Traffic Impact Study

1758 and 1790 Norwich New London Turnpike

Montville, Connecticut

Prepared for:

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This study examines the traffic impact of a proposed multifamily residential development at 1758 and 1790 Norwich New London Turnpike (Route 32) in Montville, Connecticut. Levels of Service (LOS) for traffic flows under 2024 existing and 2027 no-build and build traffic conditions were analyzed to identify any deficiencies in existing and future traffic operations at area intersections. For the purpose of this traffic study, 2027 was assumed to be the year during which the development is built and occupied.

I. Summary

- The residential development is projected to generate 74 and 78 vehicular trips during the respective weekday morning and weekday afternoon peak hours.

- The traffic impact of the development will be limited. At the intersection level, all area intersections will continue to operate at LOS C or better when the development is built and occupied. Traffic movements at the proposed site driveway on Route 32 will operate at LOS A and C during the peak hours.

II. Project Description

The proposed multifamily residential development will include a total of 200 residential units in five four-story buildings at 1758 and 1790 Norwich New London Turnpike (Route 32) in Montville, Connecticut. One site driveway is proposed on Route 32.

III. Existing Traffic Conditions

To evaluate the quality of traffic operation in the vicinity of the development, the following signalized and unsignalized intersections were analyzed for the study:

- Route 32 and Route 2A westbound ramps;
- Route 32, Podurgiel Lane, and Route 2A eastbound ramps;
- Route 32 and Occum Lane;
- Route 32, Montville Commons Road, and Golden Road;
- Route 32 and PTA Lane;
- Route 32 and the site driveway; and
- Route 32, Woodland Drive, and St. Bernard School Drive.

Traffic counts were collected at the intersections during weekday morning and weekday afternoon hours in May 2024. From these counts, traffic volumes for the peak weekday morning hour of 7:30 am-8:30 am and peak weekday afternoon hour of 4:00 pm-5:00 pm were identified. The resulting peak-hour traffic volumes used for the traffic analyses are shown in Figures 1 and 2 of the Appendices.

Capacity Analysis

To assess the quality of traffic flow, intersection capacity analysis was conducted for the existing, future no-build, and future build traffic conditions. Capacity analysis provides an indication of how well roadway facilities serve the traffic demands placed upon them. Synchro 12, a software package that includes the evaluation criteria of the *Highway Capacity Manual, 2000th Edition and 7th Edition*, was used to analyze the intersections.

Level of service (LOS) is the term used to describe the different operating conditions that occur on a given roadway segment or intersection under various traffic conditions. It is a qualitative measure of the effects of a number of factors including roadway geometry, speed, travel delay, freedom to maneuver, and safety. Six levels of service can be defined for each type of facility. Each level of service (LOS) is given a letter designation from A to F, with LOS A representing the best operating conditions and LOS F representing the worst.

Table 1 that follows shows the capacity analysis results for the analyzed intersections under the 2024 existing traffic conditions. Most analyzed traffic movements and intersections are operating at acceptable LOS D or better with short delays during the peak hours. The only exception is the eastbound approach of Podurgiel Lane, which operates at a LOS E with an average delay of 59.5 seconds during the weekday afternoon peak hour. Overall, traffic operates efficiently along the Route 32 corridor during the peak hours.

Table 1 Capacity Analyses for Existing Conditions

Intersection	2024 Existing Conditions			
	Weekday Morning Peak Hour of Adjacent Street		Weekday Afternoon Peak Hour of Adjacent Street	
	Delay (sec)	LOS	Delay (sec)	LOS
Rt. 32, Rt. 2A WB On Ramp, and Rt. 2A WB Off Ramp (Signalized)				
WB Rt. 2A WB Off Ramp Left Turn	29.2	C	39.4	D
WB Rt. 2A WB Off Ramp Left Turn and Through	29.2	C	39.5	D
WB Rt. 2A WB Off Ramp Right Turn	27.3	C	34.7	C
NB Rt. 32 Left Turn	3.9	A	4.9	A
NB Rt. 32 Through	4.2	A	4.8	A
SB Rt. 32 Through and Right Turn	13.4	B	22.4	C
Intersection	11.7	B	17.8	B
Rt. 32, Podurgiel Ln., Rt. 2A EB On Ramp, and Rt. 2A EB Off Ramp (Signalized)				
EB Podurgiel Ln.	38.0	D	59.5	E
NB Rt. 32 Left Turn	0.0	A	11.4	B
NB Rt. 32 Through	21.8	C	21.9	C
NB Rt. 32 Right Turn	17.8	B	19.3	B
SB Rt. 32 Left Turn	11.7	B	8.0	A
SB Rt. 32 Through and Right Turn	10.9	B	9.0	A
Southeastbound Rt. 2A EB Off Ramp Left Turn and Through	23.7	C	29.7	C
Southeastbound Rt. 2A EB Off Ramp Through and Right Turn	21.8	C	39.7	D
Intersection	18.7	B	20.5	C
Rt. 32, Montville Commons North Driveway, and Occum Ln. (Signalized)				
EB Montville Commons North Driveway Left Turn	31.1	C	43.3	D
EB Montville Commons North Driveway Left Turn and Through	31.1	C	43.4	D
EB Montville Commons North Driveway Right Turn	28.7	C	33.3	C
WB Occum Ln.	31.5	C	43.3	D
NB Route Rt. 32 Left Turn	3.0	A	18.0	B
NB Route Rt. 32 Through and Right Turn	4.7	A	19.1	B
SB Rt. 32 Left Turn	10.1	B	12.2	B
SB Rt. 32 Through	13.4	B	15.0	B
SB Rt. 32 Right Turn	25.7	C	35.6	D
Intersection	13.8	B	25.0	C
Rt. 32, Montville Commons Rd., and Golden Rd. (Signalized)				
EB Montville Commons Road Left Turn and Through	32.2	C	39.2	D
EB Montville Commons Road Right Turn	30.8	C	37.1	D
WB Golden Rd.	31.8	C	41.6	D
NB Rt. 32 Left Turn	8.1	A	7.5	A
NB Rt. 32 Through and Right Turn	16.4	B	19.9	B
SB Rt. 32 Left Turn	14.3	B	5.1	A
SB Rt. 32 Through and Right Turn	17.1	B	3.6	A
Intersection	17.9	B	16.2	B
Rt. 32, Woodland Dr., and St. Bernard School Dr. (Signalized)				
EB Woodland Dr.	23.9	C	23.2	C
WB St. Bernard School Dr. Left Turn and Through	27.2	C	23.0	C
WB St. Bernard School Dr. Right Turn	22.1	C	21.5	C
NB Rt. 32	20.4	C	12.7	B
SB Rt. 32 Left Turn	8.1	A	4.8	A
SB Rt. 32 Through and Right Turn	8.4	A	5.1	A
Intersection	16.3	B	10.3	B
Rt. 32 and PTA Ln. (Unsignalized)				
WB PTA Ln.	20.0	C	21.7	C
SB Rt. 32 Left Turn	9.0	A	0.0	A

EB Eastbound
WB Westbound
NB Northbound
SB Southbound
LOS Level of Service

IV. Future Traffic Conditions

For the purpose of this traffic impact study, it was assumed that the development will be built and occupied in 2027.

As a comparison for demonstrating the traffic impact of the project, a 2027 no-build scenario is included in the study. Figures 3 and 4 of the Appendices show the 2027 no-build traffic volumes, which were generated by using an annual traffic growth rate of 0.6 percent per year between 2024 and 2027 that was recommended by the CTDOT Bureau of Policy and Planning.

Table 2 details the capacity analysis results for the 2024 no-build traffic conditions. Most traffic movements and intersections will continue to operate at acceptable LOS D or better under the 2027 no-build traffic conditions.

Table 2 Capacity Analyses for No-Build Conditions

Intersection	2027 No-Build Conditions			
	Weekday Morning Peak Hour of Adjacent Street		Weekday Afternoon Peak Hour of Adjacent Street	
	Delay (sec)	LOS	Delay (sec)	LOS
Rt. 32, Rt. 2A WB On Ramp, and Rt. 2A WB Off Ramp (Signalized)				
WB Rt. 2A WB Off Ramp Left Turn	29.1	C	39.2	D
WB Rt. 2A WB Off Ramp Left Turn and Through	29.1	C	39.3	D
WB Rt. 2A WB Off Ramp Right Turn	27.2	C	34.5	C
NB Rt. 32 Left Turn	4.1	A	5.4	A
NB Rt. 32 Through	4.4	A	4.8	A
SB Rt. 32 Through and Right Turn	13.6	B	23.4	C
Intersection	11.9	B	18.2	B
Rt. 32, Podurgiel Ln., Rt. 2A EB On Ramp, and Rt. 2A EB Off Ramp (Signalized)				
EB Podurgiel Ln.	38.0	D	59.5	E
NB Rt. 32 Left Turn	0.0	A	12.0	B
NB Rt. 32 Through	21.6	C	22.9	C
NB Rt. 32 Right Turn	17.5	B	20.0	C
SB Rt. 32 Left Turn	12.2	B	8.4	A
SB Rt. 32 Through and Right Turn	10.8	B	8.9	A
Southeastbound Rt. 2A EB Off Ramp Left Turn and Through	24.2	C	29.5	C
Southeastbound Rt. 2A EB Off Ramp Through and Right Turn	22.1	C	39.9	D
Intersection	18.8	B	20.9	C
Rt. 32, Montville Commons North Driveway, and Occum Ln. (Signalized)				
EB Montville Commons North Driveway Left Turn	31.2	C	43.4	D
EB Montville Commons North Driveway Left Turn and Through	31.1	C	43.3	D
EB Montville Commons North Driveway Right Turn	28.7	C	33.3	C
WB Occum Ln.	31.5	C	43.2	D
NB Route Rt. 32 Left Turn	3.3	A	18.6	B
NB Route Rt. 32 Through and Right Turn	4.8	A	19.6	B
SB Rt. 32 Left Turn	9.5	A	12.4	B
SB Rt. 32 Through	13.5	B	15.1	B
SB Rt. 32 Right Turn	25.1	C	35.8	D
Intersection	13.7	B	25.3	C
Rt. 32, Montville Commons Rd., and Golden Rd. (Signalized)				
EB Montville Commons Road Left Turn and Through	32.2	C	39.1	D
EB Montville Commons Road Right Turn	30.9	C	37.0	D
WB Golden Rd.	31.8	C	41.7	D
NB Rt. 32 Left Turn	8.1	A	7.6	A
NB Rt. 32 Through and Right Turn	16.6	B	20.5	C
SB Rt. 32 Left Turn	14.6	B	5.4	A
SB Rt. 32 Through and Right Turn	17.3	B	3.6	A
Intersection	18.0	B	16.4	B
Rt. 32, Woodland Dr., and St. Bernard School Dr. (Signalized)				
EB Woodland Dr.	24.1	C	23.5	C
WB St. Bernard School Dr. Left Turn and Through	27.7	C	23.2	C
WB St. Bernard School Dr. Right Turn	22.2	C	21.6	C
NB Rt. 32	20.6	C	12.7	B
SB Rt. 32 Left Turn	8.3	A	4.7	A
SB Rt. 32 Through and Right Turn	8.6	A	5.1	A
Intersection	16.5	B	10.4	B
Rt. 32 and PTA Ln. (Unsignalized)				
WB PTA Ln.	20.4	C	22.2	C
SB Rt. 32 Left Turn	9.1	A	0.0	A

EB Eastbound
WB Westbound
NB Northbound
SB Southbound
LOS Level of Service

Trip Generation

The peak-hour vehicular trips generated by the development were estimated using data from ITE (Institute of Transportation Engineers) *Trip Generation Manual, 11th Edition*. the development will generate 74 and 78 vehicular trips during the respective weekday morning and weekday afternoon peak hours.

Table 3 Trip Generation (vph)

Multifamily Housing (Mid Rise) (ITE LU 221) (200 Units)			
	Entry	**Exit**	**Entry & Exit**
Weekday AM Peak Hour of Adjacent Street	17	57	74
Weekday PM Peak Hour of Adjacent Street	48	30	78

vph Vehicles per hour

Table 4 depicts the distribution of the site-generated trips along the area routes. The distribution takes into account the relative traffic volumes of the area roadways and the development patterns in this part of Montville. Traffic volumes for the 2027 build conditions, which combine the no-build volumes and the new site trips, are presented in Figures 6 and 7.

Table 4 Trip Distribution

To / From Route	Entry/Exit
North: Route 32	10%
West: Route 2A	40%
East: Route 2A	20%
South: Route 32	30%
Total	100%

Capacity Analysis

Table 5 shows the capacity analysis results for the 2027 build traffic conditions. With the exception of Podurgiel Lane that will remain at a LOS E during the weekday afternoon peak hour, all other traffic movements will operate at acceptable LOS D or better during the two peak hours when the development is built and occupied. At the intersection level, all area intersections will operate at LOS C or better. At the proposed site driveway on Route 32, traffic movements will operate at LOS A and C during the peak hours. The traffic capacity analyses demonstrate that the traffic impact of the development will be limited and will be adequately accommodated by the existing area roadways.

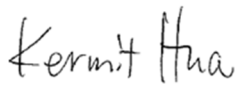
Table 5 Capacity Analyses for Build Conditions

Intersection	2027 Build Conditions			
	Weekday Morning Peak Hour of Adjacent Street		Weekday Afternoon Peak Hour of Adjacent Street	
	Delay (sec)	LOS	Delay (sec)	LOS
Rt. 32, Rt. 2A WB On Ramp, and Rt. 2A WB Off Ramp (Signalized)				
WB Rt. 2A WB Off Ramp Left Turn	29.1	C	39.8	D
WB Rt. 2A WB Off Ramp Left Turn and Through	29.1	C	39.9	D
WB Rt. 2A WB Off Ramp Right Turn	27.1	C	34.5	C
NB Rt. 32 Left Turn	4.1	A	5.9	A
NB Rt. 32 Through	4.3	A	4.5	A
SB Rt. 32 Through and Right Turn	13.8	B	24.1	C
Intersection	11.8	B	18.5	B
Rt. 32, Podurgiel Ln., Rt. 2A EB On Ramp, and Rt. 2A EB Off Ramp (Signalized)				
EB Podurgiel Ln.	38.0	D	59.5	E
NB Rt. 32 Left Turn	0.0	A	11.8	B
NB Rt. 32 Through	21.5	C	24.1	C
NB Rt. 32 Right Turn	17.2	B	20.9	C
SB Rt. 32 Left Turn	13.1	B	9.1	A
SB Rt. 32 Through and Right Turn	10.8	B	9.2	A
Southeastbound Rt. 2A EB Off Ramp Left Turn and Through	24.2	C	28.6	C
Southeastbound Rt. 2A EB Off Ramp Through and Right Turn	22.6	C	40.8	D
Intersection	18.9	B	21.6	C
Rt. 32, Montville Commons North Driveway, and Occum Ln. (Signalized)				
EB Montville Commons North Driveway Left Turn	31.2	C	43.4	D
EB Montville Commons North Driveway Left Turn and Through	31.1	C	43.3	D
EB Montville Commons North Driveway Right Turn	28.7	C	33.3	C
WB Occum Ln.	31.5	C	43.2	D
NB Route Rt. 32 Left Turn	3.0	A	18.6	B
NB Route Rt. 32 Through and Right Turn	4.3	A	20.0	B
SB Rt. 32 Left Turn	9.6	A	12.4	B
SB Rt. 32 Through	13.5	B	15.1	B
SB Rt. 32 Right Turn	24.9	C	34.7	C
Intersection	13.3	B	25.0	C
Rt. 32, Montville Commons Rd., and Golden Rd. (Signalized)				
EB Montville Commons Road Left Turn and Through	32.2	C	39.1	D
EB Montville Commons Road Right Turn	30.9	C	37.0	D
WB Golden Rd.	31.8	C	41.7	D
NB Rt. 32 Left Turn	8.1	A	7.6	A
NB Rt. 32 Through and Right Turn	18.0	B	21.3	C
SB Rt. 32 Left Turn	15.6	B	6.1	A
SB Rt. 32 Through and Right Turn	16.7	B	3.8	A
Intersection	18.4	B	16.6	B
Rt. 32, Woodland Dr., and St. Bernard School Dr. (Signalized)				
EB Woodland Dr.	24.3	C	23.5	C
WB St. Bernard School Dr. Left Turn and Through	28.2	C	23.2	C
WB St. Bernard School Dr. Right Turn	22.4	C	21.6	C
NB Rt. 32	20.7	C	12.9	B
SB Rt. 32 Left Turn	8.3	A	4.8	A
SB Rt. 32 Through and Right Turn	9.0	A	5.2	A
Intersection	16.6	B	10.5	B
Rt. 32 and PTA Ln. (Unsignalized)				
WB PTA Ln.	22.0	C	23.3	C
SB Rt. 32 Left Turn	9.3	A	0.0	A
Rt. 32 and Proposed Site Driveway (Unsignalized)				
NB Rt. 32 Left Turn	8.5	A	9.1	A
NB Rt. 32 Through	0.1	A	0.2	A
EB Proposed Site Driveway	16.2	C	20.2	C

EB Eastbound
WB Westbound
NB Northbound
SB Southbound
LOS Level of Service

V. Conclusions

Area traffic operation was analyzed for a proposed multifamily residential development at 1758 and 1790 Norwich New London Turnpike under the 2024 existing and 2027 no-build and build traffic conditions. The traffic impact of the development will be limited and will be adequately accommodated by the adjacent roadways.



