/h/ln	1821.8	0.0	1599.0	1774.0	0.0	1850.2	1275.7	0.0	1632.4	945.1	0.0	1649.3
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	3.1	11.8	0.0	24.8	0.2	0.0	4.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	1.1	0.0	3.1	16.4	0.0	24.8	25.0	0.0	4.6
Proportion In Lane	0.048		1.000	1.000		0.101	1.000		0.844	1.000		0.678
Lane Grp Cap(c), veh/h	1016.2	0.0	854.2	571.8	0.0	1156.2	377.8	0.0	463.9	83.6	0.0	468.7
V/C Ratio(X)	0.655	0.000	0.108	0.098	0.000	0.135	0.501	0.000	0.995	0.526	0.000	0.239
Avail Cap(c_a), veh/h	1016.2	0.0	854.2	814.2	0.0	1409.0	377.8	0.0	463.9	83.6	0.0	468.7
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.563	0.000	0.563	0.752	0.000	0.752	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	0.0	0.0	0.0	7.2	0.0	6.8	30.5	0.0	31.4	44.0	0.0	24.2
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.1	0.0	0.0	1.0	0.0	40.5	6.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	0.9	0.0	0.0	7.3	0.0	6.8	31.5	0.0	71.9	49.9	0.0	24.4
Lane Group LOS	A		A	A		A	C		E	D		C
Approach Volume, veh/h		758			213			651			156	
Approach Delay, s/veh		0.8			6.9			60.2			31.6	
Approach LOS		A			A			E			C	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		51.00		7.98	58.98			29.00			29.00	
Change Period (Y+Rc), s		4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s		47.00		16.00	67.00			25.00			25.00	
Max Q Clear Time (g_c+I1), s		2.00		3.14	5.05			26.84			27.00	
Green Extension Time (p_c)		7.17		0.07	7.30			0.00			0.00	

Intersection Summary	
HCM 2010 Control Delay	26.0
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	62	316	311	0	177	1	822	487	253	1164	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1881	0	1881	1900	1863	1900	1881	1881	0
Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Capacity, veh/h	308	323	272	212	0	256	8	1026	468	394	1808	0
Arriving On Green	0.17	0.17	0.00	0.16	0.00	0.16	0.00	0.29	0.00	0.07	0.17	0.00
Sat Flow, veh/h	1809.5	1900.0	1599.0	1326.8	0.0	1599.0	1809.5	1615.0	1615.0	1791.6	0.0	0.0
Grp Volume(v), veh/h	116.5	79.5	0.0	379.3	0.0	198.9	4.0	883.9	0.0	377.6	1265.2	0.0
Grp Sat Flow(s),veh/h/ln	1809.5	1900.0	1599.0	1326.8	0.0	1599.0	1809.5	1769.6	1615.0	1791.6	1787.1	0.0
Q Serve(g_s), s	5.7	3.6	0.0	16.0	16.0	11.9	0.2	23.6	0.0	21.0	33.4	50.6
Cycle Q Clear(g_c), s	5.7	3.6	0.0	16.0	16.0	11.9	0.2	23.6	0.0	21.0	33.4	50.6
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	307.6	323.0	271.8	212.3	0.0	255.8	7.6	1026.4	468.3	394.2	1807.8	0.0
V/C Ratio(X)	0.379	0.246	0.000	1.787	0.000	0.777	0.526	0.861	0.000	0.958	0.700	0.000
Avail Cap(c_a), veh/h	307.6	323.0	271.8	212.3	0.0	255.8	72.4	1026.4	468.3	394.2	1807.8	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.000	1.000	0.000	1.000	0.000	1.000	1.000	1.000	0.000	0.419	0.419	0.000
Uniform Delay (d), s/veh	36.8	35.9	0.0	42.0	0.0	40.3	49.7	33.6	0.0	45.9	34.5	0.0
Incr Delay (d2), s/veh	3.5	1.8	0.0	372.2	0.0	20.4	46.5	7.6	0.0	19.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	40.3	37.8	0.0	414.2	0.0	60.7	96.2	41.2	0.0	65.8	35.0	0.0
Lane Group LOS	D	D		F		E	F	D		E	D	
Approach Volume, veh/h		196			578			888			1643	
Approach Delay, s/veh		39.3			292.6			41.4			42.1	
Approach LOS		D			F			D			D	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		21.00			20.00		4.42	33.00		26.00	54.58	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		17.00			16.00		4.00	29.00		22.00	47.00	
Max Q Clear Time (g_c+I1), s		7.71			18.00		2.22	25.63		23.01	35.39	
Green Extension Time (p_c)		0.46			0.00		0.00	3.05		0.00	9.56	

Intersection Summary												
HCM 2010 Control Delay			85.6									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	215	87	451	164	22	85	123	744	274	145	847	28
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1887	1887	1863	1872	1872	1881	1863	1900
Lanes	1	1	1	1	1	0	1	2	0	1	2	1
Capacity, veh/h	351	532	452	210	63	203	241	873	308	211	1133	517
Arriving On Green	0.09	0.09	0.00	0.16	0.16	0.16	0.03	0.11	0.11	0.07	0.32	0.00
Sat Flow, veh/h	1254.2	1900.0	1615.0	1311.2	393.3	1269.8	1774.0	2646.7	933.2	1791.6	1615.0	1615.0
Grp Volume(v), veh/h	294.5	103.6	0.0	180.2	0.0	152.5	175.7	571.9	522.3	172.6	1008.3	0.0
Grp Sat Flow(s),veh/h/ln	1254.2	1900.0	1615.0	1311.2	0.0	1663.0	1774.0	1872.3	1707.6	1791.6	1769.6	1615.0
Q Serve(g_s), s	23.1	5.0	0.0	13.4	0.0	8.5	6.4	30.3	30.3	6.5	27.1	0.0
Cycle Q Clear(g_c), s	23.1	5.0	0.0	13.4	0.0	8.5	6.4	30.3	30.3	6.5	27.1	0.0
Proportion In Lane	1.000		1.000	1.000		0.764	1.000		0.547	1.000		1.000
Lane Grp Cap(c), veh/h	351.2	532.0	452.2	209.8	0.0	266.1	241.2	617.9	563.5	211.3	1132.5	516.8
V/C Ratio(X)	0.839	0.195	0.000	0.859	0.000	0.573	0.728	0.926	0.927	0.817	0.890	0.000
Avail Cap(c_a), veh/h	351.2	532.0	452.2	209.8	0.0	266.1	241.2	617.9	563.5	211.3	1132.5	516.8
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	43.2	35.0	0.0	40.9	0.0	38.8	25.8	43.3	43.4	25.6	32.3	0.0
Incr Delay (d2), s/veh	20.7	0.8	0.0	34.0	0.0	8.7	17.5	21.9	23.6	28.3	10.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	63.9	35.8	0.0	74.9	0.0	47.5	43.3	65.2	66.9	53.9	42.9	0.0
Lane Group LOS	E	D		E		D	D	E	E	D	D	
Approach Volume, veh/h		398			333			1270			1181	
Approach Delay, s/veh		56.6			62.4			62.9			44.5	
Approach LOS		E			E			E			D	

Timer												
Assigned Phase		2			6		3	8		7	4	
Phase Duration (G+Y+Rc), s		32.00			20.00		12.00	37.00		11.00	36.00	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		28.00			16.00		8.00	33.00		7.00	32.00	
Max Q Clear Time (g_c+I1), s		25.10			15.39		8.39	32.31		8.50	29.09	
Green Extension Time (p_c)		0.45			0.10		0.00	0.64		0.00	2.61	

Intersection Summary												
HCM 2010 Control Delay			55.2									
HCM 2010 Level of Service			E									

Intersection	
Intersection Delay (sec/veh):	10.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	586	3	16	814	18	60
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.92	0.75	0.80	0.96	0.75	0.79
Heavy Vehicles(%)	1	0	12	1	0	2
Movement Flow Rate	637	4	20	848	24	76
Number of Lanes	1	0	0	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	641	0	1527	639
Stage 1	-	-	-	-	639	-
Stage 2	-	-	-	-	888	-
Follow-up Headway	-	-	2.308	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	*838	-	*28	*838
Stage 1	-	-	-	-	*838	-
Stage 2	-	-	-	-	*535	-
Time blocked-Platoon(%)	-	-	44	-	76	44
Mov Capacity-1 Maneuver	-	-	*838	-	*26	*838
Mov Capacity-2 Maneuver	-	-	-	-	*26	-
Stage 1	-	-	-	-	*838	-
Stage 2	-	-	-	-	*511	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.2	172.1
HCM LOS	A	A	F

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	*99				
HCM Control Delay (s)	172.1	-	-	9.401	-
HCM Lane VC Ratio	1.01	-	-	0.024	-
HCM Lane LOS	F	-	-	A	-
HCM 95th Percentile Queue (veh)	6.182	-	-	0.073	-

Intersection	
Intersection Delay (sec/veh):	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	592	42	44	764	1	66	0	195	1	0	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.84	0.62	0.85	0.89	0.92	0.87	0.92	0.83	0.92	0.92	0.92
Heavy Vehicles(%)	2	1	0	0	1	2	0	2	0	2	2	2
Movement Flow Rate	1	705	68	52	858	1	76	0	235	1	0	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	859	0	0	773	0	0	1706	1704	739	1822	1738	859
Stage 1	-	-	-	-	-	-	741	741	-	963	963	-
Stage 2	-	-	-	-	-	-	965	963	-	859	775	-
Follow-up Headway	2.218	-	-	2.2	-	-	3.5	4.018	3.3	3.518	4.018	3.318
Pot Capacity-1 Maneuver	*621	-	-	774	-	-	# 0	0	512	# 0	0	*621
Stage 1	-	-	-	-	-	-	484	436	-	331	304	-
Stage 2	-	-	-	-	-	-	331	304	-	371	410	-
Time blocked-Platoon(%)	59	-	-	44	-	-	98	98	44	98	98	59
Mov Capacity-1 Maneuver	*621	-	-	774	-	-	# 0	0	512	# 0	0	*621
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 0	0	-	# 0	0	-
Stage 1	-	-	-	-	-	-	482	434	-	330	265	-
Stage 2	-	-	-	-	-	-	285	265	-	200	409	-

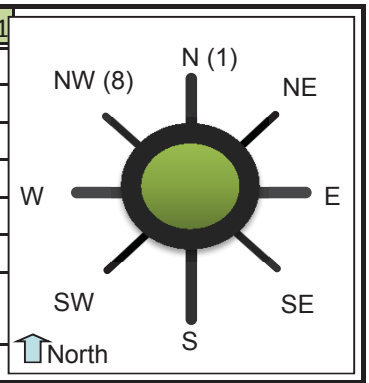
Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	0.6	22.3	10.9
HCM LOS	A	A	C	B

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	512							621
HCM Control Delay (s)	22.3	10.807	0	-	9.984	0	-	10.9
HCM Lane VC Ratio	0.607	0.002	-	-	0.067	-	-	0.011
HCM Lane LOS	C	B	A	-	A	A	-	B
HCM 95th Percentile Queue (veh)	3.999	0.005	-	-	0.215	-	-	0.032

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	Existing, PM
County/District:	Anne Arundel, MD
Intersection:	Laurel Fort Meade Rd. and MD 32 East Existing PM Peak



Volumes

	Entry Legs (FROM)							
	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph								
NE (2), vph								
E (3), vph								
SE (4), vph	281							
S (5), vph								
SW (6), vph	328	687						
W (7), vph								
NW (8), vph								
Entry Volume, vph	609	687	0	0	0	0	0	0

Exit Legs (TO)

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph			199					
NE (2), vph								
E (3), vph								
SE (4), vph							127	
S (5), vph								
SW (6), vph							141	
W (7), vph								
NW (8), vph								
Entry Volume, vph	0	0	199	0	0	0	268	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	0	0	1	0	1
# of Conflict Flow Lanes	1	2	2	2	1	1	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	1.000	1.000	0.952	1.000	0.952
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	0	0	227	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	321	0	0	0	0	0	0	145
	S (5), pcu/h	0	0	0	0	0	0	0	0
	SW (6), pcu/h	1158	0	0	0	0	0	0	161
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1479	0	0	0	0	227	0	306
	Entry flow Lane 1, pcu/h	695	0	0	0	0	227	0	306
	Entry flow Lane 2, pcu/h	784	0	0	0	0	0	0	0
	Conflicting flow, pcu/h	0	0	0	0	0	466	0	1479

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1076	1076	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	662	747	NA	NA	NA	NA	NA	NA
V/C ratio	**0.62**	**0.69**			#VALUE!	#VALUE!		
Control Delay, s/veh	**11.6**	**14.0**			#VALUE!	#VALUE!		
LOS	B	B			#VALUE!	#VALUE!		
95th % Queue (ft)	**116**	**156**			#VALUE!	#VALUE!		
Approach Delay, LOS	12.9 sec, LOS B				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	777	NA	382	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	216	NA	291	NA
V/C ratio			#VALUE!	#VALUE!	**0.28**		**0.76**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**7.8**		**37.8**	#VALUE!
LOS			#VALUE!	#VALUE!	A		E	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**30**		**163**	#VALUE!
Approach Delay, LOS			#VALUE!		7.8 sec, LOS A		37.8 sec, LOS E	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1371	1371	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	662	747	NA	NA	NA	NA	NA	NA
V/C ratio	**0.48**	**0.54**			#VALUE!	#VALUE!		
Control Delay, s/veh	**7.5**	**8.4**			#VALUE!	#VALUE!		
LOS	A	A			#VALUE!	#VALUE!		
95th % Queue (ft)	**71**	**90**			#VALUE!	#VALUE!		
Approach Delay, LOS	8 sec, LOS A				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	1027	NA	413	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	216	NA	291	NA
V/C ratio			#VALUE!	#VALUE!	**0.21**		**0.71**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**5.5**		**30.7**	#VALUE!
LOS			#VALUE!	#VALUE!	A		D	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**21**		**140**	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

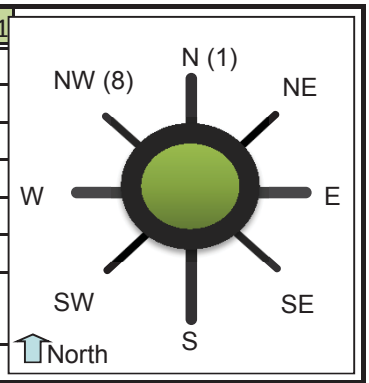
Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	Existing, PM
County/District:	Anne Arundel, MD
Intersection:	Mapes Rd. and MD 32 West Existing PM Peak



Volumes

	Entry Legs (FROM)							
	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph								15
Exit NE (2), vph								
Legs E (3), vph								
(TO) SE (4), vph								
S (5), vph	835						258	209
SW (6), vph								
W (7), vph		382						4
NW (8), vph								
Entry Volume, vph	835	382	0	0	0	0	258	228

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph	214							
NE (2), vph								
E (3), vph								
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph	97							
NW (8), vph								
Entry Volume, vph	311	0	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	2	1	0	0	0
# of Conflict Flow Lanes	2	2	2	2	1	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	0.952	0.952	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	17	244	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	953	0	0	533	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	436	0	0	5	111	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1389	0	0	555	355	0	0	0
	Entry flow Lane 1, pcu/h	953	0	0	294	355	0	0	0
	Entry flow Lane 2, pcu/h	436	0	0	260	0	0	0	0
	Conflicting flow, pcu/h	648	0	0	355	0	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	662	684	NA	NA	1076	NA	NA	NA
Entry Flow Rates, veh/h	908	415	NA	NA	338	NA	NA	NA
V/C ratio	**1.37**	**0.61**			**0.31**	#VALUE!		
Control Delay, s/veh	**195.7**	**16.1**			**6.4**	#VALUE!		
LOS	F	C			A	#VALUE!		
95th % Queue (ft)	**1033**	**108**			**36**	#VALUE!		
Approach Delay, LOS	139.3 sec, LOS F				6.4 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	825	839	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	280	248	NA	NA	NA	NA
V/C ratio			**0.34**	**0.30**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**8.3**	**7.6**			#VALUE!	#VALUE!
LOS			A	A			#VALUE!	#VALUE!
95th % Queue (ft)			**40**	**32**			#VALUE!	#VALUE!
Approach Delay, LOS			7.9 sec, LOS A				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	817	872	NA	NA	1562	NA	NA	NA
Entry Flow Rates, veh/h	908	415	NA	NA	338	NA	NA	NA
V/C ratio	**1.11**	**0.48**			**0.22**	#VALUE!		
Control Delay, s/veh	**87.6**	**10.2**			**4.0**	#VALUE!		
LOS	F	B			A	#VALUE!		
95th % Queue (ft)	**656**	**69**			**22**	#VALUE!		
Approach Delay, LOS	63.3 sec, LOS F				4 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	1095	1135	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	280	248	NA	NA	NA	NA
V/C ratio			**0.26**	**0.22**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**5.7**	**5.1**			#VALUE!	#VALUE!
LOS			A	A			#VALUE!	#VALUE!
95th % Queue (ft)			**27**	**22**			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	309	325	214	111	161	92	96	668	271	166	693	145
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1900	1900	1845	1893	1893	1881	1881	1881	1900	1884	1884
Lanes	1	1	1	1	1	0	1	2	1	1	2	0
Capacity, veh/h	433	567	482	374	285	153	269	996	446	334	865	168
Arriving On Green	0.12	0.30	0.30	0.07	0.25	0.25	0.07	0.28	0.00	0.07	0.28	0.28
Sat Flow, veh/h	1791.6	1615.0	1615.0	1756.8	1160.7	622.8	1791.6	1599.0	1599.0	1809.5	3068.7	594.8
Grp Volume(v), veh/h	359.3	377.9	240.4	135.4	0.0	321.3	115.7	695.8	0.0	184.4	483.5	456.6
Grp Sat Flow(s),veh/h/ln	1791.6	1900.0	1615.0	1756.8	0.0	1783.5	1791.6	1787.1	1599.0	1809.5	1884.2	1779.3
Q Serve(g_s), s	7.0	9.9	7.0	3.2	0.0	9.4	2.6	9.9	0.0	4.0	14.1	14.1
Cycle Q Clear(g_c), s	7.0	9.9	7.0	3.2	0.0	9.4	2.6	9.9	0.0	4.0	14.1	14.1
Proportion In Lane	1.000		1.000	1.000		0.349	1.000		1.000	1.000		0.334
Lane Grp Cap(c), veh/h	432.8	567.1	482.0	373.8	0.0	438.1	268.7	996.4	445.8	333.8	531.1	501.5
V/C Ratio(X)	0.830	0.666	0.499	0.362	0.000	0.733	0.430	0.698	0.000	0.553	0.910	0.911
Avail Cap(c_a), veh/h	432.8	669.4	569.0	373.8	0.0	534.1	274.2	1007.4	450.7	333.8	531.1	501.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	14.7	17.4	16.4	14.9	0.0	19.7	15.0	18.3	0.0	14.8	19.7	19.7
Incr Delay (d2), s/veh	12.8	2.0	0.8	0.6	0.0	4.1	1.1	2.1	0.0	2.0	19.9	20.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	27.5	19.4	17.2	15.5	0.0	23.8	16.1	20.5	0.0	16.8	39.5	40.4
Lane Group LOS	C	B	B	B		C	B	C		B	D	D
Approach Volume, veh/h		978			457			811			1125	
Approach Delay, s/veh		21.8			21.3			19.8			36.2	
Approach LOS		C			C			B			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	11.00	20.94		8.00	17.94		7.83	19.83		8.00	20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	7.00	20.00		4.00	17.00		4.00	16.00		4.00	16.00	
Max Q Clear Time (g_c+I1), s	9.00	11.89		5.24	11.41		4.56	11.90		6.00	16.07	
Green Extension Time (p_c)	0.00	3.31		0.00	2.53		0.00	3.21		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay			26.1
HCM 2010 Level of Service			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	414	863	119	108	752	324	334	379	104	228	127	168
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1881	1900	1900	1881	1900	1900	1900	1900	1881	1889	1889
Lanes	1	2	1	1	1	1	1	2	0	1	1	0
Capacity, veh/h	366	1793	810	370	743	638	411	501	153	280	281	0
Arriving On Green	0.16	0.50	0.00	0.06	0.40	0.40	0.13	0.18	0.18	0.10	0.15	0.00
Sat Flow, veh/h	1809.5	1615.0	1615.0	1809.5	1615.0	1615.0	1809.5	2793.9	855.2	1791.6	1889.1	0.0
Grp Volume(v), veh/h	426.8	938.0	0.0	116.1	800.0	330.6	367.0	288.2	269.2	265.1	144.3	0.0
Grp Sat Flow(s),veh/h/ln	1809.5	1787.1	1615.0	1809.5	1881.2	1615.0	1809.5	1900.0	1749.1	1791.6	1889.1	0.0
Q Serve(g_s), s	16.0	17.5	0.0	3.7	39.0	15.4	13.0	14.5	14.7	10.0	6.9	0.0
Cycle Q Clear(g_c), s	16.0	17.5	0.0	3.7	39.0	15.4	13.0	14.5	14.7	10.0	6.9	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		0.489	1.000		0.000
Lane Grp Cap(c), veh/h	366.3	1792.9	810.1	370.3	743.3	638.1	410.6	340.8	313.8	280.2	281.5	0.0
V/C Ratio(X)	1.165	0.523	0.000	0.314	1.076	0.518	0.894	0.846	0.858	0.946	0.513	0.000
Avail Cap(c_a), veh/h	366.3	1792.9	810.1	379.6	743.3	638.1	410.6	365.7	336.7	280.2	306.2	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	33.5	16.6	0.0	16.2	29.9	22.7	31.9	39.2	39.3	35.7	38.7	0.0
Incr Delay (d2), s/veh	100.1	0.3	0.0	0.5	55.5	0.7	21.3	15.8	18.5	39.4	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	133.7	16.9	0.0	16.7	85.3	23.4	53.2	54.9	57.7	75.1	40.1	0.0
Lane Group LOS	F	B		B	F	C	D	D	E	E	D	
Approach Volume, veh/h		1365			1247			925			409	
Approach Delay, s/veh		53.4			62.5			55.1			62.8	
Approach LOS		D			E			E			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	20.00	53.51		9.49	43.00		17.00	21.71		14.00	18.71	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	16.00	49.00		6.00	39.00		13.00	19.00		10.00	16.00	
Max Q Clear Time (g_c+I1), s	18.00	19.51		5.72	41.00		15.00	16.74		12.00	8.95	
Green Extension Time (p_c)	0.00	17.82		0.01	0.00		0.00	0.97		0.00	2.45	

Intersection Summary			
HCM 2010 Control Delay			57.7
HCM 2010 Level of Service			E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	19	11	27	4	93	4	453	83	223	498	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1900	1881	1900	1881	1900	1900	1900	1900
Lanes	0	1	0	0	1	1	1	1	1	1	1	1
Capacity, veh/h	73	99	56	175	34	165	15	1023	878	328	1362	1158
Arriving On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.01	0.54	0.54	0.18	0.72	0.72
Sat Flow, veh/h	270.5	730.7	539.0	898.1	225.8	1599.0	1809.5	1615.0	1615.0	1809.5	1615.0	1615.0
Grp Volume(v), veh/h	48.0	0.0	0.0	60.3	0.0	112.0	8.0	481.9	107.8	272.0	585.9	11.9
Grp Sat Flow(s),veh/h/ln	1622.8	0.0	0.0	1123.8	0.0	1599.0	1809.5	1881.2	1615.0	1809.5	1900.0	1615.0
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	4.7	0.3	11.0	2.3	10.1	8.8	0.1
Cycle Q Clear(g_c), s	1.7	0.0	0.0	2.5	0.0	4.7	0.3	11.0	2.3	10.1	8.8	0.1
Proportion In Lane	0.167		0.332	0.799		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	227.8	0.0	0.0	208.8	0.0	165.2	14.9	1022.7	877.9	328.2	1361.8	1157.6
V/C Ratio(X)	0.211	0.000	0.000	0.289	0.000	0.678	0.537	0.471	0.123	0.829	0.430	0.010
Avail Cap(c_a), veh/h	410.8	0.0	0.0	319.4	0.0	366.0	103.5	1022.7	877.9	621.3	1576.5	1340.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	0.962	0.962	0.962
Uniform Delay (d), s/veh	28.9	0.0	0.0	29.1	0.0	30.2	34.5	9.8	7.8	27.6	4.1	2.8
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.8	0.0	4.8	26.8	0.3	0.1	5.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	29.3	0.0	0.0	29.8	0.0	35.0	61.4	10.1	7.9	32.7	4.3	2.8
Lane Group LOS	C			C		D	E	B	A	C	A	A
Approach Volume, veh/h		48			172			598			870	
Approach Delay, s/veh		29.3			33.2			10.4			13.1	
Approach LOS		C			C			B			B	

Timer								
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		11.22			11.22		4.58	42.00		16.68	54.10	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		4.00	38.00		24.00	58.00	
Max Q Clear Time (g_c+I1), s		3.72			6.72		2.31	12.99		12.12	10.83	
Green Extension Time (p_c)		0.71			0.60		0.00	8.37		0.62	9.69	

Intersection Summary			
HCM 2010 Control Delay		14.7	
HCM 2010 Level of Service		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	377	219	84	56	97	118	201	344	87	96	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1900	1900	1881	1881	1900	1900	1900	1900	1900
Lanes	1	2	1	1	1	1	1	1	1	1	1	0
Capacity, veh/h	792	1664	737	590	914	769	370	345	293	300	281	34
Arriving On Green	0.03	0.46	0.00	0.05	0.48	0.00	0.03	0.06	0.00	0.07	0.17	0.17
Sat Flow, veh/h	1809.5	1599.0	1599.0	1809.5	1599.0	1599.0	1791.6	1615.0	1615.0	1809.5	1662.1	202.2
Grp Volume(v), veh/h	39.7	409.8	0.0	103.7	63.6	0.0	124.2	231.0	0.0	103.6	0.0	147.5
Grp Sat Flow(s),veh/h/ln	1809.5	1805.0	1599.0	1809.5	1900.0	1599.0	1791.6	1900.0	1615.0	1809.5	0.0	1864.3
Q Serve(g_s), s	0.8	4.6	0.0	1.9	1.2	0.0	3.7	7.9	0.0	3.1	0.0	4.7
Cycle Q Clear(g_c), s	0.8	4.6	0.0	1.9	1.2	0.0	3.7	7.9	0.0	3.1	0.0	4.7
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		0.108
Lane Grp Cap(c), veh/h	791.6	1664.4	737.2	589.7	914.0	769.2	369.8	344.7	293.0	299.9	0.0	315.7
V/C Ratio(X)	0.050	0.246	0.000	0.176	0.070	0.000	0.336	0.670	0.000	0.345	0.000	0.467
Avail Cap(c_a), veh/h	843.8	1664.4	737.2	714.5	914.0	769.2	445.9	885.5	752.6	371.4	0.0	840.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	0.899	0.899	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	8.8	10.9	0.0	8.0	9.3	0.0	21.0	29.3	0.0	21.1	0.0	24.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.0	0.5	2.0	0.0	0.7	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	8.8	11.0	0.0	8.2	9.3	0.0	21.5	31.4	0.0	21.7	0.0	26.0
Lane Group LOS	A	B		A	A		C	C		C		C
Approach Volume, veh/h		450			167			355			251	
Approach Delay, s/veh		10.8			8.6			27.9			24.2	
Approach LOS		B			A			C			C	

Timer								
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	6.08	34.67		7.41	36.00		9.17	16.07		8.37	15.27	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	28.00		8.00	32.00		8.00	31.00		7.00	30.00	
Max Q Clear Time (g_c+I1), s	2.76	6.59		3.89	3.20		5.69	9.92		5.09	6.75	
Green Extension Time (p_c)	0.01	3.04		0.08	3.27		0.06	2.15		0.04	2.21	

Intersection Summary			
HCM 2010 Control Delay		18.2	
HCM 2010 Level of Service		B	

Intersection	
Intersection Delay (sec/veh):	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	32	569	119	68	52	8
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.73	0.91	0.96	0.85	0.76	0.67
Heavy Vehicles(%)	0	0	1	2	2	12
Movement Flow Rate	44	625	124	80	68	12
Number of Lanes	0	2	2	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	204	0	0	0	565	102
Stage 1	-	-	-	-	164	-
Stage 2	-	-	-	-	401	-
Follow-up Headway	2.2	-	-	-	3.52	3.42
Pot Capacity-1 Maneuver	1463	-	-	-	508	*1438
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	645	-
Time blocked-Platoon(%)	4	-	-	-	4	4
Mov Capacity-1 Maneuver	1463	-	-	-	485	*1438
Mov Capacity-2 Maneuver	-	-	-	-	485	-
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	615	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.5	0	12.9
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					538
HCM Control Delay (s)	7.537	-	-	-	12.9
HCM Lane VC Ratio	0.03	-	-	-	0.149
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.093	-	-	-	0.522

Intersection	
Intersection Delay (sec/veh):	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	412	11	22	106	5	184
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.90	0.69	0.79	0.83	0.63	0.78
Heavy Vehicles(%)	0	0	0	1	0	0
Movement Flow Rate	458	16	28	128	8	236
Number of Lanes	2	0	0	2	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	474	0	586	237
Stage 1	-	-	-	-	466	-
Stage 2	-	-	-	-	120	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1099	-	457	771
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	917	-
Time blocked-Platoon(%)	-	-	0	-	1	0
Mov Capacity-1 Maneuver	-	-	1099	-	444	771
Mov Capacity-2 Maneuver	-	-	-	-	444	-
Stage 1	-	-	-	-	604	-
Stage 2	-	-	-	-	893	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	1.5	12.1
HCM LOS	A	A	B

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	753				
HCM Control Delay (s)	12.1	-	-	8.361	-
HCM Lane VC Ratio	0.324	-	-	0.025	-
HCM Lane LOS	B	-	-	A	-
HCM 95th Percentile Queue (veh)	1.406	-	-	0.078	-

HCM 2010 Signalized Intersection Summary
3: Obrien Rd & Mapes Rd

9/10/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	805	90	15	260	460	51	99	6	126	37	39
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1638	1884	1884	1900	1853	1900	1863	1868	1868	1727	1726	1726
Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Capacity, veh/h	663	1907	358	319	2060	897	288	175	32	267	117	130
Arriving On Green	0.08	0.62	0.62	0.00	0.18	0.18	0.06	0.11	0.11	0.10	0.16	0.16
Sat Flow, veh/h	1559.9	3086.8	579.2	1809.5	1615.0	1615.0	1774.0	1539.2	279.8	1645.0	745.7	832.9
Grp Volume(v), veh/h	231.5	584.6	553.7	15.0	279.6	547.6	83.6	0.0	156.0	159.5	0.0	110.3
Grp Sat Flow(s),veh/h/ln	1559.9	1884.1	1781.9	1809.5	1853.2	1615.0	1774.0	0.0	1819.0	1645.0	0.0	1578.6
Q Serve(g_s), s	5.1	17.5	17.6	0.4	6.4	31.8	4.2	0.0	8.5	7.9	0.0	6.5
Cycle Q Clear(g_c), s	5.1	17.5	17.6	0.4	6.4	31.8	4.2	0.0	8.5	7.9	0.0	6.5
Proportion In Lane	1.000		0.325	1.000		1.000	1.000		0.154	1.000		0.528
Lane Grp Cap(c), veh/h	662.7	1163.7	1100.6	318.7	2059.6	897.5	287.8	0.0	207.0	266.9	0.0	247.3
V/C Ratio(X)	0.349	0.502	0.503	0.047	0.136	0.610	0.290	0.000	0.754	0.598	0.000	0.446
Avail Cap(c_a), veh/h	911.9	1163.7	1100.6	365.1	2059.6	897.5	328.9	0.0	392.3	347.3	0.0	448.8
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	6.3	10.8	10.8	10.3	21.1	31.5	37.0	0.0	43.8	31.0	0.0	39.0
Incr Delay (d2), s/veh	0.3	0.3	0.4	0.1	0.0	1.2	0.6	0.0	5.5	2.1	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	6.7	11.2	11.2	10.3	21.2	32.7	37.5	0.0	49.3	33.1	0.0	40.3
Lane Group LOS	A	B	B	B	C	C	D		D	C		D
Approach Volume, veh/h		1370			842			240			270	
Approach Delay, s/veh		10.4			28.5			45.2			36.0	
Approach LOS		B			C			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	11.70	67.00		5.38	60.68		9.64	15.61		14.01	19.98	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	24.00	63.00		4.00	43.00		8.00	22.00		15.00	29.00	
Max Q Clear Time (g_c+I1), s	7.11	19.58		2.37	33.80		6.19	10.48		9.95	8.46	
Green Extension Time (p_c)	0.61	17.98		0.00	6.82		0.03	1.13		0.17	1.47	

Intersection Summary			
HCM 2010 Control Delay			21.6
HCM 2010 Level of Service			C

HCM 2010 Signalized Intersection Summary
6: Taylor Ave & Mapes Rd

9/10/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	827	25	169	794	284	65	7	60	40	1	16
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1827	1792	1827	1881	1863	1897	1897	1900	1863	1863	1863
Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Capacity, veh/h	439	2719	1193	467	2564	1136	58	3	242	59	1	238
Arriving On Green	0.02	0.52	0.00	0.24	0.24	0.00	0.15	0.15	0.00	0.15	0.15	0.00
Sat Flow, veh/h	1774.0	1523.6	1523.6	632.0	3574.3	1583.3	17.4	1.6	1615.0	5.0	0.1	1583.3
Grp Volume(v), veh/h	117.4	852.6	0.0	213.9	882.2	0.0	92.0	0.0	0.0	44.6	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1735.6	1523.6	632.0	1787.1	1583.3	19.0	0.0	1615.0	5.2	0.0	1583.3
Q Serve(g_s), s	2.0	16.8	0.0	36.0	24.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.0	16.8	0.0	44.9	24.6	0.0	18.0	0.0	0.0	18.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.917		1.000	0.976		1.000
Lane Grp Cap(c), veh/h	439.0	2719.1	1193.5	466.8	2563.9	1135.8	60.4	0.0	242.2	60.0	0.0	237.5
V/C Ratio(X)	0.267	0.314	0.000	0.458	0.344	0.000	1.524	0.000	0.000	0.742	0.000	0.000
Avail Cap(c_a), veh/h	440.2	2719.1	1193.5	466.8	2563.9	1135.8	60.4	0.0	242.2	60.0	0.0	237.5
HCM Platoon Ratio	0.67	0.67	0.67	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.587	0.587	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	7.2	10.2	0.0	34.0	22.3	0.0	59.2	0.0	0.0	59.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.1	0.0	0.4	0.0	0.0	303.4	0.0	0.0	38.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	7.5	10.2	0.0	34.4	22.4	0.0	362.5	0.0	0.0	98.3	0.0	0.0
Lane Group LOS	A	B		C	C		F			F		
Approach Volume, veh/h		970			1096			92			45	
Approach Delay, s/veh		9.9			24.7			362.5			98.3	
Approach LOS		A			C			F			F	

Timer												
Assigned Phase	5	2			6			8			4	
Phase Duration (G+Y+Rc), s	7.92	98.00			90.08			22.00			22.00	
Change Period (Y+Rc), s	4.00	4.00			4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	94.00			86.00			18.00			18.00	
Max Q Clear Time (g_c+I1), s	3.96	18.76			46.86			20.00			20.00	
Green Extension Time (p_c)	0.00	28.27			21.62			0.00			0.00	

Intersection Summary			
HCM 2010 Control Delay			33.8
HCM 2010 Level of Service			C

HCM 2010 Signalized Intersection Summary
7: Cooper Av & Mapes Rd

9/10/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	463	447	104	91	894	480	40	72	62	123	104	472
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1810	1696	1900	1863	1900	1900	1721	1900	1824	1824	1863
Lanes	1	2	1	1	2	1	1	1	1	0	1	1
Capacity, veh/h	521	1891	793	504	1369	625	60	516	484	168	129	475
Arriving On Green	0.21	0.55	0.55	0.05	0.39	0.39	0.30	0.30	0.00	0.30	0.30	0.00
Sat Flow, veh/h	1774.0	1442.0	1442.0	1809.5	1615.0	1615.0	1094.2	1720.7	1615.0	438.0	401.2	1583.3
Grp Volume(v), veh/h	492.6	496.7	144.4	123.0	993.3	505.3	75.5	144.0	0.0	302.1	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1719.0	1442.0	1809.5	1769.6	1615.0	1094.2	1720.7	1615.0	839.2	0.0	1583.3
Q Serve(g_s), s	22.9	9.1	6.0	4.9	28.7	33.5	0.0	7.7	0.0	28.3	0.0	0.0
Cycle Q Clear(g_c), s	22.9	9.1	6.0	4.9	28.7	33.5	36.0	7.7	0.0	36.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	0.522		1.000
Lane Grp Cap(c), veh/h	521.5	1891.0	793.1	504.5	1369.1	624.7	60.0	516.2	484.5	297.4	0.0	475.0
V/C Ratio(X)	0.945	0.263	0.182	0.244	0.726	0.809	1.258	0.279	0.000	1.016	0.000	0.000
Avail Cap(c_a), veh/h	572.1	1891.0	793.1	504.5	1369.1	624.7	60.0	516.2	484.5	297.4	0.0	475.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.963	0.963	0.963	0.819	0.819	0.819	1.000	1.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	33.6	14.2	13.5	20.4	31.4	32.8	60.0	32.1	0.0	46.8	0.0	0.0
Incr Delay (d2), s/veh	23.0	0.1	0.1	0.2	1.6	6.5	200.7	0.3	0.0	56.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	56.7	14.3	13.6	20.6	33.0	39.3	260.7	32.4	0.0	103.1	0.0	0.0
Lane Group LOS	E	B	B	C	C	D	F	C		F		
Approach Volume, veh/h		1134			1622			219			302	
Approach Delay, s/veh		32.6			34.0			110.9			103.1	
Approach LOS		C			C			F			F	
Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	29.58	70.00		10.00	50.42			40.00			40.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	29.00	66.00		6.00	43.00			36.00			36.00	
Max Q Clear Time (g_c+I1), s	24.87	11.12		6.93	35.50			38.00			38.00	
Green Extension Time (p_c)	0.71	22.42		0.00	6.04			0.00			0.00	
Intersection Summary												
HCM 2010 Control Delay			45.0									
HCM 2010 Level of Service			D									

HCM 2010 Signalized Intersection Summary
8: Ernie Pyle St & Mapes Rd

9/10/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	209	299	666	1117	31	80	40	113	8	198	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1855	1855	1881	1900	1900	1900	1827	1835	1863	1667	1858	1858
Lanes	0	2	1	1	2	0	1	1	1	1	1	0
Capacity, veh/h	147	463	439	789	2401	91	185	498	430	366	431	62
Arriving On Green	0.09	0.09	0.09	0.70	1.00	1.00	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	310.5	1687.7	1599.0	1809.5	3637.5	138.1	1040.1	1834.6	1583.3	1209.3	1588.5	229.2
Grp Volume(v), veh/h	60.4	264.6	305.1	756.8	655.1	647.6	96.4	48.2	128.4	13.8	0.0	314.7
Grp Sat Flow(s),veh/h/ln	310.5	1687.7	1599.0	1809.5	1900.0	1875.6	1040.1	1834.6	1583.3	1209.3	0.0	1817.7
Q Serve(g_s), s	22.1	11.6	21.6	41.0	0.0	0.0	10.5	2.3	7.5	1.0	0.0	17.8
Cycle Q Clear(g_c), s	22.1	11.6	21.6	41.0	0.0	0.0	28.3	2.3	7.5	3.3	0.0	17.8
Proportion In Lane	1.000		1.000	1.000		0.074	1.000		1.000	1.000		0.126
Lane Grp Cap(c), veh/h	146.9	0.0	438.6	789.0	1253.9	1237.9	185.4	498.0	429.8	366.2	0.0	493.4
V/C Ratio(X)	0.411	0.000	0.696	0.959	0.522	0.523	0.520	0.097	0.299	0.038	0.000	0.638
Avail Cap(c_a), veh/h	146.9	0.0	438.6	789.0	1253.9	1237.9	215.1	550.4	475.0	400.7	0.0	545.3
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.977	0.977	0.977	0.090	0.090	0.090	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	48.5	0.0	48.3	9.9	0.0	0.0	49.9	31.8	33.7	33.0	0.0	37.4
Incr Delay (d2), s/veh	8.1	0.0	8.6	3.8	0.0	0.0	2.2	0.1	0.4	0.0	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	56.6	0.0	57.0	13.6	0.0	0.0	52.2	31.9	34.1	33.1	0.0	39.6
Lane Group LOS	E		E	B	A	A	D	C	C	C		D
Approach Volume, veh/h		630			2060			273			328	
Approach Delay, s/veh		33.0			5.0			40.1			39.3	
Approach LOS		C			A			D			D	
Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		36.00		45.00	81.00			35.67			35.67	
Change Period (Y+Rc), s		4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s		32.00		41.00	77.00			35.00			35.00	
Max Q Clear Time (g_c+I1), s		24.05		43.00	2.00			30.30			19.80	
Green Extension Time (p_c)		6.29		0.00	23.99			1.38			2.79	
Intersection Summary												
HCM 2010 Control Delay			16.7									
HCM 2010 Level of Service			B									

HCM 2010 Signalized Intersection Summary
9: Annapolis Rd & Llewellyn Ave

9/10/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	25	45	568	58	213	346	2434	205	65	1140	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1743	1892	1900	1900	1900	1881	1881	1845	1863	1863	1863	1900
Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Capacity, veh/h	161	252	215	232	317	267	373	1869	844	59	1268	579
Arriving On Green	0.13	0.13	0.00	0.17	0.17	0.17	0.21	0.53	0.00	0.07	0.72	0.00
Sat Flow, veh/h	1206.8	1891.9	1615.0	1389.3	1900.0	1599.0	1791.6	1583.3	1583.3	1774.0	1615.0	1615.0
Grp Volume(v), veh/h	20.0	39.7	0.0	604.3	100.0	231.5	397.7	2797.7	0.0	79.3	1310.3	0.0
Grp Sat Flow(s),veh/h/ln	1206.8	1891.9	1615.0	1389.3	1900.0	1599.0	1791.6	1752.4	1583.3	1774.0	1769.6	1615.0
Q Serve(g_s), s	1.8	2.2	0.0	20.0	5.6	16.9	25.0	64.0	0.0	4.0	43.0	0.0
Cycle Q Clear(g_c), s	1.8	2.2	0.0	20.0	5.6	16.9	25.0	64.0	0.0	4.0	43.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	160.9	252.3	215.3	231.5	316.7	266.5	373.3	1869.3	844.4	59.1	1268.2	578.7
V/C Ratio(X)	0.124	0.157	0.000	2.610	0.316	0.869	1.066	1.497	0.000	1.340	1.033	0.000
Avail Cap(c_a), veh/h	160.9	252.3	215.3	231.5	316.7	266.5	373.3	1869.3	844.4	59.1	1268.2	578.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	45.8	46.0	0.0	50.0	44.0	48.7	47.5	28.0	0.0	56.0	17.0	0.0
Incr Delay (d2), s/veh	1.6	1.3	0.0	736.7	2.6	29.7	65.0	226.4	0.0	232.3	34.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	47.4	47.4	0.0	786.7	46.6	78.5	112.5	254.4	0.0	288.3	51.2	0.0
Lane Group LOS	D	D		F	D	E	F	F		F	F	
Approach Volume, veh/h		60			936			3195			1390	
Approach Delay, s/veh		47.4			532.4			236.7			64.7	
Approach LOS		D			F			F			E	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		20.00			24.00		29.00	68.00		8.00	47.00	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			20.00		25.00	64.00		4.00	43.00	
Max Q Clear Time (g_c+I1), s		4.23			22.00		27.00	66.00		6.00	45.00	
Green Extension Time (p_c)		0.12			0.00		0.00	0.00		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay		241.5	
HCM 2010 Level of Service		F	

HCM 2010 Signalized Intersection Summary
10: Annapolis Rd & Mapes Rd

9/10/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	127	29	171	488	111	191	1030	1381	90	72	650	886
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1845	1900	1863	1900	1897	1863	1900	1827	1827	1827	1810	1863
Lanes	2	1	1	1	1	1	2	2	1	1	3	1
Capacity, veh/h	515	285	238	367	348	290	1262	2131	906	349	2388	765
Arriving On Green	0.03	0.15	0.00	0.07	0.18	0.18	0.28	0.97	0.97	0.07	0.48	0.00
Sat Flow, veh/h	3408.2	1583.3	1583.3	1809.5	1583.3	1583.3	3510.5	1552.9	1552.9	1739.9	1583.3	1583.3
Grp Volume(v), veh/h	167.1	35.8	0.0	513.7	140.5	238.8	1373.3	1453.7	108.4	82.8	738.6	0.0
Grp Sat Flow(s),veh/h/ln	1704.1	1900.0	1583.3	1809.5	1897.4	1583.3	1755.2	1826.9	1552.9	1739.9	1646.7	1583.3
Q Serve(g_s), s	4.0	2.0	0.0	8.0	7.8	17.4	20.0	3.7	0.2	2.7	10.9	0.0
Cycle Q Clear(g_c), s	4.0	2.0	0.0	8.0	7.8	17.4	20.0	3.7	0.2	2.7	10.9	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	515.5	285.0	237.5	367.0	347.8	290.3	1261.8	2131.4	905.8	348.7	2387.7	765.3
V/C Ratio(X)	0.324	0.126	0.000	1.400	0.404	0.822	1.088	0.682	0.120	0.237	0.309	0.000
Avail Cap(c_a), veh/h	515.5	285.0	237.5	367.0	347.8	290.3	1261.8	2131.4	905.8	348.7	2387.7	765.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	42.9	44.2	0.0	46.7	43.2	47.1	14.5	0.7	0.6	12.8	18.8	0.0
Incr Delay (d2), s/veh	1.7	0.9	0.0	195.6	3.5	22.4	53.0	1.8	0.3	1.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.6	45.1	0.0	242.4	46.7	69.6	67.5	2.5	0.9	14.4	19.2	0.0
Lane Group LOS	D	D		F	D	E	F	A	A	B	B	
Approach Volume, veh/h		203			893			2935			821	
Approach Delay, s/veh		44.6			165.4			32.8			18.7	
Approach LOS		D			F			C			B	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.00	22.00		12.00	26.00		24.00	74.00		12.00	62.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	18.00		8.00	22.00		20.00	70.00		8.00	58.00	
Max Q Clear Time (g_c+I1), s	6.00	3.96		10.00	19.40		22.00	5.68		4.70	12.90	
Green Extension Time (p_c)	0.00	1.54		0.00	0.49		0.00	34.16		0.04	28.11	

Intersection Summary			
HCM 2010 Control Delay		55.3	
HCM 2010 Level of Service		E	

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1345	36	73	805	9	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.95	0.66	0.60	0.86	0.63	0.68
Heavy Vehicles(%)	4	19	0	2	20	16
Movement Flow Rate	1416	55	122	936	14	47
Number of Lanes	1	0	0	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1471	0	2624	1444
Stage 1	-	-	-	-	1444	-
Stage 2	-	-	-	-	1180	-
Follow-up Headway	-	-	2.2	-	3.68	3.444
Pot Capacity-1 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	183	-
Time blocked-Platoon(%)	-	-	100	-	100	100
Mov Capacity-1 Maneuver	-	-	-	-	-	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	183	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0	-
HCM LOS	A	A	-

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	-				
HCM Control Delay (s)	-	-	-	-	-
HCM Lane VC Ratio	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th Percentile Queue (veh)	-	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	$ 1387

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	1267	116	230	849	2	29	0	87	0	0	2
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.97	0.77	0.78	0.90	0.92	0.61	0.92	0.67	0.92	0.92	0.92
Heavy Vehicles(%)	2	4	2	0	2	2	0	2	2	2	2	2
Movement Flow Rate	3	1306	151	295	943	2	48	0	130	0	0	2
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	945	0	0	1457	0	0	2923	2923	1382	2987	2997	944
Stage 1	-	-	-	-	-	-	1388	1388	-	1534	1534	-
Stage 2	-	-	-	-	-	-	1535	1535	-	1453	1463	-
Follow-up Headway	2.218	-	-	2.2	-	-	3.5	4.018	3.318	3.518	4.018	3.318
Pot Capacity-1 Maneuver	*515	-	-	*# 10	-	-	-	-	*# 10	-	-	*515
Stage 1	-	-	-	-	-	-	*# 10	*10	-	*46	*57	-
Stage 2	-	-	-	-	-	-	*# 46	*57	-	*10	*10	-
Time blocked-Platoon(%)	66	-	-	99	-	-	100	100	99	100	100	66
Mov Capacity-1 Maneuver	*515	-	-	*# 10	-	-	-	-	*# 10	-	-	*515
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	*# 10	*10	-	*44	*57	-
Stage 2	-	-	-	-	-	-	*# 46	*57	-	-	*10	-

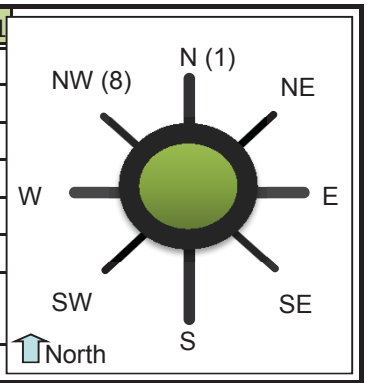
Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	$ 3220.4	-	-
HCM LOS	A	F	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	12.035	0	$ 13546.623	$ 13546.623		-	-
HCM Lane VC Ratio	-	0.006	-	-	29.487	-	-	-
HCM Lane LOS	-	B	A	-	F	A	-	-
HCM 95th Percentile Queue (veh)	-	0.019	-	-	38.482	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Anne Arundel, MD
Intersection:	Laurel Fort Meade Rd. and MD 32 East
	Baseline AM Peak



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph								
NE (2), vph								
E (3), vph								
SE (4), vph	85							
S (5), vph								
SW (6), vph	672	853						
W (7), vph								
NW (8), vph								
Entry Volume, vph	757	853	0	0	0	0	0	0

Exit Legs (TO)

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph			602					
NE (2), vph								
E (3), vph								
SE (4), vph							491	
S (5), vph								
SW (6), vph							56	
W (7), vph								
NW (8), vph								
Entry Volume, vph	0	0	602	0	0	0	547	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	0	0	1	0	1
# of Conflict Flow Lanes	1	2	2	2	1	1	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	1.000	1.000	0.952	1.000	0.952
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	0	0	687	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	97	0	0	0	0	0	0	560
	S (5), pcu/h	0	0	0	0	0	0	0	0
	SW (6), pcu/h	1740	0	0	0	0	0	0	64
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1838	0	0	0	0	687	0	624
	Entry flow Lane 1, pcu/h	864	0	0	0	0	687	0	624
	Entry flow Lane 2, pcu/h	974	0	0	0	0	0	0	0
	Conflicting flow, pcu/h	0	0	0	0	0	657	0	1838

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1076	1076	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	823	927	NA	NA	NA	NA	NA	NA
V/C ratio	**0.76**	**0.86**			#VALUE!	#VALUE!		
Control Delay, s/veh	**17.1**	**24.1**			#VALUE!	#VALUE!		
LOS	C	C			#VALUE!	#VALUE!		
95th % Queue (ft)	**205**	**303**			#VALUE!	#VALUE!		
Approach Delay, LOS	20.8 sec, LOS C				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	679	NA	297	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	654	NA	595	NA
V/C ratio			#VALUE!	#VALUE!	**0.96**		**2.00**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**50.5**		**489.9**	#VALUE!
LOS			#VALUE!	#VALUE!	F		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**372**		**1113**	#VALUE!
Approach Delay, LOS			#VALUE!		50.5 sec, LOS F		489.9 sec, LOS F	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1371	1371	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	823	927	NA	NA	NA	NA	NA	NA
V/C ratio	**0.60**	**0.68**			#VALUE!	#VALUE!		
Control Delay, s/veh	**9.5**	**11.3**			#VALUE!	#VALUE!		
LOS	A	B			#VALUE!	#VALUE!		
95th % Queue (ft)	**111**	**149**			#VALUE!	#VALUE!		
Approach Delay, LOS	10.4 sec, LOS B				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	864	NA	299	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	654	NA	595	NA
V/C ratio			#VALUE!	#VALUE!	**0.76**		**1.99**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**19.7**		**485.4**	#VALUE!
LOS			#VALUE!	#VALUE!	C		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**192**		**1109**	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

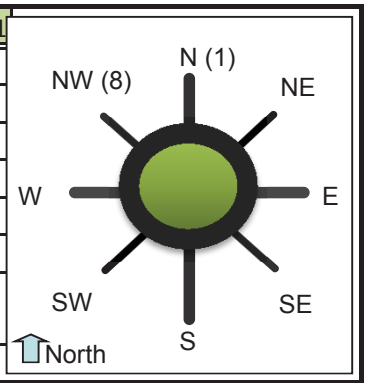
Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Anne Arundel, MD
Intersection:	Mapes Rd. and MD 32 West Baseline AM Peak



Volumes

	Entry Legs (FROM)							
	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
Exit Legs (TO) N (1), vph								**204**
NE (2), vph								
E (3), vph								
SE (4), vph								
S (5), vph	**275**						**896**	**549**
SW (6), vph								
W (7), vph		**140**						**41**
NW (8), vph								
Entry Volume, vph	275	140	0	0	0	0	896	794

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph	**833**							
NE (2), vph								
E (3), vph								
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph	**177**							
NW (8), vph								
Entry Volume, vph	1010	0	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	2	1	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	0.952	0.952	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	233	951	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	314	0	0	1649	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	160	0	0	47	202	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	474	0	0	1929	1153	0	0	0
	Entry flow Lane 1, pcu/h	314	0	0	1023	1153	0	0	0
	Entry flow Lane 2, pcu/h	160	0	0	906	0	0	0	0
	Conflicting flow, pcu/h	1898	0	0	1153	0	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	259	285	NA	NA	1076	NA	NA	NA
Entry Flow Rates, veh/h	299	152	NA	NA	1098	NA	NA	NA
V/C ratio	**1.15**	**0.53**			**1.02**	#VALUE!		
Control Delay, s/veh	**145.0**	**28.9**			**52.3**	#VALUE!		
LOS	F	D			F	#VALUE!		
95th % Queue (ft)	**351**	**77**			**569**	#VALUE!		
Approach Delay, LOS	105.8 sec, LOS F				52.3 sec, LOS F			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	453	480	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	974	863	NA	NA	NA	NA
V/C ratio			**2.15**	**1.80**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**544.1**	**387.4**			#VALUE!	#VALUE!
LOS			F	F			#VALUE!	#VALUE!
95th % Queue (ft)			**1845**	**1414**			#VALUE!	#VALUE!
Approach Delay, LOS			470.5 sec, LOS F				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	234	283	NA	NA	1562	NA	NA	NA
Entry Flow Rates, veh/h	299	152	NA	NA	1098	NA	NA	NA
V/C ratio	**1.28**	**0.54**			**0.70**	#VALUE!		
Control Delay, s/veh	**195.5**	**29.3**			**11.1**	#VALUE!		
LOS	F	D			B	#VALUE!		
95th % Queue (ft)	**404**	**78**			**168**	#VALUE!		
Approach Delay, LOS	139.4 sec, LOS F				11.1 sec, LOS B			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	493	553	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	974	863	NA	NA	NA	NA
V/C ratio			**1.97**	**1.56**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**465.2**	**280.2**			#VALUE!	#VALUE!
LOS			F	F			#VALUE!	#VALUE!
95th % Queue (ft)			**1723**	**1201**			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	102	82	434	410	431	311	1041	298	833	1207	438
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1881	1759	1900	1898	1881	1845	1827	1792	1863	1831	1900
Lanes	2	1	1	2	1	2	1	3	1	2	3	1
Capacity, veh/h	399	395	314	959	527	808	390	1238	378	1024	1600	547
Arriving On Green	0.05	0.21	0.21	0.11	0.28	0.28	0.16	0.25	0.00	0.25	0.34	0.34
Sat Flow, veh/h	3510.5	1495.4	1495.4	3510.5	2910.2	2910.2	1756.8	1523.6	1523.6	3441.6	1615.0	1615.0
Grp Volume(v), veh/h	129.5	114.6	101.2	556.4	465.9	453.7	374.7	1210.5	0.0	1028.4	1341.1	503.4
Grp Sat Flow(s),veh/h/ln	1755.2	1881.2	1495.4	1755.2	1898.3	1455.1	1756.8	1662.5	1523.6	1720.8	1575.0	1615.0
Q Serve(g_s), s	2.5	4.5	5.1	9.8	20.8	11.8	14.0	21.3	0.0	22.0	23.2	26.5
Cycle Q Clear(g_c), s	2.5	4.5	5.1	9.8	20.8	11.8	14.0	21.3	0.0	22.0	23.2	26.5
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	399.2	395.1	314.1	958.6	527.3	808.3	389.5	1238.2	378.3	1023.5	1599.6	546.8
V/C Ratio(X)	0.324	0.290	0.322	0.580	0.884	0.561	0.962	0.978	0.000	1.005	0.838	0.921
Avail Cap(c_a), veh/h	399.2	424.6	337.5	958.6	557.0	853.9	389.5	1238.2	378.3	1023.5	1599.6	546.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	26.9	29.4	29.7	19.3	30.6	27.4	22.5	33.1	0.0	25.8	27.1	28.2
Incr Delay (d2), s/veh	0.5	0.4	0.6	0.9	15.0	0.8	35.6	20.3	0.0	29.3	4.1	21.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	27.3	29.8	30.2	20.2	45.6	28.1	58.2	53.4	0.0	55.1	31.2	49.2
Lane Group LOS	C	C	C	C	D	C	E	D		F	C	D
Approach Volume, veh/h		345			1476			1585			2873	
Approach Delay, s/veh		29.0			30.6			54.5			42.9	
Approach LOS		C			C			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.00	22.61		14.00	28.61		18.00	26.00		26.00	34.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	20.00		10.00	26.00		14.00	22.00		22.00	30.00	
Max Q Clear Time (g_c+I1), s	4.53	7.08		11.79	22.82		16.00	23.35		24.00	28.55	
Green Extension Time (p_c)	0.00	4.96		0.00	1.80		0.00	0.00		0.00	1.41	

Intersection Summary			
HCM 2010 Control Delay			42.2
HCM 2010 Level of Service			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	257	531	248	705	856	572	305	1470	258	229	2128	398
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1696	1827	1900	1845	1845	1776	1863	1788	1788	1845	1900	1863
Lanes	2	2	1	2	2	1	2	3	0	2	3	1
Capacity, veh/h	406	752	350	886	1373	591	296	1571	343	298	2032	620
Arriving On Green	0.03	0.22	0.00	0.21	0.39	0.39	0.05	0.39	0.39	0.05	0.39	0.00
Sat Flow, veh/h	3134.4	1615.0	1615.0	3408.2	1509.3	1509.3	3441.6	4010.5	876.3	3408.2	1583.3	1583.3
Grp Volume(v), veh/h	362.0	647.6	0.0	903.8	930.4	794.4	376.5	1266.8	641.1	272.6	2503.5	0.0
Grp Sat Flow(s),veh/h/ln	1567.2	1735.6	1615.0	1704.1	1752.4	1509.3	1720.8	1626.9	1633.1	1704.1	1729.0	1583.3
Q Serve(g_s), s	4.0	21.6	0.0	25.0	26.4	47.0	6.0	46.5	47.0	5.8	47.0	0.0
Cycle Q Clear(g_c), s	4.0	21.6	0.0	25.0	26.4	47.0	6.0	46.5	47.0	5.8	47.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		0.537	1.000		1.000
Lane Grp Cap(c), veh/h	406.3	752.1	349.9	885.5	1372.7	591.2	296.3	1274.4	639.6	297.9	2031.6	620.1
V/C Ratio(X)	0.891	0.861	0.000	1.021	0.678	1.344	1.271	0.994	1.002	0.915	1.232	0.000
Avail Cap(c_a), veh/h	406.3	752.1	349.9	885.5	1372.7	591.2	296.3	1274.4	639.6	297.9	2031.6	620.1
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	46.7	45.3	0.0	35.8	30.2	36.5	30.9	36.4	36.5	29.5	36.5	0.0
Incr Delay (d2), s/veh	21.0	10.0	0.0	35.6	1.4	165.8	145.7	23.7	36.1	31.1	109.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	67.7	55.3	0.0	71.3	31.6	202.3	176.7	60.1	72.6	60.6	145.5	0.0
Lane Group LOS	E	E		F	C	F	F	E	F	E	F	
Approach Volume, veh/h		1010			2629			2284			2776	
Approach Delay, s/veh		59.7			96.9			82.8			137.2	
Approach LOS		E			F			F			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.00	30.00		29.00	51.00		10.00	51.00		10.00	51.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	26.00		25.00	47.00		6.00	47.00		6.00	47.00	
Max Q Clear Time (g_c+I1), s	6.00	23.56		27.00	49.00		8.00	49.00		7.83	49.00	
Green Extension Time (p_c)	0.00	2.22		0.00	0.00		0.00	0.00		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay			101.7
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	3	3	114	34	260	19	817	29	94	647	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1900	1881	1743	1881	1792	1863	1900	1900
Lanes	0	1	0	0	1	1	1	1	1	1	1	1
Capacity, veh/h	11	8	17	238	67	267	36	1019	825	185	1186	1008
Arriving On Green	0.02	0.02	0.02	0.17	0.17	0.17	0.02	0.54	0.54	0.14	0.83	0.83
Sat Flow, veh/h	533.0	399.8	799.5	1427.0	401.6	1599.0	1660.1	1523.6	1523.6	1774.0	1615.0	1615.0
Grp Volume(v), veh/h	26.0	0.0	0.0	218.0	0.0	270.8	27.5	928.4	34.1	156.7	743.7	42.4
Grp Sat Flow(s),veh/h/ln	1732.3	0.0	0.0	1828.6	0.0	1599.0	1660.1	1881.2	1523.6	1774.0	1900.0	1615.0
Q Serve(g_s), s	1.4	0.0	0.0	10.8	0.0	16.0	1.6	42.9	1.0	8.3	13.3	0.4
Cycle Q Clear(g_c), s	1.4	0.0	0.0	10.8	0.0	16.0	1.6	42.9	1.0	8.3	13.3	0.4
Proportion In Lane	0.308		0.462	0.780		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	36.1	0.0	0.0	304.8	0.0	266.5	36.0	1019.0	825.3	184.8	1185.9	1008.0
V/C Ratio(X)	0.720	0.000	0.000	0.715	0.000	1.016	0.765	0.911	0.041	0.848	0.627	0.042
Avail Cap(c_a), veh/h	288.7	0.0	0.0	304.8	0.0	266.5	69.2	1019.0	825.3	184.8	1185.9	1008.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	0.800	0.800	0.800
Uniform Delay (d), s/veh	46.7	0.0	0.0	37.8	0.0	40.0	46.7	19.9	10.3	40.6	4.2	3.1
Incr Delay (d2), s/veh	23.4	0.0	0.0	7.8	0.0	59.4	27.9	12.0	0.0	24.4	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	70.1	0.0	0.0	45.6	0.0	99.4	74.6	31.9	10.3	65.0	5.0	3.1
Lane Group LOS	E			D		F	E	C	B	E	A	A
Approach Volume, veh/h		26			489			990			943	
Approach Delay, s/veh		70.1			75.4			32.3			14.9	
Approach LOS		E			E			C			B	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		6.00			20.00		6.08	56.00		14.00	63.92	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		4.00	52.00		10.00	58.00	
Max Q Clear Time (g_c+I1), s		3.43			18.00		3.58	44.87		10.28	15.31	
Green Extension Time (p_c)		0.04			0.00		0.00	5.66		0.00	19.87	

Intersection Summary			
HCM 2010 Control Delay			34.6
HCM 2010 Level of Service			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	120	114	332	696	27	313	87	76	90	138	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1863	1881	1900	1900	1900	1900	1881	1845	1900	1887	1887
Lanes	1	2	1	1	1	1	1	1	1	1	1	0
Capacity, veh/h	154	1482	670	772	998	849	393	486	405	350	181	81
Arriving On Green	0.01	0.42	0.00	0.12	0.53	0.00	0.06	0.09	0.00	0.06	0.15	0.15
Sat Flow, veh/h	1809.5	1599.0	1599.0	1809.5	1615.0	1615.0	1809.5	1568.0	1568.0	1809.5	1234.1	554.9
Grp Volume(v), veh/h	12.1	153.8	0.0	400.0	892.3	0.0	364.0	164.2	0.0	95.7	0.0	232.6
Grp Sat Flow(s),veh/h/ln	1809.5	1769.6	1599.0	1809.5	1900.0	1615.0	1809.5	1881.2	1568.0	1809.5	0.0	1789.1
Q Serve(g_s), s	0.4	2.8	0.0	10.3	45.1	0.0	16.2	8.8	0.0	4.8	0.0	13.7
Cycle Q Clear(g_c), s	0.4	2.8	0.0	10.3	45.1	0.0	16.2	8.8	0.0	4.8	0.0	13.7
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		0.310
Lane Grp Cap(c), veh/h	154.1	1482.1	669.6	772.0	998.5	848.7	392.6	486.3	405.3	350.2	0.0	262.7
V/C Ratio(X)	0.078	0.104	0.000	0.518	0.894	0.000	0.927	0.338	0.000	0.273	0.000	0.886
Avail Cap(c_a), veh/h	201.1	1482.1	669.6	811.1	998.5	848.7	392.6	490.2	408.5	350.2	0.0	266.4
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	0.424	0.424	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	23.0	19.0	0.0	9.7	22.8	0.0	33.2	40.5	0.0	36.1	0.0	45.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	10.4	0.0	15.0	0.2	0.0	0.4	0.0	27.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	23.2	19.0	0.0	10.2	33.2	0.0	48.2	40.7	0.0	36.5	0.0	72.6
Lane Group LOS	C	B		B	C		D	D		D		E
Approach Volume, veh/h		166			1292			528			328	
Approach Delay, s/veh		19.3			26.1			45.8			62.1	
Approach LOS		B			C			D			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	5.21	49.00		16.68	60.47		22.00	31.78		10.00	19.78	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	45.00		15.00	56.00		18.00	28.00		6.00	16.00	
Max Q Clear Time (g_c+I1), s	2.41	4.84		12.30	47.15		18.18	10.83		6.79	15.70	
Green Extension Time (p_c)	0.00	10.29		0.38	4.83		0.00	2.15		0.00	0.08	

Intersection Summary			
HCM 2010 Control Delay			35.2
HCM 2010 Level of Service			D

Intersection	
Intersection Delay (sec/veh):	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	12	201	788	49	80	66
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.44	0.89	0.83	0.73	0.69	0.70
Heavy Vehicles(%)	0	2	0	0	0	0
Movement Flow Rate	27	226	949	67	116	94
Number of Lanes	0	2	2	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	1016	0	0	0	1150	509
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	167	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	990	-	-	-	428	*1056
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	851	-
Time blocked-Platoon(%)	30	-	-	-	30	30
Mov Capacity-1 Maneuver	990	-	-	-	415	*1056
Mov Capacity-2 Maneuver	-	-	-	-	415	-
Stage 1	-	-	-	-	622	-
Stage 2	-	-	-	-	825	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.9	0	15
HCM LOS	A	A	C

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					570
HCM Control Delay (s)	8.739	-	-	-	15
HCM Lane VC Ratio	0.028	-	-	-	0.369
HCM Lane LOS	A	-	-	-	C
HCM 95th Percentile Queue (veh)	0.085	-	-	-	1.69

Intersection	
Intersection Delay (sec/veh):	4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	357	92	261	435	24	29
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.88	0.60	0.81	0.81	0.57	0.75
Heavy Vehicles(%)	2	0	0	0	0	0
Movement Flow Rate	406	153	322	537	42	39
Number of Lanes	2	0	0	2	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	559	0	1396	280
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	913	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1022	-	180	723
Stage 1	-	-	-	-	592	-
Stage 2	-	-	-	-	484	-
Time blocked-Platoon(%)	-	-	0	-	17	0
Mov Capacity-1 Maneuver	-	-	1022	-	99	723
Mov Capacity-2 Maneuver	-	-	-	-	99	-
Stage 1	-	-	-	-	592	-
Stage 2	-	-	-	-	267	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	3.8	44.4
HCM LOS	A	A	E

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	169				
HCM Control Delay (s)	44.4	-	-	10.136	-
HCM Lane VC Ratio	0.478	-	-	0.315	-
HCM Lane LOS	E	-	-	B	-
HCM 95th Percentile Queue (veh)	2.277	-	-	1.36	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	404	13	4	892	84	207	29	6	413	43	274
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1882	1882	1900	1900	1900	1881	1900	1900	1881	1880	1880
Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Capacity, veh/h	288	1504	103	404	1474	659	364	227	64	686	67	370
Arriving On Green	0.03	0.43	0.43	0.02	0.82	0.82	0.14	0.16	0.16	0.25	0.27	0.27
Sat Flow, veh/h	1809.5	3483.1	239.4	1809.5	1615.0	1615.0	1791.6	1425.3	403.5	1791.6	250.5	1384.8
Grp Volume(v), veh/h	61.7	242.0	237.9	8.0	1013.6	100.0	268.8	0.0	71.6	573.6	0.0	389.8
Grp Sat Flow(s),veh/h/ln	1809.5	1882.4	1840.1	1809.5	1805.0	1615.0	1791.6	0.0	1828.8	1791.6	0.0	1635.4
Q Serve(g_s), s	2.0	9.0	9.1	0.3	12.7	1.4	13.2	0.0	3.7	23.4	0.0	24.7
Cycle Q Clear(g_c), s	2.0	9.0	9.1	0.3	12.7	1.4	13.2	0.0	3.7	23.4	0.0	24.7
Proportion In Lane	1.000		0.130	1.000		1.000	1.000		0.221	1.000		0.847
Lane Grp Cap(c), veh/h	288.1	813.0	794.7	404.1	1474.1	659.5	363.6	0.0	291.5	686.2	0.0	436.9
V/C Ratio(X)	0.214	0.298	0.299	0.020	0.688	0.152	0.739	0.000	0.245	0.836	0.000	0.892
Avail Cap(c_a), veh/h	298.4	813.0	794.7	457.0	1474.1	659.5	437.1	0.0	291.5	899.2	0.0	546.4
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	17.1	20.0	20.0	18.5	7.0	6.0	31.8	0.0	39.6	19.3	0.0	38.0
Incr Delay (d2), s/veh	0.4	0.2	0.2	0.0	1.4	0.1	5.3	0.0	0.4	5.4	0.0	14.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	17.4	20.2	20.2	18.5	8.4	6.1	37.1	0.0	40.1	24.7	0.0	52.5
Lane Group LOS	B	C	C	B	A	A	D		D	C		D
Approach Volume, veh/h		542			1122			340			963	
Approach Delay, s/veh		19.9			8.2			37.7			36.0	
Approach LOS		B			A			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	7.39	50.54		4.85	48.00		19.58	21.18		31.19	32.79	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	44.00		4.00	44.00		20.00	16.00		40.00	36.00	
Max Q Clear Time (g_c+I1), s	4.02	11.09		2.28	14.65		15.24	5.69		25.44	26.72	
Green Extension Time (p_c)	0.00	13.84		0.00	13.19		0.35	2.21		1.74	2.07	

Intersection Summary			
HCM 2010 Control Delay			22.7
HCM 2010 Level of Service			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	808	42	72	821	54	46	2	210	267	6	97
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1881	1900	1863	1881	1863	1899	1899	1881	1863	1863	1863
Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Capacity, veh/h	371	1906	861	347	1726	764	59	1	640	59	0	633
Arriving On Green	0.03	1.00	0.00	0.97	0.97	0.00	0.40	0.40	0.00	0.40	0.40	0.00
Sat Flow, veh/h	1774.0	1615.0	1615.0	593.9	3574.3	1583.3	3.2	0.1	1599.0	0.0	0.0	1583.3
Grp Volume(v), veh/h	21.7	939.5	0.0	101.4	922.5	0.0	54.4	0.0	0.0	296.7	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1787.1	1615.0	593.9	1787.1	1583.3	3.3	0.0	1599.0	0.0	0.0	1583.3
Q Serve(g_s), s	0.7	0.0	0.0	1.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	1.1	2.2	0.0	48.0	0.0	0.0	48.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.960		1.000	0.978		1.000
Lane Grp Cap(c), veh/h	370.8	1906.3	861.3	346.8	1725.7	764.5	60.1	0.0	639.6	59.3	0.0	633.3
V/C Ratio(X)	0.059	0.493	0.000	0.292	0.535	0.000	0.906	0.000	0.000	5.001	0.000	0.000
Avail Cap(c_a), veh/h	399.5	1906.3	861.3	346.8	1725.7	764.5	60.1	0.0	639.6	59.3	0.0	633.3
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.774	0.774	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	14.0	0.0	0.0	1.1	1.1	0.0	58.8	0.0	0.0	60.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.4	0.3	0.0	82.9	0.0	0.0	1837.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	14.1	0.2	0.0	1.4	1.4	0.0	141.8	0.0	0.0	1897.4	0.0	0.0
Lane Group LOS	B	A		A	A		F			F		
Approach Volume, veh/h		961			1024			54			297	
Approach Delay, s/veh		0.5			1.4			141.8			1897.4	
Approach LOS		A			A			F			F	

Timer												
Assigned Phase	5	2			6			8			4	
Phase Duration (G+Y+Rc), s	6.06	68.00			61.94			52.00			52.00	
Change Period (Y+Rc), s	4.00	4.00			4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	64.00			56.00			48.00			48.00	
Max Q Clear Time (g_c+I1), s	2.72	2.00			4.20			50.00			50.00	
Green Extension Time (p_c)	0.00	26.51			24.70			0.00			0.00	

Intersection Summary			
HCM 2010 Control Delay			245.1
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	438	956	19	25	471	139	100	120	104	442	47	441
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1900	1900	1900	1881	1863	1900	1900	1881	1881	1827	1881
Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Capacity, veh/h	548	1562	699	226	856	379	632	837	705	545	805	705
Arriving On Green	0.44	0.87	0.87	0.02	0.24	0.24	0.44	0.44	0.00	0.44	0.44	0.00
Sat Flow, veh/h	1791.6	1615.0	1615.0	1809.5	1583.3	1583.3	1358.6	1900.0	1599.0	1238.0	1826.9	1599.0
Grp Volume(v), veh/h	527.7	1138.1	40.4	39.7	523.3	190.4	192.3	155.8	0.0	465.3	64.4	0.0
Grp Sat Flow(s),veh/h/ln	1791.6	1805.0	1615.0	1809.5	1787.1	1583.3	1358.6	1900.0	1599.0	1238.0	1826.9	1599.0
Q Serve(g_s), s	22.4	13.5	0.4	1.9	15.4	12.2	11.3	5.9	0.0	43.2	2.4	0.0
Cycle Q Clear(g_c), s	22.4	13.5	0.4	1.9	15.4	12.2	13.7	5.9	0.0	49.1	2.4	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	548.0	1562.4	699.0	226.1	856.4	379.4	632.0	837.3	704.6	544.8	805.1	704.6
V/C Ratio(X)	0.963	0.728	0.058	0.176	0.611	0.502	0.304	0.186	0.000	0.854	0.080	0.000
Avail Cap(c_a), veh/h	659.4	1562.4	699.0	242.9	856.4	379.4	644.4	854.6	719.2	556.1	821.7	719.2
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.905	0.905	0.905	0.868	0.868	0.868	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	16.1	5.4	4.5	32.6	39.9	38.7	23.1	20.1	0.0	35.0	19.1	0.0
Incr Delay (d2), s/veh	22.6	1.6	0.0	0.3	1.1	0.9	0.3	0.1	0.0	12.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	38.7	7.0	4.5	32.9	41.0	39.6	23.3	20.2	0.0	47.2	19.1	0.0
Lane Group LOS	D	A	A	C	D	D	C	C		D	B	
Approach Volume, veh/h		1706			753			348			530	
Approach Delay, s/veh		16.7			40.2			21.9			43.8	
Approach LOS		B			D			C			D	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	29.68	55.00		6.91	32.23			55.93			55.93	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	33.00	51.00		4.00	22.00			53.00			53.00	
Max Q Clear Time (g_c+I1), s	24.43	15.51		3.94	17.37			15.67			51.12	
Green Extension Time (p_c)	1.25	17.90		0.00	3.84			4.01			0.81	

Intersection Summary			
HCM 2010 Control Delay			26.9
HCM 2010 Level of Service			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	1122	73	124	276	6	217	140	694	29	35	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1863	1882	1882	1863	1871	1881	1900	1847	1847
Lanes	0	2	1	1	2	0	1	1	1	1	1	0
Capacity, veh/h	59	1633	753	224	2025	88	468	677	579	446	192	405
Arriving On Green	0.63	0.63	0.63	0.12	1.00	1.00	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	87.3	3435.1	1599.0	1774.0	3581.3	155.3	1275.7	1870.7	1599.0	1250.7	531.3	1118.0
Grp Volume(v), veh/h	661.4	631.4	92.4	136.3	190.3	188.6	333.8	155.6	913.2	43.9	0.0	112.0
Grp Sat Flow(s),veh/h/ln	1793.4	1729.0	1599.0	1774.0	1882.0	1854.6	1275.7	1870.7	1599.0	1250.7	0.0	1649.3
Q Serve(g_s), s	8.5	37.6	2.6	4.3	0.0	0.0	26.8	6.4	40.0	2.8	0.0	5.1
Cycle Q Clear(g_c), s	28.2	37.6	2.6	4.3	0.0	0.0	31.9	6.4	40.0	9.2	0.0	5.1
Proportion In Lane	0.049		1.000	1.000		0.084	1.000		1.000	1.000		0.678
Lane Grp Cap(c), veh/h	878.3	0.0	752.6	224.5	1064.3	1048.8	467.8	677.3	579.0	445.7	0.0	597.2
V/C Ratio(X)	0.753	0.000	0.123	0.607	0.179	0.180	0.714	0.230	1.577	0.099	0.000	0.188
Avail Cap(c_a), veh/h	878.3	0.0	752.6	377.4	1226.5	1208.7	467.8	677.3	579.0	445.7	0.0	597.2
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.593	0.593	0.593	0.485	0.485	0.485	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	16.0	0.0	11.4	21.0	0.0	0.0	35.0	24.5	35.2	27.7	0.0	24.1
Incr Delay (d2), s/veh	2.2	0.0	0.0	1.3	0.0	0.0	5.1	0.2	268.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	18.2	0.0	11.5	22.3	0.0	0.0	40.1	24.7	303.2	27.8	0.0	24.3
Lane Group LOS	B		B	C	A	A	D	C	F	C		C
Approach Volume, veh/h		1385			515			1403			156	
Approach Delay, s/veh		9.5			5.9			209.7			25.3	
Approach LOS		A			A			F			C	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		56.00		10.48	66.48			44.00			44.00	
Change Period (Y+Rc), s		4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s		52.00		16.00	72.00			40.00			40.00	
Max Q Clear Time (g_c+I1), s		39.63		6.25	2.00			42.00			11.19	
Green Extension Time (p_c)		8.45		0.22	19.65			0.00			8.66	

Intersection Summary			
HCM 2010 Control Delay			90.9
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	62	316	311	0	185	1	1636	741	342	2461	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1881	0	1881	1900	1863	1900	1881	1881	0
Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Capacity, veh/h	241	253	213	177	0	213	60	1386	633	373	2025	0
Arriving On Green	0.13	0.13	0.00	0.13	0.00	0.13	0.03	0.39	0.00	0.21	0.57	0.00
Sat Flow, veh/h	1809.5	1900.0	1599.0	1326.8	0.0	1599.0	1809.5	1615.0	1615.0	1791.6	0.0	0.0
Grp Volume(v), veh/h	116.5	79.5	0.0	379.3	0.0	207.9	4.0	1759.1	0.0	510.4	2675.0	0.0
Grp Sat Flow(s),veh/h/ln	1809.5	1900.0	1599.0	1326.8	0.0	1599.0	1809.5	1769.6	1615.0	1791.6	1787.1	0.0
Q Serve(g_s), s	7.2	4.5	0.0	16.0	16.0	15.5	0.3	47.0	0.0	25.0	68.0	68.0
Cycle Q Clear(g_c), s	7.2	4.5	0.0	16.0	16.0	15.5	0.3	47.0	0.0	25.0	68.0	68.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	241.3	253.3	213.2	176.9	0.0	213.2	60.3	1386.2	632.5	373.3	2025.4	0.0
V/C Ratio(X)	0.483	0.314	0.000	2.144	0.000	0.975	0.066	1.269	0.000	1.368	1.321	0.000
Avail Cap(c_a), veh/h	241.3	253.3	213.2	176.9	0.0	213.2	241.3	1386.2	632.5	373.3	2025.4	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	0.000	1.000	1.000	1.000	0.000	0.090	0.090	0.000
Uniform Delay (d), s/veh	48.2	47.0	0.0	52.0	0.0	51.8	56.2	36.5	0.0	47.5	26.0	0.0
Incr Delay (d2), s/veh	6.8	3.2	0.0	533.1	0.0	55.5	0.5	126.9	0.0	167.0	144.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	54.9	50.2	0.0	585.1	0.0	107.3	56.6	163.4	0.0	214.5	170.7	0.0
Lane Group LOS	D	D		F		F	E	F		F	F	
Approach Volume, veh/h		196			587			1763			3185	
Approach Delay, s/veh		53.0			416.0			163.2			177.7	
Approach LOS		D			F			F			F	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		20.00			20.00		8.00	51.00		29.00	72.00	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		16.00	47.00		25.00	56.00	
Max Q Clear Time (g_c+I1), s		9.15			18.00		2.26	49.00		27.00	70.00	
Green Extension Time (p_c)		0.37			0.00		0.00	0.00		0.00	0.00	

Intersection Summary												
HCM 2010 Control Delay			193.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	762	87	943	252	30	163	262	1156	337	249	1577	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1895	1881	1863	1864	1900	1881	1863	1900
Lanes	2	1	1	1	1	1	2	2	1	1	3	1
Capacity, veh/h	1356	489	416	557	321	271	358	1299	563	238	1924	611
Arriving On Green	0.08	0.09	0.00	0.15	0.17	0.17	0.02	0.11	0.11	0.09	0.38	0.00
Sat Flow, veh/h	3510.5	1615.0	1615.0	1809.5	1599.0	1599.0	3441.6	1615.0	1615.0	1791.6	1615.0	1615.0
Grp Volume(v), veh/h	1043.8	103.6	0.0	276.9	49.2	223.3	374.3	1256.5	351.0	296.4	1877.4	0.0
Grp Sat Flow(s),veh/h/ln	1755.2	1900.0	1615.0	1809.5	1895.3	1599.0	1720.8	1863.7	1615.0	1791.6	1695.1	1615.0
Q Serve(g_s), s	19.5	5.1	0.0	12.4	2.2	13.5	6.0	33.7	20.8	9.0	36.6	0.0
Cycle Q Clear(g_c), s	19.5	5.1	0.0	12.4	2.2	13.5	6.0	33.7	20.8	9.0	36.6	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	1355.9	489.4	416.0	556.6	321.3	271.1	358.2	1298.7	562.7	237.8	1923.6	610.9
V/C Ratio(X)	0.770	0.212	0.000	0.498	0.153	0.824	1.045	0.968	0.624	1.246	0.976	0.000
Avail Cap(c_a), veh/h	1445.9	832.2	707.4	582.2	641.5	541.2	358.2	1298.7	562.7	237.8	1923.6	610.9
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.537	0.537	0.000	1.000	1.000	1.000	0.090	0.090	0.090	1.000	1.000	0.000
Uniform Delay (d), s/veh	22.2	36.5	0.0	27.9	35.6	40.3	28.9	43.9	38.2	27.2	30.8	0.0
Incr Delay (d2), s/veh	1.3	0.1	0.0	0.7	0.2	6.2	27.8	3.1	0.5	141.0	15.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	23.5	36.6	0.0	28.5	35.8	46.5	56.7	47.0	38.7	168.2	46.0	0.0
Lane Group LOS	C	D		C	D	D	F	D	D	F	D	
Approach Volume, veh/h		1147			549			1982			2174	
Approach Delay, s/veh		24.7			36.5			47.3			62.6	
Approach LOS		C			D			D			E	

Timer												
Assigned Phase	7	4		3	8		5	2		1	6	
Phase Duration (G+Y+Rc), s	27.42	29.88		18.58	21.03		10.00	39.00		13.00	42.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	26.00	44.00		16.00	34.00		6.00	35.00		9.00	38.00	
Max Q Clear Time (g_c+I1), s	21.51	7.10		14.44	15.54		8.00	35.72		11.00	38.55	
Green Extension Time (p_c)	1.92	1.68		0.14	1.49		0.00	0.00		0.00	0.00	

Intersection Summary												
HCM 2010 Control Delay			47.6									
HCM 2010 Level of Service			D									

Intersection	
Intersection Delay (sec/veh):	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	998	5	27	1386	31	102
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.92	0.75	0.80	0.96	0.75	0.79
Heavy Vehicles(%)	1	0	12	1	0	2
Movement Flow Rate	1085	7	34	1444	41	129
Number of Lanes	1	0	0	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1092	0	2601	1089
Stage 1	-	-	-	-	1089	-
Stage 2	-	-	-	-	1512	-
Follow-up Headway	-	-	2.308	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	*335	-	*# 0	*335
Stage 1	-	-	-	-	*335	-
Stage 2	-	-	-	-	-	-
Time blocked-Platoon(%)	-	-	78	-	98	78
Mov Capacity-1 Maneuver	-	-	*335	-	*# 0	*335
Mov Capacity-2 Maneuver	-	-	-	-	*# 0	-
Stage 1	-	-	-	-	*335	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.4	26.4
HCM LOS	A	A	D

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	*335				
HCM Control Delay (s)	26.4	-	-	16.947	-
HCM Lane VC Ratio	0.509	-	-	0.101	-
HCM Lane LOS	D	-	-	C	-
HCM 95th Percentile Queue (veh)	2.742	-	-	0.333	-

Intersection	
Intersection Delay (sec/veh):	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	2	1008	71	75	1301	2	112	0	332	2	0	9
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.84	0.62	0.85	0.89	0.92	0.87	0.92	0.83	0.92	0.92	0.92
Heavy Vehicles(%)	2	1	0	0	1	2	0	2	0	2	2	2
Movement Flow Rate	2	1200	115	88	1462	2	129	0	400	2	0	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	1464	0	0	1315	0	0	2906	2902	1258	3101	2958	1463
Stage 1	-	-	-	-	-	-	1262	1262	-	1639	1639	-
Stage 2	-	-	-	-	-	-	1644	1640	-	1462	1319	-
Follow-up Headway	2.218	-	-	2.2	-	-	3.5	4.018	3.3	3.518	4.018	3.318
Pot Capacity-1 Maneuver	-	-	-	201	-	-	-	-	# 151	-	-	-
Stage 1	-	-	-	-	-	-	141	132	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	39	98	-
Time blocked-Platoon(%)	100	-	-	80	-	-	100	100	80	100	100	100
Mov Capacity-1 Maneuver	-	-	-	201	-	-	-	-	# 151	-	-	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	132	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	98	-

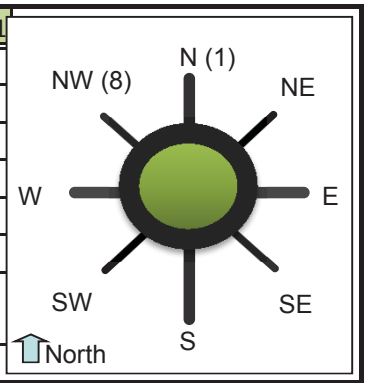
Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	2.1	-	-
HCM LOS	A	A	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	-	-	-	36.223	0	-	-
HCM Lane VC Ratio	-	-	-	-	0.439	-	-	-
HCM Lane LOS	-	-	-	-	E	A	-	-
HCM 95th Percentile Queue (veh)	-	-	-	-	2.049	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, PM
County/District:	Anne Arundel, MD
Intersection:	Laurel Fort Meade Rd. and MD 32 East
	Baseline PM Peak



