

Transportation Impact Study

for the proposed

Syracuse University

University Place Road Closure

City of Syracuse, Onondaga County, NY

March 2016

Project No. 36013
Prepared For:



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1. HCM 2010 Highway Capacity Manual. Transportation Research Board. The National Academies, Washington, DC: 2010.

EXECUTIVE SUMMARY

OVERVIEW

The purpose of this report is to identify if there is any traffic impact of closing the segment of University Place between South Crouse Avenue and College Place on the immediate highway system. Any potential impacts to the adjacent roadway network are identified and mitigation measures are recommended, if necessary.

In an effort to define traffic impact, this analysis determines the extent of existing traffic conditions, establishes background traffic flow including area growth and/or additional traffic resulting from new developments in the area, and establishes new traffic flow due projections due to the proposed road closure.

The study area is located along the northern side of the Syracuse University Campus in the City of Syracuse, Onondaga County, New York. The study area consists of the following intersections:

1. S. Crouse Avenue/Waverly Avenue
2. S. Crouse Avenue/University Place
3. University Place/Smith Drive (existing parking)
4. University Place/College Place
5. University Place/Comstock Avenue
6. Comstock Avenue/Waverly Avenue

The proposal involves closing University Place to vehicular traffic between S. Crouse Avenue and College Place. All existing vehicular traffic that currently uses this segment of University Place would be required to find permanent alternate travel routes. The existing parking areas currently serviced by Smith Drive would be serviced by a new driveway accessing College Place between Lyman Hall and Link Hall. Existing CENTRO bus routes will be altered to utilize Waverly Avenue instead of University Place.

It is anticipated that the University Place road closure would occur in 2016. Given the short timeframe associated with the proposed project, no growth has been added to the existing traffic volumes. Traffic diversions resulting from the closure of University Place were determined based upon existing travel patterns, likely origins and destinations, and existing traffic volumes and delays.

CONCLUSIONS & RECOMMENDATIONS

Based on the projected future volumes and projected levels of service, the proposed University Place closure between S Crouse Avenue and College Place will not have a significant adverse impact on existing traffic operations in the area, as documented in this report. The analyses contained in this report indicate that the existing transportation network can adequately accommodate the projected traffic volumes and resulting impacts to study area intersections. No mitigation is required.

I. INTRODUCTION

The purpose of this report is to identify if there is any traffic impact of closing the segment of University Place between South Crouse Avenue and College Place on the immediate highway system. Any potential impacts to the adjacent roadway network are identified and mitigation measures are recommended, if necessary.

In an effort to define traffic impact, this analysis determines the extent of existing traffic conditions, establishes background traffic flow including area growth and/or additional traffic resulting from new developments in the area, and establishes new traffic flow due projections due to the proposed road closure.

II. LOCATION

The study area is located along the northern side of the Syracuse University Campus in the City of Syracuse, Onondaga County, New York. The study area is shown in **Figure 1** – Site Location and Study Area (all figures are included at the end of this report). The study area consists of the following intersections:

1. S. Crouse Avenue/Waverly Avenue
2. S. Crouse Avenue/University Place
3. University Place/Smith Drive (existing parking)
4. University Place/College Place
5. University Place/Comstock Avenue
6. Comstock Avenue/Waverly Avenue

III. EXISTING HIGHWAY SYSTEM

S. Crouse Avenue, Waverly Avenue, and Comstock Avenue are owned and maintained by the City of Syracuse. The remaining roadways are owned by the University, specifically University Place from S. Crouse Drive to Comstock Avenue, and College Place. The speed limit on all roadways in the study area is 30 mph. The lane geometry at each of the study intersections is depicted in **Figure 2**.

IV. EXISTING TRAFFIC CONDITIONS

A. Peak Intervals for Analysis

Given the functional characteristics of the roadway network and the proposed closure of the segment of University Place from S. Crouse Avenue to College Place, the peak hours selected for analysis are the weekday AM and PM commuter peaks.

B. Existing Traffic Volume Data

In order to accurately model existing conditions, traffic volume data collection was performed by SRF & Associates during the weekday AM and PM peak periods on Tuesday, March 1, 2016

between 7:00-9:00 AM and 4:00-6:00 PM. The existing weekday peak hour volumes (7:45-8:45 AM and 4:45-5:45 PM) are reflected in **Figure 3**.