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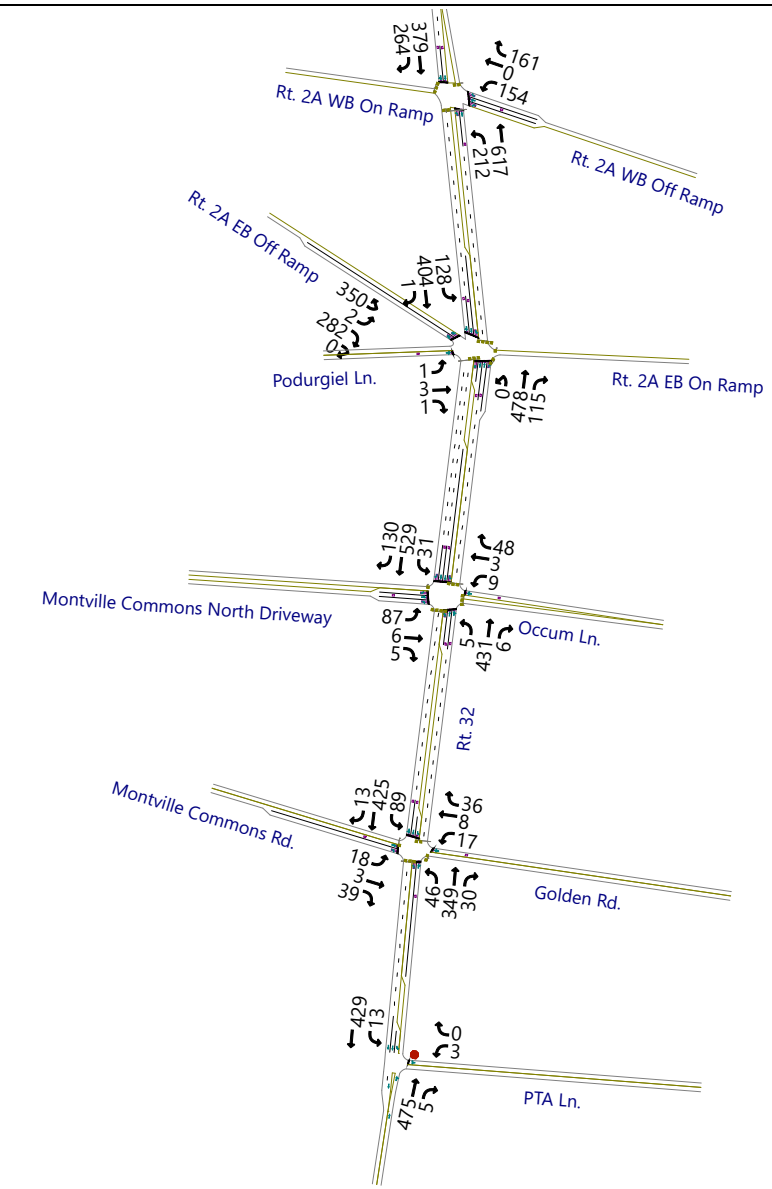


Figure 1 2024 Existing Traffic Volumes Weekday Morning Peak Hour of Adjacent Street

1758 Norwich New London Turnpike, Montville, Connecticut, 2024 Existing Conditions, Weekday AM Peak Hour
KWH Enterprise, LLC

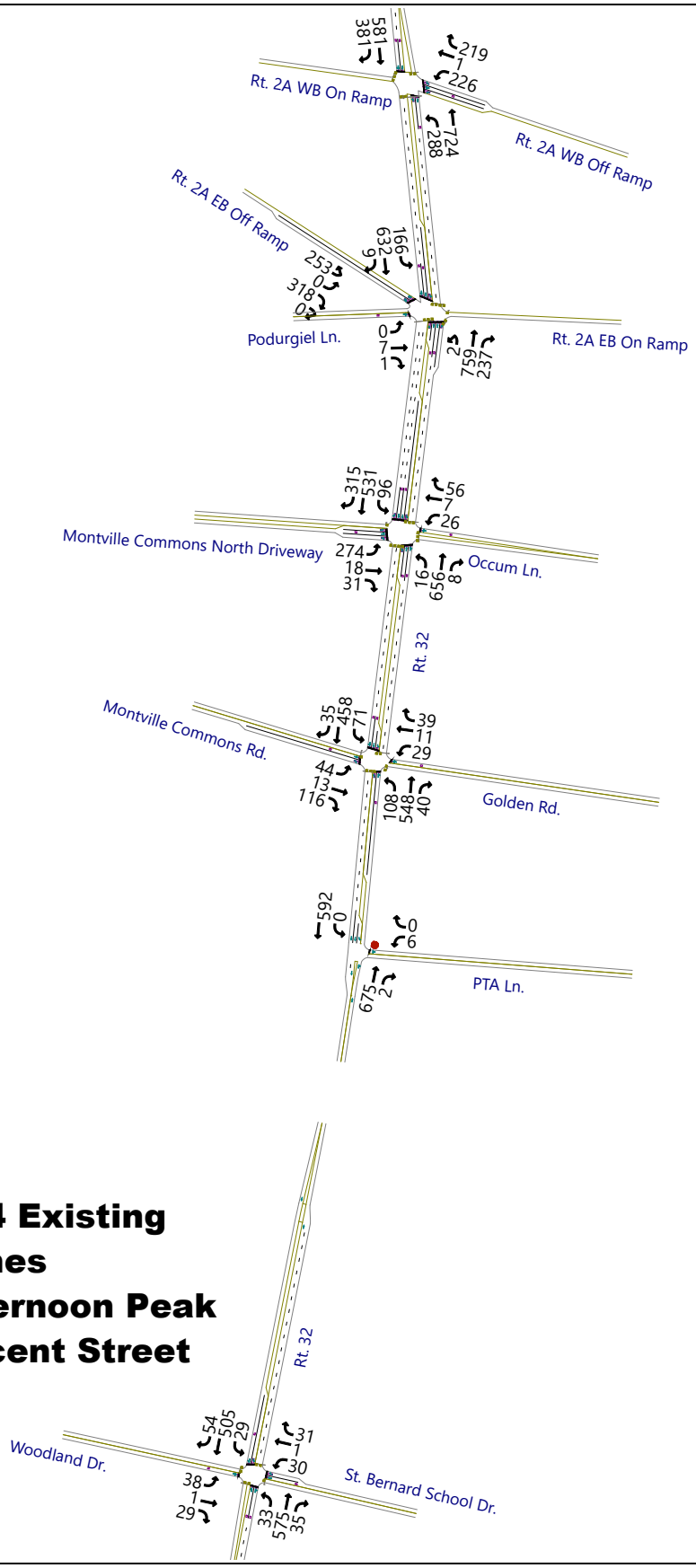


Figure 2 2024 Existing Traffic Volumes Weekday Afternoon Peak Hour of Adjacent Street

1758 Norwich New London Turnpike, Montville, Connecticut, 2024 Existing Conditions, Weekday PM Peak Hour
KWH Enterprise, LLC

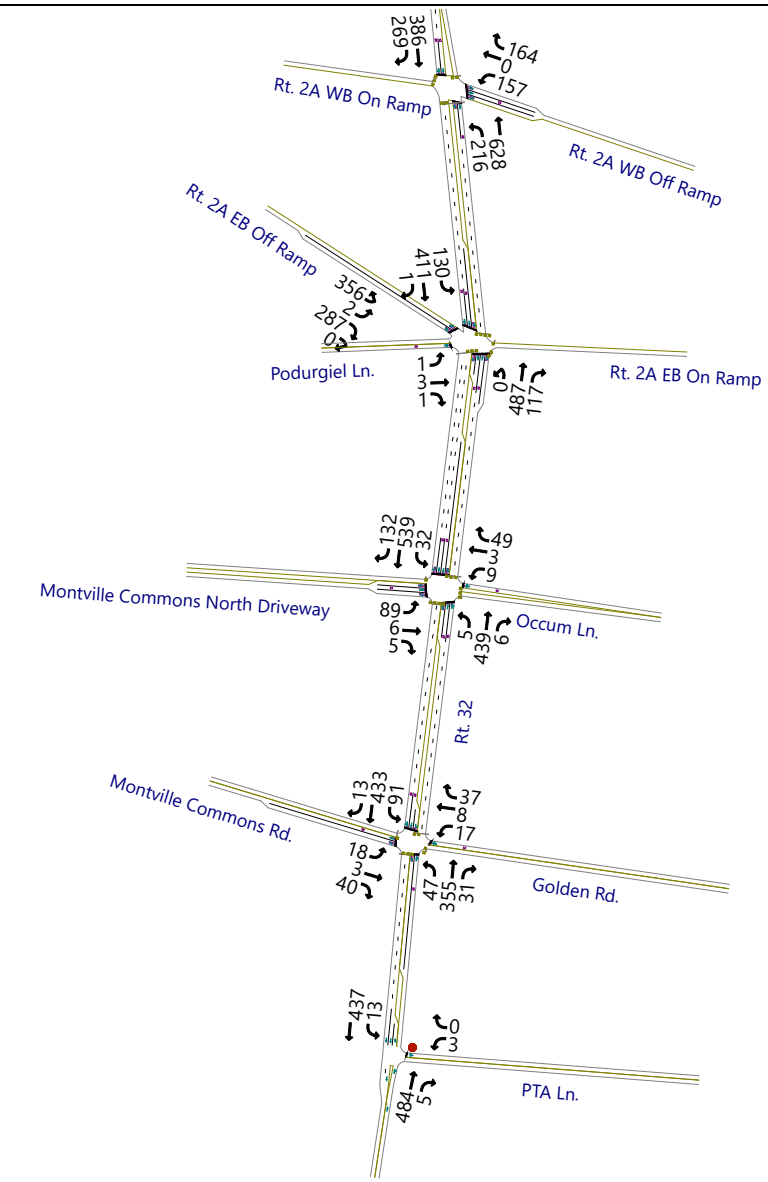


Figure 3 2027 No-Build Traffic Volumes Weekday Morning Peak Hour of Adjacent Street

1758 Norwich New London Turnpike, Montville, Connecticut, 2027 No-Build Conditions, Weekday AM Peak Hour
KWH Enterprise, LLC

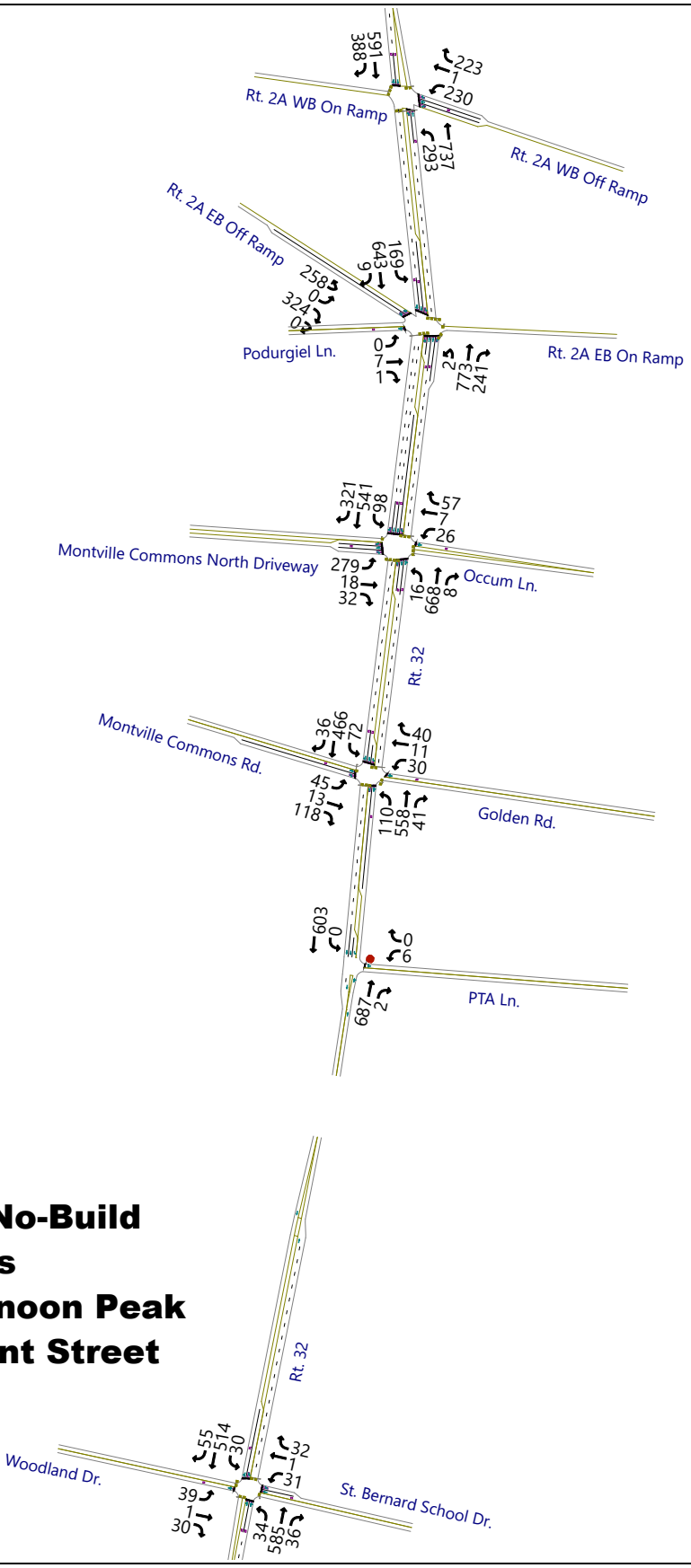
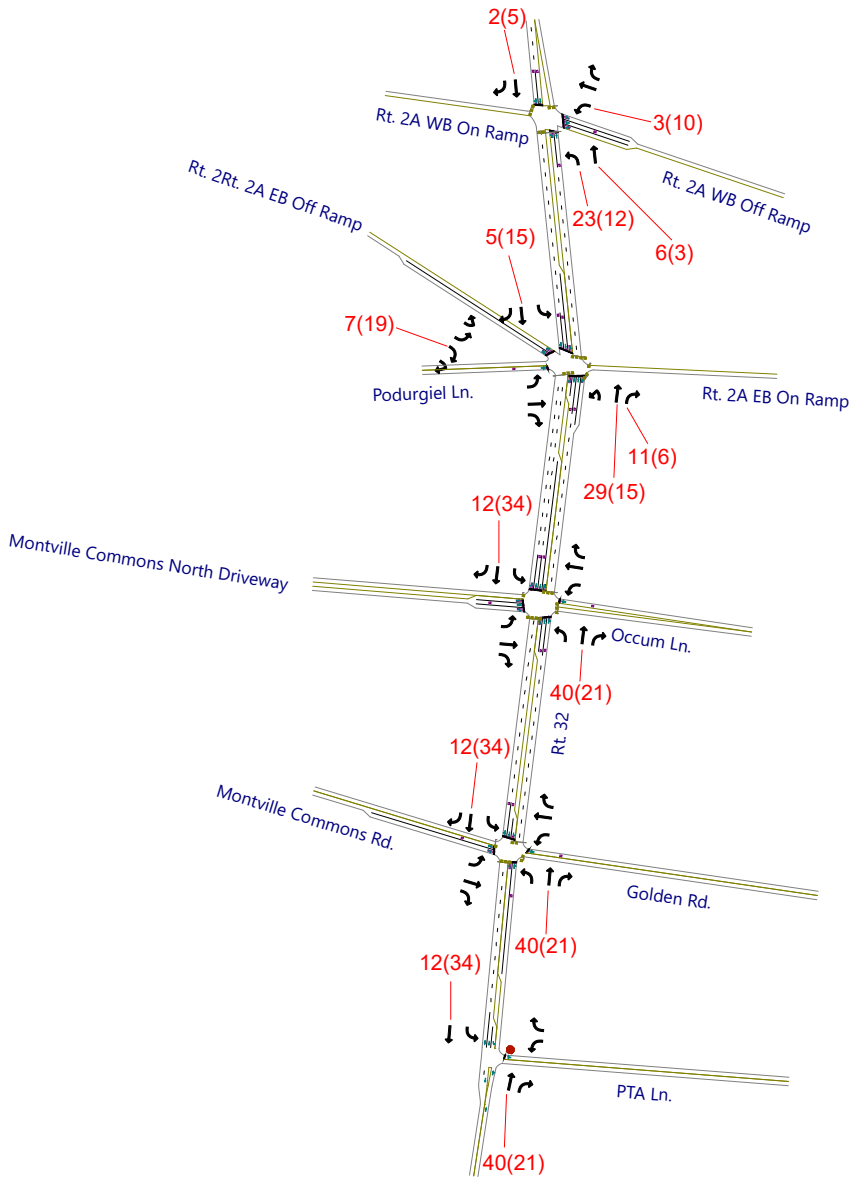