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph								
NE (2), vph								
E (3), vph								
SE (4), vph	471							
S (5), vph								
SW (6), vph	227	786						
W (7), vph								
NW (8), vph								
Entry Volume, vph	698	786	0	0	0	0	0	0

Exit Legs (TO)

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph			367					
NE (2), vph								
E (3), vph								
SE (4), vph							127	
S (5), vph								
SW (6), vph							335	
W (7), vph								
NW (8), vph								
Entry Volume, vph	0	0	367	0	0	0	462	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	0	0	1	0	1
# of Conflict Flow Lanes	1	2	2	2	1	1	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	1.000	1.000	0.952	1.000	0.952
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	0	0	419	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	538	0	0	0	0	0	0	145
	S (5), pcu/h	0	0	0	0	0	0	0	0
	SW (6), pcu/h	1156	0	0	0	0	0	0	382
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1694	0	0	0	0	419	0	527
	Entry flow Lane 1, pcu/h	797	0	0	0	0	419	0	527
	Entry flow Lane 2, pcu/h	897	0	0	0	0	0	0	0
	Conflicting flow, pcu/h	0	0	0	0	0	683	0	1694

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1076	1076	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	759	854	NA	NA	NA	NA	NA	NA
V/C ratio	**0.70**	**0.79**			#VALUE!	#VALUE!		
Control Delay, s/veh	**14.4**	**18.8**			#VALUE!	#VALUE!		
LOS	B	C			#VALUE!	#VALUE!		
95th % Queue (ft)	**163**	**230**			#VALUE!	#VALUE!		
Approach Delay, LOS	16.7 sec, LOS C				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	667	NA	329	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	399	NA	502	NA
V/C ratio			#VALUE!	#VALUE!	**0.60**		**1.53**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**16.1**		**281.5**	#VALUE!
LOS			#VALUE!	#VALUE!	C		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**105**		**743**	#VALUE!
Approach Delay, LOS			#VALUE!		16.1 sec, LOS C		281.5 sec, LOS F	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1371	1371	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	759	854	NA	NA	NA	NA	NA	NA
V/C ratio	**0.55**	**0.62**			#VALUE!	#VALUE!		
Control Delay, s/veh	**8.6**	**10.0**			#VALUE!	#VALUE!		
LOS	A	A			#VALUE!	#VALUE!		
95th % Queue (ft)	**93**	**121**			#VALUE!	#VALUE!		
Approach Delay, LOS	9.3 sec, LOS A				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	845	NA	340	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	399	NA	502	NA
V/C ratio			#VALUE!	#VALUE!	**0.47**		**1.48**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**10.4**		**258.9**	#VALUE!
LOS			#VALUE!	#VALUE!	B		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**67**		**714**	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

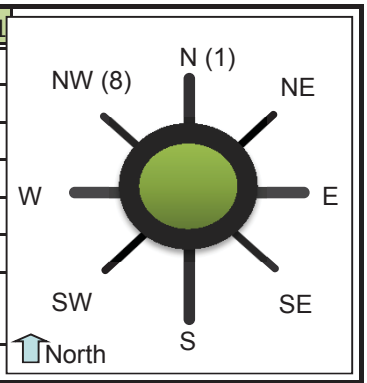
Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, PM
County/District:	Anne Arundel, MD
Intersection:	Mapes Rd. and MD 32 West
	Baseline PM Peak



Volumes

		Entry Legs (FROM)							
		N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation		SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
Exit Legs (TO)	N (1), vph								69
	NE (2), vph								
	E (3), vph								
	SE (4), vph								
	S (5), vph	835						356	220
	SW (6), vph								
	W (7), vph		423						27
	NW (8), vph								
	Entry Volume, vph	835	423	0	0	0	0	356	316

		S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation		SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
	N (1), vph	268							
	NE (2), vph								
	E (3), vph								
	SE (4), vph								
	S (5), vph								
	SW (6), vph								
	W (7), vph	200							
	NW (8), vph								
	Entry Volume, vph	468	0	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	2	1	0	0	0
# of Conflict Flow Lanes	2	2	2	2	1	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	0.952	0.952	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	79	306	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	953	0	0	657	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	483	0	0	31	228	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1436	0	0	767	534	0	0	0
	Entry flow Lane 1, pcu/h	953	0	0	406	534	0	0	0
	Entry flow Lane 2, pcu/h	483	0	0	361	0	0	0	0
	Conflicting flow, pcu/h	916	0	0	534	0	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	541	567	NA	NA	1076	NA	NA	NA
Entry Flow Rates, veh/h	908	460	NA	NA	509	NA	NA	NA
V/C ratio	**1.68**	**0.81**			**0.47**	#VALUE!		
Control Delay, s/veh	**332.0**	**32.2**			**8.7**	#VALUE!		
LOS	F	D			A	#VALUE!		
95th % Queue (ft)	**1373**	**211**			**68**	#VALUE!		
Approach Delay, LOS	231.2 sec, LOS F				8.7 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	721	740	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	387	343	NA	NA	NA	NA
V/C ratio			**0.54**	**0.46**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**13.3**	**11.3**			#VALUE!	#VALUE!
LOS			B	B			#VALUE!	#VALUE!
95th % Queue (ft)			**85**	**65**			#VALUE!	#VALUE!
Approach Delay, LOS			12.4 sec, LOS B				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	625	685	NA	NA	1562	NA	NA	NA
Entry Flow Rates, veh/h	908	460	NA	NA	509	NA	NA	NA
V/C ratio	**1.45**	**0.67**			**0.33**	#VALUE!		
Control Delay, s/veh	**231.7**	**18.7**			**5.0**	#VALUE!		
LOS	F	C			A	#VALUE!		
95th % Queue (ft)	**1135**	**136**			**38**	#VALUE!		
Approach Delay, LOS	160.1 sec, LOS F				5 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	916	966	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	387	343	NA	NA	NA	NA
V/C ratio			**0.42**	**0.36**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**8.9**	**7.5**			#VALUE!	#VALUE!
LOS			A	A			#VALUE!	#VALUE!
95th % Queue (ft)			**56**	**43**			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	446	390	306	405	200	774	153	1531	271	362	1260	207
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1900	1900	1845	1893	1881	1881	1881	1881	1900	1881	1900
Lanes	2	1	1	2	1	2	1	3	1	2	3	1
Capacity, veh/h	842	507	431	590	536	825	252	1626	506	495	1537	511
Arriving On Green	0.07	0.27	0.27	0.08	0.28	0.28	0.07	0.32	0.00	0.07	0.32	0.32
Sat Flow, veh/h	3475.7	1615.0	1615.0	3408.2	2910.2	2910.2	1791.6	1599.0	1599.0	3510.5	1615.0	1615.0
Grp Volume(v), veh/h	518.6	453.5	343.8	493.9	259.7	943.9	184.3	1594.8	0.0	402.2	1431.8	217.9
Grp Sat Flow(s),veh/h/ln	1737.9	1900.0	1615.0	1704.1	1892.5	1455.1	1791.6	1711.9	1599.0	1755.2	1618.1	1615.0
Q Serve(g_s), s	4.0	13.8	11.9	5.0	6.8	17.0	4.0	18.5	0.0	4.0	17.2	6.4
Cycle Q Clear(g_c), s	4.0	13.8	11.9	5.0	6.8	17.0	4.0	18.5	0.0	4.0	17.2	6.4
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	841.7	506.7	430.7	590.0	536.2	824.6	252.0	1626.3	506.4	495.0	1537.2	511.4
V/C Ratio(X)	0.616	0.895	0.798	0.837	0.484	1.145	0.732	0.981	0.000	0.813	0.931	0.426
Avail Cap(c_a), veh/h	841.7	506.7	430.7	590.0	536.2	824.6	252.0	1626.3	506.4	495.0	1537.2	511.4
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	18.6	21.2	20.5	18.6	17.9	21.5	16.3	20.3	0.0	17.7	19.9	16.2
Incr Delay (d2), s/veh	1.4	18.3	10.2	10.2	0.7	79.3	10.4	17.8	0.0	10.0	10.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	19.9	39.4	30.7	28.9	18.5	100.8	26.7	38.2	0.0	27.7	30.4	16.8
Lane Group LOS	B	D	C	C	B	F	C	D		C	C	B
Approach Volume, veh/h		1316			1698			1779			2052	
Approach Delay, s/veh		29.5			67.3			37.0			28.5	
Approach LOS		C			E			D			C	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.00	20.00		9.00	21.00		8.00	23.00		8.00	23.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	16.00		5.00	17.00		4.00	19.00		4.00	19.00	
Max Q Clear Time (g_c+I1), s	6.00	15.79		7.00	19.00		6.00	20.47		6.00	19.15	
Green Extension Time (p_c)	0.00	0.18		0.00	0.00		0.00	0.00		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay			40.5
HCM 2010 Level of Service			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	434	863	218	396	752	324	334	1998	703	589	1439	168
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1881	1900	1900	1881	1900	1900	1900	1900	1881	1900	1881
Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Capacity, veh/h	423	894	404	385	849	384	572	1961	646	528	2141	660
Arriving On Green	0.06	0.25	0.00	0.05	0.24	0.24	0.09	0.40	0.40	0.10	0.41	0.00
Sat Flow, veh/h	3510.5	1615.0	1615.0	3510.5	1615.0	1615.0	3510.5	1615.0	1615.0	3475.7	1599.0	1599.0
Grp Volume(v), veh/h	447.4	938.0	0.0	425.8	800.0	330.6	367.0	2244.9	889.9	684.9	1635.2	0.0
Grp Sat Flow(s),veh/h/ln	1755.2	1787.1	1615.0	1755.2	1787.1	1615.0	1755.2	1634.0	1615.0	1737.9	1729.0	1599.0
Q Serve(g_s), s	5.0	20.0	0.0	4.0	17.6	15.7	4.8	32.0	32.0	8.0	21.6	0.0
Cycle Q Clear(g_c), s	5.0	20.0	0.0	4.0	17.6	15.7	4.8	32.0	32.0	8.0	21.6	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	423.0	893.6	403.7	384.9	848.9	383.6	572.2	1960.8	646.0	527.6	2141.4	660.1
V/C Ratio(X)	1.058	1.050	0.000	1.106	0.942	0.862	0.641	1.145	1.378	1.298	0.764	0.000
Avail Cap(c_a), veh/h	423.0	893.6	403.7	384.9	848.9	383.6	617.3	1960.8	646.0	527.6	2141.4	660.1
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	28.3	30.0	0.0	30.3	30.0	29.2	16.8	24.0	24.0	21.3	20.1	0.0
Incr Delay (d2), s/veh	59.8	44.0	0.0	77.7	18.4	17.8	2.0	71.8	179.5	147.7	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	88.1	74.0	0.0	108.1	48.4	47.1	18.8	95.8	203.5	169.0	21.8	0.0
Lane Group LOS	F	F		F	D	D	B	F	F	F	C	
Approach Volume, veh/h		1385			1556			3502			2320	
Approach Delay, s/veh		78.6			64.4			115.1			65.3	
Approach LOS		E			E			F			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	9.00	24.00		8.00	23.00		10.97	36.00		12.00	37.03	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	5.00	20.00		4.00	19.00		8.00	32.00		8.00	32.00	
Max Q Clear Time (g_c+I1), s	7.00	22.00		6.00	19.59		6.79	34.00		10.00	23.63	
Green Extension Time (p_c)	0.00	0.00		0.00	0.00		0.18	0.00		0.00	8.33	

Intersection Summary			
HCM 2010 Control Delay			87.1
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	32	19	46	7	158	7	771	141	380	848	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1900	1881	1900	1881	1900	1900	1900	1900
Lanes	0	1	0	0	1	1	1	1	1	1	1	1
Capacity, veh/h	17	53	36	198	51	218	23	791	679	430	1226	1042
Arriving On Green	0.06	0.06	0.06	0.14	0.14	0.14	0.01	0.42	0.42	0.32	0.86	0.86
Sat Flow, veh/h	291.5	885.6	602.0	1452.3	375.0	1599.0	1809.5	1615.0	1615.0	1809.5	1615.0	1615.0
Grp Volume(v), veh/h	81.4	0.0	0.0	103.4	0.0	190.4	14.0	820.2	183.1	463.4	997.6	21.4
Grp Sat Flow(s),veh/h/ln	1779.2	0.0	0.0	1827.4	0.0	1599.0	1809.5	1881.2	1615.0	1809.5	1900.0	1615.0
Q Serve(g_s), s	4.9	0.0	0.0	5.7	0.0	12.8	0.8	46.0	8.1	26.0	27.1	0.2
Cycle Q Clear(g_c), s	4.9	0.0	0.0	5.7	0.0	12.8	0.8	46.0	8.1	26.0	27.1	0.2
Proportion In Lane	0.164		0.338	0.795		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	106.1	0.0	0.0	249.2	0.0	218.1	22.9	790.6	678.7	429.8	1225.7	1041.9
V/C Ratio(X)	0.767	0.000	0.000	0.415	0.000	0.873	0.611	1.037	0.270	1.078	0.814	0.021
Avail Cap(c_a), veh/h	260.1	0.0	0.0	267.1	0.0	233.7	66.1	790.6	678.7	429.8	1225.7	1041.9
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	0.928	0.928	0.928
Uniform Delay (d), s/veh	50.7	0.0	0.0	43.3	0.0	46.3	53.8	31.7	20.7	37.4	4.7	2.8
Incr Delay (d2), s/veh	10.9	0.0	0.0	1.1	0.0	27.2	23.5	42.1	0.2	64.4	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	61.6	0.0	0.0	44.4	0.0	73.6	77.2	73.8	21.0	101.9	8.7	2.8
Lane Group LOS	E			D		E	E	F	C	F	A	A
Approach Volume, veh/h		81			294			1017			1482	
Approach Delay, s/veh		61.6			63.3			64.4			37.7	
Approach LOS		E			E			E			D	

Timer								
Assigned Phase		4			8		5	2			1	6	
Phase Duration (G+Y+Rc), s		10.53			18.93		5.39	50.00			30.00	74.61	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00			4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		4.00	46.00			26.00	68.00	
Max Q Clear Time (g_c+I1), s		6.93			14.77		2.84	48.00			28.00	29.05	
Green Extension Time (p_c)		0.20			0.16		0.00	0.00			0.00	22.75	

Intersection Summary								
HCM 2010 Control Delay			50.4					
HCM 2010 Level of Service			D					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	688	313	84	136	97	131	201	344	87	96	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1900	1900	1881	1881	1900	1900	1900	1900	1900
Lanes	1	2	1	1	1	1	1	1	1	1	1	0
Capacity, veh/h	781	1957	867	466	1060	892	302	324	275	257	205	72
Arriving On Green	0.03	0.54	0.00	0.04	0.56	0.00	0.03	0.06	0.00	0.06	0.15	0.15
Sat Flow, veh/h	1809.5	1599.0	1599.0	1809.5	1599.0	1599.0	1791.6	1615.0	1615.0	1809.5	1346.1	470.8
Grp Volume(v), veh/h	39.7	747.8	0.0	103.7	154.5	0.0	137.9	231.0	0.0	103.6	0.0	177.5
Grp Sat Flow(s),veh/h/ln	1809.5	1805.0	1599.0	1809.5	1900.0	1599.0	1791.6	1900.0	1615.0	1809.5	0.0	1816.9
Q Serve(g_s), s	0.9	10.7	0.0	2.2	3.5	0.0	5.6	10.7	0.0	4.3	0.0	8.2
Cycle Q Clear(g_c), s	0.9	10.7	0.0	2.2	3.5	0.0	5.6	10.7	0.0	4.3	0.0	8.2
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		0.259
Lane Grp Cap(c), veh/h	780.9	1957.1	866.9	466.3	1060.5	892.5	302.3	323.6	275.1	257.1	0.0	277.3
V/C Ratio(X)	0.051	0.382	0.000	0.222	0.146	0.000	0.456	0.714	0.000	0.403	0.000	0.640
Avail Cap(c_a), veh/h	810.9	1957.1	866.9	588.7	1060.5	892.5	334.2	890.8	757.2	301.3	0.0	831.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	0.090	0.090	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	8.5	11.8	0.0	8.5	9.5	0.0	29.4	40.1	0.0	29.6	0.0	35.6
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.1	0.0	0.1	0.3	0.0	1.0	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	8.5	12.0	0.0	8.7	9.6	0.0	29.5	40.4	0.0	30.6	0.0	38.1
Lane Group LOS	A	B		A	A		C	D		C		D
Approach Volume, veh/h		788			258			369			281	
Approach Delay, s/veh		11.8			9.2			36.3			35.3	
Approach LOS		B			A			D			D	

Timer								
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	6.51	52.57		7.94	54.00		11.40	19.26		9.81	17.67	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	44.00		10.00	50.00		9.00	42.00		8.00	41.00	
Max Q Clear Time (g_c+I1), s	2.86	12.72		4.17	5.50		7.60	12.71		6.26	10.22	
Green Extension Time (p_c)	0.00	7.07		0.10	7.49		0.04	2.55		0.03	2.57	

Intersection Summary								
HCM 2010 Control Delay			20.6					
HCM 2010 Level of Service			C					

Intersection	
Intersection Delay (sec/veh):	2.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	54	969	203	116	89	14
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.73	0.91	0.96	0.85	0.76	0.67
Heavy Vehicles(%)	0	0	1	2	2	12
Movement Flow Rate	74	1065	211	136	117	21
Number of Lanes	0	2	2	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	347	0	0	0	960	174
Stage 1	-	-	-	-	279	-
Stage 2	-	-	-	-	681	-
Follow-up Headway	2.2	-	-	-	3.52	3.42
Pot Capacity-1 Maneuver	1316	-	-	-	286	981
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	464	-
Time blocked-Platoon(%)	6	-	-	-	6	6
Mov Capacity-1 Maneuver	1316	-	-	-	247	981
Mov Capacity-2 Maneuver	-	-	-	-	247	-
Stage 1	-	-	-	-	843	-
Stage 2	-	-	-	-	400	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.5	0	29.9
HCM LOS	A	A	D

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					279
HCM Control Delay (s)	7.898	-	-	-	29.9
HCM Lane VC Ratio	0.056	-	-	-	0.495
HCM Lane LOS	A	-	-	-	D
HCM 95th Percentile Queue (veh)	0.178	-	-	-	2.563

Intersection	
Intersection Delay (sec/veh):	9.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	412	28	34	373	84	275
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.90	0.69	0.79	0.83	0.63	0.78
Heavy Vehicles(%)	0	0	0	1	0	0
Movement Flow Rate	458	41	43	449	133	353
Number of Lanes	2	0	0	2	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	499	0	790	250
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	311	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1075	-	*462	756
Stage 1	-	-	-	-	*595	-
Stage 2	-	-	-	-	*1309	-
Time blocked-Platoon(%)	-	-	0	-	13	0
Mov Capacity-1 Maneuver	-	-	1075	-	*437	756
Mov Capacity-2 Maneuver	-	-	-	-	*437	-
Stage 1	-	-	-	-	*595	-
Stage 2	-	-	-	-	*1240	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.7	27.3
HCM LOS	A	A	D

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	*630				
HCM Control Delay (s)	27.3	-	-	8.488	-
HCM Lane VC Ratio	0.771	-	-	0.04	-
HCM Lane LOS	D	-	-	A	-
HCM 95th Percentile Queue (veh)	7.221	-	-	0.125	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	169	1225	90	15	312	463	51	99	6	147	37	39
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1638	1883	1883	1900	1849	1900	1863	1868	1868	1727	1726	1726
Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Capacity, veh/h	623	2041	249	188	2070	904	293	167	30	276	122	136
Arriving On Green	0.07	0.62	0.62	0.00	0.18	0.18	0.05	0.11	0.11	0.11	0.16	0.16
Sat Flow, veh/h	1559.9	3293.1	402.4	1809.5	1615.0	1615.0	1774.0	1539.2	279.8	1645.0	745.7	832.9
Grp Volume(v), veh/h	231.5	827.6	810.7	15.0	335.5	551.2	83.6	0.0	156.0	186.1	0.0	110.3
Grp Sat Flow(s),veh/h/ln	1559.9	1883.2	1812.2	1809.5	1848.8	1615.0	1774.0	0.0	1819.0	1645.0	0.0	1578.6
Q Serve(g_s), s	5.4	32.2	33.3	0.4	8.2	33.9	4.5	0.0	9.0	9.8	0.0	6.8
Cycle Q Clear(g_c), s	5.4	32.2	33.3	0.4	8.2	33.9	4.5	0.0	9.0	9.8	0.0	6.8
Proportion In Lane	1.000		0.222	1.000		1.000	1.000		0.154	1.000		0.528
Lane Grp Cap(c), veh/h	623.5	1167.1	1123.1	187.9	2069.5	903.9	293.3	0.0	197.9	276.3	0.0	258.7
V/C Ratio(X)	0.371	0.709	0.722	0.080	0.162	0.610	0.285	0.000	0.788	0.673	0.000	0.426
Avail Cap(c_a), veh/h	783.1	1167.1	1123.1	230.6	2069.5	903.9	294.1	0.0	286.0	338.7	0.0	394.2
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	7.0	13.9	14.1	13.5	22.8	33.2	39.7	0.0	47.0	32.1	0.0	40.6
Incr Delay (d2), s/veh	0.4	2.0	2.3	0.2	0.0	1.2	0.5	0.0	8.9	3.8	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	7.4	16.0	16.4	13.7	22.8	34.4	40.2	0.0	55.9	35.9	0.0	41.7
Lane Group LOS	A	B	B	B	C	C	D		E	D		D
Approach Volume, veh/h		1870			902			240			296	
Approach Delay, s/veh		15.1			29.8			50.4			38.1	
Approach LOS		B			C			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	11.94	71.00		5.45	64.51		9.95	15.76		15.90	21.72	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	19.00	67.00		4.00	52.00		6.00	17.00		16.00	27.00	
Max Q Clear Time (g_c+I1), s	7.43	35.28		2.39	35.90		6.47	11.04		11.76	8.79	
Green Extension Time (p_c)	0.52	22.63		0.00	13.23		0.00	0.72		0.19	1.41	

Intersection Summary			
HCM 2010 Control Delay			23.7
HCM 2010 Level of Service			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	108	860	25	169	1061	284	65	7	60	40	1	16
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1827	1792	1827	1881	1863	1897	1897	1900	1863	1863	1863
Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Capacity, veh/h	206	1736	762	261	1549	686	58	3	700	59	1	686
Arriving On Green	0.03	0.50	0.00	0.58	0.58	0.00	0.43	0.43	0.00	0.43	0.43	0.00
Sat Flow, veh/h	1774.0	1523.6	1523.6	612.2	3574.3	1583.3	6.0	0.5	1615.0	1.7	0.0	1583.3
Grp Volume(v), veh/h	117.4	886.6	0.0	213.9	1178.9	0.0	92.0	0.0	0.0	44.6	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1735.6	1523.6	612.2	1787.1	1583.3	6.6	0.0	1615.0	1.8	0.0	1583.3
Q Serve(g_s), s	4.0	20.6	0.0	39.4	29.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.0	20.6	0.0	52.0	29.9	0.0	52.0	0.0	0.0	52.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.917		1.000	0.976		1.000
Lane Grp Cap(c), veh/h	206.5	1735.6	761.8	261.1	1548.8	686.1	60.4	0.0	699.8	60.0	0.0	686.1
V/C Ratio(X)	0.569	0.511	0.000	0.819	0.761	0.000	1.524	0.000	0.000	0.742	0.000	0.000
Avail Cap(c_a), veh/h	206.5	1735.6	761.8	261.1	1548.8	686.1	60.4	0.0	699.8	60.0	0.0	686.1
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.329	0.329	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	24.8	20.1	0.0	32.9	20.7	0.0	57.6	0.0	0.0	59.1	0.0	0.0
Incr Delay (d2), s/veh	3.6	0.3	0.0	6.8	0.8	0.0	303.4	0.0	0.0	38.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	28.4	20.4	0.0	39.7	21.5	0.0	360.9	0.0	0.0	97.7	0.0	0.0
Lane Group LOS	C	C		D	C		F			F		
Approach Volume, veh/h		1004			1393			92			45	
Approach Delay, s/veh		21.3			24.3			360.9			97.7	
Approach LOS		C			C			F			F	

Timer												
Assigned Phase	5	2			6			8			4	
Phase Duration (G+Y+Rc), s	8.00	64.00			56.00			56.00			56.00	
Change Period (Y+Rc), s	4.00	4.00			4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	60.00			52.00			52.00			52.00	
Max Q Clear Time (g_c+I1), s	6.00	22.58			54.00			54.00			54.00	
Green Extension Time (p_c)	0.00	25.46			0.00			0.00			0.00	

Intersection Summary			
HCM 2010 Control Delay			36.6
HCM 2010 Level of Service			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	471	472	104	91	1098	480	40	72	62	123	104	535
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1810	1696	1900	1863	1900	1900	1721	1900	1824	1824	1863
Lanes	1	2	1	1	2	1	1	1	1	0	1	1
Capacity, veh/h	518	1977	829	490	1348	615	60	473	444	154	112	435
Arriving On Green	0.41	0.96	0.96	0.05	0.38	0.38	0.28	0.28	0.00	0.28	0.28	0.00
Sat Flow, veh/h	1774.0	1442.0	1442.0	1809.5	1615.0	1615.0	1094.2	1720.7	1615.0	418.8	383.6	1583.3
Grp Volume(v), veh/h	501.1	524.4	144.4	123.0	1220.0	505.3	75.5	144.0	0.0	302.1	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1719.0	1442.0	1809.5	1769.6	1615.0	1094.2	1720.7	1615.0	802.4	0.0	1583.3
Q Serve(g_s), s	27.1	1.0	0.6	5.0	39.1	33.8	0.0	7.9	0.0	25.1	0.0	0.0
Cycle Q Clear(g_c), s	27.1	1.0	0.6	5.0	39.1	33.8	33.0	7.9	0.0	33.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	0.522		1.000
Lane Grp Cap(c), veh/h	518.2	1976.9	829.1	490.2	1348.1	615.2	60.0	473.2	444.1	266.3	0.0	435.4
V/C Ratio(X)	0.967	0.265	0.174	0.251	0.905	0.821	1.258	0.304	0.000	1.134	0.000	0.000
Avail Cap(c_a), veh/h	528.7	1976.9	829.1	490.2	1348.1	615.2	60.0	473.2	444.1	266.3	0.0	435.4
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.959	0.959	0.959	0.733	0.733	0.733	1.000	1.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	29.1	1.0	1.0	20.8	35.1	33.5	60.0	34.4	0.0	48.6	0.0	0.0
Incr Delay (d2), s/veh	29.8	0.1	0.1	0.2	6.8	6.6	200.7	0.4	0.0	96.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	58.9	1.1	1.1	21.0	41.9	40.0	260.7	34.8	0.0	144.9	0.0	0.0
Lane Group LOS	E	A	A	C	D	D	F	C		F		
Approach Volume, veh/h		1170			1848			219			302	
Approach Delay, s/veh		25.8			40.0			112.5			144.9	
Approach LOS		C			D			F			F	
Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	33.29	73.00		10.00	49.71			37.00			37.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	30.00	69.00		6.00	45.00			33.00			33.00	
Max Q Clear Time (g_c+I1), s	29.10	2.98		6.98	41.08			35.00			35.00	
Green Extension Time (p_c)	0.19	30.25		0.00	3.52			0.00			0.00	
Intersection Summary												
HCM 2010 Control Delay			48.8									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	32	234	299	666	1321	31	80	40	113	8	198	25
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1854	1854	1881	1900	1900	1900	1827	1835	1863	1667	1858	1858
Lanes	0	2	1	1	2	0	1	1	1	1	1	0
Capacity, veh/h	206	956	906	677	2685	86	94	367	317	276	318	46
Arriving On Green	0.19	0.19	0.19	0.27	1.00	1.00	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	258.3	1686.9	1599.0	1809.5	3661.8	117.4	1040.1	1834.6	1583.3	1209.3	1588.5	229.2
Grp Volume(v), veh/h	60.4	296.2	305.1	756.8	768.8	763.2	96.4	48.2	128.4	13.8	0.0	314.7
Grp Sat Flow(s),veh/h/ln	258.3	1686.9	1599.0	1809.5	1900.0	1879.3	1040.1	1834.6	1583.3	1209.3	0.0	1817.7
Q Serve(g_s), s	24.7	7.9	19.9	16.0	0.0	0.0	3.9	2.6	8.5	1.1	0.0	20.1
Cycle Q Clear(g_c), s	24.7	7.9	19.9	16.0	0.0	0.0	24.0	2.6	8.5	3.7	0.0	20.1
Proportion In Lane	1.000		1.000	1.000		0.062	1.000		1.000	1.000		0.126
Lane Grp Cap(c), veh/h	206.4	0.0	906.1	676.8	1393.3	1378.1	93.8	366.9	316.7	275.8	0.0	363.5
V/C Ratio(X)	0.293	0.000	0.337	1.118	0.552	0.554	1.027	0.131	0.406	0.050	0.000	0.866
Avail Cap(c_a), veh/h	206.4	0.0	906.1	676.8	1393.3	1378.1	93.8	366.9	316.7	275.8	0.0	363.5
HCM Platoon Ratio	0.33	0.33	0.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.975	0.975	0.975	0.090	0.090	0.090	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	31.2	0.0	29.2	23.0	0.0	0.0	59.3	39.4	41.8	41.0	0.0	46.4
Incr Delay (d2), s/veh	3.5	0.0	1.0	55.4	0.0	0.0	100.6	0.2	0.8	0.1	0.0	19.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	34.7	0.0	30.2	78.3	0.0	0.0	159.9	39.6	42.6	41.0	0.0	65.6
Lane Group LOS	C		C	F	A	A	F	D	D	D		E
Approach Volume, veh/h		662			2289			273			328	
Approach Delay, s/veh		17.1			25.9			83.5			64.5	
Approach LOS		B			C			F			E	
Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		72.00		20.00	92.00			28.00			28.00	
Change Period (Y+Rc), s		4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s		68.00		16.00	88.00			24.00			24.00	
Max Q Clear Time (g_c+I1), s		26.71		18.00	2.00			26.00			22.10	
Green Extension Time (p_c)		24.68		0.00	34.26			0.00			0.64	
Intersection Summary												
HCM 2010 Control Delay			32.3									
HCM 2010 Level of Service			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	25	45	568	58	213	346	2624	205	65	1164	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1743	1892	1900	1900	1900	1881	1881	1845	1863	1863	1863	1900
Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Capacity, veh/h	161	252	215	220	301	253	373	1898	858	59	1298	592
Arriving On Green	0.13	0.13	0.00	0.16	0.16	0.16	0.21	0.54	0.00	0.07	0.73	0.00
Sat Flow, veh/h	1206.8	1891.9	1615.0	1389.3	1900.0	1599.0	1791.6	1583.3	1583.3	1774.0	1615.0	1615.0
Grp Volume(v), veh/h	20.0	39.7	0.0	604.3	100.0	231.5	397.7	3016.1	0.0	79.3	1337.9	0.0
Grp Sat Flow(s),veh/h/ln	1206.8	1891.9	1615.0	1389.3	1900.0	1599.0	1791.6	1752.4	1583.3	1774.0	1769.6	1615.0
Q Serve(g_s), s	1.8	2.2	0.0	19.0	5.6	17.1	25.0	65.0	0.0	4.0	44.0	0.0
Cycle Q Clear(g_c), s	1.8	2.2	0.0	19.0	5.6	17.1	25.0	65.0	0.0	4.0	44.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	160.9	252.3	215.3	220.0	300.8	253.2	373.3	1898.5	857.6	59.1	1297.7	592.2
V/C Ratio(X)	0.124	0.157	0.000	2.747	0.332	0.914	1.066	1.589	0.000	1.340	1.031	0.000
Avail Cap(c_a), veh/h	160.9	252.3	215.3	220.0	300.8	253.2	373.3	1898.5	857.6	59.1	1297.7	592.2
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	45.8	46.0	0.0	50.5	44.9	49.7	47.5	27.5	0.0	56.0	16.0	0.0
Incr Delay (d2), s/veh	1.6	1.3	0.0	798.8	3.0	38.2	65.0	267.5	0.0	232.3	33.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	47.4	47.4	0.0	849.3	47.8	87.9	112.5	295.0	0.0	288.3	49.3	0.0
Lane Group LOS	D	D		F	D	F	F	F		F	F	
Approach Volume, veh/h		60			936			3414			1417	
Approach Delay, s/veh		47.4			575.3			273.7			62.6	
Approach LOS		D			F			F			E	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		20.00			23.00		29.00	69.00		8.00	48.00	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			19.00		25.00	65.00		4.00	44.00	
Max Q Clear Time (g_c+I1), s		4.23			21.00		27.00	67.00		6.00	46.00	
Green Extension Time (p_c)		0.12			0.00		0.00	0.00		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay			268.5
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	29	195	488	111	191	1220	1381	90	72	650	899
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1845	1900	1863	1900	1897	1863	1900	1827	1827	1827	1810	1863
Lanes	2	1	1	1	1	1	2	2	1	1	3	1
Capacity, veh/h	515	285	238	367	348	290	1308	2162	919	325	2264	726
Arriving On Green	0.03	0.15	0.00	0.07	0.18	0.18	0.32	0.99	0.99	0.06	0.46	0.00
Sat Flow, veh/h	3408.2	1583.3	1583.3	1809.5	1583.3	1583.3	3510.5	1552.9	1552.9	1739.9	1583.3	1583.3
Grp Volume(v), veh/h	169.7	35.8	0.0	513.7	140.5	238.8	1626.7	1453.7	108.4	82.8	738.6	0.0
Grp Sat Flow(s),veh/h/ln	1704.1	1900.0	1583.3	1809.5	1897.4	1583.3	1755.2	1826.9	1552.9	1739.9	1646.7	1583.3
Q Serve(g_s), s	4.0	2.0	0.0	8.0	7.8	17.4	23.0	1.7	0.1	2.9	11.4	0.0
Cycle Q Clear(g_c), s	4.0	2.0	0.0	8.0	7.8	17.4	23.0	1.7	0.1	2.9	11.4	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	515.5	285.0	237.5	367.0	347.8	290.3	1307.9	2161.9	918.8	325.3	2264.2	725.7
V/C Ratio(X)	0.329	0.126	0.000	1.400	0.404	0.822	1.244	0.672	0.118	0.254	0.326	0.000
Avail Cap(c_a), veh/h	515.5	285.0	237.5	367.0	347.8	290.3	1307.9	2161.9	918.8	325.3	2264.2	725.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	43.0	44.2	0.0	46.7	43.2	47.1	15.0	0.3	0.3	14.7	20.7	0.0
Incr Delay (d2), s/veh	1.7	0.9	0.0	195.6	3.5	22.4	116.3	1.7	0.3	1.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.7	45.1	0.0	242.4	46.7	69.6	131.3	2.0	0.6	16.6	21.1	0.0
Lane Group LOS	D	D		F	D	E	F	A	A	B	C	
Approach Volume, veh/h		206			893			3189			821	
Approach Delay, s/veh		44.7			165.4			67.9			20.6	
Approach LOS		D			F			E			C	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.00	22.00		12.00	26.00		27.00	75.00		11.00	59.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	18.00		8.00	22.00		23.00	71.00		7.00	55.00	
Max Q Clear Time (g_c+I1), s	6.00	3.96		10.00	19.40		25.00	3.70		4.90	13.43	
Green Extension Time (p_c)	0.00	1.54		0.00	0.49		0.00	34.90		0.03	26.72	

Intersection Summary			
HCM 2010 Control Delay			76.4
HCM 2010 Level of Service			E

Intersection	
Intersection Delay (sec/veh):	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1786	36	73	859	9	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.95	0.66	0.60	0.86	0.63	0.68
Heavy Vehicles(%)	4	19	0	2	20	16
Movement Flow Rate	1880	55	122	999	14	47
Number of Lanes	1	0	0	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1935	0	3151	1908
Stage 1	-	-	-	-	1908	-
Stage 2	-	-	-	-	1243	-
Follow-up Headway	-	-	2.2	-	3.68	3.444
Pot Capacity-1 Maneuver	-	-	-	-	# 0	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	148	-
Time blocked-Platoon(%)	-	-	100	-	100	100
Mov Capacity-1 Maneuver	-	-	-	-	# 0	-
Mov Capacity-2 Maneuver	-	-	-	-	# 0	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	148	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0	-
HCM LOS	A	A	-

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	-				
HCM Control Delay (s)	-	-	-	-	-
HCM Lane VC Ratio	-	-	-	-	-
HCM Lane LOS	-	-	-	-	-
HCM 95th Percentile Queue (veh)	-	-	-	-	-

Intersection	
Intersection Delay (sec/veh)	$ 1499.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	444	1267	116	230	849	269	29	0	87	33	0	56
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.97	0.77	0.78	0.90	0.92	0.61	0.92	0.67	0.92	0.92	0.92
Heavy Vehicles(%)	2	4	2	0	2	2	0	2	2	2	2	2
Movement Flow Rate	483	1306	151	295	943	292	48	0	130	36	0	61
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	1235	0	0	1457	0	0	4058	4173	1382	4092	4102	1089
Stage 1	-	-	-	-	-	-	2348	2348	-	1679	1679	-
Stage 2	-	-	-	-	-	-	1710	1825	-	2413	2423	-
Follow-up Headway	2.218	-	-	2.2	-	-	3.5	4.018	3.318	3.518	4.018	3.318
Pot Capacity-1 Maneuver	# 301	-	-	*# 10	-	-	# 0	0	*# 10	# 0	0	253
Stage 1	-	-	-	-	-	-	# 0	0	-	# 26	35	-
Stage 2	-	-	-	-	-	-	# 23	21	-	# 0	0	-
Time blocked-Platoon(%)	66	-	-	99	-	-	100	100	99	100	100	66
Mov Capacity-1 Maneuver	# 301	-	-	*# 10	-	-	# 0	0	*# 10	-	0	253
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 0	0	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-	-	35	-
Stage 2	-	-	-	-	-	-	# 18	21	-	-	0	-

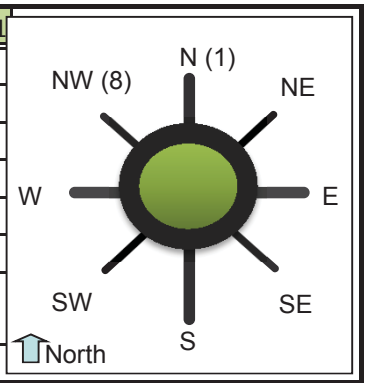
Approach	EB	WB	NB	SB
HCM Control Delay (s)	78.9	$ 2609.8	$ 8261.6	-
HCM LOS	F	F	F	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	*10							-
HCM Control Delay (s)	$ 8261.6	$ 317.209	0	$ 13546.623	$ 13546.623		-	-
HCM Lane VC Ratio	17.739	# 1.603	-	-	29.487	-	-	-
HCM Lane LOS	F	F	A	-	F	A	-	-
HCM 95th Percentile Queue (veh)	23.728	28.952	-	-	38.482	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Anne Arundel, MD
Intersection:	Laurel Fort Meade Rd. and MD 32 East Base + Alt A AM Peak



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph								
NE (2), vph								
E (3), vph								
SE (4), vph	85							
S (5), vph								
SW (6), vph	673	854						
W (7), vph								
NW (8), vph								
Entry Volume, vph	758	854	0	0	0	0	0	0

Exit Legs (TO)

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph			615					
NE (2), vph								
E (3), vph								
SE (4), vph							898	
S (5), vph								
SW (6), vph							179	
W (7), vph								
NW (8), vph								
Entry Volume, vph	0	0	615	0	0	0	1077	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	0	0	1	0	1
# of Conflict Flow Lanes	1	2	2	2	1	1	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	1.000	1.000	0.952	1.000	0.952
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	0	0	702	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	97	0	0	0	0	0	0	1025
	S (5), pcu/h	0	0	0	0	0	0	0	0
	SW (6), pcu/h	1743	0	0	0	0	0	0	204
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1840	0	0	0	0	702	0	1229
	Entry flow Lane 1, pcu/h	865	0	0	0	0	702	0	1229
	Entry flow Lane 2, pcu/h	975	0	0	0	0	0	0	0
	Conflicting flow, pcu/h	0	0	0	0	0	1122	0	1840

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1076	1076	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	824	928	NA	NA	NA	NA	NA	NA
V/C ratio	**0.77**	**0.86**			#VALUE!	#VALUE!		
Control Delay, s/veh	**17.2**	**24.2**			#VALUE!	#VALUE!		
LOS	C	C			#VALUE!	#VALUE!		
95th % Queue (ft)	**206**	**304**			#VALUE!	#VALUE!		
Approach Delay, LOS	20.9 sec, LOS C				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	491	NA	297	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	668	NA	1171	NA
V/C ratio			#VALUE!	#VALUE!	**1.36**		**3.94**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**199.4**		**1357.6**	#VALUE!
LOS			#VALUE!	#VALUE!	F		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**799**		**2969**	#VALUE!
Approach Delay, LOS			#VALUE!		199.4 sec, LOS F		1357.6 sec, LOS F	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1371	1371	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	824	928	NA	NA	NA	NA	NA	NA
V/C ratio	**0.60**	**0.68**			#VALUE!	#VALUE!		
Control Delay, s/veh	**9.5**	**11.3**			#VALUE!	#VALUE!		
LOS	A	B			#VALUE!	#VALUE!		
95th % Queue (ft)	**112**	**150**			#VALUE!	#VALUE!		
Approach Delay, LOS	10.5 sec, LOS B				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	569	NA	298	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	668	NA	1171	NA
V/C ratio			#VALUE!	#VALUE!	**1.17**		**3.93**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**120.6**		**1349.5**	#VALUE!
LOS			#VALUE!	#VALUE!	F		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**610**		**2965**	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

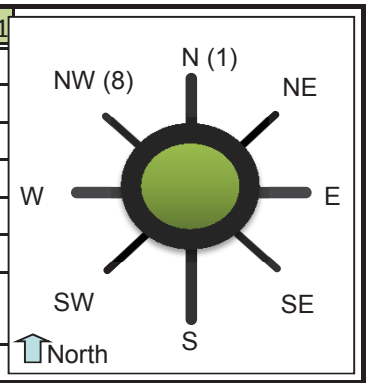
Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Anne Arundel, MD
Intersection:	Mapes Rd. and MD 32 West Base + Alt A AM Peak



Volumes

		Entry Legs (FROM)							
		N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation		SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
Exit Legs (TO)	N (1), vph								204
	NE (2), vph								
	E (3), vph								
	SE (4), vph								
	S (5), vph	277						896	549
	SW (6), vph								
	W (7), vph		190						41
	NW (8), vph								
	Entry Volume, vph	277	190	0	0	0	0	896	794

		S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation		SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
	N (1), vph	1253							
	NE (2), vph								
	E (3), vph								
	SE (4), vph								
	S (5), vph								
	SW (6), vph								
	W (7), vph	177							
	NW (8), vph								
	Entry Volume, vph	1430	0	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	2	1	0	0	0
# of Conflict Flow Lanes	2	2	2	2	1	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	0.952	0.952	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	233	1430	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	316	0	0	1649	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	217	0	0	47	202	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	533	0	0	1929	1632	0	0	0
	Entry flow Lane 1, pcu/h	316	0	0	1023	1632	0	0	0
	Entry flow Lane 2, pcu/h	217	0	0	906	0	0	0	0
	Conflicting flow, pcu/h	1898	0	0	1632	0	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	259	285	NA	NA	1076	NA	NA	NA
Entry Flow Rates, veh/h	301	207	NA	NA	1554	NA	NA	NA
V/C ratio	**1.16**	**0.72**			**1.44**	#VALUE!		
Control Delay, s/veh	**147.8**	**43.5**			**218.6**	#VALUE!		
LOS	F	E			F	#VALUE!		
95th % Queue (ft)	**356**	**136**			**1793**	#VALUE!		
Approach Delay, LOS	105.4 sec, LOS F				218.6 sec, LOS F			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	316	343	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	974	863	NA	NA	NA	NA
V/C ratio			**3.08**	**2.51**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**967.9**	**713.6**			#VALUE!	#VALUE!
LOS			F	F			#VALUE!	#VALUE!
95th % Queue (ft)			**2268**	**1827**			#VALUE!	#VALUE!
Approach Delay, LOS			848.4 sec, LOS F				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	234	283	NA	NA	1562	NA	NA	NA
Entry Flow Rates, veh/h	301	207	NA	NA	1554	NA	NA	NA
V/C ratio	**1.29**	**0.73**			**1.00**	#VALUE!		
Control Delay, s/veh	**199.0**	**44.3**			**38.3**	#VALUE!		
LOS	F	E			E	#VALUE!		
95th % Queue (ft)	**410**	**137**			**621**	#VALUE!		
Approach Delay, LOS	136.1 sec, LOS F				38.3 sec, LOS E			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	305	360	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	974	863	NA	NA	NA	NA
V/C ratio			**3.19**	**2.40**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**1018.7**	**661.9**			#VALUE!	#VALUE!
LOS			F	F			#VALUE!	#VALUE!
95th % Queue (ft)			**2303**	**1778**			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	102	82	447	410	431	311	1041	300	833	1207	438
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1881	1759	1900	1898	1881	1845	1827	1792	1863	1831	1900
Lanes	2	1	1	2	1	2	1	3	1	2	3	1
Capacity, veh/h	399	374	297	968	527	808	414	1238	378	1024	1503	514
Arriving On Green	0.05	0.20	0.20	0.12	0.28	0.28	0.18	0.25	0.00	0.25	0.32	0.32
Sat Flow, veh/h	3510.5	1495.4	1495.4	3510.5	2910.2	2910.2	1756.8	1523.6	1523.6	3441.6	1615.0	1615.0
Grp Volume(v), veh/h	129.5	114.6	101.2	573.1	465.9	453.7	374.7	1210.5	0.0	1028.4	1341.1	503.4
Grp Sat Flow(s),veh/h/ln	1755.2	1881.2	1495.4	1755.2	1898.3	1455.1	1756.8	1662.5	1523.6	1720.8	1575.0	1615.0
Q Serve(g_s), s	2.6	4.6	5.2	9.9	20.8	11.8	13.8	21.3	0.0	22.0	23.9	27.4
Cycle Q Clear(g_c), s	2.6	4.6	5.2	9.9	20.8	11.8	13.8	21.3	0.0	22.0	23.9	27.4
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	399.2	373.9	297.2	967.9	527.3	808.3	413.9	1238.2	378.3	1023.5	1503.3	513.8
V/C Ratio(X)	0.324	0.307	0.341	0.592	0.884	0.561	0.905	0.978	0.000	1.005	0.892	0.980
Avail Cap(c_a), veh/h	399.2	403.4	320.6	967.9	557.0	853.9	417.7	1238.2	378.3	1023.5	1503.3	513.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	27.5	30.3	30.5	18.9	30.6	27.4	21.1	33.1	0.0	25.5	28.8	29.9
Incr Delay (d2), s/veh	0.5	0.5	0.7	1.0	15.0	0.8	22.7	20.3	0.0	29.3	7.2	34.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	27.9	30.7	31.2	19.9	45.6	28.1	43.9	53.4	0.0	54.8	35.9	64.3
Lane Group LOS	C	C	C	B	D	C	D	D		F	D	E
Approach Volume, veh/h		345			1493			1585			2873	
Approach Delay, s/veh		29.8			30.4			51.1			47.6	
Approach LOS		C			C			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.00	21.61		15.00	28.61		19.81	26.00		26.00	32.19	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	19.00		11.00	26.00		16.00	22.00		22.00	28.00	
Max Q Clear Time (g_c+I1), s	4.57	7.16		11.95	22.82		15.77	23.35		24.00	29.37	
Green Extension Time (p_c)	0.00	4.73		0.00	1.80		0.03	0.00		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay			43.5
HCM 2010 Level of Service			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	266	533	248	705	869	572	305	1470	258	229	2128	469
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1696	1827	1900	1845	1845	1776	1863	1788	1788	1845	1900	1863
Lanes	2	2	1	2	2	1	2	3	0	2	3	1
Capacity, veh/h	407	748	348	897	1375	592	300	1573	344	301	2035	621
Arriving On Green	0.04	0.22	0.00	0.22	0.39	0.39	0.05	0.39	0.39	0.05	0.39	0.00
Sat Flow, veh/h	3134.4	1615.0	1615.0	3408.2	1509.3	1509.3	3441.6	4010.5	876.3	3408.2	1583.3	1583.3
Grp Volume(v), veh/h	374.6	650.0	0.0	903.8	944.6	794.4	376.5	1266.8	641.1	272.6	2503.5	0.0
Grp Sat Flow(s),veh/h/ln	1567.2	1735.6	1615.0	1704.1	1752.4	1509.3	1720.8	1626.9	1633.1	1704.1	1729.0	1583.3
Q Serve(g_s), s	5.0	23.5	0.0	28.0	29.1	51.0	7.0	50.4	51.0	6.3	51.0	0.0
Cycle Q Clear(g_c), s	5.0	23.5	0.0	28.0	29.1	51.0	7.0	50.4	51.0	6.3	51.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		0.537	1.000		1.000
Lane Grp Cap(c), veh/h	406.9	747.6	347.8	896.6	1375.0	592.1	300.0	1276.5	640.7	301.2	2034.9	621.2
V/C Ratio(X)	0.921	0.869	0.000	1.008	0.687	1.342	1.255	0.992	1.001	0.905	1.230	0.000
Avail Cap(c_a), veh/h	406.9	747.6	347.8	896.6	1375.0	592.1	300.0	1276.5	640.7	301.2	2034.9	621.2
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	50.1	49.2	0.0	39.5	32.9	39.5	32.6	39.3	39.5	31.7	39.5	0.0
Incr Delay (d2), s/veh	26.0	10.8	0.0	32.0	1.4	164.9	139.2	23.3	35.7	28.9	108.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	76.1	60.0	0.0	71.5	34.3	204.4	171.8	62.6	75.2	60.6	147.7	0.0
Lane Group LOS	E	E		F	C	F	F	E	F	E	F	
Approach Volume, veh/h		1025			2643			2284			2776	
Approach Delay, s/veh		65.9			98.2			84.1			139.1	
Approach LOS		E			F			F			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	9.00	32.00		32.00	55.00		11.00	55.00		11.00	55.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	5.00	28.00		28.00	51.00		7.00	51.00		7.00	51.00	
Max Q Clear Time (g_c+I1), s	7.00	25.50		30.00	53.00		9.00	53.00		8.26	53.00	
Green Extension Time (p_c)	0.00	2.28		0.00	0.00		0.00	0.00		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay			103.7
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	3	3	114	34	260	19	825	29	94	710	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1900	1881	1743	1881	1792	1863	1900	1900
Lanes	0	1	0	0	1	1	1	1	1	1	1	1
Capacity, veh/h	11	8	16	215	61	241	35	1081	876	184	1249	1062
Arriving On Green	0.02	0.02	0.02	0.15	0.15	0.15	0.02	0.57	0.57	0.14	0.87	0.87
Sat Flow, veh/h	533.0	399.8	799.5	1427.0	401.6	1599.0	1660.1	1523.6	1523.6	1774.0	1615.0	1615.0
Grp Volume(v), veh/h	26.0	0.0	0.0	218.0	0.0	270.8	27.5	937.5	34.1	156.7	816.1	42.4
Grp Sat Flow(s),veh/h/ln	1732.3	0.0	0.0	1828.6	0.0	1599.0	1660.1	1881.2	1523.6	1774.0	1900.0	1615.0
Q Serve(g_s), s	1.6	0.0	0.0	12.2	0.0	16.0	1.8	44.8	1.0	9.2	13.4	0.4
Cycle Q Clear(g_c), s	1.6	0.0	0.0	12.2	0.0	16.0	1.8	44.8	1.0	9.2	13.4	0.4
Proportion In Lane	0.308		0.462	0.780		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	35.0	0.0	0.0	275.7	0.0	241.0	34.8	1081.1	875.6	183.9	1249.0	1061.7
V/C Ratio(X)	0.744	0.000	0.000	0.791	0.000	1.124	0.792	0.867	0.039	0.852	0.653	0.040
Avail Cap(c_a), veh/h	261.1	0.0	0.0	275.7	0.0	241.0	62.6	1081.1	875.6	183.9	1249.0	1061.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	0.788	0.788	0.788
Uniform Delay (d), s/veh	51.7	0.0	0.0	43.5	0.0	45.1	51.7	19.1	9.8	45.0	3.1	2.3
Incr Delay (d2), s/veh	26.3	0.0	0.0	14.4	0.0	95.3	31.7	7.6	0.0	24.9	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	78.0	0.0	0.0	57.9	0.0	140.3	83.5	26.8	9.8	69.8	4.1	2.3
Lane Group LOS	E			E		F	F	C	A	E	A	A
Approach Volume, veh/h		26			489			999			1015	
Approach Delay, s/veh		78.0			103.6			27.8			14.2	
Approach LOS		E			F			C			B	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		6.14			20.00		6.22	65.00		15.00	73.78	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		4.00	61.00		11.00	68.00	
Max Q Clear Time (g_c+I1), s		3.58			18.00		3.75	46.85		11.16	15.36	
Green Extension Time (p_c)		0.04			0.00		0.00	10.43		0.00	23.56	

Intersection Summary												
HCM 2010 Control Delay			37.5									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	123	114	332	717	27	313	87	76	90	138	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1863	1881	1900	1900	1900	1900	1881	1845	1900	1887	1887
Lanes	1	2	1	1	1	1	1	1	1	1	1	0
Capacity, veh/h	146	1534	693	778	1021	868	393	496	414	323	168	76
Arriving On Green	0.01	0.43	0.00	0.12	0.54	0.00	0.06	0.09	0.00	0.05	0.14	0.14
Sat Flow, veh/h	1809.5	1599.0	1599.0	1809.5	1615.0	1615.0	1809.5	1568.0	1568.0	1809.5	1234.1	554.9
Grp Volume(v), veh/h	12.1	157.7	0.0	400.0	919.2	0.0	364.0	164.2	0.0	95.7	0.0	232.6
Grp Sat Flow(s),veh/h/ln	1809.5	1769.6	1599.0	1809.5	1900.0	1615.0	1809.5	1881.2	1568.0	1809.5	0.0	1789.1
Q Serve(g_s), s	0.4	3.1	0.0	11.0	50.8	0.0	18.9	9.6	0.0	5.3	0.0	15.1
Cycle Q Clear(g_c), s	0.4	3.1	0.0	11.0	50.8	0.0	18.9	9.6	0.0	5.3	0.0	15.1
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		0.310
Lane Grp Cap(c), veh/h	145.7	1533.6	692.9	777.9	1021.2	868.0	393.0	496.2	413.5	323.4	0.0	244.2
V/C Ratio(X)	0.083	0.103	0.000	0.514	0.900	0.000	0.926	0.331	0.000	0.296	0.000	0.953
Avail Cap(c_a), veh/h	187.4	1533.6	692.9	831.8	1021.2	868.0	394.3	497.5	414.7	323.4	0.0	244.2
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	0.468	0.468	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	24.7	19.7	0.0	10.1	24.3	0.0	40.2	43.8	0.0	40.8	0.0	50.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	10.8	0.0	16.0	0.2	0.0	0.5	0.0	44.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	24.9	19.7	0.0	10.6	35.1	0.0	56.1	44.0	0.0	41.3	0.0	94.7
Lane Group LOS	C	B		B	D		E	D		D		F
Approach Volume, veh/h		170			1319			528			328	
Approach Delay, s/veh		20.1			27.7			52.3			79.1	
Approach LOS		C			C			D			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	5.30	54.79		17.51	67.00		24.91	34.91		10.00	20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	50.00		17.00	63.00		21.00	31.00		6.00	16.00	
Max Q Clear Time (g_c+I1), s	2.44	5.10		12.98	52.81		20.90	11.61		7.32	17.13	
Green Extension Time (p_c)	0.00	11.11		0.52	5.53		0.01	2.25		0.00	0.00	

Intersection Summary												
HCM 2010 Control Delay			39.9									
HCM 2010 Level of Service			D									

Intersection	
Intersection Delay (sec/veh):	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	12	204	809	49	80	66
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.44	0.89	0.83	0.73	0.69	0.70
Heavy Vehicles(%)	0	2	0	0	0	0
Movement Flow Rate	27	229	975	67	116	94
Number of Lanes	0	2	2	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	1042	0	0	0	1178	522
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	169	-
Follow-up Headway	2.2	-	-	-	3.5	3.3
Pot Capacity-1 Maneuver	1006	-	-	-	444	*1020
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	850	-
Time blocked-Platoon(%)	32	-	-	-	32	32
Mov Capacity-1 Maneuver	1006	-	-	-	430	*1020
Mov Capacity-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	824	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.9	0	14.7
HCM LOS	A	A	B

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					581
HCM Control Delay (s)	8.678	-	-	-	14.7
HCM Lane VC Ratio	0.027	-	-	-	0.362
HCM Lane LOS	A	-	-	-	B
HCM 95th Percentile Queue (veh)	0.084	-	-	-	1.643

Intersection	
Intersection Delay (sec/veh):	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	357	92	282	439	24	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.88	0.60	0.81	0.81	0.57	0.75
Heavy Vehicles(%)	2	0	0	0	0	0
Movement Flow Rate	406	153	348	542	42	43
Number of Lanes	2	0	0	2	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	559	0	1450	280
Stage 1	-	-	-	-	483	-
Stage 2	-	-	-	-	967	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1022	-	160	723
Stage 1	-	-	-	-	592	-
Stage 2	-	-	-	-	436	-
Time blocked-Platoon(%)	-	-	0	-	15	0
Mov Capacity-1 Maneuver	-	-	1022	-	82	723
Mov Capacity-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	592	-
Stage 2	-	-	-	-	224	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	4	57.7
HCM LOS	A	A	F

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	148				
HCM Control Delay (s)	57.7	-	-	10.331	-
HCM Lane VC Ratio	0.573	-	-	0.341	-
HCM Lane LOS	F	-	-	B	-
HCM 95th Percentile Queue (veh)	2.933	-	-	1.522	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	29	471	13	4	1270	103	207	29	6	416	43	274
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1882	1882	1900	1900	1900	1881	1900	1900	1881	1880	1880
Lanes	1	2	0	1	2	1	1	1	0	1	1	0
Capacity, veh/h	196	1638	97	397	1600	716	332	204	58	653	63	347
Arriving On Green	0.03	0.47	0.47	0.02	0.89	0.89	0.14	0.14	0.14	0.25	0.25	0.25
Sat Flow, veh/h	1809.5	3520.0	207.8	1809.5	1615.0	1615.0	1791.6	1425.3	403.5	1791.6	250.5	1384.8
Grp Volume(v), veh/h	61.7	279.4	274.9	8.0	1443.2	122.6	268.8	0.0	71.6	577.8	0.0	389.8
Grp Sat Flow(s),veh/h/ln	1809.5	1882.2	1845.6	1809.5	1805.0	1615.0	1791.6	0.0	1828.8	1791.6	0.0	1635.4
Q Serve(g_s), s	2.1	11.1	11.2	0.3	27.1	1.2	15.1	0.0	4.2	27.5	0.0	28.0
Cycle Q Clear(g_c), s	2.1	11.1	11.2	0.3	27.1	1.2	15.1	0.0	4.2	27.5	0.0	28.0
Proportion In Lane	1.000		0.113	1.000		1.000	1.000		0.221	1.000		0.847
Lane Grp Cap(c), veh/h	195.7	875.9	858.8	396.9	1600.0	715.8	331.6	0.0	262.2	652.5	0.0	410.3
V/C Ratio(X)	0.315	0.319	0.320	0.020	0.902	0.171	0.811	0.000	0.273	0.885	0.000	0.950
Avail Cap(c_a), veh/h	202.1	875.9	858.8	443.3	1600.0	715.8	331.6	0.0	262.2	669.7	0.0	410.3
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	20.0	20.1	20.1	18.3	5.3	3.8	37.1	0.0	45.7	23.2	0.0	44.1
Incr Delay (d2), s/veh	0.9	0.2	0.2	0.0	7.5	0.1	14.0	0.0	0.6	13.3	0.0	31.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	21.0	20.3	20.3	18.3	12.8	4.0	51.1	0.0	46.2	36.5	0.0	75.9
Lane Group LOS	C	C	C	B	B	A	D		D	D		E
Approach Volume, veh/h		616			1574			340			968	
Approach Delay, s/veh		20.4			12.1			50.1			52.4	
Approach LOS		C			B			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	7.58	59.65		4.93	57.00		21.00	21.14		33.86	34.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	53.00		4.00	53.00		17.00	16.00		31.00	30.00	
Max Q Clear Time (g_c+I1), s	4.11	13.19		2.29	29.08		17.08	6.17		29.48	30.04	
Green Extension Time (p_c)	0.00	22.88		0.00	16.50		0.00	2.14		0.38	0.00	

Intersection Summary			
HCM 2010 Control Delay			28.4
HCM 2010 Level of Service			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	1048	42	72	863	54	46	2	210	267	6	97
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1863	1881	1900	1863	1881	1863	1899	1899	1881	1863	1863	1863
Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Capacity, veh/h	137	1281	579	85	1100	487	59	1	919	59	0	910
Arriving On Green	0.03	0.72	0.00	0.62	0.62	0.00	0.57	0.57	0.00	0.57	0.57	0.00
Sat Flow, veh/h	1774.0	1615.0	1615.0	456.1	3574.3	1583.3	2.2	0.1	1599.0	0.0	0.0	1583.3
Grp Volume(v), veh/h	21.7	1218.6	0.0	101.4	969.7	0.0	54.4	0.0	0.0	296.7	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1774.0	1787.1	1615.0	456.1	1787.1	1583.3	2.3	0.0	1599.0	0.0	0.0	1583.3
Q Serve(g_s), s	1.0	36.4	0.0	6.6	27.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	36.4	0.0	36.9	27.4	0.0	69.0	0.0	0.0	69.0	0.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	0.960		1.000	0.978		1.000
Lane Grp Cap(c), veh/h	136.6	1280.8	578.7	84.9	1100.2	487.4	60.1	0.0	919.4	59.3	0.0	910.4
V/C Ratio(X)	0.159	0.951	0.000	1.194	0.881	0.000	0.906	0.000	0.000	5.001	0.000	0.000
Avail Cap(c_a), veh/h	165.2	1280.8	578.7	84.9	1100.2	487.4	60.1	0.0	919.4	59.3	0.0	910.4
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.707	0.707	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	29.5	16.1	0.0	40.6	21.2	0.0	58.3	0.0	0.0	60.0	0.0	0.0
Incr Delay (d2), s/veh	0.5	15.1	0.0	143.4	6.3	0.0	82.9	0.0	0.0	1837.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	30.1	31.1	0.0	183.9	27.5	0.0	141.3	0.0	0.0	1897.4	0.0	0.0
Lane Group LOS	C	C		F	C		F			F		
Approach Volume, veh/h		1240			1071			54			297	
Approach Delay, s/veh		31.1			42.3			141.3			1897.4	
Approach LOS		C			D			F			F	

Timer												
Assigned Phase	5	2			6			8			4	
Phase Duration (G+Y+Rc), s	6.06	47.00			40.94			73.00			73.00	
Change Period (Y+Rc), s	4.00	4.00			4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	43.00			35.00			69.00			69.00	
Max Q Clear Time (g_c+I1), s	2.98	38.44			38.94			71.00			71.00	
Green Extension Time (p_c)	0.00	4.19			0.00			0.00			0.00	

Intersection Summary			
HCM 2010 Control Delay			245.9
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	495	1140	19	25	503	139	100	120	104	442	47	451
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1900	1900	1900	1881	1863	1900	1900	1881	1881	1827	1881
Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Capacity, veh/h	607	1618	724	181	657	291	611	810	681	524	779	681
Arriving On Green	0.58	0.90	0.90	0.03	0.18	0.18	0.43	0.43	0.00	0.43	0.43	0.00
Sat Flow, veh/h	1791.6	1615.0	1615.0	1809.5	1583.3	1583.3	1358.6	1900.0	1599.0	1238.0	1826.9	1599.0
Grp Volume(v), veh/h	596.4	1357.1	40.4	39.7	558.9	190.4	192.3	155.8	0.0	465.3	64.4	0.0
Grp Sat Flow(s),veh/h/ln	1791.6	1805.0	1615.0	1809.5	1787.1	1583.3	1358.6	1900.0	1599.0	1238.0	1826.9	1599.0
Q Serve(g_s), s	32.5	18.7	0.3	2.1	18.1	13.4	11.7	6.1	0.0	44.9	2.5	0.0
Cycle Q Clear(g_c), s	32.5	18.7	0.3	2.1	18.1	13.4	14.2	6.1	0.0	51.0	2.5	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	607.0	1618.4	724.0	180.8	657.1	291.1	610.7	809.8	681.5	524.3	778.6	681.5
V/C Ratio(X)	0.982	0.839	0.056	0.220	0.851	0.654	0.315	0.192	0.000	0.887	0.083	0.000
Avail Cap(c_a), veh/h	612.0	1618.4	724.0	195.6	657.1	291.1	610.7	809.8	681.5	524.3	778.6	681.5
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.827	0.827	0.827	0.842	0.842	0.842	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	17.9	4.4	3.4	38.3	47.2	45.3	24.7	21.5	0.0	37.5	20.4	0.0
Incr Delay (d2), s/veh	28.5	3.4	0.0	0.5	8.9	4.4	0.3	0.1	0.0	16.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	46.4	7.8	3.5	38.8	56.1	49.7	24.9	21.6	0.0	54.2	20.5	0.0
Lane Group LOS	D	A	A	D	E	D	C	C		D	C	
Approach Volume, veh/h		1994			789			348			530	
Approach Delay, s/veh		19.3			53.7			23.4			50.1	
Approach LOS		B			D			C			D	
Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	38.67	57.65		7.02	26.00			55.00			55.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	35.00	53.00		4.00	22.00			51.00			51.00	
Max Q Clear Time (g_c+I1), s	34.54	20.75		4.12	20.10			16.24			53.00	
Green Extension Time (p_c)	0.13	20.20		0.00	1.73			3.99			0.00	
Intersection Summary												
HCM 2010 Control Delay			31.5									
HCM 2010 Level of Service			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	19	1306	73	124	308	6	217	140	694	29	35	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1863	1882	1882	1863	1871	1881	1900	1847	1847
Lanes	0	2	1	1	2	0	1	1	1	1	1	0
Capacity, veh/h	57	1807	828	204	2193	85	408	595	508	386	169	355
Arriving On Green	0.69	0.69	0.69	0.11	1.00	1.00	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	75.1	3458.5	1599.0	1774.0	3599.2	139.9	1275.7	1870.7	1599.0	1250.7	531.3	1118.0
Grp Volume(v), veh/h	773.4	726.2	92.4	136.3	211.5	209.6	333.8	155.6	913.2	43.9	0.0	112.0
Grp Sat Flow(s),veh/h/ln	1804.7	1729.0	1599.0	1774.0	1881.9	1857.2	1275.7	1870.7	1599.0	1250.7	0.0	1649.3
Q Serve(g_s), s	10.4	44.0	2.1	3.8	0.0	0.0	28.5	6.8	35.0	3.0	0.0	5.5
Cycle Q Clear(g_c), s	32.3	44.0	2.1	3.8	0.0	0.0	34.0	6.8	35.0	9.8	0.0	5.5
Proportion In Lane	0.042		1.000	1.000		0.075	1.000		1.000	1.000		0.678
Lane Grp Cap(c), veh/h	968.6	0.0	828.0	204.3	1146.7	1131.7	407.6	594.8	508.4	385.7	0.0	524.4
V/C Ratio(X)	0.798	0.000	0.112	0.667	0.184	0.185	0.819	0.262	1.796	0.114	0.000	0.214
Avail Cap(c_a), veh/h	968.6	0.0	828.0	364.3	1316.5	1299.2	407.6	594.8	508.4	385.7	0.0	524.4
HCM Platoon Ratio	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.454	0.454	0.454	0.287	0.287	0.287	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	13.1	0.0	8.6	22.3	0.0	0.0	39.9	27.9	37.5	31.6	0.0	27.5
Incr Delay (d2), s/veh	2.2	0.0	0.0	1.1	0.0	0.0	12.4	0.2	366.0	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	15.3	0.0	8.6	23.4	0.0	0.0	52.3	28.2	403.6	31.7	0.0	27.7
Lane Group LOS	B		A	C	A	A	D	C	F	C		C
Approach Volume, veh/h		1592			557			1403			156	
Approach Delay, s/veh		7.9			5.7			278.3			28.8	
Approach LOS		A			A			F			C	
Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		61.00		10.07	71.07			39.00			39.00	
Change Period (Y+Rc), s		4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s		57.00		16.00	77.00			35.00			35.00	
Max Q Clear Time (g_c+I1), s		46.05		5.85	2.00			37.00			11.79	
Green Extension Time (p_c)		8.54		0.23	26.70			0.00			8.11	
Intersection Summary												
HCM 2010 Control Delay			110.8									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	62	316	311	0	185	1	1666	741	342	2632	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1881	0	1881	1900	1863	1900	1881	1881	0
Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Capacity, veh/h	241	253	213	177	0	213	60	1416	646	358	2025	0
Arriving On Green	0.13	0.13	0.00	0.13	0.00	0.13	0.03	0.40	0.00	0.20	0.57	0.00
Sat Flow, veh/h	1809.5	1900.0	1599.0	1326.8	0.0	1599.0	1809.5	1615.0	1615.0	1791.6	0.0	0.0
Grp Volume(v), veh/h	116.5	79.5	0.0	379.3	0.0	207.9	4.0	1791.4	0.0	510.4	2860.9	0.0
Grp Sat Flow(s),veh/h/ln	1809.5	1900.0	1599.0	1326.8	0.0	1599.0	1809.5	1769.6	1615.0	1791.6	1787.1	0.0
Q Serve(g_s), s	7.2	4.5	0.0	16.0	16.0	15.5	0.3	48.0	0.0	24.0	68.0	68.0
Cycle Q Clear(g_c), s	7.2	4.5	0.0	16.0	16.0	15.5	0.3	48.0	0.0	24.0	68.0	68.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	241.3	253.3	213.2	176.9	0.0	213.2	60.3	1415.7	646.0	358.3	2025.4	0.0
V/C Ratio(X)	0.483	0.314	0.000	2.144	0.000	0.975	0.066	1.265	0.000	1.425	1.412	0.000
Avail Cap(c_a), veh/h	241.3	253.3	213.2	176.9	0.0	213.2	241.3	1415.7	646.0	358.3	2025.4	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	0.000	1.000	1.000	1.000	0.000	0.090	0.090	0.000
Uniform Delay (d), s/veh	48.2	47.0	0.0	52.0	0.0	51.8	56.2	36.0	0.0	48.0	26.0	0.0
Incr Delay (d2), s/veh	6.8	3.2	0.0	533.1	0.0	55.5	0.5	125.2	0.0	192.6	185.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	54.9	50.2	0.0	585.1	0.0	107.3	56.6	161.2	0.0	240.6	211.9	0.0
Lane Group LOS	D	D		F		F	E	F		F	F	
Approach Volume, veh/h		196			587			1795			3371	
Approach Delay, s/veh		53.0			416.0			161.0			216.2	
Approach LOS		D			F			F			F	

Timer								
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		20.00			20.00		8.00	52.00		28.00	72.00	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		16.00	48.00		24.00	56.00	
Max Q Clear Time (g_c+I1), s		9.15			18.00		2.26	50.00		26.00	70.00	
Green Extension Time (p_c)		0.37			0.00		0.00	0.00		0.00	0.00	

Intersection Summary								
HCM 2010 Control Delay			213.9					
HCM 2010 Level of Service			F					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	774	87	1114	252	30	163	292	1156	337	249	1577	152
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1895	1881	1863	1864	1900	1881	1863	1900
Lanes	2	1	1	1	1	1	2	2	1	1	3	1
Capacity, veh/h	1375	497	423	561	324	273	368	1257	544	238	1870	594
Arriving On Green	0.08	0.09	0.00	0.15	0.17	0.17	0.02	0.11	0.11	0.09	0.37	0.00
Sat Flow, veh/h	3510.5	1615.0	1615.0	1809.5	1599.0	1599.0	3441.6	1615.0	1615.0	1791.6	1615.0	1615.0
Grp Volume(v), veh/h	1060.3	103.6	0.0	276.9	49.2	223.3	417.1	1256.5	351.0	296.4	1877.4	0.0
Grp Sat Flow(s),veh/h/ln	1755.2	1900.0	1615.0	1809.5	1895.3	1599.0	1720.8	1863.7	1615.0	1791.6	1695.1	1615.0
Q Serve(g_s), s	19.1	5.0	0.0	12.1	2.2	13.2	6.0	33.0	20.4	9.0	36.0	0.0
Cycle Q Clear(g_c), s	19.1	5.0	0.0	12.1	2.2	13.2	6.0	33.0	20.4	9.0	36.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	1375.3	497.4	422.8	561.1	323.7	273.1	367.7	1256.7	544.5	238.3	1870.3	594.0
V/C Ratio(X)	0.771	0.208	0.000	0.494	0.152	0.818	1.135	1.000	0.645	1.244	1.004	0.000
Avail Cap(c_a), veh/h	1476.9	892.9	759.0	593.3	697.1	588.1	367.7	1256.7	544.5	238.3	1870.3	594.0
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	0.423	0.423	0.000	1.000	1.000	1.000	0.090	0.090	0.090	1.000	1.000	0.000
Uniform Delay (d), s/veh	21.2	35.3	0.0	27.0	34.5	39.1	28.8	43.5	37.9	27.0	30.9	0.0
Incr Delay (d2), s/veh	1.0	0.1	0.0	0.7	0.2	6.0	64.1	7.6	0.5	139.9	21.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	22.3	35.4	0.0	27.7	34.8	45.1	92.9	51.1	38.4	167.0	52.7	0.0
Lane Group LOS	C	D		C	C	D	F	D	D	F	F	
Approach Volume, veh/h		1164			549			2025			2174	
Approach Delay, s/veh		23.4			35.4			57.5			68.2	
Approach LOS		C			D			E			E	

Timer								
Assigned Phase	7	4		3	8		5	2		1	6	
Phase Duration (G+Y+Rc), s	27.17	29.62		18.26	20.72		10.00	37.00		13.00	40.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	26.00	46.00		16.00	36.00		6.00	33.00		9.00	36.00	
Max Q Clear Time (g_c+I1), s	21.08	6.96		14.09	15.17		8.00	35.00		11.00	38.00	
Green Extension Time (p_c)	2.09	1.69		0.17	1.54		0.00	0.00		0.00	0.00	

Intersection Summary								
HCM 2010 Control Delay			52.7					
HCM 2010 Level of Service			D					

Intersection	
Intersection Delay (sec/veh):	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1068	5	27	1783	31	102
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.92	0.75	0.80	0.96	0.75	0.79
Heavy Vehicles(%)	1	0	12	1	0	2
Movement Flow Rate	1161	7	34	1857	41	129
Number of Lanes	1	0	0	1	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1168	0	3090	1165
Stage 1	-	-	-	-	1165	-
Stage 2	-	-	-	-	1925	-
Follow-up Headway	-	-	2.308	-	3.5	3.318
Pot Capacity-1 Maneuver	-	-	*227	-	*# 0	*227
Stage 1	-	-	-	-	*227	-
Stage 2	-	-	-	-	-	-
Time blocked-Platoon(%)	-	-	85	-	80	85
Mov Capacity-1 Maneuver	-	-	*227	-	*# 0	*227
Mov Capacity-2 Maneuver	-	-	-	-	*# 0	-
Stage 1	-	-	-	-	*227	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.4	57
HCM LOS	A	A	F

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	*227				
HCM Control Delay (s)	57	-	-	23.609	-
HCM Lane VC Ratio	0.751	-	-	0.149	-
HCM Lane LOS	F	-	-	C	-
HCM 95th Percentile Queue (veh)	5.207	-	-	0.513	-

Intersection	
Intersection Delay (sec/veh):	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	72	1008	71	75	1301	44	112	0	332	242	0	406
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.84	0.62	0.85	0.89	0.92	0.87	0.92	0.83	0.92	0.92	0.92
Heavy Vehicles(%)	2	1	0	0	1	2	0	2	0	2	2	2
Movement Flow Rate	78	1200	115	88	1462	48	129	0	400	263	0	441
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	1510	0	0	1315	0	0	3297	3100	1258	3276	3133	1486
Stage 1	-	-	-	-	-	-	1414	1414	-	1662	1662	-
Stage 2	-	-	-	-	-	-	1883	1686	-	1614	1471	-
Follow-up Headway	2.218	-	-	2.2	-	-	3.5	4.018	3.3	3.518	4.018	3.318
Pot Capacity-1 Maneuver	-	-	-	201	-	-	-	-	# 151	-	-	-
Stage 1	-	-	-	-	-	-	# 54	60	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	# 14	43	-
Time blocked-Platoon(%)	100	-	-	80	-	-	100	100	80	100	100	100
Mov Capacity-1 Maneuver	-	-	-	201	-	-	-	-	# 151	-	-	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	60	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	43	-

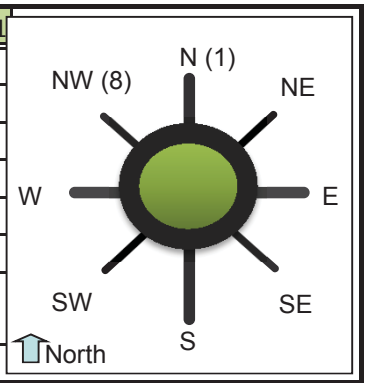
Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	2	-	-
HCM LOS	A	A	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	-	-	-	36.223	0	-	-
HCM Lane VC Ratio	-	-	-	-	0.439	-	-	-
HCM Lane LOS	-	-	-	-	E	A	-	-
HCM 95th Percentile Queue (veh)	-	-	-	-	2.049	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, PM
County/District:	Anne Arundel, MD
Intersection:	Laurel Fort Meade Rd. and MD 32 East
	Baseline PM Peak



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph								
NE (2), vph								
E (3), vph								
SE (4), vph	471							
S (5), vph								
SW (6), vph	233	793						
W (7), vph								
NW (8), vph								
Entry Volume, vph	704	793	0	0	0	0	0	0

Exit Legs (TO)

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph			369					
NE (2), vph								
E (3), vph								
SE (4), vph							192	
S (5), vph								
SW (6), vph							335	
W (7), vph								
NW (8), vph								
Entry Volume, vph	0	0	369	0	0	0	527	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	0	0	1	0	1
# of Conflict Flow Lanes	1	2	2	2	1	1	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	1.000	1.000	0.952	1.000	0.952
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	0	0	421	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	538	0	0	0	0	0	0	219
	S (5), pcu/h	0	0	0	0	0	0	0	0
	SW (6), pcu/h	1171	0	0	0	0	0	0	382
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1709	0	0	0	0	421	0	601
	Entry flow Lane 1, pcu/h	803	0	0	0	0	421	0	601
	Entry flow Lane 2, pcu/h	905	0	0	0	0	0	0	0
	Conflicting flow, pcu/h	0	0	0	0	0	757	0	1709

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1076	1076	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	765	862	NA	NA	NA	NA	NA	NA
V/C ratio	**0.71**	**0.80**			#VALUE!	#VALUE!		
Control Delay, s/veh	**14.7**	**19.2**			#VALUE!	#VALUE!		
LOS	B	C			#VALUE!	#VALUE!		
95th % Queue (ft)	**167**	**237**			#VALUE!	#VALUE!		
Approach Delay, LOS	17.1 sec, LOS C				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	634	NA	325	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	401	NA	573	NA
V/C ratio			#VALUE!	#VALUE!	**0.63**		**1.76**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**18.1**		**382.0**	#VALUE!
LOS			#VALUE!	#VALUE!	C		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**118**		**965**	#VALUE!
Approach Delay, LOS			#VALUE!		18.1 sec, LOS C		382 sec, LOS F	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1371	1371	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	765	862	NA	NA	NA	NA	NA	NA
V/C ratio	**0.56**	**0.63**			#VALUE!	#VALUE!		
Control Delay, s/veh	**8.7**	**10.1**			#VALUE!	#VALUE!		
LOS	A	B			#VALUE!	#VALUE!		
95th % Queue (ft)	**95**	**124**			#VALUE!	#VALUE!		
Approach Delay, LOS	9.4 sec, LOS A				#VALUE!			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	790	NA	336	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	401	NA	573	NA
V/C ratio			#VALUE!	#VALUE!	**0.51**		**1.71**	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!	**11.7**		**357.9**	#VALUE!
LOS			#VALUE!	#VALUE!	B		F	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!	**77**		**936**	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

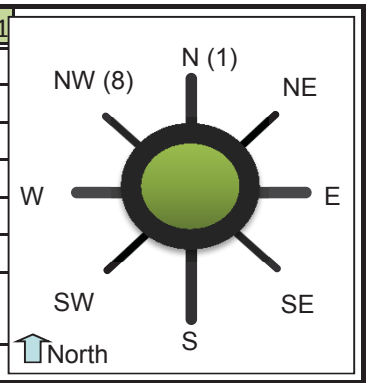
Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, PM
County/District:	Anne Arundel, MD
Intersection:	Mapes Rd. and MD 32 West Base + Alt A PM Peak



Volumes

Volumes	Entry Legs (FROM)							
	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
Exit Legs (TO) N (1), vph								69
NE (2), vph								
E (3), vph								
SE (4), vph								
S (5), vph	846						356	220
SW (6), vph								
W (7), vph		795						27
NW (8), vph								
Entry Volume, vph	846	795	0	0	0	0	356	316

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph	335							
NE (2), vph								
E (3), vph								
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph	200							
NW (8), vph								
Entry Volume, vph	535	0	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	0	2	1	0	0	0
# of Conflict Flow Lanes	2	2	2	2	1	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	95%	95%	95%	95%	95%	95%	95%	95%
% Heavy Vehicles	5%	5%	5%	5%	5%	5%	5%	5%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	0.952	1.000	1.000	0.952	0.952	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	0	79	382	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	0	0	0	0	0	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	966	0	0	657	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	907	0	0	31	228	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	1873	0	0	767	611	0	0	0
	Entry flow Lane 1, pcu/h	966	0	0	406	611	0	0	0
	Entry flow Lane 2, pcu/h	907	0	0	361	0	0	0	0
	Conflicting flow, pcu/h	916	0	0	611	0	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	541	567	NA	NA	1076	NA	NA	NA
Entry Flow Rates, veh/h	920	864	NA	NA	582	NA	NA	NA
V/C ratio	**1.70**	**1.53**			**0.54**	#VALUE!		
Control Delay, s/veh	**341.6**	**264.9**			**9.9**	#VALUE!		
LOS	F	F			A	#VALUE!		
95th % Queue (ft)	**1410**	**1168**			**88**	#VALUE!		
Approach Delay, LOS	304.4 sec, LOS F				9.9 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	681	702	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	387	343	NA	NA	NA	NA
V/C ratio			**0.57**	**0.49**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**14.9**	**12.4**			#VALUE!	#VALUE!
LOS			B	B			#VALUE!	#VALUE!
95th % Queue (ft)			**94**	**71**			#VALUE!	#VALUE!
Approach Delay, LOS			13.7 sec, LOS B				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	625	685	NA	NA	1562	NA	NA	NA
Entry Flow Rates, veh/h	920	864	NA	NA	582	NA	NA	NA
V/C ratio	**1.47**	**1.26**			**0.37**	#VALUE!		
Control Delay, s/veh	**239.9**	**149.7**			**5.5**	#VALUE!		
LOS	F	F			A	#VALUE!		
95th % Queue (ft)	**1171**	**851**			**46**	#VALUE!		
Approach Delay, LOS	196.2 sec, LOS F				5.5 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	848	902	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	387	343	NA	NA	NA	NA
V/C ratio			**0.46**	**0.38**			#VALUE!	#VALUE!
Control Delay, sec/pcu			**10.0**	**8.3**			#VALUE!	#VALUE!
LOS			B	A			#VALUE!	#VALUE!
95th % Queue (ft)			**63**	**47**			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	446	390	306	407	200	774	153	1531	283	362	1260	207
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1900	1900	1845	1893	1881	1881	1881	1881	1900	1881	1900
Lanes	2	1	1	2	1	2	1	3	1	2	3	1
Capacity, veh/h	857	507	431	590	505	776	252	1626	506	495	1537	511
Arriving On Green	0.08	0.27	0.27	0.08	0.27	0.27	0.07	0.32	0.00	0.07	0.32	0.32
Sat Flow, veh/h	3475.7	1615.0	1615.0	3408.2	2910.2	2910.2	1791.6	1599.0	1599.0	3510.5	1615.0	1615.0
Grp Volume(v), veh/h	518.6	453.5	343.8	496.3	259.7	943.9	184.3	1594.8	0.0	402.2	1431.8	217.9
Grp Sat Flow(s),veh/h/ln	1737.9	1900.0	1615.0	1704.1	1892.5	1455.1	1791.6	1711.9	1599.0	1755.2	1618.1	1615.0
Q Serve(g_s), s	5.0	13.8	11.9	5.0	7.0	16.0	4.0	18.5	0.0	4.0	17.2	6.4
Cycle Q Clear(g_c), s	5.0	13.8	11.9	5.0	7.0	16.0	4.0	18.5	0.0	4.0	17.2	6.4
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	857.4	506.7	430.7	590.0	504.7	776.1	252.0	1626.3	506.4	495.0	1537.2	511.4
V/C Ratio(X)	0.605	0.895	0.798	0.841	0.515	1.216	0.732	0.981	0.000	0.813	0.931	0.426
Avail Cap(c_a), veh/h	857.4	506.7	430.7	590.0	504.7	776.1	252.0	1626.3	506.4	495.0	1537.2	511.4
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	17.2	21.2	20.5	19.3	18.7	22.0	16.3	20.3	0.0	17.7	19.9	16.2
Incr Delay (d2), s/veh	1.2	18.3	10.2	10.6	0.9	109.0	10.4	17.8	0.0	10.0	10.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	18.4	39.4	30.7	29.9	19.6	131.0	26.7	38.2	0.0	27.7	30.4	16.8
Lane Group LOS	B	D	C	C	B	F	C	D		C	C	B
Approach Volume, veh/h		1316			1700			1779			2052	
Approach Delay, s/veh		28.8			84.4			37.0			28.5	
Approach LOS		C			F			D			C	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	9.00	20.00		9.00	20.00		8.00	23.00		8.00	23.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	5.00	16.00		5.00	16.00		4.00	19.00		4.00	19.00	
Max Q Clear Time (g_c+I1), s	7.00	15.79		7.00	18.00		6.00	20.47		6.00	19.15	
Green Extension Time (p_c)	0.00	0.18		0.00	0.00		0.00	0.00		0.00	0.00	