C. Field Observations

All intersections included in the project area were observed during weekday commuter peak intervals to assess existing traffic operating conditions at each intersection. Signal timing information for intersections within the study area was utilized to determine peak hour phasing plans and phase durations during each interval. This information was used to support and/or calibrate capacity analysis models described in detail later in this report.

V. FUTURE AREA DEVELOPMENT AND LOCAL GROWTH

It is anticipated that the University Place road closure would occur in 2016. Given the short timeframe associated with the proposed project, no growth has been added to the existing traffic volumes.

VI. PROPOSED PROJECT

The proposal involves closing University Place to vehicular traffic between S. Crouse Avenue and College Place. All existing vehicular traffic that currently uses this segment of University Place would be required to find permanent alternate travel routes. The existing parking areas currently serviced by Smith Drive would be serviced by a new driveway accessing College Place between Lyman Hall and Link Hall. Existing CENTRO bus routes will be altered to utilize Waverly Avenue instead of University Place. The proposed concept plan is shown in **Figure 4**.

VII. FULL DEVELOPMENT VOLUMES

Traffic diversions resulting from the closure of University Place were determined based upon existing travel patterns, likely origins and destinations, and existing traffic volumes and delays. The network additions and subtractions are shown in **Figure 5**.

Future design hour traffic volumes are developed for the weekday peaks by combining the existing traffic conditions (Figure 3) and the re-distributed traffic (Figure 5). The resulting network design hour volumes, based on future conditions as proposed, are illustrated in **Figure 6** for the weekday peak hours.

VIII. CENTRO BUS ROUTES

The Central New York Regional Transportation Authority (CNYRTA) operates several subsidiary companies to carry out the functions of the Authority. One such subsidiary is CNY CENTRO. CNY CENTRO provides daily public transportation service connecting residential areas with the region's most significant employment districts, shopping locations, educational and medical facilities, and entertainment venues, within the cities of Syracuse, Oswego, Fulton, Auburn, Rome and Utica.

CENTRO Syracuse currently provides 240 bus trips per day between University Place and Waverly Avenue. University Place carries 159 of the 240 bus trips and 126 of the 159 trips are city buses as opposed to University shuttles. Eighty-one (81) of the current 240 bus trips operate along Waverly Avenue all in the eastbound direction. The bus trips along University Avenue are split such that 90 buses travel westbound and 69 travel eastbound.

All of the buses currently using University Avenue will be re-routed to Waverly Avenue once University Avenue is closed. Waverly Avenue will then carry an additional 90 westbound and 69 eastbound CENTRO buses per day. Any buses that are currently traveling along University Avenue during the AM and PM peak hours (7:45-8:45 AM and 4:45-5:45 PM) are included in the analyses in this study. It is estimated that approximately 9(8) buses travel eastbound on University Avenue during the AM(PM) peak hours and 8(11) buses travel westbound on University Avenue during the AM(PM) peak hours.

IX. CAPACITY ANALYSIS

Capacity analysis is a technique used for determining a measure of effectiveness for a section of roadway and/or intersection based on the number of vehicles during a specific time period. The measure of effectiveness used for the capacity analysis is referred to as a Level of Service (LOS). Levels of Service are calculated to provide an indication of the amount of delay that a motorist experiences while traveling along a roadway or through an intersection. Since the most amount of delay to motorists usually occurs at intersections, the capacity analysis specifically focuses on intersections.

Six Levels of Service are defined for analysis purposes. They are assigned letter designations, from "A" to "F", with LOS "A" representing the best conditions and LOS "F" the worst. Suggested ranges of service capacity and an explanation of Levels of Service are included in the Appendix.

The standard procedure for capacity analysis of signalized and un-signalized intersections is outlined in the Highway Capacity Manual (HCM 2010) published by the Transportation Research Board. Traffic analysis software, Synchro 8, which is based on procedures and methodologies contained in the HCM 2010, was used to analyze operating conditions at study area intersections. The procedure yields a Level of Service (LOS) based on the HCM 2010 as an indicator of how well intersections operate.

Existing operating conditions during the peak study periods are evaluated to determine a basis for comparison with the projected future conditions. Existing operating conditions are documented in the field and modeled using traffic analysis software. The traffic analysis models are calibrated based on the actual field observations.