Figure 4 2027 No-Build Traffic Volumes Weekday Afternoon Peak Hour of Adjacent Street

1758 Norwich New London Turnpike, Montville, Connecticut, 2027 No-Build Conditions, Weekday PM Peak Hour
KWH Enterprise, LLC



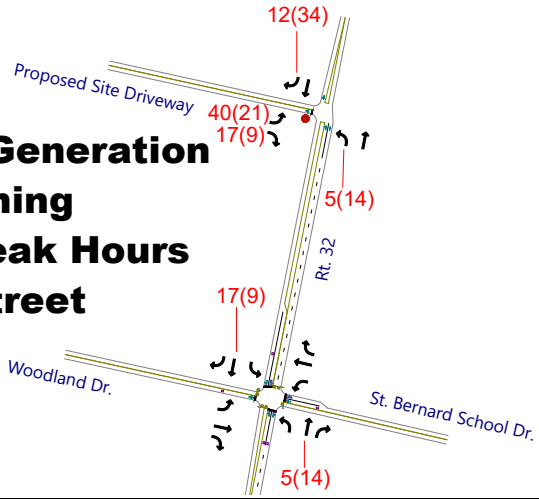


Figure 5 Trip Generation Weekday Morning (Afternoon) Peak Hours of Adjacent Street

1758 Norwich New London Turnpike, Montville, Connecticut, Trips, Weekday AM(PM) Peak Hours
KWH Enterprise, LLC

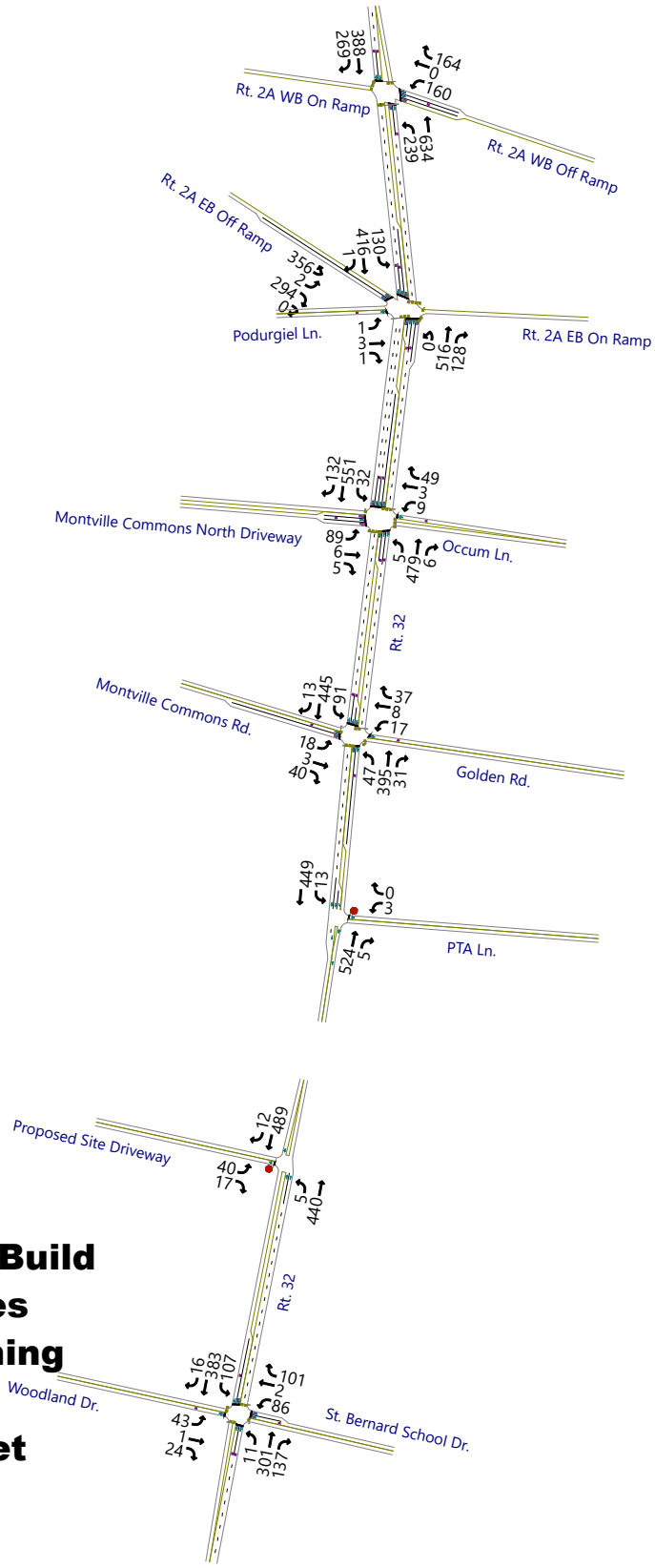


Figure 6 2027 Build Traffic Volumes Weekday Morning Peak Hour of Adjacent Street

1758 Norwich New London Turnpike, Montville, Connecticut, 2027 Build Conditions, Weekday AM Peak Hour
KWH Enterprise, LLC

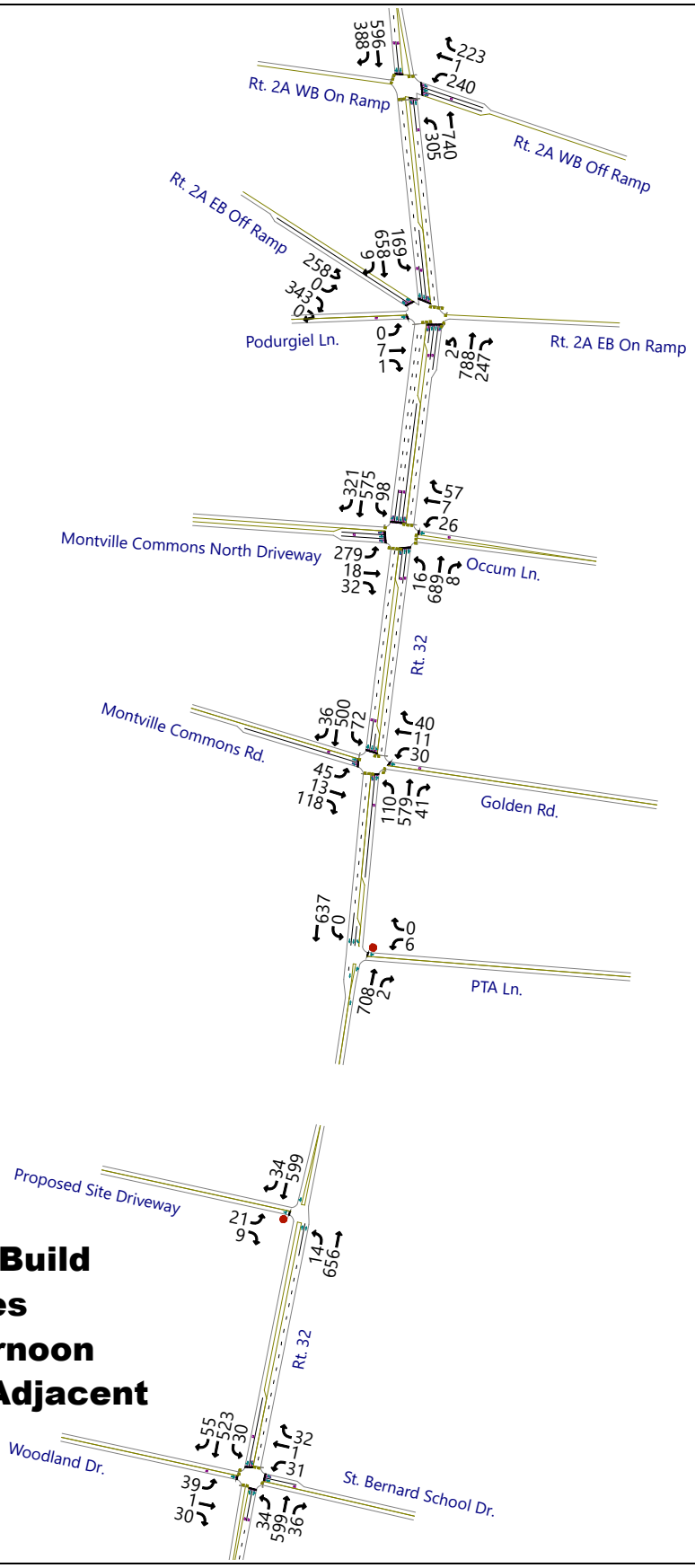


Figure 7 2027 Build Traffic Volumes Weekday Afternoon Peak Hour of Adjacent Street

1758 Norwich New London Turnpike, Montville, Connecticut, 2027 Build Conditions, Weekday PM Peak Hour
KWH Enterprise, LLC

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF POLICY & PLANNING - ROADWAY INFORMATION SYSTEMS
TRAFFIC DATA COLLECTION & VERIFICATION SECTION

FACTORS FOR EXPANDING 24-HOUR COUNTS TO
ANNUAL AVERAGE DAILY TRAFFIC VOLUMES
(BASED ON 2018 CONTINUOUS COUNT STATION DATA)

GROUP - 1 * * INTERSTATE * *

STATION(S): 7, 12, 24, 30, 31, 32, 53, 54

AVG.	WEEKDAY	FRIDAY	SATURDAY	SUNDAY
JANUARY	1.08	1.03	1.21	1.41
FEBRUARY	1.04	0.96	1.13	1.45
MARCH	1.05	0.93	1.05	1.21
APRIL	0.99	0.91	1.03	1.17
MAY	0.94	0.83	0.98	1.10
JUNE	0.95	0.90	0.99	1.08
JULY	0.95	0.91	0.97	1.08
AUGUST	0.94	0.86	0.99	1.06
SEPTEMBER	0.99	0.89	0.99	1.08
OCTOBER	0.98	0.90	1.00	1.12
NOVEMBER	0.98	0.98	1.03	1.13
DECEMBER	1.00	0.96	1.04	1.22

GROUP - 2 * * RURAL * *

STATION(S): 4, 10, 16, 20, 50, 51

AVG.	WEEKDAY	FRIDAY	SATURDAY	SUNDAY
JANUARY	1.12	1.08	1.17	1.48
FEBRUARY	1.12	1.05	1.16	1.55
MARCH	1.08	1.04	1.06	1.32
APRIL	1.05	0.95	0.94	1.29
MAY	0.95	0.89	0.95	1.04
JUNE	0.91	0.80	0.87	0.95
JULY	0.93	0.84	0.87	0.98
AUGUST	0.89	0.83	0.90	0.93
SEPTEMBER	0.97	0.88	0.91	1.02
OCTOBER	0.98	0.88	0.97	1.08
NOVEMBER	1.00	1.02	1.09	1.21
DECEMBER	1.08	1.09	1.11	1.29

GROUP - 3 * * INTERSTATE * *

STATION(S): 27 (I-84 FROM ROUTE 195 TO MASS. STATE LINE)

AVG.	WEEKDAY	FRIDAY	SATURDAY	SUNDAY
JANUARY	1.02	1.10	1.25	0.99
FEBRUARY	0.86	0.81	1.02	1.22
MARCH	1.46	0.91	0.94	0.93
APRIL	1.22	0.96	1.00	1.00
MAY	1.07	0.73	0.99	0.90
JUNE	1.04	0.84	0.96	0.71
JULY	0.98	0.84	0.80	0.74
AUGUST	0.81	0.75	0.89	0.79
SEPTEMBER	1.11	1.09	1.13	0.81
OCTOBER	1.04	1.06	1.30	0.99
NOVEMBER	1.26	1.24	1.15	0.64
DECEMBER	1.14	0.33	0.43	0.79

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF POLICY & PLANNING - ROADWAY INFORMATION SYSTEMS
TRAFFIC MONITORING & DATA ANALYSIS SECTION

FACTORS FOR EXPANDING 24-HOUR COUNTS TO
ANNUAL AVERAGE DAILY TRAFFIC VOLUMES
(BASED ON 2018 CONTINUOUS COUNT STATION DATA)

GROUP - 4 * * URBAN * *

STATION(S): 8, 9, 11, 15, 17, 22, 23, 28, 47, 48, 52

AVG.	WEEKDAY	FRIDAY	SATURDAY	SUNDAY
JANUARY	1.03	1.00	1.18	1.46
FEBRUARY	1.03	0.95	1.14	1.49
MARCH	0.97	0.94	1.07	1.30
APRIL	0.98	0.90	1.03	1.26
MAY	0.92	0.83	1.01	1.21
JUNE	0.91	0.85	1.01	1.15
JULY	0.95	0.89	1.06	1.22
AUGUST	0.95	0.89	1.09	1.23
SEPTEMBER	0.96	0.88	1.03	1.20
OCTOBER	0.95	0.86	1.05	1.16
NOVEMBER	0.97	0.97	1.08	1.27
DECEMBER	0.99	0.96	1.06	1.24

GROUP - 5 * *NORTHWEST RECREATIONAL * *

STATION(S): 1 (Station 18 not available on 2018)