Intersection Summary			
HCM 2010 Control Delay			44.6
HCM 2010 Level of Service			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	498	875	218	396	754	324	334	1998	703	589	1439	179
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1881	1900	1900	1881	1900	1900	1900	1900	1881	1900	1881
Lanes	2	2	1	2	2	1	2	3	1	2	3	1
Capacity, veh/h	442	953	431	344	864	390	531	2042	673	554	2392	737
Arriving On Green	0.08	0.27	0.00	0.06	0.24	0.24	0.08	0.42	0.42	0.13	0.46	0.00
Sat Flow, veh/h	3510.5	1615.0	1615.0	3510.5	1615.0	1615.0	3510.5	1615.0	1615.0	3475.7	1599.0	1599.0
Grp Volume(v), veh/h	513.4	951.1	0.0	425.8	802.1	330.6	367.0	2244.9	889.9	684.9	1635.2	0.0
Grp Sat Flow(s),veh/h/ln	1755.2	1787.1	1615.0	1755.2	1787.1	1615.0	1755.2	1634.0	1615.0	1737.9	1729.0	1599.0
Q Serve(g_s), s	10.0	31.9	0.0	7.0	26.3	23.4	7.0	50.0	50.0	15.0	29.8	0.0
Cycle Q Clear(g_c), s	10.0	31.9	0.0	7.0	26.3	23.4	7.0	50.0	50.0	15.0	29.8	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	442.3	953.1	430.7	344.2	863.8	390.3	531.5	2042.5	672.9	554.5	2392.2	737.5
V/C Ratio(X)	1.161	0.998	0.000	1.237	0.929	0.847	0.691	1.099	1.322	1.235	0.684	0.000
Avail Cap(c_a), veh/h	442.3	953.1	430.7	344.2	863.8	390.3	658.6	2042.5	672.9	554.5	2392.2	737.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	34.8	44.0	0.0	40.6	44.5	43.4	22.9	35.0	35.0	40.6	25.4	0.0
Incr Delay (d2), s/veh	94.8	28.6	0.0	129.3	16.1	15.8	2.3	52.8	155.3	120.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	129.6	72.6	0.0	169.9	60.5	59.2	25.1	87.8	190.3	161.3	26.3	0.0
Lane Group LOS	F	E		F	E	E	C	F	F	F	C	
Approach Volume, veh/h		1464			1559			3502			2320	
Approach Delay, s/veh		92.5			90.1			107.3			66.1	
Approach LOS		F			F			F			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	14.00	36.00		11.00	33.00		13.66	54.00		19.00	59.34	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	10.00	32.00		7.00	29.00		14.00	50.00		15.00	51.00	
Max Q Clear Time (g_c+I1), s	12.00	33.91		9.00	28.33		9.05	52.00		17.00	31.77	
Green Extension Time (p_c)	0.00	0.00		0.00	0.61		0.61	0.00		0.00	19.01	

Intersection Summary			
HCM 2010 Control Delay			91.0
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	32	19	46	7	158	7	828	141	380	858	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1900	1881	1900	1881	1900	1900	1900	1900
Lanes	0	1	0	0	1	1	1	1	1	1	1	1
Capacity, veh/h	17	53	36	198	51	218	23	825	708	397	1226	1042
Arriving On Green	0.06	0.06	0.06	0.14	0.14	0.14	0.01	0.44	0.44	0.29	0.86	0.86
Sat Flow, veh/h	291.5	885.6	602.0	1452.3	375.0	1599.0	1809.5	1615.0	1615.0	1809.5	1615.0	1615.0
Grp Volume(v), veh/h	81.4	0.0	0.0	103.4	0.0	190.4	14.0	880.9	183.1	463.4	1009.4	21.4
Grp Sat Flow(s),veh/h/ln	1779.2	0.0	0.0	1827.4	0.0	1599.0	1809.5	1881.2	1615.0	1809.5	1900.0	1615.0
Q Serve(g_s), s	4.9	0.0	0.0	5.7	0.0	12.8	0.8	48.0	7.9	24.0	28.1	0.2
Cycle Q Clear(g_c), s	4.9	0.0	0.0	5.7	0.0	12.8	0.8	48.0	7.9	24.0	28.1	0.2
Proportion In Lane	0.164		0.338	0.795		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	106.1	0.0	0.0	249.2	0.0	218.1	22.9	825.0	708.2	396.8	1225.7	1041.9
V/C Ratio(X)	0.767	0.000	0.000	0.415	0.000	0.873	0.611	1.068	0.259	1.168	0.824	0.021
Avail Cap(c_a), veh/h	260.1	0.0	0.0	267.1	0.0	233.7	66.1	825.0	708.2	396.8	1225.7	1041.9
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	0.927	0.927	0.927
Uniform Delay (d), s/veh	50.7	0.0	0.0	43.3	0.0	46.3	53.8	30.7	19.5	38.8	4.8	2.8
Incr Delay (d2), s/veh	10.9	0.0	0.0	1.1	0.0	27.2	23.5	51.0	0.2	98.1	4.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	61.6	0.0	0.0	44.4	0.0	73.6	77.2	81.8	19.7	136.9	9.1	2.8
Lane Group LOS	E			D		E	E	F	B	F	A	A
Approach Volume, veh/h		81			294			1078			1494	
Approach Delay, s/veh		61.6			63.3			71.2			48.6	
Approach LOS		E			E			E			D	

Timer												
Assigned Phase		4			8		5	2		1	6	
Phase Duration (G+Y+Rc), s		10.53			18.93		5.39	52.00		28.00	74.61	
Change Period (Y+Rc), s		4.00			4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s		16.00			16.00		4.00	48.00		24.00	68.00	
Max Q Clear Time (g_c+I1), s		6.93			14.77		2.84	50.00		26.00	30.14	
Green Extension Time (p_c)		0.20			0.16		0.00	0.00		0.00	23.66	

Intersection Summary			
HCM 2010 Control Delay		58.7	
HCM 2010 Level of Service		E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	31	707	313	84	139	97	131	201	344	87	96	23
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1881	1900	1900	1881	1881	1900	1900	1900	1900	1900
Lanes	1	2	1	1	1	1	1	1	1	1	1	0
Capacity, veh/h	781	1970	873	459	1067	898	300	322	274	255	204	71
Arriving On Green	0.03	0.55	0.00	0.04	0.56	0.00	0.03	0.06	0.00	0.06	0.15	0.15
Sat Flow, veh/h	1809.5	1599.0	1599.0	1809.5	1599.0	1599.0	1791.6	1615.0	1615.0	1809.5	1346.1	470.8
Grp Volume(v), veh/h	39.7	768.5	0.0	103.7	158.0	0.0	137.9	231.0	0.0	103.6	0.0	177.5
Grp Sat Flow(s),veh/h/ln	1809.5	1805.0	1599.0	1809.5	1900.0	1599.0	1791.6	1900.0	1615.0	1809.5	0.0	1816.9
Q Serve(g_s), s	0.9	11.2	0.0	2.2	3.6	0.0	5.7	10.9	0.0	4.3	0.0	8.3
Cycle Q Clear(g_c), s	0.9	11.2	0.0	2.2	3.6	0.0	5.7	10.9	0.0	4.3	0.0	8.3
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		0.259
Lane Grp Cap(c), veh/h	781.0	1969.9	872.5	459.2	1067.1	898.0	299.9	322.0	273.7	254.8	0.0	275.8
V/C Ratio(X)	0.051	0.390	0.000	0.226	0.148	0.000	0.460	0.717	0.000	0.406	0.000	0.644
Avail Cap(c_a), veh/h	810.3	1969.9	872.5	599.1	1067.1	898.0	329.7	857.8	729.2	297.0	0.0	800.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	0.090	0.090	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	8.5	11.9	0.0	8.5	9.5	0.0	29.8	40.7	0.0	30.1	0.0	36.2
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.2	0.1	0.0	0.1	0.3	0.0	1.0	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	8.5	12.0	0.0	8.8	9.6	0.0	29.9	41.0	0.0	31.1	0.0	38.7
Lane Group LOS	A	B		A	A		C	D		C		D
Approach Volume, veh/h		808			262			369			281	
Approach Delay, s/veh		11.9			9.3			36.9			35.9	
Approach LOS		B			A			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	6.53	53.55		7.98	55.00		11.49	19.39		9.89	17.79	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	4.00	44.00		11.00	51.00		9.00	41.00		8.00	40.00	
Max Q Clear Time (g_c+I1), s	2.87	13.16		4.18	5.61		7.69	12.86		6.32	10.34	
Green Extension Time (p_c)	0.00	7.29		0.11	7.77		0.04	2.53		0.03	2.55	

Intersection Summary			
HCM 2010 Control Delay		20.8	
HCM 2010 Level of Service		C	

Intersection	
Intersection Delay (sec/veh):	3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Volume (vph)	54	988	206	116	89	14
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length	0			0	0	0
Median Width		0	0		12	
Grade (%)		0%	0%		0%	
Peak Hour Factor	0.73	0.91	0.96	0.85	0.76	0.67
Heavy Vehicles(%)	0	0	1	2	2	12
Movement Flow Rate	74	1086	215	136	117	21
Number of Lanes	0	2	2	0	1	0

Major/Minor	Major 1		Major 2			
Conflicting Flow Rate - All	351	0	0	0	974	176
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	691	-
Follow-up Headway	2.2	-	-	-	3.52	3.42
Pot Capacity-1 Maneuver	1312	-	-	-	281	978
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	459	-
Time blocked-Platoon(%)	6	-	-	-	6	6
Mov Capacity-1 Maneuver	1312	-	-	-	241	978
Mov Capacity-2 Maneuver	-	-	-	-	241	-
Stage 1	-	-	-	-	838	-
Stage 2	-	-	-	-	394	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.5	0	31.1
HCM LOS	A	A	D

Lane	EBL	EBT	WBT	WBR	SBLn1
Capacity (vph)					272
HCM Control Delay (s)	7.908	-	-	-	31.1
HCM Lane VC Ratio	0.056	-	-	-	0.507
HCM Lane LOS	A	-	-	-	D
HCM 95th Percentile Queue (veh)	0.179	-	-	-	2.665

Intersection	
Intersection Delay (sec/veh):	9.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	412	28	37	405	84	294
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None
Storage Length		0	0		0	0
Median Width	0			0	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.90	0.69	0.79	0.83	0.63	0.78
Heavy Vehicles(%)	0	0	0	1	0	0
Movement Flow Rate	458	41	47	488	133	377
Number of Lanes	2	0	0	2	1	0

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	499	0	817	250
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	338	-
Follow-up Headway	-	-	2.2	-	3.5	3.3
Pot Capacity-1 Maneuver	-	-	1075	-	*475	756
Stage 1	-	-	-	-	*595	-
Stage 2	-	-	-	-	*1273	-
Time blocked-Platoon(%)	-	-	0	-	15	0
Mov Capacity-1 Maneuver	-	-	1075	-	*447	756
Mov Capacity-2 Maneuver	-	-	-	-	*447	-
Stage 1	-	-	-	-	*595	-
Stage 2	-	-	-	-	*1197	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0.7	29
HCM LOS	A	A	D

Lane	NBLn1	EBT	EBR	WBL	WBT
Capacity (vph)	*640				
HCM Control Delay (s)	29	-	-	8.501	-
HCM Lane VC Ratio	0.797	-	-	0.044	-
HCM Lane LOS	D	-	-	A	-
HCM 95th Percentile Queue (veh)	7.925	-	-	0.137	-

Attachment 6

Intersection Worksheets – Fort Gordon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	363	145	370	331	71	24	256	69	248	826	51
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1899	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	48	663	305	468	1008	391	129	400	340	292	1097	449
Arriving On Green	0.03	0.19	0.00	0.13	0.29	0.00	0.21	0.21	0.00	0.29	0.29	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	612.3	1900.0	1615.0	1012.1	3797.8	1552.9
Grp Volume(v), veh/h	40.0	453.8	0.0	430.2	429.9	0.0	48.0	365.7	0.0	275.6	928.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	612.3	1900.0	1615.0	1012.1	1898.9	1552.9
Q Serve(g_s), s	2.2	10.8	0.0	10.9	9.1	0.0	6.0	16.9	0.0	23.9	20.7	0.0
Cycle Q Clear(g_c), s	2.2	10.8	0.0	10.9	9.1	0.0	6.0	16.9	0.0	23.9	20.7	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	48.3	662.6	305.3	468.5	1007.8	391.2	129.0	400.2	340.2	292.4	1097.2	448.6
V/C Ratio(X)	0.827	0.685	0.000	0.918	0.427	0.000	0.372	0.914	0.000	0.942	0.846	0.000
Avail Cap(c_a), veh/h	109.8	662.6	305.3	468.5	1007.8	391.2	129.4	401.5	341.3	292.6	1098.1	449.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	43.4	34.0	0.0	38.5	25.7	0.0	30.4	34.7	0.0	31.2	30.1	0.0
Incr Delay (d2), s/veh	28.3	2.9	0.0	23.1	0.3	0.0	1.8	25.0	0.0	37.4	6.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	71.7	36.9	0.0	61.6	26.0	0.0	32.2	59.7	0.0	68.7	36.3	0.0
Lane Group LOS	E	D		E	C		C	E		E	D	
Approach Volume, veh/h		494			860			414			1204	
Approach Delay, s/veh		39.7			43.8			56.5			43.7	
Approach LOS		D			D			E			D	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	6.64	21.00		16.00	30.36			22.94			29.98	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	6.00	17.00		12.00	23.00			19.00			26.00	
Max Q Clear Time (g_c+I1), s	4.18	12.84		12.88	11.08			18.92			25.92	
Green Extension Time (p_c)	0.01	2.14		0.00	4.62			0.02			0.06	

Intersection Summary												
HCM 2010 Control Delay			44.9									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	588	91	486	458	154	28	243	217	176	951	325
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	235	923	425	659	1086	495	49	793	619	219	1162	515
Arriving On Green	0.07	0.26	0.00	0.13	0.32	0.32	0.03	0.22	0.00	0.13	0.32	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	144.6	744.3	0.0	571.8	508.9	171.1	40.0	342.3	0.0	195.6	1068.5	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	2.5	12.3	0.0	6.8	7.5	5.3	1.4	5.1	0.0	7.0	17.6	0.0
Cycle Q Clear(g_c), s	2.5	12.3	0.0	6.8	7.5	5.3	1.4	5.1	0.0	7.0	17.6	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	235.0	923.0	425.3	659.4	1086.2	495.1	48.9	793.4	618.5	218.5	1162.3	514.8
V/C Ratio(X)	0.615	0.806	0.000	0.867	0.469	0.346	0.818	0.431	0.000	0.895	0.919	0.000
Avail Cap(c_a), veh/h	336.8	962.4	443.5	659.4	1086.2	495.1	116.9	932.9	727.3	218.5	1166.2	516.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	28.1	21.3	0.0	26.4	16.6	15.9	30.0	20.8	0.0	26.5	20.2	0.0
Incr Delay (d2), s/veh	2.6	5.0	0.0	11.8	0.3	0.4	26.9	0.4	0.0	34.1	11.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	30.7	26.3	0.0	38.2	17.0	16.3	56.9	21.2	0.0	60.6	31.8	0.0
Lane Group LOS	C	C		D	B	B	E	C		E	C	
Approach Volume, veh/h		889			1252			382			1264	
Approach Delay, s/veh		27.0			26.6			24.9			36.3	
Approach LOS		C			C			C			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	8.19	20.30		12.00	24.12		5.67	17.61		12.00	23.93	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	6.00	17.00		8.00	19.00		4.00	16.00		8.00	20.00	
Max Q Clear Time (g_c+I1), s	4.51	14.30		8.80	9.51		3.36	7.06		9.05	19.65	
Green Extension Time (p_c)	0.06	2.01		0.00	5.86		0.00	5.87		0.00	0.29	

Intersection Summary												
HCM 2010 Control Delay			29.7									
HCM 2010 Level of Service			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	99	49	47	138	62	33	165	57	251	384	191
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1706	1706	1900	1840	1840	1900	1891	1891	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	113	242	121	181	291	160	78	278	86	331	651	559
Arriving On Green	0.06	0.23	0.23	0.10	0.26	0.26	0.04	0.20	0.20	0.19	0.35	0.35
Sat Flow, veh/h	1739.9	1072.6	538.7	1809.5	1117.0	614.2	1809.5	1385.1	430.0	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	88.1	0.0	215.5	79.7	0.0	260.8	55.9	0.0	304.5	291.9	451.8	248.1
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1611.3	1809.5	0.0	1731.1	1809.5	0.0	1815.2	1756.8	1881.2	1615.0
Q Serve(g_s), s	4.2	0.0	10.1	3.5	0.0	11.0	2.6	0.0	13.6	13.6	17.4	10.0
Cycle Q Clear(g_c), s	4.2	0.0	10.1	3.5	0.0	11.0	2.6	0.0	13.6	13.6	17.4	10.0
Proportion In Lane	1.000		0.334	1.000		0.355	1.000		0.237	1.000		1.000
Lane Grp Cap(c), veh/h	112.8	0.0	363.3	181.5	0.0	451.7	78.4	0.0	364.4	331.5	651.2	559.0
V/C Ratio(X)	0.781	0.000	0.593	0.439	0.000	0.577	0.714	0.000	0.836	0.880	0.694	0.444
Avail Cap(c_a), veh/h	206.5	0.0	363.3	214.7	0.0	451.7	107.4	0.0	387.7	396.1	714.3	613.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	38.8	0.0	29.2	35.7	0.0	27.1	39.8	0.0	32.3	33.3	23.7	21.3
Incr Delay (d2), s/veh	11.1	0.0	7.0	1.7	0.0	5.3	12.9	0.0	14.0	17.7	2.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	49.9	0.0	36.1	37.3	0.0	32.4	52.7	0.0	46.4	50.9	26.3	21.8
Lane Group LOS	D		D	D		C	D		D	D	C	C
Approach Volume, veh/h		304			340			360			992	
Approach Delay, s/veh		40.1			33.6			47.4			32.4	
Approach LOS		D			C			D			C	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	11.46	25.00		14.45	27.99		9.65	22.92		21.90	35.17	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	10.00	19.00		10.00	19.00		5.00	18.00		19.00	32.00	
Max Q Clear Time (g_c+I1), s	6.20	12.08		5.49	13.05		4.57	15.58		15.62	19.41	
Green Extension Time (p_c)	0.06	2.59		0.05	2.30		0.00	1.34		0.30	4.65	

Intersection Summary		
HCM 2010 Control Delay		36.5
HCM 2010 Level of Service		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	266	76	235	568	154	120	113	110	59	44	15
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1870	1870	1870	1881	1900	1900	1863	1810	1776	1863	1601	1601
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	101	660	209	519	1506	422	441	523	436	421	222	205
Arriving On Green	0.29	0.29	0.29	0.13	0.53	0.53	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	226.8	2018.3	727.4	1791.6	2857.1	801.5	1299.1	1809.5	1509.3	1256.8	767.9	708.4
Grp Volume(v), veh/h	217.9	0.0	216.3	276.5	434.0	402.2	136.4	128.4	154.9	84.3	0.0	91.9
Grp Sat Flow(s),veh/h/ln	1548.4	0.0	1573.0	1791.6	1900.0	1758.6	1299.1	1809.5	1509.3	1256.8	0.0	1476.3
Q Serve(g_s), s	0.0	0.0	6.5	5.7	8.0	8.0	5.1	3.1	4.6	3.1	0.0	2.7
Cycle Q Clear(g_c), s	5.4	0.0	6.5	5.7	8.0	8.0	7.8	3.1	4.6	6.2	0.0	2.7
Proportion In Lane	0.146		0.462	1.000		0.456	1.000		1.000	1.000		0.480
Lane Grp Cap(c), veh/h	518.3	0.0	453.0	519.0	1001.2	926.7	440.6	523.1	436.3	421.5	0.0	426.8
V/C Ratio(X)	0.421	0.000	0.477	0.533	0.433	0.434	0.310	0.245	0.355	0.200	0.000	0.215
Avail Cap(c_a), veh/h	597.8	0.0	560.9	530.3	1098.5	1016.7	440.6	523.1	436.3	421.5	0.0	426.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	16.4	0.0	16.8	11.0	8.3	8.3	18.3	15.5	16.1	17.9	0.0	15.4
Incr Delay (d2), s/veh	1.2	0.0	1.7	3.1	0.6	0.7	1.8	1.1	2.3	1.1	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	17.5	0.0	18.4	14.1	8.9	9.0	20.1	16.6	18.3	19.0	0.0	16.5
Lane Group LOS	B		B	B	A	A	C	B	B	B		B
Approach Volume, veh/h		434			1113			420			176	
Approach Delay, s/veh		18.0			10.2			18.4			17.7	
Approach LOS		B			B			B			B	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		22.30		13.64	35.94			21.00			21.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		20.00		8.00	33.00			16.50			16.50	
Max Q Clear Time (g_c+I1), s		8.48		7.66	10.01			9.76			8.23	
Green Extension Time (p_c)		8.69		0.08	14.91			2.30			2.67	

Intersection Summary		
HCM 2010 Control Delay		14.0
HCM 2010 Level of Service		B

Intersection	
Intersection Delay (sec/veh):	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	535	92	191	193	4	1	0	6	0	1	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	0	608	116	262	261	12	4	0	8	0	4	4
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	273	0	0	724	0	0	1461	~	666	1461	1515	137
Stage 1	-	-	-	-	-	-	666	-	-	791	791	-
Stage 2	-	-	-	-	-	-	795	-	-	670	724	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1302	-	-	852	-	-	108	0	463	108	121	917
Stage 1	-	-	-	-	-	-	452	0	-	386	404	-
Stage 2	-	-	-	-	-	-	384	0	-	450	433	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1302	-	-	852	-	-	74	-	463	76	77	917
Mov Capacity-2 Maneuver	-	-	-	-	-	-	74	-	-	76	77	-
Stage 1	-	-	-	-	-	-	452	-	-	386	257	-
Stage 2	-	-	-	-	-	-	240	-	-	442	433	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	5.4	27.4	31.9
HCM LOS	A	A	D	D

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	74	463							142
HCM Control Delay (s)	56.4	12.9	0	-	-	11.087	-	-	31.9
HCM Lane VC Ratio	0.054	0.017	-	-	-	0.307	-	-	0.056
HCM Lane LOS	F	B	A	-	-	B	-	-	D
HCM 95th Percentile Queue (veh)	0.168	0.053	0	-	-	1.306	-	-	0.177

Intersection	
Intersection Delay (sec/veh):	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	8	0	33	0	2	6	1	253	1	13	810	278
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	16	0	56	0	2	7	4	342	1	14	1000	309
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1538	1534	655	879	1688	343	1309	0	0	343	0	0
Stage 1	1183	1183	-	351	351	-	-	-	-	-	-	-
Stage 2	355	351	-	528	1337	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	80	115	386	242	93	653	535	-	-	1213	-	-
Stage 1	204	261	-	639	631	-	-	-	-	-	-	-
Stage 2	641	631	-	502	220	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	74	108	386	198	88	653	535	-	-	1213	-	-
Mov Capacity-2 Maneuver	74	108	-	198	88	-	-	-	-	-	-	-
Stage 1	202	248	-	633	625	-	-	-	-	-	-	-
Stage 2	627	625	-	409	209	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	33	19.9	0.1	0.1
HCM LOS	D	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				199	251			
HCM Control Delay (s)	11.78	0	-	33	19.9	8.003	-	-
HCM Lane VC Ratio	0.007	-	-	0.361	0.035	0.012	-	-
HCM Lane LOS	B	A	-	D	C	A	-	-
HCM 95th Percentile Queue (veh)	0.023	-	-	1.548	0.107	0.035	-	-

Intersection	
Intersection Delay (sec/veh):	180.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	65	109	390	34	9	7	30	141	23	289	3
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	0	100	151	443	48	12	12	36	188	52	304	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	60	0	0	251	0	0	1272	1122	126	1228	1191	30
Stage 1	-	-	-	-	-	-	176	176	-	940	940	-
Stage 2	-	-	-	-	-	-	1096	946	-	288	251	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	3.3
Pot Capacity-1 Maneuver	1559	-	-	1314	-	-	145	207	924	138	# 186	1059
Stage 1	-	-	-	-	-	-	831	758	-	286	341	-
Stage 2	-	-	-	-	-	-	260	342	-	671	699	-
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	1
Mov Capacity-1 Maneuver	1559	-	-	1314	-	-	-	137	924	65	# 123	1059
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	137	-	65	# 123	-
Stage 1	-	-	-	-	-	-	831	758	-	286	# 226	-
Stage 2	-	-	-	-	-	-	-	227	-	509	699	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	8	-	$ 660.1
HCM LOS	A	A	-	F

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	-	480							65	126
HCM Control Delay (s)	-	18.9	0	-	-	9.128	0	-	164.6	$ 18.9
HCM Lane VC Ratio	-	0.467	-	-	-	0.337	-	-	0.804	2.477
HCM Lane LOS	-	C	A	-	-	A	A	-	F	F
HCM 95th Percentile Queue (veh)	-	2.442	0	-	-	1.506	-	-	3.703	27.517

Intersection	
Intersection Delay (sec/veh):	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	14	368	39	56	236	8	32	53	71	7	14	6
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	20	413	48	64	315	12	40	76	129	8	24	20
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	327	0	0	461	0	0	775	932	231	734	950	164
Stage 1	-	-	-	-	-	-	477	477	-	449	449	-
Stage 2	-	-	-	-	-	-	298	455	-	285	501	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1244	-	-	1347	-	-	426	355	*1294	*486	314	720
Stage 1	-	-	-	-	-	-	774	718	-	*564	525	-
Stage 2	-	-	-	-	-	-	659	567	-	*1294	661	-
Time blocked-Platoon(%)	0	-	-	14	-	-	14	14	14	14	14	0
Mov Capacity-1 Maneuver	1244	-	-	1347	-	-	365	327	*1294	*339	289	720
Mov Capacity-2 Maneuver	-	-	-	-	-	-	365	327	-	*339	289	-
Stage 1	-	-	-	-	-	-	757	702	-	*552	495	-
Stage 2	-	-	-	-	-	-	574	534	-	*1016	647	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	1.4	16.5	15.4
HCM LOS	A	A	C	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*555							*339	*393
HCM Control Delay (s)	16.5	7.941	0.1	-	7.805	0.2	-	15.8	15.4
HCM Lane VC Ratio	0.441	0.016	-	-	0.047	-	-	0.016	0.119
HCM Lane LOS	C	A	A	-	A	A	-	C	C
HCM 95th Percentile Queue (veh)	2.238	0.049	-	-	0.149	-	-	0.048	0.402

Intersection	
Intersection Delay (sec/veh):	18.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	407	30	374	918	36	399
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	496	36	430	1009	60	547
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	532	0	1879	266
Stage 1	-	-	-	-	514	-
Stage 2	-	-	-	-	1365	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	1046	-	64	735
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	206	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	1046	-	# 38	735
Mov Capacity-2 Maneuver	-	-	-	-	# 38	-
Stage 1	-	-	-	-	571	-
Stage 2	-	-	-	-	121	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	3.2	71.9
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	38	735				
HCM Control Delay (s)	$ 520.3	22.7	-	-	10.822	-
HCM Lane VC Ratio	1.579	0.744	-	-	0.411	-
HCM Lane LOS	F	C	-	-	B	-
HCM 95th Percentile Queue (veh)	6.314	6.761	-	-	2.039	-

Intersection	
Intersection Delay (sec/veh):	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	8	12	51	12	64	10	200	95	111	375	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	0	16	20	68	24	108	16	290	112	161	426	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1194	1184	215	1146	1130	201	430	0	0	402	0	0
Stage 1	750	750	-	378	378	-	-	-	-	-	-	-
Stage 2	444	434	-	768	752	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	165	191	770	175	205	845	1088	-	-	1151	-	-
Stage 1	407	422	-	640	619	-	-	-	-	-	-	-
Stage 2	597	585	-	391	421	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	114	162	770	139	174	845	1088	-	-	1151	-	-
Mov Capacity-2 Maneuver	114	162	-	139	174	-	-	-	-	-	-	-
Stage 1	401	363	-	631	610	-	-	-	-	-	-	-
Stage 2	493	576	-	313	362	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	19.2	51.1	0.3	2.4
HCM LOS	C	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				289	265			
HCM Control Delay (s)	8.358	0	-	19.2	51.1	8.635	0	-
HCM Lane VC Ratio	0.015	-	-	0.125	0.757	0.14	-	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th Percentile Queue (veh)	0.044	-	-	0.421	5.53	0.486	-	-

Intersection	
Intersection Delay (sec/veh)	17.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	34	114	65	41	109	11	88	184	28	15	63	36
Peak Hour Factor	0.71	0.73	0.86	0.60	0.70	0.39	0.85	0.70	0.58	0.63	0.68	0.64
Heavy Vehicles(%)	3	3	2	15	5	9	0	3	0	20	2	0
Movement Flow Rate	48	156	76	68	156	28	104	263	48	24	93	56
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	15.2	15.6	21.9	13.1
HCM LOS	C	C	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	29%	16%	25%	13%
Volume Thru (%)	61%	54%	68%	55%
Volume Right (%)	9%	31%	7%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	300	213	161	114
Left Turning Volume	184	114	109	63
Through Volume	28	65	11	36
Right Turning Volume	88	34	41	15
Lane Flow Rate	415	280	252	173
Geometry Group	1	1	1	1
Degree of Utilization, X	0.697	0.488	0.469	0.324
Departure Headway, Hd	6.048	6.286	6.688	6.758
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	597	570	537	530
Service Time	4.097	4.344	4.746	4.823
HCM Lane V/C Ratio	0.695	0.491	0.469	0.326
HCM Control Delay	21.9	15.2	15.6	13.1
HCM Lane LOS	C	C	C	B
HCM 95th Percentile Queue	6.9	2.9	2.6	1.4

Intersection	
Intersection Delay (sec/veh)	38.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	7	3	5	31	0	6	19	200	16	13	589	22
Peak Hour Factor	0.58	0.25	0.42	0.25	0.25	0.25	0.59	0.74	0.25	0.25	0.89	0.55
Heavy Vehicles(%)	57	0	20	3	0	0	0	0	6	38	1	0
Movement Flow Rate	12	12	12	124	0	24	32	270	64	52	662	40
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10.8	12.7	15.2	55.7
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	0%	93%	0%	38%	0%	0%	0%	96%
Volume Right (%)	0%	7%	0%	62%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	19	216	7	8	31	6	13	611
Left Turning Volume	0	200	0	3	0	0	0	589
Through Volume	0	16	0	5	0	6	0	22
Right Turning Volume	19	0	7	0	31	0	13	0
Lane Flow Rate	32	334	12	24	124	24	52	702
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0.058	0.549	0.03	0.047	0.268	0.043	0.099	1
Departure Headway, Hd	6.473	5.914	9.066	7.108	7.779	6.499	6.869	5.702
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	551	605	396	502	464	550	525	639
Service Time	4.238	3.687	6.783	4.883	5.491	4.245	4.569	3.402
HCM Lane V/C Ratio	0.058	0.552	0.03	0.048	0.267	0.044	0.099	1.099
HCM Control Delay	9.6	15.7	12.1	10.2	13.3	9.5	10.3	59.1
HCM Lane LOS	A	C	B	B	B	A	B	F
HCM 95th Percentile Queue	0.2	3.6	0.1	0.1	1.1	0.1	0.3	119.2

Intersection	
Intersection Delay (sec/veh):	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	306	0	1	612	12	1	0	1	8	0	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	4	348	0	1	827	36	4	0	1	32	0	20
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	863	0	0	348	0	0	1213	~	348	1204	1203	432
Stage 1	-	-	-	-	-	-	356	-	-	847	847	-
Stage 2	-	-	-	-	-	-	857	-	-	357	356	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	788	-	-	1178	-	-	160	0	700	162	186	628
Stage 1	-	-	-	-	-	-	666	0	-	359	381	-
Stage 2	-	-	-	-	-	-	355	0	-	665	633	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	788	-	-	1178	-	-	154	-	700	161	185	628
Mov Capacity-2 Maneuver	-	-	-	-	-	-	154	-	-	161	185	-
Stage 1	-	-	-	-	-	-	662	-	-	357	380	-
Stage 2	-	-	-	-	-	-	343	-	-	660	629	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.1	0	24.3	25.7
HCM LOS	A	A	C	D

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	154	700							225
HCM Control Delay (s)	29	10.2	9.592	0	-	8.06	-	-	25.7
HCM Lane VC Ratio	0.026	0.002	0.005	-	-	0.001	-	-	0.231
HCM Lane LOS	D	B	A	A	-	A	-	-	D
HCM 95th Percentile Queue (veh)	0.08	0.006	0.015	-	-	0.003	-	-	0.867

Intersection	
Intersection Delay (sec/veh)	$ 3659.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	268	0	0	3	0	24	0	1460	5	0	145	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	536	0	0	3	0	26	0	1973	5	0	179	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	2174	2163	96	2066	2167	1976	191	0	0	-	0	0
Stage 1	185	185	-	1976	1976	-	-	-	-	-	-	-
Stage 2	1989	1978	-	90	191	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	0	-	-
Pot Capacity-1 Maneuver	# 27	47	910	31	46	52	1395	-	-	0	-	-
Stage 1	805	746	-	64	106	-	-	-	-	0	-	-
Stage 2	# 64	106	-	907	741	-	-	-	-	0	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 13	47	910	31	46	52	1395	-	-	-	-	-
Mov Capacity-2 Maneuver	# 13	47	-	31	46	-	-	-	-	-	-	-
Stage 1	805	746	-	64	106	-	-	-	-	-	-	-
Stage 2	# 32	106	-	907	741	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 18665.3	160.7	0	0
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (vph)				13	48		
HCM Control Delay (s)	0	-	-	$ 160.7	160.7	-	-
HCM Lane VC Ratio	-	-	-	41.231	0.611	-	-
HCM Lane LOS	A	-	-	F	F	-	-
HCM 95th Percentile Queue (veh)	0	-	-	68.317	2.351	-	-

Intersection	
Intersection Delay (sec/veh):	41

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	90	16	83	32	6	36	180	370	27	37	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	72	138	22	94	45	8	62	217	493	61	39	0
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	53	0	0	160	0	0	550	534	80	885	541	-
Stage 1	-	-	-	-	-	-	293	293	-	237	237	-
Stage 2	-	-	-	-	-	-	257	241	-	648	304	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	0
Pot Capacity-1 Maneuver	1568	-	-	1419	-	-	450	456	980	241	449	0
Stage 1	-	-	-	-	-	-	719	674	-	719	710	0
Stage 2	-	-	-	-	-	-	755	711	-	421	663	0
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	0
Mov Capacity-1 Maneuver	1568	-	-	1419	-	-	382	406	980	64	400	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	382	406	-	64	400	-
Stage 1	-	-	-	-	-	-	686	643	-	686	663	-
Stage 2	-	-	-	-	-	-	663	664	-	132	633	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.3	4.9	64.9	-
HCM LOS	A	A	F	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	382	684							64	-
HCM Control Delay (s)	16.2	69.2	7.406	0	-	7.718	0	-	208	-
HCM Lane VC Ratio	0.162	1.038	0.046	-	-	0.066	-	-	0.959	-
HCM Lane LOS	C	F	A	A	-	A	A	-	F	-
HCM 95th Percentile Queue (veh)	0.574	18.039	0.144	-	-	0.213	-	-	4.635	-

Intersection	
Intersection Delay (sec/veh):	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	530	36	80	259	1	41	30	114	25	86	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	1	596	44	91	345	1	51	43	207	28	148	33
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	346	0	0	640	0	0	1049	1148	320	850	1170	174
Stage 1	-	-	-	-	-	-	620	620	-	528	528	-
Stage 2	-	-	-	-	-	-	429	528	-	322	642	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1224	-	-	1255	-	-	311	295	*1201	*496	256	708
Stage 1	-	-	-	-	-	-	767	698	-	*507	481	-
Stage 2	-	-	-	-	-	-	548	526	-	*1201	646	-
Time blocked-Platoon(%)	0	-	-	20	-	-	20	20	20	20	20	0
Mov Capacity-1 Maneuver	1224	-	-	1255	-	-	136	268	*1201	*336	233	708
Mov Capacity-2 Maneuver	-	-	-	-	-	-	136	268	-	*336	233	-
Stage 1	-	-	-	-	-	-	766	697	-	*506	438	-
Stage 2	-	-	-	-	-	-	314	479	-	*932	645	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	1.8	31.6	42.9
HCM LOS	A	A	D	E

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*425							*336	*269
HCM Control Delay (s)	31.6	7.945	0	-	8.092	0.2	-	16.4	45.5
HCM Lane VC Ratio	0.709	0.001	-	-	0.072	-	-	0.056	0.71
HCM Lane LOS	D	A	A	-	A	A	-	C	E
HCM 95th Percentile Queue (veh)	5.416	0.004	-	-	0.234	-	-	0.178	4.896

Intersection						
Intersection Delay (sec/veh): $ 345.7						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1359	89	377	501	14	757
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	1657	107	433	551	23	1037
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1764	0	2853	883
Stage 1	-	-	-	-	1711	-
Stage 2	-	-	-	-	1142	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	# 359	-	# 14	# 291
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	271	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	# 359	-	# 14	# 291
Mov Capacity-2 Maneuver	-	-	-	-	# 14	-
Stage 1	-	-	-	-	134	-
Stage 2	-	-	-	-	271	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	65.6	$ 1181
HCM LOS	A	F	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	14	291				
HCM Control Delay (s)	$ 876.2	$ 1187.9	-	-	148.893	-
HCM Lane VC Ratio	1.667	3.564	-	-	1.207	-
HCM Lane LOS	F	F	-	-	F	-
HCM 95th Percentile Queue (veh)	3.598	97.247	-	-	18.214	-

Intersection	
Intersection Delay (sec/veh):	8.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	52	11	147	6	370	92	36	143	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	69	22	249	10	536	108	52	162	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1015	933	84	883	881	322	167	0	0	644	0	0
Stage 1	269	269	-	610	610	-	-	-	-	-	-	-
Stage 2	746	664	-	273	271	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	219	268	915	264	288	724	1364	-	-	936	-	-
Stage 1	741	690	-	478	488	-	-	-	-	-	-	-
Stage 2	409	461	-	729	689	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	128	251	915	246	270	724	1364	-	-	936	-	-
Mov Capacity-2 Maneuver	128	251	-	246	270	-	-	-	-	-	-	-
Stage 1	736	652	-	474	484	-	-	-	-	-	-	-
Stage 2	254	458	-	681	651	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	23.6	28.6	0.1	2.2
HCM LOS	C	D	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				205	481			
HCM Control Delay (s)	7.658	0	-	23.6	28.6	9.073	0	-
HCM Lane VC Ratio	0.007	-	-	0.057	0.708	0.056	-	-
HCM Lane LOS	A	A	-	C	D	A	A	-
HCM 95th Percentile Queue (veh)	0.021	-	-	0.18	5.529	0.177	-	-

Intersection	
Intersection Delay (sec/veh):	43.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	86	5	30	0	68	61	19	405	5	36	263	58
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.42	0.54	0.25	0.59	0.66	0.79	0.90	0.31	0.69	0.89	0.85
Heavy Vehicles(%)	0	0	3	0	0	0	0	1	0	0	0	0
Movement Flow Rate	143	12	56	0	115	92	24	450	16	52	296	68
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1044	948	330	974	974	458	364	0	0	466	0	0
Stage 1	434	434	-	506	506	-	-	-	-	-	-	-
Stage 2	610	514	-	468	468	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.327	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	209	263	709	233	254	607	1206	-	-	1106	-	-
Stage 1	604	585	-	552	543	-	-	-	-	-	-	-
Stage 2	485	539	-	579	565	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 102	241	709	193	233	607	1206	-	-	1106	-	-
Mov Capacity-2 Maneuver	# 102	241	-	193	233	-	-	-	-	-	-	-
Stage 1	588	550	-	537	528	-	-	-	-	-	-	-
Stage 2	313	524	-	491	532	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	238.2	34.6	0.4	1.1
HCM LOS	F	D	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				107	709	321			
HCM Control Delay (s)	8.046	0	-	$ 34.6	10.5	34.6	8.416	0	-
HCM Lane VC Ratio	0.02	-	-	1.451	0.078	0.647	0.047	-	-
HCM Lane LOS	A	A	-	F	B	D	A	A	-
HCM 95th Percentile Queue (veh)	0.061	-	-	11.219	0.254	4.233	0.148	-	-

Intersection	
Intersection Delay (sec/veh):	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	24	98	0	0	194	60	0	1	0	122	2	43
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.72	0.25	0.25	0.58	0.83	0.25	0.25	0.25	0.82	0.50	0.72
Heavy Vehicles(%)	0	3	0	0	4	5	0	0	0	2	0	9
Movement Flow Rate	32	136	0	0	334	72	0	4	0	149	4	60
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	406	0	-	136	0	0	602	606	68	572	570	203
Stage 1	-	-	-	-	-	-	200	200	-	370	370	-
Stage 2	-	-	-	-	-	-	402	406	-	202	200	-
Follow-up Headway	2.2	-	0	2.2	-	-	3.5	4	3.3	3.518	4	3.381
Pot Capacity-1 Maneuver	1164	-	0	1461	-	-	414	414	1001	431	434	820
Stage 1	-	-	0	-	-	-	806	739	-	650	624	-
Stage 2	-	-	0	-	-	-	629	601	-	800	739	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1164	-	-	1461	-	-	373	403	1001	419	422	820
Mov Capacity-2 Maneuver	-	-	-	-	-	-	373	403	-	419	422	-
Stage 1	-	-	-	-	-	-	784	719	-	632	624	-
Stage 2	-	-	-	-	-	-	579	601	-	774	719	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.6	0	14	15.8
HCM LOS	A	A	B	C

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	403						419	774
HCM Control Delay (s)	14	8.18	0	0	-	-	18.2	10.1
HCM Lane VC Ratio	0.01	0.027	-	-	-	-	0.355	0.082
HCM Lane LOS	B	A	A	A	-	-	C	B
HCM 95th Percentile Queue (veh)	0.03	0.085	-	0	-	-	1.578	0.268

Intersection	
Intersection Delay (sec/veh):	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	29	174	60	13	208	105	18	39	4	39	38	28
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.73	0.75	0.65	0.83	0.71	0.64	0.65	0.50	0.81	0.59	0.78
Heavy Vehicles(%)	0	8	0	0	2	5	11	0	0	0	13	4
Movement Flow Rate	36	238	80	20	251	148	28	60	8	48	64	36
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	399	0	0	318	0	0	765	789	159	749	755	200
Stage 1	-	-	-	-	-	-	350	350	-	365	365	-
Stage 2	-	-	-	-	-	-	415	439	-	384	390	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.599	4	3.3	3.5	4.117	3.336
Pot Capacity-1 Maneuver	1171	-	-	1253	-	-	309	325	892	331	325	836
Stage 1	-	-	-	-	-	-	648	636	-	658	604	-
Stage 2	-	-	-	-	-	-	597	582	-	643	589	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1171	-	-	1253	-	-	240	310	892	270	310	836
Mov Capacity-2 Maneuver	-	-	-	-	-	-	240	310	-	270	310	-
Stage 1	-	-	-	-	-	-	628	616	-	638	594	-
Stage 2	-	-	-	-	-	-	501	573	-	557	571	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.8	0.4	22.5	23
HCM LOS	A	A	C	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	301							346
HCM Control Delay (s)	22.5	8.171	0	-	7.92	0	-	23
HCM Lane VC Ratio	0.319	0.031	-	-	0.016	-	-	0.429
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th Percentile Queue (veh)	1.338	0.095	-	-	0.049	-	-	2.079

Intersection	
Intersection Delay (sec/veh):	5.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	43	158	212	431	224	63
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	Free	Free	None	None	Free	Free
Storage Length	0	0	0			0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.72	0.71	0.79	0.93	0.71	0.83
Heavy Vehicles(%)	5	2	0	1	2	6
Movement Flow Rate	60	223	268	463	315	76
Number of Lanes	1	1	1	1	1	1

Major/Minor	Major 1				Major 2	
Conflicting Flow Rate - All	1352	196	391	0	0	0
Stage 1	353	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Follow-up Headway	3.545	3.318	2.2	-	-	-
Pot Capacity-1 Maneuver	163	845	1179	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	126	845	1179	-	-	-
Mov Capacity-2 Maneuver	126	-	-	-	-	-
Stage 1	705	-	-	-	-	-
Stage 2	272	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	20.6	3.3	0
HCM LOS	C	A	A

Lane	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (vph)			126	845		
HCM Control Delay (s)	8.951	-	57	10.8	-	-
HCM Lane VC Ratio	0.228	-	0.474	0.263	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th Percentile Queue (veh)	0.877	-	2.147	1.058	-	-

Intersection	
Intersection Delay (sec/veh):	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	2	0	0	0	0	1	3	195	0	1	54	18
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.81	0.25	0.25	0.75	0.38
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	0	11	11
Movement Flow Rate	4	0	0	0	0	4	12	241	0	4	72	47
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	4	0	0	0	0	0	70	12	0	131	10	2
Stage 1	-	-	-	-	-	-	8	8	-	2	2	-
Stage 2	-	-	-	-	-	-	62	4	-	129	8	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.5	4.009	3.3	3.5	4.099	3.399
Pot Capacity-1 Maneuver	1631	-	-	-	-	-	927	885	-	846	867	1056
Stage 1	-	-	-	-	-	-	1019	891	-	1026	877	-
Stage 2	-	-	-	-	-	-	954	894	-	880	871	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1631	-	-	-	-	-	828	883	-	-	865	1056
Mov Capacity-2 Maneuver	-	-	-	-	-	-	828	883	-	-	865	-
Stage 1	-	-	-	-	-	-	1017	889	-	1024	877	-
Stage 2	-	-	-	-	-	-	836	894	-	640	869	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	7.2	0	-	-
HCM LOS	A	A	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	7.213	0	-	0	-	-	-
HCM Lane VC Ratio	-	0.002	-	-	-	-	-	-
HCM Lane LOS	-	A	A	-	A	-	-	-
HCM 95th Percentile Queue (veh)	-	0.007	-	-	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	27.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	5	36	20	9	42	151	862	47	77	230	14
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.38	0.63	0.64	0.71	0.75	0.75	0.70	0.81	0.69	0.64	0.69	0.70
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	1	1	0
Movement Flow Rate	8	8	56	28	12	56	216	1064	68	120	333	20
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1553	2147	177	1941	2123	566	353	0	0	1132	0	0
Stage 1	583	583	-	1530	1530	-	-	-	-	-	-	-
Stage 2	970	1564	-	411	593	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	78	49	842	40	51	473	1217	-	-	619	-	-
Stage 1	470	502	-	125	181	-	-	-	-	-	-	-
Stage 2	276	174	-	594	497	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	38	32	842	# 23	34	473	1217	-	-	619	-	-
Mov Capacity-2 Maneuver	38	32	-	# 23	34	-	-	-	-	-	-	-
Stage 1	387	405	-	103	149	-	-	-	-	-	-	-
Stage 2	184	143	-	438	401	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	56.6	$ 490.8	1.6	3.4
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				138	57			
HCM Control Delay (s)	8.594	0.3	-	56.6	$ 490.8	12.214	0.4	-
HCM Lane VC Ratio	0.177	-	-	0.522	1.687	0.194	-	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th Percentile Queue (veh)	0.643	-	-	2.514	8.933	0.716	-	-

Intersection	
Intersection Delay (sec/veh):	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	208	29	32	767	0	0	0	0	30	0	233
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.69	0.56	0.73	0.87	0.25	0.25	0.25	0.25	0.58	0.25	0.79
Heavy Vehicles(%)	0	0	0	9	0	0	0	0	0	0	0	0
Movement Flow Rate	0	301	52	44	882	0	0	0	0	52	0	295
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor	Major 1			Major 2					Minor 2		
Conflicting Flow Rate - All	882	0	0	353	0	-			1090	~	441
Stage 1	-	-	-	-	-	-			970	-	-
Stage 2	-	-	-	-	-	-			120	-	-
Follow-up Headway	3.1	-	-	3.19	-	0			3.8	0	3.9
Pot Capacity-1 Maneuver	452	-	-	768	-	0			230	0	487
Stage 1	-	-	-	-	-	0			212	0	-
Stage 2	-	-	-	-	-	0			807	0	-
Time blocked-Platoon(%)	0	-	-	0	-	0			0	0	0
Mov Capacity-1 Maneuver	452	-	-	768	-	-			220	-	487
Mov Capacity-2 Maneuver	-	-	-	-	-	-			220	-	-
Stage 1	-	-	-	-	-	-			212	-	-
Stage 2	-	-	-	-	-	-			807	-	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	0.5	23.6
HCM LOS	A	A	C

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						220	487
HCM Control Delay (s)	0	-	-	9.971	-	26.3	23.1
HCM Lane VC Ratio	-	-	-	0.057	-	0.235	0.606
HCM Lane LOS	A	-	-	A	-	D	C
HCM 95th Percentile Queue (veh)	0	-	-	0.181	-	0.885	3.955

Intersection	
Intersection Delay (sec/veh):	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	176	64	0	600	133	200	0	28	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.76	0.76	0.25	0.86	0.74	0.85	0.25	0.70	0.25	0.25	0.25
Heavy Vehicles(%)	0	0	0	0	0	2	0	0	7	0	0	0
Movement Flow Rate	0	232	84	0	698	180	235	0	40	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	623	~	158
Stage 1	-	-	-	-	-	-	274	-	-
Stage 2	-	-	-	-	-	-	349	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.37
Pot Capacity-1 Maneuver	0	-	-	0	-	-	375	0	844
Stage 1	0	-	-	0	-	-	714	0	-
Stage 2	0	-	-	0	-	-	646	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	375	-	844
Mov Capacity-2 Maneuver	-	-	-	-	-	-	375	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	646	-	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0	26.6
HCM LOS	A	A	D

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	375	844				
HCM Control Delay (s)	29.5	9.5	-	-	-	-
HCM Lane VC Ratio	0.627	0.047	-	-	-	-
HCM Lane LOS	D	A	-	-	-	-
HCM 95th Percentile Queue (veh)	4.093	0.149	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	232	16	22	322	454	105	690	566	130	92	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1886	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	859	396	67	793	308	610	884	751	77	510	210
Arriving On Green	0.03	0.25	0.00	0.02	0.23	0.00	0.47	0.47	0.00	0.14	0.14	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	1311.4	1900.0	1615.0	568.7	3771.4	1552.9
Grp Volume(v), veh/h	52.0	290.0	0.0	25.6	418.2	0.0	210.0	985.7	0.0	144.4	103.4	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	1311.4	1900.0	1615.0	568.7	1885.7	1552.9
Q Serve(g_s), s	3.7	8.1	0.0	0.9	12.6	0.0	12.1	55.0	0.0	16.0	2.9	0.0
Cycle Q Clear(g_c), s	3.7	8.1	0.0	0.9	12.6	0.0	12.1	55.0	0.0	16.0	2.9	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.6	859.4	396.0	67.5	792.8	307.8	609.8	883.5	751.0	76.9	510.2	210.1
V/C Ratio(X)	0.935	0.337	0.000	0.379	0.527	0.000	0.344	1.116	0.000	1.878	0.203	0.000
Avail Cap(c_a), veh/h	55.6	859.4	396.0	118.7	843.0	327.3	609.8	883.5	751.0	76.9	510.2	210.1
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.0	36.7	0.0	57.3	39.9	0.0	20.2	31.6	0.0	51.1	45.5	0.0
Incr Delay (d2), s/veh	96.8	0.2	0.0	3.5	0.5	0.0	0.3	67.2	0.0	439.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	153.8	37.0	0.0	60.8	40.4	0.0	20.5	98.9	0.0	491.0	45.7	0.0
Lane Group LOS	F	D		E	D		C	F		F	D	
Approach Volume, veh/h		342			444			1196			248	
Approach Delay, s/veh		54.7			41.6			85.1			305.3	
Approach LOS		D			D			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.00	33.00		6.27	31.27			59.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	29.00		4.00	29.00			55.00			16.00	
Max Q Clear Time (g_c+I1), s	5.73	10.05		2.85	14.60			57.00			18.00	
Green Extension Time (p_c)	0.00	4.59		0.00	4.07			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			96.3									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	253	486	24	194	595	371	139	807	1046	275	181	100
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	391	911	420	309	695	317	231	1327	1034	293	1492	661
Arriving On Green	0.11	0.26	0.00	0.06	0.21	0.21	0.13	0.37	0.00	0.17	0.41	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	389.2	615.2	0.0	228.2	661.1	412.2	198.6	1136.6	0.0	305.6	203.4	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	12.9	18.2	0.0	5.1	22.5	24.0	12.4	33.5	0.0	20.0	4.0	0.0
Cycle Q Clear(g_c), s	12.9	18.2	0.0	5.1	22.5	24.0	12.4	33.5	0.0	20.0	4.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	391.5	911.0	419.8	309.5	695.1	316.8	230.5	1326.7	1034.3	293.0	1492.4	661.0
V/C Ratio(X)	0.994	0.675	0.000	0.737	0.951	1.301	0.861	0.857	0.000	1.043	0.136	0.000
Avail Cap(c_a), veh/h	391.5	911.0	419.8	309.5	695.1	316.8	344.9	1470.0	1146.0	293.0	1492.4	661.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	51.2	38.3	0.0	53.3	45.1	45.7	49.4	33.7	0.0	47.7	21.0	0.0
Incr Delay (d2), s/veh	43.9	2.0	0.0	8.9	22.8	156.7	13.4	4.9	0.0	64.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	95.0	40.3	0.0	62.2	68.0	202.5	62.7	38.6	0.0	111.9	21.1	0.0
Lane Group LOS	F	D		E	E	F	E	D		F	C	
Approach Volume, veh/h		1004			1302			1335			509	
Approach Delay, s/veh		61.5			109.6			42.1			75.6	
Approach LOS		E			F			D			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	17.00	34.00		11.00	28.00		18.70	46.42		24.00	51.71	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	13.00	30.00		7.00	24.00		22.00	47.00		20.00	45.00	
Max Q Clear Time (g_c+I1), s	14.92	20.18		7.08	26.00		14.41	35.55		22.00	6.04	
Green Extension Time (p_c)	0.00	6.58		0.00	0.00		0.32	6.87		0.00	13.09	

Intersection Summary												
HCM 2010 Control Delay			72.1									
HCM 2010 Level of Service			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	302	114	25	25	60	222	9	386	20	23	82	7
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1730	1730	1900	1856	1856	1900	1898	1898	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	502	575	128	115	57	259	30	519	24	43	558	479
Arriving On Green	0.29	0.42	0.42	0.02	0.06	0.06	0.02	0.29	0.29	0.02	0.30	0.30
Sat Flow, veh/h	1739.9	1371.0	305.1	1809.5	293.4	1328.4	1809.5	1799.7	83.8	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	511.9	0.0	202.0	42.4	0.0	404.5	15.3	0.0	569.0	26.7	96.5	9.1
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1676.1	1809.5	0.0	1621.7	1809.5	0.0	1883.5	1756.8	1881.2	1615.0
Q Serve(g_s), s	34.0	0.0	9.4	2.7	0.0	23.0	1.0	0.0	34.0	1.8	4.5	0.5
Cycle Q Clear(g_c), s	34.0	0.0	9.4	2.7	0.0	23.0	1.0	0.0	34.0	1.8	4.5	0.5
Proportion In Lane	1.000		0.182	1.000		0.819	1.000		0.044	1.000		1.000
Lane Grp Cap(c), veh/h	501.7	0.0	703.5	115.2	0.0	316.3	30.2	0.0	543.1	43.5	557.6	478.7
V/C Ratio(X)	1.020	0.000	0.287	0.368	0.000	1.279	0.506	0.000	1.048	0.615	0.173	0.019
Avail Cap(c_a), veh/h	501.7	0.0	703.5	153.5	0.0	316.3	76.7	0.0	543.1	74.5	557.6	478.7
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	42.0	0.0	22.6	55.4	0.0	55.2	57.5	0.0	42.0	56.9	30.8	29.4
Incr Delay (d2), s/veh	45.4	0.0	1.0	2.0	0.0	147.6	12.5	0.0	51.7	13.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	87.4	0.0	23.6	57.3	0.0	202.8	70.0	0.0	93.6	70.2	30.9	29.4
Lane Group LOS	F		C	E		F	E		F	E	C	C
Approach Volume, veh/h		714			447			584			132	
Approach Delay, s/veh		69.3			189.0			93.0			38.8	
Approach LOS		E			F			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	40.00	55.50		13.50	29.00		7.97	40.00		8.92	40.95	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	34.00	47.00		10.00	23.00		5.00	34.00		5.00	34.00	
Max Q Clear Time (g_c+I1), s	36.00	11.38		4.72	25.00		2.99	36.00		3.78	6.48	
Green Extension Time (p_c)	0.00	8.85		0.02	0.00		0.00	0.00		0.00	4.78	

Intersection Summary	
HCM 2010 Control Delay	103.0
HCM 2010 Level of Service	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	593	108	222	160	37	51	39	299	155	103	5
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1867	1867	1867	1881	1900	1900	1863	1810	1776	1863	1683	1683
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	56	1355	281	343	1813	424	370	550	459	449	443	58
Arriving On Green	0.16	0.16	0.16	0.07	0.61	0.61	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	94.2	2771.3	571.6	1791.6	2980.5	696.6	1258.8	1809.5	1509.3	1356.3	1457.8	191.5
Grp Volume(v), veh/h	442.1	0.0	397.2	261.2	115.6	112.4	58.0	44.3	421.1	221.4	0.0	126.7
Grp Sat Flow(s),veh/h/ln	1779.0	0.0	1598.0	1791.6	1900.0	1777.1	1258.8	1809.5	1509.3	1356.3	0.0	1649.3
Q Serve(g_s), s	0.0	0.0	27.2	1.6	3.0	3.2	4.4	2.1	32.3	16.7	0.0	6.9
Cycle Q Clear(g_c), s	25.8	0.0	27.2	1.6	3.0	3.2	11.3	2.1	32.3	18.8	0.0	6.9
Proportion In Lane	0.053		0.358	1.000		0.392	1.000		1.000	1.000		0.116
Lane Grp Cap(c), veh/h	906.3	0.0	785.7	342.9	1155.8	1081.1	370.0	550.4	459.1	448.9	0.0	501.7
V/C Ratio(X)	0.488	0.000	0.506	0.762	0.100	0.104	0.157	0.081	0.917	0.493	0.000	0.252
Avail Cap(c_a), veh/h	906.3	0.0	785.7	552.0	1155.8	1081.1	370.0	550.4	459.1	448.9	0.0	501.7
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	36.4	0.0	37.0	43.0	9.8	9.8	35.7	29.8	40.3	36.5	0.0	31.5
Incr Delay (d2), s/veh	0.9	0.0	1.1	11.9	0.1	0.1	0.9	0.3	25.7	3.8	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	37.2	0.0	38.0	54.9	9.9	9.9	36.6	30.1	66.0	40.3	0.0	32.7
Lane Group LOS	D		D	D	A	A	D	C	E	D		C
Approach Volume, veh/h		839			489			523			348	
Approach Delay, s/veh		37.6			33.9			59.7			37.5	
Approach LOS		D			C			E			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		65.00		14.00	79.00			41.00			41.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		46.00		22.00	73.00			36.50			36.50	
Max Q Clear Time (g_c+I1), s		29.22		3.59	5.17			34.31			20.80	
Green Extension Time (p_c)		10.25		2.26	20.13			1.19			5.21	

Intersection Summary	
HCM 2010 Control Delay	42.0
HCM 2010 Level of Service	D

Intersection	
Intersection Delay (sec/veh):	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	267	0	1	521	11	1	0	1	7	0	4
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	4	303	0	1	704	33	4	0	1	28	0	16
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	737	0	0	303	0	0	1042	~	303	1035	1034	369
Stage 1	-	-	-	-	-	-	311	-	-	723	723	-
Stage 2	-	-	-	-	-	-	731	-	-	312	311	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	878	-	-	1225	-	-	210	0	741	212	234	681
Stage 1	-	-	-	-	-	-	704	0	-	421	434	-
Stage 2	-	-	-	-	-	-	416	0	-	703	662	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	878	-	-	1225	-	-	204	-	741	211	233	681
Mov Capacity-2 Maneuver	-	-	-	-	-	-	204	-	-	211	233	-
Stage 1	-	-	-	-	-	-	700	-	-	419	434	-
Stage 2	-	-	-	-	-	-	406	-	-	698	659	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.1	0	19.7	20.1
HCM LOS	A	A	C	C

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	204	741							282
HCM Control Delay (s)	23	9.9	9.119	0	-	7.942	-	-	20.1
HCM Lane VC Ratio	0.02	0.002	0.005	-	-	0.001	-	-	0.156
HCM Lane LOS	C	A	A	A	-	A	-	-	C
HCM 95th Percentile Queue (veh)	0.06	0.005	0.014	-	-	0.003	-	-	0.545

Intersection	
Intersection Delay (sec/veh):	$ 908.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	238	0	0	3	0	21	0	1144	4	0	102	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	476	0	0	3	0	23	0	1546	4	0	126	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1692	1682	69	1611	1685	1548	137	0	0	-	0	0
Stage 1	132	132	-	1548	1548	-	-	-	-	-	-	-
Stage 2	1560	1550	-	63	137	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	0	-	-
Pot Capacity-1 Maneuver	# 62	94	948	70	93	103	1459	-	-	0	-	-
Stage 1	864	786	-	119	174	-	-	-	-	0	-	-
Stage 2	# 120	173	-	941	782	-	-	-	-	0	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 48	94	948	70	93	103	1459	-	-	-	-	-
Mov Capacity-2 Maneuver	# 48	94	-	70	93	-	-	-	-	-	-	-
Stage 1	864	786	-	119	174	-	-	-	-	-	-	-
Stage 2	# 93	173	-	941	782	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 4174.2	55.2	0	0
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (vph)				48	97		
HCM Control Delay (s)	0	-	-	$ 55.2	55.2	-	-
HCM Lane VC Ratio	-	-	-	9.917	0.269	-	-
HCM Lane LOS	A	-	-	F	F	-	-
HCM 95th Percentile Queue (veh)	0	-	-	56.651	0.992	-	-

Intersection	
Intersection Delay (sec/veh):	21.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	16	80	14	74	28	5	32	160	329	24	33	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	64	123	19	84	39	7	55	193	439	55	35	0
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	46	0	0	142	0	0	489	475	72	788	481	-
Stage 1	-	-	-	-	-	-	261	261	-	211	211	-
Stage 2	-	-	-	-	-	-	228	214	-	577	270	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	0
Pot Capacity-1 Maneuver	1577	-	-	1441	-	-	495	493	990	282	486	0
Stage 1	-	-	-	-	-	-	748	696	-	743	730	0
Stage 2	-	-	-	-	-	-	783	731	-	462	686	0
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	0
Mov Capacity-1 Maneuver	1577	-	-	1441	-	-	431	445	990	97	439	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	431	445	-	97	439	-
Stage 1	-	-	-	-	-	-	718	668	-	713	687	-
Stage 2	-	-	-	-	-	-	700	688	-	176	658	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.3	4.9	32.9	-
HCM LOS	A	A	D	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	431	721							97	-
HCM Control Delay (s)	14.6	34.5	7.379	0	-	7.653	0	-	81.8	-
HCM Lane VC Ratio	0.128	0.876	0.041	-	-	0.058	-	-	0.562	-
HCM Lane LOS	B	D	A	A	-	A	A	-	F	-
HCM 95th Percentile Queue (veh)	0.436	10.777	0.127	-	-	0.186	-	-	2.59	-

Intersection	
Intersection Delay (sec/veh):	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	250	32	71	191	1	36	27	101	22	76	9
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	1	281	40	81	255	1	45	39	184	25	131	30
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	256	0	0	321	0	0	658	721	161	580	741	129
Stage 1	-	-	-	-	-	-	303	303	-	418	418	-
Stage 2	-	-	-	-	-	-	355	418	-	162	323	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1427	-	-	1397	-	-	527	485	*1381	*641	436	*1417
Stage 1	-	-	-	-	-	-	831	769	-	*681	607	-
Stage 2	-	-	-	-	-	-	712	648	-	*1381	713	-
Time blocked-Platoon(%)	6	-	-	8	-	-	13	13	8	13	13	6
Mov Capacity-1 Maneuver	1427	-	-	1397	-	-	368	451	*1381	*492	405	*1417
Mov Capacity-2 Maneuver	-	-	-	-	-	-	368	451	-	*492	405	-
Stage 1	-	-	-	-	-	-	830	768	-	*681	565	-
Stage 2	-	-	-	-	-	-	499	604	-	*1136	712	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	2	11.9	16.6
HCM LOS	A	A	B	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*784							*492	*468
HCM Control Delay (s)	11.9	7.525	0	-	7.735	0.2	-	12.6	17
HCM Lane VC Ratio	0.341	0.001	-	-	0.058	-	-	0.034	0.362
HCM Lane LOS	B	A	A	-	A	A	-	B	C
HCM 95th Percentile Queue (veh)	1.516	0.003	-	-	0.184	-	-	0.105	1.63

Intersection	
Intersection Delay (sec/veh):	12.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	986	79	325	406	12	616
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	1202	95	374	446	20	844
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1297	0	2221	649
Stage 1	-	-	-	-	1250	-
Stage 2	-	-	-	-	971	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	800	-	48	*948
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	333	-
Time blocked-Platoon(%)	-	-	37	-	37	37
Mov Capacity-1 Maneuver	-	-	800	-	26	*948
Mov Capacity-2 Maneuver	-	-	-	-	26	-
Stage 1	-	-	-	-	500	-
Stage 2	-	-	-	-	177	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	6.1	36.9
HCM LOS	A	A	E

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*26	*948				
HCM Control Delay (s)	$ 316.5	30.3	-	-	13.379	-
HCM Lane VC Ratio	0.769	0.89	-	-	0.467	-
HCM Lane LOS	F	D	-	-	B	-
HCM 95th Percentile Queue (veh)	2.389	12.432	-	-	2.51	-

Intersection	
Intersection Delay (sec/veh):	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	46	10	74	5	329	82	22	127	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	61	20	125	8	477	96	32	144	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	824	799	74	755	753	287	148	0	0	573	0	0
Stage 1	210	210	-	541	541	-	-	-	-	-	-	-
Stage 2	614	589	-	214	212	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	294	321	927	323	341	757	1386	-	-	995	-	-
Stage 1	797	732	-	522	524	-	-	-	-	-	-	-
Stage 2	483	499	-	784	731	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	227	309	927	309	328	757	1386	-	-	995	-	-
Mov Capacity-2 Maneuver	227	309	-	309	328	-	-	-	-	-	-	-
Stage 1	792	708	-	519	521	-	-	-	-	-	-	-
Stage 2	385	496	-	751	707	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	17.5	17.8	0.1	1.5
HCM LOS	C	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				300	486			
HCM Control Delay (s)	7.612	0	-	17.5	17.8	8.738	0	-
HCM Lane VC Ratio	0.006	-	-	0.039	0.425	0.032	-	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th Percentile Queue (veh)	0.017	-	-	0.121	2.095	0.099	-	-

Intersection	
Intersection Delay (sec/veh)	15.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	39	99	64	47	63	9	59	115	131	19	164	21
Peak Hour Factor	0.49	0.88	0.70	0.84	0.88	0.75	0.74	0.82	0.63	0.79	0.79	0.88
Heavy Vehicles(%)	0	3	0	0	3	0	0	4	4	10	2	0
Movement Flow Rate	80	112	91	56	72	12	80	140	208	24	208	24
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	14.5	11.9	18.3	14
HCM LOS	B	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	19%	19%	39%	9%
Volume Thru (%)	38%	49%	53%	80%
Volume Right (%)	43%	32%	8%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	305	202	119	204
Left Turning Volume	115	99	63	164
Through Volume	131	64	9	21
Right Turning Volume	59	39	47	19
Lane Flow Rate	428	284	140	256
Geometry Group	1	1	1	1
Degree of Utilization, X	0.649	0.478	0.256	0.438
Departure Headway, Hd	5.588	6.064	6.595	6.177
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	650	595	546	583
Service Time	3.588	4.084	4.624	4.208
HCM Lane V/C Ratio	0.658	0.477	0.256	0.439
HCM Control Delay	18.3	14.5	11.9	14
HCM Lane LOS	C	B	B	B
HCM 95th Percentile Queue	5.5	2.7	1	2.3

Intersection	
Intersection Delay (sec/veh)	38.3
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	17	57	6	64	12	27	0	344	229	69	78	7
Peak Hour Factor	0.61	0.89	0.38	0.70	0.38	0.45	0.25	0.89	0.71	0.48	0.70	0.58
Heavy Vehicles(%)	18	4	0	2	0	0	0	1	4	4	3	0
Movement Flow Rate	28	64	16	91	32	60	0	387	323	144	111	12
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.6	11.6	59.2	11.7
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	0%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	100%	60%	0%	90%	0%	31%	0%	92%
Volume Right (%)	0%	40%	0%	10%	0%	69%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	0	573	17	63	64	39	69	85
Left Turning Volume	0	344	0	57	0	12	0	78
Through Volume	0	229	0	6	0	27	0	7
Right Turning Volume	0	0	17	0	64	0	69	0
Lane Flow Rate	0	709	28	80	91	92	144	123
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0	1	0.063	0.163	0.197	0.17	0.278	0.219
Departure Headway, Hd	5.988	5.721	8.199	7.371	7.746	6.701	6.961	6.387
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	0	638	436	484	464	532	519	566
Service Time	3.696	3.429	5.958	5.154	5.497	4.48	4.661	4.087
HCM Lane V/C Ratio	0	1.111	0.064	0.165	0.196	0.173	0.277	0.217
HCM Control Delay	8.7	59.2	11.5	11.6	12.4	10.9	12.3	10.9
HCM Lane LOS	N	F	B	B	B	B	B	B
HCM 95th Percentile Queue	0	118.9	0.2	0.6	0.7	0.6	1.2	0.8

Intersection	
Intersection Delay (sec/veh):	52

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	113	28	23	1	20	52	6	366	2	68	383	38
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.78	0.52	0.25	0.63	0.81	0.75	0.85	0.50	0.65	0.90	0.86
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	0	0	0
Movement Flow Rate	164	36	44	4	32	64	8	431	4	105	426	44
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1155	1109	448	1147	1129	433	470	0	0	435	0	0
Stage 1	658	658	-	449	449	-	-	-	-	-	-	-
Stage 2	497	451	-	698	680	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	175	211	615	178	206	627	1102	-	-	1135	-	-
Stage 1	457	464	-	593	576	-	-	-	-	-	-	-
Stage 2	559	574	-	434	454	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 122	183	615	126	178	627	1102	-	-	1135	-	-
Mov Capacity-2 Maneuver	# 122	183	-	126	178	-	-	-	-	-	-	-
Stage 1	452	406	-	587	570	-	-	-	-	-	-	-
Stage 2	469	568	-	321	397	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	277.8	21.3	0.1	1.5
HCM LOS	F	C	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				130	615	320			
HCM Control Delay (s)	8.291	0	-	$ 21.3	11.3	21.3	8.494	0	-
HCM Lane VC Ratio	0.007	-	-	1.536	0.072	0.312	0.092	-	-
HCM Lane LOS	A	A	-	F	B	C	A	A	-
HCM 95th Percentile Queue (veh)	0.022	-	-	14.041	0.232	1.301	0.304	-	-

Intersection	
Intersection Delay (sec/veh):	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	44	301	0	1	84	171	0	0	1	115	1	28
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.83	0.25	0.25	0.60	0.82	0.25	0.25	0.25	0.74	0.25	0.47
Heavy Vehicles(%)	2	4	0	0	2	2	0	0	0	0	0	0
Movement Flow Rate	56	363	0	4	140	209	0	0	4	155	4	60
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	349	0	-	363	0	0	760	832	182	730	728	175
Stage 1	-	-	-	-	-	-	475	475	-	253	253	-
Stage 2	-	-	-	-	-	-	285	357	-	477	475	-
Follow-up Headway	2.218	-	0	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1210	-	0	1207	-	-	325	307	866	340	353	874
Stage 1	-	-	0	-	-	-	574	561	-	756	702	-
Stage 2	-	-	0	-	-	-	727	632	-	573	561	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1210	-	-	1207	-	-	289	292	866	326	336	874
Mov Capacity-2 Maneuver	-	-	-	-	-	-	289	292	-	326	336	-
Stage 1	-	-	-	-	-	-	547	535	-	721	700	-
Stage 2	-	-	-	-	-	-	671	630	-	544	535	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.1	0.1	9.2	21.1
HCM LOS	A	A	A	C

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	866						326	794
HCM Control Delay (s)	9.2	8.119	0	7.993	0	-	25.7	9.9
HCM Lane VC Ratio	0.005	0.046	-	0.003	-	-	0.477	0.08
HCM Lane LOS	A	A	A	A	A	-	D	A
HCM 95th Percentile Queue (veh)	0.014	0.145	-	0.01	-	-	2.451	0.26

Intersection	
Intersection Delay (sec/veh):	44

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	30	402	67	6	216	54	33	42	17	76	110	15
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.68	0.76	0.76	0.50	0.87	0.84	0.69	0.81	0.35	0.83	0.74	0.63
Heavy Vehicles(%)	17	2	6	17	3	2	6	7	0	0	0	0
Movement Flow Rate	44	529	88	12	248	64	48	52	49	92	149	24
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	312	0	0	617	0	0	1052	997	309	1016	1009	156
Stage 1	-	-	-	-	-	-	661	661	-	304	304	-
Stage 2	-	-	-	-	-	-	391	336	-	712	705	-
Follow-up Headway	2.353	-	-	2.353	-	-	3.554	4.063	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1168	-	-	894	-	-	201	239	736	218	242	895
Stage 1	-	-	-	-	-	-	445	452	-	710	667	-
Stage 2	-	-	-	-	-	-	625	633	-	427	442	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1168	-	-	894	-	-	91	227	736	162	230	895
Mov Capacity-2 Maneuver	-	-	-	-	-	-	91	227	-	162	230	-
Stage 1	-	-	-	-	-	-	428	435	-	683	658	-
Stage 2	-	-	-	-	-	-	465	625	-	338	425	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.5	0.3	79	186.9
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	181							213
HCM Control Delay (s)	79	8.203	0	-	9.082	0	-	186.9
HCM Lane VC Ratio	0.819	0.038	-	-	0.013	-	-	1.24
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th Percentile Queue (veh)	5.685	0.118	-	-	0.041	-	-	13.638

Intersection	
Intersection Delay (sec/veh):	8.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	91	302	130	181	518	81
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
Right Turn Channelized	Free	Free	None	None	Free	Free
Storage Length	0	0	0			0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.84	0.86	0.90	0.92	0.78	0.68
Heavy Vehicles(%)	0	0	1	1	0	11
Movement Flow Rate	108	351	144	197	664	119
Number of Lanes	1	1	1	1	1	1

Major/Minor			Major 1		Major 2	
Conflicting Flow Rate - All	1209	392	783	0	0	0
Stage 1	724	-	-	-	-	-
Stage 2	485	-	-	-	-	-
Follow-up Headway	3.5	3.3	2.209	-	-	-
Pot Capacity-1 Maneuver	204	661	840	-	-	-
Stage 1	484	-	-	-	-	-
Stage 2	623	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	-	-	-
Mov Capacity-1 Maneuver	169	661	840	-	-	-
Mov Capacity-2 Maneuver	169	-	-	-	-	-
Stage 1	484	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay (s)	26.2	4.3	0
HCM LOS	D	A	A

Lane	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (vph)			169	661		
HCM Control Delay (s)	10.174	-	58.1	16.4	-	-
HCM Lane VC Ratio	0.172	-	0.641	0.531	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th Percentile Queue (veh)	0.619	-	3.625	3.145	-	-

Intersection	
Intersection Delay (sec/veh):	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	11	0	1	0	0	0	4	29	0	0	156	4
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.25	0.25	0.25	0.25	0.25	0.50	0.81	0.25	0.25	0.66	0.50
Heavy Vehicles(%)	18	0	0	0	0	0	0	3	0	0	0	0
Movement Flow Rate	20	0	4	0	0	0	8	36	0	0	236	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	292	292	240	294	296	36	244	0	0	36	0	0
Stage 1	240	240	-	52	52	-	-	-	-	-	-	-
Stage 2	52	52	-	242	244	-	-	-	-	-	-	-
Follow-up Headway	3.662	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	630	622	804	662	619	1042	1334	-	-	1588	-	-
Stage 1	729	711	-	966	856	-	-	-	-	-	-	-
Stage 2	922	856	-	766	708	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	627	618	804	656	615	1042	1334	-	-	1588	-	-
Mov Capacity-2 Maneuver	627	618	-	656	615	-	-	-	-	-	-	-
Stage 1	725	711	-	960	851	-	-	-	-	-	-	-
Stage 2	916	851	-	762	708	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	10.7	0	1.4	0
HCM LOS	B	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				651	0			
HCM Control Delay (s)	7.715	0	-	10.7	0	0	-	-
HCM Lane VC Ratio	0.006	-	-	0.037	-	-	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th Percentile Queue (veh)	0.018	-	-	0.115	-	0	-	-

Intersection	
Intersection Delay (sec/veh):	22.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	10	34	168	36	14	33	25	214	30	83	814	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.77	0.84	0.64	0.58	0.49	0.78	0.86	0.94	0.80	0.94	0.63
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	1	0	0
Movement Flow Rate	20	44	200	56	24	67	32	249	32	104	866	16
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1283	1427	441	992	1419	141	882	0	0	281	0	0
Stage 1	1082	1082	-	329	329	-	-	-	-	-	-	-
Stage 2	201	345	-	663	1090	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	124	136	570	203	138	888	775	-	-	1286	-	-
Stage 1	236	296	-	664	650	-	-	-	-	-	-	-
Stage 2	788	640	-	422	294	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	89	120	570	86	122	888	775	-	-	1286	-	-
Mov Capacity-2 Maneuver	89	120	-	86	122	-	-	-	-	-	-	-
Stage 1	226	272	-	637	623	-	-	-	-	-	-	-
Stage 2	671	614	-	211	270	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	80.1	110.3	1.1	1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				280	159			
HCM Control Delay (s)	9.845	0.1	-	80.1	110.3	8.045	0.2	-
HCM Lane VC Ratio	0.041	-	-	0.943	0.929	0.081	-	-
HCM Lane LOS	A	A	-	F	F	A	A	-
HCM 95th Percentile Queue (veh)	0.129	-	-	9.012	6.772	0.263	-	-

Intersection	
Intersection Delay (sec/veh):	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	776	154	65	221	0	0	0	0	143	2	98
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.87	0.80	0.68	0.73	0.25	0.25	0.25	0.25	0.83	0.50	0.61
Heavy Vehicles(%)	0	0	0	2	0	0	0	0	0	4	0	2
Movement Flow Rate	0	892	192	96	303	0	0	0	0	172	4	161
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor	Major 1			Major 2						Minor 2		
Conflicting Flow Rate - All	303	0	0	1085	0	-				852	1580	152
Stage 1	-	-	-	-	-	-				495	495	-
Stage 2	-	-	-	-	-	-				357	1085	-
Follow-up Headway	3.1	-	-	3.12	-	0				3.84	4	3.92
Pot Capacity-1 Maneuver	845	-	-	356	-	0				308	110	737
Stage 1	-	-	-	-	-	0				437	549	-
Stage 2	-	-	-	-	-	0				575	295	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	845	-	-	356	-	-				244	80	737
Mov Capacity-2 Maneuver	-	-	-	-	-	-				244	80	-
Stage 1	-	-	-	-	-	-				437	401	-
Stage 2	-	-	-	-	-	-				575	295	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	4.5	30.7
HCM LOS	A	A	D

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						244	737
HCM Control Delay (s)	0	-	-	18.783	-	48.8	11.2
HCM Lane VC Ratio	-	-	-	0.269	-	0.706	0.218
HCM Lane LOS	A	-	-	C	-	E	B
HCM 95th Percentile Queue (veh)	0	-	-	1.066	-	4.721	0.827

Intersection	
Intersection Delay (sec/veh):	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	725	200	0	257	127	29	0	54	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.91	0.94	0.25	0.68	0.79	0.81	0.25	0.90	0.25	0.25	0.25
Heavy Vehicles(%)	0	1	1	0	0	3	0	0	4	0	0	0
Movement Flow Rate	0	797	213	0	378	161	36	0	60	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	1093	~	506
Stage 1	-	-	-	-	-	-	904	-	-
Stage 2	-	-	-	-	-	-	189	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.34
Pot Capacity-1 Maneuver	0	-	-	0	-	-	171	0	506
Stage 1	0	-	-	0	-	-	302	0	-
Stage 2	0	-	-	0	-	-	800	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	171	-	506
Mov Capacity-2 Maneuver	-	-	-	-	-	-	171	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	800	-	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	0	20
HCM LOS	A	A	C

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	171	506				
HCM Control Delay (s)	31.5	13.1	-	-	-	-
HCM Lane VC Ratio	0.209	0.119	-	-	-	-
HCM Lane LOS	D	B	-	-	-	-
HCM 95th Percentile Queue (veh)	0.76	0.401	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	409	163	416	373	80	27	288	78	279	930	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1899	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	561	258	491	914	355	121	418	355	311	1215	497
Arriving On Green	0.03	0.16	0.00	0.14	0.27	0.00	0.22	0.22	0.00	0.32	0.32	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	548.5	1900.0	1615.0	970.5	3797.8	1552.9
Grp Volume(v), veh/h	45.3	511.3	0.0	483.7	484.4	0.0	54.0	411.4	0.0	310.0	1044.9	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	548.5	1900.0	1615.0	970.5	1898.9	1552.9
Q Serve(g_s), s	2.7	14.3	0.0	13.7	12.0	0.0	8.5	21.6	0.0	31.9	25.8	0.0
Cycle Q Clear(g_c), s	2.7	14.3	0.0	13.7	12.0	0.0	8.5	21.6	0.0	31.9	25.8	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.9	560.8	258.4	491.5	914.5	355.0	120.7	418.0	355.3	310.5	1215.3	496.9
V/C Ratio(X)	0.810	0.912	0.000	0.984	0.530	0.000	0.447	0.984	0.000	0.998	0.860	0.000
Avail Cap(c_a), veh/h	115.2	560.8	258.4	491.5	914.5	355.0	120.7	418.0	355.3	310.5	1215.3	496.9
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	48.0	41.3	0.0	42.9	31.4	0.0	33.7	38.8	0.0	34.0	31.9	0.0
Incr Delay (d2), s/veh	23.3	19.2	0.0	36.4	0.6	0.0	2.6	39.7	0.0	50.6	6.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	71.3	60.5	0.0	79.3	31.9	0.0	36.3	78.6	0.0	84.5	38.3	0.0
Lane Group LOS	E	E		E	C		D	E		F	D	
Approach Volume, veh/h		557			968			465			1355	
Approach Delay, s/veh		61.4			55.6			73.7			48.9	
Approach LOS		E			E			E			D	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	7.40	20.00		18.00	30.60			26.00			36.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	7.00	16.00		14.00	23.00			22.00			32.00	
Max Q Clear Time (g_c+I1), s	4.74	16.35		15.74	14.04			23.56			33.92	
Green Extension Time (p_c)	0.01	0.00		0.00	4.31			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			56.4									
HCM 2010 Level of Service			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	662	102	547	515	173	32	273	244	198	1070	366
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	245	934	430	718	1125	513	58	851	663	258	1287	570
Arriving On Green	0.07	0.27	0.00	0.14	0.34	0.34	0.03	0.24	0.00	0.15	0.36	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	163.1	838.0	0.0	643.5	572.2	192.2	45.7	384.5	0.0	220.0	1202.2	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	3.6	18.0	0.0	9.7	10.7	7.5	2.0	7.1	0.0	9.9	25.1	0.0
Cycle Q Clear(g_c), s	3.6	18.0	0.0	9.7	10.7	7.5	2.0	7.1	0.0	9.9	25.1	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	245.5	933.7	430.2	717.9	1124.6	512.6	57.7	850.5	663.1	258.2	1286.6	569.9
V/C Ratio(X)	0.664	0.897	0.000	0.896	0.509	0.375	0.792	0.452	0.000	0.852	0.934	0.000
Avail Cap(c_a), veh/h	355.6	941.3	433.7	717.9	1124.6	512.6	92.6	850.5	663.1	302.8	1292.7	572.6
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	35.4	27.7	0.0	33.0	20.8	19.7	37.6	25.6	0.0	32.3	24.3	0.0
Incr Delay (d2), s/veh	3.1	11.2	0.0	14.0	0.4	0.5	21.0	0.4	0.0	18.0	12.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	38.5	38.9	0.0	47.0	21.1	20.2	58.6	25.9	0.0	50.3	36.8	0.0
Lane Group LOS	D	D		D	C	C	E	C		D	D	
Approach Volume, veh/h		1001			1408			430			1422	
Approach Delay, s/veh		38.8			32.8			29.4			38.9	
Approach LOS		D			C			C			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	9.52	24.83		15.00	30.31		6.49	22.42		15.94	31.87	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	8.00	21.00		11.00	24.00		4.00	18.00		14.00	28.00	
Max Q Clear Time (g_c+I1), s	5.58	20.02		11.70	12.72		3.96	9.13		11.91	27.13	
Green Extension Time (p_c)	0.11	0.81		0.00	7.33		0.00	6.37		0.13	0.74	

Intersection Summary												
HCM 2010 Control Delay			35.9									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	111	55	53	155	70	37	186	64	283	432	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1706	1706	1900	1839	1839	1900	1891	1891	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	126	248	124	172	283	156	81	297	92	365	709	609
Arriving On Green	0.07	0.23	0.23	0.10	0.25	0.25	0.04	0.21	0.21	0.21	0.38	0.38
Sat Flow, veh/h	1739.9	1072.2	539.1	1809.5	1114.7	616.1	1809.5	1386.6	428.8	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	241.8	89.8	0.0	293.5	62.7	0.0	343.0	329.1	508.2	279.2
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1611.2	1809.5	0.0	1730.8	1809.5	0.0	1815.4	1756.8	1881.2	1615.0
Q Serve(g_s), s	5.4	0.0	12.9	4.5	0.0	14.5	3.3	0.0	17.4	17.4	22.0	12.4
Cycle Q Clear(g_c), s	5.4	0.0	12.9	4.5	0.0	14.5	3.3	0.0	17.4	17.4	22.0	12.4
Proportion In Lane	1.000		0.335	1.000		0.356	1.000		0.236	1.000		1.000
Lane Grp Cap(c), veh/h	126.2	0.0	372.1	172.3	0.0	439.0	81.1	0.0	389.2	364.5	709.3	608.9
V/C Ratio(X)	0.793	0.000	0.650	0.521	0.000	0.669	0.773	0.000	0.881	0.903	0.717	0.459
Avail Cap(c_a), veh/h	182.7	0.0	372.1	190.0	0.0	439.0	114.0	0.0	400.2	424.2	750.4	644.2
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	43.5	0.0	33.1	41.0	0.0	31.9	45.0	0.0	36.2	36.8	25.3	22.3
Incr Delay (d2), s/veh	13.8	0.0	8.5	2.4	0.0	7.9	18.8	0.0	19.5	20.3	3.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	57.3	0.0	41.7	43.5	0.0	39.8	63.8	0.0	55.8	57.1	28.4	22.9
Lane Group LOS	E		D	D		D	E		E	E	C	C
Approach Volume, veh/h		342			383			406			1117	
Approach Delay, s/veh		46.2			40.7			57.0			35.5	
Approach LOS		D			D			E			D	
Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	12.91	28.00		15.07	30.16		10.27	26.42		25.77	41.92	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	10.00	22.00		10.00	22.00		6.00	21.00		23.00	38.00	
Max Q Clear Time (g_c+I1), s	7.39	14.93		6.50	16.52		5.27	19.43		19.40	23.97	
Green Extension Time (p_c)	0.05	2.97		0.05	2.41		0.01	0.99		0.37	5.61	
Intersection Summary												
HCM 2010 Control Delay			41.9									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	299	86	264	639	173	135	127	124	66	50	17
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1870	1870	1870	1881	1900	1900	1863	1810	1776	1863	1601	1601
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	101	602	193	530	1520	426	421	513	428	401	218	200
Arriving On Green	0.27	0.27	0.27	0.16	0.53	0.53	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	224.3	1975.9	719.1	1791.6	2857.4	801.2	1284.6	1809.5	1509.3	1238.8	768.7	707.2
Grp Volume(v), veh/h	241.4	0.0	247.7	310.6	488.4	452.1	153.4	144.3	174.6	94.3	0.0	104.3
Grp Sat Flow(s),veh/h/ln	1496.7	0.0	1574.5	1791.6	1900.0	1758.6	1284.6	1809.5	1509.3	1238.8	0.0	1476.0
Q Serve(g_s), s	0.0	0.0	7.8	6.4	9.2	9.2	5.9	3.5	5.3	3.6	0.0	3.1
Cycle Q Clear(g_c), s	6.2	0.0	7.8	6.4	9.2	9.2	9.0	3.5	5.3	7.2	0.0	3.1
Proportion In Lane	0.150		0.457	1.000		0.456	1.000		1.000	1.000		0.479
Lane Grp Cap(c), veh/h	473.7	0.0	421.7	530.1	1010.4	935.2	420.7	512.8	427.7	400.9	0.0	418.3
V/C Ratio(X)	0.510	0.000	0.588	0.586	0.483	0.483	0.365	0.281	0.408	0.235	0.000	0.249
Avail Cap(c_a), veh/h	520.7	0.0	488.2	593.2	1117.0	1033.9	420.7	512.8	427.7	400.9	0.0	418.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	17.5	0.0	18.1	11.2	8.4	8.4	19.2	15.9	16.5	18.6	0.0	15.7
Incr Delay (d2), s/veh	1.8	0.0	2.8	3.8	0.8	0.8	2.4	1.4	2.9	1.4	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	19.3	0.0	20.9	15.0	9.1	9.2	21.6	17.2	19.4	20.0	0.0	17.1
Lane Group LOS	B		C	B	A	A	C	B	B	C		B
Approach Volume, veh/h		489			1251			472			199	
Approach Delay, s/veh		20.1			10.6			19.4			18.5	
Approach LOS		C			B			B			B	
Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		21.22		15.00	36.21			20.60			20.60	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		17.40		11.00	33.40			16.10			16.10	
Max Q Clear Time (g_c+I1), s		9.77		8.42	11.20			11.04			9.17	
Green Extension Time (p_c)		6.45		0.65	16.08			2.09			2.66	
Intersection Summary												
HCM 2010 Control Delay			14.9									
HCM 2010 Level of Service			B									