The future traffic conditions with the University Place road closure were analyzed to assess the operations of the adjacent intersections in the study area. Capacity results for existing and future conditions are listed in Table I. The discussion following the table summarizes capacity conditions. All capacity analysis calculations are included in the Appendix.

TABLE I
CAPACITY ANALYSIS RESULTS

INTERSECTION	EXISTING CONDITIONS		FUTURE CONDITIONS	
	AM	PM	AM	PM
1. S. Crouse Avenue/Waverly Avenue (S)				
Eastbound left – Waverly Avenue	A(6.8)	A(6.9)	A(6.9)	A(7.1)
Eastbound thru/right – Waverly Avenue	A(3.7)	A(6.0)	A(5.4)	A(6.6)
Westbound – Waverly Avenue	B(13.2)	B(12.2)	B(16.0)	B(14.3)
Northbound – S. Crouse Avenue	C(22.0)	C(24.8)	B(15.7)	B(15.7)
Overall LOS(Delay in sec/veh)	B(11.0)	B(11.1)	B(12.8)	B(11.4)
2. S. Crouse Drive/University Place (U)				
Eastbound – University Place	A(7.4)	A(7.4)	A(7.4)	A(7.4)
Westbound – University Place	A(7.8)	A(7.2)	N/A	
Northbound – S. Crouse Drive	A(7.3)	A(7.2)	A(7.2)	A(7.3)
Southbound – S. Crouse Drive	A(7.8)	A(7.6)	A(7.4)	A(7.2)
3. College Place/University Place (U)				
Eastbound – University Place	A(7.3)	A(7.7)	N/A	
Westbound – University Place	A(8.2)	A(7.9)	A(7.8)	A(7.6)
Northbound – College Place	A(7.8)	A(7.7)	A(6.9)	A(6.8)
Southbound – Driveway	A(7.6)	A(7.4)	A(7.4)	A(7.4)
5. University Place/Comstock Avenue (S)				
Eastbound – University Place	A(6.8)	A(7.0)	A(6.7)	A(7.3)
Westbound – University Place	A(6.8)	A(5.9)	A(6.0)	A(5.4)
Northbound – Comstock Avenue	C(32.3)	C(30.3)	C(31.7)	C(29.5)
Southbound – Comstock Avenue	D(38.4)	D(41.6)	D(38.8)	D(40.8)
Overall LOS(Delay in sec/veh)	C(27.0)	C(27.8)	C(28.4)	C(28.6)
6. Waverly Avenue/Comstock Avenue (S)				
Eastbound – Waverly Avenue	C(20.3)	C(26.0)	C(21.8)	C(30.0)
Westbound – Waverly Avenue	C(20.1)	B(18.7)	C(20.4)	B(18.9)
Northbound – Comstock Avenue	A(9.2)	B(10.3)	A(9.1)	A(9.6)
Overall LOS(Delay in sec/veh)	B(15.2)	B(18.5)	B(15.7)	C(20.4)
7. New Driveway/College Place (U)				
Eastbound – New Driveway	NA		A(9.2)	A(9.4)
Northbound left – College Place			A(7.4)	A(7.4)

Notes:

1. D(35.3) = Level of Service (Delay in Seconds per Vehicle)
2. (S) = Signalized; (U) = Un-signalized
3. NA = Approach does not exist and/or was not analyzed under this condition

The results shown in Table I indicate that all of the intersection approaches in the study area operate at LOS “D” or better (acceptable operating conditions) under existing traffic conditions. No changes in levels of service are anticipated at any of the study area intersections as a result of the University Place closure. No mitigation is necessary to accommodate the changes in travel patterns.