AVG.	WEEKDAY	FRIDAY	SATURDAY	SUNDAY
JANUARY	1.29	1.18	1.05	1.21
FEBRUARY	1.24	1.10	1.02	1.34
MARCH	1.28	1.06	1.14	1.24
APRIL	1.04	0.88	0.96	0.85
MAY	1.00	0.83	0.78	0.80
JUNE	0.96	0.80	0.79	0.77
JULY	0.91	0.80	0.71	0.61
AUGUST	0.94	0.75	0.76	0.71
SEPTEMBER	0.99	0.85	0.69	0.73
OCTOBER	0.95	0.71	0.69	0.68
NOVEMBER	1.15	1.05	1.08	1.06
DECEMBER	1.13	1.11	1.09	1.25

GROUP - 6 * * SOUTHEAST RECREATIONAL * *

STATION(S): 5, 33, 44, 46

AVG.	WEEKDAY	FRIDAY	SATURDAY	SUNDAY
JANUARY	1.24	1.08	1.05	1.22
FEBRUARY	1.17	1.00	0.98	1.21
MARCH	1.19	0.98	0.93	1.06
APRIL	1.13	0.91	0.86	1.00
MAY	1.04	0.85	0.84	0.92
JUNE	1.00	0.80	0.81	0.88
JULY	0.91	0.77	0.75	0.79
AUGUST	0.92	0.75	0.77	0.80
SEPTEMBER	1.07	0.89	0.84	0.92
OCTOBER	1.10	0.89	0.93	0.98
NOVEMBER	1.17	0.97	0.93	1.04
DECEMBER	1.16	1.00	0.97	1.15

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076

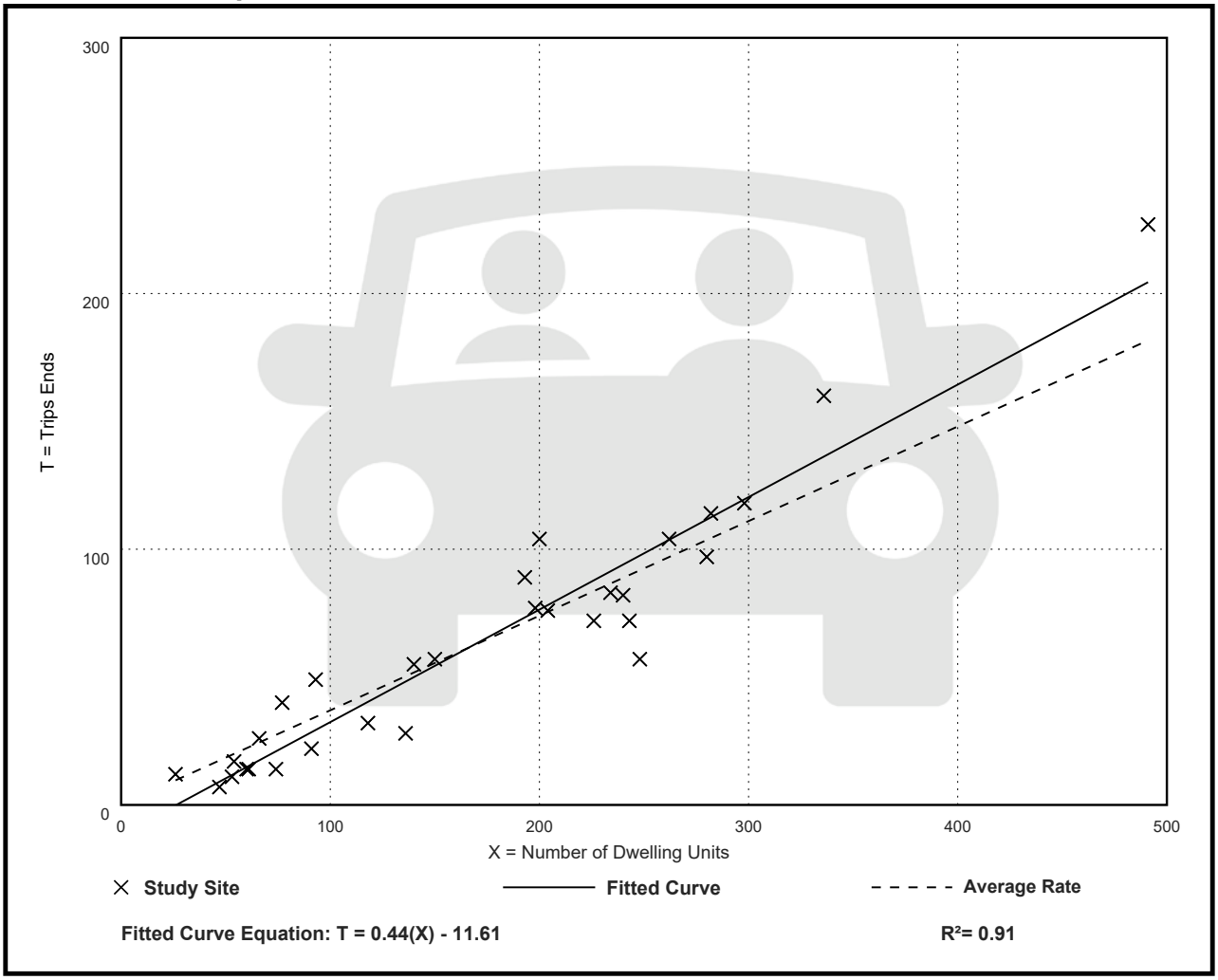
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 30
Avg. Num. of Dwelling Units: 173
Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

Data Plot and Equation



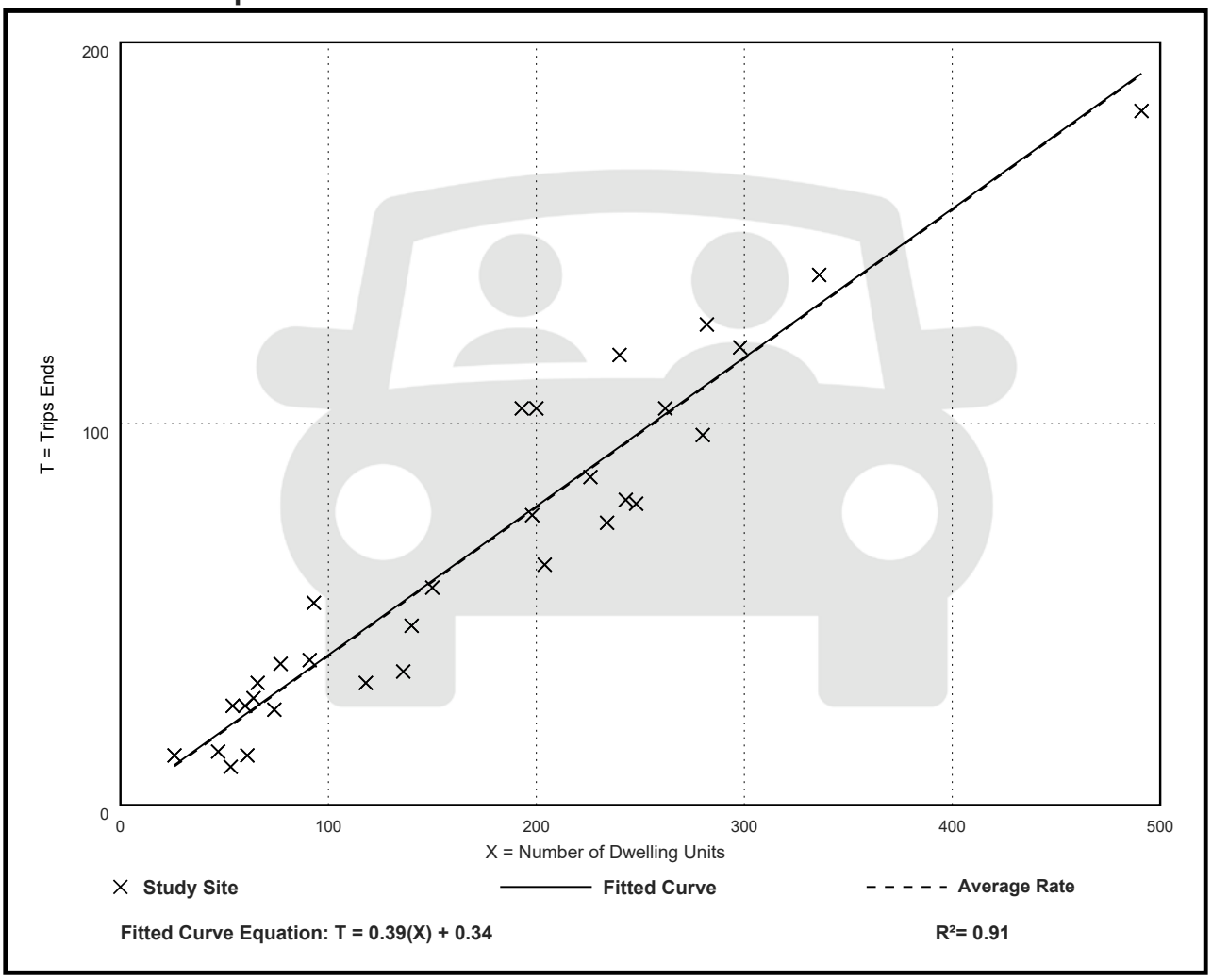
Multifamily Housing (Mid-Rise)
Not Close to Rail Transit (221)

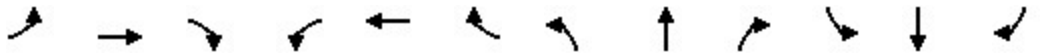
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 31
Avg. Num. of Dwelling Units: 169
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

Data Plot and Equation



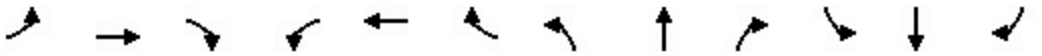


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	154	0	161	212	617	0	0	379	264
Future Volume (vph)	0	0	0	154	0	161	212	617	0	0	379	264
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	4.4	4.4	4.0	4.0			4.9	
Lane Util. Factor				0.95	0.95	1.00	1.00	1.00			0.95	
Frt				1.00	1.00	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1649	1553	1736	1827			3257	
Flt Permitted				0.95	0.95	1.00	0.34	1.00			1.00	
Satd. Flow (perm)				1649	1649	1553	620	1827			3257	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	160	0	168	221	643	0	0	395	275
RTOR Reduction (vph)	0	0	0	0	0	147	0	0	0	0	152	0
Lane Group Flow (vph)	0	0	0	80	80	21	221	643	0	0	518	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Split	NA	Prot	D.P+P	NA			NA	
Protected Phases				4	4	4	1	1 2			2	
Permitted Phases							2					
Actuated Green, G (s)				8.9	8.9	8.9	47.8	51.8			31.3	
Effective Green, g (s)				8.9	8.9	8.9	47.8	51.8			31.3	
Actuated g/C Ratio				0.13	0.13	0.13	0.68	0.74			0.45	
Clearance Time (s)				4.4	4.4	4.4	4.0				4.9	
Vehicle Extension (s)				3.0	3.0	3.0	3.0				3.0	
Lane Grp Cap (vph)				209	209	197	686	1351			1456	
v/s Ratio Prot				c0.05	0.05	0.01	0.08	c0.35			0.16	
v/s Ratio Perm							0.14					
v/c Ratio				0.38	0.38	0.11	0.32	0.48			0.36	
Uniform Delay, d1				28.0	28.0	27.0	4.2	3.7			12.7	
Progression Factor				1.00	1.00	1.00	0.87	1.10			1.00	
Incremental Delay, d2				1.2	1.2	0.2	0.2	0.2			0.7	
Delay (s)				29.2	29.2	27.3	3.9	4.2			13.4	
Level of Service				C	C	C	A	A			B	
Approach Delay (s/veh)		0.0			28.2			4.2			13.4	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

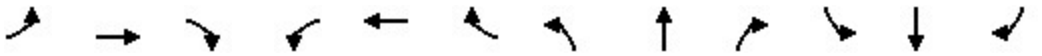
Movement	EBL	EBT	EBR	NBL2	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations												
Traffic Volume (vph)	1	3	1	0	478	115	128	404	1	350	2	282
Future Volume (vph)	1	3	1	0	478	115	128	404	1	350	2	282
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2			7.0	7.0	4.3	7.0			5.4	5.4
Lane Util. Factor		1.00			0.95	1.00	1.00	0.95			1.00	1.00
Frt		0.97			1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected		0.99			1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1777			3505	1568	1752	3504			1752	1568
Flt Permitted		0.99			1.00	1.00	0.31	1.00			0.95	1.00
Satd. Flow (perm)		1777			3505	1568	566	3504			1752	1568
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	3	1	0	543	131	145	459	1	398	2	320
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	5	0	0	543	131	145	460	0	0	400	320
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		pm+pt	NA	Prot	pm+pt	NA		Prot	Prot	Prot
Protected Phases	4	4		1	6	6	5	2		7	7	7
Permitted Phases				6			2					
Actuated Green, G (s)		1.0			18.1	18.1	26.2	26.2			23.2	23.2
Effective Green, g (s)		1.0			18.1	18.1	26.2	26.2			23.2	23.2
Actuated g/C Ratio		0.01			0.26	0.26	0.37	0.37			0.33	0.33
Clearance Time (s)		7.2			7.0	7.0	4.3	7.0			5.4	5.4
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		25			906	405	276	1311			580	519
v/s Ratio Prot		c0.00			c0.15	0.08	c0.03	0.13			c0.23	0.20
v/s Ratio Perm							0.17					
v/c Ratio		0.20			0.60	0.32	0.53	0.35			0.69	0.62
Uniform Delay, d1		34.1			22.8	21.0	15.6	15.8			20.3	19.7
Progression Factor		1.00			0.83	0.75	0.64	0.64			1.00	1.00
Incremental Delay, d2		3.9			2.9	2.1	1.7	0.7			3.4	2.2
Delay (s)		38.0			21.8	17.8	11.7	10.9			23.7	21.8
Level of Service		D			C	B	B	B			C	C
Approach Delay (s/veh)		38.0			21.0			11.1			22.9	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	23.9
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