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	602	104	215	217	5	1	0	7	0	1	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	0	684	132	295	293	15	4	0	9	0	4	4
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	308	0	0	816	0	0	1645	~	750	1646	1707	155
Stage 1	-	-	-	-	-	-	750	-	-	891	891	-
Stage 2	-	-	-	-	-	-	895	-	-	755	816	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1264	-	-	786	-	-	80	0	415	80	92	896
Stage 1	-	-	-	-	-	-	407	0	-	340	364	-
Stage 2	-	-	-	-	-	-	338	0	-	404	393	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1264	-	-	786	-	-	48	-	415	50	50	896
Mov Capacity-2 Maneuver	-	-	-	-	-	-	48	-	-	50	50	-
Stage 1	-	-	-	-	-	-	407	-	-	340	199	-
Stage 2	-	-	-	-	-	-	180	-	-	395	393	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	6	35.7	46.4
HCM LOS	A	A	E	E

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	48	415							95
HCM Control Delay (s)	86.7	13.9	0	-	-	12.299	-	-	46.4
HCM Lane VC Ratio	0.083	0.022	-	-	-	0.375	-	-	0.084
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th Percentile Queue (veh)	0.26	0.069	0	-	-	1.748	-	-	0.269

Intersection	
Intersection Delay (sec/veh):	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	9	0	37	0	2	7	1	285	1	15	912	313
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	18	0	63	0	2	8	4	385	1	16	1126	348
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1731	1726	737	989	1900	386	1474	0	0	386	0	0
Stage 1	1332	1332	-	394	394	-	-	-	-	-	-	-
Stage 2	399	394	-	595	1506	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	58	88	339	201	68	612	463	-	-	1169	-	-
Stage 1	166	222	-	602	604	-	-	-	-	-	-	-
Stage 2	604	604	-	458	182	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	51	79	339	151	61	612	463	-	-	1169	-	-
Mov Capacity-2 Maneuver	51	79	-	151	61	-	-	-	-	-	-	-
Stage 1	164	201	-	595	597	-	-	-	-	-	-	-
Stage 2	588	597	-	337	165	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	54	23.5	0.1	0.1
HCM LOS	F	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				150	204			
HCM Control Delay (s)	12.843	0	-	54	23.5	8.123	-	-
HCM Lane VC Ratio	0.009	-	-	0.538	0.048	0.014	-	-
HCM Lane LOS	B	A	-	F	C	A	-	-
HCM 95th Percentile Queue (veh)	0.026	-	-	2.671	0.15	0.042	-	-

Intersection	
Intersection Delay (sec/veh):	$ 323.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	73	123	439	38	10	8	34	159	26	325	3
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	0	112	171	499	54	13	14	41	212	59	342	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	67	0	0	283	0	0	1432	1263	142	1383	1342	34
Stage 1	-	-	-	-	-	-	198	198	-	1059	1059	-
Stage 2	-	-	-	-	-	-	1234	1065	-	324	283	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	3.3
Pot Capacity-1 Maneuver	1550	-	-	1279	-	-	112	171	906	107	# 151	1052
Stage 1	-	-	-	-	-	-	808	741	-	244	# 300	-
Stage 2	-	-	-	-	-	-	217	300	-	640	677	-
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	1
Mov Capacity-1 Maneuver	1550	-	-	1279	-	-	-	104	906	# 41	# 92	1052
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	104	-	# 41	# 92	-
Stage 1	-	-	-	-	-	-	808	741	-	244	# 183	-
Stage 2	-	-	-	-	-	-	-	183	-	463	677	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	8.5	-	$ 1193.6
HCM LOS	A	A	-	F

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	-	403							41	94
HCM Control Delay (s)	-	27.8	0	-	-	9.603	0	-	$ -1	$ 27.8
HCM Lane VC Ratio	-	0.628	-	-	-	0.39	-	-	1.441	3.723
HCM Lane LOS	-	D	A	-	-	A	A	-	F	F
HCM 95th Percentile Queue (veh)	-	4.143	0	-	-	1.882	-	-	5.972	35.679

Intersection	
Intersection Delay (sec/veh):	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	16	414	44	63	266	9	36	60	80	8	16	7
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	23	465	54	72	355	13	45	86	145	9	28	23
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	368	0	0	519	0	0	874	1050	260	828	1071	185
Stage 1	-	-	-	-	-	-	538	538	-	506	506	-
Stage 2	-	-	-	-	-	-	336	512	-	322	565	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1202	-	-	1306	-	-	372	307	*1271	*430	268	695
Stage 1	-	-	-	-	-	-	741	691	-	*522	493	-
Stage 2	-	-	-	-	-	-	625	535	-	*1271	633	-
Time blocked-Platoon(%)	0	-	-	15	-	-	15	15	15	15	15	0
Mov Capacity-1 Maneuver	1202	-	-	1306	-	-	305	278	*1271	*270	243	695
Mov Capacity-2 Maneuver	-	-	-	-	-	-	305	278	-	*270	243	-
Stage 1	-	-	-	-	-	-	721	673	-	*508	459	-
Stage 2	-	-	-	-	-	-	529	498	-	*956	616	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	1.5	21.9	17.6
HCM LOS	A	A	C	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*484							*270	*341
HCM Control Delay (s)	21.9	8.053	0.1	-	7.916	0.2	-	18.6	17.5
HCM Lane VC Ratio	0.571	0.019	-	-	0.055	-	-	0.022	0.158
HCM Lane LOS	C	A	A	-	A	A	-	C	C
HCM 95th Percentile Queue (veh)	3.512	0.058	-	-	0.174	-	-	0.069	0.555

Intersection	
Intersection Delay (sec/veh):	38.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	458	34	421	1033	41	449
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	559	41	484	1135	68	615
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	600	0	2116	301
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	1536	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	987	-	# 45	698
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	167	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	987	-	# 23	698
Mov Capacity-2 Maneuver	-	-	-	-	# 23	-
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	85	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	3.6	156.6
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	23	698				
HCM Control Delay (s)	$ 1242.1	36	-	-	12.104	-
HCM Lane VC Ratio	2.971	0.881	-	-	0.49	-
HCM Lane LOS	F	E	-	-	B	-
HCM 95th Percentile Queue (veh)	8.634	10.864	-	-	2.764	-

Intersection	
Intersection Delay (sec/veh):	23.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	9	14	57	14	72	11	225	107	125	422	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	0	18	23	76	28	122	17	326	126	181	480	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1342	1330	242	1288	1269	226	484	0	0	452	0	0
Stage 1	844	844	-	423	423	-	-	-	-	-	-	-
Stage 2	498	486	-	865	846	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	131	156	743	139	170	818	1038	-	-	1103	-	-
Stage 1	361	382	-	605	591	-	-	-	-	-	-	-
Stage 2	558	554	-	346	381	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	82	128	743	104	140	818	1038	-	-	1103	-	-
Mov Capacity-2 Maneuver	82	128	-	104	140	-	-	-	-	-	-	-
Stage 1	355	319	-	595	581	-	-	-	-	-	-	-
Stage 2	444	545	-	264	318	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	23.1	133.9	0.3	2.4
HCM LOS	C	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				240	209			
HCM Control Delay (s)	8.528	0	-	23.1	133.9	8.904	0	-
HCM Lane VC Ratio	0.017	-	-	0.172	1.082	0.164	-	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th Percentile Queue (veh)	0.051	-	-	0.609	10.333	0.587	-	-

Intersection	
Intersection Delay (sec/veh)	25.7
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	38	128	73	46	123	12	99	207	32	17	71	41
Peak Hour Factor	0.71	0.73	0.86	0.60	0.70	0.39	0.85	0.70	0.58	0.63	0.68	0.64
Heavy Vehicles(%)	3	3	2	15	5	9	0	3	0	20	2	0
Movement Flow Rate	54	175	85	77	176	31	116	296	55	27	104	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	20.4	20.3	36.6	15.8
HCM LOS	C	C	E	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	29%	16%	25%	13%
Volume Thru (%)	61%	54%	68%	55%
Volume Right (%)	9%	31%	7%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	338	239	181	129
Left Turning Volume	207	128	123	71
Through Volume	32	73	12	41
Right Turning Volume	99	38	46	17
Lane Flow Rate	467	314	283	195
Geometry Group	1	1	1	1
Degree of Utilization, X	0.849	0.61	0.583	0.411
Departure Headway, Hd	6.691	6.994	7.414	7.564
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	547	518	487	475
Service Time	4.691	5.026	5.45	5.612
HCM Lane V/C Ratio	0.854	0.606	0.581	0.411
HCM Control Delay	36.6	20.4	20.3	15.8
HCM Lane LOS	E	C	C	C
HCM 95th Percentile Queue	16.4	4.7	4.2	2.1

Intersection	
Intersection Delay (sec/veh)	39.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	8	3	6	35	0	7	21	225	18	15	663	25
Peak Hour Factor	0.58	0.25	0.42	0.25	0.25	0.25	0.59	0.74	0.25	0.25	0.89	0.55
Heavy Vehicles(%)	57	0	20	3	0	0	0	0	6	38	1	0
Movement Flow Rate	14	12	14	140	0	28	36	304	72	60	745	45
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.1	13.4	18.3	56.7
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	0%	93%	0%	33%	0%	0%	0%	96%
Volume Right (%)	0%	7%	0%	67%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	21	243	8	9	35	7	15	688
Left Turning Volume	0	225	0	3	0	0	0	663
Through Volume	0	18	0	6	0	7	0	25
Right Turning Volume	21	0	8	0	35	0	15	0
Lane Flow Rate	36	376	14	26	140	28	60	790
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0.066	0.639	0.036	0.054	0.308	0.052	0.118	1
Departure Headway, Hd	6.671	6.12	9.267	7.338	7.91	6.663	7.055	5.886
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	538	590	387	489	456	539	509	617
Service Time	4.394	3.843	6.995	5.065	5.63	4.384	4.786	3.616
HCM Lane V/C Ratio	0.067	0.637	0.036	0.053	0.307	0.052	0.118	1.28
HCM Control Delay	9.9	19.1	12.3	10.5	14.1	9.8	10.7	60.2
HCM Lane LOS	A	C	B	B	B	A	B	F
HCM 95th Percentile Queue	0.2	5.3	0.1	0.2	1.3	0.2	0.4	117

Intersection	
Intersection Delay (sec/veh):	125.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	97	6	34	0	77	69	21	456	6	41	296	65
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.42	0.54	0.25	0.59	0.66	0.79	0.90	0.31	0.69	0.89	0.85
Heavy Vehicles(%)	0	0	3	0	0	0	0	1	0	0	0	0
Movement Flow Rate	162	14	63	0	131	105	27	507	19	59	333	76
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1178	1069	371	1099	1098	517	409	0	0	526	0	0
Stage 1	489	489	-	571	571	-	-	-	-	-	-	-
Stage 2	689	580	-	528	527	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.327	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	169	223	673	192	215	562	1161	-	-	1051	-	-
Stage 1	564	553	-	509	508	-	-	-	-	-	-	-
Stage 2	439	503	-	538	532	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 58	200	673	152	193	562	1161	-	-	1051	-	-
Mov Capacity-2 Maneuver	# 58	200	-	152	193	-	-	-	-	-	-	-
Stage 1	545	513	-	492	491	-	-	-	-	-	-	-
Stage 2	254	486	-	439	493	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 718.5	64.9	0.4	1.1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				62	673	273			
HCM Control Delay (s)	8.173	0	-	$ 64.9	10.9	64.9	8.63	0	-
HCM Lane VC Ratio	0.023	-	-	2.838	0.094	0.861	0.057	-	-
HCM Lane LOS	A	A	-	F	B	F	A	A	-
HCM 95th Percentile Queue (veh)	0.07	-	-	17.925	0.308	7.312	0.18	-	-

Intersection	
Intersection Delay (sec/veh):	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	27	110	0	0	218	68	0	1	0	137	2	48
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.72	0.25	0.25	0.58	0.83	0.25	0.25	0.25	0.82	0.50	0.72
Heavy Vehicles(%)	0	3	0	0	4	5	0	0	0	2	0	9
Movement Flow Rate	36	153	0	0	376	82	0	4	0	167	4	67
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	458	0	-	153	0	0	678	683	77	644	642	229
Stage 1	-	-	-	-	-	-	225	225	-	417	417	-
Stage 2	-	-	-	-	-	-	453	458	-	227	225	-
Follow-up Headway	2.2	-	0	2.2	-	-	3.5	4	3.3	3.518	4	3.381
Pot Capacity-1 Maneuver	1114	-	0	1440	-	-	369	374	990	386	395	793
Stage 1	-	-	0	-	-	-	782	721	-	613	595	-
Stage 2	-	-	0	-	-	-	590	570	-	776	721	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1114	-	-	1440	-	-	327	362	990	373	382	793
Mov Capacity-2 Maneuver	-	-	-	-	-	-	327	362	-	373	382	-
Stage 1	-	-	-	-	-	-	757	698	-	593	595	-
Stage 2	-	-	-	-	-	-	537	570	-	747	698	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.6	0	15.1	18.7
HCM LOS	A	A	C	C

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	362						373	747
HCM Control Delay (s)	15.1	8.339	0	0	-	-	22.3	10.3
HCM Lane VC Ratio	0.011	0.032	-	-	-	-	0.448	0.095
HCM Lane LOS	C	A	A	A	-	-	C	B
HCM 95th Percentile Queue (veh)	0.033	0.1	-	0	-	-	2.239	0.312

Intersection	
Intersection Delay (sec/veh):	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	33	196	68	15	234	118	20	44	5	44	43	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.73	0.75	0.65	0.83	0.71	0.64	0.65	0.50	0.81	0.59	0.78
Heavy Vehicles(%)	0	8	0	0	2	5	11	0	0	0	13	4
Movement Flow Rate	41	268	91	23	282	166	31	68	10	54	73	41
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	448	0	0	359	0	0	864	890	180	846	852	224
Stage 1	-	-	-	-	-	-	396	396	-	411	411	-
Stage 2	-	-	-	-	-	-	468	494	-	435	441	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.599	4	3.3	3.5	4.117	3.336
Pot Capacity-1 Maneuver	1123	-	-	1211	-	-	265	284	868	284	285	810
Stage 1	-	-	-	-	-	-	612	608	-	622	576	-
Stage 2	-	-	-	-	-	-	559	550	-	604	559	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1123	-	-	1211	-	-	191	268	868	217	269	810
Mov Capacity-2 Maneuver	-	-	-	-	-	-	191	268	-	217	269	-
Stage 1	-	-	-	-	-	-	590	586	-	599	565	-
Stage 2	-	-	-	-	-	-	453	540	-	509	539	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.8	0.4	29.3	32.4
HCM LOS	A	A	D	D

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	255							294
HCM Control Delay (s)	29.3	8.326	0	-	8.03	0	-	32.4
HCM Lane VC Ratio	0.427	0.036	-	-	0.019	-	-	0.572
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th Percentile Queue (veh)	2.015	0.113	-	-	0.058	-	-	3.314

Intersection	
Intersection Delay (sec/veh):	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	2	0	0	0	0	1	3	219	0	1	61	20
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.81	0.25	0.25	0.75	0.38
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	0	11	11
Movement Flow Rate	4	0	0	0	0	4	12	270	0	4	81	53
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	4	0	0	0	0	0	77	12	0	145	10	2
Stage 1	-	-	-	-	-	-	8	8	-	2	2	-
Stage 2	-	-	-	-	-	-	69	4	-	143	8	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.5	4.009	3.3	3.5	4.099	3.399
Pot Capacity-1 Maneuver	1631	-	-	-	-	-	917	885	-	828	867	1056
Stage 1	-	-	-	-	-	-	1019	891	-	1026	877	-
Stage 2	-	-	-	-	-	-	946	894	-	865	871	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1631	-	-	-	-	-	807	883	-	-	865	1056
Mov Capacity-2 Maneuver	-	-	-	-	-	-	807	883	-	-	865	-
Stage 1	-	-	-	-	-	-	1017	889	-	1024	877	-
Stage 2	-	-	-	-	-	-	815	894	-	601	869	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	7.2	0	-	-
HCM LOS	A	A	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	7.213	0	-	0	-	-	-
HCM Lane VC Ratio	-	0.002	-	-	-	-	-	-
HCM Lane LOS	-	A	A	-	A	-	-	-
HCM 95th Percentile Queue (veh)	-	0.007	-	-	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	82.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	6	41	23	10	47	170	970	53	87	259	16
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.38	0.63	0.64	0.71	0.75	0.75	0.70	0.81	0.69	0.64	0.69	0.70
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	1	1	0
Movement Flow Rate	8	10	64	32	13	63	243	1198	77	136	375	23
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1751	2420	200	2188	2393	638	398	0	0	1275	0	0
Stage 1	659	659	-	1723	1723	-	-	-	-	-	-	-
Stage 2	1092	1761	-	465	670	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	56	33	814	# 26	34	424	1172	-	-	546	-	-
Stage 1	424	464	-	94	145	-	-	-	-	-	-	-
Stage 2	232	139	-	552	459	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	16	20	814	# 11	20	424	1172	-	-	546	-	-
Mov Capacity-2 Maneuver	16	20	-	# 11	20	-	-	-	-	-	-	-
Stage 1	336	348	-	75	115	-	-	-	-	-	-	-
Stage 2	139	110	-	371	345	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	208.8	$ 1512.1	1.7	3.9
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				78	29			
HCM Control Delay (s)	8.873	0.4	-	208.8	$ 1512.1	13.765	0.5	-
HCM Lane VC Ratio	0.207	-	-	1.045	3.738	0.249	-	-
HCM Lane LOS	A	A	-	F	F	B	A	-
HCM 95th Percentile Queue (veh)	0.779	-	-	5.75	13.041	0.976	-	-

Intersection	
Intersection Delay (sec/veh):	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	234	33	36	863	0	0	0	0	34	0	262
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.69	0.56	0.73	0.87	0.25	0.25	0.25	0.25	0.58	0.25	0.79
Heavy Vehicles(%)	0	0	0	9	0	0	0	0	0	0	0	0
Movement Flow Rate	0	339	59	49	992	0	0	0	0	59	0	332
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2	
Conflicting Flow Rate - All	992	0	0	398	0	-				1226	~	496
Stage 1	-	-	-	-	-	-				1090	-	-
Stage 2	-	-	-	-	-	-				136	-	-
Follow-up Headway	3.1	-	-	3.19	-	0				3.8	0	3.9
Pot Capacity-1 Maneuver	401	-	-	731	-	0				191	0	449
Stage 1	-	-	-	-	-	0				175	0	-
Stage 2	-	-	-	-	-	0				790	0	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	401	-	-	731	-	-				181	-	449
Mov Capacity-2 Maneuver	-	-	-	-	-	-				181	-	-
Stage 1	-	-	-	-	-	-				175	-	-
Stage 2	-	-	-	-	-	-				790	-	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	0.5	32.7
HCM LOS	A	A	D

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						181	449
HCM Control Delay (s)	0	-	-	10.281	-	34.1	32.5
HCM Lane VC Ratio	-	-	-	0.067	-	0.324	0.739
HCM Lane LOS	A	-	-	B	-	D	D
HCM 95th Percentile Queue (veh)	0	-	-	0.216	-	1.323	6.013

Intersection	
Intersection Delay (sec/veh):	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	198	72	0	675	150	225	0	32	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.76	0.76	0.25	0.86	0.74	0.85	0.25	0.70	0.25	0.25	0.25
Heavy Vehicles(%)	0	0	0	0	0	2	0	0	7	0	0	0
Movement Flow Rate	0	261	95	0	785	203	265	0	46	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	702	~	179
Stage 1	-	-	-	-	-	-	309	-	-
Stage 2	-	-	-	-	-	-	393	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.37
Pot Capacity-1 Maneuver	0	-	-	0	-	-	329	0	818
Stage 1	0	-	-	0	-	-	682	0	-
Stage 2	0	-	-	0	-	-	609	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	329	-	818
Mov Capacity-2 Maneuver	-	-	-	-	-	-	329	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	609	-	-

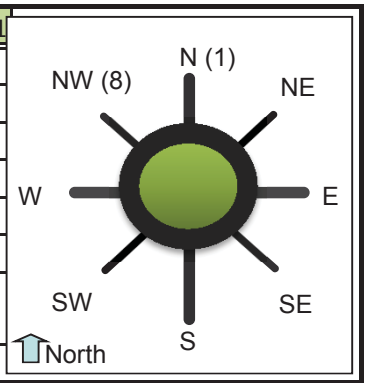
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	43
HCM LOS	A	A	E

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	329	818				
HCM Control Delay (s)	48.8	9.7	-	-	-	-
HCM Lane VC Ratio	0.805	0.056	-	-	-	-
HCM Lane LOS	E	A	-	-	-	-
HCM 95th Percentile Queue (veh)	6.725	0.177	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Baseline AM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					48			
Exit NE (2), vph								
Legs E (3), vph		71						
(TO) SE (4), vph								
S (5), vph	252							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	252	71	0	0	48	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		485						
NE (2), vph								
E (3), vph	239							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	239	485	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	52	0	527	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	77	0	0	0	260	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	274	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	351	0	52	0	787	0	0	0
	Entry flow Lane 1, pcu/h	274	0	52	0	260	0	0	0
	Entry flow Lane 2, pcu/h	77	0	0	0	527	0	0	0
	Conflicting flow, pcu/h	0	0	527	0	77	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	781	NA	1046	1046	NA	NA
Entry Flow Rates, veh/h	274	77	52	NA	260	527	NA	NA
V/C ratio	**0.24**	**0.07**	**0.07**		**0.25**	**0.50**		
Control Delay, s/veh	**5.4**	**3.8**	**5.3**		**5.8**	**9.4**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**24**	**5**	**5**		**25**	**73**		
Approach Delay, LOS	5.1 sec, LOS A		5.3 sec, LOS A		8.2 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1020	NA	1333	1333	NA	NA
Entry Flow Rates, veh/h	274	77	52	NA	260	527	NA	NA
V/C ratio	**0.17**	**0.05**	**0.05**		**0.19**	**0.40**		
Control Delay, s/veh	**3.5**	**2.5**	**4.0**		**4.3**	**6.4**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**15**	**4**	**4**		**18**	**48**		
Approach Delay, LOS	3.3 sec, LOS A		4 sec, LOS A		5.7 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

HCM 2010 Signalized Intersection Summary
2: 19th St. & Gordon Hwy

9/8/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	261	18	25	362	511	118	777	637	146	104	33
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1886	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	888	409	73	826	321	591	866	736	68	509	210
Arriving On Green	0.03	0.25	0.00	0.02	0.24	0.00	0.46	0.46	0.00	0.14	0.14	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	1295.5	1900.0	1615.0	505.7	3771.5	1552.9
Grp Volume(v), veh/h	58.7	326.3	0.0	29.1	470.1	0.0	236.0	1110.0	0.0	162.2	116.9	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	1295.5	1900.0	1615.0	505.7	1885.8	1552.9
Q Serve(g_s), s	4.0	9.1	0.0	1.0	14.3	0.0	14.4	54.0	0.0	16.0	3.3	0.0
Cycle Q Clear(g_c), s	4.0	9.1	0.0	1.0	14.3	0.0	14.4	54.0	0.0	16.0	3.3	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.5	887.6	409.0	73.0	826.1	320.7	590.5	866.1	736.2	68.3	509.4	209.7
V/C Ratio(X)	1.056	0.368	0.000	0.398	0.569	0.000	0.400	1.282	0.000	2.375	0.229	0.000
Avail Cap(c_a), veh/h	55.5	887.6	409.0	118.5	870.7	338.0	590.5	866.1	736.2	68.3	509.4	209.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.2	36.4	0.0	57.3	39.6	0.0	21.4	32.2	0.0	51.2	45.7	0.0
Incr Delay (d2), s/veh	137.4	0.3	0.0	3.5	0.8	0.0	0.4	135.6	0.0	661.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	194.6	36.7	0.0	60.7	40.4	0.0	21.9	167.8	0.0	712.7	46.0	0.0
Lane Group LOS	F	D		E	D		C	F		F	D	
Approach Volume, veh/h		385			499			1346			279	
Approach Delay, s/veh		60.7			41.6			142.2			433.5	
Approach LOS		E			D			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.00	34.00		6.46	32.46			58.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	30.00		4.00	30.00			54.00			16.00	
Max Q Clear Time (g_c+I1), s	6.00	11.08		2.97	16.26			56.00			18.00	
Green Extension Time (p_c)	0.00	5.22		0.00	4.50			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			142.1									
HCM 2010 Level of Service			F									

HCM 2010 Signalized Intersection Summary
3: 7th Ave/7th Av & Gordon Hwy

9/8/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	547	27	218	670	418	156	908	1177	310	204	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	351	888	409	339	731	333	254	1392	1085	270	1462	648
Arriving On Green	0.10	0.25	0.00	0.07	0.22	0.22	0.14	0.39	0.00	0.16	0.40	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	438.5	692.4	0.0	256.5	744.4	464.4	222.9	1278.9	0.0	344.4	229.2	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	12.0	21.8	0.0	5.9	26.0	26.0	14.3	40.0	0.0	19.0	4.8	0.0
Cycle Q Clear(g_c), s	12.0	21.8	0.0	5.9	26.0	26.0	14.3	40.0	0.0	19.0	4.8	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	351.0	888.4	409.4	338.5	731.4	333.4	254.4	1392.1	1085.3	270.4	1461.9	647.5
V/C Ratio(X)	1.249	0.779	0.000	0.758	1.018	1.393	0.876	0.919	0.000	1.274	0.157	0.000
Avail Cap(c_a), veh/h	351.0	888.4	409.4	343.6	731.4	333.4	365.5	1427.9	1113.2	270.4	1461.9	647.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	53.4	41.3	0.0	54.5	46.4	46.4	50.0	34.7	0.0	49.9	22.5	0.0
Incr Delay (d2), s/veh	133.7	4.5	0.0	9.2	37.8	194.3	15.2	9.7	0.0	148.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	187.1	45.7	0.0	63.8	84.2	240.7	65.3	44.4	0.0	198.7	22.5	0.0
Lane Group LOS	F	D		E	F	F	E	D		F	C	
Approach Volume, veh/h		1131			1465			1502			574	
Approach Delay, s/veh		100.5			130.3			47.5			128.3	
Approach LOS		F			F			D			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	16.00	34.12		11.88	30.00		20.70	49.82		23.00	52.12	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	12.00	30.00		8.00	26.00		24.00	47.00		19.00	42.00	
Max Q Clear Time (g_c+I1), s	14.00	23.84		7.87	28.00		16.34	42.05		21.00	6.79	
Green Extension Time (p_c)	0.00	4.84		0.01	0.00		0.37	3.77		0.00	15.00	

Intersection Summary												
HCM 2010 Control Delay			96.2									
HCM 2010 Level of Service			F									

HCM 2010 Signalized Intersection Summary
6: 19th St. & Chamberlain Ave.

9/8/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	128	28	28	68	250	10	434	23	26	92	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1730	1730	1900	1856	1856	1900	1898	1898	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	475	608	135	115	69	310	32	504	24	45	543	466
Arriving On Green	0.27	0.44	0.44	0.06	0.23	0.23	0.02	0.28	0.28	0.03	0.29	0.29
Sat Flow, veh/h	1739.9	1372.0	304.5	1809.5	294.9	1327.0	1809.5	1797.6	85.6	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	576.3	0.0	226.7	47.5	0.0	456.1	16.9	0.0	640.4	30.2	108.2	10.4
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1676.6	1809.5	0.0	1621.9	1809.5	0.0	1883.2	1756.8	1881.2	1615.0
Q Serve(g_s), s	35.0	0.0	11.2	3.2	0.0	30.0	1.2	0.0	36.0	2.2	5.6	0.6
Cycle Q Clear(g_c), s	35.0	0.0	11.2	3.2	0.0	30.0	1.2	0.0	36.0	2.2	5.6	0.6
Proportion In Lane	1.000		0.182	1.000		0.818	1.000		0.045	1.000		1.000
Lane Grp Cap(c), veh/h	474.7	0.0	742.8	115.1	0.0	379.3	32.0	0.0	528.4	45.2	543.0	466.1
V/C Ratio(X)	1.214	0.000	0.305	0.412	0.000	1.203	0.530	0.000	1.212	0.670	0.199	0.022
Avail Cap(c_a), veh/h	474.7	0.0	742.8	126.9	0.0	379.3	70.5	0.0	528.4	68.5	543.0	466.1
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	46.6	0.0	23.0	57.8	0.0	49.1	62.5	0.0	46.1	62.0	34.4	32.7
Incr Delay (d2), s/veh	114.4	0.0	1.1	2.4	0.0	113.7	12.9	0.0	111.9	15.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	161.1	0.0	24.1	60.1	0.0	162.9	75.4	0.0	158.1	77.7	34.6	32.7
Lane Group LOS	F		C	E		F	E		F	E	C	C
Approach Volume, veh/h		803			504			657			149	
Approach Delay, s/veh		122.4			153.2			156.0			43.2	
Approach LOS		F			F			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	41.00	62.84		14.16	36.00		8.27	42.00		9.30	43.03	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	35.00	56.00		9.00	30.00		5.00	36.00		5.00	36.00	
Max Q Clear Time (g_c+I1), s	37.00	13.17		5.24	32.00		3.19	38.00		4.19	7.57	
Green Extension Time (p_c)	0.00	10.83		0.02	0.00		0.00	0.00		0.00	5.65	

Intersection Summary			
HCM 2010 Control Delay			134.6
HCM 2010 Level of Service			F

HCM 2010 Signalized Intersection Summary
8: Rice Rd & Chamberlain Ave.

9/8/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	667	122	250	180	42	57	44	337	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1867	1867	1867	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	55	1241	259	408	1834	433	343	535	447	432	427	60
Arriving On Green	0.45	0.45	0.45	0.11	0.62	0.62	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	91.2	2771.4	573.5	1791.6	2973.6	702.4	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	496.8	0.0	447.2	294.1	130.5	126.4	64.8	50.0	474.6	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1775.0	0.0	1597.6	1791.6	1900.0	1776.0	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	1.3	0.0	25.6	9.8	3.4	3.5	5.1	2.4	35.5	19.6	0.0	8.1
Cycle Q Clear(g_c), s	24.0	0.0	25.6	9.8	3.4	3.5	13.2	2.4	35.5	22.0	0.0	8.1
Proportion In Lane	0.051		0.359	1.000		0.395	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	833.4	0.0	721.8	408.4	1171.7	1095.2	343.2	535.3	446.5	432.2	0.0	486.9
V/C Ratio(X)	0.596	0.000	0.620	0.720	0.111	0.115	0.189	0.093	1.063	0.575	0.000	0.295
Avail Cap(c_a), veh/h	833.4	0.0	721.8	545.9	1171.7	1095.2	343.2	535.3	446.5	432.2	0.0	486.9
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	24.6	0.0	25.0	18.7	9.5	9.5	37.7	30.6	42.3	38.6	0.0	32.6
Incr Delay (d2), s/veh	1.8	0.0	2.4	8.5	0.1	0.1	1.2	0.3	60.3	5.5	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	26.4	0.0	27.4	27.2	9.6	9.6	38.9	30.9	102.6	44.1	0.0	34.1
Lane Group LOS	C		C	C	A	A	D	C	F	D		C
Approach Volume, veh/h		944			551			589			392	
Approach Delay, s/veh		26.9			19.0			89.5			40.4	
Approach LOS		C			B			F			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		60.21		19.79	80.00			40.00			40.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		46.00		23.00	74.00			35.50			35.50	
Max Q Clear Time (g_c+I1), s		27.57		11.82	5.53			37.50			24.02	
Green Extension Time (p_c)		12.16		1.97	24.48			0.00			4.99	

Intersection Summary			
HCM 2010 Control Delay			42.2
HCM 2010 Level of Service			D

Intersection	
Intersection Delay (sec/veh):	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	301	0	1	586	12	1	0	1	8	0	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	4	342	0	1	792	36	4	0	1	32	0	20
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	828	0	0	342	0	0	1172	~	342	1163	1162	414
Stage 1	-	-	-	-	-	-	350	-	-	812	812	-
Stage 2	-	-	-	-	-	-	822	-	-	351	350	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	812	-	-	1184	-	-	171	0	705	173	197	643
Stage 1	-	-	-	-	-	-	671	0	-	376	395	-
Stage 2	-	-	-	-	-	-	371	0	-	670	636	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	812	-	-	1184	-	-	165	-	705	172	195	643
Mov Capacity-2 Maneuver	-	-	-	-	-	-	165	-	-	172	195	-
Stage 1	-	-	-	-	-	-	667	-	-	374	394	-
Stage 2	-	-	-	-	-	-	359	-	-	665	632	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.1	0	23.1	24.2
HCM LOS	A	A	C	C

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	165	705							239
HCM Control Delay (s)	27.4	10.1	9.455	0	-	8.044	-	-	24.2
HCM Lane VC Ratio	0.024	0.002	0.005	-	-	0.001	-	-	0.218
HCM Lane LOS	D	B	A	A	-	A	-	-	C
HCM 95th Percentile Queue (veh)	0.074	0.006	0.015	-	-	0.003	-	-	0.806

Intersection	
Intersection Delay (sec/veh):	$ 1834

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	268	0	0	3	0	24	0	1288	5	0	115	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	536	0	0	3	0	26	0	1741	5	0	142	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1905	1894	77	1815	1898	1744	154	0	0	-	0	0
Stage 1	148	148	-	1744	1744	-	-	-	-	-	-	-
Stage 2	1757	1746	-	71	154	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	0	-	-
Pot Capacity-1 Maneuver	# 43	69	937	49	69	76	1439	-	-	0	-	-
Stage 1	845	774	-	90	139	-	-	-	-	0	-	-
Stage 2	# 90	139	-	931	769	-	-	-	-	0	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 28	69	937	49	69	76	1439	-	-	-	-	-
Mov Capacity-2 Maneuver	# 28	69	-	49	69	-	-	-	-	-	-	-
Stage 1	845	774	-	90	139	-	-	-	-	-	-	-
Stage 2	# 59	139	-	931	769	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 8431.3	85.8	0	0
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (vph)				28	72		
HCM Control Delay (s)	0	-	-	$ 85.8	85.8	-	-
HCM Lane VC Ratio	-	-	-	19.143	0.408	-	-
HCM Lane LOS	A	-	-	F	F	-	-
HCM 95th Percentile Queue (veh)	0	-	-	66.522	1.59	-	-

Intersection	
Intersection Delay (sec/veh):	41

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	90	16	83	32	6	36	180	370	27	37	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	72	138	22	94	45	8	62	217	493	61	39	0
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	53	0	0	160	0	0	550	534	80	885	541	-
Stage 1	-	-	-	-	-	-	293	293	-	237	237	-
Stage 2	-	-	-	-	-	-	257	241	-	648	304	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	0
Pot Capacity-1 Maneuver	1568	-	-	1419	-	-	450	456	980	241	449	0
Stage 1	-	-	-	-	-	-	719	674	-	718	710	0
Stage 2	-	-	-	-	-	-	754	711	-	421	663	0
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	0
Mov Capacity-1 Maneuver	1568	-	-	1419	-	-	382	406	980	64	400	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	382	406	-	64	400	-
Stage 1	-	-	-	-	-	-	686	643	-	685	663	-
Stage 2	-	-	-	-	-	-	663	664	-	132	633	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.3	4.9	64.9	-
HCM LOS	A	A	F	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	382	684							64	-
HCM Control Delay (s)	16.2	69.2	7.406	0	-	7.718	0	-	208	-
HCM Lane VC Ratio	0.162	1.038	0.046	-	-	0.066	-	-	0.959	-
HCM Lane LOS	C	F	A	A	-	A	A	-	F	-
HCM 95th Percentile Queue (veh)	0.574	18.039	0.144	-	-	0.213	-	-	4.635	-

Intersection	
Intersection Delay (sec/veh):	13.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	281	36	80	215	1	41	30	114	25	86	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	1	316	44	91	287	1	51	43	207	28	148	33
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	288	0	0	360	0	0	740	810	180	652	832	145
Stage 1	-	-	-	-	-	-	340	340	-	470	470	-
Stage 2	-	-	-	-	-	-	400	470	-	182	362	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1439	-	-	1382	-	-	287	312	*1357	*357	270	*1381
Stage 1	-	-	-	-	-	-	829	764	-	*677	600	-
Stage 2	-	-	-	-	-	-	718	642	-	*1357	708	-
Time blocked-Platoon(%)	8	-	-	10	-	-	0	0	10	0	0	8
Mov Capacity-1 Maneuver	1439	-	-	1382	-	-	139	287	*1357	*252	249	*1381
Mov Capacity-2 Maneuver	-	-	-	-	-	-	139	287	-	*252	249	-
Stage 1	-	-	-	-	-	-	828	763	-	*676	554	-
Stage 2	-	-	-	-	-	-	473	592	-	*1084	707	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	2	27.9	36.6
HCM LOS	A	A	D	E

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*449							*252	*291
HCM Control Delay (s)	27.9	7.504	0	-	7.788	0.2	-	20.4	38.2
HCM Lane VC Ratio	0.671	0.001	-	-	0.066	-	-	0.075	0.657
HCM Lane LOS	D	A	A	-	A	A	-	C	E
HCM 95th Percentile Queue (veh)	4.85	0.003	-	-	0.211	-	-	0.242	4.274

Intersection	
Intersection Delay (sec/veh):	36.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1110	89	366	457	14	693
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	1354	107	421	502	23	949
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1461	0	2501	731
Stage 1	-	-	-	-	1408	-
Stage 2	-	-	-	-	1093	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	742	-	25	*# 840
Stage 1	-	-	-	-	482	-
Stage 2	-	-	-	-	287	-
Time blocked-Platoon(%)	-	-	44	-	44	44
Mov Capacity-1 Maneuver	-	-	742	-	# 11	*# 840
Mov Capacity-2 Maneuver	-	-	-	-	# 11	-
Stage 1	-	-	-	-	482	-
Stage 2	-	-	-	-	124	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	7.3	120.2
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*11	*840				
HCM Control Delay (s)	$ 1197.8	93.7	-	-	16.01	-
HCM Lane VC Ratio	2.121	1.13	-	-	0.567	-
HCM Lane LOS	F	F	-	-	C	-
HCM 95th Percentile Queue (veh)	3.828	26.899	-	-	3.604	-

Intersection	
Intersection Delay (sec/veh):	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	52	11	83	6	370	92	25	143	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	69	22	141	10	536	108	36	162	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	929	901	84	851	849	322	167	0	0	644	0	0
Stage 1	237	237	-	610	610	-	-	-	-	-	-	-
Stage 2	692	664	-	241	239	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	250	280	915	278	300	724	1364	-	-	936	-	-
Stage 1	771	713	-	478	488	-	-	-	-	-	-	-
Stage 2	437	461	-	758	711	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	183	267	915	263	286	724	1364	-	-	936	-	-
Mov Capacity-2 Maneuver	183	267	-	263	286	-	-	-	-	-	-	-
Stage 1	765	686	-	474	484	-	-	-	-	-	-	-
Stage 2	334	458	-	721	684	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	19.9	22.4	0.1	1.6
HCM LOS	C	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				253	434			
HCM Control Delay (s)	7.658	0	-	19.9	22.4	9.001	0	-
HCM Lane VC Ratio	0.007	-	-	0.046	0.535	0.039	-	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th Percentile Queue (veh)	0.021	-	-	0.144	3.072	0.121	-	-

Intersection	
Intersection Delay (sec/veh)	21.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	44	111	72	53	71	10	66	129	147	21	185	24
Peak Hour Factor	0.49	0.88	0.70	0.84	0.88	0.75	0.74	0.82	0.63	0.79	0.79	0.88
Heavy Vehicles(%)	0	3	0	0	3	0	0	4	4	10	2	0
Movement Flow Rate	90	126	103	63	81	13	89	157	233	27	234	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	18.4	13.7	28.7	17.3
HCM LOS	C	B	D	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	19%	19%	40%	9%
Volume Thru (%)	38%	49%	53%	80%
Volume Right (%)	43%	32%	7%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	342	227	134	230
Left Turning Volume	129	111	71	185
Through Volume	147	72	10	24
Right Turning Volume	66	44	53	21
Lane Flow Rate	480	319	157	288
Geometry Group	1	1	1	1
Degree of Utilization, X	0.797	0.58	0.319	0.535
Departure Headway, Hd	5.979	6.552	7.309	6.685
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	600	548	495	536
Service Time	4.06	4.642	5.309	4.781
HCM Lane V/C Ratio	0.8	0.582	0.317	0.537
HCM Control Delay	28.7	18.4	13.7	17.3
HCM Lane LOS	D	C	B	C
HCM 95th Percentile Queue	11.6	4.1	1.4	3.4

Intersection	
Intersection Delay (sec/veh)	39.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	19	64	7	72	14	30	0	387	258	78	88	8
Peak Hour Factor	0.61	0.89	0.38	0.70	0.38	0.45	0.25	0.89	0.71	0.48	0.70	0.58
Heavy Vehicles(%)	18	4	0	2	0	0	0	1	4	4	3	0
Movement Flow Rate	31	72	18	103	37	67	0	435	363	163	126	14
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12	12.1	60.5	12.4
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	0%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	100%	60%	0%	90%	0%	32%	0%	92%
Volume Right (%)	0%	40%	0%	10%	0%	68%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	0	645	19	71	72	44	78	96
Left Turning Volume	0	387	0	64	0	14	0	88
Through Volume	0	258	0	7	0	30	0	8
Right Turning Volume	0	0	19	0	72	0	78	0
Lane Flow Rate	0	798	31	90	103	104	162	140
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0	1	0.073	0.191	0.226	0.199	0.322	0.254
Departure Headway, Hd	6.205	5.938	8.4	7.594	7.914	6.904	7.135	6.56
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	0	615	428	474	455	522	505	548
Service Time	3.941	3.674	6.125	5.319	5.638	4.628	4.862	4.287
HCM Lane V/C Ratio	0	1.298	0.072	0.19	0.226	0.199	0.321	0.255
HCM Control Delay	8.9	60.5	11.8	12.1	12.9	11.3	13.2	11.5
HCM Lane LOS	N	F	B	B	B	B	B	B
HCM 95th Percentile Queue	0	116.4	0.2	0.7	0.9	0.7	1.4	1

Intersection	
Intersection Delay (sec/veh):	112.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	127	32	26	1	23	59	7	412	2	77	431	43
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.78	0.52	0.25	0.63	0.81	0.75	0.85	0.50	0.65	0.90	0.86
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	0	0	0
Movement Flow Rate	184	41	50	4	37	73	9	485	4	118	479	50
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1300	1247	504	1291	1270	487	529	0	0	489	0	0
Stage 1	740	740	-	505	505	-	-	-	-	-	-	-
Stage 2	560	507	-	786	765	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 140	175	572	142	170	585	1048	-	-	1085	-	-
Stage 1	412	426	-	553	544	-	-	-	-	-	-	-
Stage 2	516	543	-	388	415	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 86	146	572	89	142	585	1048	-	-	1085	-	-
Mov Capacity-2 Maneuver	# 86	146	-	89	142	-	-	-	-	-	-	-
Stage 1	407	360	-	546	537	-	-	-	-	-	-	-
Stage 2	416	536	-	265	351	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 610.2	28.2	0.2	1.6
HCM LOS	F	D	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				93	572	266			
HCM Control Delay (s)	8.466	0	-	$ 28.2	11.9	28.2	8.724	0	-
HCM Lane VC Ratio	0.009	-	-	2.42	0.087	0.426	0.109	-	-
HCM Lane LOS	A	A	-	F	B	D	A	A	-
HCM 95th Percentile Queue (veh)	0.027	-	-	20.607	0.286	2.015	0.367	-	-

Intersection	
Intersection Delay (sec/veh):	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	50	339	0	1	95	192	0	0	1	129	1	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.83	0.25	0.25	0.60	0.82	0.25	0.25	0.25	0.74	0.25	0.47
Heavy Vehicles(%)	2	4	0	0	2	2	0	0	0	0	0	0
Movement Flow Rate	63	408	0	4	158	234	0	0	4	174	4	68
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	392	0	-	408	0	0	853	934	204	819	817	196
Stage 1	-	-	-	-	-	-	534	534	-	283	283	-
Stage 2	-	-	-	-	-	-	319	400	-	536	534	-
Follow-up Headway	2.218	-	0	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1167	-	0	1162	-	-	281	268	842	297	313	850
Stage 1	-	-	0	-	-	-	534	528	-	728	681	-
Stage 2	-	-	0	-	-	-	697	605	-	532	528	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1167	-	-	1162	-	-	245	253	842	283	295	850
Mov Capacity-2 Maneuver	-	-	-	-	-	-	245	253	-	283	295	-
Stage 1	-	-	-	-	-	-	505	499	-	689	679	-
Stage 2	-	-	-	-	-	-	635	603	-	501	499	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.1	0.1	9.3	28.6
HCM LOS	A	A	A	D

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	842						283	770
HCM Control Delay (s)	9.3	8.262	0	8.109	0	-	36.2	10.2
HCM Lane VC Ratio	0.005	0.054	-	0.003	-	-	0.616	0.094
HCM Lane LOS	A	A	A	A	A	-	E	B
HCM 95th Percentile Queue (veh)	0.014	0.172	-	0.01	-	-	3.767	0.309

Intersection	
Intersection Delay (sec/veh):	130.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	34	452	75	7	243	61	37	47	19	86	124	17
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.68	0.76	0.76	0.50	0.87	0.84	0.69	0.81	0.35	0.83	0.74	0.63
Heavy Vehicles(%)	17	2	6	17	3	2	6	7	0	0	0	0
Movement Flow Rate	50	595	99	14	279	73	54	58	54	104	168	27
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	352	0	0	694	0	0	1186	1125	348	1145	1138	177
Stage 1	-	-	-	-	-	-	745	745	-	344	344	-
Stage 2	-	-	-	-	-	-	441	380	-	801	794	-
Follow-up Headway	2.353	-	-	2.353	-	-	3.554	4.063	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1128	-	-	836	-	-	163	201	700	178	203	871
Stage 1	-	-	-	-	-	-	400	414	-	676	641	-
Stage 2	-	-	-	-	-	-	587	605	-	381	403	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1128	-	-	836	-	-	# 38	189	700	120	191	871
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 38	189	-	120	191	-
Stage 1	-	-	-	-	-	-	382	396	-	646	630	-
Stage 2	-	-	-	-	-	-	411	595	-	287	385	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.6	0.4	$ 478.8	$ 418.7
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	92							168
HCM Control Delay (s)	$ 478.8	8.339	0	-	9.38	0	-	$ 478.8
HCM Lane VC Ratio	1.804	0.044	-	-	0.017	-	-	1.775
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th Percentile Queue (veh)	13.763	0.139	-	-	0.051	-	-	21.477

Intersection	
Intersection Delay (sec/veh):	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	12	0	1	0	0	0	5	33	0	0	176	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.25	0.25	0.25	0.25	0.25	0.50	0.81	0.25	0.25	0.66	0.50
Heavy Vehicles(%)	18	0	0	0	0	0	0	3	0	0	0	0
Movement Flow Rate	22	0	4	0	0	0	10	41	0	0	267	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	333	333	272	335	338	41	277	0	0	41	0	0
Stage 1	272	272	-	61	61	-	-	-	-	-	-	-
Stage 2	61	61	-	274	277	-	-	-	-	-	-	-
Follow-up Headway	3.662	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	591	590	772	622	586	1036	1298	-	-	1581	-	-
Stage 1	700	688	-	955	848	-	-	-	-	-	-	-
Stage 2	912	848	-	736	685	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	587	585	772	615	581	1036	1298	-	-	1581	-	-
Mov Capacity-2 Maneuver	587	585	-	615	581	-	-	-	-	-	-	-
Stage 1	694	688	-	947	841	-	-	-	-	-	-	-
Stage 2	905	841	-	732	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	11.2	0	1.5	0
HCM LOS	B	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				610	0			
HCM Control Delay (s)	7.795	0	-	11.2	0	0	-	-
HCM Lane VC Ratio	0.008	-	-	0.042	-	-	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th Percentile Queue (veh)	0.023	-	-	0.132	-	0	-	-

Intersection	
Intersection Delay (sec/veh):	71.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	11	38	189	41	16	37	28	241	34	93	916	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.77	0.84	0.64	0.58	0.49	0.78	0.86	0.94	0.80	0.94	0.63
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	1	0	0
Movement Flow Rate	22	49	225	64	28	76	36	280	36	116	974	17
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1441	1603	496	1114	1593	158	991	0	0	316	0	0
Stage 1	1215	1215	-	370	370	-	-	-	-	-	-	-
Stage 2	226	388	-	744	1223	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	95	107	525	165	108	866	706	-	-	1248	-	-
Stage 1	195	256	-	628	624	-	-	-	-	-	-	-
Stage 2	762	612	-	377	254	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	60	92	525	# 49	93	866	706	-	-	1248	-	-
Mov Capacity-2 Maneuver	60	92	-	# 49	93	-	-	-	-	-	-	-
Stage 1	185	232	-	596	592	-	-	-	-	-	-	-
Stage 2	629	581	-	154	230	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	218.2	$ 423.5	1.1	1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				223	99			
HCM Control Delay (s)	10.372	0.1	-	218.2	$ 423.5	8.181	0.2	-
HCM Lane VC Ratio	0.051	-	-	1.329	1.688	0.093	-	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th Percentile Queue (veh)	0.16	-	-	16.08	13.251	0.307	-	-

Intersection	
Intersection Delay (sec/veh):	13.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	873	173	73	249	0	0	0	0	161	2	110
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.87	0.80	0.68	0.73	0.25	0.25	0.25	0.25	0.83	0.50	0.61
Heavy Vehicles(%)	0	0	0	2	0	0	0	0	0	4	0	2
Movement Flow Rate	0	1003	216	107	341	0	0	0	0	194	4	180
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2	
Conflicting Flow Rate - All	341	0	0	1219	0	-				956	1774	171
Stage 1	-	-	-	-	-	-				555	555	-
Stage 2	-	-	-	-	-	-				401	1219	-
Follow-up Headway	3.1	-	-	3.12	-	0				3.84	4	3.92
Pot Capacity-1 Maneuver	811	-	-	306	-	0				268	84	717
Stage 1	-	-	-	-	-	0				398	516	-
Stage 2	-	-	-	-	-	0				541	255	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	811	-	-	306	-	-				195	55	717
Mov Capacity-2 Maneuver	-	-	-	-	-	-				195	55	-
Stage 1	-	-	-	-	-	-				398	336	-
Stage 2	-	-	-	-	-	-				541	255	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	5.5	64.3
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						195	717
HCM Control Delay (s)	0	-	-	22.99	-	113.2	11.7
HCM Lane VC Ratio	-	-	-	0.351	-	0.995	0.252
HCM Lane LOS	A	-	-	C	-	F	B
HCM 95th Percentile Queue (veh)	0	-	-	1.527	-	8.465	0.993

Intersection	
Intersection Delay (sec/veh):	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	816	225	0	289	143	33	0	61	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	Free	Free	Free	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.91	0.94	0.25	0.68	0.79	0.81	0.25	0.90	0.25	0.25	0.25
Heavy Vehicles(%)	0	1	1	0	0	3	0	0	4	0	0	0
Movement Flow Rate	0	897	239	0	425	181	41	0	68	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	1230	~	569
Stage 1	-	-	-	-	-	-	1017	-	-
Stage 2	-	-	-	-	-	-	213	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.34
Pot Capacity-1 Maneuver	0	-	-	0	-	-	136	0	460
Stage 1	0	-	-	0	-	-	258	0	-
Stage 2	0	-	-	0	-	-	775	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	136	-	460
Mov Capacity-2 Maneuver	-	-	-	-	-	-	136	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	775	-	-

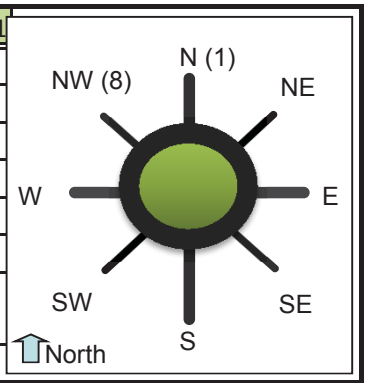
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	24.8
HCM LOS	A	A	C

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	136	460				
HCM Control Delay (s)	42.4	14.2	-	-	-	-
HCM Lane VC Ratio	0.3	0.147	-	-	-	-
HCM Lane LOS	E	B	-	-	-	-
HCM 95th Percentile Queue (veh)	1.168	0.513	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Baseline PM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					102			
Exit NE (2), vph								
Legs E (3), vph		91						
(TO) SE (4), vph								
S (5), vph	583							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	583	91	0	0	102	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		204						
NE (2), vph								
E (3), vph	146							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	146	204	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	111	0	222	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	99	0	0	0	159	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	634	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	733	0	111	0	380	0	0	0
	Entry flow Lane 1, pcu/h	634	0	111	0	159	0	0	0
	Entry flow Lane 2, pcu/h	99	0	0	0	222	0	0	0
	Conflicting flow, pcu/h	0	0	222	0	99	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	968	NA	1024	1024	NA	NA
Entry Flow Rates, veh/h	634	99	111	NA	159	222	NA	NA
V/C ratio	**0.56**	**0.09**	**0.11**		**0.16**	**0.22**		
Control Delay, s/veh	**10.0**	**3.9**	**4.8**		**4.9**	**5.6**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**90**	**7**	**10**		**14**	**21**		
Approach Delay, LOS	9.2 sec, LOS A		4.8 sec, LOS A		5.3 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1343	NA	1304	1304	NA	NA
Entry Flow Rates, veh/h	634	99	111	NA	159	222	NA	NA
V/C ratio	**0.39**	**0.06**	**0.08**		**0.12**	**0.17**		
Control Delay, s/veh	**5.5**	**2.6**	**3.3**		**3.8**	**4.2**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**47**	**5**	**7**		**10**	**15**		
Approach Delay, LOS	5.1 sec, LOS A		3.3 sec, LOS A		4 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	409	191	416	373	80	30	308	78	279	1093	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1899	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	57	529	244	471	862	335	104	430	366	335	1344	550
Arriving On Green	0.03	0.15	0.00	0.13	0.25	0.00	0.23	0.23	0.00	0.35	0.35	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	461.1	1900.0	1615.0	945.3	3798.1	1552.9
Grp Volume(v), veh/h	45.3	511.3	0.0	483.7	484.4	0.0	60.0	440.0	0.0	310.0	1228.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	461.1	1900.0	1615.0	945.3	1899.1	1552.9
Q Serve(g_s), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Cycle Q Clear(g_c), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	56.6	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	334.6	1344.3	549.6
V/C Ratio(X)	0.801	0.966	0.000	1.026	0.562	0.000	0.574	1.022	0.000	0.927	0.914	0.000
Avail Cap(c_a), veh/h	124.2	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	341.0	1370.3	560.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.1	50.3	0.0	51.6	38.9	0.0	41.0	46.1	0.0	37.0	36.8	0.0
Incr Delay (d2), s/veh	22.1	30.5	0.0	48.4	0.8	0.0	7.4	49.1	0.0	30.3	9.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	79.2	80.8	0.0	100.0	39.8	0.0	48.4	95.2	0.0	67.3	46.3	0.0
Lane Group LOS	E	F		F	D		D	F		E	D	
Approach Volume, veh/h		557			968			500			1538	
Approach Delay, s/veh		80.7			69.8			89.6			50.5	
Approach LOS		F			E			F			D	
Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.10	22.00		20.00	33.90			31.00			46.18	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	9.00	18.00		16.00	25.00			27.00			43.00	
Max Q Clear Time (g_c+I1), s	5.26	19.28		18.00	16.64			29.00			39.57	
Green Extension Time (p_c)	0.02	0.00		0.00	4.10			0.00			2.61	
Intersection Summary												
HCM 2010 Control Delay			66.0									
HCM 2010 Level of Service			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	662	102	710	515	173	32	296	264	198	1254	366
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	237	828	382	861	1126	513	58	946	738	258	1381	612
Arriving On Green	0.07	0.24	0.00	0.17	0.34	0.34	0.03	0.26	0.00	0.15	0.38	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	163.1	838.0	0.0	835.3	572.2	192.2	45.7	416.9	0.0	220.0	1409.0	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Cycle Q Clear(g_c), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	236.9	828.3	381.7	861.4	1126.4	513.4	58.3	946.1	737.5	258.3	1381.3	611.8
V/C Ratio(X)	0.689	1.012	0.000	0.970	0.508	0.374	0.785	0.441	0.000	0.852	1.020	0.000
Avail Cap(c_a), veh/h	312.9	828.3	381.7	861.4	1126.4	513.4	81.5	946.1	737.5	399.7	1381.3	611.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	40.5	33.9	0.0	36.7	23.6	22.4	42.7	27.4	0.0	36.7	27.4	0.0
Incr Delay (d2), s/veh	4.1	34.2	0.0	23.4	0.4	0.5	27.4	0.3	0.0	10.2	29.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.5	68.1	0.0	60.1	23.9	22.8	70.1	27.7	0.0	46.9	56.8	0.0
Lane Group LOS	D	F		E	C	C	E	C		D	F	
Approach Volume, veh/h		1001			1600			463			1629	
Approach Delay, s/veh		64.3			42.7			31.9			55.5	
Approach LOS		E			D			C			E	
Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	10.06	25.00		19.00	33.94		6.86	27.29		17.57	38.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	8.00	21.00		15.00	28.00		4.00	17.00		21.00	34.00	
Max Q Clear Time (g_c+I1), s	6.08	23.00		16.46	14.17		4.23	10.56		13.26	36.00	
Green Extension Time (p_c)	0.09	0.00		0.00	8.50		0.00	5.28		0.37	0.00	
Intersection Summary												
HCM 2010 Control Delay			50.7									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	133	55	53	332	70	37	186	64	283	432	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1712	1712	1900	1834	1834	1900	1891	1891	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	124	361	152	146	457	118	81	273	84	356	666	572
Arriving On Green	0.07	0.32	0.32	0.05	0.22	0.22	0.04	0.20	0.20	0.20	0.35	0.35
Sat Flow, veh/h	1739.9	1146.4	481.1	1809.5	1407.0	363.1	1809.5	1386.6	428.8	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	273.6	89.8	0.0	509.4	62.7	0.0	343.0	329.1	508.2	279.2
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1627.5	1809.5	0.0	1770.1	1809.5	0.0	1815.4	1756.8	1881.2	1615.0
Q Serve(g_s), s	6.6	0.0	16.2	5.7	0.0	32.6	4.0	0.0	21.9	21.5	28.0	15.8
Cycle Q Clear(g_c), s	6.6	0.0	16.2	5.7	0.0	32.6	4.0	0.0	21.9	21.5	28.0	15.8
Proportion In Lane	1.000		0.296	1.000		0.205	1.000		0.236	1.000		1.000
Lane Grp Cap(c), veh/h	123.7	0.0	512.7	146.3	0.0	574.9	81.0	0.0	356.9	355.6	666.4	572.1
V/C Ratio(X)	0.808	0.000	0.534	0.614	0.000	0.886	0.774	0.000	0.961	0.925	0.763	0.488
Avail Cap(c_a), veh/h	148.7	0.0	512.7	185.6	0.0	574.9	108.3	0.0	356.9	375.4	666.4	572.1
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	53.6	0.0	33.0	53.5	0.0	43.7	55.3	0.0	46.6	45.8	33.4	29.5
Incr Delay (d2), s/veh	23.5	0.0	3.9	4.1	0.0	18.0	21.4	0.0	37.3	27.7	5.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	77.0	0.0	36.9	57.7	0.0	61.7	76.7	0.0	83.9	73.5	38.6	30.1
Lane Group LOS	E		D	E		E	E		F	E	D	C
Approach Volume, veh/h		374			599			406			1117	
Approach Delay, s/veh		47.7			61.1			82.8			46.8	
Approach LOS		D			E			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	14.32	42.86		15.46	44.00		11.24	29.00		29.68	47.44	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	10.00	36.00		12.00	38.00		7.00	23.00		25.00	41.00	
Max Q Clear Time (g_c+I1), s	8.63	18.20		7.68	34.63		6.01	23.90		23.51	29.97	
Green Extension Time (p_c)	0.03	8.35		0.06	2.19		0.01	0.00		0.17	4.89	

Intersection Summary		
HCM 2010 Control Delay		56.2
HCM 2010 Level of Service		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	325	86	299	851	173	135	127	128	66	50	17
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1869	1869	1869	1881	1900	1900	1863	1810	1776	1863	1601	1601
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	97	953	292	685	1955	411	337	490	409	317	208	192
Arriving On Green	0.92	0.92	0.92	0.13	0.64	0.64	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	193.3	1971.2	636.8	1791.6	3046.6	640.4	1284.6	1809.5	1509.3	1238.8	768.7	707.2
Grp Volume(v), veh/h	236.3	0.0	282.3	351.8	609.4	574.7	153.4	144.3	180.3	94.3	0.0	104.3
Grp Sat Flow(s),veh/h/ln	1263.1	0.0	1588.7	1791.6	1900.0	1787.0	1284.6	1809.5	1509.3	1238.8	0.0	1476.0
Q Serve(g_s), s	0.0	0.0	2.7	11.5	20.3	20.4	12.8	7.6	11.9	7.8	0.0	6.7
Cycle Q Clear(g_c), s	1.7	0.0	2.7	11.5	20.3	20.4	19.4	7.6	11.9	15.4	0.0	6.7
Proportion In Lane	0.153		0.401	1.000		0.358	1.000		1.000	1.000		0.479
Lane Grp Cap(c), veh/h	613.8	0.0	728.5	685.3	1219.2	1146.7	336.6	490.1	408.8	317.2	0.0	399.7
V/C Ratio(X)	0.385	0.000	0.388	0.513	0.500	0.501	0.456	0.294	0.441	0.297	0.000	0.261
Avail Cap(c_a), veh/h	613.8	0.0	728.5	820.1	1219.2	1146.7	336.6	490.1	408.8	317.2	0.0	399.7
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	2.8	0.0	2.8	11.6	11.3	11.4	41.9	34.7	36.2	40.8	0.0	34.3
Incr Delay (d2), s/veh	0.8	0.0	0.7	2.2	0.7	0.7	4.4	1.5	3.4	2.4	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	3.6	0.0	3.5	13.8	12.0	12.1	46.3	36.2	39.7	43.2	0.0	35.9
Lane Group LOS	A		A	B	B	B	D	D	D	D		D
Approach Volume, veh/h		519			1536			478			199	
Approach Delay, s/veh		3.6			12.4			40.8			39.3	
Approach LOS		A			B			D			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		61.02		21.98	83.00			37.00			37.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		47.00		25.00	77.00			32.50			32.50	
Max Q Clear Time (g_c+I1), s		4.74		13.48	22.39			21.43			17.42	
Green Extension Time (p_c)		30.64		2.49	36.71			3.68			4.37	

Intersection Summary		
HCM 2010 Control Delay		17.7
HCM 2010 Level of Service		B

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	630	104	215	220	5	1	0	7	0	1	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	0	716	132	295	297	15	4	0	9	0	4	4
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	312	0	0	848	0	0	1681	~	782	1682	1743	157
Stage 1	-	-	-	-	-	-	782	-	-	895	895	-
Stage 2	-	-	-	-	-	-	899	-	-	787	848	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1260	-	-	764	-	-	76	0	397	76	88	894
Stage 1	-	-	-	-	-	-	390	0	-	338	362	-
Stage 2	-	-	-	-	-	-	336	0	-	388	380	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1260	-	-	764	-	-	45	-	397	47	47	894
Mov Capacity-2 Maneuver	-	-	-	-	-	-	45	-	-	47	47	-
Stage 1	-	-	-	-	-	-	390	-	-	338	193	-
Stage 2	-	-	-	-	-	-	174	-	-	379	380	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	6.1	37.8	49.4
HCM LOS	A	A	E	E

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	45	397							89
HCM Control Delay (s)	92.7	14.3	0	-	-	12.637	-	-	49.4
HCM Lane VC Ratio	0.089	0.024	-	-	-	0.385	-	-	0.09
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th Percentile Queue (veh)	0.278	0.072	0	-	-	1.825	-	-	0.288

Intersection	
Intersection Delay (sec/veh):	97.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	33	0	37	0	2	290	1	285	1	50	912	504
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	66	0	63	0	2	315	4	385	1	54	1126	560
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	2066	1908	843	1065	2188	386	1686	0	0	386	0	0
Stage 1	1514	1514	-	394	394	-	-	-	-	-	-	-
Stage 2	552	394	-	671	1794	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	# 32	68	287	177	45	612	384	-	-	1169	-	-
Stage 1	128	181	-	602	604	-	-	-	-	-	-	-
Stage 2	491	604	-	412	131	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 15	67	287	137	44	612	384	-	-	1169	-	-
Mov Capacity-2 Maneuver	# 15	67	-	137	44	-	-	-	-	-	-	-
Stage 1	126	181	-	594	596	-	-	-	-	-	-	-
Stage 2	234	596	-	322	131	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 1902.5	19.4	0.1	0.3
HCM LOS	F	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				28	562			
HCM Control Delay (s)	14.474	0	-	$ 19.4	19.4	8.23	-	-
HCM Lane VC Ratio	0.01	-	-	4.597	0.565	0.046	-	-
HCM Lane LOS	B	A	-	F	C	A	-	-
HCM 95th Percentile Queue (veh)	0.032	-	-	15.669	3.493	0.146	-	-

Intersection	
Intersection Delay (sec/veh):	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	73	123	616	38	10	8	58	181	26	516	3
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	0	112	171	700	54	13	14	70	241	59	543	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	67	0	0	283	0	0	1934	1665	142	1814	1744	34
Stage 1	-	-	-	-	-	-	198	198	-	1461	1461	-
Stage 2	-	-	-	-	-	-	1736	1467	-	353	283	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	3.3
Pot Capacity-1 Maneuver	1549	-	-	1279	-	-	50	97	906	# 52	# 85	1052
Stage 1	-	-	-	-	-	-	808	741	-	141	# 193	-
Stage 2	-	-	-	-	-	-	111	193	-	617	677	-
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	1
Mov Capacity-1 Maneuver	1549	-	-	1279	-	-	-	# 44	906	-	# 39	1052
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	# 44	-	-	# 39	-
Stage 1	-	-	-	-	-	-	808	741	-	141	# 87	-
Stage 2	-	-	-	-	-	-	-	87	-	410	677	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	10.2	-	-
HCM LOS	A	B	-	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	-	168							-	40
HCM Control Delay (s)	-	$ 452	0	-	-	11.163	0	-	-	$ 452
HCM Lane VC Ratio	-	1.852	-	-	-	0.547	-	-	-	13.776
HCM Lane LOS	-	F	A	-	-	B	A	-	-	F
HCM 95th Percentile Queue (veh)	-	22.98	0	-	-	3.461	-	-	-	66.967

Intersection	
Intersection Delay (sec/veh):	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	16	436	44	98	443	9	36	60	84	8	16	7
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	23	490	54	111	591	13	45	86	153	9	28	23
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	604	0	0	544	0	0	1095	1389	272	1154	1410	303
Stage 1	-	-	-	-	-	-	563	563	-	820	820	-
Stage 2	-	-	-	-	-	-	532	826	-	334	590	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1198	-	-	1271	-	-	383	234	*1273	*354	202	*1273
Stage 1	-	-	-	-	-	-	707	670	-	*491	455	-
Stage 2	-	-	-	-	-	-	743	490	-	*1273	611	-
Time blocked-Platoon(%)	15	-	-	15	-	-	27	27	15	27	27	15
Mov Capacity-1 Maneuver	1198	-	-	1271	-	-	291	198	*1273	*183	170	*1273
Mov Capacity-2 Maneuver	-	-	-	-	-	-	291	198	-	*183	170	-
Stage 1	-	-	-	-	-	-	687	651	-	*477	395	-
Stage 2	-	-	-	-	-	-	589	425	-	*946	594	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	1.6	32.9	21.7
HCM LOS	A	A	D	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*401							*183	*274
HCM Control Delay (s)	32.9	8.063	0.1	-	8.104	0.4	-	25.3	21.3
HCM Lane VC Ratio	0.707	0.019	-	-	0.088	-	-	0.033	0.197
HCM Lane LOS	D	A	A	-	A	A	-	D	C
HCM 95th Percentile Queue (veh)	5.313	0.058	-	-	0.288	-	-	0.102	0.717

Intersection	
Intersection Delay (sec/veh):	59.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	489	34	520	1281	41	461
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	596	41	598	1408	68	632
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	637	0	2517	319
Stage 1	-	-	-	-	617	-
Stage 2	-	-	-	-	1900	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	1206	-	# 23	*1237
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	106	-
Time blocked-Platoon(%)	-	-	18	-	18	18
Mov Capacity-1 Maneuver	-	-	1206	-	# 12	*1237
Mov Capacity-2 Maneuver	-	-	-	-	# 12	-
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	# 53	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	3.2	276.8
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*12	*1237				
HCM Control Delay (s)	$ 2734	10.9	-	-	10.881	-
HCM Lane VC Ratio	5.694	0.511	-	-	0.496	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th Percentile Queue (veh)	9.687	3.009	-	-	2.842	-

Intersection	
Intersection Delay (sec/veh):	23.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	9	14	57	14	72	11	225	107	125	422	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	0	18	23	76	28	122	17	326	126	181	480	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1342	1330	242	1288	1269	226	484	0	0	452	0	0
Stage 1	844	844	-	423	423	-	-	-	-	-	-	-
Stage 2	498	486	-	865	846	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	131	156	743	139	170	818	1038	-	-	1103	-	-
Stage 1	361	382	-	605	591	-	-	-	-	-	-	-
Stage 2	558	554	-	346	381	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	82	128	743	104	140	818	1038	-	-	1103	-	-
Mov Capacity-2 Maneuver	82	128	-	104	140	-	-	-	-	-	-	-
Stage 1	355	319	-	595	581	-	-	-	-	-	-	-
Stage 2	444	545	-	264	318	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	23.1	133.9	0.3	2.4
HCM LOS	C	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				240	209			
HCM Control Delay (s)	8.528	0	-	23.1	133.9	8.904	0	-
HCM Lane VC Ratio	0.017	-	-	0.172	1.082	0.164	-	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th Percentile Queue (veh)	0.051	-	-	0.609	10.333	0.587	-	-

Intersection	
Intersection Delay (sec/veh)	31.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	38	128	73	46	123	12	99	211	32	17	106	41
Peak Hour Factor	0.71	0.73	0.86	0.60	0.70	0.39	0.85	0.70	0.58	0.63	0.68	0.64
Heavy Vehicles(%)	3	3	2	15	5	9	0	3	0	20	2	0
Movement Flow Rate	54	175	85	77	176	31	116	301	55	27	156	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	23.1	22.8	48.3	19.8
HCM LOS	C	C	E	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	29%	16%	25%	10%
Volume Thru (%)	62%	54%	68%	65%
Volume Right (%)	9%	31%	7%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	342	239	181	164
Left Turning Volume	211	128	123	106
Through Volume	32	73	12	41
Right Turning Volume	99	38	46	17
Lane Flow Rate	473	314	283	247
Geometry Group	1	1	1	1
Degree of Utilization, X	0.916	0.645	0.616	0.537
Departure Headway, Hd	6.969	7.406	7.838	7.83
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	520	486	459	457
Service Time	5.046	5.498	5.933	5.93
HCM Lane V/C Ratio	0.91	0.646	0.617	0.54
HCM Control Delay	48.3	23.1	22.8	19.8
HCM Lane LOS	E	C	C	C
HCM 95th Percentile Queue	29.9	5.4	4.8	3.5

Intersection	
Intersection Delay (sec/veh)	67.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	8	3	6	205	0	7	21	270	39	15	1031	25
Peak Hour Factor	0.58	0.25	0.42	0.25	0.25	0.25	0.59	0.74	0.25	0.25	0.89	0.55
Heavy Vehicles(%)	57	0	20	3	0	0	0	0	6	38	1	0
Movement Flow Rate	14	12	14	820	0	28	36	365	156	60	1158	45
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	13.2	70.5	65.9	67.2
HCM LOS	B	F	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	0%	87%	0%	33%	0%	0%	0%	98%
Volume Right (%)	0%	13%	0%	67%	0%	100%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	21	309	8	9	205	7	15	1056
Left Turning Volume	0	270	0	3	0	0	0	1031
Through Volume	0	39	0	6	0	7	0	25
Right Turning Volume	21	0	8	0	205	0	15	0
Lane Flow Rate	36	521	14	26	820	28	60	1204
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0.082	1	0.043	0.067	1	0.055	0.149	1
Departure Headway, Hd	8.313	7.726	11.148	9.217	8.372	7.123	8.946	7.802
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	431	469	323	391	443	503	402	482
Service Time	6.053	5.466	8.85	6.919	6.113	4.864	6.682	5.539
HCM Lane V/C Ratio	0.084	1.111	0.043	0.066	1.851	0.056	0.149	2.498
HCM Control Delay	11.8	69.6	14.4	12.6	72.6	10.3	13.2	69.9
HCM Lane LOS	B	F	B	B	F	B	B	F
HCM 95th Percentile Queue	0.3	102.1	0.1	0.2	98.1	0.2	0.5	101.7

Intersection	
Intersection Delay (sec/veh):	237.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	97	6	34	0	77	69	21	468	6	41	395	65
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.42	0.54	0.25	0.59	0.66	0.79	0.90	0.31	0.69	0.89	0.85
Heavy Vehicles(%)	0	0	3	0	0	0	0	1	0	0	0	0
Movement Flow Rate	162	14	63	0	131	105	27	520	19	59	444	76
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1302	1193	482	1223	1222	530	520	0	0	539	0	0
Stage 1	600	600	-	584	584	-	-	-	-	-	-	-
Stage 2	702	593	-	639	638	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.327	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 139	188	582	158	181	553	1056	-	-	1040	-	-
Stage 1	491	493	-	501	502	-	-	-	-	-	-	-
Stage 2	432	497	-	468	474	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 33	166	582	120	160	553	1056	-	-	1040	-	-
Mov Capacity-2 Maneuver	# 33	166	-	120	160	-	-	-	-	-	-	-
Stage 1	473	453	-	482	483	-	-	-	-	-	-	-
Stage 2	246	479	-	371	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 1505.9	104.8	0.4	0.9
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				35	582	234			
HCM Control Delay (s)	8.497	0	-	$ 104.8	11.9	104.8	8.671	0	-
HCM Lane VC Ratio	0.025	-	-	5.027	0.108	1.005	0.057	-	-
HCM Lane LOS	A	A	-	F	B	F	A	A	-
HCM 95th Percentile Queue (veh)	0.077	-	-	20.792	0.362	9.455	0.182	-	-

Intersection	
Intersection Delay (sec/veh):	8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	27	131	0	0	388	68	0	1	0	137	2	48
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.72	0.25	0.25	0.58	0.83	0.25	0.25	0.25	0.82	0.50	0.72
Heavy Vehicles(%)	0	3	0	0	4	5	0	0	0	2	0	9
Movement Flow Rate	36	182	0	0	669	82	0	4	0	167	4	67
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	751	0	-	182	0	0	1000	1005	91	966	964	376
Stage 1	-	-	-	-	-	-	254	254	-	710	710	-
Stage 2	-	-	-	-	-	-	746	751	-	256	254	-
Follow-up Headway	2.2	-	0	2.2	-	-	3.5	4	3.3	3.518	4	3.381
Pot Capacity-1 Maneuver	868	-	0	1405	-	-	224	243	972	234	257	655
Stage 1	-	-	0	-	-	-	755	701	-	424	440	-
Stage 2	-	-	0	-	-	-	409	421	-	749	701	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	868	-	-	1405	-	-	192	233	972	224	246	655
Mov Capacity-2 Maneuver	-	-	-	-	-	-	192	233	-	224	246	-
Stage 1	-	-	-	-	-	-	724	672	-	406	440	-
Stage 2	-	-	-	-	-	-	364	421	-	714	672	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.5	0	20.7	43.6
HCM LOS	A	A	C	E

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	233						224	599
HCM Control Delay (s)	20.7	9.327	0	0	-	-	57	11.8
HCM Lane VC Ratio	0.017	0.041	-	-	-	-	0.746	0.118
HCM Lane LOS	C	A	A	A	-	-	F	B
HCM 95th Percentile Queue (veh)	0.052	0.13	-	0	-	-	5.12	0.399

Intersection	
Intersection Delay (sec/veh):	14.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	37	213	68	15	368	118	20	44	5	44	43	67
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.73	0.75	0.65	0.83	0.71	0.64	0.65	0.50	0.81	0.59	0.78
Heavy Vehicles(%)	0	8	0	0	2	5	11	0	0	0	13	4
Movement Flow Rate	46	292	91	23	443	166	31	68	10	54	73	86
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	609	0	0	383	0	0	1082	1085	192	1041	1047	305
Stage 1	-	-	-	-	-	-	430	430	-	572	572	-
Stage 2	-	-	-	-	-	-	652	655	-	469	475	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.599	4	3.3	3.5	4.117	3.336
Pot Capacity-1 Maneuver	979	-	-	1187	-	-	187	219	855	210	218	730
Stage 1	-	-	-	-	-	-	586	587	-	509	487	-
Stage 2	-	-	-	-	-	-	442	466	-	579	539	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	979	-	-	1187	-	-	114	205	855	147	204	730
Mov Capacity-2 Maneuver	-	-	-	-	-	-	114	205	-	147	204	-
Stage 1	-	-	-	-	-	-	558	559	-	485	478	-
Stage 2	-	-	-	-	-	-	324	457	-	479	514	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.9	0.3	53.4	66.1
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	177							252
HCM Control Delay (s)	53.4	8.857	0	-	8.093	0	-	66.1
HCM Lane VC Ratio	0.615	0.047	-	-	0.019	-	-	0.846
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th Percentile Queue (veh)	3.424	0.147	-	-	0.059	-	-	6.833

Intersection	
Intersection Delay (sec/veh):	154.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	68	0	21	0	0	1	173	219	0	1	61	558
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.81	0.25	0.25	0.75	0.38
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	0	11	11
Movement Flow Rate	136	0	84	0	0	4	692	270	0	4	81	1468
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	4	0	0	84	0	0	1091	318	42	451	358	2
Stage 1	-	-	-	-	-	-	314	314	-	2	2	-
Stage 2	-	-	-	-	-	-	777	4	-	449	356	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.5	4.009	3.3	3.5	4.099	3.399
Pot Capacity-1 Maneuver	1631	-	-	1526	-	-	# 194	600	1034	522	554	# 1056
Stage 1	-	-	-	-	-	-	701	658	-	1026	877	-
Stage 2	-	-	-	-	-	-	# 393	894	-	593	613	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1631	-	-	1526	-	-	-	547	1034	300	505	# 1056
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	547	-	300	505	-
Stage 1	-	-	-	-	-	-	# 639	600	-	936	877	-
Stage 2	-	-	-	-	-	-	-	894	-	297	559	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	4.6	0	-	272.4
HCM LOS	A	A	-	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							993
HCM Control Delay (s)	-	7.408	0	-	0	-	-	272.4
HCM Lane VC Ratio	-	0.083	-	-	-	-	-	1.565
HCM Lane LOS	-	A	A	-	A	-	-	F
HCM 95th Percentile Queue (veh)	-	0.273	-	-	0	-	-	77.603

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	6	62	23	10	47	340	970	53	87	259	16
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.38	0.63	0.64	0.71	0.75	0.75	0.70	0.81	0.69	0.64	0.69	0.70
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	1	1	0
Movement Flow Rate	8	10	97	32	13	63	486	1198	77	136	375	23
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	2237	2906	200	2674	2879	638	398	0	0	1275	0	0
Stage 1	659	659	-	2209	2209	-	-	-	-	-	-	-
Stage 2	1578	2247	-	465	670	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	24	16	814	# 11	17	424	1172	-	-	546	-	-
Stage 1	424	464	-	46	83	-	-	-	-	-	-	-
Stage 2	116	79	-	552	459	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	-	# 7	814	-	# 7	424	1172	-	-	546	-	-
Mov Capacity-2 Maneuver	-	# 7	-	-	# 7	-	-	-	-	-	-	-
Stage 1	248	348	-	# 27	49	-	-	-	-	-	-	-
Stage 2	42	46	-	355	345	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	-	-	3.2	3.9
HCM LOS	-	-	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				-	-			
HCM Control Delay (s)	10.228	0.6	-	-	-	13.765	0.5	-
HCM Lane VC Ratio	0.414	-	-	-	-	0.249	-	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th Percentile Queue (veh)	2.073	-	-	-	-	0.976	-	-

Intersection	
Intersection Delay (sec/veh):	13.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	251	36	36	997	0	0	0	0	34	0	297
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.69	0.56	0.73	0.87	0.25	0.25	0.25	0.25	0.58	0.25	0.79
Heavy Vehicles(%)	0	0	0	9	0	0	0	0	0	0	0	0
Movement Flow Rate	0	364	64	49	1146	0	0	0	0	59	0	376
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2		
Conflicting Flow Rate - All	1146	0	0	428	0	-				1390	~	573
Stage 1	-	-	-	-	-	-				1244	-	-
Stage 2	-	-	-	-	-	-				146	-	-
Follow-up Headway	3.1	-	-	3.19	-	0				3.8	0	3.9
Pot Capacity-1 Maneuver	338	-	-	707	-	0				153	0	400
Stage 1	-	-	-	-	-	0				137	0	-
Stage 2	-	-	-	-	-	0				779	0	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	338	-	-	707	-	-				145	-	400
Mov Capacity-2 Maneuver	-	-	-	-	-	-				145	-	-
Stage 1	-	-	-	-	-	-				137	-	-
Stage 2	-	-	-	-	-	-				779	-	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	0.4	61.2
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						145	400
HCM Control Delay (s)	0	-	-	10.473	-	45.7	63.6
HCM Lane VC Ratio	-	-	-	0.07	-	0.404	0.94
HCM Lane LOS	A	-	-	B	-	E	F
HCM 95th Percentile Queue (veh)	0	-	-	0.224	-	1.752	10.465

Intersection	
Intersection Delay (sec/veh):	16.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	211	76	0	781	150	253	0	32	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.76	0.76	0.25	0.86	0.74	0.85	0.25	0.70	0.25	0.25	0.25
Heavy Vehicles(%)	0	0	0	0	0	2	0	0	7	0	0	0
Movement Flow Rate	0	278	100	0	908	203	298	0	46	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	782	~	189
Stage 1	-	-	-	-	-	-	328	-	-
Stage 2	-	-	-	-	-	-	454	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.37
Pot Capacity-1 Maneuver	0	-	-	0	-	-	# 288	0	805
Stage 1	0	-	-	0	-	-	664	0	-
Stage 2	0	-	-	0	-	-	560	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	# 288	-	805
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 288	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	560	-	-

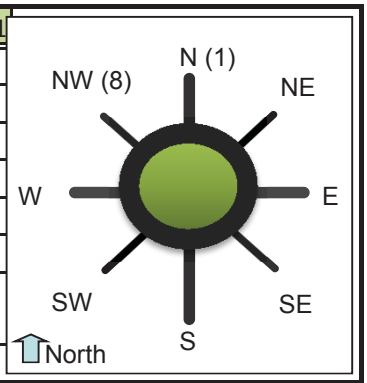
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	89.5
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	288	805				
HCM Control Delay (s)	101.7	9.7	-	-	-	-
HCM Lane VC Ratio	1.033	0.057	-	-	-	-
HCM Lane LOS	F	A	-	-	-	-
HCM 95th Percentile Queue (veh)	11.185	0.18	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States Base + Alt C AM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
Exit Legs (TO) N (1), vph					52			
NE (2), vph								
E (3), vph		106						
SE (4), vph								
S (5), vph	252							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	252	106	0	0	52	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		485						
NE (2), vph								
E (3), vph	338							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	338	485	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	2	2	2	2	1	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	57	0	527	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	115	0	0	0	367	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	274	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	389	0	57	0	895	0	0	0
	Entry flow Lane 1, pcu/h	274	0	57	0	367	0	0	0
	Entry flow Lane 2, pcu/h	115	0	0	0	527	0	0	0
	Conflicting flow, pcu/h	0	0	527	0	115	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	781	NA	1007	1007	NA	NA
Entry Flow Rates, veh/h	274	115	57	NA	367	527	NA	NA
V/C ratio	**0.24**	**0.10**	**0.07**		**0.36**	**0.52**		
Control Delay, s/veh	**5.4**	**4.1**	**5.3**		**7.4**	**10.1**		
LOS	A	A	A		A	B		
95th % Queue (ft)	**24**	**8**	**6**		**42**	**78**		
Approach Delay, LOS	5 sec, LOS A		5.3 sec, LOS A		9 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1020	NA	1283	1283	NA	NA
Entry Flow Rates, veh/h	274	115	57	NA	367	527	NA	NA
V/C ratio	**0.17**	**0.07**	**0.06**		**0.29**	**0.41**		
Control Delay, s/veh	**3.5**	**2.7**	**4.0**		**5.4**	**6.8**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**15**	**6**	**4**		**30**	**51**		
Approach Delay, LOS	3.2 sec, LOS A		4 sec, LOS A		6.2 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	261	23	25	362	511	144	924	637	146	130	33
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1889	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	828	382	73	768	298	596	898	763	56	510	210
Arriving On Green	0.03	0.24	0.00	0.02	0.22	0.00	0.47	0.47	0.00	0.14	0.14	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	1261.6	1900.0	1615.0	414.1	3777.5	1552.9
Grp Volume(v), veh/h	58.7	326.3	0.0	29.1	470.1	0.0	288.0	1320.0	0.0	162.2	146.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	1261.6	1900.0	1615.0	414.1	1888.7	1552.9
Q Serve(g_s), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Cycle Q Clear(g_c), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.5	828.4	381.7	73.0	768.0	298.2	596.4	898.2	763.4	55.9	510.2	209.7
V/C Ratio(X)	1.056	0.394	0.000	0.398	0.612	0.000	0.483	1.470	0.000	2.900	0.286	0.000
Avail Cap(c_a), veh/h	55.5	828.4	381.7	118.5	812.6	315.5	596.4	898.2	763.4	55.9	510.2	209.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.2	38.1	0.0	57.3	41.4	0.0	21.3	31.2	0.0	51.2	46.1	0.0
Incr Delay (d2), s/veh	137.4	0.3	0.0	3.5	1.2	0.0	0.6	217.4	0.0	901.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	194.6	38.4	0.0	60.7	42.6	0.0	21.9	248.7	0.0	953.0	46.4	0.0
Lane Group LOS	F	D		E	D		C	F		F	D	
Approach Volume, veh/h		385			499			1608			308	
Approach Delay, s/veh		62.2			43.7			208.1			523.4	
Approach LOS		E			D			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.00	32.00		6.46	30.46			60.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	28.00		4.00	28.00			56.00			16.00	
Max Q Clear Time (g_c+I1), s	6.00	11.29		2.97	16.57			58.00			18.00	
Green Extension Time (p_c)	0.00	4.95		0.00	4.06			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			193.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	547	27	244	670	418	156	1074	1324	310	233	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	322	784	361	315	644	294	252	1578	1230	261	1632	723
Arriving On Green	0.09	0.22	0.00	0.06	0.19	0.19	0.14	0.44	0.00	0.15	0.45	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	438.5	692.4	0.0	287.1	744.4	464.4	222.9	1512.7	0.0	344.4	261.8	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	12.0	24.8	0.0	7.3	25.0	25.0	15.7	52.7	0.0	20.0	5.6	0.0
Cycle Q Clear(g_c), s	12.0	24.8	0.0	7.3	25.0	25.0	15.7	52.7	0.0	20.0	5.6	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	321.6	783.7	361.1	314.8	644.3	293.7	252.1	1578.1	1230.2	260.8	1631.9	722.8
V/C Ratio(X)	1.363	0.884	0.000	0.912	1.155	1.581	0.884	0.959	0.000	1.321	0.160	0.000
Avail Cap(c_a), veh/h	321.6	783.7	361.1	314.8	644.3	293.7	362.8	1586.6	1236.8	260.8	1631.9	722.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	58.8	48.7	0.0	60.5	52.3	52.3	54.8	35.4	0.0	54.8	21.0	0.0
Incr Delay (d2), s/veh	182.4	11.7	0.0	29.3	86.7	277.4	16.4	14.0	0.0	168.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	241.2	60.4	0.0	89.8	139.0	329.7	71.2	49.3	0.0	223.5	21.0	0.0
Lane Group LOS	F	E		F	F	F	E	D		F	C	
Approach Volume, veh/h		1131			1496			1736			606	
Approach Delay, s/veh		130.5			188.8			52.1			136.1	
Approach LOS		F			F			D			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	16.00	33.00		12.00	29.00		22.07	60.70		24.00	62.63	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	12.00	29.00		8.00	25.00		26.00	57.00		20.00	51.00	
Max Q Clear Time (g_c+I1), s	14.00	26.79		9.25	27.00		17.68	54.65		22.00	7.56	
Green Extension Time (p_c)	0.00	1.88		0.00	0.00		0.39	2.05		0.00	20.92	