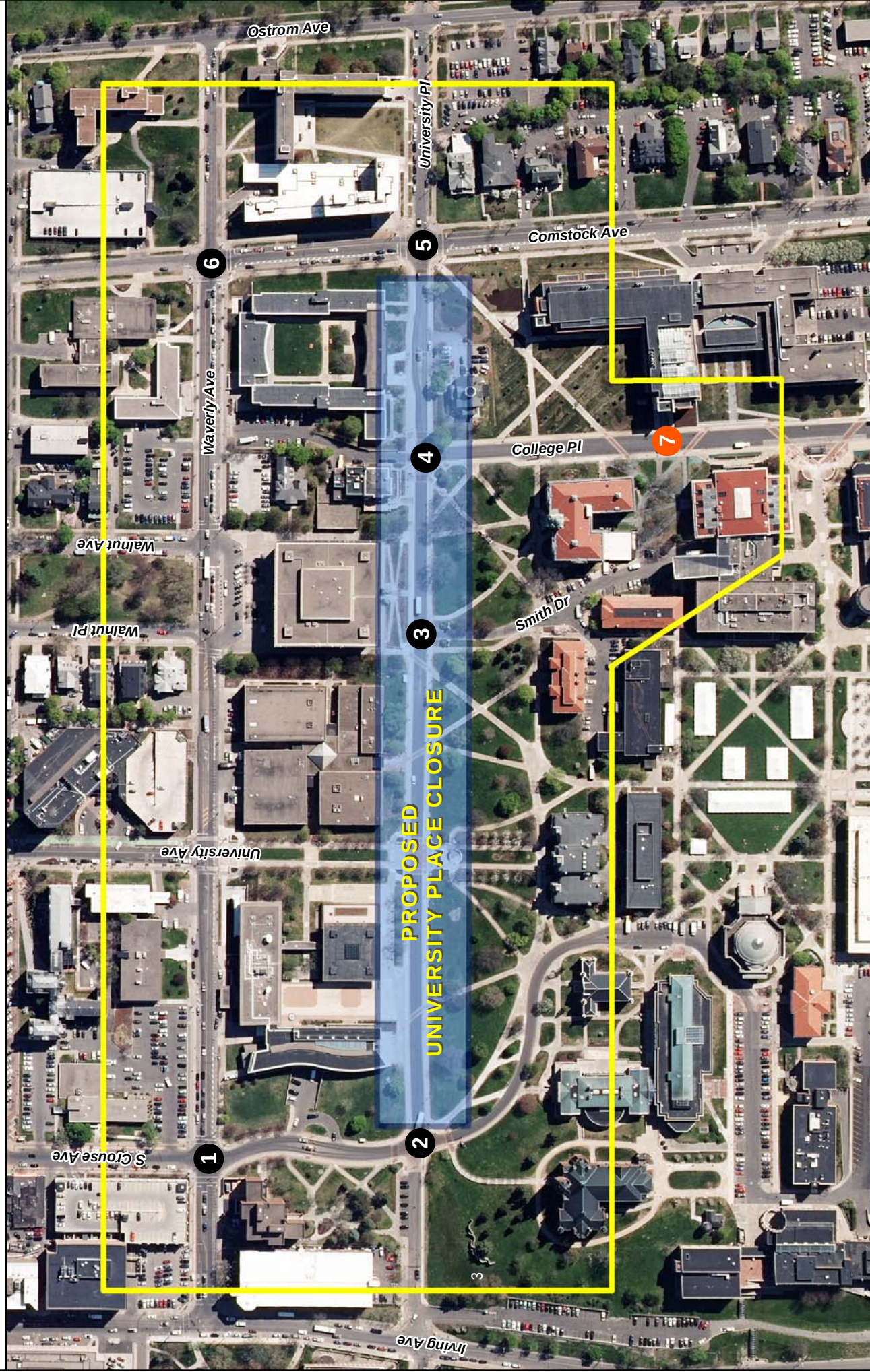
X. CONCLUSIONS & RECOMMENDATIONS

Based on the projected future volumes and projected levels of service, the proposed University Place closure between S. Crouse Avenue and College Place will not have a significant adverse impact on existing traffic operations in the area, as documented in this report. The analyses contained in this report indicate that the existing transportation network can adequately accommodate the projected traffic volumes and resulting impacts to study area intersections. No mitigation is required

XI. FIGURES

Figures 1 through 6 are included on the following pages.