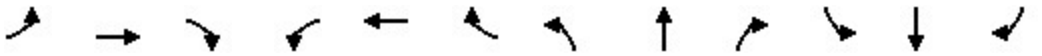
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	87	6	5	9	3	48	5	431	6	31	529	130
Future Volume (vph)	87	6	5	9	3	48	5	431	6	31	529	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		0.89		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.96	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1665	1679	1568		1634		1752	3498		1752	3505	1568
Flt Permitted	0.95	0.96	1.00		0.99		0.40	1.00		0.43	1.00	1.00
Satd. Flow (perm)	1665	1679	1568		1634		735	3498		792	3505	1568
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	105	7	6	11	4	58	6	519	7	37	637	157
RTOR Reduction (vph)	0	0	5	0	0	0	0	1	0	0	0	80
Lane Group Flow (vph)	56	56	1	0	73	0	6	525	0	37	637	77
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	Prot
Protected Phases	7	7	7	4	4		1	6		5	2	2
Permitted Phases							6			2		
Actuated Green, G (s)	6.6	6.6	6.6		7.1		34.4	33.2		37.0	34.5	34.5
Effective Green, g (s)	6.6	6.6	6.6		7.1		34.4	33.2		37.0	34.5	34.5
Actuated g/C Ratio	0.09	0.09	0.09		0.10		0.49	0.47		0.53	0.49	0.49
Clearance Time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	156	158	147		165		378	1659		452	1727	772
v/s Ratio Prot	c0.03	0.03	0.00		c0.04		0.00	0.15		c0.00	c0.18	0.05
v/s Ratio Perm							0.01			0.04		
v/c Ratio	0.36	0.35	0.00		0.44		0.02	0.32		0.08	0.37	0.10
Uniform Delay, d1	29.7	29.7	28.7		29.6		9.1	11.4		8.0	11.0	9.5
Progression Factor	1.00	1.00	1.00		1.00		0.33	0.37		1.26	1.17	2.68
Incremental Delay, d2	1.4	1.4	0.0		1.9		0.0	0.5		0.1	0.6	0.2
Delay (s)	31.1	31.1	28.7		31.5		3.0	4.7		10.1	13.4	25.7
Level of Service	C	C	C		C		A	A		B	B	C
Approach Delay (s/veh)		31.0			31.5			4.7			15.6	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	3	39	17	8	36	46	349	30	89	425	13
Future Volume (vph)	18	3	39	17	8	36	46	349	30	89	425	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	0.95	
Frt		1.00	0.85		0.92		1.00	0.99		1.00	1.00	
Flt Protected		0.96	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1752	1553		1657		1736	1805		1736	3456	
Flt Permitted		0.96	1.00		0.99		0.44	1.00		0.35	1.00	
Satd. Flow (perm)		1752	1553		1657		801	1805		647	3456	
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	23	4	51	22	10	47	60	453	39	116	552	17
RTOR Reduction (vph)	0	0	48	0	43	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	27	3	0	36	0	60	492	0	116	566	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	7	7	4	4		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		4.5	4.5		5.3		37.2	32.9		41.2	34.9	
Effective Green, g (s)		4.5	4.5		5.3		37.2	32.9		41.2	34.9	
Actuated g/C Ratio		0.06	0.06		0.08		0.53	0.47		0.59	0.50	
Clearance Time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		112	99		125		483	848		478	1723	
v/s Ratio Prot		c0.02	0.00		c0.02		0.01	c0.27		c0.02	0.16	
v/s Ratio Perm							0.06			0.12		
v/c Ratio		0.24	0.03		0.28		0.12	0.58		0.24	0.33	
Uniform Delay, d1		31.1	30.7		30.6		8.0	13.5		7.1	10.5	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.99	1.58	
Incremental Delay, d2		1.1	0.1		1.3		0.1	2.9		0.3	0.5	
Delay (s)		32.2	30.8		31.8		8.1	16.4		14.3	17.1	
Level of Service		C	C		C		A	B		B	B	
Approach Delay (s/veh)		31.3			31.8			15.5			16.6	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	1	24	84	2	99	11	291	135	105	360	16
Future Volume (vph)	42	1	24	84	2	99	11	291	135	105	360	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.3		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00		0.95		1.00	1.00	
Frt		0.95			1.00	0.85		0.95		1.00	0.99	
Flt Protected		0.97			0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1703			1759	1568		3338		1752	1833	
Flt Permitted		0.72			0.72	1.00		0.93		0.26	1.00	
Satd. Flow (perm)		1268			1321	1568		3103		477	1833	
Peak-hour factor, PHF	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
Adj. Flow (vph)	74	2	42	147	4	174	19	511	237	184	632	28
RTOR Reduction (vph)	0	28	0	0	0	139	0	66	0	0	2	0
Lane Group Flow (vph)	0	90	0	0	151	35	0	701	0	184	658	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA		D.P+P	NA	
Protected Phases		4			4	4		2		1	1 2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		13.3			13.3	13.3		22.7		37.2	41.2	
Effective Green, g (s)		13.3			13.3	13.3		22.7		37.2	41.2	
Actuated g/C Ratio		0.20			0.20	0.20		0.34		0.56	0.62	
Clearance Time (s)		6.0			6.0	6.0		6.3		4.0		
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)		252			263	312		1054		542	1130	
v/s Ratio Prot						0.02				0.07	c0.36	
v/s Ratio Perm		0.07			c0.11			c0.23		0.12		
v/c Ratio		0.36			0.57	0.11		0.67		0.34	0.58	
Uniform Delay, d1		23.1			24.2	21.9		18.8		7.8	7.7	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		0.9			3.0	0.2		1.6		0.4	0.8	
Delay (s)		23.9			27.2	22.1		20.4		8.1	8.4	
Level of Service		C			C	C		C		A	A	
Approach Delay (s/veh)		23.9			24.5			20.4			8.4	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	16.3
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

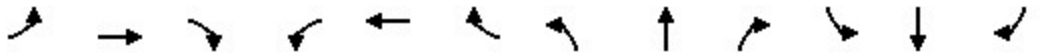
Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	475	5	13	429
Future Vol, veh/h	3	0	475	5	13	429
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	0	669	7	18	604

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1011	673	0	0	676	0
Stage 1	673	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Critical Hdwy	6.645	6.245	-	-	4.145	-
Critical Hdwy Stg 1	5.445	-	-	-	-	-
Critical Hdwy Stg 2	5.845	-	-	-	-	-
Follow-up Hdwy	3.5285	3.3285	-	-	2.2285	-
Pot Cap-1 Maneuver	249	452	-	-	908	-
Stage 1	504	-	-	-	-	-
Stage 2	692	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	244	452	-	-	908	-
Mov Cap-2 Maneuver	244	-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.03	0	0.27
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	244	908	-
HCM Lane V/C Ratio	-	-	0.017	0.02	-
HCM Control Delay (s/veh)	-	-	20	9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-



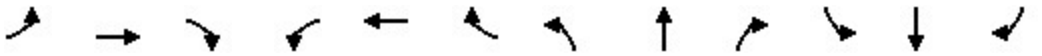
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	226	1	219	288	724	0	0	581	381
Future Volume (vph)	0	0	0	226	1	219	288	724	0	0	581	381
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	4.4	4.4	4.0	4.0			4.9	
Lane Util. Factor				0.95	0.95	1.00	1.00	1.00			0.95	
Frt				1.00	1.00	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1681	1686	1583	1770	1863			3329	
Flt Permitted				0.95	0.95	1.00	0.14	1.00			1.00	
Satd. Flow (perm)				1681	1686	1583	264	1863			3329	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	254	1	246	324	813	0	0	653	428
RTOR Reduction (vph)	0	0	0	0	0	213	0	0	0	0	104	0
Lane Group Flow (vph)	0	0	0	127	128	33	324	813	0	0	977	0
Turn Type				Split	NA	Prot	D.P+P	NA			NA	
Protected Phases				4	4	4	1	1 2			2	
Permitted Phases							2					
Actuated Green, G (s)				12.2	12.2	12.2	64.5	68.5			39.6	
Effective Green, g (s)				12.2	12.2	12.2	64.5	68.5			39.6	
Actuated g/C Ratio				0.14	0.14	0.14	0.72	0.76			0.44	
Clearance Time (s)				4.4	4.4	4.4	4.0				4.9	
Vehicle Extension (s)				3.0	3.0	3.0	3.0				3.0	
Lane Grp Cap (vph)				227	228	214	605	1417			1464	
v/s Ratio Prot				0.08	c0.08	0.02	0.15	c0.44			c0.29	
v/s Ratio Perm							0.24					
v/c Ratio				0.56	0.56	0.16	0.54	0.57			0.67	
Uniform Delay, d1				36.4	36.4	34.4	12.0	4.6			20.0	
Progression Factor				1.00	1.00	1.00	0.34	0.94			1.00	
Incremental Delay, d2				3.0	3.1	0.3	0.8	0.5			2.4	
Delay (s)				39.4	39.5	34.7	4.9	4.8			22.4	
Level of Service				D	D	C	A	A			C	
Approach Delay (s/veh)		0.0			37.1			4.8			22.4	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

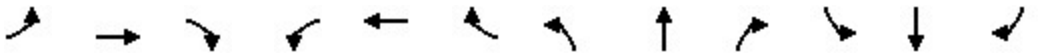
Movement	EBT	EBR	NBL2	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations											
Traffic Volume (vph)	7	1	2	759	237	166	632	9	253	0	318
Future Volume (vph)	7	1	2	759	237	166	632	9	253	0	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2		4.3	7.0	7.0	4.3	7.0			5.4	5.4
Lane Util. Factor	1.00		1.00	0.95	1.00	1.00	0.95			1.00	1.00
Frt	0.99		1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	1853		1787	3574	1599	1787	3566			1787	1599
Flt Permitted	1.00		0.39	1.00	1.00	0.19	1.00			0.95	1.00
Satd. Flow (perm)	1853		732	3574	1599	351	3566			1787	1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	8	1	2	816	255	178	680	10	272	0	342
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	9	0	2	816	255	178	690	0	0	272	342
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	NA		pm+pt	NA	Prot	pm+pt	NA		Prot	Prot	Prot
Protected Phases	4		1	6	6	5	2		7	7	7
Permitted Phases			6			2					
Actuated Green, G (s)	1.0		31.4	30.5	30.5	45.0	39.8			24.4	24.4
Effective Green, g (s)	1.0		31.4	30.5	30.5	45.0	39.8			24.4	24.4
Actuated g/C Ratio	0.01		0.35	0.34	0.34	0.50	0.44			0.27	0.27
Clearance Time (s)	7.2		4.3	7.0	7.0	4.3	7.0			5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	20		265	1211	541	338	1576			484	433
v/s Ratio Prot	c0.00		0.00	c0.23	0.16	c0.06	0.19			0.15	c0.21
v/s Ratio Perm			0.00			0.20					
v/c Ratio	0.45		0.01	0.67	0.47	0.53	0.44			0.56	0.79
Uniform Delay, d1	44.2		19.1	25.5	23.4	14.4	17.4			28.2	30.4
Progression Factor	1.00		0.59	0.75	0.71	0.48	0.48			1.00	1.00
Incremental Delay, d2	15.3		0.0	2.7	2.7	1.2	0.7			1.5	9.3
Delay (s)	59.5		11.4	21.9	19.3	8.0	9.0			29.7	39.7
Level of Service	E		B	C	B	A	A			C	D
Approach Delay (s/veh)	59.5			21.3			8.8			35.3	
Approach LOS	E			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	23.9
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	274	18	31	26	7	56	16	656	8	96	531	315
Future Volume (vph)	274	18	31	26	7	56	16	656	8	96	531	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		0.92		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.96	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1698	1712	1599		1697		1787	3568		1787	3574	1599
Flt Permitted	0.95	0.96	1.00		0.99		0.43	1.00		0.29	1.00	1.00
Satd. Flow (perm)	1698	1712	1599		1697		818	3568		550	3574	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	298	20	34	28	8	61	17	713	9	104	577	342
RTOR Reduction (vph)	0	0	29	0	0	0	0	1	0	0	0	171
Lane Group Flow (vph)	158	160	5	0	97	0	17	721	0	104	577	171
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	Prot
Protected Phases	7	7	7	4	4		1	6		5	2	2
Permitted Phases							6			2		
Actuated Green, G (s)	12.7	12.7	12.7		9.0		44.5	41.9		50.9	45.1	45.1
Effective Green, g (s)	12.7	12.7	12.7		9.0		44.5	41.9		50.9	45.1	45.1
Actuated g/C Ratio	0.14	0.14	0.14		0.10		0.49	0.47		0.57	0.50	0.50
Clearance Time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	239	241	225		169		432	1661		390	1790	801
v/s Ratio Prot	0.09	c0.09	0.00		c0.06		0.00	c0.20		c0.02	0.16	0.11
v/s Ratio Perm							0.02			0.13		
v/c Ratio	0.66	0.66	0.02		0.57		0.04	0.43		0.27	0.32	0.21
Uniform Delay, d1	36.6	36.6	33.3		38.7		11.6	16.1		9.7	13.4	12.5
Progression Factor	1.00	1.00	1.00		1.00		1.55	1.14		1.22	1.09	2.80
Incremental Delay, d2	6.7	6.7	0.0		4.7		0.0	0.7		0.3	0.4	0.6
Delay (s)	43.3	43.4	33.3		43.3		18.0	19.1		12.2	15.0	35.6
Level of Service	D	D	C		D		B	B		B	B	D
Approach Delay (s/veh)		42.4			43.3			19.1			21.6	
Approach LOS		D			D			B			C	

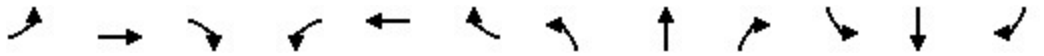
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	13	116	29	11	39	108	548	40	71	458	35
Future Volume (vph)	44	13	116	29	11	39	108	548	40	71	458	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1794	1583		1708		1770	1844		1770	3501	
Flt Permitted		0.96	1.00		0.98		0.40	1.00		0.26	1.00	
Satd. Flow (perm)		1794	1583		1708		753	1844		484	3501	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	50	15	132	33	12	44	123	623	45	81	520	40
RTOR Reduction (vph)	0	0	119	0	40	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	65	13	0	50	0	123	668	0	81	555	0
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	7	7	4	4		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		8.9	8.9		6.8		55.2	47.3		51.4	45.4	
Effective Green, g (s)		8.9	8.9		6.8		55.2	47.3		51.4	45.4	
Actuated g/C Ratio		0.10	0.10		0.08		0.61	0.53		0.57	0.50	
Clearance Time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		177	156		129		551	969		362	1766	
v/s Ratio Prot		c0.04	0.01		c0.03		c0.02	c0.36		0.01	0.16	
v/s Ratio Perm							0.12			0.11		
v/c Ratio		0.37	0.08		0.39		0.22	0.69		0.22	0.31	
Uniform Delay, d1		37.9	36.8		39.6		7.3	15.9		10.4	13.1	
Progression Factor		1.00	1.00		1.00		1.00	1.00		0.46	0.24	
Incremental Delay, d2		1.3	0.2		1.9		0.2	4.0		0.3	0.5	
Delay (s)		39.2	37.1		41.6		7.5	19.9		5.1	3.6	
Level of Service		D	D		D		A	B		A	A	
Approach Delay (s/veh)		37.8			41.6			18.0			3.8	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	1	29	30	1	31	33	575	35	29	505	54
Future Volume (vph)	38	1	29	30	1	31	33	575	35	29	505	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.3		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00		0.95		1.00	1.00	
Frt		0.94			1.00	0.85		0.99		1.00	0.99	
Flt Protected		0.97			0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1707			1776	1583		3501		1770	1836	
Flt Permitted		0.81			0.68	1.00		0.89		0.33	1.00	
Satd. Flow (perm)		1417			1259	1583		3140		624	1836	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	43	1	33	34	1	35	38	653	40	33	574	61
RTOR Reduction (vph)	0	29	0	0	0	31	0	6	0	0	5	0
Lane Group Flow (vph)	0	48	0	0	35	4	0	725	0	33	630	0
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA		D.P+P	NA	
Protected Phases		4			4	4		2		1	1 2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		5.9			5.9	5.9		22.2		31.7	35.7	
Effective Green, g (s)		5.9			5.9	5.9		22.2		31.7	35.7	
Actuated g/C Ratio		0.11			0.11	0.11		0.41		0.59	0.66	
Clearance Time (s)		6.0			6.0	6.0		6.3		4.0		
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)		155			137	173		1293		568	1216	
v/s Ratio Prot						0.00				0.01	c0.34	
v/s Ratio Perm		c0.03			0.03			0.23		0.02		
v/c Ratio		0.31			0.26	0.02		0.56		0.06	0.52	
Uniform Delay, d1		22.1			22.0	21.4		12.1		4.7	4.7	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		1.1			1.0	0.1		0.6		0.0	0.4	
Delay (s)		23.2			23.0	21.5		12.7		4.8	5.1	
Level of Service		C			C	C		B		A	A	
Approach Delay (s/veh)		23.2			22.2			12.7			5.0	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	53.9	Sum of lost time (s)	16.3
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

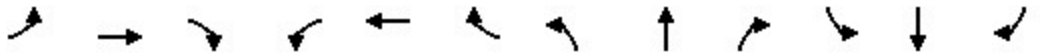
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	675	2	0	592
Future Vol, veh/h	6	0	675	2	0	592
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	0	758	2	0	665