Intersection Summary												
HCM 2010 Control Delay			121.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	287	28	28	96	250	10	434	23	26	92	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1745	1745	1900	1854	1854	1900	1898	1898	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	471	676	67	121	89	284	33	487	23	47	526	451
Arriving On Green	0.27	0.43	0.43	0.07	0.23	0.23	0.02	0.27	0.27	0.03	0.28	0.28
Sat Flow, veh/h	1739.9	1562.8	154.7	1809.5	390.4	1244.1	1809.5	1797.6	85.6	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	576.3	0.0	457.1	47.5	0.0	490.2	16.9	0.0	640.4	30.2	108.2	10.4
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1717.5	1809.5	0.0	1634.5	1809.5	0.0	1883.2	1756.8	1881.2	1615.0
Q Serve(g_s), s	32.0	0.0	24.3	3.0	0.0	27.0	1.1	0.0	32.0	2.0	5.2	0.6
Cycle Q Clear(g_c), s	32.0	0.0	24.3	3.0	0.0	27.0	1.1	0.0	32.0	2.0	5.2	0.6
Proportion In Lane	1.000		0.090	1.000		0.761	1.000		0.045	1.000		1.000
Lane Grp Cap(c), veh/h	471.3	0.0	742.9	120.9	0.0	373.5	32.7	0.0	510.1	46.8	525.7	451.3
V/C Ratio(X)	1.223	0.000	0.615	0.393	0.000	1.312	0.519	0.000	1.256	0.646	0.206	0.023
Avail Cap(c_a), veh/h	471.3	0.0	742.9	153.2	0.0	373.5	76.6	0.0	510.1	74.3	525.7	451.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	43.1	0.0	25.9	52.8	0.0	45.6	57.5	0.0	43.1	56.9	32.5	30.9
Incr Delay (d2), s/veh	118.1	0.0	3.8	2.1	0.0	158.5	12.1	0.0	130.3	14.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	161.1	0.0	29.7	54.9	0.0	204.1	69.6	0.0	173.4	70.9	32.7	30.9
Lane Group LOS	F		C	D		F	E		F	E	C	C
Approach Volume, veh/h		1033			538			657			149	
Approach Delay, s/veh		103.0			190.9			170.7			40.4	
Approach LOS		F			F			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	38.00	57.11		13.89	33.00		8.13	38.00		9.15	39.01	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	32.00	49.00		10.00	27.00		5.00	32.00		5.00	32.00	
Max Q Clear Time (g_c+I1), s	34.00	26.31		4.97	29.00		3.10	34.00		4.01	7.20	
Green Extension Time (p_c)	0.00	11.84		0.03	0.00		0.00	0.00		0.00	5.45	

Intersection Summary			
HCM 2010 Control Delay			137.7
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	858	122	256	214	42	57	44	369	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1866	1866	1866	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	59	1155	188	352	1828	365	350	513	428	439	409	57
Arriving On Green	0.40	0.40	0.40	0.13	0.59	0.59	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	75.0	2935.5	471.4	1791.6	3076.8	614.7	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	611.2	0.0	549.9	301.2	150.3	145.7	64.8	50.0	519.7	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1795.8	0.0	1615.0	1791.6	1900.0	1791.5	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	9.8	0.0	26.6	7.9	3.0	3.1	3.7	1.7	24.3	14.3	0.0	5.9
Cycle Q Clear(g_c), s	26.2	0.0	26.6	7.9	3.0	3.1	9.6	1.7	24.3	16.0	0.0	5.9
Proportion In Lane	0.042		0.292	1.000		0.343	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	758.4	0.0	642.7	352.2	1128.6	1064.2	350.4	513.0	427.9	439.1	0.0	466.5
V/C Ratio(X)	0.806	0.000	0.856	0.855	0.133	0.137	0.185	0.097	1.215	0.566	0.000	0.308
Avail Cap(c_a), veh/h	800.5	0.0	685.9	419.0	1223.5	1153.7	350.4	513.0	427.9	439.1	0.0	466.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	23.2	0.0	23.6	17.7	7.7	7.7	27.9	22.6	30.7	28.5	0.0	24.1
Incr Delay (d2), s/veh	6.8	0.0	11.1	20.2	0.1	0.1	1.2	0.4	116.4	5.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	30.0	0.0	34.7	38.0	7.8	7.8	29.0	23.0	147.1	33.7	0.0	25.8
Lane Group LOS	C		C	D	A	A	C	C	F	C		C
Approach Volume, veh/h		1161			597			634			392	
Approach Delay, s/veh		32.2			23.0			125.2			30.8	
Approach LOS		C			C			F			C	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		40.11		16.80	56.92			28.80			28.80	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		36.20		14.00	55.20			24.30			24.30	
Max Q Clear Time (g_c+I1), s		28.64		9.87	5.08			26.30			18.01	
Green Extension Time (p_c)		6.47		0.94	28.77			0.00			3.43	

Intersection Summary			
HCM 2010 Control Delay			51.2
HCM 2010 Level of Service			D

Intersection	
Intersection Delay (sec/veh):	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	306	0	1	612	12	1	0	1	8	0	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	4	348	0	1	827	36	4	0	1	32	0	20
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	863	0	0	348	0	0	1213	~	348	1204	1203	432
Stage 1	-	-	-	-	-	-	356	-	-	847	847	-
Stage 2	-	-	-	-	-	-	857	-	-	357	356	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	788	-	-	1178	-	-	160	0	700	162	186	628
Stage 1	-	-	-	-	-	-	666	0	-	359	381	-
Stage 2	-	-	-	-	-	-	355	0	-	665	633	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	788	-	-	1178	-	-	154	-	700	161	185	628
Mov Capacity-2 Maneuver	-	-	-	-	-	-	154	-	-	161	185	-
Stage 1	-	-	-	-	-	-	662	-	-	357	380	-
Stage 2	-	-	-	-	-	-	343	-	-	660	629	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.1	0	24.3	25.7
HCM LOS	A	A	C	D

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	154	700							225
HCM Control Delay (s)	29	10.2	9.592	0	-	8.06	-	-	25.7
HCM Lane VC Ratio	0.026	0.002	0.005	-	-	0.001	-	-	0.231
HCM Lane LOS	D	B	A	A	-	A	-	-	D
HCM 95th Percentile Queue (veh)	0.08	0.006	0.015	-	-	0.003	-	-	0.867

Intersection	
Intersection Delay (sec/veh):	16

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	440	0	0	3	0	69	0	1288	5	255	115	41
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	880	0	0	3	0	75	0	1741	5	277	142	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	2500	2465	94	2369	2486	1744	188	0	0	1746	0	0
Stage 1	719	719	-	1744	1744	-	-	-	-	-	-	-
Stage 2	1781	1746	-	625	742	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	# 15	30	913	18	29	76	1398	-	-	356	-	-
Stage 1	# 390	431	-	90	139	-	-	-	-	-	-	-
Stage 2	# 87	139	-	439	420	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 0	4	913	5	4	76	1398	-	-	356	-	-
Mov Capacity-2 Maneuver	# 0	4	-	5	4	-	-	-	-	-	-	-
Stage 1	# 390	54	-	90	139	-	-	-	-	-	-	-
Stage 2	# 1	139	-	55	53	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	-	$ 496	0	25.6
HCM LOS	-	F	A	D

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				0	48			
HCM Control Delay (s)	0	-	-	-	$ 496	42.913	-	-
HCM Lane VC Ratio	-	-	-	-	1.63	0.779	-	-
HCM Lane LOS	A	-	-	-	F	E	-	-
HCM 95th Percentile Queue (veh)	0	-	-	-	7.629	6.396	-	-

Intersection	
Intersection Delay (sec/veh):	276.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	90	16	111	32	6	36	352	529	27	67	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	72	138	22	126	45	8	62	424	705	61	71	0
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	53	0	0	160	0	0	630	598	80	1159	605	-
Stage 1	-	-	-	-	-	-	293	293	-	301	301	-
Stage 2	-	-	-	-	-	-	337	305	-	858	304	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	0
Pot Capacity-1 Maneuver	1568	-	-	1419	-	-	398	# 419	980	155	412	0
Stage 1	-	-	-	-	-	-	719	674	-	662	666	0
Stage 2	-	-	-	-	-	-	683	666	-	320	663	0
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	0
Mov Capacity-1 Maneuver	1568	-	-	1419	-	-	305	# 364	980	-	358	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	305	# 364	-	-	358	-
Stage 1	-	-	-	-	-	-	686	643	-	632	607	-
Stage 2	-	-	-	-	-	-	550	607	-	# 29	633	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.3	5.5	$ 401	-
HCM LOS	A	A	F	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	305	599							-	-
HCM Control Delay (s)	19.8	$ 421.9	7.406	0	-	7.784	0	-	-	-
HCM Lane VC Ratio	0.204	1.886	0.046	-	-	0.089	-	-	-	-
HCM Lane LOS	C	F	A	A	-	A	A	-	-	-
HCM 95th Percentile Queue (veh)	0.748	72.172	0.144	-	-	0.292	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	12.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	440	36	86	243	1	41	30	146	25	86	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	1	494	44	98	324	1	51	43	265	28	148	33
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	325	0	0	538	0	0	950	1039	269	792	1061	163
Stage 1	-	-	-	-	-	-	518	518	-	521	521	-
Stage 2	-	-	-	-	-	-	432	521	-	271	540	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1246	-	-	1278	-	-	317	311	*1273	*459	271	721
Stage 1	-	-	-	-	-	-	760	705	-	*512	485	-
Stage 2	-	-	-	-	-	-	546	530	-	*1273	651	-
Time blocked-Platoon(%)	0	-	-	15	-	-	15	15	15	15	15	0
Mov Capacity-1 Maneuver	1246	-	-	1278	-	-	147	282	*1273	*298	245	721
Mov Capacity-2 Maneuver	-	-	-	-	-	-	147	282	-	*298	245	-
Stage 1	-	-	-	-	-	-	760	705	-	*511	439	-
Stage 2	-	-	-	-	-	-	312	480	-	*945	650	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	2	27.6	39.5
HCM LOS	A	A	D	E

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*507							*298	*280
HCM Control Delay (s)	27.6	7.893	0	-	8.05	0.2	-	17.9	41.6
HCM Lane VC Ratio	0.709	0.001	-	-	0.076	-	-	0.064	0.682
HCM Lane LOS	D	A	A	-	A	A	-	C	E
HCM 95th Percentile Queue (veh)	5.609	0.003	-	-	0.248	-	-	0.202	4.569

Intersection						
Intersection Delay (sec/veh): $ 359.3						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1333	89	382	496	14	782
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	1626	107	439	545	23	1071
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1733	0	2831	867
Stage 1	-	-	-	-	1680	-
Stage 2	-	-	-	-	1151	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	# 369	-	# 14	# 298
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	268	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	# 369	-	# 14	# 298
Mov Capacity-2 Maneuver	-	-	-	-	# 14	-
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	268	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	63.1	$ 1194.3
HCM LOS	A	F	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	14	298				
HCM Control Delay (s)	$ 876.2	$ 1201.2	-	-	141.453	-
HCM Lane VC Ratio	1.667	3.595	-	-	1.19	-
HCM Lane LOS	F	F	-	-	F	-
HCM 95th Percentile Queue (veh)	3.598	100.645	-	-	17.939	-

Intersection	
Intersection Delay (sec/veh):	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	52	11	83	6	370	92	25	143	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	69	22	141	10	536	108	36	162	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	929	901	84	851	849	322	167	0	0	644	0	0
Stage 1	237	237	-	610	610	-	-	-	-	-	-	-
Stage 2	692	664	-	241	239	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	250	280	915	278	300	724	1364	-	-	936	-	-
Stage 1	771	713	-	478	488	-	-	-	-	-	-	-
Stage 2	437	461	-	758	711	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	183	267	915	263	286	724	1364	-	-	936	-	-
Mov Capacity-2 Maneuver	183	267	-	263	286	-	-	-	-	-	-	-
Stage 1	765	686	-	474	484	-	-	-	-	-	-	-
Stage 2	334	458	-	721	684	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	19.9	22.4	0.1	1.6
HCM LOS	C	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				253	434			
HCM Control Delay (s)	7.658	0	-	19.9	22.4	9.001	0	-
HCM Lane VC Ratio	0.007	-	-	0.046	0.535	0.039	-	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th Percentile Queue (veh)	0.021	-	-	0.144	3.072	0.121	-	-

Intersection	
Intersection Delay (sec/veh)	26.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	44	111	72	53	71	10	66	161	147	21	191	24
Peak Hour Factor	0.49	0.88	0.70	0.84	0.88	0.75	0.74	0.82	0.63	0.79	0.79	0.88
Heavy Vehicles(%)	0	3	0	0	3	0	0	4	4	10	2	0
Movement Flow Rate	90	126	103	63	81	13	89	196	233	27	242	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19.9	14.3	38.3	18.9
HCM LOS	C	B	E	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	18%	19%	40%	9%
Volume Thru (%)	43%	49%	53%	81%
Volume Right (%)	39%	32%	7%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	374	227	134	236
Left Turning Volume	161	111	71	191
Through Volume	147	72	10	24
Right Turning Volume	66	44	53	21
Lane Flow Rate	519	319	157	296
Geometry Group	1	1	1	1
Degree of Utilization, X	0.877	0.607	0.33	0.571
Departure Headway, Hd	6.212	6.854	7.573	6.952
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	586	529	476	520
Service Time	4.212	4.878	5.608	4.986
HCM Lane V/C Ratio	0.886	0.603	0.33	0.569
HCM Control Delay	38.3	19.9	14.3	18.9
HCM Lane LOS	E	C	B	C
HCM 95th Percentile Queue	20.6	4.6	1.5	4

Intersection	
Intersection Delay (sec/veh)	45.3
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	19	64	7	99	14	30	0	719	411	78	147	8
Peak Hour Factor	0.61	0.89	0.38	0.70	0.38	0.45	0.25	0.89	0.71	0.48	0.70	0.58
Heavy Vehicles(%)	18	4	0	2	0	0	0	1	4	4	3	0
Movement Flow Rate	31	72	18	141	37	67	0	808	579	163	210	14
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12.5	13.3	62.5	14.1
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	0%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	100%	64%	0%	90%	0%	32%	0%	95%
Volume Right (%)	0%	36%	0%	10%	0%	68%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	0	1130	19	71	99	44	78	155
Left Turning Volume	0	719	0	64	0	14	0	147
Through Volume	0	411	0	7	0	30	0	8
Right Turning Volume	0	0	19	0	99	0	78	0
Lane Flow Rate	0	1387	31	90	141	104	162	224
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0	1	0.076	0.199	0.319	0.204	0.332	0.423
Departure Headway, Hd	6.561	6.319	8.729	7.923	8.112	7.103	7.353	6.8
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	0	582	412	454	444	507	491	530
Service Time	4.298	4.056	6.454	5.648	5.835	4.825	5.081	4.528
HCM Lane V/C Ratio	0	2.383	0.075	0.198	0.318	0.205	0.33	0.423
HCM Control Delay	9.3	62.5	12.2	12.6	14.6	11.6	13.7	14.4
HCM Lane LOS	N	F	B	B	B	B	B	B
HCM 95th Percentile Queue	0	112.9	0.2	0.7	1.4	0.8	1.5	2.2

Intersection	
Intersection Delay (sec/veh):	153.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	127	32	26	1	23	59	7	501	2	77	447	43
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.78	0.52	0.25	0.63	0.81	0.75	0.85	0.50	0.65	0.90	0.86
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	0	0	0
Movement Flow Rate	184	41	50	4	37	73	9	589	4	118	497	50
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1422	1369	522	1413	1392	591	547	0	0	593	0	0
Stage 1	758	758	-	609	609	-	-	-	-	-	-	-
Stage 2	664	611	-	804	783	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 115	148	559	117	143	511	1033	-	-	993	-	-
Stage 1	402	418	-	486	488	-	-	-	-	-	-	-
Stage 2	453	487	-	380	407	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 65	121	559	68	117	511	1033	-	-	993	-	-
Mov Capacity-2 Maneuver	# 65	121	-	68	117	-	-	-	-	-	-	-
Stage 1	397	346	-	480	482	-	-	-	-	-	-	-
Stage 2	354	481	-	253	337	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 903.5	37.3	0.1	1.6
HCM LOS	F	E	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				71	559	221			
HCM Control Delay (s)	8.517	0	-	$ 37.3	12.1	37.3	9.116	0	-
HCM Lane VC Ratio	0.009	-	-	3.17	0.089	0.513	0.119	-	-
HCM Lane LOS	A	A	-	F	B	E	A	A	-
HCM 95th Percentile Queue (veh)	0.027	-	-	22.94	0.293	2.641	0.405	-	-

Intersection	
Intersection Delay (sec/veh):	12.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	50	492	0	1	122	192	0	0	1	129	1	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.83	0.25	0.25	0.60	0.82	0.25	0.25	0.25	0.74	0.25	0.47
Heavy Vehicles(%)	2	4	0	0	2	2	0	0	0	0	0	0
Movement Flow Rate	63	593	0	4	203	234	0	0	4	174	4	68
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	437	0	-	593	0	0	1083	1164	297	1049	1047	219
Stage 1	-	-	-	-	-	-	719	719	-	328	328	-
Stage 2	-	-	-	-	-	-	364	445	-	721	719	-
Follow-up Headway	2.218	-	0	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1123	-	0	993	-	-	197	196	747	207	230	826
Stage 1	-	-	0	-	-	-	423	436	-	689	651	-
Stage 2	-	-	0	-	-	-	659	578	-	422	436	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1123	-	-	993	-	-	170	184	747	196	216	826
Mov Capacity-2 Maneuver	-	-	-	-	-	-	170	184	-	196	216	-
Stage 1	-	-	-	-	-	-	399	412	-	650	648	-
Stage 2	-	-	-	-	-	-	599	576	-	396	412	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.8	0.1	9.8	65.2
HCM LOS	A	A	A	F

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	747						196	714
HCM Control Delay (s)	9.8	8.397	0	8.64	0	-	87.8	10.6
HCM Lane VC Ratio	0.005	0.056	-	0.004	-	-	0.889	0.101
HCM Lane LOS	A	A	A	A	A	-	F	B
HCM 95th Percentile Queue (veh)	0.016	0.179	-	0.012	-	-	6.843	0.335

Intersection	
Intersection Delay (sec/veh):	177.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	66	573	75	7	264	61	37	47	19	86	124	23
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.68	0.76	0.76	0.50	0.87	0.84	0.69	0.81	0.35	0.83	0.74	0.63
Heavy Vehicles(%)	17	2	6	17	3	2	6	7	0	0	0	0
Movement Flow Rate	97	754	99	14	303	73	54	58	54	104	168	37
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	376	0	0	853	0	0	1468	1402	427	1422	1415	189
Stage 1	-	-	-	-	-	-	998	998	-	368	368	-
Stage 2	-	-	-	-	-	-	470	404	-	1054	1047	-
Follow-up Headway	2.353	-	-	2.353	-	-	3.554	4.063	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1105	-	-	726	-	-	103	137	632	115	# 139	858
Stage 1	-	-	-	-	-	-	289	315	-	656	625	-
Stage 2	-	-	-	-	-	-	566	591	-	276	308	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1105	-	-	726	-	-	-	123	632	# 61	# 124	858
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	123	-	# 61	# 124	-
Stage 1	-	-	-	-	-	-	264	287	-	598	613	-
Stage 2	-	-	-	-	-	-	386	580	-	184	281	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.9	0.4	-	$ 1040.8
HCM LOS	A	A	-	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							99
HCM Control Delay (s)	-	8.571	0	-	10.056	0	-	$ -1
HCM Lane VC Ratio	-	0.088	-	-	0.019	-	-	3.108
HCM Lane LOS	-	A	A	-	B	A	-	F
HCM 95th Percentile Queue (veh)	-	0.288	-	-	0.059	-	-	29.94

Intersection	
Intersection Delay (sec/veh):	$ 693.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	497	0	154	0	0	0	32	33	0	0	176	91
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.25	0.25	0.25	0.25	0.25	0.50	0.81	0.25	0.25	0.66	0.50
Heavy Vehicles(%)	18	0	0	0	0	0	0	3	0	0	0	0
Movement Flow Rate	904	0	616	0	0	0	64	41	0	0	267	182
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	527	527	358	835	618	41	449	0	0	41	0	0
Stage 1	358	358	-	169	169	-	-	-	-	-	-	-
Stage 2	169	169	-	666	449	-	-	-	-	-	-	-
Follow-up Headway	3.662	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 437	459	691	289	408	1036	1122	-	-	1581	-	-
Stage 1	# 628	631	-	838	763	-	-	-	-	-	-	-
Stage 2	# 797	763	-	452	576	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 418	432	691	30	384	1036	1122	-	-	1581	-	-
Mov Capacity-2 Maneuver	# 418	432	-	30	384	-	-	-	-	-	-	-
Stage 1	# 592	631	-	789	719	-	-	-	-	-	-	-
Stage 2	# 751	719	-	49	576	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 946	0	5.1	0
HCM LOS	F	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				498	0			
HCM Control Delay (s)	8.403	0	-	$ 0	0	0	-	-
HCM Lane VC Ratio	0.057	-	-	3.051	-	-	-	-
HCM Lane LOS	A	A	-	F	A	A	-	-
HCM 95th Percentile Queue (veh)	0.181	-	-	132.021	-	0	-	-

Intersection	
Intersection Delay (sec/veh):	258.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	11	38	342	41	16	37	55	241	34	93	916	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.77	0.84	0.64	0.58	0.49	0.78	0.86	0.94	0.80	0.94	0.63
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	1	0	0
Movement Flow Rate	22	49	407	64	28	76	71	280	36	116	974	17
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1511	1673	496	1184	1663	158	991	0	0	316	0	0
Stage 1	1215	1215	-	440	440	-	-	-	-	-	-	-
Stage 2	296	458	-	744	1223	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	84	97	525	147	98	866	706	-	-	1248	-	-
Stage 1	195	256	-	571	581	-	-	-	-	-	-	-
Stage 2	694	570	-	377	254	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	49	79	525	# 14	80	866	706	-	-	1248	-	-
Mov Capacity-2 Maneuver	49	79	-	# 14	80	-	-	-	-	-	-	-
Stage 1	175	232	-	514	523	-	-	-	-	-	-	-
Stage 2	540	513	-	# 60	230	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 428.5	$ 2070.6	2.1	1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				259	33			
HCM Control Delay (s)	10.664	0.2	-	$ 2070.6	$ 2070.6	8.181	0.2	-
HCM Lane VC Ratio	0.1	-	-	1.847	5.065	0.093	-	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th Percentile Queue (veh)	0.331	-	-	32.892	19.917	0.307	-	-

Intersection	
Intersection Delay (sec/veh):	19.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	1001	199	73	270	0	0	0	0	161	2	116
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.87	0.80	0.68	0.73	0.25	0.25	0.25	0.25	0.83	0.50	0.61
Heavy Vehicles(%)	0	0	0	2	0	0	0	0	0	4	0	2
Movement Flow Rate	0	1151	249	107	370	0	0	0	0	194	4	190
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2	
Conflicting Flow Rate - All	370	0	0	1400	0	-			1044	1984	185
Stage 1	-	-	-	-	-	-			584	584	-
Stage 2	-	-	-	-	-	-			460	1400	-
Follow-up Headway	3.1	-	-	3.12	-	0			3.84	4	3.92
Pot Capacity-1 Maneuver	787	-	-	250	-	0			237	62	703
Stage 1	-	-	-	-	-	0			380	501	-
Stage 2	-	-	-	-	-	0			499	209	-
Time blocked-Platoon(%)	0	-	-	0	-	0			0	0	0
Mov Capacity-1 Maneuver	787	-	-	250	-	-			# 158	35	703
Mov Capacity-2 Maneuver	-	-	-	-	-	-			# 158	35	-
Stage 1	-	-	-	-	-	-			380	287	-
Stage 2	-	-	-	-	-	-			499	209	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	6.7	108.1
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						158	703
HCM Control Delay (s)	0	-	-	29.815	-	202.4	12
HCM Lane VC Ratio	-	-	-	0.429	-	1.228	0.271
HCM Lane LOS	A	-	-	D	-	F	B
HCM 95th Percentile Queue (veh)	0	-	-	2.027	-	11.069	1.094

Intersection	
Intersection Delay (sec/veh):	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	912	0	0	306	143	38	0	61	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.91	0.94	0.25	0.68	0.79	0.81	0.25	0.90	0.25	0.25	0.25
Heavy Vehicles(%)	0	1	1	0	0	3	0	0	4	0	0	0
Movement Flow Rate	0	1002	0	0	450	181	47	0	68	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	-	-	0	0	1227	~	501
Stage 1	-	-	-	-	-	-	1002	-	-
Stage 2	-	-	-	-	-	-	225	-	-
Follow-up Headway	0	-	0	0	-	-	3.5	0	3.34
Pot Capacity-1 Maneuver	0	-	0	0	-	-	137	0	510
Stage 1	0	-	0	0	-	-	264	0	-
Stage 2	0	-	0	0	-	-	763	0	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	137	-	510
Mov Capacity-2 Maneuver	-	-	-	-	-	-	137	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	763	-	-

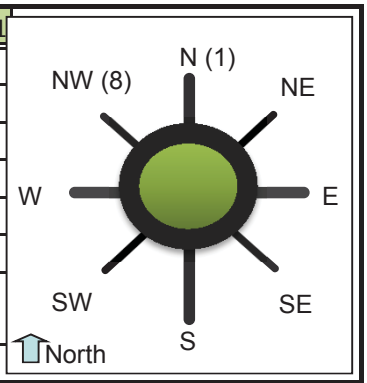
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	25.9
HCM LOS	A	A	D

Lane	NBLn1	NBLn2	EBT	WBT	WBR
Capacity (vph)	137	510			
HCM Control Delay (s)	44.4	13.1	-	-	-
HCM Lane VC Ratio	0.342	0.133	-	-	-
HCM Lane LOS	E	B	-	-	-
HCM 95th Percentile Queue (veh)	1.391	0.456	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Base + Alt C PM



Volumes

Entry Legs (FROM)

Exit Legs (TO)	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					134			
NE (2), vph								
E (3), vph		97						
SE (4), vph								
S (5), vph	583							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	583	97	0	0	134	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		204						
NE (2), vph								
E (3), vph	162							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	162	204	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	146	0	222	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	105	0	0	0	176	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	634	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	739	0	146	0	398	0	0	0
	Entry flow Lane 1, pcu/h	634	0	146	0	176	0	0	0
	Entry flow Lane 2, pcu/h	105	0	0	0	222	0	0	0
	Conflicting flow, pcu/h	0	0	222	0	105	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	968	NA	1017	1017	NA	NA
Entry Flow Rates, veh/h	634	105	146	NA	176	222	NA	NA
V/C ratio	**0.56**	**0.09**	**0.15**		**0.17**	**0.22**		
Control Delay, s/veh	**10.0**	**4.0**	**5.1**		**5.1**	**5.6**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**90**	**8**	**13**		**16**	**21**		
Approach Delay, LOS	9.1 sec, LOS A		5.1 sec, LOS A		5.4 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1343	NA	1296	1296	NA	NA
Entry Flow Rates, veh/h	634	105	146	NA	176	222	NA	NA
V/C ratio	**0.39**	**0.06**	**0.11**		**0.14**	**0.17**		
Control Delay, s/veh	**5.5**	**2.7**	**3.5**		**3.9**	**4.2**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**47**	**5**	**9**		**12**	**15**		
Approach Delay, LOS	5.1 sec, LOS A		3.5 sec, LOS A		4.1 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	409	191	416	373	80	30	308	78	279	1093	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1899	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	55	623	287	429	915	355	92	380	323	305	1224	500
Arriving On Green	0.03	0.18	0.00	0.12	0.27	0.00	0.20	0.20	0.00	0.32	0.32	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	461.1	1900.0	1615.0	945.3	3798.1	1552.9
Grp Volume(v), veh/h	45.3	511.3	0.0	483.7	484.4	0.0	60.0	440.0	0.0	310.0	1228.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	461.1	1900.0	1615.0	945.3	1899.1	1552.9
Q Serve(g_s), s	2.5	12.6	0.0	11.0	10.8	0.0	10.8	18.0	0.0	29.0	29.0	0.0
Cycle Q Clear(g_c), s	2.5	12.6	0.0	11.0	10.8	0.0	10.8	18.0	0.0	29.0	29.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.5	623.1	287.1	429.1	915.5	355.4	92.2	380.0	323.0	304.6	1223.8	500.4
V/C Ratio(X)	0.817	0.821	0.000	1.127	0.529	0.000	0.651	1.158	0.000	1.018	1.003	0.000
Avail Cap(c_a), veh/h	127.9	623.1	287.1	429.1	915.5	355.4	92.2	380.0	323.0	304.6	1223.8	500.4
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	43.2	35.6	0.0	39.5	28.2	0.0	33.1	36.0	0.0	30.5	30.5	0.0
Incr Delay (d2), s/veh	24.2	8.6	0.0	83.0	0.6	0.0	15.0	96.6	0.0	56.2	26.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	67.4	44.2	0.0	122.5	28.8	0.0	48.1	132.6	0.0	86.7	57.1	0.0
Lane Group LOS	E	D		F	C		D	F		F	F	
Approach Volume, veh/h		557			968			500			1538	
Approach Delay, s/veh		46.1			75.6			122.5			63.0	
Approach LOS		D			E			F			E	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	7.04	20.00		15.00	27.96			22.00			33.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	7.00	16.00		11.00	20.00			18.00			29.00	
Max Q Clear Time (g_c+I1), s	4.46	14.64		13.00	12.83			20.00			31.00	
Green Extension Time (p_c)	0.01	0.86		0.00	3.67			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			72.1									
HCM 2010 Level of Service			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	662	102	710	515	173	32	296	264	198	1254	366
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	237	828	382	861	1126	513	58	946	738	258	1381	612
Arriving On Green	0.07	0.24	0.00	0.17	0.34	0.34	0.03	0.26	0.00	0.15	0.38	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	163.1	838.0	0.0	835.3	572.2	192.2	45.7	416.9	0.0	220.0	1409.0	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Cycle Q Clear(g_c), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	236.9	828.3	381.7	861.4	1126.4	513.4	58.3	946.1	737.5	258.3	1381.3	611.8
V/C Ratio(X)	0.689	1.012	0.000	0.970	0.508	0.374	0.785	0.441	0.000	0.852	1.020	0.000
Avail Cap(c_a), veh/h	312.9	828.3	381.7	861.4	1126.4	513.4	81.5	946.1	737.5	399.7	1381.3	611.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	40.5	33.9	0.0	36.7	23.6	22.4	42.7	27.4	0.0	36.7	27.4	0.0
Incr Delay (d2), s/veh	4.1	34.2	0.0	23.4	0.4	0.5	27.4	0.3	0.0	10.2	29.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.5	68.1	0.0	60.1	23.9	22.8	70.1	27.7	0.0	46.9	56.8	0.0
Lane Group LOS	D	F		E	C	C	E	C		D	F	
Approach Volume, veh/h		1001			1600			463			1629	
Approach Delay, s/veh		64.3			42.7			31.9			55.5	
Approach LOS		E			D			C			E	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	10.06	25.00		19.00	33.94		6.86	27.29		17.57	38.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	8.00	21.00		15.00	28.00		4.00	17.00		21.00	34.00	
Max Q Clear Time (g_c+I1), s	6.08	23.00		16.46	14.17		4.23	10.56		13.26	36.00	
Green Extension Time (p_c)	0.09	0.00		0.00	8.50		0.00	5.28		0.37	0.00	

Intersection Summary												
HCM 2010 Control Delay			50.7									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	111	55	53	155	85	37	195	64	403	503	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1706	1706	1900	1841	1841	1900	1891	1891	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	127	193	97	181	213	143	81	253	75	474	762	654
Arriving On Green	0.07	0.18	0.18	0.03	0.07	0.07	0.04	0.18	0.18	0.27	0.41	0.41
Sat Flow, veh/h	1739.9	1072.2	539.1	1809.5	1028.8	690.5	1809.5	1404.1	414.2	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	241.8	89.8	0.0	315.9	62.7	0.0	355.7	468.6	591.8	279.2
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1611.2	1809.5	0.0	1719.3	1809.5	0.0	1818.3	1756.8	1881.2	1615.0
Q Serve(g_s), s	5.0	0.0	12.9	4.3	0.0	16.2	3.0	0.0	16.0	23.6	24.3	7.2
Cycle Q Clear(g_c), s	5.0	0.0	12.9	4.3	0.0	16.2	3.0	0.0	16.0	23.6	24.3	7.2
Proportion In Lane	1.000		0.335	1.000		0.402	1.000		0.228	1.000		1.000
Lane Grp Cap(c), veh/h	126.8	0.0	289.9	181.4	0.0	356.4	80.9	0.0	327.2	474.2	762.2	654.3
V/C Ratio(X)	0.788	0.000	0.834	0.495	0.000	0.886	0.775	0.000	1.087	0.988	0.776	0.427
Avail Cap(c_a), veh/h	195.7	0.0	289.9	203.5	0.0	356.4	101.8	0.0	327.2	474.2	762.2	654.3
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	40.5	0.0	35.2	40.8	0.0	40.4	42.0	0.0	36.5	32.3	22.9	8.0
Incr Delay (d2), s/veh	11.1	0.0	23.7	2.1	0.0	26.1	24.6	0.0	75.0	38.1	5.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	51.6	0.0	58.8	42.9	0.0	66.5	66.6	0.0	111.5	70.4	28.0	8.5
Lane Group LOS	D		E	D		E	E		F	E	C	A
Approach Volume, veh/h		342			406			418			1340	
Approach Delay, s/veh		56.7			61.2			104.7			38.8	
Approach LOS		E			E			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	12.48	22.00		14.91	24.43		9.98	22.00		30.00	42.02	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	10.00	16.00		10.00	16.00		5.00	16.00		24.00	35.00	
Max Q Clear Time (g_c+I1), s	7.03	14.87		6.34	18.20		5.05	18.00		25.61	26.27	
Green Extension Time (p_c)	0.05	0.59		0.05	0.00		0.00	0.00		0.00	4.59	

Intersection Summary	
HCM 2010 Control Delay	55.9
HCM 2010 Level of Service	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	333	86	264	915	173	135	127	124	66	50	17
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1869	1869	1869	1881	1900	1900	1863	1810	1776	1863	1601	1601
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	94	905	266	634	1888	369	359	493	411	339	209	193
Arriving On Green	0.84	0.84	0.84	0.13	0.61	0.61	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	195.2	1968.1	635.8	1791.6	3090.2	603.3	1284.6	1809.5	1509.3	1238.8	768.7	707.2
Grp Volume(v), veh/h	245.0	0.0	282.8	310.6	645.5	612.2	153.4	144.3	174.6	94.3	0.0	104.3
Grp Sat Flow(s),veh/h/ln	1321.8	0.0	1588.8	1791.6	1900.0	1793.5	1284.6	1809.5	1509.3	1238.8	0.0	1476.0
Q Serve(g_s), s	0.0	0.0	4.0	8.2	18.0	18.1	9.6	5.7	8.6	5.9	0.0	5.0
Cycle Q Clear(g_c), s	2.6	0.0	4.0	8.2	18.0	18.1	14.5	5.7	8.6	11.5	0.0	5.0
Proportion In Lane	0.148		0.400	1.000		0.336	1.000		1.000	1.000		0.479
Lane Grp Cap(c), veh/h	599.7	0.0	665.7	634.2	1161.1	1096.0	358.6	492.6	410.9	339.1	0.0	401.8
V/C Ratio(X)	0.408	0.000	0.425	0.490	0.556	0.559	0.428	0.293	0.425	0.278	0.000	0.260
Avail Cap(c_a), veh/h	599.7	0.0	665.7	708.1	1161.1	1096.0	358.6	492.6	410.9	339.1	0.0	401.8
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	4.4	0.0	4.6	10.5	10.3	10.3	31.3	25.9	27.0	30.5	0.0	25.6
Incr Delay (d2), s/veh	1.0	0.0	0.9	2.1	1.0	1.1	3.7	1.5	3.2	2.0	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	5.4	0.0	5.5	12.7	11.3	11.4	35.0	27.4	30.2	32.5	0.0	27.2
Lane Group LOS	A		A	B	B	B	D	C	C	C		C
Approach Volume, veh/h		528			1568			472			199	
Approach Delay, s/veh		5.4			11.6			30.9			29.7	
Approach LOS		A			B			C			C	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		43.71		17.29	61.00			29.00			29.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		35.00		15.00	55.00			24.50			24.50	
Max Q Clear Time (g_c+I1), s		6.03		10.18	20.14			16.54			13.54	
Green Extension Time (p_c)		23.68		1.12	27.59			2.94			3.63	

Intersection Summary	
HCM 2010 Control Delay	15.0
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	630	104	215	220	5	1	0	7	0	1	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	0	716	132	295	297	15	4	0	9	0	4	4
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	312	0	0	848	0	0	1681	~	782	1682	1743	157
Stage 1	-	-	-	-	-	-	782	-	-	895	895	-
Stage 2	-	-	-	-	-	-	899	-	-	787	848	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1260	-	-	764	-	-	76	0	397	76	88	894
Stage 1	-	-	-	-	-	-	390	0	-	338	362	-
Stage 2	-	-	-	-	-	-	336	0	-	388	380	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1260	-	-	764	-	-	45	-	397	47	47	894
Mov Capacity-2 Maneuver	-	-	-	-	-	-	45	-	-	47	47	-
Stage 1	-	-	-	-	-	-	390	-	-	338	193	-
Stage 2	-	-	-	-	-	-	174	-	-	379	380	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	6.1	37.8	49.4
HCM LOS	A	A	E	E

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	45	397							89
HCM Control Delay (s)	92.7	14.3	0	-	-	12.637	-	-	49.4
HCM Lane VC Ratio	0.089	0.024	-	-	-	0.385	-	-	0.09
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th Percentile Queue (veh)	0.278	0.072	0	-	-	1.825	-	-	0.288

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	9	0	37	0	2	7	1	309	1	15	1103	313
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	18	0	63	0	2	8	4	418	1	16	1362	348
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	2000	1995	855	1140	2169	419	1710	0	0	419	0	0
Stage 1	1568	1568	-	427	427	-	-	-	-	-	-	-
Stage 2	432	427	-	713	1742	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	36	60	282	156	46	583	376	-	-	1137	-	-
Stage 1	118	170	-	576	584	-	-	-	-	-	-	-
Stage 2	577	584	-	389	139	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	34	59	282	120	45	583	376	-	-	1137	-	-
Mov Capacity-2 Maneuver	34	59	-	120	45	-	-	-	-	-	-	-
Stage 1	116	170	-	568	576	-	-	-	-	-	-	-
Stage 2	559	576	-	302	139	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	103.7	29.1	0.1	0.1
HCM LOS	F	D	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				107	159			
HCM Control Delay (s)	14.677	0	-	103.7	29.1	8.212	-	-
HCM Lane VC Ratio	0.011	-	-	0.754	0.062	0.014	-	-
HCM Lane LOS	B	A	-	F	D	A	-	-
HCM 95th Percentile Queue (veh)	0.032	-	-	4.099	0.195	0.044	-	-

Intersection	
Intersection Delay (sec/veh):	$ 323.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	73	123	439	38	10	8	34	159	26	325	3
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	0	112	171	499	54	13	14	41	212	59	342	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	67	0	0	283	0	0	1432	1263	142	1383	1342	34
Stage 1	-	-	-	-	-	-	198	198	-	1059	1059	-
Stage 2	-	-	-	-	-	-	1234	1065	-	324	283	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	3.3
Pot Capacity-1 Maneuver	1551	-	-	1279	-	-	112	170	906	107	# 152	1053
Stage 1	-	-	-	-	-	-	808	741	-	244	# 300	-
Stage 2	-	-	-	-	-	-	217	300	-	640	677	-
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	1
Mov Capacity-1 Maneuver	1551	-	-	1279	-	-	-	104	906	# 41	# 92	1053
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	104	-	# 41	# 92	-
Stage 1	-	-	-	-	-	-	808	741	-	244	# 183	-
Stage 2	-	-	-	-	-	-	-	183	-	463	677	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	8.5	-	$ 1193.6
HCM LOS	A	A	-	F

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	-	403							41	94
HCM Control Delay (s)	-	27.8	0	-	-	9.603	0	-	$ -1	$ 27.8
HCM Lane VC Ratio	-	0.628	-	-	-	0.39	-	-	1.441	3.723
HCM Lane LOS	-	D	A	-	-	A	A	-	F	F
HCM 95th Percentile Queue (veh)	-	4.143	0	-	-	1.882	-	-	5.972	35.679

Intersection	
Intersection Delay (sec/veh):	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	16	448	44	63	542	9	36	60	80	8	16	7
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	23	503	54	72	723	13	45	86	145	9	28	23
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	736	0	0	557	0	0	1096	1456	279	1215	1477	369
Stage 1	-	-	-	-	-	-	576	576	-	874	874	-
Stage 2	-	-	-	-	-	-	520	880	-	341	603	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1139	-	-	1295	-	-	*429	221	*1246	*342	189	*1197
Stage 1	-	-	-	-	-	-	*739	687	-	*524	475	-
Stage 2	-	-	-	-	-	-	*1197	507	-	*1246	629	-
Time blocked-Platoon(%)	20	-	-	17	-	-	30	30	17	30	30	20
Mov Capacity-1 Maneuver	1139	-	-	1295	-	-	*334	194	*1246	*181	166	*1197
Mov Capacity-2 Maneuver	-	-	-	-	-	-	*334	194	-	*181	166	-
Stage 1	-	-	-	-	-	-	*717	666	-	*509	430	-
Stage 2	-	-	-	-	-	-	*995	459	-	*930	611	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	1	32.2	22.3
HCM LOS	A	A	D	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*398							*181	*267
HCM Control Delay (s)	32.2	8.225	0.1	-	7.943	0.3	-	25.6	21.9
HCM Lane VC Ratio	0.694	0.02	-	-	0.055	-	-	0.033	0.202
HCM Lane LOS	D	A	A	-	A	A	-	D	C
HCM 95th Percentile Queue (veh)	5.096	0.061	-	-	0.175	-	-	0.103	0.739

Intersection	
Intersection Delay (sec/veh):	54.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	492	34	492	1309	41	458
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	600	41	566	1438	68	627
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	641	0	2472	321
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	1851	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	1190	-	# 25	*1246
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	112	-
Time blocked-Platoon(%)	-	-	17	-	17	17
Mov Capacity-1 Maneuver	-	-	1190	-	# 13	*1246
Mov Capacity-2 Maneuver	-	-	-	-	# 13	-
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	# 59	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	3	254.6
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*13	*1246				
HCM Control Delay (s)	$ 2493.5	10.8	-	-	10.734	-
HCM Lane VC Ratio	5.256	0.504	-	-	0.475	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th Percentile Queue (veh)	9.589	2.932	-	-	2.628	-

Intersection	
Intersection Delay (sec/veh):	61.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	9	14	57	14	81	11	225	107	196	422	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	0	18	23	76	28	137	17	326	126	284	480	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1556	1536	242	1494	1475	226	484	0	0	452	0	0
Stage 1	1050	1050	-	423	423	-	-	-	-	-	-	-
Stage 2	506	486	-	1071	1052	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	93	117	743	100	128	818	1038	-	-	1103	-	-
Stage 1	277	307	-	605	591	-	-	-	-	-	-	-
Stage 2	552	554	-	265	306	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	48	85	743	# 65	93	818	1038	-	-	1103	-	-
Mov Capacity-2 Maneuver	48	85	-	# 65	93	-	-	-	-	-	-	-
Stage 1	272	228	-	595	581	-	-	-	-	-	-	-
Stage 2	430	545	-	176	227	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	32.8	$ 371.1	0.3	3.5
HCM LOS	D	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				170	147			
HCM Control Delay (s)	8.528	0	-	32.8	$ 371.1	9.392	0	-
HCM Lane VC Ratio	0.017	-	-	0.243	1.641	0.258	-	-
HCM Lane LOS	A	A	-	D	F	A	A	-
HCM 95th Percentile Queue (veh)	0.051	-	-	0.912	17.083	1.03	-	-

Intersection	
Intersection Delay (sec/veh)	39.5
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	38	128	82	46	123	12	170	207	32	17	71	41
Peak Hour Factor	0.71	0.73	0.86	0.60	0.70	0.39	0.85	0.70	0.58	0.63	0.68	0.64
Heavy Vehicles(%)	3	3	2	15	5	9	0	3	0	20	2	0
Movement Flow Rate	54	175	95	77	176	31	200	296	55	27	104	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	23.4	22.4	65.7	16.8
HCM LOS	C	C	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	42%	15%	25%	13%
Volume Thru (%)	51%	52%	68%	55%
Volume Right (%)	8%	33%	7%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	409	248	181	129
Left Turning Volume	207	128	123	71
Through Volume	32	82	12	41
Right Turning Volume	170	38	46	17
Lane Flow Rate	551	324	283	195
Geometry Group	1	1	1	1
Degree of Utilization, X	1	0.661	0.615	0.431
Departure Headway, Hd	6.924	7.344	7.821	7.941
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	529	496	467	455
Service Time	4.924	5.308	5.774	5.943
HCM Lane V/C Ratio	1.042	0.653	0.606	0.429
HCM Control Delay	65.7	23.4	22.4	16.8
HCM Lane LOS	F	C	C	C
HCM 95th Percentile Queue	108.2	5.8	4.8	2.3

Intersection	
Intersection Delay (sec/veh)	39.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	8	3	6	35	0	7	21	225	18	15	663	25
Peak Hour Factor	0.58	0.25	0.42	0.25	0.25	0.25	0.59	0.74	0.25	0.25	0.89	0.55
Heavy Vehicles(%)	57	0	20	3	0	0	0	0	6	38	1	0
Movement Flow Rate	14	12	14	140	0	28	36	304	72	60	745	45
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.1	13.4	18.3	56.7
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	0%	93%	0%	33%	0%	0%	0%	96%
Volume Right (%)	0%	7%	0%	67%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	21	243	8	9	35	7	15	688
Left Turning Volume	0	225	0	3	0	0	0	663
Through Volume	0	18	0	6	0	7	0	25
Right Turning Volume	21	0	8	0	35	0	15	0
Lane Flow Rate	36	376	14	26	140	28	60	790
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0.066	0.639	0.036	0.054	0.308	0.052	0.118	1
Departure Headway, Hd	6.671	6.12	9.267	7.338	7.91	6.663	7.055	5.886
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	538	590	387	489	456	539	509	617
Service Time	4.394	3.843	6.995	5.065	5.63	4.384	4.786	3.616
HCM Lane V/C Ratio	0.067	0.637	0.036	0.053	0.307	0.052	0.118	1.28
HCM Control Delay	9.9	19.1	12.3	10.5	14.1	9.8	10.7	60.2
HCM Lane LOS	A	C	B	B	B	A	B	F
HCM 95th Percentile Queue	0.2	5.3	0.1	0.2	1.3	0.2	0.4	117

Intersection	
Intersection Delay (sec/veh):	125.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	97	6	34	0	77	69	21	456	6	41	296	65
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.42	0.54	0.25	0.59	0.66	0.79	0.90	0.31	0.69	0.89	0.85
Heavy Vehicles(%)	0	0	3	0	0	0	0	1	0	0	0	0
Movement Flow Rate	162	14	63	0	131	105	27	507	19	59	333	76
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1178	1069	371	1099	1098	517	409	0	0	526	0	0
Stage 1	489	489	-	571	571	-	-	-	-	-	-	-
Stage 2	689	580	-	528	527	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.327	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	169	223	673	192	215	562	1161	-	-	1051	-	-
Stage 1	564	553	-	509	508	-	-	-	-	-	-	-
Stage 2	439	503	-	538	532	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 58	200	673	152	193	562	1161	-	-	1051	-	-
Mov Capacity-2 Maneuver	# 58	200	-	152	193	-	-	-	-	-	-	-
Stage 1	545	513	-	492	491	-	-	-	-	-	-	-
Stage 2	254	486	-	439	493	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 718.5	64.9	0.4	1.1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				62	673	273			
HCM Control Delay (s)	8.173	0	-	$ 64.9	10.9	64.9	8.63	0	-
HCM Lane VC Ratio	0.023	-	-	2.838	0.094	0.861	0.057	-	-
HCM Lane LOS	A	A	-	F	B	F	A	A	-
HCM 95th Percentile Queue (veh)	0.07	-	-	17.925	0.308	7.312	0.18	-	-

Intersection	
Intersection Delay (sec/veh):	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	27	110	0	0	218	68	0	1	0	137	2	48
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.72	0.25	0.25	0.58	0.83	0.25	0.25	0.25	0.82	0.50	0.72
Heavy Vehicles(%)	0	3	0	0	4	5	0	0	0	2	0	9
Movement Flow Rate	36	153	0	0	376	82	0	4	0	167	4	67
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	458	0	-	153	0	0	678	683	77	644	642	229
Stage 1	-	-	-	-	-	-	225	225	-	417	417	-
Stage 2	-	-	-	-	-	-	453	458	-	227	225	-
Follow-up Headway	2.2	-	0	2.2	-	-	3.5	4	3.3	3.518	4	3.381
Pot Capacity-1 Maneuver	1114	-	0	1440	-	-	369	374	990	386	395	793
Stage 1	-	-	0	-	-	-	782	721	-	613	595	-
Stage 2	-	-	0	-	-	-	590	570	-	776	721	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1114	-	-	1440	-	-	327	362	990	373	382	793
Mov Capacity-2 Maneuver	-	-	-	-	-	-	327	362	-	373	382	-
Stage 1	-	-	-	-	-	-	757	698	-	593	595	-
Stage 2	-	-	-	-	-	-	537	570	-	747	698	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.6	0	15.1	18.7
HCM LOS	A	A	C	C

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	362						373	747
HCM Control Delay (s)	15.1	8.339	0	0	-	-	22.3	10.3
HCM Lane VC Ratio	0.011	0.032	-	-	-	-	0.448	0.095
HCM Lane LOS	C	A	A	A	-	-	C	B
HCM 95th Percentile Queue (veh)	0.033	0.1	-	0	-	-	2.239	0.312

Intersection	
Intersection Delay (sec/veh):	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	33	196	68	15	234	189	20	44	5	53	43	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.73	0.75	0.65	0.83	0.71	0.64	0.65	0.50	0.81	0.59	0.78
Heavy Vehicles(%)	0	8	0	0	2	5	11	0	0	0	13	4
Movement Flow Rate	41	268	91	23	282	266	31	68	10	65	73	41
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	548	0	0	359	0	0	914	990	180	896	902	274
Stage 1	-	-	-	-	-	-	396	396	-	461	461	-
Stage 2	-	-	-	-	-	-	518	594	-	435	441	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.599	4	3.3	3.5	4.117	3.336
Pot Capacity-1 Maneuver	1032	-	-	1211	-	-	245	249	868	263	266	760
Stage 1	-	-	-	-	-	-	612	608	-	584	547	-
Stage 2	-	-	-	-	-	-	524	496	-	604	559	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1032	-	-	1211	-	-	172	235	868	194	251	760
Mov Capacity-2 Maneuver	-	-	-	-	-	-	172	235	-	194	251	-
Stage 1	-	-	-	-	-	-	588	584	-	561	537	-
Stage 2	-	-	-	-	-	-	420	487	-	507	537	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.9	0.3	34.9	43.7
HCM LOS	A	A	D	E

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	226							263
HCM Control Delay (s)	34.9	8.632	0	-	8.03	0	-	43.7
HCM Lane VC Ratio	0.482	0.039	-	-	0.019	-	-	0.682
HCM Lane LOS	D	A	A	-	A	A	-	E
HCM 95th Percentile Queue (veh)	2.399	0.123	-	-	0.058	-	-	4.497

Intersection	
Intersection Delay (sec/veh):	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	2	0	0	0	0	1	3	219	0	1	61	20
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.81	0.25	0.25	0.75	0.38
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	0	11	11
Movement Flow Rate	4	0	0	0	0	4	12	270	0	4	81	53
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	4	0	0	0	0	0	77	12	0	145	10	2
Stage 1	-	-	-	-	-	-	8	8	-	2	2	-
Stage 2	-	-	-	-	-	-	69	4	-	143	8	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.5	4.009	3.3	3.5	4.099	3.399
Pot Capacity-1 Maneuver	1631	-	-	-	-	-	917	885	-	828	867	1056
Stage 1	-	-	-	-	-	-	1019	891	-	1026	877	-
Stage 2	-	-	-	-	-	-	946	894	-	865	871	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1631	-	-	-	-	-	807	883	-	-	865	1056
Mov Capacity-2 Maneuver	-	-	-	-	-	-	807	883	-	-	865	-
Stage 1	-	-	-	-	-	-	1017	889	-	1024	877	-
Stage 2	-	-	-	-	-	-	815	894	-	601	869	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	7.2	0	-	-
HCM LOS	A	A	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	7.213	0	-	0	-	-	-
HCM Lane VC Ratio	-	0.002	-	-	-	-	-	-
HCM Lane LOS	-	A	A	-	A	-	-	-
HCM 95th Percentile Queue (veh)	-	0.007	-	-	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	158

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	6	41	23	10	47	170	1140	53	87	280	16
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.38	0.63	0.64	0.71	0.75	0.75	0.70	0.81	0.69	0.64	0.69	0.70
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	1	1	0
Movement Flow Rate	8	10	64	32	13	63	243	1407	77	136	406	23
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1886	2660	215	2412	2633	743	429	0	0	1484	0	0
Stage 1	690	690	-	1932	1932	-	-	-	-	-	-	-
Stage 2	1196	1970	-	480	701	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	44	23	796	# 18	24	362	1141	-	-	454	-	-
Stage 1	406	449	-	70	114	-	-	-	-	-	-	-
Stage 2	201	109	-	541	444	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	-	13	796	# 5	# 13	362	1141	-	-	454	-	-
Mov Capacity-2 Maneuver	-	13	-	# 5	# 13	-	-	-	-	-	-	-
Stage 1	320	314	-	55	90	-	-	-	-	-	-	-
Stage 2	111	86	-	338	311	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	-	$ 3567.3	1.6	4.5
HCM LOS	-	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				-	14			
HCM Control Delay (s)	9.006	0.4	-	-	$ 3567.3	16.283	0.8	-
HCM Lane VC Ratio	0.213	-	-	-	7.742	0.299	-	-
HCM Lane LOS	A	A	-	-	F	C	A	-
HCM 95th Percentile Queue (veh)	0.805	-	-	-	14.586	1.243	-	-

Intersection	
Intersection Delay (sec/veh):	13.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	251	36	36	997	0	0	0	0	34	0	297
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.69	0.56	0.73	0.87	0.25	0.25	0.25	0.25	0.58	0.25	0.79
Heavy Vehicles(%)	0	0	0	9	0	0	0	0	0	0	0	0
Movement Flow Rate	0	364	64	49	1146	0	0	0	0	59	0	376
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2		
Conflicting Flow Rate - All	1146	0	0	428	0	-				1390	~	573
Stage 1	-	-	-	-	-	-				1244	-	-
Stage 2	-	-	-	-	-	-				146	-	-
Follow-up Headway	3.1	-	-	3.19	-	0				3.8	0	3.9
Pot Capacity-1 Maneuver	338	-	-	707	-	0				153	0	400
Stage 1	-	-	-	-	-	0				137	0	-
Stage 2	-	-	-	-	-	0				779	0	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	338	-	-	707	-	-				145	-	400
Mov Capacity-2 Maneuver	-	-	-	-	-	-				145	-	-
Stage 1	-	-	-	-	-	-				137	-	-
Stage 2	-	-	-	-	-	-				779	-	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	0.4	61.2
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						145	400
HCM Control Delay (s)	0	-	-	10.473	-	45.7	63.6
HCM Lane VC Ratio	-	-	-	0.07	-	0.404	0.94
HCM Lane LOS	A	-	-	B	-	E	F
HCM 95th Percentile Queue (veh)	0	-	-	0.224	-	1.752	10.465

Intersection	
Intersection Delay (sec/veh):	16.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	211	76	0	781	150	253	0	32	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.76	0.76	0.25	0.86	0.74	0.85	0.25	0.70	0.25	0.25	0.25
Heavy Vehicles(%)	0	0	0	0	0	2	0	0	7	0	0	0
Movement Flow Rate	0	278	100	0	908	203	298	0	46	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	782	~	189
Stage 1	-	-	-	-	-	-	328	-	-
Stage 2	-	-	-	-	-	-	454	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.37
Pot Capacity-1 Maneuver	0	-	-	0	-	-	# 288	0	805
Stage 1	0	-	-	0	-	-	664	0	-
Stage 2	0	-	-	0	-	-	560	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	# 288	-	805
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 288	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	560	-	-

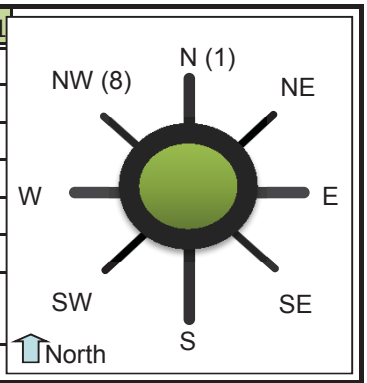
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	89.5
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	288	805				
HCM Control Delay (s)	101.7	9.7	-	-	-	-
HCM Lane VC Ratio	1.033	0.057	-	-	-	-
HCM Lane LOS	F	A	-	-	-	-
HCM 95th Percentile Queue (veh)	11.185	0.18	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Base + Alt D AM



Volumes

Entry Legs (FROM)

Exit Legs (TO)	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					48			
NE (2), vph								
E (3), vph		71						
SE (4), vph								
S (5), vph	264							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	264	71	0	0	48	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		584						
NE (2), vph								
E (3), vph	310							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	310	584	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	52	0	635	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	77	0	0	0	337	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	287	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	364	0	52	0	972	0	0	0
	Entry flow Lane 1, pcu/h	287	0	52	0	337	0	0	0
	Entry flow Lane 2, pcu/h	77	0	0	0	635	0	0	0
	Conflicting flow, pcu/h	0	0	635	0	77	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	725	NA	1046	1046	NA	NA
Entry Flow Rates, veh/h	287	77	52	NA	337	635	NA	NA
V/C ratio	**0.25**	**0.07**	**0.07**		**0.32**	**0.61**		
Control Delay, s/veh	**5.5**	**3.8**	**5.7**		**6.7**	**11.6**		
LOS	A	A	A		A	B		
95th % Queue (ft)	**25**	**5**	**6**		**35**	**107**		
Approach Delay, LOS	5.2 sec, LOS A		5.7 sec, LOS A		9.9 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	926	NA	1333	1333	NA	NA
Entry Flow Rates, veh/h	287	77	52	NA	337	635	NA	NA
V/C ratio	**0.17**	**0.05**	**0.06**		**0.25**	**0.48**		
Control Delay, s/veh	**3.5**	**2.5**	**4.4**		**4.9**	**7.5**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**16**	**4**	**4**		**25**	**66**		
Approach Delay, LOS	3.3 sec, LOS A		4.4 sec, LOS A		6.6 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	261	23	25	362	511	144	924	637	146	130	33
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1889	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	828	382	73	768	298	596	898	763	56	510	210
Arriving On Green	0.03	0.24	0.00	0.02	0.22	0.00	0.47	0.47	0.00	0.14	0.14	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	1261.6	1900.0	1615.0	414.1	3777.5	1552.9
Grp Volume(v), veh/h	58.7	326.3	0.0	29.1	470.1	0.0	288.0	1320.0	0.0	162.2	146.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	1261.6	1900.0	1615.0	414.1	1888.7	1552.9
Q Serve(g_s), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Cycle Q Clear(g_c), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.5	828.4	381.7	73.0	768.0	298.2	596.4	898.2	763.4	55.9	510.2	209.7
V/C Ratio(X)	1.056	0.394	0.000	0.398	0.612	0.000	0.483	1.470	0.000	2.900	0.286	0.000
Avail Cap(c_a), veh/h	55.5	828.4	381.7	118.5	812.6	315.5	596.4	898.2	763.4	55.9	510.2	209.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.2	38.1	0.0	57.3	41.4	0.0	21.3	31.2	0.0	51.2	46.1	0.0
Incr Delay (d2), s/veh	137.4	0.3	0.0	3.5	1.2	0.0	0.6	217.4	0.0	901.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	194.6	38.4	0.0	60.7	42.6	0.0	21.9	248.7	0.0	953.0	46.4	0.0
Lane Group LOS	F	D		E	D		C	F		F	D	
Approach Volume, veh/h		385			499			1608			308	
Approach Delay, s/veh		62.2			43.7			208.1			523.4	
Approach LOS		E			D			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.00	32.00		6.46	30.46			60.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	28.00		4.00	28.00			56.00			16.00	
Max Q Clear Time (g_c+I1), s	6.00	11.29		2.97	16.57			58.00			18.00	
Green Extension Time (p_c)	0.00	4.95		0.00	4.06			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			193.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	547	27	244	670	418	156	1074	1324	310	233	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	322	784	361	315	644	294	252	1578	1230	261	1632	723
Arriving On Green	0.09	0.22	0.00	0.06	0.19	0.19	0.14	0.44	0.00	0.15	0.45	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	438.5	692.4	0.0	287.1	744.4	464.4	222.9	1512.7	0.0	344.4	261.8	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	12.0	24.8	0.0	7.3	25.0	25.0	15.7	52.7	0.0	20.0	5.6	0.0
Cycle Q Clear(g_c), s	12.0	24.8	0.0	7.3	25.0	25.0	15.7	52.7	0.0	20.0	5.6	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	321.6	783.7	361.1	314.8	644.3	293.7	252.1	1578.1	1230.2	260.8	1631.9	722.8
V/C Ratio(X)	1.363	0.884	0.000	0.912	1.155	1.581	0.884	0.959	0.000	1.321	0.160	0.000
Avail Cap(c_a), veh/h	321.6	783.7	361.1	314.8	644.3	293.7	362.8	1586.6	1236.8	260.8	1631.9	722.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	58.8	48.7	0.0	60.5	52.3	52.3	54.8	35.4	0.0	54.8	21.0	0.0
Incr Delay (d2), s/veh	182.4	11.7	0.0	29.3	86.7	277.4	16.4	14.0	0.0	168.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	241.2	60.4	0.0	89.8	139.0	329.7	71.2	49.3	0.0	223.5	21.0	0.0
Lane Group LOS	F	E		F	F	F	E	D		F	C	
Approach Volume, veh/h		1131			1496			1736			606	
Approach Delay, s/veh		130.5			188.8			52.1			136.1	
Approach LOS		F			F			D			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	16.00	33.00		12.00	29.00		22.07	60.70		24.00	62.63	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	12.00	29.00		8.00	25.00		26.00	57.00		20.00	51.00	
Max Q Clear Time (g_c+I1), s	14.00	26.79		9.25	27.00		17.68	54.65		22.00	7.56	
Green Extension Time (p_c)	0.00	1.88		0.00	0.00		0.39	2.05		0.00	20.92	

Intersection Summary												
HCM 2010 Control Delay			121.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	128	28	28	68	358	10	498	23	45	103	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1730	1730	1900	1858	1858	1900	1898	1898	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	407	575	128	120	54	350	33	500	21	67	557	478
Arriving On Green	0.23	0.42	0.42	0.07	0.25	0.25	0.02	0.28	0.28	0.04	0.30	0.30
Sat Flow, veh/h	1739.9	1372.0	304.5	1809.5	216.5	1395.1	1809.5	1810.1	75.1	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	576.3	0.0	226.7	47.5	0.0	617.3	16.9	0.0	730.5	52.3	121.2	10.4
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1676.6	1809.5	0.0	1611.6	1809.5	0.0	1885.2	1756.8	1881.2	1615.0
Q Serve(g_s), s	28.0	0.0	10.9	3.0	0.0	30.0	1.1	0.0	33.0	3.5	5.8	0.5
Cycle Q Clear(g_c), s	28.0	0.0	10.9	3.0	0.0	30.0	1.1	0.0	33.0	3.5	5.8	0.5
Proportion In Lane	1.000		0.182	1.000		0.866	1.000		0.040	1.000		1.000
Lane Grp Cap(c), veh/h	407.5	0.0	702.1	120.1	0.0	404.4	32.6	0.0	520.4	67.0	557.1	478.3
V/C Ratio(X)	1.414	0.000	0.323	0.395	0.000	1.526	0.520	0.000	1.404	0.781	0.218	0.022
Avail Cap(c_a), veh/h	407.5	0.0	702.1	151.4	0.0	404.4	75.7	0.0	520.4	73.5	557.1	478.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	45.8	0.0	23.4	53.5	0.0	44.8	58.2	0.0	43.3	57.0	31.7	29.8
Incr Delay (d2), s/veh	200.4	0.0	1.2	2.1	0.0	249.1	12.3	0.0	193.1	38.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	246.2	0.0	24.6	55.6	0.0	293.9	70.4	0.0	236.3	95.0	31.8	29.8
Lane Group LOS	F		C	E		F	E		F	F	C	C
Approach Volume, veh/h		803			665			747			184	
Approach Delay, s/veh		183.6			276.9			232.6			49.7	
Approach LOS		F			F			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	34.00	56.07		13.93	36.00		8.15	39.00		10.56	41.41	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	28.00	48.00		10.00	30.00		5.00	33.00		5.00	33.00	
Max Q Clear Time (g_c+I1), s	30.00	12.86		5.01	32.00		3.11	35.00		5.53	7.79	
Green Extension Time (p_c)	0.00	13.77		0.03	0.00		0.00	0.00		0.00	6.56	

Intersection Summary			
HCM 2010 Control Delay			214.5
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	916	122	250	224	42	57	44	337	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1866	1866	1866	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	65	1221	186	352	1912	365	306	434	362	393	346	48
Arriving On Green	0.42	0.42	0.42	0.12	0.62	0.62	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	71.2	2974.3	447.4	1791.6	3102.4	593.0	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	646.1	0.0	580.9	294.1	156.1	151.4	64.8	50.0	474.6	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1802.3	0.0	1619.0	1791.6	1900.0	1795.4	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	8.0	0.0	23.9	6.3	2.5	2.6	3.4	1.6	17.5	12.9	0.0	5.3
Cycle Q Clear(g_c), s	23.5	0.0	23.9	6.3	2.5	2.6	8.7	1.6	17.5	14.5	0.0	5.3
Proportion In Lane	0.040		0.276	1.000		0.330	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	799.7	0.0	672.4	351.9	1171.1	1106.6	305.7	433.9	361.9	393.0	0.0	394.6
V/C Ratio(X)	0.808	0.000	0.864	0.836	0.133	0.137	0.212	0.115	1.312	0.632	0.000	0.364
Avail Cap(c_a), veh/h	839.9	0.0	713.5	384.4	1223.5	1156.1	305.7	433.9	361.9	393.0	0.0	394.6
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	19.2	0.0	19.5	15.1	5.9	5.9	26.7	21.7	27.7	27.3	0.0	23.1
Incr Delay (d2), s/veh	6.6	0.0	11.5	18.7	0.1	0.1	1.6	0.5	158.7	7.5	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	25.8	0.0	30.9	33.8	6.0	6.0	28.3	22.2	186.5	34.9	0.0	25.7
Lane Group LOS	C		C	C	A	A	C	C	F	C		C
Approach Volume, veh/h		1227			602			589			392	
Approach Delay, s/veh		28.2			19.6			155.1			31.5	
Approach LOS		C			B			F			C	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		36.31		14.68	50.99			22.00			22.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		32.00		10.00	47.00			17.50			17.50	
Max Q Clear Time (g_c+I1), s		25.88		8.29	4.58			19.50			16.46	
Green Extension Time (p_c)		5.43		0.41	27.70			0.00			0.65	

Intersection Summary			
HCM 2010 Control Delay			53.4
HCM 2010 Level of Service			D

Intersection	
Intersection Delay (sec/veh)	31.6
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	44	111	136	53	71	10	77	129	147	21	185	24
Peak Hour Factor	0.49	0.88	0.70	0.84	0.88	0.75	0.74	0.82	0.63	0.79	0.79	0.88
Heavy Vehicles(%)	0	3	0	0	3	0	0	4	4	10	2	0
Movement Flow Rate	90	126	194	63	81	13	104	157	233	27	234	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	30.1	15.3	44.4	20.8
HCM LOS	D	C	E	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	22%	15%	40%	9%
Volume Thru (%)	37%	38%	53%	80%
Volume Right (%)	42%	47%	7%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	353	291	134	230
Left Turning Volume	129	111	71	185
Through Volume	147	136	10	24
Right Turning Volume	77	44	53	21
Lane Flow Rate	495	410	157	288
Geometry Group	1	1	1	1
Degree of Utilization, X	0.904	0.779	0.347	0.592
Departure Headway, Hd	6.581	6.835	7.962	7.402
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	549	529	449	487
Service Time	4.646	4.898	6.055	5.481
HCM Lane V/C Ratio	0.902	0.775	0.35	0.591
HCM Control Delay	44.4	30.1	15.3	20.8
HCM Lane LOS	E	D	C	C
HCM 95th Percentile Queue	26.5	10.4	1.6	4.3

Intersection	
Intersection Delay (sec/veh)	39.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	19	64	7	72	14	30	0	387	258	78	88	8
Peak Hour Factor	0.61	0.89	0.38	0.70	0.38	0.45	0.25	0.89	0.71	0.48	0.70	0.58
Heavy Vehicles(%)	18	4	0	2	0	0	0	1	4	4	3	0
Movement Flow Rate	31	72	18	103	37	67	0	435	363	163	126	14
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12	12.1	60.5	12.4
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	0%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	100%	60%	0%	90%	0%	32%	0%	92%
Volume Right (%)	0%	40%	0%	10%	0%	68%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	0	645	19	71	72	44	78	96
Left Turning Volume	0	387	0	64	0	14	0	88
Through Volume	0	258	0	7	0	30	0	8
Right Turning Volume	0	0	19	0	72	0	78	0
Lane Flow Rate	0	798	31	90	103	104	162	140
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0	1	0.073	0.191	0.226	0.199	0.322	0.254
Departure Headway, Hd	6.205	5.938	8.4	7.594	7.914	6.904	7.135	6.56
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	0	615	428	474	455	522	505	548
Service Time	3.941	3.674	6.125	5.319	5.638	4.628	4.862	4.287
HCM Lane V/C Ratio	0	1.298	0.072	0.19	0.226	0.199	0.321	0.255
HCM Control Delay	8.9	60.5	11.8	12.1	12.9	11.3	13.2	11.5
HCM Lane LOS	N	F	B	B	B	B	B	B
HCM 95th Percentile Queue	0	116.4	0.2	0.7	0.9	0.7	1.4	1

Intersection	
Intersection Delay (sec/veh):	112.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	127	32	26	1	23	59	7	412	2	77	431	43
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.78	0.52	0.25	0.63	0.81	0.75	0.85	0.50	0.65	0.90	0.86
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	0	0	0
Movement Flow Rate	184	41	50	4	37	73	9	485	4	118	479	50
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1300	1247	504	1291	1270	487	529	0	0	489	0	0
Stage 1	740	740	-	505	505	-	-	-	-	-	-	-
Stage 2	560	507	-	786	765	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 140	175	572	142	170	585	1048	-	-	1085	-	-
Stage 1	412	426	-	553	544	-	-	-	-	-	-	-
Stage 2	516	543	-	388	415	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 86	146	572	89	142	585	1048	-	-	1085	-	-
Mov Capacity-2 Maneuver	# 86	146	-	89	142	-	-	-	-	-	-	-
Stage 1	407	360	-	546	537	-	-	-	-	-	-	-
Stage 2	416	536	-	265	351	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 610.2	28.2	0.2	1.6
HCM LOS	F	D	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				93	572	266			
HCM Control Delay (s)	8.466	0	-	$ 28.2	11.9	28.2	8.724	0	-
HCM Lane VC Ratio	0.009	-	-	2.42	0.087	0.426	0.109	-	-
HCM Lane LOS	A	A	-	F	B	D	A	A	-
HCM 95th Percentile Queue (veh)	0.027	-	-	20.607	0.286	2.015	0.367	-	-

Intersection	
Intersection Delay (sec/veh):	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	50	339	0	1	95	192	0	0	1	129	1	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.83	0.25	0.25	0.60	0.82	0.25	0.25	0.25	0.74	0.25	0.47
Heavy Vehicles(%)	2	4	0	0	2	2	0	0	0	0	0	0
Movement Flow Rate	63	408	0	4	158	234	0	0	4	174	4	68
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	392	0	-	408	0	0	853	934	204	819	817	196
Stage 1	-	-	-	-	-	-	534	534	-	283	283	-
Stage 2	-	-	-	-	-	-	319	400	-	536	534	-
Follow-up Headway	2.218	-	0	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1167	-	0	1162	-	-	281	268	842	297	313	850
Stage 1	-	-	0	-	-	-	534	528	-	728	681	-
Stage 2	-	-	0	-	-	-	697	605	-	532	528	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1167	-	-	1162	-	-	245	253	842	283	295	850
Mov Capacity-2 Maneuver	-	-	-	-	-	-	245	253	-	283	295	-
Stage 1	-	-	-	-	-	-	505	499	-	689	679	-
Stage 2	-	-	-	-	-	-	635	603	-	501	499	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.1	0.1	9.3	28.6
HCM LOS	A	A	A	D

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	842						283	770
HCM Control Delay (s)	9.3	8.262	0	8.109	0	-	36.2	10.2
HCM Lane VC Ratio	0.005	0.054	-	0.003	-	-	0.616	0.094
HCM Lane LOS	A	A	A	A	A	-	E	B
HCM 95th Percentile Queue (veh)	0.014	0.172	-	0.01	-	-	3.767	0.309

Intersection	
Intersection Delay (sec/veh):	210.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	34	452	75	7	243	72	37	47	19	150	124	17
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.68	0.76	0.76	0.50	0.87	0.84	0.69	0.81	0.35	0.83	0.74	0.63
Heavy Vehicles(%)	17	2	6	17	3	2	6	7	0	0	0	0
Movement Flow Rate	50	595	99	14	279	86	54	58	54	181	168	27
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	365	0	0	694	0	0	1193	1138	348	1151	1144	183
Stage 1	-	-	-	-	-	-	745	745	-	350	350	-
Stage 2	-	-	-	-	-	-	448	393	-	801	794	-
Follow-up Headway	2.353	-	-	2.353	-	-	3.554	4.063	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1115	-	-	836	-	-	161	197	700	# 177	202	865
Stage 1	-	-	-	-	-	-	400	414	-	671	636	-
Stage 2	-	-	-	-	-	-	582	597	-	381	403	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1115	-	-	836	-	-	# 37	185	700	# 118	190	865
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 37	185	-	# 118	190	-
Stage 1	-	-	-	-	-	-	382	395	-	641	625	-
Stage 2	-	-	-	-	-	-	406	587	-	286	385	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.6	0.3	$ 497.9	$ 712.4
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	90							154
HCM Control Delay (s)	$ 497.9	8.38	0	-	9.38	0	-	$ 497.9
HCM Lane VC Ratio	1.844	0.045	-	-	0.017	-	-	2.437
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th Percentile Queue (veh)	13.952	0.141	-	-	0.051	-	-	32.05

Intersection	
Intersection Delay (sec/veh):	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	12	0	1	0	0	0	5	33	0	0	176	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.25	0.25	0.25	0.25	0.25	0.50	0.81	0.25	0.25	0.66	0.50
Heavy Vehicles(%)	18	0	0	0	0	0	0	3	0	0	0	0
Movement Flow Rate	22	0	4	0	0	0	10	41	0	0	267	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	333	333	272	335	338	41	277	0	0	41	0	0
Stage 1	272	272	-	61	61	-	-	-	-	-	-	-
Stage 2	61	61	-	274	277	-	-	-	-	-	-	-
Follow-up Headway	3.662	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	591	590	772	622	586	1036	1298	-	-	1581	-	-
Stage 1	700	688	-	955	848	-	-	-	-	-	-	-
Stage 2	912	848	-	736	685	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	587	585	772	615	581	1036	1298	-	-	1581	-	-
Mov Capacity-2 Maneuver	587	585	-	615	581	-	-	-	-	-	-	-
Stage 1	694	688	-	947	841	-	-	-	-	-	-	-
Stage 2	905	841	-	732	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	11.2	0	1.5	0
HCM LOS	B	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				610	0			
HCM Control Delay (s)	7.795	0	-	11.2	0	0	-	-
HCM Lane VC Ratio	0.008	-	-	0.042	-	-	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th Percentile Queue (veh)	0.023	-	-	0.132	-	0	-	-

Intersection	
Intersection Delay (sec/veh):	135.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	11	38	189	41	16	37	28	268	34	93	1069	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.77	0.84	0.64	0.58	0.49	0.78	0.86	0.94	0.80	0.94	0.63
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	1	0	0
Movement Flow Rate	22	49	225	64	28	76	36	312	36	116	1137	17
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1620	1798	578	1227	1788	174	1154	0	0	348	0	0
Stage 1	1378	1378	-	402	402	-	-	-	-	-	-	-
Stage 2	242	420	-	825	1386	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	70	81	464	137	82	846	613	-	-	1215	-	-
Stage 1	155	214	-	601	604	-	-	-	-	-	-	-
Stage 2	746	593	-	337	212	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	39	69	464	# 27	70	846	613	-	-	1215	-	-
Mov Capacity-2 Maneuver	39	69	-	# 27	70	-	-	-	-	-	-	-
Stage 1	146	194	-	566	569	-	-	-	-	-	-	-
Stage 2	609	558	-	117	192	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 414.1	$ 976.4	1.2	0.9
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				168	59			
HCM Control Delay (s)	11.238	0.2	-	$ 976.4	$ 976.4	8.276	0.2	-
HCM Lane VC Ratio	0.059	-	-	1.764	2.833	0.096	-	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th Percentile Queue (veh)	0.186	-	-	21.269	17.171	0.317	-	-

Intersection	
Intersection Delay (sec/veh):	19.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	1001	199	73	270	0	0	0	0	161	2	116
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.87	0.80	0.68	0.73	0.25	0.25	0.25	0.25	0.83	0.50	0.61
Heavy Vehicles(%)	0	0	0	2	0	0	0	0	0	4	0	2
Movement Flow Rate	0	1151	249	107	370	0	0	0	0	194	4	190
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2	
Conflicting Flow Rate - All	370	0	0	1400	0	-			1044	1984	185
Stage 1	-	-	-	-	-	-			584	584	-
Stage 2	-	-	-	-	-	-			460	1400	-
Follow-up Headway	3.1	-	-	3.12	-	0			3.84	4	3.92
Pot Capacity-1 Maneuver	787	-	-	250	-	0			237	62	703
Stage 1	-	-	-	-	-	0			380	501	-
Stage 2	-	-	-	-	-	0			499	209	-
Time blocked-Platoon(%)	0	-	-	0	-	0			0	0	0
Mov Capacity-1 Maneuver	787	-	-	250	-	-			# 158	35	703
Mov Capacity-2 Maneuver	-	-	-	-	-	-			# 158	35	-
Stage 1	-	-	-	-	-	-			380	287	-
Stage 2	-	-	-	-	-	-			499	209	-

Approach	EB	WB	SB
HCM Control Delay (s)	0	6.7	108.1
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						158	703
HCM Control Delay (s)	0	-	-	29.815	-	202.4	12
HCM Lane VC Ratio	-	-	-	0.429	-	1.228	0.271
HCM Lane LOS	A	-	-	D	-	F	B
HCM 95th Percentile Queue (veh)	0	-	-	2.027	-	11.069	1.094

Intersection	
Intersection Delay (sec/veh):	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	912	257	0	306	143	38	0	61	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.91	0.94	0.25	0.68	0.79	0.81	0.25	0.90	0.25	0.25	0.25
Heavy Vehicles(%)	0	1	1	0	0	3	0	0	4	0	0	0
Movement Flow Rate	0	1002	273	0	450	181	47	0	68	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	1364	~	638
Stage 1	-	-	-	-	-	-	1139	-	-
Stage 2	-	-	-	-	-	-	225	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.34
Pot Capacity-1 Maneuver	0	-	-	0	-	-	108	0	415
Stage 1	0	-	-	0	-	-	218	0	-
Stage 2	0	-	-	0	-	-	763	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	108	-	415
Mov Capacity-2 Maneuver	-	-	-	-	-	-	108	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	763	-	-

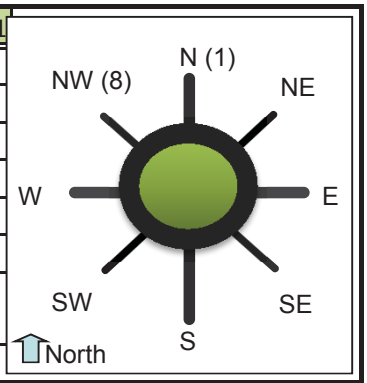
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	34.4
HCM LOS	A	A	D

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	108	415				
HCM Control Delay (s)	61.8	15.4	-	-	-	-
HCM Lane VC Ratio	0.434	0.163	-	-	-	-
HCM Lane LOS	F	C	-	-	-	-
HCM 95th Percentile Queue (veh)	1.854	0.578	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Base + Alt D PM



Volumes

Entry Legs (FROM)

Exit Legs (TO)	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					102			
NE (2), vph								
E (3), vph		91						
SE (4), vph								
S (5), vph	672							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	672	91	0	0	102	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		220						
NE (2), vph								
E (3), vph	157							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	157	220	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	111	0	239	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	99	0	0	0	171	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	730	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	829	0	111	0	410	0	0	0
	Entry flow Lane 1, pcu/h	730	0	111	0	171	0	0	0
	Entry flow Lane 2, pcu/h	99	0	0	0	239	0	0	0
	Conflicting flow, pcu/h	0	0	239	0	99	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	956	NA	1024	1024	NA	NA
Entry Flow Rates, veh/h	730	99	111	NA	171	239	NA	NA
V/C ratio	**0.65**	**0.09**	**0.12**		**0.17**	**0.23**		
Control Delay, s/veh	**12.0**	**3.9**	**4.8**		**5.1**	**5.8**		
LOS	B	A	A		A	A		
95th % Queue (ft)	**125**	**7**	**10**		**15**	**23**		
Approach Delay, LOS	11.1 sec, LOS B		4.8 sec, LOS A		5.5 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1322	NA	1304	1304	NA	NA
Entry Flow Rates, veh/h	730	99	111	NA	171	239	NA	NA
V/C ratio	**0.45**	**0.06**	**0.08**		**0.13**	**0.18**		
Control Delay, s/veh	**6.2**	**2.6**	**3.4**		**3.8**	**4.3**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**59**	**5**	**7**		**11**	**17**		
Approach Delay, LOS	5.8 sec, LOS A		3.4 sec, LOS A		4.1 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	409	191	416	373	80	30	308	78	279	1093	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1899	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	57	529	244	471	862	335	104	430	366	335	1344	550
Arriving On Green	0.03	0.15	0.00	0.13	0.25	0.00	0.23	0.23	0.00	0.35	0.35	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	461.1	1900.0	1615.0	945.3	3798.1	1552.9
Grp Volume(v), veh/h	45.3	511.3	0.0	483.7	484.4	0.0	60.0	440.0	0.0	310.0	1228.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	461.1	1900.0	1615.0	945.3	1899.1	1552.9
Q Serve(g_s), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Cycle Q Clear(g_c), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	56.6	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	334.6	1344.3	549.6
V/C Ratio(X)	0.801	0.966	0.000	1.026	0.562	0.000	0.574	1.022	0.000	0.927	0.914	0.000
Avail Cap(c_a), veh/h	124.2	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	341.0	1370.3	560.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.1	50.3	0.0	51.6	38.9	0.0	41.0	46.1	0.0	37.0	36.8	0.0
Incr Delay (d2), s/veh	22.1	30.5	0.0	48.4	0.8	0.0	7.4	49.1	0.0	30.3	9.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	79.2	80.8	0.0	100.0	39.8	0.0	48.4	95.2	0.0	67.3	46.3	0.0
Lane Group LOS	E	F		F	D		D	F		E	D	
Approach Volume, veh/h		557			968			500			1538	
Approach Delay, s/veh		80.7			69.8			89.6			50.5	
Approach LOS		F			E			F			D	
Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.10	22.00		20.00	33.90			31.00			46.18	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	9.00	18.00		16.00	25.00			27.00			43.00	
Max Q Clear Time (g_c+I1), s	5.26	19.28		18.00	16.64			29.00			39.57	
Green Extension Time (p_c)	0.02	0.00		0.00	4.10			0.00			2.61	
Intersection Summary												
HCM 2010 Control Delay			66.0									
HCM 2010 Level of Service			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	662	102	710	515	173	32	296	264	198	1254	366
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	237	828	382	861	1126	513	58	946	738	258	1381	612
Arriving On Green	0.07	0.24	0.00	0.17	0.34	0.34	0.03	0.26	0.00	0.15	0.38	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	163.1	838.0	0.0	835.3	572.2	192.2	45.7	416.9	0.0	220.0	1409.0	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Cycle Q Clear(g_c), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	236.9	828.3	381.7	861.4	1126.4	513.4	58.3	946.1	737.5	258.3	1381.3	611.8
V/C Ratio(X)	0.689	1.012	0.000	0.970	0.508	0.374	0.785	0.441	0.000	0.852	1.020	0.000
Avail Cap(c_a), veh/h	312.9	828.3	381.7	861.4	1126.4	513.4	81.5	946.1	737.5	399.7	1381.3	611.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	40.5	33.9	0.0	36.7	23.6	22.4	42.7	27.4	0.0	36.7	27.4	0.0
Incr Delay (d2), s/veh	4.1	34.2	0.0	23.4	0.4	0.5	27.4	0.3	0.0	10.2	29.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.5	68.1	0.0	60.1	23.9	22.8	70.1	27.7	0.0	46.9	56.8	0.0
Lane Group LOS	D	F		E	C	C	E	C		D	F	
Approach Volume, veh/h		1001			1600			463			1629	
Approach Delay, s/veh		64.3			42.7			31.9			55.5	
Approach LOS		E			D			C			E	
Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	10.06	25.00		19.00	33.94		6.86	27.29		17.57	38.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	8.00	21.00		15.00	28.00		4.00	17.00		21.00	34.00	
Max Q Clear Time (g_c+I1), s	6.08	23.00		16.46	14.17		4.23	10.56		13.26	36.00	
Green Extension Time (p_c)	0.09	0.00		0.00	8.50		0.00	5.28		0.37	0.00	
Intersection Summary												
HCM 2010 Control Delay			50.7									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	133	55	53	332	70	37	186	64	283	432	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1712	1712	1900	1834	1834	1900	1891	1891	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	124	361	152	146	457	118	81	273	84	356	666	572
Arriving On Green	0.07	0.32	0.32	0.05	0.22	0.22	0.04	0.20	0.20	0.20	0.35	0.35
Sat Flow, veh/h	1739.9	1146.4	481.1	1809.5	1407.0	363.1	1809.5	1386.6	428.8	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	273.6	89.8	0.0	509.4	62.7	0.0	343.0	329.1	508.2	279.2
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1627.5	1809.5	0.0	1770.1	1809.5	0.0	1815.4	1756.8	1881.2	1615.0
Q Serve(g_s), s	6.6	0.0	16.2	5.7	0.0	32.6	4.0	0.0	21.9	21.5	28.0	11.5
Cycle Q Clear(g_c), s	6.6	0.0	16.2	5.7	0.0	32.6	4.0	0.0	21.9	21.5	28.0	11.5
Proportion In Lane	1.000		0.296	1.000		0.205	1.000		0.236	1.000		1.000
Lane Grp Cap(c), veh/h	123.7	0.0	512.7	146.3	0.0	574.9	81.0	0.0	356.9	355.6	666.4	572.1
V/C Ratio(X)	0.808	0.000	0.534	0.614	0.000	0.886	0.774	0.000	0.961	0.925	0.763	0.488
Avail Cap(c_a), veh/h	148.7	0.0	512.7	185.6	0.0	574.9	108.3	0.0	356.9	375.4	666.4	572.1
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	53.6	0.0	33.0	53.5	0.0	43.7	55.3	0.0	46.6	45.8	33.4	15.8
Incr Delay (d2), s/veh	23.5	0.0	3.9	4.1	0.0	18.0	21.4	0.0	37.3	27.7	5.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	77.0	0.0	36.9	57.7	0.0	61.7	76.7	0.0	83.9	73.5	38.6	16.4
Lane Group LOS	E		D	E		E	E		F	E	D	B
Approach Volume, veh/h		374			599			406			1117	
Approach Delay, s/veh		47.7			61.1			82.8			43.4	
Approach LOS		D			E			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	14.32	42.86		15.46	44.00		11.24	29.00		29.68	47.44	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	10.00	36.00		12.00	38.00		7.00	23.00		25.00	41.00	
Max Q Clear Time (g_c+I1), s	8.63	18.20		7.68	34.63		6.01	23.90		23.51	29.97	
Green Extension Time (p_c)	0.03	8.35		0.06	2.19		0.01	0.00		0.17	4.89	