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1092	760	0	0	761	0
Stage 1	760	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	223	405	-	-	849	-
Stage 1	461	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	223	405	-	-	849	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	21.67	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	223	849	-
HCM Lane V/C Ratio	-	-	0.03	-	-
HCM Control Delay (s/veh)	-	-	21.7	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

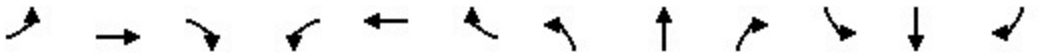


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	157	0	164	216	628	0	0	386	269
Future Volume (vph)	0	0	0	157	0	164	216	628	0	0	386	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	4.4	4.4	4.0	4.0			4.9	
Lane Util. Factor				0.95	0.95	1.00	1.00	1.00			0.95	
Frt				1.00	1.00	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1649	1553	1736	1827			3257	
Flt Permitted				0.95	0.95	1.00	0.33	1.00			1.00	
Satd. Flow (perm)				1649	1649	1553	606	1827			3257	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	164	0	171	225	654	0	0	402	280
RTOR Reduction (vph)	0	0	0	0	0	149	0	0	0	0	156	0
Lane Group Flow (vph)	0	0	0	82	82	22	225	654	0	0	526	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Split	NA	Prot	D.P+P	NA			NA	
Protected Phases				4	4	4	1	1 2			2	
Permitted Phases							2					
Actuated Green, G (s)				9.0	9.0	9.0	47.7	51.7			31.1	
Effective Green, g (s)				9.0	9.0	9.0	47.7	51.7			31.1	
Actuated g/C Ratio				0.13	0.13	0.13	0.68	0.74			0.44	
Clearance Time (s)				4.4	4.4	4.4	4.0				4.9	
Vehicle Extension (s)				3.0	3.0	3.0	3.0				3.0	
Lane Grp Cap (vph)				212	212	199	680	1349			1447	
v/s Ratio Prot				c0.05	0.05	0.01	0.08	c0.36			0.16	
v/s Ratio Perm							0.15					
v/c Ratio				0.39	0.39	0.11	0.33	0.48			0.36	
Uniform Delay, d1				28.0	28.0	27.0	4.3	3.7			12.9	
Progression Factor				1.00	1.00	1.00	0.88	1.11			1.00	
Incremental Delay, d2				1.2	1.2	0.2	0.2	0.2			0.7	
Delay (s)				29.1	29.1	27.2	4.1	4.4			13.6	
Level of Service				C	C	C	A	A			B	
Approach Delay (s/veh)		0.0			28.2			4.3			13.6	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

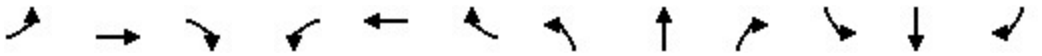
Movement	EBL	EBT	EBR	NBL2	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations												
Traffic Volume (vph)	1	3	1	0	487	117	130	411	1	356	2	287
Future Volume (vph)	1	3	1	0	487	117	130	411	1	356	2	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2			7.0	7.0	4.3	7.0			5.4	5.4
Lane Util. Factor		1.00			0.95	1.00	1.00	0.95			1.00	1.00
Frt		0.97			1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected		0.99			1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1777			3505	1568	1752	3504			1752	1568
Flt Permitted		0.99			1.00	1.00	0.30	1.00			0.95	1.00
Satd. Flow (perm)		1777			3505	1568	553	3504			1752	1568
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	3	1	0	553	133	148	467	1	405	2	326
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	5	0	0	553	133	148	468	0	0	407	326
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		pm+pt	NA	Prot	pm+pt	NA		Prot	Prot	Prot
Protected Phases	4	4		1	6	6	5	2		7	7	7
Permitted Phases				6			2					
Actuated Green, G (s)		1.0			18.1	18.1	26.2	26.2			23.2	23.2
Effective Green, g (s)		1.0			18.1	18.1	26.2	26.2			23.2	23.2
Actuated g/C Ratio		0.01			0.26	0.26	0.37	0.37			0.33	0.33
Clearance Time (s)		7.2			7.0	7.0	4.3	7.0			5.4	5.4
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		25			906	405	272	1311			580	519
v/s Ratio Prot		c0.00			0.16	0.08	c0.03	0.13			c0.23	0.21
v/s Ratio Perm							c0.17					
v/c Ratio		0.20			0.61	0.33	0.54	0.36			0.70	0.63
Uniform Delay, d1		34.1			22.8	21.0	15.8	15.8			20.4	19.8
Progression Factor		1.00			0.82	0.73	0.64	0.64			1.00	1.00
Incremental Delay, d2		3.9			3.0	2.1	2.1	0.7			3.8	2.4
Delay (s)		38.0			21.6	17.5	12.2	10.8			24.2	22.1
Level of Service		D			C	B	B	B			C	C
Approach Delay (s/veh)		38.0			20.8			11.2			23.3	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	23.9
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	6	5	9	3	49	5	439	6	32	539	132
Future Volume (vph)	89	6	5	9	3	49	5	439	6	32	539	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		0.89		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.96	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1665	1679	1568		1634		1752	3498		1752	3505	1568
Flt Permitted	0.95	0.96	1.00		0.99		0.41	1.00		0.40	1.00	1.00
Satd. Flow (perm)	1665	1679	1568		1634		748	3498		746	3505	1568
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	107	7	6	11	4	59	6	529	7	39	649	159
RTOR Reduction (vph)	0	0	5	0	0	0	0	1	0	0	0	81
Lane Group Flow (vph)	57	57	1	0	74	0	6	535	0	39	649	78
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	Prot
Protected Phases	7	7	7	4	4		1	6		5	2	2
Permitted Phases							6			2		
Actuated Green, G (s)	6.6	6.6	6.6		7.1		33.2	32.0		38.2	34.5	34.5
Effective Green, g (s)	6.6	6.6	6.6		7.1		33.2	32.0		38.2	34.5	34.5
Actuated g/C Ratio	0.09	0.09	0.09		0.10		0.47	0.46		0.55	0.49	0.49
Clearance Time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	156	158	147		165		371	1599		460	1727	772
v/s Ratio Prot	c0.03	0.03	0.00		c0.05		0.00	0.15		c0.00	c0.19	0.05
v/s Ratio Perm							0.01			0.04		
v/c Ratio	0.37	0.36	0.00		0.45		0.02	0.33		0.08	0.38	0.10
Uniform Delay, d1	29.7	29.7	28.7		29.6		9.7	12.2		7.5	11.0	9.5
Progression Factor	1.00	1.00	1.00		1.00		0.34	0.35		1.25	1.17	2.63
Incremental Delay, d2	1.5	1.4	0.0		1.9		0.0	0.5		0.1	0.6	0.2
Delay (s)	31.2	31.1	28.7		31.5		3.3	4.8		9.5	13.5	25.1
Level of Service	C	C	C		C		A	A		A	B	C
Approach Delay (s/veh)		31.0			31.5			4.8			15.5	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	41.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	3	40	17	8	37	47	355	31	91	433	13
Future Volume (vph)	18	3	40	17	8	37	47	355	31	91	433	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	0.95	
Frt		1.00	0.85		0.92		1.00	0.99		1.00	1.00	
Flt Protected		0.96	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1752	1553		1656		1736	1805		1736	3456	
Flt Permitted		0.96	1.00		0.99		0.43	1.00		0.35	1.00	
Satd. Flow (perm)		1752	1553		1656		793	1805		633	3456	
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	23	4	52	22	10	48	61	461	40	118	562	17
RTOR Reduction (vph)	0	0	49	0	44	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	27	3	0	36	0	61	501	0	118	576	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	7	7	4	4		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		4.5	4.5		5.3		37.2	32.9		41.2	34.9	
Effective Green, g (s)		4.5	4.5		5.3		37.2	32.9		41.2	34.9	
Actuated g/C Ratio		0.06	0.06		0.08		0.53	0.47		0.59	0.50	
Clearance Time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		112	99		125		479	848		471	1723	
v/s Ratio Prot		c0.02	0.00		c0.02		0.01	c0.28		c0.02	0.17	
v/s Ratio Perm							0.06			0.12		
v/c Ratio		0.24	0.03		0.29		0.13	0.59		0.25	0.33	
Uniform Delay, d1		31.1	30.7		30.6		8.0	13.6		7.1	10.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		2.01	1.59	
Incremental Delay, d2		1.1	0.1		1.3		0.1	3.0		0.3	0.5	
Delay (s)		32.2	30.9		31.8		8.1	16.6		14.6	17.3	
Level of Service		C	C		C		A	B		B	B	
Approach Delay (s/veh)		31.3			31.8			15.7			16.8	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	1	24	86	2	101	11	296	137	107	366	16
Future Volume (vph)	43	1	24	86	2	101	11	296	137	107	366	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.3		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00		0.95		1.00	1.00	
Frt		0.95			1.00	0.85		0.95		1.00	0.99	
Flt Protected		0.97			0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1703			1759	1568		3339		1752	1833	
Flt Permitted		0.72			0.71	1.00		0.93		0.25	1.00	
Satd. Flow (perm)		1263			1315	1568		3103		465	1833	
Peak-hour factor, PHF	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
Adj. Flow (vph)	75	2	42	151	4	177	19	519	240	188	642	28
RTOR Reduction (vph)	0	28	0	0	0	141	0	66	0	0	2	0
Lane Group Flow (vph)	0	91	0	0	155	36	0	712	0	188	668	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA		D.P+P	NA	
Protected Phases		4			4	4		2		1	1 2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		13.5			13.5	13.5		23.0		37.5	41.5	
Effective Green, g (s)		13.5			13.5	13.5		23.0		37.5	41.5	
Actuated g/C Ratio		0.20			0.20	0.20		0.34		0.56	0.62	
Clearance Time (s)		6.0			6.0	6.0		6.3		4.0		
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)		253			263	314		1060		536	1130	
v/s Ratio Prot						0.02				0.08	c0.36	
v/s Ratio Perm		0.07			c0.12			c0.23		0.12		
v/c Ratio		0.36			0.59	0.11		0.67		0.35	0.59	
Uniform Delay, d1		23.2			24.4	22.0		18.9		7.9	7.8	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		0.9			3.4	0.2		1.7		0.4	0.8	
Delay (s)		24.1			27.7	22.2		20.6		8.3	8.6	
Level of Service		C			C	C		C		A	A	
Approach Delay (s/veh)		24.1			24.8			20.6			8.5	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	67.3	Sum of lost time (s)	16.3
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

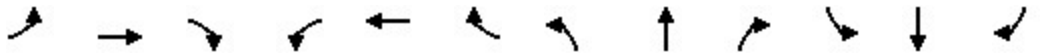
Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	484	5	13	437
Future Vol, veh/h	3	0	484	5	13	437
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	0	682	7	18	615

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1030	685	0	0	689	0
Stage 1	685	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Critical Hdwy	6.645	6.245	-	-	4.145	-
Critical Hdwy Stg 1	5.445	-	-	-	-	-
Critical Hdwy Stg 2	5.845	-	-	-	-	-
Follow-up Hdwy	3.5285	3.3285	-	-	2.2285	-
Pot Cap-1 Maneuver	242	445	-	-	898	-
Stage 1	497	-	-	-	-	-
Stage 2	687	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	237	445	-	-	898	-
Mov Cap-2 Maneuver	237	-	-	-	-	-
Stage 1	497	-	-	-	-	-
Stage 2	673	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.45	0	0.26
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	237	898	-
HCM Lane V/C Ratio	-	-	0.018	0.02	-
HCM Control Delay (s/veh)	-	-	20.4	9.1	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-



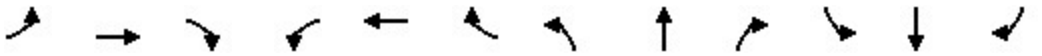
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	230	1	223	293	737	0	0	591	388
Future Volume (vph)	0	0	0	230	1	223	293	737	0	0	591	388
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	4.4	4.4	4.0	4.0			4.9	
Lane Util. Factor				0.95	0.95	1.00	1.00	1.00			0.95	
Frt				1.00	1.00	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1681	1686	1583	1770	1863			3329	
Flt Permitted				0.95	0.95	1.00	0.13	1.00			1.00	
Satd. Flow (perm)				1681	1686	1583	243	1863			3329	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	258	1	251	329	828	0	0	664	436
RTOR Reduction (vph)	0	0	0	0	0	216	0	0	0	0	106	0
Lane Group Flow (vph)	0	0	0	129	130	35	329	828	0	0	994	0
Turn Type				Split	NA	Prot	D.P+P	NA			NA	
Protected Phases				4	4	4	1	1 2			2	
Permitted Phases							2					
Actuated Green, G (s)				12.4	12.4	12.4	64.3	68.3			38.9	
Effective Green, g (s)				12.4	12.4	12.4	64.3	68.3			38.9	
Actuated g/C Ratio				0.14	0.14	0.14	0.71	0.76			0.43	
Clearance Time (s)				4.4	4.4	4.4	4.0				4.9	
Vehicle Extension (s)				3.0	3.0	3.0	3.0				3.0	
Lane Grp Cap (vph)				231	232	218	604	1413			1438	
v/s Ratio Prot				0.08	c0.08	0.02	0.15	c0.44			c0.30	
v/s Ratio Perm							0.24					
v/c Ratio				0.56	0.56	0.16	0.54	0.59			0.69	
Uniform Delay, d1				36.2	36.3	34.2	13.5	4.7			20.7	
Progression Factor				1.00	1.00	1.00	0.34	0.90			1.00	
Incremental Delay, d2				2.9	3.1	0.3	0.9	0.5			2.8	
Delay (s)				39.2	39.3	34.5	5.4	4.8			23.4	
Level of Service				D	D	C	A	A			C	
Approach Delay (s/veh)		0.0			36.9			5.0			23.4	
Approach LOS		A			D			A			C	

Intersection Summary				
HCM 2000 Control Delay (s/veh)	18.2	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.3	
Intersection Capacity Utilization	62.5%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