Intersection Summary	
HCM 2010 Control Delay	54.7
HCM 2010 Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	325	86	299	851	173	135	127	128	66	50	17
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1869	1869	1869	1881	1900	1900	1863	1810	1776	1863	1601	1601
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	97	953	292	685	1955	411	337	490	409	317	208	192
Arriving On Green	0.92	0.92	0.92	0.13	0.64	0.64	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	193.3	1971.2	636.8	1791.6	3046.6	640.4	1284.6	1809.5	1509.3	1238.8	768.7	707.2
Grp Volume(v), veh/h	236.3	0.0	282.3	351.8	609.4	574.7	153.4	144.3	180.3	94.3	0.0	104.3
Grp Sat Flow(s),veh/h/ln	1263.1	0.0	1588.7	1791.6	1900.0	1787.0	1284.6	1809.5	1509.3	1238.8	0.0	1476.0
Q Serve(g_s), s	0.0	0.0	2.7	11.5	20.3	20.4	12.8	7.6	11.9	7.8	0.0	6.7
Cycle Q Clear(g_c), s	1.7	0.0	2.7	11.5	20.3	20.4	19.4	7.6	11.9	15.4	0.0	6.7
Proportion In Lane	0.153		0.401	1.000		0.358	1.000		1.000	1.000		0.479
Lane Grp Cap(c), veh/h	613.8	0.0	728.5	685.3	1219.2	1146.7	336.6	490.1	408.8	317.2	0.0	399.7
V/C Ratio(X)	0.385	0.000	0.388	0.513	0.500	0.501	0.456	0.294	0.441	0.297	0.000	0.261
Avail Cap(c_a), veh/h	613.8	0.0	728.5	820.1	1219.2	1146.7	336.6	490.1	408.8	317.2	0.0	399.7
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	2.8	0.0	2.8	11.6	11.3	11.4	41.9	34.7	36.2	40.8	0.0	34.3
Incr Delay (d2), s/veh	0.8	0.0	0.7	2.2	0.7	0.7	4.4	1.5	3.4	2.4	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	3.6	0.0	3.5	13.8	12.0	12.1	46.3	36.2	39.7	43.2	0.0	35.9
Lane Group LOS	A		A	B	B	B	D	D	D	D		D
Approach Volume, veh/h		519			1536			478			199	
Approach Delay, s/veh		3.6			12.4			40.8			39.3	
Approach LOS		A			B			D			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		61.02		21.98	83.00			37.00			37.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		47.00		25.00	77.00			32.50			32.50	
Max Q Clear Time (g_c+I1), s		4.74		13.48	22.39			21.43			17.42	
Green Extension Time (p_c)		30.64		2.49	36.71			3.68			4.37	

Intersection Summary	
HCM 2010 Control Delay	17.7
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	630	104	215	220	5	1	0	7	0	1	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	0	716	132	295	297	15	4	0	9	0	4	4
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	312	0	0	848	0	0	1681	~	782	1682	1743	157
Stage 1	-	-	-	-	-	-	782	-	-	895	895	-
Stage 2	-	-	-	-	-	-	899	-	-	787	848	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1260	-	-	764	-	-	76	0	397	76	88	894
Stage 1	-	-	-	-	-	-	390	0	-	338	362	-
Stage 2	-	-	-	-	-	-	336	0	-	388	380	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1260	-	-	764	-	-	45	-	397	47	47	894
Mov Capacity-2 Maneuver	-	-	-	-	-	-	45	-	-	47	47	-
Stage 1	-	-	-	-	-	-	390	-	-	338	193	-
Stage 2	-	-	-	-	-	-	174	-	-	379	380	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	6.1	37.8	49.4
HCM LOS	A	A	E	E

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	45	397							89
HCM Control Delay (s)	92.7	14.3	0	-	-	12.637	-	-	49.4
HCM Lane VC Ratio	0.089	0.024	-	-	-	0.385	-	-	0.09
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th Percentile Queue (veh)	0.278	0.072	0	-	-	1.825	-	-	0.288

Intersection	
Intersection Delay (sec/veh):	97.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	33	0	37	0	2	290	1	285	1	50	912	504
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	66	0	63	0	2	315	4	385	1	54	1126	560
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	2066	1908	843	1065	2188	386	1686	0	0	386	0	0
Stage 1	1514	1514	-	394	394	-	-	-	-	-	-	-
Stage 2	552	394	-	671	1794	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	# 32	68	287	177	45	612	384	-	-	1169	-	-
Stage 1	128	181	-	602	604	-	-	-	-	-	-	-
Stage 2	491	604	-	412	131	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 15	67	287	137	44	612	384	-	-	1169	-	-
Mov Capacity-2 Maneuver	# 15	67	-	137	44	-	-	-	-	-	-	-
Stage 1	126	181	-	594	596	-	-	-	-	-	-	-
Stage 2	234	596	-	322	131	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 1902.5	19.4	0.1	0.3
HCM LOS	F	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				28	562			
HCM Control Delay (s)	14.474	0	-	$ 19.4	19.4	8.23	-	-
HCM Lane VC Ratio	0.01	-	-	4.597	0.565	0.046	-	-
HCM Lane LOS	B	A	-	F	C	A	-	-
HCM 95th Percentile Queue (veh)	0.032	-	-	15.669	3.493	0.146	-	-

Intersection	
Intersection Delay (sec/veh):	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	73	123	616	38	10	8	58	181	26	516	3
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	0	112	171	700	54	13	14	70	241	59	543	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	67	0	0	283	0	0	1934	1665	142	1814	1744	34
Stage 1	-	-	-	-	-	-	198	198	-	1461	1461	-
Stage 2	-	-	-	-	-	-	1736	1467	-	353	283	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	3.3
Pot Capacity-1 Maneuver	1549	-	-	1279	-	-	50	97	906	# 52	# 85	1052
Stage 1	-	-	-	-	-	-	808	741	-	141	# 193	-
Stage 2	-	-	-	-	-	-	111	193	-	617	677	-
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	1
Mov Capacity-1 Maneuver	1549	-	-	1279	-	-	-	# 44	906	-	# 39	1052
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	# 44	-	-	# 39	-
Stage 1	-	-	-	-	-	-	808	741	-	141	# 87	-
Stage 2	-	-	-	-	-	-	-	87	-	410	677	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	10.2	-	-
HCM LOS	A	B	-	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	-	168							-	40
HCM Control Delay (s)	-	$ 452	0	-	-	11.163	0	-	-	$ 452
HCM Lane VC Ratio	-	1.852	-	-	-	0.547	-	-	-	13.776
HCM Lane LOS	-	F	A	-	-	B	A	-	-	F
HCM 95th Percentile Queue (veh)	-	22.98	0	-	-	3.461	-	-	-	66.967

Intersection	
Intersection Delay (sec/veh):	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	16	436	44	98	443	9	36	60	84	8	16	7
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	23	490	54	111	591	13	45	86	153	9	28	23
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	604	0	0	544	0	0	1095	1389	272	1154	1410	303
Stage 1	-	-	-	-	-	-	563	563	-	820	820	-
Stage 2	-	-	-	-	-	-	532	826	-	334	590	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1198	-	-	1271	-	-	383	234	*1273	*354	202	*1273
Stage 1	-	-	-	-	-	-	707	670	-	*491	455	-
Stage 2	-	-	-	-	-	-	743	490	-	*1273	611	-
Time blocked-Platoon(%)	15	-	-	15	-	-	27	27	15	27	27	15
Mov Capacity-1 Maneuver	1198	-	-	1271	-	-	291	198	*1273	*183	170	*1273
Mov Capacity-2 Maneuver	-	-	-	-	-	-	291	198	-	*183	170	-
Stage 1	-	-	-	-	-	-	687	651	-	*477	395	-
Stage 2	-	-	-	-	-	-	589	425	-	*946	594	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	1.6	32.9	21.7
HCM LOS	A	A	D	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*401							*183	*274
HCM Control Delay (s)	32.9	8.063	0.1	-	8.104	0.4	-	25.3	21.3
HCM Lane VC Ratio	0.707	0.019	-	-	0.088	-	-	0.033	0.197
HCM Lane LOS	D	A	A	-	A	A	-	D	C
HCM 95th Percentile Queue (veh)	5.313	0.058	-	-	0.288	-	-	0.102	0.717

Intersection	
Intersection Delay (sec/veh):	59.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	489	34	520	1281	41	461
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	596	41	598	1408	68	632
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	637	0	2517	319
Stage 1	-	-	-	-	617	-
Stage 2	-	-	-	-	1900	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	1206	-	# 23	*1237
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	106	-
Time blocked-Platoon(%)	-	-	18	-	18	18
Mov Capacity-1 Maneuver	-	-	1206	-	# 12	*1237
Mov Capacity-2 Maneuver	-	-	-	-	# 12	-
Stage 1	-	-	-	-	749	-
Stage 2	-	-	-	-	# 53	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	3.2	276.8
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*12	*1237				
HCM Control Delay (s)	$ 2734	10.9	-	-	10.881	-
HCM Lane VC Ratio	5.694	0.511	-	-	0.496	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th Percentile Queue (veh)	9.687	3.009	-	-	2.842	-

Intersection	
Intersection Delay (sec/veh):	23.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	9	14	57	14	72	11	225	107	125	422	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	0	18	23	76	28	122	17	326	126	181	480	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1342	1330	242	1288	1269	226	484	0	0	452	0	0
Stage 1	844	844	-	423	423	-	-	-	-	-	-	-
Stage 2	498	486	-	865	846	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	131	156	743	139	170	818	1038	-	-	1103	-	-
Stage 1	361	382	-	605	591	-	-	-	-	-	-	-
Stage 2	558	554	-	346	381	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	82	128	743	104	140	818	1038	-	-	1103	-	-
Mov Capacity-2 Maneuver	82	128	-	104	140	-	-	-	-	-	-	-
Stage 1	355	319	-	595	581	-	-	-	-	-	-	-
Stage 2	444	545	-	264	318	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	23.1	133.9	0.3	2.4
HCM LOS	C	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				240	209			
HCM Control Delay (s)	8.528	0	-	23.1	133.9	8.904	0	-
HCM Lane VC Ratio	0.017	-	-	0.172	1.082	0.164	-	-
HCM Lane LOS	A	A	-	C	F	A	A	-
HCM 95th Percentile Queue (veh)	0.051	-	-	0.609	10.333	0.587	-	-

Intersection	
Intersection Delay (sec/veh)	31.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	38	128	73	46	123	12	99	211	32	17	106	41
Peak Hour Factor	0.71	0.73	0.86	0.60	0.70	0.39	0.85	0.70	0.58	0.63	0.68	0.64
Heavy Vehicles(%)	3	3	2	15	5	9	0	3	0	20	2	0
Movement Flow Rate	54	175	85	77	176	31	116	301	55	27	156	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	23.1	22.8	48.3	19.8
HCM LOS	C	C	E	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	29%	16%	25%	10%
Volume Thru (%)	62%	54%	68%	65%
Volume Right (%)	9%	31%	7%	25%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	342	239	181	164
Left Turning Volume	211	128	123	106
Through Volume	32	73	12	41
Right Turning Volume	99	38	46	17
Lane Flow Rate	473	314	283	247
Geometry Group	1	1	1	1
Degree of Utilization, X	0.916	0.645	0.616	0.537
Departure Headway, Hd	6.969	7.406	7.838	7.83
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	520	486	459	457
Service Time	5.046	5.498	5.933	5.93
HCM Lane V/C Ratio	0.91	0.646	0.617	0.54
HCM Control Delay	48.3	23.1	22.8	19.8
HCM Lane LOS	E	C	C	C
HCM 95th Percentile Queue	29.9	5.4	4.8	3.5

Intersection	
Intersection Delay (sec/veh)	67.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	8	3	6	205	0	7	21	270	39	15	1031	25
Peak Hour Factor	0.58	0.25	0.42	0.25	0.25	0.25	0.59	0.74	0.25	0.25	0.89	0.55
Heavy Vehicles(%)	57	0	20	3	0	0	0	0	6	38	1	0
Movement Flow Rate	14	12	14	820	0	28	36	365	156	60	1158	45
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	13.2	70.5	65.9	67.2
HCM LOS	B	F	F	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	0%	87%	0%	33%	0%	0%	0%	98%
Volume Right (%)	0%	13%	0%	67%	0%	100%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	21	309	8	9	205	7	15	1056
Left Turning Volume	0	270	0	3	0	0	0	1031
Through Volume	0	39	0	6	0	7	0	25
Right Turning Volume	21	0	8	0	205	0	15	0
Lane Flow Rate	36	521	14	26	820	28	60	1204
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0.082	1	0.043	0.067	1	0.055	0.149	1
Departure Headway, Hd	8.313	7.726	11.148	9.217	8.372	7.123	8.946	7.802
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	431	469	323	391	443	503	402	482
Service Time	6.053	5.466	8.85	6.919	6.113	4.864	6.682	5.539
HCM Lane V/C Ratio	0.084	1.111	0.043	0.066	1.851	0.056	0.149	2.498
HCM Control Delay	11.8	69.6	14.4	12.6	72.6	10.3	13.2	69.9
HCM Lane LOS	B	F	B	B	F	B	B	F
HCM 95th Percentile Queue	0.3	102.1	0.1	0.2	98.1	0.2	0.5	101.7

Intersection	
Intersection Delay (sec/veh):	237.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	97	6	34	0	77	69	21	468	6	41	395	65
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.42	0.54	0.25	0.59	0.66	0.79	0.90	0.31	0.69	0.89	0.85
Heavy Vehicles(%)	0	0	3	0	0	0	0	1	0	0	0	0
Movement Flow Rate	162	14	63	0	131	105	27	520	19	59	444	76
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1302	1193	482	1223	1222	530	520	0	0	539	0	0
Stage 1	600	600	-	584	584	-	-	-	-	-	-	-
Stage 2	702	593	-	639	638	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.327	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 139	188	582	158	181	553	1056	-	-	1040	-	-
Stage 1	491	493	-	501	502	-	-	-	-	-	-	-
Stage 2	432	497	-	468	474	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 33	166	582	120	160	553	1056	-	-	1040	-	-
Mov Capacity-2 Maneuver	# 33	166	-	120	160	-	-	-	-	-	-	-
Stage 1	473	453	-	482	483	-	-	-	-	-	-	-
Stage 2	246	479	-	371	436	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 1505.9	104.8	0.4	0.9
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				35	582	234			
HCM Control Delay (s)	8.497	0	-	$ 104.8	11.9	104.8	8.671	0	-
HCM Lane VC Ratio	0.025	-	-	5.027	0.108	1.005	0.057	-	-
HCM Lane LOS	A	A	-	F	B	F	A	A	-
HCM 95th Percentile Queue (veh)	0.077	-	-	20.792	0.362	9.455	0.182	-	-

Intersection	
Intersection Delay (sec/veh):	8.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	27	131	0	0	388	68	0	1	0	137	2	48
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.72	0.25	0.25	0.58	0.83	0.25	0.25	0.25	0.82	0.50	0.72
Heavy Vehicles(%)	0	3	0	0	4	5	0	0	0	2	0	9
Movement Flow Rate	36	182	0	0	669	82	0	4	0	167	4	67
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	751	0	-	182	0	0	1000	1005	91	966	964	376
Stage 1	-	-	-	-	-	-	254	254	-	710	710	-
Stage 2	-	-	-	-	-	-	746	751	-	256	254	-
Follow-up Headway	2.2	-	0	2.2	-	-	3.5	4	3.3	3.518	4	3.381
Pot Capacity-1 Maneuver	868	-	0	1405	-	-	224	243	972	234	257	655
Stage 1	-	-	0	-	-	-	755	701	-	424	440	-
Stage 2	-	-	0	-	-	-	409	421	-	749	701	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	868	-	-	1405	-	-	192	233	972	224	246	655
Mov Capacity-2 Maneuver	-	-	-	-	-	-	192	233	-	224	246	-
Stage 1	-	-	-	-	-	-	724	672	-	406	440	-
Stage 2	-	-	-	-	-	-	364	421	-	714	672	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.5	0	20.7	43.6
HCM LOS	A	A	C	E

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	233						224	599
HCM Control Delay (s)	20.7	9.327	0	0	-	-	57	11.8
HCM Lane VC Ratio	0.017	0.041	-	-	-	-	0.746	0.118
HCM Lane LOS	C	A	A	A	-	-	F	B
HCM 95th Percentile Queue (veh)	0.052	0.13	-	0	-	-	5.12	0.399

Intersection	
Intersection Delay (sec/veh):	14.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	37	213	68	15	368	118	20	44	5	44	43	67
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.73	0.75	0.65	0.83	0.71	0.64	0.65	0.50	0.81	0.59	0.78
Heavy Vehicles(%)	0	8	0	0	2	5	11	0	0	0	13	4
Movement Flow Rate	46	292	91	23	443	166	31	68	10	54	73	86
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	609	0	0	383	0	0	1082	1085	192	1041	1047	305
Stage 1	-	-	-	-	-	-	430	430	-	572	572	-
Stage 2	-	-	-	-	-	-	652	655	-	469	475	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.599	4	3.3	3.5	4.117	3.336
Pot Capacity-1 Maneuver	979	-	-	1187	-	-	187	219	855	210	218	730
Stage 1	-	-	-	-	-	-	586	587	-	509	487	-
Stage 2	-	-	-	-	-	-	442	466	-	579	539	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	979	-	-	1187	-	-	114	205	855	147	204	730
Mov Capacity-2 Maneuver	-	-	-	-	-	-	114	205	-	147	204	-
Stage 1	-	-	-	-	-	-	558	559	-	485	478	-
Stage 2	-	-	-	-	-	-	324	457	-	479	514	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.9	0.3	53.4	66.1
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	177							252
HCM Control Delay (s)	53.4	8.857	0	-	8.093	0	-	66.1
HCM Lane VC Ratio	0.615	0.047	-	-	0.019	-	-	0.846
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th Percentile Queue (veh)	3.424	0.147	-	-	0.059	-	-	6.833

Intersection	
Intersection Delay (sec/veh):	154.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	68	0	21	0	0	1	173	219	0	1	61	558
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.81	0.25	0.25	0.75	0.38
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	0	11	11
Movement Flow Rate	136	0	84	0	0	4	692	270	0	4	81	1468
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	4	0	0	84	0	0	1091	318	42	451	358	2
Stage 1	-	-	-	-	-	-	314	314	-	2	2	-
Stage 2	-	-	-	-	-	-	777	4	-	449	356	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.5	4.009	3.3	3.5	4.099	3.399
Pot Capacity-1 Maneuver	1631	-	-	1526	-	-	# 194	600	1034	522	554	# 1056
Stage 1	-	-	-	-	-	-	701	658	-	1026	877	-
Stage 2	-	-	-	-	-	-	# 393	894	-	593	613	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1631	-	-	1526	-	-	-	547	1034	300	505	# 1056
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	547	-	300	505	-
Stage 1	-	-	-	-	-	-	# 639	600	-	936	877	-
Stage 2	-	-	-	-	-	-	-	894	-	297	559	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	4.6	0	-	272.4
HCM LOS	A	A	-	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							993
HCM Control Delay (s)	-	7.408	0	-	0	-	-	272.4
HCM Lane VC Ratio	-	0.083	-	-	-	-	-	1.565
HCM Lane LOS	-	A	A	-	A	-	-	F
HCM 95th Percentile Queue (veh)	-	0.273	-	-	0	-	-	77.603

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	6	62	23	10	47	340	970	53	87	259	16
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.38	0.63	0.64	0.71	0.75	0.75	0.70	0.81	0.69	0.64	0.69	0.70
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	1	1	0
Movement Flow Rate	8	10	97	32	13	63	486	1198	77	136	375	23
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	2237	2906	200	2674	2879	638	398	0	0	1275	0	0
Stage 1	659	659	-	2209	2209	-	-	-	-	-	-	-
Stage 2	1578	2247	-	465	670	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	24	16	814	# 11	17	424	1172	-	-	546	-	-
Stage 1	424	464	-	46	83	-	-	-	-	-	-	-
Stage 2	116	79	-	552	459	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	-	# 7	814	-	# 7	424	1172	-	-	546	-	-
Mov Capacity-2 Maneuver	-	# 7	-	-	# 7	-	-	-	-	-	-	-
Stage 1	248	348	-	# 27	49	-	-	-	-	-	-	-
Stage 2	42	46	-	355	345	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	-	-	3.2	3.9
HCM LOS	-	-	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				-	-			
HCM Control Delay (s)	10.228	0.6	-	-	-	13.765	0.5	-
HCM Lane VC Ratio	0.414	-	-	-	-	0.249	-	-
HCM Lane LOS	B	A	-	-	-	B	A	-
HCM 95th Percentile Queue (veh)	2.073	-	-	-	-	0.976	-	-

Intersection	
Intersection Delay (sec/veh):	13.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	4	251	33	36	1002	0	0	0	0	34	0	297
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.69	0.56	0.73	0.87	0.25	0.25	0.25	0.25	0.58	0.25	0.79
Heavy Vehicles(%)	0	0	0	9	0	0	0	0	0	0	0	0
Movement Flow Rate	16	364	59	49	1152	0	0	0	0	59	0	376
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2		
Conflicting Flow Rate - All	1152	0	0	423	0	-				1428	~	576
Stage 1	-	-	-	-	-	-				1250	-	-
Stage 2	-	-	-	-	-	-				178	-	-
Follow-up Headway	3.1	-	-	3.19	-	0				3.8	0	3.9
Pot Capacity-1 Maneuver	336	-	-	711	-	0				145	0	398
Stage 1	-	-	-	-	-	0				135	0	-
Stage 2	-	-	-	-	-	0				746	0	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	336	-	-	711	-	-				131	-	398
Mov Capacity-2 Maneuver	-	-	-	-	-	-				131	-	-
Stage 1	-	-	-	-	-	-				126	-	-
Stage 2	-	-	-	-	-	-				699	-	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.8	0.4	63.2
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						131	398
HCM Control Delay (s)	16.249	0.3	-	10.44	-	53	64.8
HCM Lane VC Ratio	0.048	-	-	0.069	-	0.447	0.945
HCM Lane LOS	C	A	-	B	-	F	F
HCM 95th Percentile Queue (veh)	0.149	-	-	0.223	-	1.991	10.575

Intersection	
Intersection Delay (sec/veh):	16.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	211	75	0	781	150	253	0	32	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.76	0.76	0.25	0.86	0.74	0.85	0.25	0.70	0.25	0.25	0.25
Heavy Vehicles(%)	0	0	0	0	0	2	0	0	7	0	0	0
Movement Flow Rate	0	278	99	0	908	203	298	0	46	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	782	~	189
Stage 1	-	-	-	-	-	-	328	-	-
Stage 2	-	-	-	-	-	-	454	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.37
Pot Capacity-1 Maneuver	0	-	-	0	-	-	# 288	0	805
Stage 1	0	-	-	0	-	-	664	0	-
Stage 2	0	-	-	0	-	-	560	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	# 288	-	805
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 288	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	560	-	-

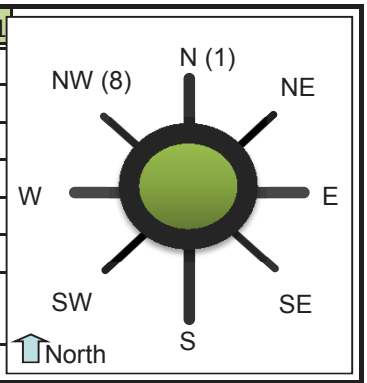
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	89.5
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	288	805				
HCM Control Delay (s)	101.7	9.7	-	-	-	-
HCM Lane VC Ratio	1.033	0.057	-	-	-	-
HCM Lane LOS	F	A	-	-	-	-
HCM 95th Percentile Queue (veh)	11.185	0.18	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States Base + Alt E AM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
Exit Legs (TO) N (1), vph					52			
NE (2), vph								
E (3), vph		106						
SE (4), vph								
S (5), vph	252							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	252	106	0	0	52	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		485						
NE (2), vph								
E (3), vph	338							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	338	485	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	57	0	527	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	115	0	0	0	367	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	274	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	389	0	57	0	895	0	0	0
	Entry flow Lane 1, pcu/h	274	0	57	0	367	0	0	0
	Entry flow Lane 2, pcu/h	115	0	0	0	527	0	0	0
	Conflicting flow, pcu/h	0	0	527	0	115	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	781	NA	1007	1007	NA	NA
Entry Flow Rates, veh/h	274	115	57	NA	367	527	NA	NA
V/C ratio	**0.24**	**0.10**	**0.07**		**0.36**	**0.52**		
Control Delay, s/veh	**5.4**	**4.1**	**5.3**		**7.4**	**10.1**		
LOS	A	A	A		A	B		
95th % Queue (ft)	**24**	**8**	**6**		**42**	**78**		
Approach Delay, LOS	5 sec, LOS A		5.3 sec, LOS A		9 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1020	NA	1283	1283	NA	NA
Entry Flow Rates, veh/h	274	115	57	NA	367	527	NA	NA
V/C ratio	**0.17**	**0.07**	**0.06**		**0.29**	**0.41**		
Control Delay, s/veh	**3.5**	**2.7**	**4.0**		**5.4**	**6.8**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**15**	**6**	**4**		**30**	**51**		
Approach Delay, LOS	3.2 sec, LOS A		4 sec, LOS A		6.2 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	261	23	25	362	511	144	924	637	146	130	33
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1889	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	828	382	73	768	298	596	898	763	56	510	210
Arriving On Green	0.03	0.24	0.00	0.02	0.22	0.00	0.47	0.47	0.00	0.14	0.14	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	1261.6	1900.0	1615.0	414.1	3777.5	1552.9
Grp Volume(v), veh/h	58.7	326.3	0.0	29.1	470.1	0.0	288.0	1320.0	0.0	162.2	146.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	1261.6	1900.0	1615.0	414.1	1888.7	1552.9
Q Serve(g_s), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Cycle Q Clear(g_c), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.5	828.4	381.7	73.0	768.0	298.2	596.4	898.2	763.4	55.9	510.2	209.7
V/C Ratio(X)	1.056	0.394	0.000	0.398	0.612	0.000	0.483	1.470	0.000	2.900	0.286	0.000
Avail Cap(c_a), veh/h	55.5	828.4	381.7	118.5	812.6	315.5	596.4	898.2	763.4	55.9	510.2	209.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.2	38.1	0.0	57.3	41.4	0.0	21.3	31.2	0.0	51.2	46.1	0.0
Incr Delay (d2), s/veh	137.4	0.3	0.0	3.5	1.2	0.0	0.6	217.4	0.0	901.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	194.6	38.4	0.0	60.7	42.6	0.0	21.9	248.7	0.0	953.0	46.4	0.0
Lane Group LOS	F	D		E	D		C	F		F	D	
Approach Volume, veh/h		385			499			1608			308	
Approach Delay, s/veh		62.2			43.7			208.1			523.4	
Approach LOS		E			D			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.00	32.00		6.46	30.46			60.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	28.00		4.00	28.00			56.00			16.00	
Max Q Clear Time (g_c+I1), s	6.00	11.29		2.97	16.57			58.00			18.00	
Green Extension Time (p_c)	0.00	4.95		0.00	4.06			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			193.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	547	27	244	670	418	156	1074	1324	310	233	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	322	784	361	315	644	294	252	1578	1230	261	1632	723
Arriving On Green	0.09	0.22	0.00	0.06	0.19	0.19	0.14	0.44	0.00	0.15	0.45	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	438.5	692.4	0.0	287.1	744.4	464.4	222.9	1512.7	0.0	344.4	261.8	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	12.0	24.8	0.0	7.3	25.0	25.0	15.7	52.7	0.0	20.0	5.6	0.0
Cycle Q Clear(g_c), s	12.0	24.8	0.0	7.3	25.0	25.0	15.7	52.7	0.0	20.0	5.6	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	321.6	783.7	361.1	314.8	644.3	293.7	252.1	1578.1	1230.2	260.8	1631.9	722.8
V/C Ratio(X)	1.363	0.884	0.000	0.912	1.155	1.581	0.884	0.959	0.000	1.321	0.160	0.000
Avail Cap(c_a), veh/h	321.6	783.7	361.1	314.8	644.3	293.7	362.8	1586.6	1236.8	260.8	1631.9	722.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	58.8	48.7	0.0	60.5	52.3	52.3	54.8	35.4	0.0	54.8	21.0	0.0
Incr Delay (d2), s/veh	182.4	11.7	0.0	29.3	86.7	277.4	16.4	14.0	0.0	168.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	241.2	60.4	0.0	89.8	139.0	329.7	71.2	49.3	0.0	223.5	21.0	0.0
Lane Group LOS	F	E		F	F	F	E	D		F	C	
Approach Volume, veh/h		1131			1496			1736			606	
Approach Delay, s/veh		130.5			188.8			52.1			136.1	
Approach LOS		F			F			D			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	16.00	33.00		12.00	29.00		22.07	60.70		24.00	62.63	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	12.00	29.00		8.00	25.00		26.00	57.00		20.00	51.00	
Max Q Clear Time (g_c+I1), s	14.00	26.79		9.25	27.00		17.68	54.65		22.00	7.56	
Green Extension Time (p_c)	0.00	1.88		0.00	0.00		0.39	2.05		0.00	20.92	

Intersection Summary												
HCM 2010 Control Delay			121.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	287	28	28	96	250	10	434	23	26	92	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1745	1745	1900	1854	1854	1900	1898	1898	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	471	676	67	121	89	284	33	487	23	47	526	451
Arriving On Green	0.27	0.43	0.43	0.07	0.23	0.23	0.02	0.27	0.27	0.03	0.28	0.28
Sat Flow, veh/h	1739.9	1562.8	154.7	1809.5	390.4	1244.1	1809.5	1797.6	85.6	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	576.3	0.0	457.1	47.5	0.0	490.2	16.9	0.0	640.4	30.2	108.2	10.4
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1717.5	1809.5	0.0	1634.5	1809.5	0.0	1883.2	1756.8	1881.2	1615.0
Q Serve(g_s), s	32.0	0.0	24.3	3.0	0.0	27.0	1.1	0.0	32.0	2.0	5.2	0.6
Cycle Q Clear(g_c), s	32.0	0.0	24.3	3.0	0.0	27.0	1.1	0.0	32.0	2.0	5.2	0.6
Proportion In Lane	1.000		0.090	1.000		0.761	1.000		0.045	1.000		1.000
Lane Grp Cap(c), veh/h	471.3	0.0	742.9	120.9	0.0	373.5	32.7	0.0	510.1	46.8	525.7	451.3
V/C Ratio(X)	1.223	0.000	0.615	0.393	0.000	1.312	0.519	0.000	1.256	0.646	0.206	0.023
Avail Cap(c_a), veh/h	471.3	0.0	742.9	153.2	0.0	373.5	76.6	0.0	510.1	74.3	525.7	451.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	43.1	0.0	25.9	52.8	0.0	45.6	57.5	0.0	43.1	56.9	32.5	30.9
Incr Delay (d2), s/veh	118.1	0.0	3.8	2.1	0.0	158.5	12.1	0.0	130.3	14.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	161.1	0.0	29.7	54.9	0.0	204.1	69.6	0.0	173.4	70.9	32.7	30.9
Lane Group LOS	F		C	D		F	E		F	E	C	C
Approach Volume, veh/h		1033			538			657			149	
Approach Delay, s/veh		103.0			190.9			170.7			40.4	
Approach LOS		F			F			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	38.00	57.11		13.89	33.00		8.13	38.00		9.15	39.01	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	32.00	49.00		10.00	27.00		5.00	32.00		5.00	32.00	
Max Q Clear Time (g_c+I1), s	34.00	26.31		4.97	29.00		3.10	34.00		4.01	7.20	
Green Extension Time (p_c)	0.00	11.84		0.03	0.00		0.00	0.00		0.00	5.45	

Intersection Summary			
HCM 2010 Control Delay			137.7
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	858	122	256	214	42	57	44	369	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1866	1866	1866	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	68	1117	181	359	1830	366	329	458	382	417	366	51
Arriving On Green	0.38	0.38	0.38	0.12	0.59	0.59	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	75.1	2935.5	472.0	1791.6	3076.8	614.7	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	611.9	0.0	549.2	301.2	150.3	145.7	64.8	50.0	519.7	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1800.3	0.0	1614.8	1791.6	1900.0	1791.5	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	8.0	0.0	21.9	6.5	2.4	2.5	3.1	1.5	17.5	12.0	0.0	4.9
Cycle Q Clear(g_c), s	21.6	0.0	21.9	6.5	2.4	2.5	8.1	1.5	17.5	13.5	0.0	4.9
Proportion In Lane	0.042		0.292	1.000		0.343	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	745.6	0.0	620.1	358.9	1130.3	1065.8	329.4	458.1	382.1	417.2	0.0	416.7
V/C Ratio(X)	0.821	0.000	0.886	0.839	0.133	0.137	0.197	0.109	1.360	0.596	0.000	0.345
Avail Cap(c_a), veh/h	782.1	0.0	657.5	369.8	1154.5	1088.6	329.4	458.1	382.1	417.2	0.0	416.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	19.6	0.0	19.9	14.5	6.2	6.2	24.4	19.8	25.8	25.0	0.0	21.1
Incr Delay (d2), s/veh	7.7	0.0	14.4	19.1	0.1	0.1	1.3	0.5	178.2	6.2	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	27.3	0.0	34.3	33.6	6.3	6.3	25.8	20.3	204.0	31.1	0.0	23.4
Lane Group LOS	C		C	C	A	A	C	C	F	C		C
Approach Volume, veh/h		1161			597			634			392	
Approach Delay, s/veh		30.6			20.1			171.3			28.3	
Approach LOS		C			C			F			C	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		32.54		14.58	47.12			22.00			22.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		28.00		9.00	42.00			17.50			17.50	
Max Q Clear Time (g_c+I1), s		23.94		8.47	4.48			19.50			15.45	
Green Extension Time (p_c)		3.60		0.14	24.09			0.00			1.29	

Intersection Summary			
HCM 2010 Control Delay			60.1
HCM 2010 Level of Service			E

Intersection	
Intersection Delay (sec/veh):	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	306	0	1	612	12	1	0	1	8	0	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	4	348	0	1	827	36	4	0	1	32	0	20
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	863	0	0	348	0	0	1213	~	348	1204	1203	432
Stage 1	-	-	-	-	-	-	356	-	-	847	847	-
Stage 2	-	-	-	-	-	-	857	-	-	357	356	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	788	-	-	1178	-	-	160	0	700	162	186	628
Stage 1	-	-	-	-	-	-	666	0	-	359	381	-
Stage 2	-	-	-	-	-	-	355	0	-	665	633	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	788	-	-	1178	-	-	154	-	700	161	185	628
Mov Capacity-2 Maneuver	-	-	-	-	-	-	154	-	-	161	185	-
Stage 1	-	-	-	-	-	-	662	-	-	357	380	-
Stage 2	-	-	-	-	-	-	343	-	-	660	629	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.1	0	24.3	25.7
HCM LOS	A	A	C	D

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	154	700							225
HCM Control Delay (s)	29	10.2	9.592	0	-	8.06	-	-	25.7
HCM Lane VC Ratio	0.026	0.002	0.005	-	-	0.001	-	-	0.231
HCM Lane LOS	D	B	A	A	-	A	-	-	D
HCM 95th Percentile Queue (veh)	0.08	0.006	0.015	-	-	0.003	-	-	0.867

Intersection	
Intersection Delay (sec/veh):	16

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	440	0	0	3	0	69	0	1288	5	255	115	41
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	880	0	0	3	0	75	0	1741	5	277	142	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	2500	2465	94	2369	2486	1744	188	0	0	1746	0	0
Stage 1	719	719	-	1744	1744	-	-	-	-	-	-	-
Stage 2	1781	1746	-	625	742	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	# 15	30	913	18	29	76	1398	-	-	356	-	-
Stage 1	# 390	431	-	90	139	-	-	-	-	-	-	-
Stage 2	# 87	139	-	439	420	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 0	4	913	5	4	76	1398	-	-	356	-	-
Mov Capacity-2 Maneuver	# 0	4	-	5	4	-	-	-	-	-	-	-
Stage 1	# 390	54	-	90	139	-	-	-	-	-	-	-
Stage 2	# 1	139	-	55	53	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	-	$ 496	0	25.6
HCM LOS	-	F	A	D

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				0	48			
HCM Control Delay (s)	0	-	-	-	$ 496	42.913	-	-
HCM Lane VC Ratio	-	-	-	-	1.63	0.779	-	-
HCM Lane LOS	A	-	-	-	F	E	-	-
HCM 95th Percentile Queue (veh)	0	-	-	-	7.629	6.396	-	-

Intersection	
Intersection Delay (sec/veh):	276.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	90	16	111	32	6	36	352	529	27	67	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	72	138	22	126	45	8	62	424	705	61	71	0
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	53	0	0	160	0	0	630	598	80	1159	605	-
Stage 1	-	-	-	-	-	-	293	293	-	301	301	-
Stage 2	-	-	-	-	-	-	337	305	-	858	304	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	0
Pot Capacity-1 Maneuver	1568	-	-	1419	-	-	398	# 419	980	155	412	0
Stage 1	-	-	-	-	-	-	719	674	-	662	666	0
Stage 2	-	-	-	-	-	-	683	666	-	320	663	0
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	0
Mov Capacity-1 Maneuver	1568	-	-	1419	-	-	305	# 364	980	-	358	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	305	# 364	-	-	358	-
Stage 1	-	-	-	-	-	-	686	643	-	632	607	-
Stage 2	-	-	-	-	-	-	550	607	-	# 29	633	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.3	5.5	$ 401	-
HCM LOS	A	A	F	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	305	599							-	-
HCM Control Delay (s)	19.8	$ 421.9	7.406	0	-	7.784	0	-	-	-
HCM Lane VC Ratio	0.204	1.886	0.046	-	-	0.089	-	-	-	-
HCM Lane LOS	C	F	A	A	-	A	A	-	-	-
HCM 95th Percentile Queue (veh)	0.748	72.172	0.144	-	-	0.292	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	12.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	440	36	86	243	1	41	30	146	25	86	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	1	494	44	98	324	1	51	43	265	28	148	33
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	325	0	0	538	0	0	950	1039	269	792	1061	163
Stage 1	-	-	-	-	-	-	518	518	-	521	521	-
Stage 2	-	-	-	-	-	-	432	521	-	271	540	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1246	-	-	1278	-	-	317	311	*1273	*459	271	721
Stage 1	-	-	-	-	-	-	760	705	-	*512	485	-
Stage 2	-	-	-	-	-	-	546	530	-	*1273	651	-
Time blocked-Platoon(%)	0	-	-	15	-	-	15	15	15	15	15	0
Mov Capacity-1 Maneuver	1246	-	-	1278	-	-	147	282	*1273	*298	245	721
Mov Capacity-2 Maneuver	-	-	-	-	-	-	147	282	-	*298	245	-
Stage 1	-	-	-	-	-	-	760	705	-	*511	439	-
Stage 2	-	-	-	-	-	-	312	480	-	*945	650	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	2	27.6	39.5
HCM LOS	A	A	D	E

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*507							*298	*280
HCM Control Delay (s)	27.6	7.893	0	-	8.05	0.2	-	17.9	41.6
HCM Lane VC Ratio	0.709	0.001	-	-	0.076	-	-	0.064	0.682
HCM Lane LOS	D	A	A	-	A	A	-	C	E
HCM 95th Percentile Queue (veh)	5.609	0.003	-	-	0.248	-	-	0.202	4.569

Intersection						
Intersection Delay (sec/veh): $ 359.3						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1333	89	382	496	14	782
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	1626	107	439	545	23	1071
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1733	0	2831	867
Stage 1	-	-	-	-	1680	-
Stage 2	-	-	-	-	1151	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	# 369	-	# 14	# 298
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	268	-
Time blocked-Platoon(%)	-	-	0	-	0	0
Mov Capacity-1 Maneuver	-	-	# 369	-	# 14	# 298
Mov Capacity-2 Maneuver	-	-	-	-	# 14	-
Stage 1	-	-	-	-	139	-
Stage 2	-	-	-	-	268	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	63.1	$ 1194.3
HCM LOS	A	F	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	14	298				
HCM Control Delay (s)	$ 876.2	$ 1201.2	-	-	141.453	-
HCM Lane VC Ratio	1.667	3.595	-	-	1.19	-
HCM Lane LOS	F	F	-	-	F	-
HCM 95th Percentile Queue (veh)	3.598	100.645	-	-	17.939	-

Intersection						
Intersection Delay (sec/veh):	5.3					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	52	11	83	6	370	92	25	143	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	69	22	141	10	536	108	36	162	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	929	901	84	851	849	322	167	0	0	644	0	0
Stage 1	237	237	-	610	610	-	-	-	-	-	-	-
Stage 2	692	664	-	241	239	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	250	280	915	278	300	724	1364	-	-	936	-	-
Stage 1	771	713	-	478	488	-	-	-	-	-	-	-
Stage 2	437	461	-	758	711	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	183	267	915	263	286	724	1364	-	-	936	-	-
Mov Capacity-2 Maneuver	183	267	-	263	286	-	-	-	-	-	-	-
Stage 1	765	686	-	474	484	-	-	-	-	-	-	-
Stage 2	334	458	-	721	684	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	19.9	22.4	0.1	1.6
HCM LOS	C	C	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				253	434			
HCM Control Delay (s)	7.658	0	-	19.9	22.4	9.001	0	-
HCM Lane VC Ratio	0.007	-	-	0.046	0.535	0.039	-	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th Percentile Queue (veh)	0.021	-	-	0.144	3.072	0.121	-	-

Intersection	
Intersection Delay (sec/veh)	26.4
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	44	111	72	53	71	10	66	161	147	21	191	24
Peak Hour Factor	0.49	0.88	0.70	0.84	0.88	0.75	0.74	0.82	0.63	0.79	0.79	0.88
Heavy Vehicles(%)	0	3	0	0	3	0	0	4	4	10	2	0
Movement Flow Rate	90	126	103	63	81	13	89	196	233	27	242	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19.9	14.3	38.3	18.9
HCM LOS	C	B	E	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	18%	19%	40%	9%
Volume Thru (%)	43%	49%	53%	81%
Volume Right (%)	39%	32%	7%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	374	227	134	236
Left Turning Volume	161	111	71	191
Through Volume	147	72	10	24
Right Turning Volume	66	44	53	21
Lane Flow Rate	519	319	157	296
Geometry Group	1	1	1	1
Degree of Utilization, X	0.877	0.607	0.33	0.571
Departure Headway, Hd	6.212	6.854	7.573	6.952
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	586	529	476	520
Service Time	4.212	4.878	5.608	4.986
HCM Lane V/C Ratio	0.886	0.603	0.33	0.569
HCM Control Delay	38.3	19.9	14.3	18.9
HCM Lane LOS	E	C	B	C
HCM 95th Percentile Queue	20.6	4.6	1.5	4

Intersection	
Intersection Delay (sec/veh)	45.3
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	19	64	7	99	14	30	0	719	411	78	147	8
Peak Hour Factor	0.61	0.89	0.38	0.70	0.38	0.45	0.25	0.89	0.71	0.48	0.70	0.58
Heavy Vehicles(%)	18	4	0	2	0	0	0	1	4	4	3	0
Movement Flow Rate	31	72	18	141	37	67	0	808	579	163	210	14
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12.5	13.3	62.5	14.1
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	0%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	100%	64%	0%	90%	0%	32%	0%	95%
Volume Right (%)	0%	36%	0%	10%	0%	68%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	0	1130	19	71	99	44	78	155
Left Turning Volume	0	719	0	64	0	14	0	147
Through Volume	0	411	0	7	0	30	0	8
Right Turning Volume	0	0	19	0	99	0	78	0
Lane Flow Rate	0	1387	31	90	141	104	162	224
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0	1	0.076	0.199	0.319	0.204	0.332	0.423
Departure Headway, Hd	6.561	6.319	8.729	7.923	8.112	7.103	7.353	6.8
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	0	582	412	454	444	507	491	530
Service Time	4.298	4.056	6.454	5.648	5.835	4.825	5.081	4.528
HCM Lane V/C Ratio	0	2.383	0.075	0.198	0.318	0.205	0.33	0.423
HCM Control Delay	9.3	62.5	12.2	12.6	14.6	11.6	13.7	14.4
HCM Lane LOS	N	F	B	B	B	B	B	B
HCM 95th Percentile Queue	0	112.9	0.2	0.7	1.4	0.8	1.5	2.2

Intersection	
Intersection Delay (sec/veh):	153.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	127	32	26	1	23	59	7	501	2	77	447	43
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.78	0.52	0.25	0.63	0.81	0.75	0.85	0.50	0.65	0.90	0.86
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	0	0	0
Movement Flow Rate	184	41	50	4	37	73	9	589	4	118	497	50
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1422	1369	522	1413	1392	591	547	0	0	593	0	0
Stage 1	758	758	-	609	609	-	-	-	-	-	-	-
Stage 2	664	611	-	804	783	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 115	148	559	117	143	511	1033	-	-	993	-	-
Stage 1	402	418	-	486	488	-	-	-	-	-	-	-
Stage 2	453	487	-	380	407	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 65	121	559	68	117	511	1033	-	-	993	-	-
Mov Capacity-2 Maneuver	# 65	121	-	68	117	-	-	-	-	-	-	-
Stage 1	397	346	-	480	482	-	-	-	-	-	-	-
Stage 2	354	481	-	253	337	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 903.5	37.3	0.1	1.6
HCM LOS	F	E	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				71	559	221			
HCM Control Delay (s)	8.517	0	-	$ 37.3	12.1	37.3	9.116	0	-
HCM Lane VC Ratio	0.009	-	-	3.17	0.089	0.513	0.119	-	-
HCM Lane LOS	A	A	-	F	B	E	A	A	-
HCM 95th Percentile Queue (veh)	0.027	-	-	22.94	0.293	2.641	0.405	-	-

Intersection	
Intersection Delay (sec/veh):	12.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	50	492	0	1	122	192	0	0	1	129	1	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.83	0.25	0.25	0.60	0.82	0.25	0.25	0.25	0.74	0.25	0.47
Heavy Vehicles(%)	2	4	0	0	2	2	0	0	0	0	0	0
Movement Flow Rate	63	593	0	4	203	234	0	0	4	174	4	68
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	437	0	-	593	0	0	1083	1164	297	1049	1047	219
Stage 1	-	-	-	-	-	-	719	719	-	328	328	-
Stage 2	-	-	-	-	-	-	364	445	-	721	719	-
Follow-up Headway	2.218	-	0	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1123	-	0	993	-	-	197	196	747	207	230	826
Stage 1	-	-	0	-	-	-	423	436	-	689	651	-
Stage 2	-	-	0	-	-	-	659	578	-	422	436	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1123	-	-	993	-	-	170	184	747	196	216	826
Mov Capacity-2 Maneuver	-	-	-	-	-	-	170	184	-	196	216	-
Stage 1	-	-	-	-	-	-	399	412	-	650	648	-
Stage 2	-	-	-	-	-	-	599	576	-	396	412	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.8	0.1	9.8	65.2
HCM LOS	A	A	A	F

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	747						196	714
HCM Control Delay (s)	9.8	8.397	0	8.64	0	-	87.8	10.6
HCM Lane VC Ratio	0.005	0.056	-	0.004	-	-	0.889	0.101
HCM Lane LOS	A	A	A	A	A	-	F	B
HCM 95th Percentile Queue (veh)	0.016	0.179	-	0.012	-	-	6.843	0.335

Intersection	
Intersection Delay (sec/veh):	177.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	66	573	75	7	264	61	37	47	19	86	124	23
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.68	0.76	0.76	0.50	0.87	0.84	0.69	0.81	0.35	0.83	0.74	0.63
Heavy Vehicles(%)	17	2	6	17	3	2	6	7	0	0	0	0
Movement Flow Rate	97	754	99	14	303	73	54	58	54	104	168	37
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	376	0	0	853	0	0	1468	1402	427	1422	1415	189
Stage 1	-	-	-	-	-	-	998	998	-	368	368	-
Stage 2	-	-	-	-	-	-	470	404	-	1054	1047	-
Follow-up Headway	2.353	-	-	2.353	-	-	3.554	4.063	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1105	-	-	726	-	-	103	137	632	115	# 139	858
Stage 1	-	-	-	-	-	-	289	315	-	656	625	-
Stage 2	-	-	-	-	-	-	566	591	-	276	308	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1105	-	-	726	-	-	-	123	632	# 61	# 124	858
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	123	-	# 61	# 124	-
Stage 1	-	-	-	-	-	-	264	287	-	598	613	-
Stage 2	-	-	-	-	-	-	386	580	-	184	281	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.9	0.4	-	$ 1040.8
HCM LOS	A	A	-	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							99
HCM Control Delay (s)	-	8.571	0	-	10.056	0	-	$ -1
HCM Lane VC Ratio	-	0.088	-	-	0.019	-	-	3.108
HCM Lane LOS	-	A	A	-	B	A	-	F
HCM 95th Percentile Queue (veh)	-	0.288	-	-	0.059	-	-	29.94

Intersection	
Intersection Delay (sec/veh):	$ 693.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	497	0	154	0	0	0	32	33	0	0	176	91
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.25	0.25	0.25	0.25	0.25	0.50	0.81	0.25	0.25	0.66	0.50
Heavy Vehicles(%)	18	0	0	0	0	0	0	3	0	0	0	0
Movement Flow Rate	904	0	616	0	0	0	64	41	0	0	267	182
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	527	527	358	835	618	41	449	0	0	41	0	0
Stage 1	358	358	-	169	169	-	-	-	-	-	-	-
Stage 2	169	169	-	666	449	-	-	-	-	-	-	-
Follow-up Headway	3.662	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 437	459	691	289	408	1036	1122	-	-	1581	-	-
Stage 1	# 628	631	-	838	763	-	-	-	-	-	-	-
Stage 2	# 797	763	-	452	576	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 418	432	691	30	384	1036	1122	-	-	1581	-	-
Mov Capacity-2 Maneuver	# 418	432	-	30	384	-	-	-	-	-	-	-
Stage 1	# 592	631	-	789	719	-	-	-	-	-	-	-
Stage 2	# 751	719	-	49	576	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 946	0	5.1	0
HCM LOS	F	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				498	0			
HCM Control Delay (s)	8.403	0	-	$ 0	0	0	-	-
HCM Lane VC Ratio	0.057	-	-	3.051	-	-	-	-
HCM Lane LOS	A	A	-	F	A	A	-	-
HCM 95th Percentile Queue (veh)	0.181	-	-	132.021	-	0	-	-

Intersection	
Intersection Delay (sec/veh):	258.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	11	38	342	41	16	37	55	241	34	93	916	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.77	0.84	0.64	0.58	0.49	0.78	0.86	0.94	0.80	0.94	0.63
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	1	0	0
Movement Flow Rate	22	49	407	64	28	76	71	280	36	116	974	17
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1511	1673	496	1184	1663	158	991	0	0	316	0	0
Stage 1	1215	1215	-	440	440	-	-	-	-	-	-	-
Stage 2	296	458	-	744	1223	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	84	97	525	147	98	866	706	-	-	1248	-	-
Stage 1	195	256	-	571	581	-	-	-	-	-	-	-
Stage 2	694	570	-	377	254	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	49	79	525	# 14	80	866	706	-	-	1248	-	-
Mov Capacity-2 Maneuver	49	79	-	# 14	80	-	-	-	-	-	-	-
Stage 1	175	232	-	514	523	-	-	-	-	-	-	-
Stage 2	540	513	-	# 60	230	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 428.5	$ 2070.6	2.1	1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				259	33			
HCM Control Delay (s)	10.664	0.2	-	$ 2070.6	$ 2070.6	8.181	0.2	-
HCM Lane VC Ratio	0.1	-	-	1.847	5.065	0.093	-	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th Percentile Queue (veh)	0.331	-	-	32.892	19.917	0.307	-	-

Intersection	
Intersection Delay (sec/veh):	152.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	32	994	173	73	302	0	0	0	0	161	2	116
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.87	0.80	0.68	0.73	0.25	0.25	0.25	0.25	0.83	0.50	0.61
Heavy Vehicles(%)	0	0	0	2	0	0	0	0	0	4	0	2
Movement Flow Rate	128	1143	216	107	414	0	0	0	0	194	4	190
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2				Minor 2		
Conflicting Flow Rate - All	414	0	0	1359	0	-			1341	2243	207
Stage 1	-	-	-	-	-	-			628	628	-
Stage 2	-	-	-	-	-	-			713	1615	-
Follow-up Headway	3.1	-	-	3.12	-	0			3.84	4	3.92
Pot Capacity-1 Maneuver	751	-	-	262	-	0			# 158	43	680
Stage 1	-	-	-	-	-	0			355	479	-
Stage 2	-	-	-	-	-	0			350	164	-
Time blocked-Platoon(%)	0	-	-	0	-	0			0	0	0
Mov Capacity-1 Maneuver	751	-	-	262	-	-			# 42	6	680
Mov Capacity-2 Maneuver	-	-	-	-	-	-			# 42	6	-
Stage 1	-	-	-	-	-	-			# 81	283	-
Stage 2	-	-	-	-	-	-			# 80	38	-

Approach	EB	WB	SB
HCM Control Delay (s)	2.5	5.8	$ 926.1
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						42	680
HCM Control Delay (s)	10.776	2.1	-	27.959	-	$ -1	12.3
HCM Lane VC Ratio	0.17	-	-	0.41	-	4.618	0.28
HCM Lane LOS	B	A	-	D	-	F	B
HCM 95th Percentile Queue (veh)	0.612	-	-	1.896	-	22.264	1.143

Intersection	
Intersection Delay (sec/veh):	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	912	251	0	306	143	38	0	61	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.91	0.94	0.25	0.68	0.79	0.81	0.25	0.90	0.25	0.25	0.25
Heavy Vehicles(%)	0	1	1	0	0	3	0	0	4	0	0	0
Movement Flow Rate	0	1002	267	0	450	181	47	0	68	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	1361	~	635
Stage 1	-	-	-	-	-	-	1136	-	-
Stage 2	-	-	-	-	-	-	225	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.34
Pot Capacity-1 Maneuver	0	-	-	0	-	-	109	0	416
Stage 1	0	-	-	0	-	-	218	0	-
Stage 2	0	-	-	0	-	-	763	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	109	-	416
Mov Capacity-2 Maneuver	-	-	-	-	-	-	109	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	763	-	-

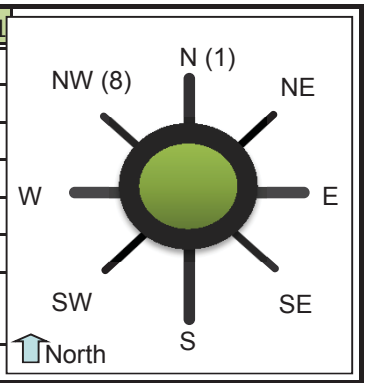
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	34
HCM LOS	A	A	D

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	109	416				
HCM Control Delay (s)	60.9	15.3	-	-	-	-
HCM Lane VC Ratio	0.43	0.163	-	-	-	-
HCM Lane LOS	F	C	-	-	-	-
HCM 95th Percentile Queue (veh)	1.834	0.576	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Base + Alt E PM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					134			
Exit NE (2), vph								
Legs E (3), vph		97						
(TO) SE (4), vph								
S (5), vph	583							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	583	97	0	0	134	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		204						
NE (2), vph								
E (3), vph	162							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	162	204	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	146	0	222	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	105	0	0	0	176	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	634	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	739	0	146	0	398	0	0	0
	Entry flow Lane 1, pcu/h	634	0	146	0	176	0	0	0
	Entry flow Lane 2, pcu/h	105	0	0	0	222	0	0	0
	Conflicting flow, pcu/h	0	0	222	0	105	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	968	NA	1017	1017	NA	NA
Entry Flow Rates, veh/h	634	105	146	NA	176	222	NA	NA
V/C ratio	**0.56**	**0.09**	**0.15**		**0.17**	**0.22**		
Control Delay, s/veh	**10.0**	**4.0**	**5.1**		**5.1**	**5.6**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**90**	**8**	**13**		**16**	**21**		
Approach Delay, LOS	9.1 sec, LOS A		5.1 sec, LOS A		5.4 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1343	NA	1296	1296	NA	NA
Entry Flow Rates, veh/h	634	105	146	NA	176	222	NA	NA
V/C ratio	**0.39**	**0.06**	**0.11**		**0.14**	**0.17**		
Control Delay, s/veh	**5.5**	**2.7**	**3.5**		**3.9**	**4.2**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**47**	**5**	**9**		**12**	**15**		
Approach Delay, LOS	5.1 sec, LOS A		3.5 sec, LOS A		4.1 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	409	191	416	373	80	30	308	78	279	1093	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1899	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	57	529	244	471	862	335	104	430	366	335	1344	550
Arriving On Green	0.03	0.15	0.00	0.13	0.25	0.00	0.23	0.23	0.00	0.35	0.35	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	461.1	1900.0	1615.0	945.3	3798.1	1552.9
Grp Volume(v), veh/h	45.3	511.3	0.0	483.7	484.4	0.0	60.0	440.0	0.0	310.0	1228.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	461.1	1900.0	1615.0	945.3	1899.1	1552.9
Q Serve(g_s), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Cycle Q Clear(g_c), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	56.6	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	334.6	1344.3	549.6
V/C Ratio(X)	0.801	0.966	0.000	1.026	0.562	0.000	0.574	1.022	0.000	0.927	0.914	0.000
Avail Cap(c_a), veh/h	124.2	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	341.0	1370.3	560.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.1	50.3	0.0	51.6	38.9	0.0	41.0	46.1	0.0	37.0	36.8	0.0
Incr Delay (d2), s/veh	22.1	30.5	0.0	48.4	0.8	0.0	7.4	49.1	0.0	30.3	9.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	79.2	80.8	0.0	100.0	39.8	0.0	48.4	95.2	0.0	67.3	46.3	0.0
Lane Group LOS	E	F		F	D		D	F		E	D	
Approach Volume, veh/h		557			968			500			1538	
Approach Delay, s/veh		80.7			69.8			89.6			50.5	
Approach LOS		F			E			F			D	
Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.10	22.00		20.00	33.90			31.00			46.18	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	9.00	18.00		16.00	25.00			27.00			43.00	
Max Q Clear Time (g_c+I1), s	5.26	19.28		18.00	16.64			29.00			39.57	
Green Extension Time (p_c)	0.02	0.00		0.00	4.10			0.00			2.61	
Intersection Summary												
HCM 2010 Control Delay			66.0									
HCM 2010 Level of Service			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	662	102	710	515	173	32	296	264	198	1254	366
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	237	828	382	861	1126	513	58	946	738	258	1381	612
Arriving On Green	0.07	0.24	0.00	0.17	0.34	0.34	0.03	0.26	0.00	0.15	0.38	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	163.1	838.0	0.0	835.3	572.2	192.2	45.7	416.9	0.0	220.0	1409.0	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Cycle Q Clear(g_c), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	236.9	828.3	381.7	861.4	1126.4	513.4	58.3	946.1	737.5	258.3	1381.3	611.8
V/C Ratio(X)	0.689	1.012	0.000	0.970	0.508	0.374	0.785	0.441	0.000	0.852	1.020	0.000
Avail Cap(c_a), veh/h	312.9	828.3	381.7	861.4	1126.4	513.4	81.5	946.1	737.5	399.7	1381.3	611.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	40.5	33.9	0.0	36.7	23.6	22.4	42.7	27.4	0.0	36.7	27.4	0.0
Incr Delay (d2), s/veh	4.1	34.2	0.0	23.4	0.4	0.5	27.4	0.3	0.0	10.2	29.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.5	68.1	0.0	60.1	23.9	22.8	70.1	27.7	0.0	46.9	56.8	0.0
Lane Group LOS	D	F		E	C	C	E	C		D	F	
Approach Volume, veh/h		1001			1600			463			1629	
Approach Delay, s/veh		64.3			42.7			31.9			55.5	
Approach LOS		E			D			C			E	
Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	10.06	25.00		19.00	33.94		6.86	27.29		17.57	38.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	8.00	21.00		15.00	28.00		4.00	17.00		21.00	34.00	
Max Q Clear Time (g_c+I1), s	6.08	23.00		16.46	14.17		4.23	10.56		13.26	36.00	
Green Extension Time (p_c)	0.09	0.00		0.00	8.50		0.00	5.28		0.37	0.00	
Intersection Summary												
HCM 2010 Control Delay			50.7									
HCM 2010 Level of Service			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	111	55	53	155	79	37	201	64	354	552	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1706	1706	1900	1841	1841	1900	1892	1892	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	124	244	123	149	253	158	81	323	92	443	818	703
Arriving On Green	0.07	0.23	0.23	0.06	0.16	0.16	0.04	0.23	0.23	0.25	0.44	0.44
Sat Flow, veh/h	1739.9	1072.2	539.1	1809.5	1061.5	662.2	1809.5	1415.2	405.0	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	241.8	89.8	0.0	306.9	62.7	0.0	364.1	411.6	649.4	279.2
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1611.2	1809.5	0.0	1723.7	1809.5	0.0	1820.1	1756.8	1881.2	1615.0
Q Serve(g_s), s	6.5	0.0	15.6	5.5	0.0	19.4	3.9	0.0	22.1	26.2	34.0	9.3
Cycle Q Clear(g_c), s	6.5	0.0	15.6	5.5	0.0	19.4	3.9	0.0	22.1	26.2	34.0	9.3
Proportion In Lane	1.000		0.335	1.000		0.384	1.000		0.222	1.000		1.000
Lane Grp Cap(c), veh/h	124.0	0.0	366.7	149.2	0.0	411.6	81.1	0.0	414.9	442.6	818.4	702.6
V/C Ratio(X)	0.806	0.000	0.659	0.602	0.000	0.746	0.774	0.000	0.878	0.930	0.793	0.397
Avail Cap(c_a), veh/h	152.3	0.0	366.7	158.4	0.0	411.6	110.9	0.0	430.2	507.5	872.7	749.2
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	52.3	0.0	40.1	52.1	0.0	44.7	54.0	0.0	42.6	41.7	27.8	10.4
Incr Delay (d2), s/veh	22.2	0.0	9.0	5.7	0.0	11.6	20.2	0.0	17.8	22.3	4.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	74.5	0.0	49.1	57.8	0.0	56.3	74.2	0.0	60.4	64.0	32.7	10.8
Lane Group LOS	E		D	E		E	E		E	E	C	B
Approach Volume, veh/h		342			397			427			1340	
Approach Delay, s/veh		56.5			56.7			62.4			37.7	
Approach LOS		E			E			E			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	14.14	32.00		15.42	33.28		11.12	32.04		34.78	55.70	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	10.00	26.00		10.00	26.00		7.00	27.00		33.00	53.00	
Max Q Clear Time (g_c+I1), s	8.47	17.58		7.54	21.40		5.92	24.06		28.15	36.03	
Green Extension Time (p_c)	0.03	3.49		0.04	2.13		0.01	1.98		0.63	7.40	

Intersection Summary			
HCM 2010 Control Delay			47.5
HCM 2010 Level of Service			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	370	86	264	648	173	135	127	124	66	50	17
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1869	1869	1869	1881	1900	1900	1863	1810	1776	1863	1601	1601
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	95	1056	282	574	1816	502	348	505	421	328	215	197
Arriving On Green	0.93	0.93	0.93	0.12	0.63	0.63	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	187.4	2176.2	603.6	1791.6	2867.3	792.8	1284.6	1809.5	1509.3	1238.8	768.7	707.2
Grp Volume(v), veh/h	271.0	0.0	298.8	310.6	493.6	457.2	153.4	144.3	174.6	94.3	0.0	104.3
Grp Sat Flow(s),veh/h/ln	1403.7	0.0	1594.0	1791.6	1900.0	1760.1	1284.6	1809.5	1509.3	1238.8	0.0	1476.0
Q Serve(g_s), s	0.0	0.0	2.4	10.1	15.4	15.4	12.6	7.5	11.3	7.7	0.0	6.6
Cycle Q Clear(g_c), s	12.7	0.0	2.4	10.1	15.4	15.4	19.2	7.5	11.3	15.2	0.0	6.6
Proportion In Lane	0.133		0.379	1.000		0.450	1.000		1.000	1.000		0.479
Lane Grp Cap(c), veh/h	689.0	0.0	743.7	574.4	1203.3	1114.7	348.2	505.2	421.4	328.4	0.0	412.0
V/C Ratio(X)	0.393	0.000	0.402	0.541	0.410	0.410	0.441	0.286	0.414	0.287	0.000	0.253
Avail Cap(c_a), veh/h	689.0	0.0	743.7	693.6	1203.3	1114.7	348.2	505.2	421.4	328.4	0.0	412.0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	2.2	0.0	2.2	13.0	10.9	10.9	41.0	33.9	35.3	39.8	0.0	33.5
Incr Delay (d2), s/veh	0.8	0.0	0.7	2.9	0.5	0.5	4.0	1.4	3.0	2.2	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	3.0	0.0	3.0	15.9	11.4	11.4	45.0	35.3	38.2	42.0	0.0	35.0
Lane Group LOS	A		A	B	B	B	D	D	D	D		D
Approach Volume, veh/h		570			1261			472			199	
Approach Delay, s/veh		3.0			12.5			39.5			38.4	
Approach LOS		A			B			D			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		61.99		20.01	82.00			38.00			38.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		49.00		22.00	76.00			33.50			33.50	
Max Q Clear Time (g_c+I1), s		14.75		12.07	17.44			21.20			17.24	
Green Extension Time (p_c)		23.27		1.95	32.48			3.88			4.49	

Intersection Summary			
HCM 2010 Control Delay			17.5
HCM 2010 Level of Service			B

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	630	104	215	220	5	1	0	7	0	1	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	0	716	132	295	297	15	4	0	9	0	4	4
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	312	0	0	848	0	0	1681	~	782	1682	1743	157
Stage 1	-	-	-	-	-	-	782	-	-	895	895	-
Stage 2	-	-	-	-	-	-	899	-	-	787	848	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1260	-	-	764	-	-	76	0	397	76	88	894
Stage 1	-	-	-	-	-	-	390	0	-	338	362	-
Stage 2	-	-	-	-	-	-	336	0	-	388	380	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1260	-	-	764	-	-	45	-	397	47	47	894
Mov Capacity-2 Maneuver	-	-	-	-	-	-	45	-	-	47	47	-
Stage 1	-	-	-	-	-	-	390	-	-	338	193	-
Stage 2	-	-	-	-	-	-	174	-	-	379	380	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	6.1	37.8	49.4
HCM LOS	A	A	E	E

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	45	397							89
HCM Control Delay (s)	92.7	14.3	0	-	-	12.637	-	-	49.4
HCM Lane VC Ratio	0.089	0.024	-	-	-	0.385	-	-	0.09
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th Percentile Queue (veh)	0.278	0.072	0	-	-	1.825	-	-	0.288

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	9	0	37	0	2	7	1	309	1	15	1103	313
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	18	0	63	0	2	8	4	418	1	16	1362	348
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	2000	1995	855	1140	2169	419	1710	0	0	419	0	0
Stage 1	1568	1568	-	427	427	-	-	-	-	-	-	-
Stage 2	432	427	-	713	1742	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	36	60	282	156	46	583	376	-	-	1137	-	-
Stage 1	118	170	-	576	584	-	-	-	-	-	-	-
Stage 2	577	584	-	389	139	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	34	59	282	120	45	583	376	-	-	1137	-	-
Mov Capacity-2 Maneuver	34	59	-	120	45	-	-	-	-	-	-	-
Stage 1	116	170	-	568	576	-	-	-	-	-	-	-
Stage 2	559	576	-	302	139	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	103.7	29.1	0.1	0.1
HCM LOS	F	D	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				107	159			
HCM Control Delay (s)	14.677	0	-	103.7	29.1	8.212	-	-
HCM Lane VC Ratio	0.011	-	-	0.754	0.062	0.014	-	-
HCM Lane LOS	B	A	-	F	D	A	-	-
HCM 95th Percentile Queue (veh)	0.032	-	-	4.099	0.195	0.044	-	-

Intersection												
Intersection Delay (sec/veh): $ 323.4												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	73	123	439	38	10	8	34	159	26	325	3
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	0	112	171	499	54	13	14	41	212	59	342	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	67	0	0	283	0	0	1432	1263	142	1383	1342	34
Stage 1	-	-	-	-	-	-	198	198	-	1059	1059	-
Stage 2	-	-	-	-	-	-	1234	1065	-	324	283	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	3.3
Pot Capacity-1 Maneuver	1549	-	-	1279	-	-	112	171	906	107	# 151	1052
Stage 1	-	-	-	-	-	-	808	741	-	244	# 300	-
Stage 2	-	-	-	-	-	-	217	301	-	640	677	-
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	1
Mov Capacity-1 Maneuver	1549	-	-	1279	-	-	-	104	906	# 41	# 92	1052
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	104	-	# 41	# 92	-
Stage 1	-	-	-	-	-	-	808	741	-	244	# 183	-
Stage 2	-	-	-	-	-	-	-	184	-	463	677	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	8.5	-	$ 1193.6
HCM LOS	A	A	-	F

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	-	403							41	94
HCM Control Delay (s)	-	27.8	0	-	-	9.603	0	-	$ -1	$ 27.8
HCM Lane VC Ratio	-	0.628	-	-	-	0.39	-	-	1.441	3.723
HCM Lane LOS	-	D	A	-	-	A	A	-	F	F
HCM 95th Percentile Queue (veh)	-	4.143	0	-	-	1.882	-	-	5.972	35.679

Intersection												
Intersection Delay (sec/veh): 6.7												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	16	485	44	63	275	9	36	60	80	8	16	7
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	23	545	54	72	367	13	45	86	145	9	28	23
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	380	0	0	599	0	0	960	1142	300	880	1163	191
Stage 1	-	-	-	-	-	-	618	618	-	518	518	-
Stage 2	-	-	-	-	-	-	342	524	-	362	645	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1374	-	-	1253	-	-	319	269	*1237	*396	232	*1345
Stage 1	-	-	-	-	-	-	703	661	-	*677	598	-
Stage 2	-	-	-	-	-	-	848	633	-	*1237	604	-
Time blocked-Platoon(%)	10	-	-	18	-	-	16	16	18	16	16	10
Mov Capacity-1 Maneuver	1374	-	-	1253	-	-	261	243	*1237	*236	209	*1345
Mov Capacity-2 Maneuver	-	-	-	-	-	-	261	243	-	*236	209	-
Stage 1	-	-	-	-	-	-	686	645	-	*660	555	-
Stage 2	-	-	-	-	-	-	734	587	-	*923	589	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	1.4	27.2	18.2
HCM LOS	A	A	D	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*430							*236	*333
HCM Control Delay (s)	27.2	7.664	0.1	-	8.047	0.2	-	20.7	17.9
HCM Lane VC Ratio	0.642	0.017	-	-	0.057	-	-	0.026	0.162
HCM Lane LOS	D	A	A	-	A	A	-	C	C
HCM 95th Percentile Queue (veh)	4.386	0.051	-	-	0.182	-	-	0.079	0.571

Intersection						
Intersection Delay (sec/veh): $ 531.6						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	458	105	768	1033	50	492
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	559	127	883	1135	83	674
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	686	0	2957	344
Stage 1	-	-	-	-	623	-
Stage 2	-	-	-	-	2334	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	1147	-	# 10	*1237
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	# 61	-
Time blocked-Platoon(%)	-	-	18	-	18	18
Mov Capacity-1 Maneuver	-	-	1147	-	# 2	*1237
Mov Capacity-2 Maneuver	-	-	-	-	# 2	-
Stage 1	-	-	-	-	743	-
Stage 2	-	-	-	-	# 14	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	7.8	$ 2408.2
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*2	*1237				
HCM Control Delay (s)	$ 21793.5	11.3	-	-	17.736	-
HCM Lane VC Ratio	41.667	0.545	-	-	0.77	-
HCM Lane LOS	F	B	-	-	C	-
HCM 95th Percentile Queue (veh)	12.639	3.425	-	-	8.057	-

Intersection						
Intersection Delay (sec/veh):	104.1					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	9	14	57	14	87	11	225	107	245	422	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	0	18	23	76	28	147	17	326	126	355	480	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1703	1678	242	1636	1617	226	484	0	0	452	0	0
Stage 1	1192	1192	-	423	423	-	-	-	-	-	-	-
Stage 2	511	486	-	1213	1194	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	73	96	743	80	105	818	1038	-	-	1103	-	-
Stage 1	230	263	-	605	591	-	-	-	-	-	-	-
Stage 2	549	554	-	220	262	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	31	64	743	# 46	70	818	1038	-	-	1103	-	-
Mov Capacity-2 Maneuver	31	64	-	# 46	70	-	-	-	-	-	-	-
Stage 1	226	178	-	595	581	-	-	-	-	-	-	-
Stage 2	421	545	-	130	178	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	44.2	$ 641	0.3	4.2
HCM LOS	E	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				132	113			
HCM Control Delay (s)	8.528	0	-	44.2	$ 641	9.806	0	-
HCM Lane VC Ratio	0.017	-	-	0.313	2.225	0.322	-	-
HCM Lane LOS	A	A	-	E	F	A	A	-
HCM 95th Percentile Queue (veh)	0.051	-	-	1.233	21.661	1.403	-	-

Intersection	
Intersection Delay (sec/veh)	55
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	38	248	73	46	138	12	99	207	32	17	71	41
Peak Hour Factor	0.71	0.73	0.86	0.60	0.70	0.39	0.85	0.70	0.58	0.63	0.68	0.64
Heavy Vehicles(%)	3	3	2	15	5	9	0	3	0	20	2	0
Movement Flow Rate	54	340	85	77	197	31	116	296	55	27	104	64
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	69.7	31.3	69.9	20.6
HCM LOS	F	D	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	29%	11%	23%	13%
Volume Thru (%)	61%	69%	70%	55%
Volume Right (%)	9%	20%	6%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	338	359	196	129
Left Turning Volume	207	248	138	71
Through Volume	32	73	12	41
Right Turning Volume	99	38	46	17
Lane Flow Rate	467	478	305	195
Geometry Group	1	1	1	1
Degree of Utilization, X	1	1	0.729	0.495
Departure Headway, Hd	7.811	7.731	8.614	9.126
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	472	473	426	401
Service Time	5.776	5.724	6.55	7.069
HCM Lane V/C Ratio	0.989	1.011	0.716	0.486
HCM Control Delay	69.9	69.7	31.3	20.6
HCM Lane LOS	F	F	D	C
HCM 95th Percentile Queue	102.1	102.4	8	2.9

Intersection	
Intersection Delay (sec/veh)	39.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	8	3	6	35	0	7	21	225	18	15	663	25
Peak Hour Factor	0.58	0.25	0.42	0.25	0.25	0.25	0.59	0.74	0.25	0.25	0.89	0.55
Heavy Vehicles(%)	57	0	20	3	0	0	0	0	6	38	1	0
Movement Flow Rate	14	12	14	140	0	28	36	304	72	60	745	45
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.1	13.4	18.3	56.7
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	0%	93%	0%	33%	0%	0%	0%	96%
Volume Right (%)	0%	7%	0%	67%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	21	243	8	9	35	7	15	688
Left Turning Volume	0	225	0	3	0	0	0	663
Through Volume	0	18	0	6	0	7	0	25
Right Turning Volume	21	0	8	0	35	0	15	0
Lane Flow Rate	36	376	14	26	140	28	60	790
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0.066	0.639	0.036	0.054	0.308	0.052	0.118	1
Departure Headway, Hd	6.671	6.12	9.267	7.338	7.91	6.663	7.055	5.886
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	538	590	387	489	456	539	509	617
Service Time	4.394	3.843	6.995	5.065	5.63	4.384	4.786	3.616
HCM Lane V/C Ratio	0.067	0.637	0.036	0.053	0.307	0.052	0.118	1.28
HCM Control Delay	9.9	19.1	12.3	10.5	14.1	9.8	10.7	60.2
HCM Lane LOS	A	C	B	B	B	A	B	F
HCM 95th Percentile Queue	0.2	5.3	0.1	0.2	1.3	0.2	0.4	117

Intersection	
Intersection Delay (sec/veh):	$ 502.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	97	6	34	0	77	69	21	626	6	41	317	65
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.42	0.54	0.25	0.59	0.66	0.79	0.90	0.31	0.69	0.89	0.85
Heavy Vehicles(%)	0	0	3	0	0	0	0	1	0	0	0	0
Movement Flow Rate	162	14	63	0	131	105	27	696	19	59	356	76
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1390	1281	394	1311	1310	706	432	0	0	715	0	0
Stage 1	512	512	-	760	760	-	-	-	-	-	-	-
Stage 2	878	769	-	551	550	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.327	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 121	167	653	137	161	439	1138	-	-	895	-	-
Stage 1	548	540	-	401	418	-	-	-	-	-	-	-
Stage 2	345	413	-	522	519	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 16	146	653	104	141	439	1138	-	-	895	-	-
Mov Capacity-2 Maneuver	# 16	146	-	104	141	-	-	-	-	-	-	-
Stage 1	527	492	-	385	402	-	-	-	-	-	-	-
Stage 2	171	397	-	418	473	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 3425.3	163	0.3	1.1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				17	653	202			
HCM Control Delay (s)	8.239	0	-	$ 163	11.1	163	9.308	0	-
HCM Lane VC Ratio	0.023	-	-	10.35	0.096	1.164	0.066	-	-
HCM Lane LOS	A	A	-	F	B	F	A	A	-
HCM 95th Percentile Queue (veh)	0.072	-	-	22.767	0.319	11.679	0.213	-	-

Intersection	
Intersection Delay (sec/veh):	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	27	110	0	0	218	68	0	1	0	137	2	48
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.72	0.25	0.25	0.58	0.83	0.25	0.25	0.25	0.82	0.50	0.72
Heavy Vehicles(%)	0	3	0	0	4	5	0	0	0	2	0	9
Movement Flow Rate	36	153	0	0	376	82	0	4	0	167	4	67
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	458	0	-	153	0	0	678	683	77	644	642	229
Stage 1	-	-	-	-	-	-	225	225	-	417	417	-
Stage 2	-	-	-	-	-	-	453	458	-	227	225	-
Follow-up Headway	2.2	-	0	2.2	-	-	3.5	4	3.3	3.518	4	3.381
Pot Capacity-1 Maneuver	1114	-	0	1440	-	-	369	374	990	386	395	793
Stage 1	-	-	0	-	-	-	782	721	-	613	595	-
Stage 2	-	-	0	-	-	-	590	570	-	776	721	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1114	-	-	1440	-	-	327	362	990	373	382	793
Mov Capacity-2 Maneuver	-	-	-	-	-	-	327	362	-	373	382	-
Stage 1	-	-	-	-	-	-	757	698	-	593	595	-
Stage 2	-	-	-	-	-	-	537	570	-	747	698	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.6	0	15.1	18.7
HCM LOS	A	A	C	C

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	362						373	747
HCM Control Delay (s)	15.1	8.339	0	0	-	-	22.3	10.3
HCM Lane VC Ratio	0.011	0.032	-	-	-	-	0.448	0.095
HCM Lane LOS	C	A	A	A	-	-	C	B
HCM 95th Percentile Queue (veh)	0.033	0.1	-	0	-	-	2.239	0.312

Intersection	
Intersection Delay (sec/veh):	8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	33	196	68	15	234	118	20	44	5	44	43	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.73	0.75	0.65	0.83	0.71	0.64	0.65	0.50	0.81	0.59	0.78
Heavy Vehicles(%)	0	8	0	0	2	5	11	0	0	0	13	4
Movement Flow Rate	41	268	91	23	282	166	31	68	10	54	73	41
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	448	0	0	359	0	0	864	890	180	846	852	224
Stage 1	-	-	-	-	-	-	396	396	-	411	411	-
Stage 2	-	-	-	-	-	-	468	494	-	435	441	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.599	4	3.3	3.5	4.117	3.336
Pot Capacity-1 Maneuver	1123	-	-	1211	-	-	265	284	868	284	285	810
Stage 1	-	-	-	-	-	-	612	608	-	622	576	-
Stage 2	-	-	-	-	-	-	559	550	-	604	559	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1123	-	-	1211	-	-	191	268	868	217	269	810
Mov Capacity-2 Maneuver	-	-	-	-	-	-	191	268	-	217	269	-
Stage 1	-	-	-	-	-	-	590	586	-	599	565	-
Stage 2	-	-	-	-	-	-	453	540	-	509	539	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.8	0.4	29.3	32.4
HCM LOS	A	A	D	D

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	255							294
HCM Control Delay (s)	29.3	8.326	0	-	8.03	0	-	32.4
HCM Lane VC Ratio	0.427	0.036	-	-	0.019	-	-	0.572
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th Percentile Queue (veh)	2.015	0.113	-	-	0.058	-	-	3.314

Intersection	
Intersection Delay (sec/veh):	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	2	0	0	0	0	1	3	219	0	1	61	20
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.81	0.25	0.25	0.75	0.38
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	0	11	11
Movement Flow Rate	4	0	0	0	0	4	12	270	0	4	81	53
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	4	0	0	0	0	0	77	12	0	145	10	2
Stage 1	-	-	-	-	-	-	8	8	-	2	2	-
Stage 2	-	-	-	-	-	-	69	4	-	143	8	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.5	4.009	3.3	3.5	4.099	3.399
Pot Capacity-1 Maneuver	1631	-	-	-	-	-	917	885	-	828	867	1056
Stage 1	-	-	-	-	-	-	1019	891	-	1026	877	-
Stage 2	-	-	-	-	-	-	946	894	-	865	871	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1631	-	-	-	-	-	807	883	-	-	865	1056
Mov Capacity-2 Maneuver	-	-	-	-	-	-	807	883	-	-	865	-
Stage 1	-	-	-	-	-	-	1017	889	-	1024	877	-
Stage 2	-	-	-	-	-	-	815	894	-	601	869	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	7.2	0	-	-
HCM LOS	A	A	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	7.213	0	-	0	-	-	-
HCM Lane VC Ratio	-	0.002	-	-	-	-	-	-
HCM Lane LOS	-	A	A	-	A	-	-	-
HCM 95th Percentile Queue (veh)	-	0.007	-	-	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	266.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	6	41	32	10	47	170	1069	124	87	271	16
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.38	0.63	0.64	0.71	0.75	0.75	0.70	0.81	0.69	0.64	0.69	0.70
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	1	1	0
Movement Flow Rate	8	10	64	45	13	63	243	1320	180	136	393	23
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1830	2663	209	2370	2584	750	416	0	0	1500	0	0
Stage 1	677	677	-	1896	1896	-	-	-	-	-	-	-
Stage 2	1153	1986	-	474	688	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	49	23	803	# 19	26	358	1154	-	-	448	-	-
Stage 1	414	455	-	73	119	-	-	-	-	-	-	-
Stage 2	213	107	-	545	450	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 4	13	803	# 5	14	358	1154	-	-	448	-	-
Mov Capacity-2 Maneuver	# 4	13	-	# 5	14	-	-	-	-	-	-	-
Stage 1	327	317	-	58	94	-	-	-	-	-	-	-
Stage 2	119	84	-	339	313	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 1104.4	$ 4704.7	1.6	4.6
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				29	12			
HCM Control Delay (s)	8.949	0.4	-	$ 4704.7	$ 4704.7	16.498	0.8	-
HCM Lane VC Ratio	0.21	-	-	2.81	10.089	0.303	-	-
HCM Lane LOS	A	A	-	F	F	C	A	-
HCM 95th Percentile Queue (veh)	0.794	-	-	9.708	16.402	1.266	-	-

Intersection	
Intersection Delay (sec/veh):	13.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	4	251	33	36	1002	0	0	0	0	34	0	297
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.69	0.56	0.73	0.87	0.25	0.25	0.25	0.25	0.58	0.25	0.79
Heavy Vehicles(%)	0	0	0	9	0	0	0	0	0	0	0	0
Movement Flow Rate	16	364	59	49	1152	0	0	0	0	59	0	376
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2		
Conflicting Flow Rate - All	1152	0	0	423	0	-				1428	~	576
Stage 1	-	-	-	-	-	-				1250	-	-
Stage 2	-	-	-	-	-	-				178	-	-
Follow-up Headway	3.1	-	-	3.19	-	0				3.8	0	3.9
Pot Capacity-1 Maneuver	336	-	-	711	-	0				145	0	398
Stage 1	-	-	-	-	-	0				135	0	-
Stage 2	-	-	-	-	-	0				746	0	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	336	-	-	711	-	-				131	-	398
Mov Capacity-2 Maneuver	-	-	-	-	-	-				131	-	-
Stage 1	-	-	-	-	-	-				126	-	-
Stage 2	-	-	-	-	-	-				699	-	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.8	0.4	63.2
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						131	398
HCM Control Delay (s)	16.249	0.3	-	10.44	-	53	64.8
HCM Lane VC Ratio	0.048	-	-	0.069	-	0.447	0.945
HCM Lane LOS	C	A	-	B	-	F	F
HCM 95th Percentile Queue (veh)	0.149	-	-	0.223	-	1.991	10.575