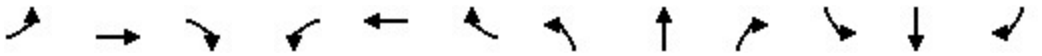
Movement	EBT	EBR	NBL2	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations											
Traffic Volume (vph)	7	1	2	773	241	169	643	9	258	0	324
Future Volume (vph)	7	1	2	773	241	169	643	9	258	0	324
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2		4.3	7.0	7.0	4.3	7.0			5.4	5.4
Lane Util. Factor	1.00		1.00	0.95	1.00	1.00	0.95			1.00	1.00
Frt	0.99		1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	1853		1787	3574	1599	1787	3567			1787	1599
Flt Permitted	1.00		0.39	1.00	1.00	0.17	1.00			0.95	1.00
Satd. Flow (perm)	1853		724	3574	1599	327	3567			1787	1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	8	1	2	831	259	182	691	10	277	0	348
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	9	0	2	831	259	182	701	0	0	277	348
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	NA		pm+pt	NA	Prot	pm+pt	NA		Prot	Prot	Prot
Protected Phases	4		1	6	6	5	2		7	7	7
Permitted Phases			6			2					
Actuated Green, G (s)	1.0		30.7	29.8	29.8	44.7	39.5			24.7	24.7
Effective Green, g (s)	1.0		30.7	29.8	29.8	44.7	39.5			24.7	24.7
Actuated g/C Ratio	0.01		0.34	0.33	0.33	0.50	0.44			0.27	0.27
Clearance Time (s)	7.2		4.3	7.0	7.0	4.3	7.0			5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	20		257	1183	529	334	1565			490	438
v/s Ratio Prot	c0.00		0.00	c0.23	0.16	c0.06	0.20			0.15	c0.22
v/s Ratio Perm			0.00			0.21					
v/c Ratio	0.45		0.01	0.70	0.49	0.54	0.45			0.57	0.79
Uniform Delay, d1	44.2		19.6	26.2	24.0	14.8	17.6			28.0	30.3
Progression Factor	1.00		0.62	0.75	0.71	0.47	0.47			1.00	1.00
Incremental Delay, d2	15.3		0.0	3.2	2.9	1.4	0.7			1.5	9.6
Delay (s)	59.5		12.0	22.9	20.0	8.4	8.9			29.5	39.9
Level of Service	E		B	C	C	A	A			C	D
Approach Delay (s/veh)	59.5			22.2			8.8			35.3	
Approach LOS	E			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	23.9
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	279	18	32	26	7	57	16	668	8	98	541	321
Future Volume (vph)	279	18	32	26	7	57	16	668	8	98	541	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		0.91		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.96	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1698	1712	1599		1696		1787	3568		1787	3574	1599
Flt Permitted	0.95	0.96	1.00		0.99		0.43	1.00		0.29	1.00	1.00
Satd. Flow (perm)	1698	1712	1599		1696		804	3568		536	3574	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	20	35	28	8	62	17	726	9	107	588	349
RTOR Reduction (vph)	0	0	30	0	0	0	0	1	0	0	0	175
Lane Group Flow (vph)	161	162	5	0	98	0	17	734	0	107	588	174
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	Prot
Protected Phases	7	7	7	4	4		1	6		5	2	2
Permitted Phases							6			2		
Actuated Green, G (s)	12.8	12.8	12.8		9.1		44.3	41.7		50.7	44.9	44.9
Effective Green, g (s)	12.8	12.8	12.8		9.1		44.3	41.7		50.7	44.9	44.9
Actuated g/C Ratio	0.14	0.14	0.14		0.10		0.49	0.46		0.56	0.50	0.50
Clearance Time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	241	243	227		171		424	1653		382	1783	797
v/s Ratio Prot	c0.09	0.09	0.00		c0.06		0.00	c0.21		c0.02	0.16	0.11
v/s Ratio Perm							0.02			0.14		
v/c Ratio	0.67	0.67	0.02		0.57		0.04	0.44		0.28	0.33	0.22
Uniform Delay, d1	36.6	36.6	33.2		38.6		11.7	16.3		9.9	13.5	12.7
Progression Factor	1.00	1.00	1.00		1.00		1.59	1.16		1.23	1.09	2.78
Incremental Delay, d2	6.8	6.7	0.0		4.6		0.0	0.7		0.4	0.5	0.6
Delay (s)	43.4	43.3	33.3		43.2		18.6	19.6		12.4	15.1	35.8
Level of Service	D	D	C		D		B	B		B	B	D
Approach Delay (s/veh)		42.4			43.2			19.6			21.8	
Approach LOS		D			D			B			C	

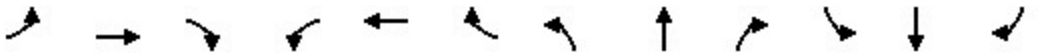
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	13	118	30	11	40	110	558	41	72	466	36
Future Volume (vph)	45	13	118	30	11	40	110	558	41	72	466	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1793	1583		1708		1770	1843		1770	3501	
Flt Permitted		0.96	1.00		0.98		0.40	1.00		0.25	1.00	
Satd. Flow (perm)		1793	1583		1708		739	1843		464	3501	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	51	15	134	34	12	45	125	634	47	82	530	41
RTOR Reduction (vph)	0	0	121	0	40	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	66	13	0	52	0	125	681	0	82	566	0
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	7	7	4	4		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		9.0	9.0		6.8		55.2	47.2		51.2	45.2	
Effective Green, g (s)		9.0	9.0		6.8		55.2	47.2		51.2	45.2	
Actuated g/C Ratio		0.10	0.10		0.08		0.61	0.52		0.57	0.50	
Clearance Time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179	158		129		544	966		351	1758	
v/s Ratio Prot		c0.04	0.01		c0.03		c0.02	c0.37		0.02	0.16	
v/s Ratio Perm							0.12			0.12		
v/c Ratio		0.37	0.08		0.41		0.23	0.70		0.23	0.32	
Uniform Delay, d1		37.8	36.8		39.7		7.4	16.1		10.7	13.3	
Progression Factor		1.00	1.00		1.00		1.00	1.00		0.48	0.23	
Incremental Delay, d2		1.3	0.2		2.1		0.2	4.3		0.3	0.5	
Delay (s)		39.1	37.0		41.7		7.6	20.5		5.4	3.6	
Level of Service		D	D		D		A	C		A	A	
Approach Delay (s/veh)		37.7			41.7			18.5			3.8	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	1	30	31	1	32	34	585	36	30	514	55
Future Volume (vph)	39	1	30	31	1	32	34	585	36	30	514	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.3		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00		0.95		1.00	1.00	
Frt		0.94			1.00	0.85		0.99		1.00	0.99	
Flt Protected		0.97			0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1707			1776	1583		3501		1770	1836	
Flt Permitted		0.81			0.67	1.00		0.89		0.33	1.00	
Satd. Flow (perm)		1416			1257	1583		3133		610	1836	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	44	1	34	35	1	36	39	665	41	34	584	62
RTOR Reduction (vph)	0	30	0	0	0	32	0	6	0	0	5	0
Lane Group Flow (vph)	0	49	0	0	36	4	0	739	0	34	642	0
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA		D.P+P	NA	
Protected Phases		4			4	4		2		1	1 2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		5.9			5.9	5.9		22.5		32.0	36.0	
Effective Green, g (s)		5.9			5.9	5.9		22.5		32.0	36.0	
Actuated g/C Ratio		0.11			0.11	0.11		0.42		0.59	0.66	
Clearance Time (s)		6.0			6.0	6.0		6.3		4.0		
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)		154			136	172		1300		563	1219	
v/s Ratio Prot						0.00				0.01	c0.35	
v/s Ratio Perm		c0.03			0.03			0.24		0.03		
v/c Ratio		0.32			0.26	0.02		0.57		0.06	0.53	
Uniform Delay, d1		22.3			22.2	21.6		12.1		4.7	4.7	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		1.2			1.0	0.1		0.6		0.0	0.4	
Delay (s)		23.5			23.2	21.6		12.7		4.7	5.1	
Level of Service		C			C	C		B		A	A	
Approach Delay (s/veh)		23.5			22.4			12.7			5.1	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	54.2	Sum of lost time (s)	16.3
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

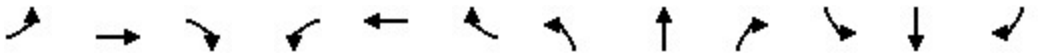
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	687	2	0	603
Future Vol, veh/h	6	0	687	2	0	603
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	0	772	2	0	678

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1112	773	0	0	774	0
Stage 1	773	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	217	398	-	-	839	-
Stage 1	454	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	217	398	-	-	839	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	694	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	22.16	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	217	839	-
HCM Lane V/C Ratio	-	-	0.031	-	-
HCM Control Delay (s/veh)	-	-	22.2	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

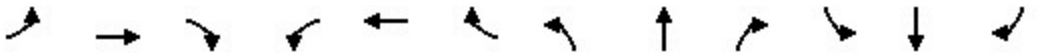


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	164	239	634	0	0	388	269
Future Volume (vph)	0	0	0	160	0	164	239	634	0	0	388	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	4.4	4.4	4.0	4.0			4.9	
Lane Util. Factor				0.95	0.95	1.00	1.00	1.00			0.95	
Frt				1.00	1.00	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1649	1553	1736	1827			3258	
Flt Permitted				0.95	0.95	1.00	0.33	1.00			1.00	
Satd. Flow (perm)				1649	1649	1553	602	1827			3258	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	167	0	171	249	660	0	0	404	280
RTOR Reduction (vph)	0	0	0	0	0	149	0	0	0	0	157	0
Lane Group Flow (vph)	0	0	0	83	84	22	249	660	0	0	527	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Split	NA	Prot	D.P+P	NA			NA	
Protected Phases				4	4	4	1	1 2			2	
Permitted Phases							2					
Actuated Green, G (s)				9.1	9.1	9.1	47.6	51.6			30.8	
Effective Green, g (s)				9.1	9.1	9.1	47.6	51.6			30.8	
Actuated g/C Ratio				0.13	0.13	0.13	0.68	0.74			0.44	
Clearance Time (s)				4.4	4.4	4.4	4.0				4.9	
Vehicle Extension (s)				3.0	3.0	3.0	3.0				3.0	
Lane Grp Cap (vph)				214	214	201	681	1346			1433	
v/s Ratio Prot				0.05	c0.05	0.01	0.09	c0.36			0.16	
v/s Ratio Perm							0.16					
v/c Ratio				0.39	0.39	0.11	0.37	0.49			0.37	
Uniform Delay, d1				27.9	27.9	26.9	4.4	3.8			13.1	
Progression Factor				1.00	1.00	1.00	0.86	1.06			1.00	
Incremental Delay, d2				1.2	1.2	0.2	0.3	0.2			0.7	
Delay (s)				29.1	29.1	27.1	4.1	4.3			13.8	
Level of Service				C	C	C	A	A			B	
Approach Delay (s/veh)		0.0			28.1			4.2			13.8	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

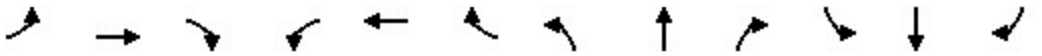
Movement	EBL	EBT	EBR	NBL2	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations												
Traffic Volume (vph)	1	3	1	0	516	128	130	416	1	356	2	294
Future Volume (vph)	1	3	1	0	516	128	130	416	1	356	2	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		7.2			7.0	7.0	4.3	7.0			5.4	5.4
Lane Util. Factor		1.00			0.95	1.00	1.00	0.95			1.00	1.00
Frt		0.97			1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected		0.99			1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)		1777			3505	1568	1752	3504			1752	1568
Flt Permitted		0.99			1.00	1.00	0.28	1.00			0.95	1.00
Satd. Flow (perm)		1777			3505	1568	510	3504			1752	1568
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1	3	1	0	586	145	148	473	1	405	2	334
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	5	0	0	586	145	148	474	0	0	407	334
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA		pm+pt	NA	Prot	pm+pt	NA		Prot	Prot	Prot
Protected Phases	4	4		1	6	6	5	2		7	7	7
Permitted Phases				6			2					
Actuated Green, G (s)		1.0			18.1	18.1	26.2	26.2			23.2	23.2
Effective Green, g (s)		1.0			18.1	18.1	26.2	26.2			23.2	23.2
Actuated g/C Ratio		0.01			0.26	0.26	0.37	0.37			0.33	0.33
Clearance Time (s)		7.2			7.0	7.0	4.3	7.0			5.4	5.4
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		25			906	405	258	1311			580	519
v/s Ratio Prot		c0.00			0.17	0.09	c0.03	0.14			c0.23	0.21
v/s Ratio Perm							c0.18					
v/c Ratio		0.20			0.65	0.36	0.57	0.36			0.70	0.64
Uniform Delay, d1		34.1			23.1	21.2	15.9	15.8			20.4	19.9
Progression Factor		1.00			0.78	0.70	0.64	0.63			1.00	1.00
Incremental Delay, d2		3.9			3.4	2.4	2.9	0.7			3.8	2.7
Delay (s)		38.0			21.5	17.2	13.1	10.8			24.2	22.6
Level of Service		D			C	B	B	B			C	C
Approach Delay (s/veh)		38.0			20.6			11.3			23.5	
Approach LOS		D			C			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	23.9
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



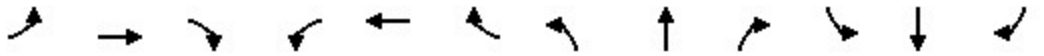
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	6	5	9	3	49	5	479	6	32	551	132
Future Volume (vph)	89	6	5	9	3	49	5	479	6	32	551	132
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		0.89		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.96	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1665	1679	1568		1634		1752	3499		1752	3505	1568
Flt Permitted	0.95	0.96	1.00		0.99		0.40	1.00		0.38	1.00	1.00
Satd. Flow (perm)	1665	1679	1568		1634		733	3499		694	3505	1568
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	107	7	6	11	4	59	6	577	7	39	664	159
RTOR Reduction (vph)	0	0	5	0	0	0	0	1	0	0	0	81
Lane Group Flow (vph)	57	57	1	0	74	0	6	583	0	39	664	78
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	Prot
Protected Phases	7	7	7	4	4		1	6		5	2	2
Permitted Phases							6			2		
Actuated Green, G (s)	6.6	6.6	6.6		7.1		33.2	32.0		38.2	34.5	34.5
Effective Green, g (s)	6.6	6.6	6.6		7.1		33.2	32.0		38.2	34.5	34.5
Actuated g/C Ratio	0.09	0.09	0.09		0.10		0.47	0.46		0.55	0.49	0.49
Clearance Time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	156	158	147		165		365	1599		434	1727	772
v/s Ratio Prot	c0.03	0.03	0.00		c0.05		0.00	0.17		c0.00	c0.19	0.05
v/s Ratio Perm							0.01			0.04		
v/c Ratio	0.37	0.36	0.00		0.45		0.02	0.36		0.09	0.38	0.10
Uniform Delay, d1	29.7	29.7	28.7		29.6		9.7	12.4		7.5	11.1	9.5
Progression Factor	1.00	1.00	1.00		1.00		0.31	0.30		1.26	1.16	2.60
Incremental Delay, d2	1.5	1.4	0.0		1.9		0.0	0.6		0.1	0.6	0.2
Delay (s)	31.2	31.1	28.7		31.5		3.0	4.3		9.6	13.5	24.9
Level of Service	C	C	C		C		A	A		A	B	C
Approach Delay (s/veh)		31.0			31.5			4.3			15.4	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	3	40	17	8	37	47	395	31	91	445	13
Future Volume (vph)	18	3	40	17	8	37	47	395	31	91	445	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	0.95	
Frt		1.00	0.85		0.92		1.00	0.99		1.00	1.00	
Flt Protected		0.96	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1752	1553		1656		1736	1807		1736	3456	
Flt Permitted		0.96	1.00		0.99		0.43	1.00		0.30	1.00	
Satd. Flow (perm)		1752	1553		1656		780	1807		552	3456	
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	23	4	52	22	10	48	61	513	40	118	578	17
RTOR Reduction (vph)	0	0	49	0	44	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	27	3	0	36	0	61	553	0	118	593	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	7	7	4	4		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		4.5	4.5		5.3		37.2	32.9		41.2	34.9	
Effective Green, g (s)		4.5	4.5		5.3		37.2	32.9		41.2	34.9	
Actuated g/C Ratio		0.06	0.06		0.08		0.53	0.47		0.59	0.50	
Clearance Time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		112	99		125		473	849		431	1723	
v/s Ratio Prot		c0.02	0.00		c0.02		0.01	c0.31		c0.02	0.17	
v/s Ratio Perm							0.06			0.14		
v/c Ratio		0.24	0.03		0.29		0.13	0.65		0.27	0.34	
Uniform Delay, d1		31.1	30.7		30.6		8.0	14.2		7.5	10.6	
Progression Factor		1.00	1.00		1.00		1.00	1.00		2.03	1.53	
Incremental Delay, d2		1.1	0.1		1.3		0.1	3.9		0.3	0.5	
Delay (s)		32.2	30.9		31.8		8.1	18.0		15.6	16.7	
Level of Service		C	C		C		A	B		B	B	
Approach Delay (s/veh)		31.3			31.8			17.0			16.6	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	1	24	86	2	101	11	301	137	107	383	16
Future Volume (vph)	43	1	24	86	2	101	11	301	137	107	383	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.3		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00		0.95		1.00	1.00	
Frt		0.95			1.00	0.85		0.95		1.00	0.99	
Flt Protected		0.97			0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1703			1759	1568		3340		1752	1834	
Flt Permitted		0.72			0.71	1.00		0.93		0.25	1.00	
Satd. Flow (perm)		1263			1313	1568		3102		457	1834	
Peak-hour factor, PHF	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
Adj. Flow (vph)	75	2	42	151	4	177	19	528	240	188	672	28
RTOR Reduction (vph)	0	28	0	0	0	142	0	64	0	0	2	0
Lane Group Flow (vph)	0	91	0	0	155	35	0	723	0	188	698	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA		D.P+P	NA	
Protected Phases		4			4	4		2		1	1 2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		13.6			13.6	13.6		23.4		38.0	42.0	
Effective Green, g (s)		13.6			13.6	13.6		23.4		38.0	42.0	
Actuated g/C Ratio		0.20			0.20	0.20		0.34		0.56	0.62	
Clearance Time (s)		6.0			6.0	6.0		6.3		4.0		
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)		252			262	314		1069		534	1134	
v/s Ratio Prot						0.02				0.08	c0.38	
v/s Ratio Perm		0.07			c0.12			0.23		0.12		
v/c Ratio		0.36			0.59	0.11		0.68		0.35	0.62	
Uniform Delay, d1		23.4			24.6	22.2		19.0		7.9	8.0	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		0.9			3.6	0.2		1.7		0.4	1.0	
Delay (s)		24.3			28.2	22.4		20.7		8.3	9.0	
Level of Service		C			C	C		C		A	A	
Approach Delay (s/veh)		24.3			25.1			20.7			8.8	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	67.9	Sum of lost time (s)	16.3
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	0	524	5	13	449
Future Vol, veh/h	3	0	524	5	13	449
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	4	0	738	7	18	632