Intersection	
Intersection Delay (sec/veh):	16.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	211	75	0	781	150	253	0	32	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.76	0.76	0.25	0.86	0.74	0.85	0.25	0.70	0.25	0.25	0.25
Heavy Vehicles(%)	0	0	0	0	0	2	0	0	7	0	0	0
Movement Flow Rate	0	278	99	0	908	203	298	0	46	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	782	~	189
Stage 1	-	-	-	-	-	-	328	-	-
Stage 2	-	-	-	-	-	-	454	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.37
Pot Capacity-1 Maneuver	0	-	-	0	-	-	# 288	0	805
Stage 1	0	-	-	0	-	-	664	0	-
Stage 2	0	-	-	0	-	-	560	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	# 288	-	805
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 288	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	560	-	-

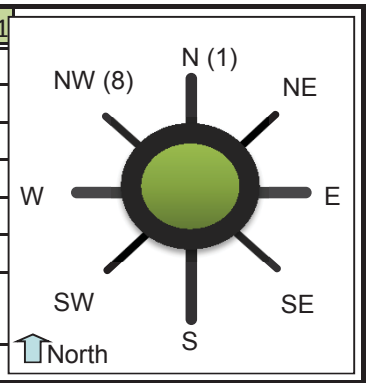
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	89.5
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	288	805				
HCM Control Delay (s)	101.7	9.7	-	-	-	-
HCM Lane VC Ratio	1.033	0.057	-	-	-	-
HCM Lane LOS	F	A	-	-	-	-
HCM 95th Percentile Queue (veh)	11.185	0.18	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States Base + Alt F AM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					48			
Exit NE (2), vph								
Legs E (3), vph		71						
(TO) SE (4), vph								
S (5), vph	264							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	264	71	0	0	48	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		584						
NE (2), vph								
E (3), vph	239							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	239	584	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	52	0	635	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	77	0	0	0	260	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	287	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	364	0	52	0	895	0	0	0
	Entry flow Lane 1, pcu/h	287	0	52	0	260	0	0	0
	Entry flow Lane 2, pcu/h	77	0	0	0	635	0	0	0
	Conflicting flow, pcu/h	0	0	635	0	77	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	725	NA	1046	1046	NA	NA
Entry Flow Rates, veh/h	287	77	52	NA	260	635	NA	NA
V/C ratio	**0.25**	**0.07**	**0.07**		**0.25**	**0.61**		
Control Delay, s/veh	**5.5**	**3.8**	**5.7**		**5.8**	**11.6**		
LOS	A	A	A		A	B		
95th % Queue (ft)	**25**	**5**	**6**		**25**	**107**		
Approach Delay, LOS	5.2 sec, LOS A		5.7 sec, LOS A		9.9 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	926	NA	1333	1333	NA	NA
Entry Flow Rates, veh/h	287	77	52	NA	260	635	NA	NA
V/C ratio	**0.17**	**0.05**	**0.06**		**0.19**	**0.48**		
Control Delay, s/veh	**3.5**	**2.5**	**4.4**		**4.3**	**7.5**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**16**	**4**	**4**		**18**	**66**		
Approach Delay, LOS	3.3 sec, LOS A		4.4 sec, LOS A		6.6 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	261	23	25	362	511	144	924	637	146	130	33
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1889	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	828	382	73	768	298	596	898	763	56	510	210
Arriving On Green	0.03	0.24	0.00	0.02	0.22	0.00	0.47	0.47	0.00	0.14	0.14	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	1261.6	1900.0	1615.0	414.1	3777.5	1552.9
Grp Volume(v), veh/h	58.7	326.3	0.0	29.1	470.1	0.0	288.0	1320.0	0.0	162.2	146.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	1261.6	1900.0	1615.0	414.1	1888.7	1552.9
Q Serve(g_s), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Cycle Q Clear(g_c), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.5	828.4	381.7	73.0	768.0	298.2	596.4	898.2	763.4	55.9	510.2	209.7
V/C Ratio(X)	1.056	0.394	0.000	0.398	0.612	0.000	0.483	1.470	0.000	2.900	0.286	0.000
Avail Cap(c_a), veh/h	55.5	828.4	381.7	118.5	812.6	315.5	596.4	898.2	763.4	55.9	510.2	209.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.2	38.1	0.0	57.3	41.4	0.0	21.3	31.2	0.0	51.2	46.1	0.0
Incr Delay (d2), s/veh	137.4	0.3	0.0	3.5	1.2	0.0	0.6	217.4	0.0	901.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	194.6	38.4	0.0	60.7	42.6	0.0	21.9	248.7	0.0	953.0	46.4	0.0
Lane Group LOS	F	D		E	D		C	F		F	D	
Approach Volume, veh/h		385			499			1608			308	
Approach Delay, s/veh		62.2			43.7			208.1			523.4	
Approach LOS		E			D			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.00	32.00		6.46	30.46			60.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	28.00		4.00	28.00			56.00			16.00	
Max Q Clear Time (g_c+I1), s	6.00	11.29		2.97	16.57			58.00			18.00	
Green Extension Time (p_c)	0.00	4.95		0.00	4.06			0.00			0.00	

Intersection Summary												
HCM 2010 Control Delay			193.4									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	547	27	244	670	418	156	1074	1324	310	233	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	319	818	377	298	669	305	254	1534	1196	254	1569	695
Arriving On Green	0.09	0.23	0.00	0.06	0.20	0.20	0.14	0.43	0.00	0.15	0.43	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	438.5	692.4	0.0	287.1	744.4	464.4	222.9	1512.7	0.0	344.4	261.8	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	11.0	22.6	0.0	6.7	24.0	24.0	14.5	49.8	0.0	18.0	5.3	0.0
Cycle Q Clear(g_c), s	11.0	22.6	0.0	6.7	24.0	24.0	14.5	49.8	0.0	18.0	5.3	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	318.6	817.8	376.8	297.7	668.5	304.7	254.0	1534.3	1196.1	253.7	1569.0	695.0
V/C Ratio(X)	1.376	0.847	0.000	0.964	1.114	1.524	0.877	0.986	0.000	1.358	0.167	0.000
Avail Cap(c_a), veh/h	318.6	817.8	376.8	297.7	668.5	304.7	361.9	1534.3	1196.1	253.7	1569.0	695.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	54.5	43.9	0.0	56.4	48.0	48.0	50.6	34.1	0.0	51.0	20.7	0.0
Incr Delay (d2), s/veh	187.9	8.2	0.0	42.4	70.3	252.0	15.7	19.6	0.0	184.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	242.4	52.2	0.0	98.8	118.3	300.0	66.2	53.8	0.0	235.5	20.7	0.0
Lane Group LOS	F	D		F	F	F	E	D		F	C	
Approach Volume, veh/h		1131			1496			1736			606	
Approach Delay, s/veh		125.9			171.0			55.4			142.8	
Approach LOS		F			F			E			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	15.00	32.00		11.00	28.00		20.85	55.00		22.00	56.15	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	11.00	28.00		7.00	24.00		24.00	51.00		18.00	45.00	
Max Q Clear Time (g_c+I1), s	13.00	24.65		8.74	26.00		16.49	51.77		20.00	7.30	
Green Extension Time (p_c)	0.00	2.78		0.00	0.00		0.37	0.00		0.00	19.54	

Intersection Summary												
HCM 2010 Control Delay			116.9									
HCM 2010 Level of Service			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	128	28	28	68	314	10	542	23	37	111	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1730	1730	1900	1857	1857	1900	1899	1899	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	410	544	121	121	55	312	33	551	21	56	596	512
Arriving On Green	0.24	0.40	0.40	0.02	0.08	0.08	0.02	0.30	0.30	0.03	0.32	0.32
Sat Flow, veh/h	1739.9	1372.0	304.5	1809.5	242.8	1372.3	1809.5	1817.1	69.3	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	576.3	0.0	226.7	47.5	0.0	551.6	16.9	0.0	792.5	43.0	130.6	10.4
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1676.6	1809.5	0.0	1615.1	1809.5	0.0	1886.4	1756.8	1881.2	1615.0
Q Serve(g_s), s	28.0	0.0	11.2	3.1	0.0	27.0	1.1	0.0	36.0	2.9	6.1	0.5
Cycle Q Clear(g_c), s	28.0	0.0	11.2	3.1	0.0	27.0	1.1	0.0	36.0	2.9	6.1	0.5
Proportion In Lane	1.000		0.182	1.000		0.850	1.000		0.037	1.000		1.000
Lane Grp Cap(c), veh/h	410.1	0.0	664.6	120.5	0.0	367.1	32.6	0.0	571.7	56.1	596.2	511.9
V/C Ratio(X)	1.405	0.000	0.341	0.394	0.000	1.503	0.519	0.000	1.386	0.767	0.219	0.020
Avail Cap(c_a), veh/h	410.1	0.0	664.6	152.3	0.0	367.1	76.2	0.0	571.7	73.9	596.2	511.9
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	45.4	0.0	25.0	55.7	0.0	54.9	57.8	0.0	41.4	57.1	29.8	27.9
Incr Delay (d2), s/veh	196.4	0.0	1.4	2.1	0.0	240.0	12.2	0.0	184.5	28.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	241.8	0.0	26.4	57.8	0.0	294.9	70.0	0.0	225.9	85.7	30.0	27.9
Lane Group LOS	F		C	E		F	E		F	F	C	C
Approach Volume, veh/h		803			599			809			184	
Approach Delay, s/veh		181.0			276.1			222.6			42.9	
Approach LOS		F			F			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	34.00	53.09		13.91	33.00		8.14	42.00		9.79	43.65	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	28.00	45.00		10.00	27.00		5.00	36.00		5.00	36.00	
Max Q Clear Time (g_c+I1), s	30.00	13.21		5.07	29.00		3.10	38.00		4.89	8.05	
Green Extension Time (p_c)	0.00	11.77		0.03	0.00		0.00	0.00		0.00	7.63	

Intersection Summary			
HCM 2010 Control Delay			208.2
HCM 2010 Level of Service			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	678	122	250	244	42	57	44	337	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1867	1867	1867	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	54	1246	256	374	1942	341	343	535	447	432	427	60
Arriving On Green	0.15	0.15	0.15	0.11	0.62	0.62	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	89.9	2772.1	565.3	1791.6	3148.6	553.7	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	502.5	0.0	454.1	294.1	167.7	162.7	64.8	50.0	474.6	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1769.5	0.0	1599.0	1791.6	1900.0	1802.3	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	8.2	0.0	32.0	9.8	4.5	4.6	5.1	2.4	35.5	19.6	0.0	8.1
Cycle Q Clear(g_c), s	31.0	0.0	32.0	9.8	4.5	4.6	13.2	2.4	35.5	22.0	0.0	8.1
Proportion In Lane	0.051		0.354	1.000		0.307	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	832.6	0.0	724.0	374.0	1171.7	1111.4	343.2	535.3	446.5	432.2	0.0	486.9
V/C Ratio(X)	0.603	0.000	0.627	0.786	0.143	0.146	0.189	0.093	1.063	0.575	0.000	0.295
Avail Cap(c_a), veh/h	832.6	0.0	724.0	498.4	1171.7	1111.4	343.2	535.3	446.5	432.2	0.0	486.9
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	40.8	0.0	41.5	21.5	9.7	9.7	37.7	30.6	42.3	38.6	0.0	32.6
Incr Delay (d2), s/veh	1.9	0.0	2.5	12.9	0.1	0.1	1.2	0.3	60.3	5.5	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	42.7	0.0	44.0	34.4	9.8	9.8	38.9	30.9	102.6	44.1	0.0	34.1
Lane Group LOS	D		D	C	A	A	D	C	F	D		C
Approach Volume, veh/h		957			625			589			392	
Approach Delay, s/veh		43.3			21.4			89.5			40.4	
Approach LOS		D			C			F			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		60.33		19.67	80.00			40.00			40.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		47.00		22.00	74.00			35.50			35.50	
Max Q Clear Time (g_c+I1), s		33.98		11.82	6.57			37.50			24.02	
Green Extension Time (p_c)		9.69		1.85	26.91			0.00			4.99	

Intersection Summary			
HCM 2010 Control Delay			48.2
HCM 2010 Level of Service			D

Intersection	
Intersection Delay (sec/veh):	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	306	0	1	612	12	0	0	0	8	0	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	1	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	4	348	0	1	827	36	0	0	0	32	0	20
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	863	0	0	349	0	0	1214	~	349	1204	1204	432
Stage 1	-	-	-	-	-	-	357	-	-	847	847	-
Stage 2	-	-	-	-	-	-	857	-	-	357	357	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	788	-	-	1177	-	-	160	0	699	162	186	628
Stage 1	-	-	-	-	-	-	665	0	-	359	381	-
Stage 2	-	-	-	-	-	-	355	0	-	665	632	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	788	-	-	1177	-	-	154	-	698	161	184	628
Mov Capacity-2 Maneuver	-	-	-	-	-	-	154	-	-	161	184	-
Stage 1	-	-	-	-	-	-	660	-	-	357	380	-
Stage 2	-	-	-	-	-	-	343	-	-	661	628	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.1	0	0	25.7
HCM LOS	A	A	A	D

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	0	0							225
HCM Control Delay (s)	0	0	9.592	0	-	8.062	-	-	25.7
HCM Lane VC Ratio	-	-	0.005	-	-	0.001	-	-	0.231
HCM Lane LOS	A	A	A	A	-	A	-	-	D
HCM 95th Percentile Queue (veh)	-	-	0.015	-	-	0.003	-	-	0.867

Intersection	
Intersection Delay (sec/veh)	$ 3659.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	268	0	0	3	0	24	0	1460	5	0	145	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	536	0	0	3	0	26	0	1973	5	0	179	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	2174	2163	96	2066	2167	1976	191	0	0	-	0	0
Stage 1	185	185	-	1976	1976	-	-	-	-	-	-	-
Stage 2	1989	1978	-	90	191	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	0	-	-
Pot Capacity-1 Maneuver	# 27	47	910	31	46	52	1395	-	-	0	-	-
Stage 1	805	746	-	64	106	-	-	-	-	0	-	-
Stage 2	# 64	106	-	907	741	-	-	-	-	0	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 13	47	910	31	46	52	1395	-	-	-	-	-
Mov Capacity-2 Maneuver	# 13	47	-	31	46	-	-	-	-	-	-	-
Stage 1	805	746	-	64	106	-	-	-	-	-	-	-
Stage 2	# 32	106	-	907	741	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 18665.3	160.7	0	0
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (vph)				13	48		
HCM Control Delay (s)	0	-	-	$ 160.7	160.7	-	-
HCM Lane VC Ratio	-	-	-	41.231	0.611	-	-
HCM Lane LOS	A	-	-	F	F	-	-
HCM 95th Percentile Queue (veh)	0	-	-	68.317	2.351	-	-

Intersection	
Intersection Delay (sec/veh):	41

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	90	16	83	32	6	36	180	370	27	37	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	72	138	22	94	45	8	62	217	493	61	39	0
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	53	0	0	160	0	0	550	534	80	885	541	-
Stage 1	-	-	-	-	-	-	293	293	-	237	237	-
Stage 2	-	-	-	-	-	-	257	241	-	648	304	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	0
Pot Capacity-1 Maneuver	1568	-	-	1419	-	-	450	456	980	241	449	0
Stage 1	-	-	-	-	-	-	719	674	-	719	710	0
Stage 2	-	-	-	-	-	-	755	711	-	421	663	0
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	0
Mov Capacity-1 Maneuver	1568	-	-	1419	-	-	382	406	980	64	400	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	382	406	-	64	400	-
Stage 1	-	-	-	-	-	-	686	643	-	686	663	-
Stage 2	-	-	-	-	-	-	663	664	-	132	633	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.3	4.9	64.9	-
HCM LOS	A	A	F	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	382	684							64	-
HCM Control Delay (s)	16.2	69.2	7.406	0	-	7.718	0	-	208	-
HCM Lane VC Ratio	0.162	1.038	0.046	-	-	0.066	-	-	0.959	-
HCM Lane LOS	C	F	A	A	-	A	A	-	F	-
HCM 95th Percentile Queue (veh)	0.574	18.039	0.144	-	-	0.213	-	-	4.635	-

Intersection	
Intersection Delay (sec/veh):	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	292	36	80	279	1	41	30	114	25	86	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	1	328	44	91	372	1	51	43	207	28	148	33
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	373	0	0	372	0	0	794	907	186	743	929	187
Stage 1	-	-	-	-	-	-	352	352	-	555	555	-
Stage 2	-	-	-	-	-	-	442	555	-	188	374	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1383	-	-	1385	-	-	548	447	*1345	*636	399	*1345
Stage 1	-	-	-	-	-	-	836	767	-	*641	571	-
Stage 2	-	-	-	-	-	-	728	612	-	*1345	710	-
Time blocked-Platoon(%)	10	-	-	10	-	-	21	21	10	21	21	10
Mov Capacity-1 Maneuver	1383	-	-	1385	-	-	344	409	*1345	*463	366	*1345
Mov Capacity-2 Maneuver	-	-	-	-	-	-	344	409	-	*463	366	-
Stage 1	-	-	-	-	-	-	835	766	-	*641	524	-
Stage 2	-	-	-	-	-	-	467	561	-	*1073	710	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	1.7	13.2	19.7
HCM LOS	A	A	B	C

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*739							*463	*424
HCM Control Delay (s)	13.2	7.606	0	-	7.782	0.2	-	13.1	20.3
HCM Lane VC Ratio	0.408	0.001	-	-	0.066	-	-	0.041	0.451
HCM Lane LOS	B	A	A	-	A	A	-	B	C
HCM 95th Percentile Queue (veh)	1.993	0.003	-	-	0.21	-	-	0.128	2.282

Intersection	
Intersection Delay (sec/veh):	$ 453

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1110	100	421	457	78	1005
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	1354	120	484	502	130	1377
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1474	0	2633	737
Stage 1	-	-	-	-	1414	-
Stage 2	-	-	-	-	1219	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	728	-	# 17	*# 840
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	246	-
Time blocked-Platoon(%)	-	-	44	-	44	44
Mov Capacity-1 Maneuver	-	-	728	-	# 6	*# 840
Mov Capacity-2 Maneuver	-	-	-	-	# 6	-
Stage 1	-	-	-	-	476	-
Stage 2	-	-	-	-	# 82	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	9.4	$ 1186.5
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*6	*840				
HCM Control Delay (s)	$ 10496.4	$ 307.4	-	-	19.183	-
HCM Lane VC Ratio	21.667	1.639	-	-	0.665	-
HCM Lane LOS	F	F	-	-	C	-
HCM 95th Percentile Queue (veh)	18.181	74.06	-	-	5.096	-

Intersection	
Intersection Delay (sec/veh):	12.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	52	11	191	6	370	92	44	143	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	69	22	324	10	536	108	64	162	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1076	957	84	907	905	322	167	0	0	644	0	0
Stage 1	293	293	-	610	610	-	-	-	-	-	-	-
Stage 2	783	664	-	297	295	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	199	260	915	255	278	724	1364	-	-	936	-	-
Stage 1	719	674	-	478	488	-	-	-	-	-	-	-
Stage 2	390	461	-	707	673	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	97	240	915	235	257	724	1364	-	-	936	-	-
Mov Capacity-2 Maneuver	97	240	-	235	257	-	-	-	-	-	-	-
Stage 1	714	628	-	474	484	-	-	-	-	-	-	-
Stage 2	204	458	-	651	627	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	27.6	38.2	0.1	2.5
HCM LOS	D	E	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				171	501			
HCM Control Delay (s)	7.658	0	-	27.6	38.2	9.127	0	-
HCM Lane VC Ratio	0.007	-	-	0.068	0.828	0.068	-	-
HCM Lane LOS	A	A	-	D	E	A	A	-
HCM 95th Percentile Queue (veh)	0.021	-	-	0.217	8.212	0.219	-	-

Intersection	
Intersection Delay (sec/veh)	36.6
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	44	130	72	53	179	10	66	129	147	21	185	24
Peak Hour Factor	0.49	0.88	0.70	0.84	0.88	0.75	0.74	0.82	0.63	0.79	0.79	0.88
Heavy Vehicles(%)	0	3	0	0	3	0	0	4	4	10	2	0
Movement Flow Rate	90	148	103	63	203	13	89	157	233	27	234	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	29.1	24	56.3	24.8
HCM LOS	D	C	F	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	19%	18%	22%	9%
Volume Thru (%)	38%	53%	74%	80%
Volume Right (%)	43%	29%	4%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	342	246	242	230
Left Turning Volume	129	130	179	185
Through Volume	147	72	10	24
Right Turning Volume	66	44	53	21
Lane Flow Rate	480	340	280	288
Geometry Group	1	1	1	1
Degree of Utilization, X	0.953	0.73	0.629	0.645
Departure Headway, Hd	7.151	7.716	8.087	8.066
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	504	466	445	446
Service Time	5.223	5.795	6.174	6.154
HCM Lane V/C Ratio	0.952	0.73	0.629	0.646
HCM Control Delay	56.3	29.1	24	24.8
HCM Lane LOS	F	D	C	C
HCM 95th Percentile Queue	47.8	8	5.1	5.4

Intersection	
Intersection Delay (sec/veh)	39.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	19	64	7	72	14	30	0	387	258	78	88	8
Peak Hour Factor	0.61	0.89	0.38	0.70	0.38	0.45	0.25	0.89	0.71	0.48	0.70	0.58
Heavy Vehicles(%)	18	4	0	2	0	0	0	1	4	4	3	0
Movement Flow Rate	31	72	18	103	37	67	0	435	363	163	126	14
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12	12.1	60.5	12.4
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	0%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	100%	60%	0%	90%	0%	32%	0%	92%
Volume Right (%)	0%	40%	0%	10%	0%	68%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	0	645	19	71	72	44	78	96
Left Turning Volume	0	387	0	64	0	14	0	88
Through Volume	0	258	0	7	0	30	0	8
Right Turning Volume	0	0	19	0	72	0	78	0
Lane Flow Rate	0	798	31	90	103	104	162	140
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0	1	0.073	0.191	0.226	0.199	0.322	0.254
Departure Headway, Hd	6.205	5.938	8.4	7.594	7.914	6.904	7.135	6.56
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	0	615	428	474	455	522	505	548
Service Time	3.941	3.674	6.125	5.319	5.638	4.628	4.862	4.287
HCM Lane V/C Ratio	0	1.298	0.072	0.19	0.226	0.199	0.321	0.255
HCM Control Delay	8.9	60.5	11.8	12.1	12.9	11.3	13.2	11.5
HCM Lane LOS	N	F	B	B	B	B	B	B
HCM 95th Percentile Queue	0	116.4	0.2	0.7	0.9	0.7	1.4	1

Intersection	
Intersection Delay (sec/veh):	182.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	127	32	26	1	23	59	7	439	2	77	584	43
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.78	0.52	0.25	0.63	0.81	0.75	0.85	0.50	0.65	0.90	0.86
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	0	0	0
Movement Flow Rate	184	41	50	4	37	73	9	516	4	118	649	50
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1501	1448	674	1492	1471	518	699	0	0	520	0	0
Stage 1	910	910	-	536	536	-	-	-	-	-	-	-
Stage 2	591	538	-	956	935	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 101	133	458	103	128	562	907	-	-	1056	-	-
Stage 1	332	356	-	532	527	-	-	-	-	-	-	-
Stage 2	497	526	-	313	347	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 55	107	458	55	103	562	907	-	-	1056	-	-
Mov Capacity-2 Maneuver	# 55	107	-	55	103	-	-	-	-	-	-	-
Stage 1	327	290	-	525	520	-	-	-	-	-	-	-
Stage 2	397	519	-	195	283	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 1131.8	42.7	0.2	1.3
HCM LOS	F	E	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				60	458	204			
HCM Control Delay (s)	9.01	0	-	$ 42.7	13.8	42.7	8.839	0	-
HCM Lane VC Ratio	0.01	-	-	3.751	0.109	0.556	0.112	-	-
HCM Lane LOS	A	A	-	F	B	E	A	A	-
HCM 95th Percentile Queue (veh)	0.031	-	-	24.133	0.365	2.972	0.378	-	-

Intersection	
Intersection Delay (sec/veh):	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	50	339	0	1	95	192	0	0	1	129	1	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.83	0.25	0.25	0.60	0.82	0.25	0.25	0.25	0.74	0.25	0.47
Heavy Vehicles(%)	2	4	0	0	2	2	0	0	0	0	0	0
Movement Flow Rate	63	408	0	4	158	234	0	0	4	174	4	68
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	392	0	-	408	0	0	853	934	204	819	817	196
Stage 1	-	-	-	-	-	-	534	534	-	283	283	-
Stage 2	-	-	-	-	-	-	319	400	-	536	534	-
Follow-up Headway	2.218	-	0	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1167	-	0	1162	-	-	281	268	842	297	313	850
Stage 1	-	-	0	-	-	-	534	528	-	728	681	-
Stage 2	-	-	0	-	-	-	697	605	-	532	528	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1167	-	-	1162	-	-	245	253	842	283	295	850
Mov Capacity-2 Maneuver	-	-	-	-	-	-	245	253	-	283	295	-
Stage 1	-	-	-	-	-	-	505	499	-	689	679	-
Stage 2	-	-	-	-	-	-	635	603	-	501	499	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.1	0.1	9.3	28.6
HCM LOS	A	A	A	D

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	842						283	770
HCM Control Delay (s)	9.3	8.262	0	8.109	0	-	36.2	10.2
HCM Lane VC Ratio	0.005	0.054	-	0.003	-	-	0.616	0.094
HCM Lane LOS	A	A	A	A	A	-	E	B
HCM 95th Percentile Queue (veh)	0.014	0.172	-	0.01	-	-	3.767	0.309

Intersection	
Intersection Delay (sec/veh):	130.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	34	452	75	7	243	61	37	47	19	86	124	17
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.68	0.76	0.76	0.50	0.87	0.84	0.69	0.81	0.35	0.83	0.74	0.63
Heavy Vehicles(%)	17	2	6	17	3	2	6	7	0	0	0	0
Movement Flow Rate	50	595	99	14	279	73	54	58	54	104	168	27
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	352	0	0	694	0	0	1186	1125	348	1145	1138	177
Stage 1	-	-	-	-	-	-	745	745	-	344	344	-
Stage 2	-	-	-	-	-	-	441	380	-	801	794	-
Follow-up Headway	2.353	-	-	2.353	-	-	3.554	4.063	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1128	-	-	836	-	-	163	201	700	178	203	871
Stage 1	-	-	-	-	-	-	400	414	-	676	641	-
Stage 2	-	-	-	-	-	-	587	605	-	381	403	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1128	-	-	836	-	-	# 38	189	700	120	191	871
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 38	189	-	120	191	-
Stage 1	-	-	-	-	-	-	382	396	-	646	630	-
Stage 2	-	-	-	-	-	-	411	595	-	287	385	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.6	0.4	$ 478.8	$ 418.7
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	92							168
HCM Control Delay (s)	$ 478.8	8.339	0	-	9.38	0	-	$ 478.8
HCM Lane VC Ratio	1.804	0.044	-	-	0.017	-	-	1.775
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th Percentile Queue (veh)	13.763	0.139	-	-	0.051	-	-	21.477

Intersection	
Intersection Delay (sec/veh):	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	12	0	1	0	0	0	5	33	0	0	176	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.25	0.25	0.25	0.25	0.25	0.50	0.81	0.25	0.25	0.66	0.50
Heavy Vehicles(%)	18	0	0	0	0	0	0	3	0	0	0	0
Movement Flow Rate	22	0	4	0	0	0	10	41	0	0	267	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	333	333	272	335	338	41	277	0	0	41	0	0
Stage 1	272	272	-	61	61	-	-	-	-	-	-	-
Stage 2	61	61	-	274	277	-	-	-	-	-	-	-
Follow-up Headway	3.662	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	591	590	772	622	586	1036	1298	-	-	1581	-	-
Stage 1	700	688	-	955	848	-	-	-	-	-	-	-
Stage 2	912	848	-	736	685	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	587	585	772	615	581	1036	1298	-	-	1581	-	-
Mov Capacity-2 Maneuver	587	585	-	615	581	-	-	-	-	-	-	-
Stage 1	694	688	-	947	841	-	-	-	-	-	-	-
Stage 2	905	841	-	732	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	11.2	0	1.5	0
HCM LOS	B	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				610	0			
HCM Control Delay (s)	7.795	0	-	11.2	0	0	-	-
HCM Lane VC Ratio	0.008	-	-	0.042	-	-	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th Percentile Queue (veh)	0.023	-	-	0.132	-	0	-	-

Intersection	
Intersection Delay (sec/veh):	$ 302.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	11	38	189	105	16	37	28	257	45	93	1005	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.77	0.84	0.64	0.58	0.49	0.78	0.86	0.94	0.80	0.94	0.63
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	1	0	0
Movement Flow Rate	22	49	225	164	28	76	36	299	48	116	1069	17
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1546	1729	544	1186	1713	174	1086	0	0	347	0	0
Stage 1	1310	1310	-	395	395	-	-	-	-	-	-	-
Stage 2	236	419	-	791	1318	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	79	89	488	# 146	91	846	650	-	-	1216	-	-
Stage 1	171	231	-	607	608	-	-	-	-	-	-	-
Stage 2	752	593	-	353	229	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	47	76	488	# 34	78	846	650	-	-	1216	-	-
Mov Capacity-2 Maneuver	47	76	-	# 34	78	-	-	-	-	-	-	-
Stage 1	162	209	-	573	574	-	-	-	-	-	-	-
Stage 2	616	560	-	# 131	207	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 328.2	$ 2066.5	1.1	1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				188	51			
HCM Control Delay (s)	10.862	0.1	-	$ 2066.5	$ 2066.5	8.273	0.2	-
HCM Lane VC Ratio	0.055	-	-	1.576	5.238	0.096	-	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th Percentile Queue (veh)	0.175	-	-	19.301	30.324	0.316	-	-

Intersection	
Intersection Delay (sec/veh):	152.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	32	994	173	73	302	0	0	0	0	161	2	116
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.87	0.80	0.68	0.73	0.25	0.25	0.25	0.25	0.83	0.50	0.61
Heavy Vehicles(%)	0	0	0	2	0	0	0	0	0	4	0	2
Movement Flow Rate	128	1143	216	107	414	0	0	0	0	194	4	190
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2				Minor 2		
Conflicting Flow Rate - All	414	0	0	1359	0	-			1341	2243	207
Stage 1	-	-	-	-	-	-			628	628	-
Stage 2	-	-	-	-	-	-			713	1615	-
Follow-up Headway	3.1	-	-	3.12	-	0			3.84	4	3.92
Pot Capacity-1 Maneuver	751	-	-	262	-	0			# 158	43	680
Stage 1	-	-	-	-	-	0			355	479	-
Stage 2	-	-	-	-	-	0			350	164	-
Time blocked-Platoon(%)	0	-	-	0	-	0			0	0	0
Mov Capacity-1 Maneuver	751	-	-	262	-	-			# 42	6	680
Mov Capacity-2 Maneuver	-	-	-	-	-	-			# 42	6	-
Stage 1	-	-	-	-	-	-			# 81	283	-
Stage 2	-	-	-	-	-	-			# 80	38	-

Approach	EB	WB	SB
HCM Control Delay (s)	2.5	5.8	$ 926.1
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						42	680
HCM Control Delay (s)	10.776	2.1	-	27.959	-	$ -1	12.3
HCM Lane VC Ratio	0.17	-	-	0.41	-	4.618	0.28
HCM Lane LOS	B	A	-	D	-	F	B
HCM 95th Percentile Queue (veh)	0.612	-	-	1.896	-	22.264	1.143

Intersection	
Intersection Delay (sec/veh):	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	912	251	0	306	143	38	0	61	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.91	0.94	0.25	0.68	0.79	0.81	0.25	0.90	0.25	0.25	0.25
Heavy Vehicles(%)	0	1	1	0	0	3	0	0	4	0	0	0
Movement Flow Rate	0	1002	267	0	450	181	47	0	68	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	1361	~	635
Stage 1	-	-	-	-	-	-	1136	-	-
Stage 2	-	-	-	-	-	-	225	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.34
Pot Capacity-1 Maneuver	0	-	-	0	-	-	109	0	416
Stage 1	0	-	-	0	-	-	218	0	-
Stage 2	0	-	-	0	-	-	763	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	109	-	416
Mov Capacity-2 Maneuver	-	-	-	-	-	-	109	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	763	-	-

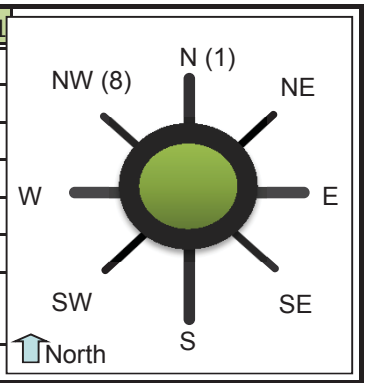
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	34
HCM LOS	A	A	D

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	109	416				
HCM Control Delay (s)	60.9	15.3	-	-	-	-
HCM Lane VC Ratio	0.43	0.163	-	-	-	-
HCM Lane LOS	F	C	-	-	-	-
HCM 95th Percentile Queue (veh)	1.834	0.576	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, PM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Base + Alt E PM



Volumes

Entry Legs (FROM)

Exit Legs (TO)	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					102			
NE (2), vph								
E (3), vph		91						
SE (4), vph								
S (5), vph	672							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	672	91	0	0	102	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		220						
NE (2), vph								
E (3), vph	146							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	146	220	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	111	0	239	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	99	0	0	0	159	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	730	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	829	0	111	0	398	0	0	0
	Entry flow Lane 1, pcu/h	730	0	111	0	159	0	0	0
	Entry flow Lane 2, pcu/h	99	0	0	0	239	0	0	0
	Conflicting flow, pcu/h	0	0	239	0	99	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	956	NA	1024	1024	NA	NA
Entry Flow Rates, veh/h	730	99	111	NA	159	239	NA	NA
V/C ratio	**0.65**	**0.09**	**0.12**		**0.16**	**0.23**		
Control Delay, s/veh	**12.0**	**3.9**	**4.8**		**4.9**	**5.8**		
LOS	B	A	A		A	A		
95th % Queue (ft)	**125**	**7**	**10**		**14**	**23**		
Approach Delay, LOS	11.1 sec, LOS B		4.8 sec, LOS A		5.4 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1322	NA	1304	1304	NA	NA
Entry Flow Rates, veh/h	730	99	111	NA	159	239	NA	NA
V/C ratio	**0.45**	**0.06**	**0.08**		**0.12**	**0.18**		
Control Delay, s/veh	**6.2**	**2.6**	**3.4**		**3.8**	**4.3**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**59**	**5**	**7**		**10**	**17**		
Approach Delay, LOS	5.8 sec, LOS A		3.4 sec, LOS A		4.1 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Intersection	
Intersection Delay (sec/veh):	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	630	104	215	220	5	1	0	7	0	1	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	0	716	132	295	297	15	4	0	9	0	4	4
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	312	0	0	848	0	0	1681	~	782	1682	1743	157
Stage 1	-	-	-	-	-	-	782	-	-	895	895	-
Stage 2	-	-	-	-	-	-	899	-	-	787	848	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1260	-	-	764	-	-	76	0	397	76	88	894
Stage 1	-	-	-	-	-	-	390	0	-	338	362	-
Stage 2	-	-	-	-	-	-	336	0	-	388	380	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1260	-	-	764	-	-	45	-	397	47	47	894
Mov Capacity-2 Maneuver	-	-	-	-	-	-	45	-	-	47	47	-
Stage 1	-	-	-	-	-	-	390	-	-	338	193	-
Stage 2	-	-	-	-	-	-	174	-	-	379	380	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	6.1	37.8	49.4
HCM LOS	A	A	E	E

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	45	397							89
HCM Control Delay (s)	92.7	14.3	0	-	-	12.637	-	-	49.4
HCM Lane VC Ratio	0.089	0.024	-	-	-	0.385	-	-	0.09
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th Percentile Queue (veh)	0.278	0.072	0	-	-	1.825	-	-	0.288

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	34	409	191	416	373	80	30	308	78	279	1093	57
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1899	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	57	529	244	471	862	335	104	430	366	335	1344	550
Arriving On Green	0.03	0.15	0.00	0.13	0.25	0.00	0.23	0.23	0.00	0.35	0.35	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	461.1	1900.0	1615.0	945.3	3798.1	1552.9
Grp Volume(v), veh/h	45.3	511.3	0.0	483.7	484.4	0.0	60.0	440.0	0.0	310.0	1228.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	461.1	1900.0	1615.0	945.3	1899.1	1552.9
Q Serve(g_s), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Cycle Q Clear(g_c), s	3.3	17.3	0.0	16.0	14.6	0.0	13.8	27.0	0.0	37.6	36.8	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	56.6	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	334.6	1344.3	549.6
V/C Ratio(X)	0.801	0.966	0.000	1.026	0.562	0.000	0.574	1.022	0.000	0.927	0.914	0.000
Avail Cap(c_a), veh/h	124.2	529.3	243.9	471.3	862.4	334.8	104.5	430.4	365.9	341.0	1370.3	560.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.1	50.3	0.0	51.6	38.9	0.0	41.0	46.1	0.0	37.0	36.8	0.0
Incr Delay (d2), s/veh	22.1	30.5	0.0	48.4	0.8	0.0	7.4	49.1	0.0	30.3	9.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	79.2	80.8	0.0	100.0	39.8	0.0	48.4	95.2	0.0	67.3	46.3	0.0
Lane Group LOS	E	F		F	D		D	F		E	D	
Approach Volume, veh/h		557			968			500			1538	
Approach Delay, s/veh		80.7			69.8			89.6			50.5	
Approach LOS		F			E			F			D	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.10	22.00		20.00	33.90			31.00			46.18	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	9.00	18.00		16.00	25.00			27.00			43.00	
Max Q Clear Time (g_c+I1), s	5.26	19.28		18.00	16.64			29.00			39.57	
Green Extension Time (p_c)	0.02	0.00		0.00	4.10			0.00			2.61	

Intersection Summary	
HCM 2010 Control Delay	66.0
HCM 2010 Level of Service	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	662	102	710	515	173	32	296	264	198	1254	366
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	237	828	382	861	1126	513	58	946	738	258	1381	612
Arriving On Green	0.07	0.24	0.00	0.17	0.34	0.34	0.03	0.26	0.00	0.15	0.38	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	163.1	838.0	0.0	835.3	572.2	192.2	45.7	416.9	0.0	220.0	1409.0	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Cycle Q Clear(g_c), s	4.1	21.0	0.0	14.5	12.2	8.5	2.2	8.6	0.0	11.3	34.0	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	236.9	828.3	381.7	861.4	1126.4	513.4	58.3	946.1	737.5	258.3	1381.3	611.8
V/C Ratio(X)	0.689	1.012	0.000	0.970	0.508	0.374	0.785	0.441	0.000	0.852	1.020	0.000
Avail Cap(c_a), veh/h	312.9	828.3	381.7	861.4	1126.4	513.4	81.5	946.1	737.5	399.7	1381.3	611.8
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	40.5	33.9	0.0	36.7	23.6	22.4	42.7	27.4	0.0	36.7	27.4	0.0
Incr Delay (d2), s/veh	4.1	34.2	0.0	23.4	0.4	0.5	27.4	0.3	0.0	10.2	29.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	44.5	68.1	0.0	60.1	23.9	22.8	70.1	27.7	0.0	46.9	56.8	0.0
Lane Group LOS	D	F		E	C	C	E	C		D	F	
Approach Volume, veh/h		1001			1600			463			1629	
Approach Delay, s/veh		64.3			42.7			31.9			55.5	
Approach LOS		E			D			C			E	

Timer										
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	10.06	25.00		19.00	33.94		6.86	27.29		17.57	38.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	8.00	21.00		15.00	28.00		4.00	17.00		21.00	34.00	
Max Q Clear Time (g_c+I1), s	6.08	23.00		16.46	14.17		4.23	10.56		13.26	36.00	
Green Extension Time (p_c)	0.09	0.00		0.00	8.50		0.00	5.28		0.37	0.00	

Intersection Summary		
HCM 2010 Control Delay		50.7
HCM 2010 Level of Service		D

Intersection	
Intersection Delay (sec/veh):	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	9	0	37	0	2	7	1	309	1	15	1103	313
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	18	0	63	0	2	8	4	418	1	16	1362	348
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	2000	1995	855	1140	2169	419	1710	0	0	419	0	0
Stage 1	1568	1568	-	427	427	-	-	-	-	-	-	-
Stage 2	432	427	-	713	1742	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	2.22	-	-
Pot Capacity-1 Maneuver	36	60	282	156	46	583	376	-	-	1137	-	-
Stage 1	118	170	-	576	584	-	-	-	-	-	-	-
Stage 2	577	584	-	389	139	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	34	59	282	120	45	583	376	-	-	1137	-	-
Mov Capacity-2 Maneuver	34	59	-	120	45	-	-	-	-	-	-	-
Stage 1	116	170	-	568	576	-	-	-	-	-	-	-
Stage 2	559	576	-	302	139	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	103.7	29.1	0.1	0.1
HCM LOS	F	D	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				107	159			
HCM Control Delay (s)	14.677	0	-	103.7	29.1	8.212	-	-
HCM Lane VC Ratio	0.011	-	-	0.754	0.062	0.014	-	-
HCM Lane LOS	B	A	-	F	D	A	-	-
HCM 95th Percentile Queue (veh)	0.032	-	-	4.099	0.195	0.044	-	-

Intersection												
Intersection Delay (sec/veh): $ 323.4												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	73	123	439	38	10	8	34	159	26	325	3
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	0	112	171	499	54	13	14	41	212	59	342	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	67	0	0	283	0	0	1432	1263	142	1383	1342	34
Stage 1	-	-	-	-	-	-	198	198	-	1059	1059	-
Stage 2	-	-	-	-	-	-	1234	1065	-	324	283	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	3.3
Pot Capacity-1 Maneuver	1549	-	-	1279	-	-	112	171	906	107	# 151	1052
Stage 1	-	-	-	-	-	-	808	741	-	244	# 300	-
Stage 2	-	-	-	-	-	-	217	301	-	640	677	-
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	1
Mov Capacity-1 Maneuver	1549	-	-	1279	-	-	-	104	906	# 41	# 92	1052
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	104	-	# 41	# 92	-
Stage 1	-	-	-	-	-	-	808	741	-	244	# 183	-
Stage 2	-	-	-	-	-	-	-	184	-	463	677	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	8.5	-	$ 1193.6
HCM LOS	A	A	-	F

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	-	403							41	94
HCM Control Delay (s)	-	27.8	0	-	-	9.603	0	-	$ -1	$ 27.8
HCM Lane VC Ratio	-	0.628	-	-	-	0.39	-	-	1.441	3.723
HCM Lane LOS	-	D	A	-	-	A	A	-	F	F
HCM 95th Percentile Queue (veh)	-	4.143	0	-	-	1.882	-	-	5.972	35.679

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	111	55	53	155	70	37	210	64	283	623	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1706	1706	1900	1839	1839	1900	1892	1892	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	124	246	124	150	269	148	81	385	105	364	811	697
Arriving On Green	0.07	0.23	0.23	0.06	0.16	0.16	0.04	0.27	0.27	0.21	0.43	0.43
Sat Flow, veh/h	1739.9	1072.2	539.1	1809.5	1114.7	616.1	1809.5	1430.8	391.9	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	241.8	89.8	0.0	293.5	62.7	0.0	376.8	329.1	732.9	279.2
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1611.2	1809.5	0.0	1730.8	1809.5	0.0	1822.7	1756.8	1881.2	1615.0
Q Serve(g_s), s	6.4	0.0	15.4	5.5	0.0	18.2	3.9	0.0	21.6	20.7	41.2	9.3
Cycle Q Clear(g_c), s	6.4	0.0	15.4	5.5	0.0	18.2	3.9	0.0	21.6	20.7	41.2	9.3
Proportion In Lane	1.000		0.335	1.000		0.356	1.000		0.215	1.000		1.000
Lane Grp Cap(c), veh/h	124.1	0.0	369.4	150.1	0.0	417.0	81.1	0.0	490.6	363.6	811.4	696.6
V/C Ratio(X)	0.806	0.000	0.654	0.598	0.000	0.704	0.774	0.000	0.768	0.905	0.903	0.401
Avail Cap(c_a), veh/h	153.4	0.0	369.4	159.6	0.0	417.0	111.7	0.0	490.6	511.2	879.2	754.8
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	51.9	0.0	39.6	51.7	0.0	43.7	53.6	0.0	38.2	43.9	30.0	10.5
Incr Delay (d2), s/veh	21.8	0.0	8.7	5.5	0.0	9.6	19.8	0.0	7.2	15.3	12.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	73.7	0.0	48.4	57.2	0.0	53.3	73.4	0.0	45.4	59.2	42.1	10.9
Lane Group LOS	E		D	E		D	E		D	E	D	B
Approach Volume, veh/h		342			383			439			1341	
Approach Delay, s/veh		55.8			54.2			49.4			39.8	
Approach LOS		E			D			D			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	14.09	32.00		15.41	33.32		11.08	36.52		29.47	54.91	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	10.00	26.00		10.00	26.00		7.00	27.00		33.00	53.00	
Max Q Clear Time (g_c+I1), s	8.42	17.43		7.50	20.19		5.89	23.60		22.73	43.16	
Green Extension Time (p_c)	0.03	3.44		0.04	2.53		0.01	2.40		0.74	5.75	

Intersection Summary		
HCM 2010 Control Delay		45.9
HCM 2010 Level of Service		D

Intersection	
Intersection Delay (sec/veh):	52.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	16	414	44	240	266	9	36	60	102	8	16	7
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	23	465	54	273	355	13	45	86	185	9	28	23
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor		Major 1			Major 2			Minor 1			Minor 2	
Conflicting Flow Rate - All	368	0	0	519	0	0	1276	1452	260	1230	1473	185
Stage 1	-	-	-	-	-	-	538	538	-	908	908	-
Stage 2	-	-	-	-	-	-	738	914	-	322	565	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1338	-	-	1303	-	-	156	156	*1273	*186	130	*1381
Stage 1	-	-	-	-	-	-	737	689	-	*355	354	-
Stage 2	-	-	-	-	-	-	429	390	-	*1273	631	-
Time blocked-Platoon(%)	8	-	-	15	-	-	13	13	15	13	13	8
Mov Capacity-1 Maneuver	1338	-	-	1303	-	-	94	112	*1273	*48	93	*1381
Mov Capacity-2 Maneuver	-	-	-	-	-	-	94	112	-	*48	93	-
Stage 1	-	-	-	-	-	-	719	673	-	*346	260	-
Stage 2	-	-	-	-	-	-	278	287	-	*926	616	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	3.8	239.8	49.3
HCM LOS	A	A	F	E

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*228							*48	*143
HCM Control Delay (s)	239.8	7.737	0.1	-	8.493	0.4	-	90.6	44.7
HCM Lane VC Ratio	1.387	0.017	-	-	0.209	-	-	0.126	0.377
HCM Lane LOS	F	A	A	-	A	A	-	F	E
HCM 95th Percentile Queue (veh)	17.714	0.052	-	-	0.789	-	-	0.403	1.59

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	17	321	86	363	816	173	135	127	136	66	50	17
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1869	1869	1869	1881	1900	1900	1863	1810	1776	1863	1601	1601
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	93	894	277	686	1913	420	348	505	421	328	215	197
Arriving On Green	0.86	0.86	0.86	0.16	0.63	0.63	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	196.8	1973.6	647.0	1791.6	3020.6	662.5	1284.6	1809.5	1509.3	1238.8	768.7	707.2
Grp Volume(v), veh/h	236.6	0.0	277.5	427.1	589.6	554.3	153.4	144.3	191.5	94.3	0.0	104.3
Grp Sat Flow(s),veh/h/ln	1287.5	0.0	1586.9	1791.6	1900.0	1783.1	1284.6	1809.5	1509.3	1238.8	0.0	1476.0
Q Serve(g_s), s	0.0	0.0	4.7	15.0	19.8	19.8	12.6	7.5	12.6	7.7	0.0	6.6
Cycle Q Clear(g_c), s	2.9	0.0	4.7	15.0	19.8	19.8	19.2	7.5	12.6	15.2	0.0	6.6
Proportion In Lane	0.153		0.408	1.000		0.372	1.000		1.000	1.000		0.479
Lane Grp Cap(c), veh/h	585.0	0.0	678.4	685.6	1203.3	1129.3	348.2	505.2	421.4	328.4	0.0	412.0
V/C Ratio(X)	0.404	0.000	0.409	0.623	0.490	0.491	0.441	0.286	0.455	0.287	0.000	0.253
Avail Cap(c_a), veh/h	585.0	0.0	678.4	734.9	1203.3	1129.3	348.2	505.2	421.4	328.4	0.0	412.0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	5.2	0.0	5.3	13.0	11.7	11.7	41.0	33.9	35.7	39.8	0.0	33.5
Incr Delay (d2), s/veh	1.0	0.0	0.8	3.5	0.7	0.7	4.0	1.4	3.5	2.2	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	6.2	0.0	6.2	16.5	12.4	12.4	45.0	35.3	39.2	42.0	0.0	35.0
Lane Group LOS	A		A	B	B	B	D	D	D	D		D
Approach Volume, veh/h		514			1571			489			199	
Approach Delay, s/veh		6.2			13.5			39.9			38.4	
Approach LOS		A			B			D			D	

Timer								
Assigned Phase		2		1	6		8		4
Phase Duration (G+Y+Rc), s		57.30		24.70	82.00		38.00		38.00
Change Period (Y+Rc), s		6.00		6.00	6.00		4.50		4.50
Max Green Setting (Gmax), s		49.00		22.00	76.00		33.50		33.50
Max Q Clear Time (g_c+I1), s		6.68		17.02	21.85		21.20		17.24
Green Extension Time (p_c)		29.83		1.68	35.29		3.99		4.62

Intersection Summary	
HCM 2010 Control Delay	18.6
HCM 2010 Level of Service	B

Intersection	
Intersection Delay (sec/veh):	54.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	492	34	492	1309	41	458
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	600	41	566	1438	68	627
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	641	0	2472	321
Stage 1	-	-	-	-	621	-
Stage 2	-	-	-	-	1851	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	1201	-	# 25	*1237
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	112	-
Time blocked-Platoon(%)	-	-	18	-	18	18
Mov Capacity-1 Maneuver	-	-	1201	-	# 13	*1237
Mov Capacity-2 Maneuver	-	-	-	-	# 13	-
Stage 1	-	-	-	-	745	-
Stage 2	-	-	-	-	# 59	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	3	254.7
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*13	*1237				
HCM Control Delay (s)	$ 2493.5	10.9	-	-	10.636	-
HCM Lane VC Ratio	5.256	0.507	-	-	0.471	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th Percentile Queue (veh)	9.589	2.972	-	-	2.586	-

Intersection	
Intersection Delay (sec/veh):	50.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	9	14	57	14	72	11	249	107	125	613	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	0	18	23	76	28	122	17	361	126	181	697	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	1594	1582	351	1540	1521	244	701	0	0	487	0	0
Stage 1	1061	1061	-	458	458	-	-	-	-	-	-	-
Stage 2	533	521	-	1082	1063	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	87	110	643	93	120	800	860	-	-	1071	-	-
Stage 1	273	303	-	579	570	-	-	-	-	-	-	-
Stage 2	534	535	-	261	302	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	50	90	643	# 65	98	800	860	-	-	1071	-	-
Mov Capacity-2 Maneuver	50	90	-	# 65	98	-	-	-	-	-	-	-
Stage 1	268	252	-	568	559	-	-	-	-	-	-	-
Stage 2	421	524	-	194	251	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	31.8	$ 358.1	0.3	1.9
HCM LOS	D	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				175	141			
HCM Control Delay (s)	9.273	0	-	31.8	$ 358.1	9.044	0	-
HCM Lane VC Ratio	0.02	-	-	0.236	1.603	0.169	-	-
HCM Lane LOS	A	A	-	D	F	A	A	-
HCM 95th Percentile Queue (veh)	0.062	-	-	0.881	15.945	0.607	-	-

Intersection	
Intersection Delay (sec/veh)	77.8
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	60	149	73	46	293	12	99	207	32	17	71	218
Peak Hour Factor	0.71	0.73	0.86	0.60	0.70	0.39	0.85	0.70	0.58	0.63	0.68	0.64
Heavy Vehicles(%)	3	3	2	15	5	9	0	3	0	20	2	0
Movement Flow Rate	85	204	85	77	419	31	116	296	55	27	104	341
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	75.2	79.3	78.2	77.9
HCM LOS	F	F	F	F

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	29%	21%	13%	6%
Volume Thru (%)	61%	53%	83%	23%
Volume Right (%)	9%	26%	3%	71%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	338	282	351	306
Left Turning Volume	207	149	293	71
Through Volume	32	73	12	218
Right Turning Volume	99	60	46	17
Lane Flow Rate	467	374	526	472
Geometry Group	1	1	1	1
Degree of Utilization, X	1	0.989	1	1
Departure Headway, Hd	9.571	9.535	9.83	9.493
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	383	385	373	387
Service Time	7.571	7.535	7.83	7.493
HCM Lane V/C Ratio	1.219	0.971	1.41	1.22
HCM Control Delay	78.2	75.2	79.3	77.9
HCM Lane LOS	F	F	F	F
HCM 95th Percentile Queue	92	77.4	90.8	92.4

Intersection	
Intersection Delay (sec/veh):	125.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	97	6	34	0	77	69	21	456	6	41	296	65
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.60	0.42	0.54	0.25	0.59	0.66	0.79	0.90	0.31	0.69	0.89	0.85
Heavy Vehicles(%)	0	0	3	0	0	0	0	1	0	0	0	0
Movement Flow Rate	162	14	63	0	131	105	27	507	19	59	333	76
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1178	1069	371	1099	1098	517	409	0	0	526	0	0
Stage 1	489	489	-	571	571	-	-	-	-	-	-	-
Stage 2	689	580	-	528	527	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.327	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	169	223	673	192	215	562	1161	-	-	1051	-	-
Stage 1	564	553	-	509	508	-	-	-	-	-	-	-
Stage 2	439	503	-	538	532	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 58	200	673	152	193	562	1161	-	-	1051	-	-
Mov Capacity-2 Maneuver	# 58	200	-	152	193	-	-	-	-	-	-	-
Stage 1	545	513	-	492	491	-	-	-	-	-	-	-
Stage 2	254	486	-	439	493	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 718.5	64.9	0.4	1.1
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				62	673	273			
HCM Control Delay (s)	8.173	0	-	$ 64.9	10.9	64.9	8.63	0	-
HCM Lane VC Ratio	0.023	-	-	2.838	0.094	0.861	0.057	-	-
HCM Lane LOS	A	A	-	F	B	F	A	A	-
HCM 95th Percentile Queue (veh)	0.07	-	-	17.925	0.308	7.312	0.18	-	-

Intersection	
Intersection Delay (sec/veh)	39.8
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	8	3	6	35	0	7	21	225	18	15	663	25
Peak Hour Factor	0.58	0.25	0.42	0.25	0.25	0.25	0.59	0.74	0.25	0.25	0.89	0.55
Heavy Vehicles(%)	57	0	20	3	0	0	0	0	6	38	1	0
Movement Flow Rate	14	12	14	140	0	28	36	304	72	60	745	45
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	11.1	13.4	18.3	56.7
HCM LOS	B	B	C	F

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	0%	93%	0%	33%	0%	0%	0%	96%
Volume Right (%)	0%	7%	0%	67%	0%	100%	0%	4%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	21	243	8	9	35	7	15	688
Left Turning Volume	0	225	0	3	0	0	0	663
Through Volume	0	18	0	6	0	7	0	25
Right Turning Volume	21	0	8	0	35	0	15	0
Lane Flow Rate	36	376	14	26	140	28	60	790
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0.066	0.639	0.036	0.054	0.308	0.052	0.118	1
Departure Headway, Hd	6.671	6.12	9.267	7.338	7.91	6.663	7.055	5.886
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	538	590	387	489	456	539	509	617
Service Time	4.394	3.843	6.995	5.065	5.63	4.384	4.786	3.616
HCM Lane V/C Ratio	0.067	0.637	0.036	0.053	0.307	0.052	0.118	1.28
HCM Control Delay	9.9	19.1	12.3	10.5	14.1	9.8	10.7	60.2
HCM Lane LOS	A	C	B	B	B	A	B	F
HCM 95th Percentile Queue	0.2	5.3	0.1	0.2	1.3	0.2	0.4	117

Intersection	
Intersection Delay (sec/veh):	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	27	110	0	0	218	238	0	1	0	158	2	48
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.75	0.72	0.25	0.25	0.58	0.83	0.25	0.25	0.25	0.82	0.50	0.72
Heavy Vehicles(%)	0	3	0	0	4	5	0	0	0	2	0	9
Movement Flow Rate	36	153	0	0	376	287	0	4	0	193	4	67
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	663	0	-	153	0	0	780	888	77	747	745	332
Stage 1	-	-	-	-	-	-	225	225	-	520	520	-
Stage 2	-	-	-	-	-	-	555	663	-	227	225	-
Follow-up Headway	2.2	-	0	2.2	-	-	3.5	4	3.3	3.518	4	3.381
Pot Capacity-1 Maneuver	935	-	0	1440	-	-	315	285	990	329	345	694
Stage 1	-	-	0	-	-	-	782	721	-	539	536	-
Stage 2	-	-	0	-	-	-	520	462	-	776	721	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	935	-	-	1440	-	-	274	274	990	316	332	694
Mov Capacity-2 Maneuver	-	-	-	-	-	-	274	274	-	316	332	-
Stage 1	-	-	-	-	-	-	752	693	-	518	536	-
Stage 2	-	-	-	-	-	-	467	462	-	742	693	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.7	0	18.3	26.9
HCM LOS	A	A	C	D

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	274						316	654
HCM Control Delay (s)	18.3	9.004	0	0	-	-	32.7	11.2
HCM Lane VC Ratio	0.015	0.039	-	-	-	-	0.61	0.108
HCM Lane LOS	C	A	A	A	-	-	D	B
HCM 95th Percentile Queue (veh)	0.044	0.12	-	0	-	-	3.767	0.362

Intersection	
Intersection Delay (sec/veh):	13.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	33	217	68	15	404	118	20	44	5	44	43	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.81	0.73	0.75	0.65	0.83	0.71	0.64	0.65	0.50	0.81	0.59	0.78
Heavy Vehicles(%)	0	8	0	0	2	5	11	0	0	0	13	4
Movement Flow Rate	41	297	91	23	487	166	31	68	10	54	73	41
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	653	0	0	388	0	0	1098	1124	195	1080	1086	327
Stage 1	-	-	-	-	-	-	425	425	-	616	616	-
Stage 2	-	-	-	-	-	-	673	699	-	464	470	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.599	4	3.3	3.5	4.117	3.336
Pot Capacity-1 Maneuver	943	-	-	1182	-	-	183	207	851	197	207	710
Stage 1	-	-	-	-	-	-	590	590	-	481	465	-
Stage 2	-	-	-	-	-	-	430	445	-	582	542	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	943	-	-	1182	-	-	117	194	851	136	194	710
Mov Capacity-2 Maneuver	-	-	-	-	-	-	117	194	-	136	194	-
Stage 1	-	-	-	-	-	-	564	564	-	460	456	-
Stage 2	-	-	-	-	-	-	334	436	-	484	518	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.9	0.3	55.2	75.2
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	174							202
HCM Control Delay (s)	55.2	8.99	0	-	8.106	0	-	75.2
HCM Lane VC Ratio	0.626	0.043	-	-	0.02	-	-	0.833
HCM Lane LOS	F	A	A	-	A	A	-	F
HCM 95th Percentile Queue (veh)	3.509	0.135	-	-	0.06	-	-	6.108

Intersection	
Intersection Delay (sec/veh):	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	2	0	0	0	0	1	3	219	0	1	61	20
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.25	0.25	0.25	0.25	0.25	0.25	0.81	0.25	0.25	0.75	0.38
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	0	11	11
Movement Flow Rate	4	0	0	0	0	4	12	270	0	4	81	53
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	4	0	0	0	0	0	77	12	0	145	10	2
Stage 1	-	-	-	-	-	-	8	8	-	2	2	-
Stage 2	-	-	-	-	-	-	69	4	-	143	8	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.5	4.009	3.3	3.5	4.099	3.399
Pot Capacity-1 Maneuver	1631	-	-	-	-	-	917	885	-	828	867	1056
Stage 1	-	-	-	-	-	-	1019	891	-	1026	877	-
Stage 2	-	-	-	-	-	-	946	894	-	865	871	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1631	-	-	-	-	-	807	883	-	-	865	1056
Mov Capacity-2 Maneuver	-	-	-	-	-	-	807	883	-	-	865	-
Stage 1	-	-	-	-	-	-	1017	889	-	1024	877	-
Stage 2	-	-	-	-	-	-	815	894	-	601	869	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	7.2	0	-	-
HCM LOS	A	A	-	-

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							-
HCM Control Delay (s)	-	7.213	0	-	0	-	-	-
HCM Lane VC Ratio	-	0.002	-	-	-	-	-	-
HCM Lane LOS	-	A	A	-	A	-	-	-
HCM 95th Percentile Queue (veh)	-	0.007	-	-	-	-	-	-

Intersection	
Intersection Delay (sec/veh):	158

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	3	6	41	23	10	47	170	1140	53	87	280	16
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.38	0.63	0.64	0.71	0.75	0.75	0.70	0.81	0.69	0.64	0.69	0.70
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	1	1	0
Movement Flow Rate	8	10	64	32	13	63	243	1407	77	136	406	23
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1886	2660	215	2412	2633	743	429	0	0	1484	0	0
Stage 1	690	690	-	1932	1932	-	-	-	-	-	-	-
Stage 2	1196	1970	-	480	701	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	44	23	796	# 18	24	362	1141	-	-	454	-	-
Stage 1	406	449	-	70	114	-	-	-	-	-	-	-
Stage 2	201	109	-	541	444	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	-	13	796	# 5	# 13	362	1141	-	-	454	-	-
Mov Capacity-2 Maneuver	-	13	-	# 5	# 13	-	-	-	-	-	-	-
Stage 1	320	314	-	55	90	-	-	-	-	-	-	-
Stage 2	111	86	-	338	311	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	-	$ 3567.3	1.6	4.5
HCM LOS	-	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				-	14			
HCM Control Delay (s)	9.006	0.4	-	-	$ 3567.3	16.283	0.8	-
HCM Lane VC Ratio	0.213	-	-	-	7.742	0.299	-	-
HCM Lane LOS	A	A	-	-	F	C	A	-
HCM 95th Percentile Queue (veh)	0.805	-	-	-	14.586	1.243	-	-

Intersection	
Intersection Delay (sec/veh):	13.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	4	251	33	36	1002	0	0	0	0	34	0	297
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.69	0.56	0.73	0.87	0.25	0.25	0.25	0.25	0.58	0.25	0.79
Heavy Vehicles(%)	0	0	0	9	0	0	0	0	0	0	0	0
Movement Flow Rate	16	364	59	49	1152	0	0	0	0	59	0	376
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2	
Conflicting Flow Rate - All	1152	0	0	423	0	-				1428	~	576
Stage 1	-	-	-	-	-	-				1250	-	-
Stage 2	-	-	-	-	-	-				178	-	-
Follow-up Headway	3.1	-	-	3.19	-	0				3.8	0	3.9
Pot Capacity-1 Maneuver	336	-	-	711	-	0				145	0	398
Stage 1	-	-	-	-	-	0				135	0	-
Stage 2	-	-	-	-	-	0				746	0	-
Time blocked-Platoon(%)	0	-	-	0	-	0				0	0	0
Mov Capacity-1 Maneuver	336	-	-	711	-	-				131	-	398
Mov Capacity-2 Maneuver	-	-	-	-	-	-				131	-	-
Stage 1	-	-	-	-	-	-				126	-	-
Stage 2	-	-	-	-	-	-				699	-	-

Approach	EB	WB	SB
HCM Control Delay (s)	0.8	0.4	63.2
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						131	398
HCM Control Delay (s)	16.249	0.3	-	10.44	-	53	64.8
HCM Lane VC Ratio	0.048	-	-	0.069	-	0.447	0.945
HCM Lane LOS	C	A	-	B	-	F	F
HCM 95th Percentile Queue (veh)	0.149	-	-	0.223	-	1.991	10.575

Intersection	
Intersection Delay (sec/veh):	16.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	211	75	0	781	150	253	0	32	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.76	0.76	0.25	0.86	0.74	0.85	0.25	0.70	0.25	0.25	0.25
Heavy Vehicles(%)	0	0	0	0	0	2	0	0	7	0	0	0
Movement Flow Rate	0	278	99	0	908	203	298	0	46	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	782	~	189
Stage 1	-	-	-	-	-	-	328	-	-
Stage 2	-	-	-	-	-	-	454	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.37
Pot Capacity-1 Maneuver	0	-	-	0	-	-	# 288	0	805
Stage 1	0	-	-	0	-	-	664	0	-
Stage 2	0	-	-	0	-	-	560	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	# 288	-	805
Mov Capacity-2 Maneuver	-	-	-	-	-	-	# 288	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	560	-	-

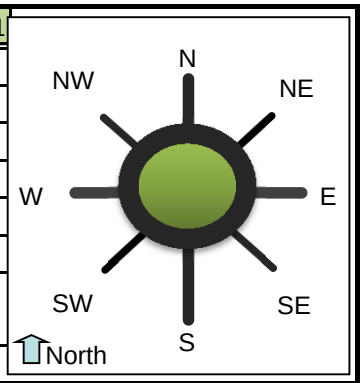
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	89.5
HCM LOS	A	A	F

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	288	805				
HCM Control Delay (s)	101.7	9.7	-	-	-	-
HCM Lane VC Ratio	1.033	0.057	-	-	-	-
HCM Lane LOS	F	A	-	-	-	-
HCM 95th Percentile Queue (veh)	11.185	0.18	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, AM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Base + Alt G AM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					48			
Exit NE (2), vph								
Legs E (3), vph		71						
(TO) SE (4), vph								
S (5), vph	252							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	252	71	0	0	48	0	0	0

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		485						
NE (2), vph								
E (3), vph	409							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	409	485	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	**2**	**2**	**2**	**2**	**1**	**2**	**2**	**2**

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	52	0	527	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	77	0	0	0	445	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	274	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	351	0	52	0	972	0	0	0
	Entry flow Lane 1, pcu/h	274	0	52	0	445	0	0	0
	Entry flow Lane 2, pcu/h	77	0	0	0	527	0	0	0
	Conflicting flow, pcu/h	0	0	527	0	77	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	781	NA	1046	1046	NA	NA
Entry Flow Rates, veh/h	274	77	52	NA	445	527	NA	NA
V/C ratio	**0.24**	**0.07**	**0.07**		**0.42**	**0.50**		
Control Delay, s/veh	**5.4**	**3.8**	**5.3**		**8.1**	**9.4**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**24**	**5**	**5**		**54**	**73**		
Approach Delay, LOS	5.1 sec, LOS A		5.3 sec, LOS A		8.8 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1020	NA	1333	1333	NA	NA
Entry Flow Rates, veh/h	274	77	52	NA	445	527	NA	NA
V/C ratio	**0.17**	**0.05**	**0.05**		**0.33**	**0.40**		
Control Delay, s/veh	**3.5**	**2.5**	**4.0**		**5.7**	**6.4**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**15**	**4**	**4**		**37**	**48**		
Approach Delay, LOS	3.3 sec, LOS A		4 sec, LOS A		6.1 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)

Bypass Characteristics	Bypass #1	Bypass #2	Bypass #3	Bypass #4	Bypass #5	Bypass #6
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Intersection	
Intersection Delay (sec/veh):	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	306	0	1	612	12	0	0	0	8	0	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	1	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	Free	Free	Free	Free	Free	Free	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.88	0.79	0.73	0.74	0.33	0.25	0.25	0.75	0.25	0.25	0.25
Heavy Vehicles(%)	0	2	0	8	2	0	0	0	0	0	0	0
Movement Flow Rate	4	348	0	1	827	36	0	0	0	32	0	20
Number of Lanes	0	1	0	0	1	1	1	0	1	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	863	0	0	349	0	0	1214	~	349	1204	1204	432
Stage 1	-	-	-	-	-	-	357	-	-	847	847	-
Stage 2	-	-	-	-	-	-	857	-	-	357	357	-
Follow-up Headway	2.2	-	-	2.272	-	-	3.5	0	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	788	-	-	1177	-	-	160	0	699	162	186	628
Stage 1	-	-	-	-	-	-	665	0	-	359	381	-
Stage 2	-	-	-	-	-	-	355	0	-	665	632	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	788	-	-	1177	-	-	154	-	698	161	184	628
Mov Capacity-2 Maneuver	-	-	-	-	-	-	154	-	-	161	184	-
Stage 1	-	-	-	-	-	-	660	-	-	357	380	-
Stage 2	-	-	-	-	-	-	343	-	-	661	628	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.1	0	0	25.7
HCM LOS	A	A	A	D

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	0	0							225
HCM Control Delay (s)	0	0	9.592	0	-	8.062	-	-	25.7
HCM Lane VC Ratio	-	-	0.005	-	-	0.001	-	-	0.231
HCM Lane LOS	A	A	A	A	-	A	-	-	D
HCM 95th Percentile Queue (veh)	-	-	0.015	-	-	0.003	-	-	0.867

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	261	23	25	362	511	144	924	637	146	130	33
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1845	1900	1900	1810	1570	1900	1900	1900	1863	1889	1827
Lanes	1	2	1	2	2	1	1	1	1	1	2	1
Capacity, veh/h	56	828	382	73	768	298	596	898	763	56	510	210
Arriving On Green	0.03	0.24	0.00	0.02	0.22	0.00	0.47	0.47	0.00	0.14	0.14	0.00
Sat Flow, veh/h	1645.0	1615.0	1615.0	3510.5	1334.7	1334.7	1261.6	1900.0	1615.0	414.1	3777.5	1552.9
Grp Volume(v), veh/h	58.7	326.3	0.0	29.1	470.1	0.0	288.0	1320.0	0.0	162.2	146.1	0.0
Grp Sat Flow(s),veh/h/ln	1645.0	1752.4	1615.0	1755.2	1719.0	1334.7	1261.6	1900.0	1615.0	414.1	1888.7	1552.9
Q Serve(g_s), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Cycle Q Clear(g_c), s	4.0	9.3	0.0	1.0	14.6	0.0	18.5	56.0	0.0	16.0	4.1	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	55.5	828.4	381.7	73.0	768.0	298.2	596.4	898.2	763.4	55.9	510.2	209.7
V/C Ratio(X)	1.056	0.394	0.000	0.398	0.612	0.000	0.483	1.470	0.000	2.900	0.286	0.000
Avail Cap(c_a), veh/h	55.5	828.4	381.7	118.5	812.6	315.5	596.4	898.2	763.4	55.9	510.2	209.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	57.2	38.1	0.0	57.3	41.4	0.0	21.3	31.2	0.0	51.2	46.1	0.0
Incr Delay (d2), s/veh	137.4	0.3	0.0	3.5	1.2	0.0	0.6	217.4	0.0	901.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	194.6	38.4	0.0	60.7	42.6	0.0	21.9	248.7	0.0	953.0	46.4	0.0
Lane Group LOS	F	D		E	D		C	F		F	D	
Approach Volume, veh/h		385			499			1608			308	
Approach Delay, s/veh		62.2			43.7			208.1			523.4	
Approach LOS		E			D			F			F	

Timer												
Assigned Phase	5	2		1	6			8			4	
Phase Duration (G+Y+Rc), s	8.00	32.00		6.46	30.46			60.00			20.00	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00			4.00			4.00	
Max Green Setting (Gmax), s	4.00	28.00		4.00	28.00			56.00			16.00	
Max Q Clear Time (g_c+I1), s	6.00	11.29		2.97	16.57			58.00			18.00	
Green Extension Time (p_c)	0.00	4.95		0.00	4.06			0.00			0.00	

Intersection Summary	
HCM 2010 Control Delay	193.4
HCM 2010 Level of Service	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	285	547	27	244	670	418	156	1074	1324	310	233	113
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1881	1845	1900	1900	1759	1792	1900	1900	1881	1776	1900	1881
Lanes	2	2	1	3	2	1	1	2	2	1	2	1
Capacity, veh/h	319	818	377	298	669	305	254	1534	1196	254	1569	695
Arriving On Green	0.09	0.23	0.00	0.06	0.20	0.20	0.14	0.43	0.00	0.15	0.43	0.00
Sat Flow, veh/h	3475.7	1615.0	1615.0	5102.9	1523.6	1523.6	1809.5	2814.3	2814.3	1691.1	1599.0	1599.0
Grp Volume(v), veh/h	438.5	692.4	0.0	287.1	744.4	464.4	222.9	1512.7	0.0	344.4	261.8	0.0
Grp Sat Flow(s),veh/h/ln	1737.9	1752.4	1615.0	1701.0	1671.3	1523.6	1809.5	1805.0	1407.1	1691.1	1805.0	1599.0
Q Serve(g_s), s	11.0	22.6	0.0	6.7	24.0	24.0	14.5	49.8	0.0	18.0	5.3	0.0
Cycle Q Clear(g_c), s	11.0	22.6	0.0	6.7	24.0	24.0	14.5	49.8	0.0	18.0	5.3	0.0
Proportion In Lane	1.000		1.000	1.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	318.6	817.8	376.8	297.7	668.5	304.7	254.0	1534.3	1196.1	253.7	1569.0	695.0
V/C Ratio(X)	1.376	0.847	0.000	0.964	1.114	1.524	0.877	0.986	0.000	1.358	0.167	0.000
Avail Cap(c_a), veh/h	318.6	817.8	376.8	297.7	668.5	304.7	361.9	1534.3	1196.1	253.7	1569.0	695.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	54.5	43.9	0.0	56.4	48.0	48.0	50.6	34.1	0.0	51.0	20.7	0.0
Incr Delay (d2), s/veh	187.9	8.2	0.0	42.4	70.3	252.0	15.7	19.6	0.0	184.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	242.4	52.2	0.0	98.8	118.3	300.0	66.2	53.8	0.0	235.5	20.7	0.0
Lane Group LOS	F	D		F	F	F	E	D		F	C	
Approach Volume, veh/h		1131			1496			1736			606	
Approach Delay, s/veh		125.9			171.0			55.4			142.8	
Approach LOS		F			F			E			F	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	15.00	32.00		11.00	28.00		20.85	55.00		22.00	56.15	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	11.00	28.00		7.00	24.00		24.00	51.00		18.00	45.00	
Max Q Clear Time (g_c+I1), s	13.00	24.65		8.74	26.00		16.49	51.77		20.00	7.30	
Green Extension Time (p_c)	0.00	2.78		0.00	0.00		0.37	0.00		0.00	19.54	

Intersection Summary		
HCM 2010 Control Delay		116.9
HCM 2010 Level of Service		F

Intersection	
Intersection Delay (sec/veh)	$ 3659.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	268	0	0	3	0	24	0	1460	5	0	145	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.92	0.59	0.92	0.92	0.92	0.25	0.74	0.92	0.92	0.81	0.90
Heavy Vehicles(%)	0	2	12	2	2	2	0	0	2	2	0	0
Movement Flow Rate	536	0	0	3	0	26	0	1973	5	0	179	12
Number of Lanes	0	1	0	0	1	0	0	1	0	0	2	1

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	2174	2163	96	2066	2167	1976	191	0	0	-	0	0
Stage 1	185	185	-	1976	1976	-	-	-	-	-	-	-
Stage 2	1989	1978	-	90	191	-	-	-	-	-	-	-
Follow-up Headway	3.5	4.02	3.42	3.52	4.02	3.32	2.2	-	-	0	-	-
Pot Capacity-1 Maneuver	# 27	47	910	31	46	52	1395	-	-	0	-	-
Stage 1	805	746	-	64	106	-	-	-	-	0	-	-
Stage 2	# 64	106	-	907	741	-	-	-	-	0	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 13	47	910	31	46	52	1395	-	-	-	-	-
Mov Capacity-2 Maneuver	# 13	47	-	31	46	-	-	-	-	-	-	-
Stage 1	805	746	-	64	106	-	-	-	-	-	-	-
Stage 2	# 32	106	-	907	741	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 18665.3	160.7	0	0
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (vph)				13	48		
HCM Control Delay (s)	0	-	-	$ 160.7	160.7	-	-
HCM Lane VC Ratio	-	-	-	41.231	0.611	-	-
HCM Lane LOS	A	-	-	F	F	-	-
HCM 95th Percentile Queue (veh)	0	-	-	68.317	2.351	-	-

Intersection	
Intersection Delay (sec/veh):	41

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	18	90	16	83	32	6	36	180	370	27	37	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.65	0.72	0.88	0.71	0.75	0.58	0.83	0.75	0.44	0.95	0.38
Heavy Vehicles(%)	0	14	3	2	6	0	0	0	2	26	2	0
Movement Flow Rate	72	138	22	94	45	8	62	217	493	61	39	0
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	53	0	0	160	0	0	550	534	80	885	541	-
Stage 1	-	-	-	-	-	-	293	293	-	237	237	-
Stage 2	-	-	-	-	-	-	257	241	-	648	304	-
Follow-up Headway	2.2	-	-	2.218	-	-	3.5	4	3.318	3.734	4.018	0
Pot Capacity-1 Maneuver	1568	-	-	1419	-	-	450	456	980	241	449	0
Stage 1	-	-	-	-	-	-	719	674	-	719	710	0
Stage 2	-	-	-	-	-	-	755	711	-	421	663	0
Time blocked-Platoon(%)	1	-	-	0	-	-	1	1	0	1	1	0
Mov Capacity-1 Maneuver	1568	-	-	1419	-	-	382	406	980	64	400	-
Mov Capacity-2 Maneuver	-	-	-	-	-	-	382	406	-	64	400	-
Stage 1	-	-	-	-	-	-	686	643	-	686	663	-
Stage 2	-	-	-	-	-	-	663	664	-	132	633	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	2.3	4.9	64.9	-
HCM LOS	A	A	F	-

Lane	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	382	684							64	-
HCM Control Delay (s)	16.2	69.2	7.406	0	-	7.718	0	-	208	-
HCM Lane VC Ratio	0.162	1.038	0.046	-	-	0.066	-	-	0.959	-
HCM Lane LOS	C	F	A	A	-	A	A	-	F	-
HCM 95th Percentile Queue (veh)	0.574	18.039	0.144	-	-	0.213	-	-	4.635	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	128	28	28	68	250	10	606	23	26	122	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1730	1730	1900	1856	1856	1900	1899	1899	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	412	547	121	121	67	303	33	556	19	47	589	506
Arriving On Green	0.24	0.40	0.40	0.02	0.08	0.08	0.02	0.30	0.30	0.03	0.31	0.31
Sat Flow, veh/h	1739.9	1372.0	304.5	1809.5	294.9	1327.0	1809.5	1825.5	62.3	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	576.3	0.0	226.7	47.5	0.0	456.1	16.9	0.0	882.6	30.2	143.5	10.4
Grp Sat Flow(s),veh/h/ln	1739.9	0.0	1676.6	1809.5	0.0	1621.9	1809.5	0.0	1887.8	1756.8	1881.2	1615.0
Q Serve(g_s), s	28.0	0.0	11.1	3.1	0.0	27.0	1.1	0.0	36.0	2.0	6.7	0.5
Cycle Q Clear(g_c), s	28.0	0.0	11.1	3.1	0.0	27.0	1.1	0.0	36.0	2.0	6.7	0.5
Proportion In Lane	1.000		0.182	1.000		0.818	1.000		0.033	1.000		1.000
Lane Grp Cap(c), veh/h	412.4	0.0	668.5	120.9	0.0	370.7	32.7	0.0	575.2	46.8	589.3	505.9
V/C Ratio(X)	1.398	0.000	0.339	0.393	0.000	1.230	0.519	0.000	1.534	0.646	0.244	0.021
Avail Cap(c_a), veh/h	412.4	0.0	668.5	153.2	0.0	370.7	76.6	0.0	575.2	74.3	589.3	505.9
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	45.1	0.0	24.7	55.4	0.0	54.6	57.5	0.0	41.1	56.9	30.2	28.0
Incr Delay (d2), s/veh	193.1	0.0	1.4	2.1	0.0	125.2	12.1	0.0	249.2	14.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	238.2	0.0	26.1	57.5	0.0	179.8	69.6	0.0	290.2	70.9	30.4	28.1
Lane Group LOS	F		C	E		F	E		F	E	C	C
Approach Volume, veh/h		803			504			900			184	
Approach Delay, s/veh		178.3			168.2			286.1			36.9	
Approach LOS		F			F			F			D	

Timer												
Assigned Phase	5	2		1	6		3	8		7	4	
Phase Duration (G+Y+Rc), s	34.00	53.11		13.89	33.00		8.13	42.00		9.15	43.01	
Change Period (Y+Rc), s	6.00	6.00		6.00	6.00		6.00	6.00		6.00	6.00	
Max Green Setting (Gmax), s	28.00	45.00		10.00	27.00		5.00	36.00		5.00	36.00	
Max Q Clear Time (g_c+I1), s	30.00	13.11		5.06	29.00		3.10	38.00		4.01	8.70	
Green Extension Time (p_c)	0.00	9.87		0.03	0.00		0.00	0.00		0.00	8.93	

Intersection Summary	
HCM 2010 Control Delay	205.9
HCM 2010 Level of Service	F

Intersection	
Intersection Delay (sec/veh):	32.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	281	36	108	215	1	41	30	273	25	86	10
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.70	0.89	0.81	0.88	0.75	0.67	0.80	0.70	0.55	0.88	0.58	0.30
Heavy Vehicles(%)	0	4	0	0	2	0	12	2	0	0	21	50
Movement Flow Rate	1	316	44	123	287	1	51	43	496	28	148	33
Number of Lanes	0	2	0	0	2	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	288	0	0	360	0	0	804	874	180	716	896	145
Stage 1	-	-	-	-	-	-	340	340	-	534	534	-
Stage 2	-	-	-	-	-	-	464	534	-	182	362	-
Follow-up Headway	2.2	-	-	2.2	-	-	3.62	4.02	3.3	3.5	4.21	3.8
Pot Capacity-1 Maneuver	1439	-	-	1382	-	-	257	287	*1357	*321	247	*1381
Stage 1	-	-	-	-	-	-	829	764	-	*617	557	-
Stage 2	-	-	-	-	-	-	652	598	-	*1357	708	-
Time blocked-Platoon(%)	8	-	-	10	-	-	0	0	10	0	0	8
Mov Capacity-1 Maneuver	1439	-	-	1382	-	-	107	256	*1357	*163	221	*1381
Mov Capacity-2 Maneuver	-	-	-	-	-	-	107	256	-	*163	221	-
Stage 1	-	-	-	-	-	-	828	763	-	*616	498	-
Stage 2	-	-	-	-	-	-	399	534	-	*812	707	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0	2.5	67.2	50.3
HCM LOS	A	A	F	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	*583							*163	*254
HCM Control Delay (s)	67.2	7.504	0	-	7.859	0.2	-	30	52.3
HCM Lane VC Ratio	1.013	0.001	-	-	0.089	-	-	0.116	0.752
HCM Lane LOS	F	A	A	-	A	A	-	D	F
HCM 95th Percentile Queue (veh)	15.355	0.003	-	-	0.292	-	-	0.386	5.401

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	826	122	266	208	42	57	44	426	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1866	1866	1866	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	50	1259	213	359	1887	388	343	535	447	432	427	60
Arriving On Green	0.29	0.29	0.29	0.13	0.62	0.62	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	77.1	2912.2	484.9	1791.6	3060.5	628.6	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	590.9	0.0	533.8	312.9	146.8	142.3	64.8	50.0	600.0	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1785.3	0.0	1612.7	1791.6	1900.0	1789.1	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	13.3	0.0	36.0	11.6	3.9	4.0	5.1	2.4	35.5	19.6	0.0	8.1
Cycle Q Clear(g_c), s	35.3	0.0	36.0	11.6	3.9	4.0	13.2	2.4	35.5	22.0	0.0	8.1
Proportion In Lane	0.043		0.301	1.000		0.351	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	814.4	0.0	707.4	359.0	1171.7	1103.3	343.2	535.3	446.5	432.2	0.0	486.9
V/C Ratio(X)	0.726	0.000	0.755	0.872	0.125	0.129	0.189	0.093	1.344	0.575	0.000	0.295
Avail Cap(c_a), veh/h	814.4	0.0	707.4	458.1	1171.7	1103.3	343.2	535.3	446.5	432.2	0.0	486.9
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	36.0	0.0	36.5	25.7	9.6	9.6	37.7	30.6	42.3	38.6	0.0	32.6
Incr Delay (d2), s/veh	4.0	0.0	5.5	21.5	0.1	0.1	1.2	0.3	169.1	5.5	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	40.0	0.0	42.0	47.2	9.7	9.7	38.9	30.9	211.3	44.1	0.0	34.1
Lane Group LOS	D		D	D	A	A	D	C	F	D		C
Approach Volume, veh/h		1125			602			715			392	
Approach Delay, s/veh		40.9			29.2			183.1			40.4	
Approach LOS		D			C			F			D	

Timer							
Assigned Phase		2		1	6		8		4
Phase Duration (G+Y+Rc), s		58.64		21.36	80.00		40.00		40.00
Change Period (Y+Rc), s		6.00		6.00	6.00		4.50		4.50
Max Green Setting (Gmax), s		47.00		22.00	74.00		35.50		35.50
Max Q Clear Time (g_c+I1), s		38.04		13.62	5.98		37.50		24.02
Green Extension Time (p_c)		7.45		1.74	32.02		0.00		5.82

Intersection Summary	
HCM 2010 Control Delay	74.2
HCM 2010 Level of Service	E

Intersection	
Intersection Delay (sec/veh):	119.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Volume (vph)	1359	89	377	501	14	757
Conflicting Peds.(#/hr)	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
Right Turn Channelized	None	None	None	None	Free	Free
Storage Length		0	0		0	0
Median Width	12			12	12	
Grade (%)	0%			0%	0%	
Peak Hour Factor	0.82	0.83	0.87	0.91	0.60	0.73
Heavy Vehicles(%)	3	3	0	1	0	1
Movement Flow Rate	1657	107	433	551	23	1037
Number of Lanes	2	0	1	2	1	1

Major/Minor	Major 1			Major 2		
Conflicting Flow Rate - All	0	0	1764	0	2853	883
Stage 1	-	-	-	-	1711	-
Stage 2	-	-	-	-	1142	-
Follow-up Headway	-	-	2.2	-	3.5	3.31
Pot Capacity-1 Maneuver	-	-	573	-	# 8	*# 696
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	271	-
Time blocked-Platoon(%)	-	-	54	-	54	54
Mov Capacity-1 Maneuver	-	-	573	-	# 2	*# 696
Mov Capacity-2 Maneuver	-	-	-	-	# 2	-
Stage 1	-	-	-	-	372	-
Stage 2	-	-	-	-	66	-

Approach	EB	WB	NB
HCM Control Delay (s)	0	12.4	$ 418.4
HCM LOS	A	B	F

Lane	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (vph)	*2	*696				
HCM Control Delay (s)	$ 8105	245.4	-	-	28.174	-
HCM Lane VC Ratio	11.667	1.49	-	-	0.756	-
HCM Lane LOS	F	F	-	-	D	-
HCM 95th Percentile Queue (veh)	4.578	50.347	-	-	6.721	-