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1094	742	0	0	745	0
Stage 1	742	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Critical Hdwy	6.645	6.245	-	-	4.145	-
Critical Hdwy Stg 1	5.445	-	-	-	-	-
Critical Hdwy Stg 2	5.845	-	-	-	-	-
Follow-up Hdwy	3.5285	3.3285	-	-	2.2285	-
Pot Cap-1 Maneuver	221	413	-	-	855	-
Stage 1	468	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	216	413	-	-	855	-
Mov Cap-2 Maneuver	216	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	666	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	22	0	0.26
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	216	855	-
HCM Lane V/C Ratio	-	-	0.02	0.021	-
HCM Control Delay (s/veh)	-	-	22	9.3	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-

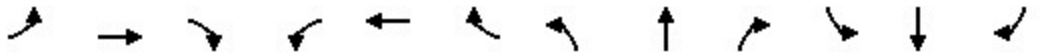
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	17	5	440	489	12
Future Vol, veh/h	40	17	5	440	489	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	18	5	478	532	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	788	538	545	0	-	0
Stage 1	538	-	-	-	-	-
Stage 2	250	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	344	542	1023	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	342	542	1023	-	-	-
Mov Cap-2 Maneuver	342	-	-	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	769	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	16.17	0.15	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	40	-	384	-	-
HCM Lane V/C Ratio	0.005	-	0.161	-	-
HCM Control Delay (s/veh)	8.5	0.1	16.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-



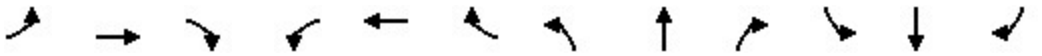
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	240	1	223	305	740	0	0	596	388
Future Volume (vph)	0	0	0	240	1	223	305	740	0	0	596	388
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	4.4	4.4	4.0	4.0			4.9	
Lane Util. Factor				0.95	0.95	1.00	1.00	1.00			0.95	
Frt				1.00	1.00	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.95	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1681	1686	1583	1770	1863			3330	
Flt Permitted				0.95	0.95	1.00	0.13	1.00			1.00	
Satd. Flow (perm)				1681	1686	1583	233	1863			3330	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	270	1	251	343	831	0	0	670	436
RTOR Reduction (vph)	0	0	0	0	0	214	0	0	0	0	105	0
Lane Group Flow (vph)	0	0	0	135	136	37	343	831	0	0	1001	0
Turn Type				Split	NA	Prot	D.P+P	NA			NA	
Protected Phases				4	4	4	1	1 2			2	
Permitted Phases							2					
Actuated Green, G (s)				12.5	12.5	12.5	64.2	68.2			38.4	
Effective Green, g (s)				12.5	12.5	12.5	64.2	68.2			38.4	
Actuated g/C Ratio				0.14	0.14	0.14	0.71	0.76			0.43	
Clearance Time (s)				4.4	4.4	4.4	4.0				4.9	
Vehicle Extension (s)				3.0	3.0	3.0	3.0				3.0	
Lane Grp Cap (vph)				233	234	219	606	1411			1420	
v/s Ratio Prot				0.08	c0.08	0.02	0.16	c0.45			c0.30	
v/s Ratio Perm							0.24					
v/c Ratio				0.58	0.58	0.17	0.57	0.59			0.70	
Uniform Delay, d1				36.3	36.3	34.2	14.7	4.8			21.2	
Progression Factor				1.00	1.00	1.00	0.33	0.83			1.00	
Incremental Delay, d2				3.5	3.6	0.4	1.0	0.5			3.0	
Delay (s)				39.8	39.9	34.5	5.9	4.5			24.1	
Level of Service				D	D	C	A	A			C	
Approach Delay (s/veh)		0.0			37.3			4.9			24.1	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

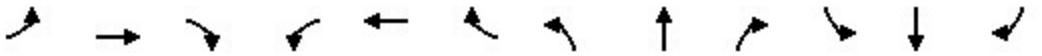
Movement	EBT	EBR	NBL2	NBT	NBR	SBL	SBT	SBR	SEL2	SEL	SER
Lane Configurations											
Traffic Volume (vph)	7	1	2	788	247	169	658	9	258	0	343
Future Volume (vph)	7	1	2	788	247	169	658	9	258	0	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.2		4.3	7.0	7.0	4.3	7.0			5.4	5.4
Lane Util. Factor	1.00		1.00	0.95	1.00	1.00	0.95			1.00	1.00
Frt	0.99		1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected	1.00		0.95	1.00	1.00	0.95	1.00			0.95	1.00
Satd. Flow (prot)	1853		1787	3574	1599	1787	3567			1787	1599
Flt Permitted	1.00		0.38	1.00	1.00	0.16	1.00			0.95	1.00
Satd. Flow (perm)	1853		712	3574	1599	298	3567			1787	1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	8	1	2	847	266	182	708	10	277	0	369
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	9	0	2	847	266	182	718	0	0	277	369
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	NA		pm+pt	NA	Prot	pm+pt	NA		Prot	Prot	Prot
Protected Phases	4		1	6	6	5	2		7	7	7
Permitted Phases			6			2					
Actuated Green, G (s)	1.0		29.8	28.9	28.9	43.9	38.7			25.5	25.5
Effective Green, g (s)	1.0		29.8	28.9	28.9	43.9	38.7			25.5	25.5
Actuated g/C Ratio	0.01		0.33	0.32	0.32	0.49	0.43			0.28	0.28
Clearance Time (s)	7.2		4.3	7.0	7.0	4.3	7.0			5.4	5.4
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	20		246	1147	513	322	1533			506	453
v/s Ratio Prot	c0.00		0.00	c0.24	0.17	c0.07	0.20			0.15	c0.23
v/s Ratio Perm			0.00			0.21					
v/c Ratio	0.45		0.01	0.74	0.52	0.57	0.47			0.55	0.81
Uniform Delay, d1	44.2		20.2	27.2	24.9	15.5	18.3			27.4	30.0
Progression Factor	1.00		0.59	0.75	0.71	0.48	0.46			1.00	1.00
Incremental Delay, d2	15.3		0.0	3.8	3.3	1.7	0.8			1.2	10.8
Delay (s)	59.5		11.8	24.1	20.9	9.1	9.2			28.6	40.8
Level of Service	E		B	C	C	A	A			C	D
Approach Delay (s/veh)	59.5			23.3			9.2			35.6	
Approach LOS	E			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	23.9
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	279	18	32	26	7	57	16	689	8	98	575	321
Future Volume (vph)	279	18	32	26	7	57	16	689	8	98	575	321
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Lane Util. Factor	0.95	0.95	1.00		1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85		0.91		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.96	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1698	1712	1599		1696		1787	3568		1787	3574	1599
Flt Permitted	0.95	0.96	1.00		0.99		0.41	1.00		0.27	1.00	1.00
Satd. Flow (perm)	1698	1712	1599		1696		762	3568		516	3574	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	20	35	28	8	62	17	749	9	107	625	349
RTOR Reduction (vph)	0	0	30	0	0	0	0	1	0	0	0	175
Lane Group Flow (vph)	161	162	5	0	98	0	17	757	0	107	625	174
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	Prot
Protected Phases	7	7	7	4	4		1	6		5	2	2
Permitted Phases							6			2		
Actuated Green, G (s)	12.8	12.8	12.8		9.1		44.3	41.7		50.7	44.9	44.9
Effective Green, g (s)	12.8	12.8	12.8		9.1		44.3	41.7		50.7	44.9	44.9
Actuated g/C Ratio	0.14	0.14	0.14		0.10		0.49	0.46		0.56	0.50	0.50
Clearance Time (s)	5.5	5.5	5.5		5.0		4.2	5.9		4.2	5.9	5.9
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	241	243	227		171		404	1653		372	1783	797
v/s Ratio Prot	c0.09	0.09	0.00		c0.06		0.00	c0.21		c0.02	0.17	0.11
v/s Ratio Perm							0.02			0.14		
v/c Ratio	0.67	0.67	0.02		0.57		0.04	0.46		0.29	0.35	0.22
Uniform Delay, d1	36.6	36.6	33.2		38.6		11.7	16.5		9.9	13.7	12.7
Progression Factor	1.00	1.00	1.00		1.00		1.59	1.17		1.21	1.07	2.69
Incremental Delay, d2	6.8	6.7	0.0		4.6		0.0	0.7		0.4	0.5	0.6
Delay (s)	43.4	43.3	33.3		43.2		18.6	20.0		12.4	15.1	34.7
Level of Service	D	D	C		D		B	B		B	B	C
Approach Delay (s/veh)		42.4			43.2			19.9			21.2	
Approach LOS		D			D			B			C	

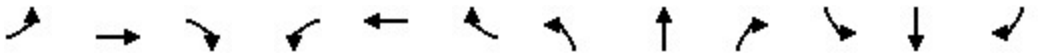
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.6
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	13	118	30	11	40	110	579	41	72	500	36
Future Volume (vph)	45	13	118	30	11	40	110	579	41	72	500	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	0.95	
Frt		1.00	0.85		0.93		1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1793	1583		1708		1770	1844		1770	3503	
Flt Permitted		0.96	1.00		0.98		0.38	1.00		0.23	1.00	
Satd. Flow (perm)		1793	1583		1708		700	1844		429	3503	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	51	15	134	34	12	45	125	658	47	82	568	41
RTOR Reduction (vph)	0	0	121	0	40	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	66	13	0	52	0	125	705	0	82	605	0
Turn Type	Split	NA	Prot	Split	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	7	7	4	4		5	2		1	6	
Permitted Phases							2			6		
Actuated Green, G (s)		9.0	9.0		6.8		55.2	47.2		51.2	45.2	
Effective Green, g (s)		9.0	9.0		6.8		55.2	47.2		51.2	45.2	
Actuated g/C Ratio		0.10	0.10		0.08		0.61	0.52		0.57	0.50	
Clearance Time (s)		5.3	5.3		4.9		4.2	6.6		4.2	6.6	
Vehicle Extension (s)		3.0	3.0		3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179	158		129		524	967		333	1759	
v/s Ratio Prot		c0.04	0.01		c0.03		c0.02	c0.38		0.02	0.17	
v/s Ratio Perm							0.12			0.12		
v/c Ratio		0.37	0.08		0.41		0.24	0.73		0.25	0.34	
Uniform Delay, d1		37.8	36.8		39.7		7.4	16.5		11.0	13.5	
Progression Factor		1.00	1.00		1.00		1.00	1.00		0.52	0.24	
Incremental Delay, d2		1.3	0.2		2.1		0.2	4.8		0.4	0.5	
Delay (s)		39.1	37.0		41.7		7.6	21.3		6.1	3.8	
Level of Service		D	D		D		A	C		A	A	
Approach Delay (s/veh)		37.7			41.7			19.2			4.1	
Approach LOS		D			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	1	30	31	1	32	34	599	36	30	523	55
Future Volume (vph)	39	1	30	31	1	32	34	599	36	30	523	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0	6.0		6.3		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00		0.95		1.00	1.00	
Frt		0.94			1.00	0.85		0.99		1.00	0.99	
Flt Protected		0.97			0.95	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		1707			1776	1583		3502		1770	1836	
Flt Permitted		0.81			0.67	1.00		0.89		0.32	1.00	
Satd. Flow (perm)		1416			1257	1583		3134		593	1836	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	44	1	34	35	1	36	39	681	41	34	594	62
RTOR Reduction (vph)	0	30	0	0	0	32	0	6	0	0	5	0
Lane Group Flow (vph)	0	49	0	0	36	4	0	755	0	34	652	0
Turn Type	Perm	NA		Perm	NA	Prot	Perm	NA		D.P+P	NA	
Protected Phases		4			4	4		2		1	1 2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		5.9			5.9	5.9		22.5		32.0	36.0	
Effective Green, g (s)		5.9			5.9	5.9		22.5		32.0	36.0	
Actuated g/C Ratio		0.11			0.11	0.11		0.42		0.59	0.66	
Clearance Time (s)		6.0			6.0	6.0		6.3		4.0		
Vehicle Extension (s)		3.0			3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)		154			136	172		1301		556	1219	
v/s Ratio Prot						0.00				0.01	c0.36	
v/s Ratio Perm		c0.03			0.03			0.24		0.03		
v/c Ratio		0.32			0.26	0.02		0.58		0.06	0.53	
Uniform Delay, d1		22.3			22.2	21.6		12.2		4.7	4.7	
Progression Factor		1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2		1.2			1.0	0.1		0.7		0.0	0.5	
Delay (s)		23.5			23.2	21.6		12.9		4.8	5.2	
Level of Service		C			C	C		B		A	A	
Approach Delay (s/veh)		23.5			22.4			12.9			5.2	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	54.2	Sum of lost time (s)	16.3
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	708	2	0	637
Future Vol, veh/h	6	0	708	2	0	637
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	60	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	0	796	2	0	716

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1154	797	0	0	798	0
Stage 1	797	-	-	-	-	-
Stage 2	358	-	-	-	-	-
Critical Hdwy	6.63	6.23	-	-	4.13	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	-	-	2.219	-
Pot Cap-1 Maneuver	204	386	-	-	822	-
Stage 1	443	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	204	386	-	-	822	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	679	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	23.29	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	204	822	-
HCM Lane V/C Ratio	-	-	0.033	-	-
HCM Control Delay (s/veh)	-	-	23.3	0	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	9	14	656	599	34
Future Vol, veh/h	21	9	14	656	599	34
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	10	15	713	651	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1057	670	688	0	-	0
Stage 1	670	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.63	6.23	4.13	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.83	-	-	-	-	-
Follow-up Hdwy	3.519	3.319	2.219	-	-	-
Pot Cap-1 Maneuver	234	456	904	-	-	-
Stage 1	508	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	229	456	904	-	-	-
Mov Cap-2 Maneuver	229	-	-	-	-	-
Stage 1	497	-	-	-	-	-
Stage 2	657	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	20.18	0.37	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	75	-	270	-	-
HCM Lane V/C Ratio	0.017	-	0.121	-	-
HCM Control Delay (s/veh)	9.1	0.2	20.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-