Intersection	
Intersection Delay (sec/veh):	8.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	52	11	83	6	542	92	25	173	1
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	69	22	141	10	786	108	36	197	4
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1213	1185	101	1135	1133	447	201	0	0	894	0	0
Stage 1	271	271	-	860	860	-	-	-	-	-	-	-
Stage 2	942	914	-	275	273	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.525	3.536	4	3.3	2.29	-	-	2.227	-	-
Pot Capacity-1 Maneuver	160	191	895	178	205	616	1325	-	-	755	-	-
Stage 1	739	689	-	348	376	-	-	-	-	-	-	-
Stage 2	318	355	-	727	688	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	108	181	895	166	194	616	1325	-	-	755	-	-
Mov Capacity-2 Maneuver	108	181	-	166	194	-	-	-	-	-	-	-
Stage 1	733	656	-	345	373	-	-	-	-	-	-	-
Stage 2	229	352	-	685	655	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	28.9	45.9	0.1	1.5
HCM LOS	D	E	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				162	306			
HCM Control Delay (s)	7.737	0	-	28.9	45.9	10.008	0	-
HCM Lane VC Ratio	0.007	-	-	0.072	0.758	0.048	-	-
HCM Lane LOS	A	A	-	D	E	B	A	-
HCM 95th Percentile Queue (veh)	0.022	-	-	0.23	5.787	0.151	-	-

Intersection	
Intersection Delay (sec/veh)	56.5
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	203	264	72	53	98	10	66	129	147	21	185	52
Peak Hour Factor	0.49	0.88	0.70	0.84	0.88	0.75	0.74	0.82	0.63	0.79	0.79	0.88
Heavy Vehicles(%)	0	3	0	0	3	0	0	4	4	10	2	0
Movement Flow Rate	414	300	103	63	111	13	89	157	233	27	234	59
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	70	19.2	65.5	30.2
HCM LOS	F	C	F	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Volume Left (%)	19%	38%	33%	8%
Volume Thru (%)	38%	49%	61%	72%
Volume Right (%)	43%	13%	6%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Volume by Lane	342	539	161	258
Left Turning Volume	129	264	98	185
Through Volume	147	72	10	52
Right Turning Volume	66	203	53	21
Lane Flow Rate	480	817	188	320
Geometry Group	1	1	1	1
Degree of Utilization, X	0.988	1	0.459	0.726
Departure Headway, Hd	7.413	7.701	8.807	8.169
Convergence(Y/N)	Yes	Yes	Yes	Yes
Capacity	489	474	408	441
Service Time	5.469	5.8	6.901	6.239
HCM Lane V/C Ratio	0.982	1.724	0.461	0.726
HCM Control Delay	65.5	70	19.2	30.2
HCM Lane LOS	F	F	C	D
HCM 95th Percentile Queue	84.1	101.9	2.5	7.9

Intersection	
Intersection Delay (sec/veh):	112.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	127	32	26	1	23	59	7	412	2	77	431	43
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.69	0.78	0.52	0.25	0.63	0.81	0.75	0.85	0.50	0.65	0.90	0.86
Heavy Vehicles(%)	0	0	0	0	0	0	0	0	0	0	0	0
Movement Flow Rate	184	41	50	4	37	73	9	485	4	118	479	50
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1300	1247	504	1291	1270	487	529	0	0	489	0	0
Stage 1	740	740	-	505	505	-	-	-	-	-	-	-
Stage 2	560	507	-	786	765	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	# 140	175	572	142	170	585	1048	-	-	1085	-	-
Stage 1	412	426	-	553	544	-	-	-	-	-	-	-
Stage 2	516	543	-	388	415	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	# 86	146	572	89	142	585	1048	-	-	1085	-	-
Mov Capacity-2 Maneuver	# 86	146	-	89	142	-	-	-	-	-	-	-
Stage 1	407	360	-	546	537	-	-	-	-	-	-	-
Stage 2	416	536	-	265	351	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 610.2	28.2	0.2	1.6
HCM LOS	F	D	A	A

Lane	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (vph)				93	572	266			
HCM Control Delay (s)	8.466	0	-	$ 28.2	11.9	28.2	8.724	0	-
HCM Lane VC Ratio	0.009	-	-	2.42	0.087	0.426	0.109	-	-
HCM Lane LOS	A	A	-	F	B	D	A	A	-
HCM 95th Percentile Queue (veh)	0.027	-	-	20.607	0.286	2.015	0.367	-	-

Intersection	
Intersection Delay (sec/veh)	39.2
Intersection LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	19	64	7	72	14	30	0	387	258	78	88	8
Peak Hour Factor	0.61	0.89	0.38	0.70	0.38	0.45	0.25	0.89	0.71	0.48	0.70	0.58
Heavy Vehicles(%)	18	4	0	2	0	0	0	1	4	4	3	0
Movement Flow Rate	31	72	18	103	37	67	0	435	363	163	126	14
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	12	12.1	60.5	12.4
HCM LOS	B	B	F	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Volume Left (%)	0%	0%	100%	0%	100%	0%	100%	0%
Volume Thru (%)	100%	60%	0%	90%	0%	32%	0%	92%
Volume Right (%)	0%	40%	0%	10%	0%	68%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	0	645	19	71	72	44	78	96
Left Turning Volume	0	387	0	64	0	14	0	88
Through Volume	0	258	0	7	0	30	0	8
Right Turning Volume	0	0	19	0	72	0	78	0
Lane Flow Rate	0	798	31	90	103	104	162	140
Geometry Group	7	7	7	7	7	7	7	7
Degree of Utilization, X	0	1	0.073	0.191	0.226	0.199	0.322	0.254
Departure Headway, Hd	6.205	5.938	8.4	7.594	7.914	6.904	7.135	6.56
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	0	615	428	474	455	522	505	548
Service Time	3.941	3.674	6.125	5.319	5.638	4.628	4.862	4.287
HCM Lane V/C Ratio	0	1.298	0.072	0.19	0.226	0.199	0.321	0.255
HCM Control Delay	8.9	60.5	11.8	12.1	12.9	11.3	13.2	11.5
HCM Lane LOS	N	F	B	B	B	B	B	B
HCM 95th Percentile Queue	0	116.4	0.2	0.7	0.9	0.7	1.4	1

Intersection	
Intersection Delay (sec/veh):	65.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	50	339	0	1	95	219	0	0	1	282	1	32
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.79	0.83	0.25	0.25	0.60	0.82	0.25	0.25	0.25	0.74	0.25	0.47
Heavy Vehicles(%)	2	4	0	0	2	2	0	0	0	0	0	0
Movement Flow Rate	63	408	0	4	158	267	0	0	4	381	4	68
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	425	0	-	408	0	0	870	967	204	836	834	213
Stage 1	-	-	-	-	-	-	534	534	-	300	300	-
Stage 2	-	-	-	-	-	-	336	433	-	536	534	-
Follow-up Headway	2.218	-	0	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1134	-	0	1162	-	-	274	256	842	# 289	306	832
Stage 1	-	-	0	-	-	-	534	528	-	713	670	-
Stage 2	-	-	0	-	-	-	682	585	-	532	528	-
Time blocked-Platoon(%)	0	-	0	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1134	-	-	1162	-	-	238	241	842	# 275	288	832
Mov Capacity-2 Maneuver	-	-	-	-	-	-	238	241	-	# 275	288	-
Stage 1	-	-	-	-	-	-	504	499	-	673	668	-
Stage 2	-	-	-	-	-	-	620	583	-	500	499	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	1.1	0.1	9.3	195.2
HCM LOS	A	A	A	F

Lane	NBLn1	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (vph)	842						275	753
HCM Control Delay (s)	9.3	8.362	0	8.109	0	-	230.2	10.3
HCM Lane VC Ratio	0.005	0.056	-	0.003	-	-	1.386	0.096
HCM Lane LOS	A	A	A	A	A	-	F	B
HCM 95th Percentile Queue (veh)	0.014	0.177	-	0.01	-	-	20.3	0.316

Intersection	
Intersection Delay (sec/veh):	139.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	34	605	75	7	270	61	37	47	19	86	124	17
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.68	0.76	0.76	0.50	0.87	0.84	0.69	0.81	0.35	0.83	0.74	0.63
Heavy Vehicles(%)	17	2	6	17	3	2	6	7	0	0	0	0
Movement Flow Rate	50	796	99	14	310	73	54	58	54	104	168	27
Number of Lanes	1	1	0	1	1	0	0	1	0	0	1	0

Major/Minor	Major 1			Major 2			Minor 1			Minor 2		
Conflicting Flow Rate - All	383	0	0	895	0	0	1418	1357	448	1377	1370	192
Stage 1	-	-	-	-	-	-	946	946	-	375	375	-
Stage 2	-	-	-	-	-	-	472	411	-	1002	995	-
Follow-up Headway	2.353	-	-	2.353	-	-	3.554	4.063	3.3	3.5	4	3.3
Pot Capacity-1 Maneuver	1098	-	-	699	-	-	112	146	615	123	# 148	855
Stage 1	-	-	-	-	-	-	309	334	-	650	621	-
Stage 2	-	-	-	-	-	-	565	586	-	295	325	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0	0	0	0
Mov Capacity-1 Maneuver	1098	-	-	699	-	-	-	137	615	# 72	# 138	855
Mov Capacity-2 Maneuver	-	-	-	-	-	-	-	137	-	# 72	# 138	-
Stage 1	-	-	-	-	-	-	295	319	-	620	609	-
Stage 2	-	-	-	-	-	-	389	574	-	210	310	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	0.4	0.4	-	$ 844.8
HCM LOS	A	A	-	F

Lane	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (vph)	-							111
HCM Control Delay (s)	-	8.435	0	-	10.255	0	-	$ -1
HCM Lane VC Ratio	-	0.046	-	-	0.02	-	-	2.686
HCM Lane LOS	-	A	A	-	B	A	-	F
HCM 95th Percentile Queue (veh)	-	0.143	-	-	0.061	-	-	27.467

Intersection	
Intersection Delay (sec/veh):	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	12	0	1	0	0	0	5	33	0	0	176	5
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			0			0	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.55	0.25	0.25	0.25	0.25	0.25	0.50	0.81	0.25	0.25	0.66	0.50
Heavy Vehicles(%)	18	0	0	0	0	0	0	3	0	0	0	0
Movement Flow Rate	22	0	4	0	0	0	10	41	0	0	267	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Major/Minor	Minor 2			Minor 1			Major 1			Major 2		
Conflicting Flow Rate - All	333	333	272	335	338	41	277	0	0	41	0	0
Stage 1	272	272	-	61	61	-	-	-	-	-	-	-
Stage 2	61	61	-	274	277	-	-	-	-	-	-	-
Follow-up Headway	3.662	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Capacity-1 Maneuver	591	590	772	622	586	1036	1298	-	-	1581	-	-
Stage 1	700	688	-	955	848	-	-	-	-	-	-	-
Stage 2	912	848	-	736	685	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	587	585	772	615	581	1036	1298	-	-	1581	-	-
Mov Capacity-2 Maneuver	587	585	-	615	581	-	-	-	-	-	-	-
Stage 1	694	688	-	947	841	-	-	-	-	-	-	-
Stage 2	905	841	-	732	685	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	11.2	0	1.5	0
HCM LOS	B	A	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				610	0			
HCM Control Delay (s)	7.795	0	-	11.2	0	0	-	-
HCM Lane VC Ratio	0.008	-	-	0.042	-	-	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th Percentile Queue (veh)	0.023	-	-	0.132	-	0	-	-

Intersection	
Intersection Delay (sec/veh):	135.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	11	38	189	41	16	37	28	268	34	93	1069	11
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.50	0.77	0.84	0.64	0.58	0.49	0.78	0.86	0.94	0.80	0.94	0.63
Heavy Vehicles(%)	0	0	0	0	0	0	0	1	0	1	0	0
Movement Flow Rate	22	49	225	64	28	76	36	312	36	116	1137	17
Number of Lanes	0	1	0	0	1	0	1	2	0	1	2	0

Major/Minor		Minor 2			Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All	1620	1798	578	1227	1788	174	1154	0	0	348	0	0
Stage 1	1378	1378	-	402	402	-	-	-	-	-	-	-
Stage 2	242	420	-	825	1386	-	-	-	-	-	-	-
Follow-up Headway	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.21	-	-
Pot Capacity-1 Maneuver	70	81	464	137	82	846	613	-	-	1215	-	-
Stage 1	155	214	-	601	604	-	-	-	-	-	-	-
Stage 2	746	593	-	337	212	-	-	-	-	-	-	-
Time blocked-Platoon(%)	0	0	0	0	0	0	0	-	-	0	-	-
Mov Capacity-1 Maneuver	39	69	464	# 27	70	846	613	-	-	1215	-	-
Mov Capacity-2 Maneuver	39	69	-	# 27	70	-	-	-	-	-	-	-
Stage 1	146	194	-	566	569	-	-	-	-	-	-	-
Stage 2	609	558	-	117	192	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay (s)	$ 414.1	$ 976.4	1.2	0.9
HCM LOS	F	F	A	A

Lane	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (vph)				168	59			
HCM Control Delay (s)	11.238	0.2	-	$ 976.4	$ 976.4	8.276	0.2	-
HCM Lane VC Ratio	0.059	-	-	1.764	2.833	0.096	-	-
HCM Lane LOS	B	A	-	F	F	A	A	-
HCM 95th Percentile Queue (veh)	0.186	-	-	21.269	17.171	0.317	-	-

Intersection	
Intersection Delay (sec/veh):	152.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	32	994	173	73	302	0	0	0	0	161	2	116
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	None	None	None	Free	Free	Free
Storage Length	0		0	0		0	0		0	0		0
Median Width		12			12			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.87	0.80	0.68	0.73	0.25	0.25	0.25	0.25	0.83	0.50	0.61
Heavy Vehicles(%)	0	0	0	2	0	0	0	0	0	4	0	2
Movement Flow Rate	128	1143	216	107	414	0	0	0	0	194	4	190
Number of Lanes	0	3	0	1	2	0	0	0	0	1	0	1

Major/Minor		Major 1			Major 2					Minor 2	
Conflicting Flow Rate - All	414	0	0	1359	0	-			1341	2243	207
Stage 1	-	-	-	-	-	-			628	628	-
Stage 2	-	-	-	-	-	-			713	1615	-
Follow-up Headway	3.1	-	-	3.12	-	0			3.84	4	3.92
Pot Capacity-1 Maneuver	751	-	-	262	-	0			# 158	43	680
Stage 1	-	-	-	-	-	0			355	479	-
Stage 2	-	-	-	-	-	0			350	164	-
Time blocked-Platoon(%)	0	-	-	0	-	0			0	0	0
Mov Capacity-1 Maneuver	751	-	-	262	-	-			# 42	6	680
Mov Capacity-2 Maneuver	-	-	-	-	-	-			# 42	6	-
Stage 1	-	-	-	-	-	-			# 81	283	-
Stage 2	-	-	-	-	-	-			# 80	38	-

Approach	EB	WB	SB
HCM Control Delay (s)	2.5	5.8	$ 926.1
HCM LOS	A	A	F

Lane	EBL	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (vph)						42	680
HCM Control Delay (s)	10.776	2.1	-	27.959	-	$ -1	12.3
HCM Lane VC Ratio	0.17	-	-	0.41	-	4.618	0.28
HCM Lane LOS	B	A	-	D	-	F	B
HCM 95th Percentile Queue (veh)	0.612	-	-	1.896	-	22.264	1.143

Intersection	
Intersection Delay (sec/veh):	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	912	251	0	306	143	38	0	61	0	0	0
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
Right Turn Channelized	None	None	None	None	None	None	Yield	Yield	Yield	None	None	None
Storage Length	0		0	0		0	0		0	0		0
Median Width		0			0			12			12	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.25	0.91	0.94	0.25	0.68	0.79	0.81	0.25	0.90	0.25	0.25	0.25
Heavy Vehicles(%)	0	1	1	0	0	3	0	0	4	0	0	0
Movement Flow Rate	0	1002	267	0	450	181	47	0	68	0	0	0
Number of Lanes	0	2	0	0	2	1	1	0	1	0	0	0

Major/Minor	Major 1			Major 2			Minor 1		
Conflicting Flow Rate - All	-	0	0	-	0	0	1361	~	635
Stage 1	-	-	-	-	-	-	1136	-	-
Stage 2	-	-	-	-	-	-	225	-	-
Follow-up Headway	0	-	-	0	-	-	3.5	0	3.34
Pot Capacity-1 Maneuver	0	-	-	0	-	-	109	0	416
Stage 1	0	-	-	0	-	-	218	0	-
Stage 2	0	-	-	0	-	-	763	0	-
Time blocked-Platoon(%)	0	-	-	0	-	-	0	0	0
Mov Capacity-1 Maneuver	-	-	-	-	-	-	109	-	416
Mov Capacity-2 Maneuver	-	-	-	-	-	-	109	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	763	-	-

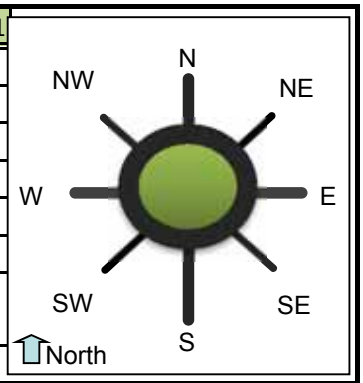
Approach	EB	WB	NB
HCM Control Delay (s)	0	0	34
HCM LOS	A	A	D

Lane	NBLn1	NBLn2	EBT	EBR	WBT	WBR
Capacity (vph)	109	416				
HCM Control Delay (s)	60.9	15.3	-	-	-	-
HCM Lane VC Ratio	0.43	0.163	-	-	-	-
HCM Lane LOS	F	C	-	-	-	-
HCM 95th Percentile Queue (veh)	1.834	0.576	-	-	-	-

General & Site Information

v2.1

Analyst:	Cardno TEC, Inc.
Agency/Co:	Solana Beach, CA
Date:	9/10/2012
Project or PI#:	ARCYBER
Year, Peak Hour:	2016, PM
County/District:	Augusta GA
Intersection:	Lane Rd./Ave. of the States
	Base + Alt G PM



Volumes

Entry Legs (FROM)

	N1 (1)	N2 (1)	NE1 (2)	NE2 (2)	E1 (3)	E2 (3)	SE1 (4)	SE2 (4)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	Left-Thru	SELECT	SELECT	SELECT
N (1), vph					102			
NE (2), vph								
E (3), vph		91						
SE (4), vph								
S (5), vph	583							
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	583	91	0	0	102	0	0	0

Exit Legs (TO)

	S1 (5)	S2 (5)	SW1 (6)	SW2 (6)	W1 (7)	W2 (7)	NW1 (8)	NW2 (8)
Lane Designation	Left-Thru	Right-Thru	SELECT	SELECT	SELECT	SELECT	SELECT	SELECT
N (1), vph		204						
NE (2), vph								
E (3), vph	173							
SE (4), vph								
S (5), vph								
SW (6), vph								
W (7), vph								
NW (8), vph								
Entry Volume, vph	173	204	0	0	0	0	0	0

	N	NE	E	SE	S	SW	W	NW
# of Entry Flow Lanes	2	0	1	0	2	0	0	0
# of Conflict Flow Lanes	2	2	2	2	1	2	2	2

Volume Characteristics	N	NE	E	SE	S	SW	W	NW
% Cars	100%	100%	100%	100%	100%	100%	100%	100%
% Heavy Vehicles	0%	0%	0%	0%	0%	0%	0%	0%
% Bicycles	0%	0%	0%	0%	0%	0%	0%	0%
# of Pedestrians **(ped/hr)**	0	0	0	0	0	0	0	0
PHF	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*	*0.92*
F_{hv}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
F_{ped}	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Entry/Conflicting Flows		N	NE	E	SE	S	SW	W	NW
Flow to	N (1), pcu/h	0	0	111	0	222	0	0	0
Leg #	NE (2), pcu/h	0	0	0	0	0	0	0	0
	E (3), pcu/h	99	0	0	0	188	0	0	0
	SE (4), pcu/h	0	0	0	0	0	0	0	0
	S (5), pcu/h	634	0	0	0	0	0	0	0
	SW (6), pcu/h	0	0	0	0	0	0	0	0
	W (7), pcu/h	0	0	0	0	0	0	0	0
	NW (8), pcu/h	0	0	0	0	0	0	0	0
	Entry flow, pcu/h	733	0	111	0	410	0	0	0
	Entry flow Lane 1, pcu/h	634	0	111	0	188	0	0	0
	Entry flow Lane 2, pcu/h	99	0	0	0	222	0	0	0
	Conflicting flow, pcu/h	0	0	222	0	99	0	0	0

Results: Approach Measures of Effectiveness

HCM 2010 Model *(build yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1130	1130	968	NA	1024	1024	NA	NA
Entry Flow Rates, veh/h	634	99	111	NA	188	222	NA	NA
V/C ratio	**0.56**	**0.09**	**0.11**		**0.18**	**0.22**		
Control Delay, s/veh	**10.0**	**3.9**	**4.8**		**5.2**	**5.6**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**90**	**7**	**10**		**17**	**21**		
Approach Delay, LOS	9.2 sec, LOS A		4.8 sec, LOS A		5.4 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#VALUE!				#VALUE!	

Calibrated Model *(future yr)*	N		E		S		W	
Lane Designations	*Left-Thru*	*Right-Thru*	*Left-Thru*	*Lane 2*	*Left-Thru*	*Right-Thru*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	1640	1640	1343	NA	1304	1304	NA	NA
Entry Flow Rates, veh/h	634	99	111	NA	188	222	NA	NA
V/C ratio	**0.39**	**0.06**	**0.08**		**0.14**	**0.17**		
Control Delay, s/veh	**5.5**	**2.6**	**3.3**		**3.9**	**4.2**		
LOS	A	A	A		A	A		
95th % Queue (ft)	**47**	**5**	**7**		**13**	**15**		
Approach Delay, LOS	5.1 sec, LOS A		3.3 sec, LOS A		4.1 sec, LOS A			
	NE		**SE**		**SW**		**NW**	
Lane Designations	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*	*Lane 1*	*Lane 2*
Entry Capacity, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
Entry Flow Rates, veh/h	NA	NA	NA	NA	NA	NA	NA	NA
V/C ratio			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Control Delay, sec/pcu			#VALUE!	#VALUE!			#VALUE!	#VALUE!
LOS			#VALUE!	#VALUE!			#VALUE!	#VALUE!
95th % Queue (ft)			#VALUE!	#VALUE!			#VALUE!	#VALUE!
Approach Delay, LOS			#N/A				#N/A	

v2.1

Bypass Lane Merge Point Analysis (if applicable)						
Bypass Characteristics	**Bypass #1**	**Bypass #2**	**Bypass #3**	**Bypass #4**	**Bypass #5**	**Bypass #6**
Select Entry Leg from Bypass (FROM)						
Select Exit Leg for Bypass (TO)						
Does the bypass have a dedicated receiving lane?						
# of Conflicting Exit Flow Lanes	**2**	**2**	**2**	**2**	**2**	**2**
Volumes						
Entry Leg: Insert Right Turn Volume						
Exit Leg: ***(Select Input Method)***						
*Lane Flow in Exit Leg****						
Sum of inner circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
Sum of outer circulatory flow lane to exit leg (leg bypass merges into)	N/A	N/A	N/A	N/A	N/A	N/A
*Critical Lane Flow (Manual) in Exit Leg****						
Volume Characteristics						
PHF (Entry Leg)						
F_{HV} (Entry Leg)						
F_{ped}						
PHF (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
F_{HV} (Exit Leg)***	N/A	N/A	N/A	N/A	N/A	N/A
******Volume Characteristics are already taken into account for Default method ONLY. Insert Values above if Manual method.***						
Entry/Conflicting Flows						
Entry Flow						
Conflicting Critical Flow						
Bypass Lane Results						
Entry Capacity of Bypass, veh/h						
Flow Rates of Exiting Traffic, veh/h						
V/C ratio						
Control Delay, sec/pcu						
LOS						
95th % Queue (ft)						

Attachment 7

Mitigation Worksheets – Fort Meade

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	32	19	46	7	158	7	828	141	380	858	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1900	1900	1881	1900	1881	1900	1900	1900	1900
Lanes	0	1	0	0	1	1	1	1	1	1	1	1
Capacity, veh/h	0	147	100	0	265	223	23	925	794	445	1376	1170
Arriving On Green	0.00	0.14	0.14	0.00	0.14	0.14	0.01	0.49	0.49	0.33	0.96	0.96
Sat Flow, veh/h	0.0	1055.7	717.7	0.0	1599.0	1599.0	1809.5	1615.0	1615.0	1809.5	1615.0	1615.0
Grp Volume(v), veh/h	0.0	0.0	68.0	0.0	21.2	190.4	14.0	880.9	183.1	463.4	1009.4	21.4
Grp Sat Flow(s),veh/h/ln	0.0	0.0	1773.4	0.0	1900.0	1599.0	1809.5	1881.2	1615.0	1809.5	1900.0	1615.0
Q Serve(g_s), s	0.0	0.0	3.4	0.0	0.9	11.4	0.8	43.7	6.3	24.0	6.4	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.4	0.0	0.9	11.4	0.8	43.7	6.3	24.0	6.4	0.0
Proportion In Lane	0.000		0.405	0.000		1.000	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	0.0	0.0	247.8	0.0	265.4	223.4	23.4	924.8	793.9	444.8	1376.5	1170.0
V/C Ratio(X)	0.000	0.000	0.275	0.000	0.080	0.852	0.598	0.952	0.231	1.042	0.733	0.018
Avail Cap(c_a), veh/h	0.0	0.0	290.6	0.0	311.3	262.0	74.1	924.8	793.9	444.8	1376.5	1170.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	0.000	0.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	0.927	0.927	0.927
Uniform Delay (d), s/veh	0.0	0.0	37.6	0.0	36.5	41.0	47.9	23.7	14.2	32.9	0.6	0.5
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.1	20.3	22.0	19.1	0.1	52.4	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	0.0	0.0	38.2	0.0	36.7	61.3	69.9	42.8	14.4	85.3	2.5	0.5
Lane Group LOS			D		D	E	E	D	B	F	A	A
Approach Volume, veh/h		68			212			1078			1494	
Approach Delay, s/veh		38.2			58.9			38.3			28.2	
Approach LOS		D			E			D			C	

Timer												
Assigned Phase	7	4		3	8		5	2		1	6	
Phase Duration (G+Y+Rc), s	0.00	17.64		0.00	17.64		5.26	52.00		28.00	74.74	
Change Period (Y+Rc), s	4.00	4.00		4.00	4.00		4.00	4.00		4.00	4.00	
Max Green Setting (Gmax), s	16.00	16.00		16.00	16.00		4.00	48.00		24.00	68.00	
Max Q Clear Time (g_c+I1), s	0.00	5.35		0.00	13.35		2.75	45.71		26.00	8.45	
Green Extension Time (p_c)	0.00	0.81		0.00	0.29		0.00	2.10		0.00	30.27	

Intersection Summary	
HCM 2010 Control Delay	34.5
HCM 2010 Level of Service	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1068	5	27	1783	31	102
Number	2	12	1	6	3	18
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking, Bus Adj	1.00	1.00	0.00	1.00	1.00	0.00
Adj Sat Flow Rate	1881	1881	1878	1878	1872	1872
Lanes	1	0	0	1	1	0
Capacity, veh/h	1794	10	0	1802	0	0
Arriving On Green	0.96	0.96	0.00	0.96	0.00	0.00
Sat Flow, veh/h	1868.7	10.7	0.0	1877.5	0.0	
Grp Volume(v), veh/h	0.0	1167.5	0.0	1857.3	0.0	
Grp Sat Flow(s),veh/h/ln	0.0	1879.4	0.0	1877.5	0.0	
Q Serve(g_s), s	0.0	6.6	0.0	96.0	0.0	
Cycle Q Clear(g_c), s	0.0	6.6	0.0	96.0	0.0	
Proportion In Lane		0.006	0.000		0.000	
Lane Grp Cap(c), veh/h	0.0	1804.2	0.0	1802.4	0.0	
V/C Ratio(X)	0.000	0.647	0.000	1.030	0.000	
Avail Cap(c_a), veh/h	0.0	1804.2	0.0	1802.4	0.0	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(I)	0.000	1.000	0.000	1.000	0.000	
Uniform Delay (d), s/veh	0.0	0.2	0.0	2.0	0.0	
Incr Delay (d2), s/veh	0.0	0.8	0.0	29.4	0.0	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	
Lane Group Delay (d), s/veh	0.0	1.0	0.0	31.4	0.0	
Lane Group LOS		A		F		
Approach Volume, veh/h	1168			1857	0	
Approach Delay, s/veh	1.0			31.4	0.0	
Approach LOS	A			C		

Timer				
Assigned Phase	2		1	6
Phase Duration (G+Y+Rc), s	100.00		0.00	100.00
Change Period (Y+Rc), s	4.00		4.00	4.00
Max Green Setting (Gmax), s	88.00		4.00	96.00
Max Q Clear Time (g_c+I1), s	8.56		0.00	98.00
Green Extension Time (p_c)	78.40		0.00	0.00

Intersection Summary	
HCM 2010 Control Delay	19.7
HCM 2010 Level of Service	B

Attachment 8

Mitigation Worksheets – Fort Gordon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	133	55	53	332	70	37	186	64	283	432	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1712	1712	1900	1834	1834	1900	1891	1891	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	240	477	200	418	586	151	300	335	104	426	837	719
Arriving On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.24	0.24	0.24	0.16	0.45	0.45
Sat Flow, veh/h	869.7	1146.4	481.1	1123.1	1407.0	363.1	905.4	1386.6	428.8	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	273.6	89.8	0.0	509.4	62.7	0.0	343.0	329.1	508.2	279.2
Grp Sat Flow(s),veh/h/ln	869.7	0.0	1627.5	1123.1	0.0	1770.1	905.4	0.0	1815.4	1756.8	1881.2	1615.0
Q Serve(g_s), s	9.2	0.0	10.2	5.3	0.0	20.4	4.9	0.0	15.3	11.5	17.8	10.0
Cycle Q Clear(g_c), s	29.6	0.0	10.2	15.5	0.0	20.4	5.1	0.0	15.3	11.5	17.8	10.0
Proportion In Lane	1.000		0.296	1.000		0.205	1.000		0.236	1.000		1.000
Lane Grp Cap(c), veh/h	240.1	0.0	677.4	418.2	0.0	736.8	300.2	0.0	438.9	425.7	837.2	718.7
V/C Ratio(X)	0.416	0.000	0.404	0.215	0.000	0.691	0.209	0.000	0.781	0.773	0.607	0.389
Avail Cap(c_a), veh/h	240.1	0.0	677.4	418.2	0.0	736.8	332.5	0.0	503.8	434.3	913.5	784.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.617	0.000	0.617	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	32.8	0.0	17.7	23.1	0.0	20.7	26.9	0.0	30.7	20.2	18.3	16.1
Incr Delay (d2), s/veh	3.3	0.0	1.1	1.2	0.0	5.3	0.3	0.0	6.8	8.3	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	36.1	0.0	18.8	24.3	0.0	26.0	27.2	0.0	37.5	28.5	19.3	16.4
Lane Group LOS	D		B	C		C	C		D	C	B	B
Approach Volume, veh/h		374			599			406			1117	
Approach Delay, s/veh		23.4			25.7			35.9			21.3	
Approach LOS		C			C			D			C	

Timer					
Assigned Phase	2	6	8	7	4
Phase Duration (G+Y+Rc), s	42.00	42.00	26.91	17.58	44.49
Change Period (Y+Rc), s	6.00	6.00	6.00	4.00	6.00
Max Green Setting (Gmax), s	36.00	36.00	24.00	14.00	42.00
Max Q Clear Time (g_c+I1), s	31.61	22.40	17.28	13.52	19.77
Green Extension Time (p_c)	3.16	8.13	3.64	0.06	7.29

Intersection Summary	
HCM 2010 Control Delay	25.0
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	131	0	0	388	68	0	1	0	137	2	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1845	0	0	1825	1825	0	1900	0	1863	1751	1751
Lanes	1	1	0	1	1	0	0	1	0	1	1	0
Capacity, veh/h	419	1114	0	190	963	118	0	352	0	448	16	263
Arriving On Green	0.60	0.60	0.00	0.00	0.60	0.60	0.00	0.19	0.00	0.19	0.19	0.19
Sat Flow, veh/h	722.9	1844.7	0.0	0.0	1595.2	195.4	0.0	1900.0	0.0	1406.7	85.0	1416.3
Grp Volume(v), veh/h	36.0	181.9	0.0	0.0	0.0	750.9	0.0	4.0	0.0	167.1	0.0	70.7
Grp Sat Flow(s),veh/h/ln	722.9	1844.7	0.0	0.0	0.0	1790.5	0.0	1900.0	0.0	1406.7	0.0	1501.3
Q Serve(g_s), s	1.4	1.6	0.0	0.0	0.0	10.9	0.0	0.1	0.0	4.2	0.0	1.5
Cycle Q Clear(g_c), s	12.2	1.6	0.0	0.0	0.0	10.9	0.0	0.1	0.0	4.2	0.0	1.5
Proportion In Lane	1.000		0.000	1.000		0.109	0.000		0.000	1.000		0.943
Lane Grp Cap(c), veh/h	419.3	1114.0	0.0	189.5	0.0	1081.4	0.0	352.4	0.0	448.0	0.0	278.5
V/C Ratio(X)	0.086	0.163	0.000	0.000	0.000	0.694	0.000	0.011	0.000	0.373	0.000	0.254
Avail Cap(c_a), veh/h	1086.3	2816.3	0.0	189.5	0.0	2733.7	0.0	1200.3	0.0	1075.8	0.0	948.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	9.3	3.3	0.0	0.0	0.0	5.1	0.0	12.6	0.0	14.4	0.0	13.2
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.4	3.4	0.0	0.0	0.0	5.9	0.0	12.6	0.0	14.9	0.0	13.7
Lane Group LOS	A	A				A		B		B		B
Approach Volume, veh/h		218			751			4			238	
Approach Delay, s/veh		4.4			5.9			12.6			14.5	
Approach LOS		A			A			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	26.94	26.94	11.05	11.05
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	58.00	58.00	24.00	24.00
Max Q Clear Time (g_c+I1), s	14.23	12.87	2.07	6.24
Green Extension Time (p_c)	8.72	8.75	0.86	0.80

Intersection Summary	
HCM 2010 Control Delay	7.4
HCM 2010 Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	213	68	15	368	118	20	44	5	44	43	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1791	1791	1900	1848	1848	1842	1842	1842	1791	1791	1791
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Capacity, veh/h	457	734	228	628	718	269	172	276	33	167	140	128
Arriving On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	824.4	1311.4	407.5	1016.6	1282.4	480.7	445.4	758.1	142.5	348.3	418.2	550.8
Grp Volume(v), veh/h	45.7	0.0	382.4	23.1	0.0	609.6	108.9	0.0	0.0	213.1	0.0	0.0
Grp Sat Flow(s),veh/h/ln	824.4	0.0	1718.9	1016.6	0.0	1763.1	1552.8	0.0	0.0	1366.4	0.0	0.0
Q Serve(g_s), s	1.5	0.0	4.8	0.5	0.0	9.0	0.0	0.0	0.0	2.1	0.0	0.0
Cycle Q Clear(g_c), s	10.5	0.0	4.8	5.4	0.0	9.0	1.9	0.0	0.0	5.0	0.0	0.0
Proportion In Lane	1.000		0.237	1.000		0.273	0.287		0.092	0.255		0.403
Lane Grp Cap(c), veh/h	456.6	0.0	961.8	627.9	0.0	986.6	481.4	0.0	0.0	435.1	0.0	0.0
V/C Ratio(X)	0.100	0.000	0.398	0.037	0.000	0.618	0.226	0.000	0.000	0.490	0.000	0.000
Avail Cap(c_a), veh/h	1131.3	0.0	2368.5	1459.9	0.0	2429.5	1117.7	0.0	0.0	1072.8	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	9.2	0.0	4.8	6.3	0.0	5.7	12.1	0.0	0.0	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.0	0.0	0.6	0.2	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.3	0.0	5.1	6.3	0.0	6.3	12.3	0.0	0.0	13.7	0.0	0.0
Lane Group LOS	A		A	A		A	B			B		
Approach Volume, veh/h		428			633			109			213	
Approach Delay, s/veh		5.5			6.3			12.3			13.7	
Approach LOS		A			A			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	25.52	25.52	12.94	12.94
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	53.00	53.00	29.00	29.00
Max Q Clear Time (g_c+I1), s	12.47	10.95	3.89	6.96
Green Extension Time (p_c)	9.05	9.10	2.06	1.98

Intersection Summary	
HCM 2010 Control Delay	7.7
HCM 2010 Level of Service	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	68	21	173	219	61	558
Number	7	14	5	2	6	16
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1900	1900	1881	1712	1712
Lanes	1	1	1	1	1	1
Capacity, veh/h	227	203	1043	1205	1096	932
Arriving On Green	0.13	0.13	0.64	0.64	0.64	0.00
Sat Flow, veh/h	1809.5	1615.0	1337.9	1881.2	1711.7	1455.0
Grp Volume(v), veh/h	136.0	84.0	692.0	270.4	81.3	0.0
Grp Sat Flow(s),veh/h/ln	1809.5	1615.0	1337.9	1881.2	1711.7	1455.0
Q Serve(g_s), s	2.4	1.6	13.8	2.1	0.6	0.0
Cycle Q Clear(g_c), s	2.4	1.6	14.5	2.1	0.6	0.0
Proportion In Lane	1.000	1.000	1.000			1.000
Lane Grp Cap(c), veh/h	227.5	203.0	1043.3	1204.9	1096.3	931.9
V/C Ratio(X)	0.598	0.414	0.663	0.224	0.074	0.000
Avail Cap(c_a), veh/h	846.1	755.2	5113.0	6927.2	6303.1	5357.7
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	14.1	13.8	5.0	2.6	2.3	0.0
Incr Delay (d2), s/veh	2.5	1.3	0.7	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	16.6	15.1	5.8	2.7	2.4	0.0
Lane Group LOS	B	B	A	A	A	
Approach Volume, veh/h	220			962	81	
Approach Delay, s/veh	16.1			4.9	2.4	
Approach LOS	B			A	A	

Timer		
Assigned Phase	2	6
Phase Duration (G+Y+Rc), s	25.92	25.92
Change Period (Y+Rc), s	4.00	4.00
Max Green Setting (Gmax), s	126.00	126.00
Max Q Clear Time (g_c+I1), s	16.45	2.61
Green Extension Time (p_c)	5.46	5.46

Intersection Summary	
HCM 2010 Control Delay	6.7
HCM 2010 Level of Service	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	497	154	32	33	176	91
Number	7	14	5	2	6	16
Initial Queue, veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking, Bus Adj	0.00	0.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1610	1900	1900	1845	1900	1900
Lanes	1	1	1	1	1	1
Capacity, veh/h	0	0	1335	1065	1097	932
Arriving On Green	0.00	0.00	0.58	0.58	0.58	0.58
Sat Flow, veh/h	0		1130.3	1844.7	1900.0	1615.0
Grp Volume(v), veh/h	0.0		64.0	40.7	266.7	182.0
Grp Sat Flow(s),veh/h/ln			1130.3	1844.7	1900.0	1615.0
Q Serve(g_s), s			0.3	0.1	0.7	0.5
Cycle Q Clear(g_c), s			0.9	0.1	0.7	0.5
Proportion In Lane			1.000			1.000
Lane Grp Cap(c), veh/h			1335.5	1064.6	1096.5	932.0
V/C Ratio(X)			0.048	0.038	0.243	0.195
Avail Cap(c_a), veh/h			3192.6	4095.5	4218.3	3585.6
HCM Platoon Ratio			1.00	1.00	1.00	1.00
Upstream Filter(I)			1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh			1.2	0.9	1.0	1.0
Incr Delay (d2), s/veh			0.0	0.0	0.1	0.1
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh			1.2	0.9	1.1	1.1
Lane Group LOS			A	A	A	A
Approach Volume, veh/h				105	449	
Approach Delay, s/veh				1.1	1.1	
Approach LOS				A	A	

Timer		
Assigned Phase	2	6
Phase Duration (G+Y+Rc), s	9.46	9.46
Change Period (Y+Rc), s	4.00	4.00
Max Green Setting (Gmax), s	21.00	21.00
Max Q Clear Time (g_c+I1), s	2.93	2.65
Green Extension Time (p_c)	2.53	2.54

Intersection Summary	
HCM 2010 Control Delay	1.1
HCM 2010 Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	251	36	36	997	0	0	0	0	34	0	297
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Adj Sat Flow Rate	0	1900	1900	1743	1900	0	0	0	0	1900	0	1900
Lanes	0	3	0	1	2	0	0	0	0	1	0	1
Capacity, veh/h	0	3166	544	836	2564	0	0	0	0	73	0	0
Arriving On Green	0.00	0.71	0.71	0.71	0.71	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Sat Flow, veh/h		4596.1	765.9	894.4	3705.0	0.0		0		1809.5	59	
Grp Volume(v), veh/h		279.9	148.1	49.3	1146.0	0.0		0.0		58.6	33.7	
Grp Sat Flow(s),veh/h/ln		1729.0	1764.8	894.4	1805.0	0.0				1809.5	C	
Q Serve(g_s), s		0.8	0.9	0.6	4.3	0.0				1.0		
Cycle Q Clear(g_c), s		0.8	0.9	1.4	4.3	0.0				1.0		
Proportion In Lane			0.434	1.000		0.000				1.000		
Lane Grp Cap(c), veh/h		2456.2	1253.6	836.1	2564.2	0.0				72.7		
V/C Ratio(X)		0.114	0.118	0.059	0.447	0.000				0.807		
Avail Cap(c_a), veh/h		4961.9	2532.4	1484.2	5180.0	0.0				2032.0		
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00				1.00		
Upstream Filter(I)		1.000	1.000	1.000	1.000	0.000				1.000		
Uniform Delay (d), s/veh		1.5	1.5	1.7	2.0	0.0				15.3		
Incr Delay (d2), s/veh		0.0	0.0	0.0	0.1	0.0				18.4		
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0				0.0		
Lane Group Delay (d), s/veh		1.5	1.5	1.7	2.1	0.0				33.7		
Lane Group LOS		A	A	A	A					C		
Approach Volume, veh/h		428			1195							
Approach Delay, s/veh		1.5			2.1							
Approach LOS		A			A							

Timer												
Assigned Phase		2			6					7		
Phase Duration (G+Y+Rc), s		26.77			26.77					5.29		
Change Period (Y+Rc), s		4.00			4.00					4.00		
Max Green Setting (Gmax), s		46.00			46.00					36.00		
Max Q Clear Time (g_c+I1), s		2.85			6.32					3.03		
Green Extension Time (p_c)		16.96			16.45					0.13		

Intersection Summary		
HCM 2010 Control Delay		3.0
HCM 2010 Level of Service		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	59	111	55	53	155	85	37	195	64	403	503	215
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1827	1706	1706	1900	1841	1841	1900	1891	1891	1845	1881	1900
Lanes	1	1	0	1	1	0	1	1	0	1	1	1
Capacity, veh/h	371	440	221	437	423	284	251	347	102	427	851	730
Arriving On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.25	0.25	0.25	0.16	0.45	0.45
Sat Flow, veh/h	1039.0	1072.2	539.1	1156.3	1028.8	690.5	838.1	1404.1	414.2	1756.8	1615.0	1615.0
Grp Volume(v), veh/h	100.0	0.0	241.8	89.8	0.0	315.9	62.7	0.0	355.7	468.6	591.8	279.2
Grp Sat Flow(s),veh/h/ln	1039.0	0.0	1611.2	1156.3	0.0	1719.3	838.1	0.0	1818.3	1756.8	1881.2	1615.0
Q Serve(g_s), s	6.7	0.0	9.1	5.1	0.0	11.6	5.7	0.0	16.0	14.0	22.0	10.0
Cycle Q Clear(g_c), s	18.4	0.0	9.1	14.2	0.0	11.6	9.7	0.0	16.0	14.0	22.0	10.0
Proportion In Lane	1.000		0.335	1.000		0.402	1.000		0.228	1.000		1.000
Lane Grp Cap(c), veh/h	371.2	0.0	661.9	436.9	0.0	706.3	250.5	0.0	448.9	427.3	850.8	730.4
V/C Ratio(X)	0.269	0.000	0.365	0.206	0.000	0.447	0.250	0.000	0.792	1.097	0.696	0.382
Avail Cap(c_a), veh/h	371.2	0.0	661.9	436.9	0.0	706.3	273.2	0.0	498.0	427.3	901.6	774.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.749	0.000	0.749	1.000	0.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	25.3	0.0	17.9	22.8	0.0	18.6	30.2	0.0	30.9	23.3	19.2	15.9
Incr Delay (d2), s/veh	1.3	0.0	1.2	1.1	0.0	2.0	0.5	0.0	7.8	72.3	2.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	26.6	0.0	19.1	23.9	0.0	20.7	30.8	0.0	38.7	95.6	21.4	16.2
Lane Group LOS	C		B	C		C	C		D	F	C	B
Approach Volume, veh/h		342			406			418			1340	
Approach Delay, s/veh		21.3			21.4			37.5			46.2	
Approach LOS		C			C			D			D	

Timer					
Assigned Phase	2	6	8	7	4
Phase Duration (G+Y+Rc), s	42.00	42.00	27.63	18.00	45.63
Change Period (Y+Rc), s	6.00	6.00	6.00	4.00	6.00
Max Green Setting (Gmax), s	36.00	36.00	24.00	14.00	42.00
Max Q Clear Time (g_c+I1), s	20.36	16.23	18.05	16.00	24.03
Green Extension Time (p_c)	6.78	7.76	3.58	0.00	7.48

Intersection Summary	
HCM 2010 Control Delay	37.4
HCM 2010 Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	128	82	46	123	12	170	207	32	17	71	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1850	1850	1850	1757	1757	1757	1870	1870	1870	1830	1830	1830
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	136	281	136	178	310	48	298	397	66	153	512	281
Arriving On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	256.7	737.2	457.2	398.8	707.3	160.1	448.5	615.3	123.7	223.2	702.4	529.9
Grp Volume(v), veh/h	324.2	0.0	0.0	283.2	0.0	0.0	550.9	0.0	0.0	195.5	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1554.7	0.0	0.0	1472.9	0.0	0.0	1235.4	0.0	0.0	1616.8	0.0	0.0
Q Serve(g_s), s	1.3	0.0	0.0	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	6.3	0.0	0.0	16.4	0.0	0.0	2.8	0.0	0.0
Proportion In Lane	0.165		0.294	0.271		0.109	0.363		0.100	0.138		0.328
Lane Grp Cap(c), veh/h	552.0	0.0	0.0	535.9	0.0	0.0	761.3	0.0	0.0	946.1	0.0	0.0
V/C Ratio(X)	0.587	0.000	0.000	0.528	0.000	0.000	0.724	0.000	0.000	0.207	0.000	0.000
Avail Cap(c_a), veh/h	1059.3	0.0	0.0	960.1	0.0	0.0	1414.7	0.0	0.0	1695.7	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	13.9	0.0	0.0	13.7	0.0	0.0	8.2	0.0	0.0	5.8	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.8	0.0	0.0	1.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	14.9	0.0	0.0	14.5	0.0	0.0	9.5	0.0	0.0	5.9	0.0	0.0
Lane Group LOS	B			B			A			A		
Approach Volume, veh/h		324			283			551			195	
Approach Delay, s/veh		14.9			14.5			9.5			5.9	
Approach LOS		B			B			A			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	17.75	17.75	28.58	28.58
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	31.00	31.00	51.00	51.00
Max Q Clear Time (g_c+I1), s	9.63	8.35	18.45	4.77
Green Extension Time (p_c)	4.13	4.21	6.14	6.44

Intersection Summary	
HCM 2010 Control Delay	11.3
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	196	68	15	234	189	20	44	5	53	43	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1793	1793	1900	1837	1837	1842	1842	1842	1789	1789	1789
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Capacity, veh/h	496	700	236	652	475	448	186	257	31	210	151	64
Arriving On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	872.6	1283.2	433.3	1038.5	870.1	821.5	438.7	766.7	140.4	465.1	453.3	291.6
Grp Volume(v), veh/h	40.7	0.0	359.2	23.1	0.0	548.1	108.9	0.0	0.0	179.3	0.0	0.0
Grp Sat Flow(s),veh/h/ln	872.6	0.0	1716.5	1038.5	0.0	1691.6	1529.2	0.0	0.0	1274.8	0.0	0.0
Q Serve(g_s), s	1.1	0.0	4.1	0.4	0.0	7.5	0.0	0.0	0.0	1.8	0.0	0.0
Cycle Q Clear(g_c), s	8.6	0.0	4.1	4.6	0.0	7.5	1.7	0.0	0.0	3.8	0.0	0.0
Proportion In Lane	1.000		0.252	1.000		0.486	0.287		0.092	0.365		0.229
Lane Grp Cap(c), veh/h	496.0	0.0	936.1	651.7	0.0	922.5	473.3	0.0	0.0	425.2	0.0	0.0
V/C Ratio(X)	0.082	0.000	0.384	0.035	0.000	0.594	0.230	0.000	0.000	0.422	0.000	0.000
Avail Cap(c_a), veh/h	1370.5	0.0	2656.3	1692.5	0.0	2617.8	1245.4	0.0	0.0	1123.2	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	8.1	0.0	4.5	5.8	0.0	5.2	11.1	0.0	0.0	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.0	0.0	0.6	0.2	0.0	0.0	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	8.2	0.0	4.7	5.8	0.0	5.9	11.3	0.0	0.0	12.1	0.0	0.0
Lane Group LOS	A		A	A		A	B			B		
Approach Volume, veh/h		400			571			109			179	
Approach Delay, s/veh		5.1			5.8			11.3			12.1	
Approach LOS		A			A			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	22.68	22.68	11.57	11.57
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	53.00	53.00	29.00	29.00
Max Q Clear Time (g_c+I1), s	10.59	9.46	3.71	5.82
Green Extension Time (p_c)	8.09	8.11	1.79	1.75

Intersection Summary	
HCM 2010 Control Delay	7.0
HCM 2010 Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	251	36	36	997	0	0	0	0	34	0	297
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Adj Sat Flow Rate	0	1900	1900	1743	1900	0	0	0	0	1900	0	1900
Lanes	0	3	0	1	2	0	0	0	0	1	0	1
Capacity, veh/h	0	3166	544	836	2564	0	0	0	0	73	0	0
Arriving On Green	0.00	0.71	0.71	0.71	0.71	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Sat Flow, veh/h		4596.1	765.9	894.4	3705.0	0.0		0		1809.5	59	
Grp Volume(v), veh/h		279.9	148.1	49.3	1146.0	0.0		0.0		58.6	33.7	
Grp Sat Flow(s),veh/h/ln		1729.0	1764.8	894.4	1805.0	0.0				1809.5	C	
Q Serve(g_s), s		0.8	0.9	0.6	4.3	0.0				1.0		
Cycle Q Clear(g_c), s		0.8	0.9	1.4	4.3	0.0				1.0		
Proportion In Lane			0.434	1.000		0.000				1.000		
Lane Grp Cap(c), veh/h		2456.2	1253.6	836.1	2564.2	0.0				72.7		
V/C Ratio(X)		0.114	0.118	0.059	0.447	0.000				0.807		
Avail Cap(c_a), veh/h		4961.9	2532.4	1484.2	5180.0	0.0				2032.0		
HCM Platoon Ratio		1.00	1.00	1.00	1.00	1.00				1.00		
Upstream Filter(I)		1.000	1.000	1.000	1.000	0.000				1.000		
Uniform Delay (d), s/veh		1.5	1.5	1.7	2.0	0.0				15.3		
Incr Delay (d2), s/veh		0.0	0.0	0.0	0.1	0.0				18.4		
Initial Q Delay(d3),s/veh		0.0	0.0	0.0	0.0	0.0				0.0		
Lane Group Delay (d), s/veh		1.5	1.5	1.7	2.1	0.0				33.7		
Lane Group LOS		A	A	A	A					C		
Approach Volume, veh/h		428			1195							
Approach Delay, s/veh		1.5			2.1							
Approach LOS		A			A							

Timer												
Assigned Phase		2			6					7		
Phase Duration (G+Y+Rc), s		26.77			26.77					5.29		
Change Period (Y+Rc), s		4.00			4.00					4.00		
Max Green Setting (Gmax), s		46.00			46.00					36.00		
Max Q Clear Time (g_c+I1), s		2.85			6.32					3.03		
Green Extension Time (p_c)		16.96			16.45					0.13		

Intersection Summary												
HCM 2010 Control Delay			3.0									
HCM 2010 Level of Service			A									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	858	122	256	214	42	57	44	369	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1866	1866	1866	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	48	1422	232	351	1969	393	323	525	598	412	419	59
Arriving On Green	0.49	0.49	0.49	0.11	0.64	0.64	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	74.7	2935.5	469.5	1791.6	3076.8	614.7	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	608.7	0.0	552.3	301.2	150.3	145.7	64.8	50.0	519.7	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1780.5	0.0	1615.3	1791.6	1900.0	1791.5	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	10.5	0.0	39.5	11.7	4.6	4.8	6.4	3.0	43.5	24.7	0.0	10.2
Cycle Q Clear(g_c), s	37.9	0.0	39.5	11.7	4.6	4.8	16.6	3.0	43.5	27.8	0.0	10.2
Proportion In Lane	0.042		0.291	1.000		0.343	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	903.7	0.0	797.1	350.9	1216.0	1146.6	323.2	524.8	598.5	412.1	0.0	477.3
V/C Ratio(X)	0.674	0.000	0.693	0.858	0.124	0.127	0.200	0.095	0.868	0.603	0.000	0.301
Avail Cap(c_a), veh/h	903.7	0.0	797.1	482.5	1216.0	1146.6	323.2	524.8	598.5	412.1	0.0	477.3
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	0.991	0.991	0.991	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	28.6	0.0	29.2	26.3	10.6	10.6	47.9	38.9	41.7	49.0	0.0	41.4
Incr Delay (d2), s/veh	2.6	0.0	3.3	19.8	0.1	0.1	1.4	0.4	15.7	6.4	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	31.3	0.0	32.6	46.1	10.7	10.7	49.3	39.2	57.4	55.4	0.0	43.0
Lane Group LOS	C		C	D	B	B	D	D	E	E		D
Approach Volume, veh/h		1161			597			634			392	
Approach Delay, s/veh		31.9			28.5			55.1			50.9	
Approach LOS		C			C			E			D	

Timer												
Assigned Phase		2		1	6			8			4	
Phase Duration (G+Y+Rc), s		80.02		21.98	102.00			48.00			48.00	
Change Period (Y+Rc), s		6.00		6.00	6.00			4.50			4.50	
Max Green Setting (Gmax), s		64.00		27.00	96.00			43.50			43.50	
Max Q Clear Time (g_c+I1), s		41.48		13.72	6.78			45.50			29.76	
Green Extension Time (p_c)		16.63		2.26	37.47			0.00			5.90	

Intersection Summary	
HCM 2010 Control Delay	39.1
HCM 2010 Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	131	0	0	388	68	0	1	0	137	2	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1845	0	0	1825	1825	0	1900	0	1863	1751	1751
Lanes	1	1	0	1	1	0	0	1	0	1	1	0
Capacity, veh/h	419	1114	0	190	963	118	0	352	0	448	16	263
Arriving On Green	0.60	0.60	0.00	0.00	0.60	0.60	0.00	0.19	0.00	0.19	0.19	0.19
Sat Flow, veh/h	722.9	1844.7	0.0	0.0	1595.2	195.4	0.0	1900.0	0.0	1406.7	85.0	1416.3
Grp Volume(v), veh/h	36.0	181.9	0.0	0.0	0.0	750.9	0.0	4.0	0.0	167.1	0.0	70.7
Grp Sat Flow(s),veh/h/ln	722.9	1844.7	0.0	0.0	0.0	1790.5	0.0	1900.0	0.0	1406.7	0.0	1501.3
Q Serve(g_s), s	1.4	1.6	0.0	0.0	0.0	10.9	0.0	0.1	0.0	4.2	0.0	1.5
Cycle Q Clear(g_c), s	12.2	1.6	0.0	0.0	0.0	10.9	0.0	0.1	0.0	4.2	0.0	1.5
Proportion In Lane	1.000		0.000	1.000		0.109	0.000		0.000	1.000		0.943
Lane Grp Cap(c), veh/h	419.3	1114.0	0.0	189.5	0.0	1081.4	0.0	352.4	0.0	448.0	0.0	278.5
V/C Ratio(X)	0.086	0.163	0.000	0.000	0.000	0.694	0.000	0.011	0.000	0.373	0.000	0.254
Avail Cap(c_a), veh/h	1086.3	2816.3	0.0	189.5	0.0	2733.7	0.0	1200.3	0.0	1075.8	0.0	948.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	0.000	0.000	0.000	1.000	0.000	1.000	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	9.3	3.3	0.0	0.0	0.0	5.1	0.0	12.6	0.0	14.4	0.0	13.2
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.5	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.4	3.4	0.0	0.0	0.0	5.9	0.0	12.6	0.0	14.9	0.0	13.7
Lane Group LOS	A	A				A		B		B		B
Approach Volume, veh/h		218			751			4			238	
Approach Delay, s/veh		4.4			5.9			12.6			14.5	
Approach LOS		A			A			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	26.94	26.94	11.05	11.05
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	58.00	58.00	24.00	24.00
Max Q Clear Time (g_c+I1), s	14.23	12.87	2.07	6.24
Green Extension Time (p_c)	8.72	8.75	0.86	0.80

Intersection Summary	
HCM 2010 Control Delay	7.4
HCM 2010 Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	213	68	15	368	118	20	44	5	44	43	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1791	1791	1900	1848	1848	1842	1842	1842	1791	1791	1791
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Capacity, veh/h	457	734	228	628	718	269	172	276	33	167	140	128
Arriving On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.23	0.23	0.23	0.23	0.23	0.23
Sat Flow, veh/h	824.4	1311.4	407.5	1016.6	1282.4	480.7	445.4	758.1	142.5	348.3	418.2	550.8
Grp Volume(v), veh/h	45.7	0.0	382.4	23.1	0.0	609.6	108.9	0.0	0.0	213.1	0.0	0.0
Grp Sat Flow(s),veh/h/ln	824.4	0.0	1718.9	1016.6	0.0	1763.1	1552.8	0.0	0.0	1366.4	0.0	0.0
Q Serve(g_s), s	1.5	0.0	4.8	0.5	0.0	9.0	0.0	0.0	0.0	2.1	0.0	0.0
Cycle Q Clear(g_c), s	10.5	0.0	4.8	5.4	0.0	9.0	1.9	0.0	0.0	5.0	0.0	0.0
Proportion In Lane	1.000		0.237	1.000		0.273	0.287		0.092	0.255		0.403
Lane Grp Cap(c), veh/h	456.6	0.0	961.8	627.9	0.0	986.6	481.4	0.0	0.0	435.1	0.0	0.0
V/C Ratio(X)	0.100	0.000	0.398	0.037	0.000	0.618	0.226	0.000	0.000	0.490	0.000	0.000
Avail Cap(c_a), veh/h	1131.3	0.0	2368.5	1459.9	0.0	2429.5	1117.7	0.0	0.0	1072.8	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	9.2	0.0	4.8	6.3	0.0	5.7	12.1	0.0	0.0	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.0	0.0	0.6	0.2	0.0	0.0	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.3	0.0	5.1	6.3	0.0	6.3	12.3	0.0	0.0	13.7	0.0	0.0
Lane Group LOS	A		A	A		A	B			B		
Approach Volume, veh/h		428			633			109			213	
Approach Delay, s/veh		5.5			6.3			12.3			13.7	
Approach LOS		A			A			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	25.52	25.52	12.94	12.94
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	53.00	53.00	29.00	29.00
Max Q Clear Time (g_c+I1), s	12.47	10.95	3.89	6.96
Green Extension Time (p_c)	9.05	9.10	2.06	1.98

Intersection Summary	
HCM 2010 Control Delay	7.7
HCM 2010 Level of Service	A

Intersection	
Intersection Delay (sec/veh)	12.8
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Volume (vph)	2	0	3	389	82	20
Peak Hour Factor	0.50	0.25	0.25	0.81	0.75	0.38
Heavy Vehicles(%)	0	0	0	1	11	11
Movement Flow Rate	4	0	12	480	109	53
Number of Lanes	1	1	1	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	2
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	2	0	2
HCM Control Delay	9.3	14.3	8.3
HCM LOS	A	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	SBLn1	SBLn2
Volume Left (%)	100%	0%	100%	0%	0%	0%
Volume Thru (%)	0%	100%	0%	100%	98%	0%
Volume Right (%)	0%	0%	0%	0%	2%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	3	389	2	0	84	18
Left Turning Volume	0	389	0	0	82	0
Through Volume	0	0	0	0	2	18
Right Turning Volume	3	0	2	0	0	0
Lane Flow Rate	12	480	4	0	115	47
Geometry Group	7	7	7	7	7	7
Degree of Utilization, X	0.017	0.614	0.007	0	0.16	0.057
Departure Headway, Hd	5.087	4.603	6.511	6.007	5.025	4.339
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	701	783	552	0	719	830
Service Time	2.835	2.351	4.219	3.715	2.725	2.039
HCM Lane V/C Ratio	0.017	0.613	0.007	0	0.16	0.057
HCM Control Delay	7.9	14.5	9.3	8.7	8.7	7.3
HCM Lane LOS	A	B	A	N	A	A
HCM 95th Percentile Queue	0.1	4.8	0	0	0.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	251	33	36	1002	0	0	0	0	34	0	297
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Adj Sat Flow Rate	1900	1900	1900	1743	1900	0	0	0	0	1900	0	1900
Lanes	0	3	0	1	2	0	0	0	0	1	0	1
Capacity, veh/h	167	2942	464	734	2592	0	0	0	0	73	0	0
Arriving On Green	0.72	0.72	0.72	0.72	0.72	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Sat Flow, veh/h	169.7	3937.8	646.5	885.6	3705.0	0.0		0		1809.5	59	
Grp Volume(v), veh/h	152.7	138.8	147.2	49.3	1151.7	0.0		0.0		58.6	34.0	
Grp Sat Flow(s),veh/h/ln	1619.8	1573.4	1614.9	885.6	1805.0	0.0				1809.5	C	
Q Serve(g_s), s	0.0	4.5	4.0	0.8	4.4	0.0				1.1		
Cycle Q Clear(g_c), s	0.8	4.5	4.0	5.3	4.4	0.0				1.1		
Proportion In Lane	0.105		0.400	1.000		0.000				1.000		
Lane Grp Cap(c), veh/h	1283.3	0.0	0.0	733.6	2592.3	0.0				72.9		
V/C Ratio(X)	0.119	0.000	0.000	0.067	0.444	0.000				0.805		
Avail Cap(c_a), veh/h	2162.0	0.0	0.0	1328.3	5016.0	0.0				1967.7		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00		
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	0.000				1.000		
Uniform Delay (d), s/veh	1.4	0.0	0.0	3.1	1.9	0.0				15.8		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.1	0.0				18.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0		
Lane Group Delay (d), s/veh	1.5	0.0	0.0	3.1	2.1	0.0				34.0		
Lane Group LOS	A			A	A					C		
Approach Volume, veh/h		439			1201							
Approach Delay, s/veh		0.5			2.1							
Approach LOS		A			A							

Timer												
Assigned Phase		2			6					7		
Phase Duration (G+Y+Rc), s		27.77			27.77					5.33		
Change Period (Y+Rc), s		4.00			4.00					4.00		
Max Green Setting (Gmax), s		46.00			46.00					36.00		
Max Q Clear Time (g_c+I1), s		6.48			7.29					3.06		
Green Extension Time (p_c)		16.61			16.48					0.13		

Intersection Summary		
HCM 2010 Control Delay		2.8
HCM 2010 Level of Service		A

Intersection	
Intersection Delay (sec/veh)	34.1
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	1	3	1	52	11	191	6	370	92	44	143	1
Peak Hour Factor	0.25	0.50	0.60	0.75	0.50	0.59	0.63	0.69	0.85	0.69	0.88	0.25
Heavy Vehicles(%)	0	0	25	4	0	0	10	0	1	3	3	0
Movement Flow Rate	4	6	2	69	22	324	10	536	108	64	162	4
Number of Lanes	0	1	0	0	1	0	0	1	1	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	10.7	21	50.3	12.7
HCM LOS	B	C	F	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Volume Left (%)	2%	0%	20%	20%	100%	0%
Volume Thru (%)	98%	0%	60%	4%	0%	99%
Volume Right (%)	0%	100%	20%	75%	0%	1%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Volume by Lane	376	92	5	254	44	144
Left Turning Volume	370	0	3	11	0	143
Through Volume	0	92	1	191	0	1
Right Turning Volume	6	0	1	52	44	0
Lane Flow Rate	546	108	12	415	64	166
Geometry Group	7	7	2	2	7	7
Degree of Utilization, X	0.979	0.167	0.024	0.683	0.134	0.327
Departure Headway, Hd	6.456	5.562	7.505	5.927	7.585	7.066
Convergence(Y/N)	Yes	Yes	Yes	Yes	Yes	Yes
Capacity	557	640	479	606	476	511
Service Time	4.239	3.344	5.518	4.021	5.285	4.766
HCM Lane V/C Ratio	0.98	0.169	0.025	0.685	0.134	0.325
HCM Control Delay	58.4	9.5	10.7	21	11.5	13.2
HCM Lane LOS	F	A	B	C	B	B
HCM 95th Percentile Queue	75	0.6	0.1	6.4	0.5	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	248	73	46	138	12	99	207	32	17	71	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1848	1848	1848	1760	1760	1760	1865	1865	1865	1830	1830	1830
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	128	495	115	196	439	60	203	421	70	133	409	221
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	180.1	1056.3	285.7	371.8	719.3	149.2	352.7	818.1	167.1	220.9	716.0	524.4
Grp Volume(v), veh/h	478.1	0.0	0.0	304.6	0.0	0.0	467.4	0.0	0.0	195.5	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1609.1	0.0	0.0	1477.0	0.0	0.0	1415.2	0.0	0.0	1600.1	0.0	0.0
Q Serve(g_s), s	3.3	0.0	0.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.7	0.0	0.0	5.8	0.0	0.0	12.1	0.0	0.0	3.4	0.0	0.0
Proportion In Lane	0.112		0.178	0.252		0.101	0.249		0.118	0.138		0.328
Lane Grp Cap(c), veh/h	737.9	0.0	0.0	695.6	0.0	0.0	693.8	0.0	0.0	762.8	0.0	0.0
V/C Ratio(X)	0.648	0.000	0.000	0.438	0.000	0.000	0.674	0.000	0.000	0.256	0.000	0.000
Avail Cap(c_a), veh/h	1309.5	0.0	0.0	1122.8	0.0	0.0	1452.8	0.0	0.0	1549.6	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	10.9	0.0	0.0	9.8	0.0	0.0	10.2	0.0	0.0	8.6	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.4	0.0	0.0	1.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	11.8	0.0	0.0	10.3	0.0	0.0	11.4	0.0	0.0	8.8	0.0	0.0
Lane Group LOS	B			B			B			A		
Approach Volume, veh/h		478			305			467			195	
Approach Delay, s/veh		11.8			10.3			11.4			8.8	
Approach LOS		B			B			B			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	22.45	22.45	23.20	23.20
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	36.00	36.00	46.00	46.00
Max Q Clear Time (g_c+I1), s	12.66	7.81	14.13	5.37
Green Extension Time (p_c)	5.79	6.12	5.07	5.24

Intersection Summary	
HCM 2010 Control Delay	11.0
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	130	72	53	179	10	66	129	147	21	185	24
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1876	1876	1876	1859	1859	1859	1840	1840	1840	1853	1853	1853
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	225	247	142	210	429	25	203	237	288	153	623	68
Arriving On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	378.0	528.7	433.0	359.7	931.9	76.0	263.8	421.5	690.3	158.9	1229.8	163.0
Grp Volume(v), veh/h	340.4	0.0	0.0	279.8	0.0	0.0	479.8	0.0	0.0	288.0	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1432.8	0.0	0.0	1595.2	0.0	0.0	1419.5	0.0	0.0	1722.0	0.0	0.0
Q Serve(g_s), s	1.9	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0	3.8	0.0	0.0	8.7	0.0	0.0	3.4	0.0	0.0
Proportion In Lane	0.264		0.302	0.225		0.048	0.186		0.486	0.092		0.095
Lane Grp Cap(c), veh/h	614.4	0.0	0.0	663.1	0.0	0.0	728.5	0.0	0.0	843.9	0.0	0.0
V/C Ratio(X)	0.554	0.000	0.000	0.422	0.000	0.000	0.659	0.000	0.000	0.341	0.000	0.000
Avail Cap(c_a), veh/h	837.9	0.0	0.0	898.4	0.0	0.0	848.9	0.0	0.0	985.7	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	8.6	0.0	0.0	8.4	0.0	0.0	7.1	0.0	0.0	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.4	0.0	0.0	1.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.4	0.0	0.0	8.8	0.0	0.0	8.6	0.0	0.0	6.6	0.0	0.0
Lane Group LOS	A			A			A			A		
Approach Volume, veh/h		340			280			480			288	
Approach Delay, s/veh		9.4			8.8			8.6			6.6	
Approach LOS		A			A			A			A	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	14.25	14.25	17.07	17.07
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	7.66	5.77	10.70	5.43
Green Extension Time (p_c)	2.64	3.01	2.37	3.88

Intersection Summary	
HCM 2010 Control Delay	8.4
HCM 2010 Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	251	33	36	1002	0	0	0	0	34	0	297
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Adj Sat Flow Rate	1900	1900	1900	1743	1900	0	0	0	0	1900	0	1900
Lanes	0	3	0	1	2	0	0	0	0	1	0	1
Capacity, veh/h	167	2942	464	734	2592	0	0	0	0	73	0	0
Arriving On Green	0.72	0.72	0.72	0.72	0.72	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Sat Flow, veh/h	169.7	3937.8	646.5	885.6	3705.0	0.0		0		1809.5	59	
Grp Volume(v), veh/h	152.7	138.8	147.2	49.3	1151.7	0.0		0.0		58.6	34.0	
Grp Sat Flow(s),veh/h/ln	1619.8	1573.4	1614.9	885.6	1805.0	0.0				1809.5	C	
Q Serve(g_s), s	0.0	4.5	4.0	0.8	4.4	0.0				1.1		
Cycle Q Clear(g_c), s	0.8	4.5	4.0	5.3	4.4	0.0				1.1		
Proportion In Lane	0.105		0.400	1.000		0.000				1.000		
Lane Grp Cap(c), veh/h	1283.3	0.0	0.0	733.6	2592.3	0.0				72.9		
V/C Ratio(X)	0.119	0.000	0.000	0.067	0.444	0.000				0.805		
Avail Cap(c_a), veh/h	2162.0	0.0	0.0	1328.3	5016.0	0.0				1967.7		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00		
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	0.000				1.000		
Uniform Delay (d), s/veh	1.4	0.0	0.0	3.1	1.9	0.0				15.8		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.1	0.0				18.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0		
Lane Group Delay (d), s/veh	1.5	0.0	0.0	3.1	2.1	0.0				34.0		
Lane Group LOS	A			A	A					C		
Approach Volume, veh/h		439			1201							
Approach Delay, s/veh		0.5			2.1							
Approach LOS		A			A							

Timer												
Assigned Phase		2			6					7		
Phase Duration (G+Y+Rc), s		27.77			27.77					5.33		
Change Period (Y+Rc), s		4.00			4.00					4.00		
Max Green Setting (Gmax), s		46.00			46.00					36.00		
Max Q Clear Time (g_c+I1), s		6.48			7.29					3.06		
Green Extension Time (p_c)		16.61			16.48					0.13		

Intersection Summary		
HCM 2010 Control Delay		2.8
HCM 2010 Level of Service		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	414	44	240	266	9	36	60	102	8	16	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1837	1837	1837	1879	1879	1879	1858	1858	1858	1900	1424	1424
Lanes	0	2	0	0	2	0	0	1	0	1	1	0
Capacity, veh/h	118	1185	132	214	779	30	157	146	256	332	204	173
Arriving On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	117.0	2794.7	276.4	0.0	1879.2	62.0	217.0	384.5	894.1	1080.3	713.8	603.7
Grp Volume(v), veh/h	223.4	0.0	319.0	272.7	0.0	368.1	316.2	0.0	0.0	9.1	0.0	50.9
Grp Sat Flow(s),veh/h/ln	1142.9	0.0	1622.9	0.0	0.0	1699.1	1524.3	0.0	0.0	1080.3	0.0	1317.5
Q Serve(g_s), s	0.0	0.0	4.3	0.0	0.0	4.9	2.1	0.0	0.0	0.3	0.0	1.0
Cycle Q Clear(g_c), s	16.0	0.0	4.3	16.0	0.0	4.9	6.0	0.0	0.0	6.2	0.0	1.0
Proportion In Lane	0.102		0.170	1.000		0.036	0.142		0.587	1.000		0.458
Lane Grp Cap(c), veh/h	661.9	0.0	772.3	214.1	0.0	808.6	558.5	0.0	0.0	331.8	0.0	377.0
V/C Ratio(X)	0.337	0.000	0.413	1.274	0.000	0.455	0.566	0.000	0.000	0.027	0.000	0.135
Avail Cap(c_a), veh/h	661.9	0.0	772.3	214.1	0.0	808.6	827.6	0.0	0.0	536.8	0.0	627.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	5.8	0.0	5.7	16.8	0.0	5.9	10.4	0.0	0.0	13.5	0.0	8.9
Incr Delay (d2), s/veh	0.3	0.0	0.4	154.3	0.0	0.4	0.9	0.0	0.0	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	6.1	0.0	6.1	171.1	0.0	6.3	11.3	0.0	0.0	13.5	0.0	9.1
Lane Group LOS	A		A	F		A	B			B		A
Approach Volume, veh/h		542			641			316			60	
Approach Delay, s/veh		6.1			76.4			11.3			9.7	
Approach LOS		A			E			B			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	20.00	20.00	13.62	13.62
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	18.00	18.00	7.96	8.21
Green Extension Time (p_c)	0.00	0.00	1.44	1.41

Intersection Summary	
HCM 2010 Control Delay	36.2
HCM 2010 Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	826	122	266	208	42	57	44	426	174	116	6
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1866	1866	1866	1881	1900	1900	1863	1810	1776	1863	1681	1681
Lanes	0	2	0	1	2	0	1	1	1	1	1	0
Capacity, veh/h	50	1259	213	359	1887	388	343	535	640	432	427	60
Arriving On Green	0.29	0.29	0.29	0.13	0.62	0.62	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	77.1	2912.2	484.9	1791.6	3060.5	628.6	1239.4	1809.5	1509.3	1349.4	1443.7	202.1
Grp Volume(v), veh/h	590.9	0.0	533.8	312.9	146.8	142.3	64.8	50.0	600.0	248.6	0.0	143.7
Grp Sat Flow(s),veh/h/ln	1785.3	0.0	1612.7	1791.6	1900.0	1789.1	1239.4	1809.5	1509.3	1349.4	0.0	1645.8
Q Serve(g_s), s	13.3	0.0	36.0	11.6	3.9	4.0	5.1	2.4	35.5	19.6	0.0	8.1
Cycle Q Clear(g_c), s	35.3	0.0	36.0	11.6	3.9	4.0	13.2	2.4	35.5	22.0	0.0	8.1
Proportion In Lane	0.043		0.301	1.000		0.351	1.000		1.000	1.000		0.123
Lane Grp Cap(c), veh/h	814.4	0.0	707.4	359.0	1171.7	1103.3	343.2	535.3	639.8	432.2	0.0	486.9
V/C Ratio(X)	0.726	0.000	0.755	0.872	0.125	0.129	0.189	0.093	0.938	0.575	0.000	0.295
Avail Cap(c_a), veh/h	814.4	0.0	707.4	458.1	1171.7	1103.3	343.2	535.3	639.8	432.2	0.0	486.9
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	36.0	0.0	36.5	25.7	9.6	9.6	37.7	30.6	33.1	38.6	0.0	32.6
Incr Delay (d2), s/veh	4.0	0.0	5.5	21.5	0.1	0.1	1.2	0.3	23.2	5.5	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	40.0	0.0	42.0	47.2	9.7	9.7	38.9	30.9	56.3	44.1	0.0	34.1
Lane Group LOS	D		D	D	A	A	D	C	E	D		C
Approach Volume, veh/h		1125			602			715			392	
Approach Delay, s/veh		40.9			29.2			52.9			40.4	
Approach LOS		D			C			D			D	

Timer								
Assigned Phase		2		1	6		8		4	
Phase Duration (G+Y+Rc), s		58.64		21.36	80.00		40.00		40.00	
Change Period (Y+Rc), s		6.00		6.00	6.00		4.50		4.50	
Max Green Setting (Gmax), s		47.00		22.00	74.00		35.50		35.50	
Max Q Clear Time (g_c+I1), s		38.04		13.62	5.98		37.50		24.02	
Green Extension Time (p_c)		7.45		1.74	32.02		0.00		5.82	

Intersection Summary	
HCM 2010 Control Delay	41.4
HCM 2010 Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	3	1	52	11	83	6	542	92	25	173	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1824	1824	1824	1878	1878	1878	1727	1898	1898	1845	1846	1846
Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Capacity, veh/h	220	239	50	213	55	179	737	849	117	280	937	19
Arriving On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	548.8	576.6	228.7	402.1	116.9	815.8	1091.4	1633.0	225.0	614.0	1802.6	36.7
Grp Volume(v), veh/h	11.7	0.0	0.0	232.0	0.0	0.0	9.5	0.0	893.7	36.2	0.0	200.6
Grp Sat Flow(s),veh/h/ln	1600.7	0.0	0.0	1345.4	0.0	0.0	1091.4	0.0	1858.0	614.0	0.0	1839.3
Q Serve(g_s), s	0.0	0.0	0.0	3.2	0.0	0.0	0.1	0.0	13.7	1.8	0.0	1.8
Cycle Q Clear(g_c), s	0.2	0.0	0.0	4.8	0.0	0.0	2.0	0.0	13.7	15.5	0.0	1.8
Proportion In Lane	0.343		0.143	0.299		0.606	1.000		0.121	1.000		0.020
Lane Grp Cap(c), veh/h	509.2	0.0	0.0	447.9	0.0	0.0	737.5	0.0	966.2	280.2	0.0	956.5
V/C Ratio(X)	0.023	0.000	0.000	0.518	0.000	0.000	0.013	0.000	0.925	0.129	0.000	0.210
Avail Cap(c_a), veh/h	845.6	0.0	0.0	817.8	0.0	0.0	737.5	0.0	966.2	280.2	0.0	956.5
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000	1.000
Uniform Delay (d), s/veh	9.4	0.0	0.0	10.4	0.0	0.0	4.5	0.0	6.8	14.0	0.0	4.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	14.3	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.4	0.0	0.0	11.3	0.0	0.0	4.5	0.0	21.1	14.2	0.0	4.1
Lane Group LOS	A			B			A		C	B		A
Approach Volume, veh/h		12			232			903			237	
Approach Delay, s/veh		9.4			11.3			20.9			5.6	
Approach LOS		A			B			C			A	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	10.77	10.77	20.00	20.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	2.16	6.80	15.69	17.47
Green Extension Time (p_c)	1.18	0.93	0.23	0.00

Intersection Summary	
HCM 2010 Control Delay	16.6
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	149	73	46	293	12	99	207	32	17	71	218
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1849	1849	1849	1781	1781	1781	1865	1865	1865	1870	1870	1870
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	219	415	151	166	522	36	235	432	73	119	153	435
Arriving On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	374.6	641.9	376.2	221.7	1085.2	89.0	405.0	747.6	191.9	90.7	329.8	1145.1
Grp Volume(v), veh/h	373.5	0.0	0.0	526.0	0.0	0.0	467.4	0.0	0.0	472.0	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1655.4	0.0	0.0	1521.3	0.0	0.0	1625.1	0.0	0.0	1586.9	0.0	0.0
Q Serve(g_s), s	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	0.0	11.0	0.0	0.0	7.7	0.0	0.0	9.2	0.0	0.0
Proportion In Lane	0.226		0.227	0.146		0.058	0.249		0.118	0.057		0.722
Lane Grp Cap(c), veh/h	785.6	0.0	0.0	723.8	0.0	0.0	739.9	0.0	0.0	706.4	0.0	0.0
V/C Ratio(X)	0.475	0.000	0.000	0.727	0.000	0.000	0.632	0.000	0.000	0.668	0.000	0.000
Avail Cap(c_a), veh/h	827.7	0.0	0.0	772.6	0.0	0.0	808.2	0.0	0.0	792.7	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	8.3	0.0	0.0	9.4	0.0	0.0	9.4	0.0	0.0	9.8	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	3.2	0.0	0.0	1.4	0.0	0.0	1.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	8.7	0.0	0.0	12.6	0.0	0.0	10.8	0.0	0.0	11.6	0.0	0.0
Lane Group LOS	A			B			B			B		
Approach Volume, veh/h		374			526			467			472	
Approach Delay, s/veh		8.7			12.6			10.8			11.6	
Approach LOS		A			B			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	18.69	18.69	17.88	17.88
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	7.77	12.98	9.68	11.20
Green Extension Time (p_c)	3.89	1.71	3.36	2.68

Intersection Summary	
HCM 2010 Control Delay	11.1
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	203	264	72	53	98	10	66	129	147	21	185	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1879	1879	1879	1867	1867	1867	1840	1840	1840	1857	1857	1857
Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Capacity, veh/h	454	329	113	75	132	16	108	148	203	62	367	89
Arriving On Green	0.50	0.50	0.50	0.12	0.12	0.12	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	909.5	658.6	225.8	609.3	1075.5	128.8	296.7	418.2	776.2	152.3	1114.6	338.7
Grp Volume(v), veh/h	817.1	0.0	0.0	187.8	0.0	0.0	479.8	0.0	0.0	319.9	0.0	0.0
Grp Sat Flow(s),veh/h/ln	1794.0	0.0	0.0	1813.6	0.0	0.0	1596.2	0.0	0.0	1833.1	0.0	0.0
Q Serve(g_s), s	43.3	0.0	0.0	10.5	0.0	0.0	10.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	43.3	0.0	0.0	10.5	0.0	0.0	27.0	0.0	0.0	16.3	0.0	0.0
Proportion In Lane	0.507		0.126	0.336		0.071	0.186		0.486	0.083		0.185
Lane Grp Cap(c), veh/h	896.0	0.0	0.0	223.0	0.0	0.0	458.6	0.0	0.0	516.9	0.0	0.0
V/C Ratio(X)	0.912	0.000	0.000	0.842	0.000	0.000	1.046	0.000	0.000	0.619	0.000	0.000
Avail Cap(c_a), veh/h	1128.9	0.0	0.0	280.9	0.0	0.0	458.6	0.0	0.0	516.9	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	23.8	0.0	0.0	44.3	0.0	0.0	37.9	0.0	0.0	34.2	0.0	0.0
Incr Delay (d2), s/veh	9.5	0.0	0.0	16.7	0.0	0.0	54.7	0.0	0.0	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	33.3	0.0	0.0	61.0	0.0	0.0	92.6	0.0	0.0	36.5	0.0	0.0
Lane Group LOS	C			E			F			D		
Approach Volume, veh/h		817			188			480			320	
Approach Delay, s/veh		33.3			61.0			92.6			36.5	
Approach LOS		C			E			F			D	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	55.59	16.70	31.00	31.00
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	65.00	16.00	27.00	27.00
Max Q Clear Time (g_c+I1), s	45.25	12.46	29.00	18.30
Green Extension Time (p_c)	6.34	0.30	0.00	3.57

Intersection Summary	
HCM 2010 Control Delay	52.5
HCM 2010 Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	33	217	68	15	404	118	20	44	5	44	43	32
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1900	1790	1790	1900	1849	1849	1842	1842	1842	1782	1782	1782
Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Capacity, veh/h	423	663	202	617	663	227	216	242	30	226	154	68
Arriving On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	791.9	1317.6	401.9	1011.5	1319.1	450.4	433.9	769.6	138.8	422.1	500.7	318.8
Grp Volume(v), veh/h	40.7	0.0	387.9	23.1	0.0	652.9	108.9	0.0	0.0	168.2	0.0	0.0
Grp Sat Flow(s),veh/h/ln	791.9	0.0	1719.4	1011.5	0.0	1769.4	1512.6	0.0	0.0	1307.3	0.0	0.0
Q Serve(g_s), s	1.2	0.0	4.1	0.4	0.0	8.2	0.0	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	9.4	0.0	4.1	4.5	0.0	8.2	1.4	0.0	0.0	2.9	0.0	0.0
Proportion In Lane	1.000		0.234	1.000		0.255	0.287		0.092	0.323		0.244
Lane Grp Cap(c), veh/h	422.7	0.0	864.8	616.9	0.0	889.9	487.7	0.0	0.0	448.4	0.0	0.0
V/C Ratio(X)	0.096	0.000	0.449	0.037	0.000	0.734	0.223	0.000	0.000	0.375	0.000	0.000
Avail Cap(c_a), veh/h	472.6	0.0	973.1	680.6	0.0	1001.4	923.5	0.0	0.0	855.0	0.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
Uniform Delay (d), s/veh	9.2	0.0	4.5	6.0	0.0	5.5	9.3	0.0	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.0	0.0	2.5	0.2	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Group Delay (d), s/veh	9.3	0.0	4.9	6.0	0.0	8.0	9.5	0.0	0.0	10.1	0.0	0.0
Lane Group LOS	A		A	A		A	A			B		
Approach Volume, veh/h		429			676			109			168	
Approach Delay, s/veh		5.3			7.9			9.5			10.1	
Approach LOS		A			A			A			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	18.22	18.22	10.05	10.05
Change Period (Y+Rc), s	4.00	4.00	4.00	4.00
Max Green Setting (Gmax), s	16.00	16.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	11.43	10.22	3.42	4.86
Green Extension Time (p_c)	2.79	3.40	1.28	1.20

Intersection Summary	
HCM 2010 Control Delay	7.5
HCM 2010 Level of Service	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	251	33	36	1002	0	0	0	0	34	0	297
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking, Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Adj Sat Flow Rate	1900	1900	1900	1743	1900	0	0	0	0	1900	0	1900
Lanes	0	3	0	1	2	0	0	0	0	1	0	1
Capacity, veh/h	603	1502	257	1155	1547	0	0	0	0	0	0	0
Arriving On Green	0.43	0.43	0.43	0.43	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	119.7	3937.8	598.9	885.6	3705.0	0.0		0			0	
Grp Volume(v), veh/h	128.8	150.2	159.7	49.3	1151.7	0.0		0.0			0.0	
Grp Sat Flow(s),veh/h/ln	963.5	1573.4	1623.3	885.6	1805.0	0.0						
Q Serve(g_s), s	0.1	0.4	0.4	0.4	1.9	0.0						
Cycle Q Clear(g_c), s	2.0	0.4	0.4	2.4	1.9	0.0						
Proportion In Lane	0.124		0.369	1.000		0.000						
Lane Grp Cap(c), veh/h	991.1	0.0	0.0	1155.1	1547.1	0.0						
V/C Ratio(X)	0.130	0.000	0.000	0.043	0.744	0.000						
Avail Cap(c_a), veh/h	991.1	0.0	0.0	1155.1	1547.1	0.0						
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00						
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	0.000						
Uniform Delay (d), s/veh	1.3	0.0	0.0	2.7	1.7	0.0						
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	2.0	0.0						
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0						
Lane Group Delay (d), s/veh	1.4	0.0	0.0	2.7	3.7	0.0						
Lane Group LOS	A			A	A							
Approach Volume, veh/h		439			1201							
Approach Delay, s/veh		0.4			3.6							
Approach LOS		A			A							

Timer	
Assigned Phase	2
Phase Duration (G+Y+Rc), s	7.00
Change Period (Y+Rc), s	4.00
Max Green Setting (Gmax), s	3.00
Max Q Clear Time (g_c+I1), s	4.00
Green Extension Time (p_c)	0.00

Intersection Summary	
HCM 2010 Control Delay	2.8
HCM 2010 Level of Service	A