FIGURE 1 - SITE LOCATION AND STUDY AREA



Legend

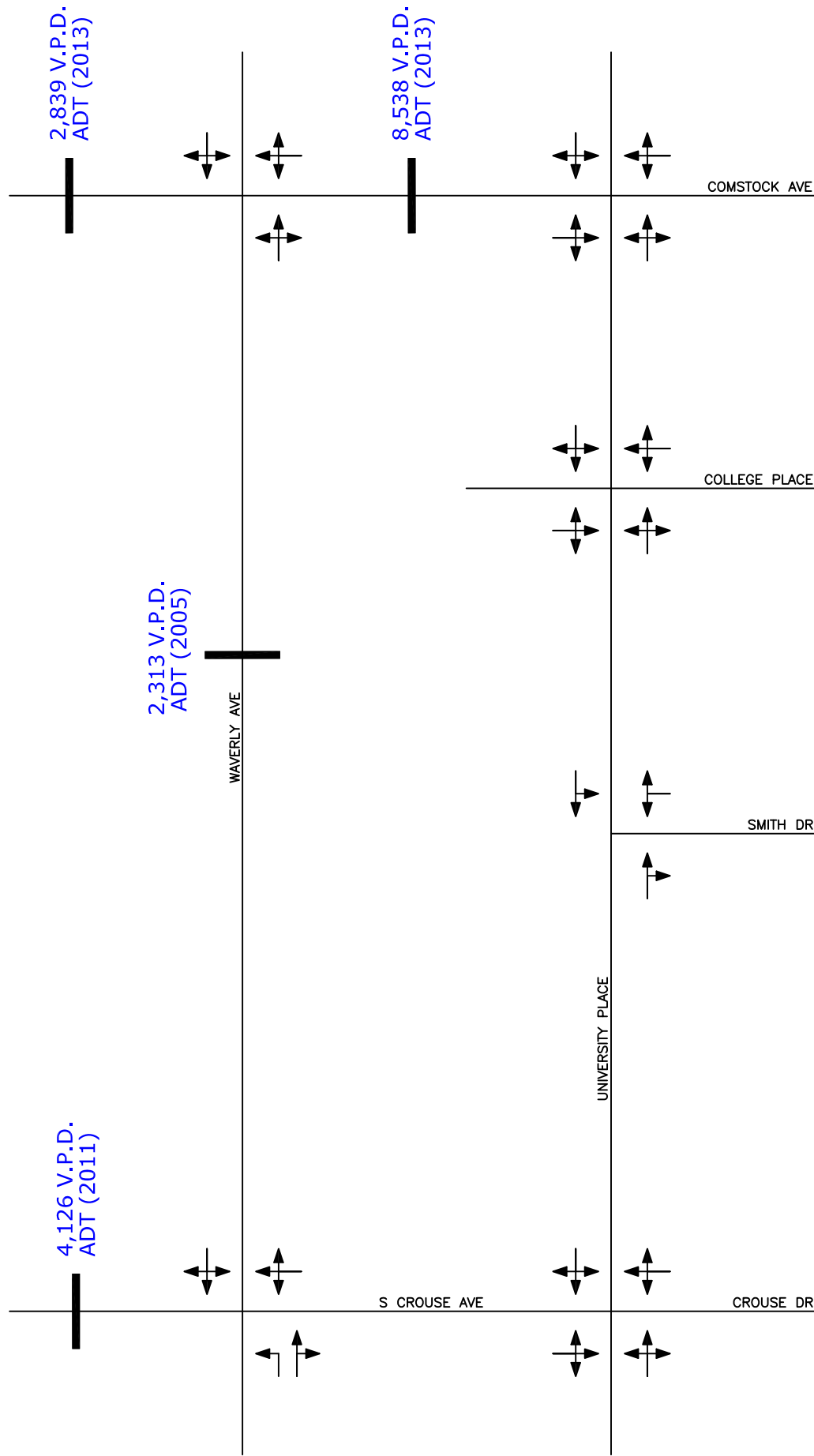
- Study Intersection
- Proposed Intersection
- Site Location
- Study Area

PROPOSED UNIVERSITY PLACE CLOSURE

CITY OF SYRACUSE, NY



NOTES:
 All counts by the NYS Department of Transportation
 V.P.D. = Vehicles per Day



PROJECT NO: 36013

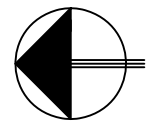
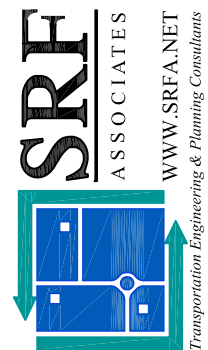
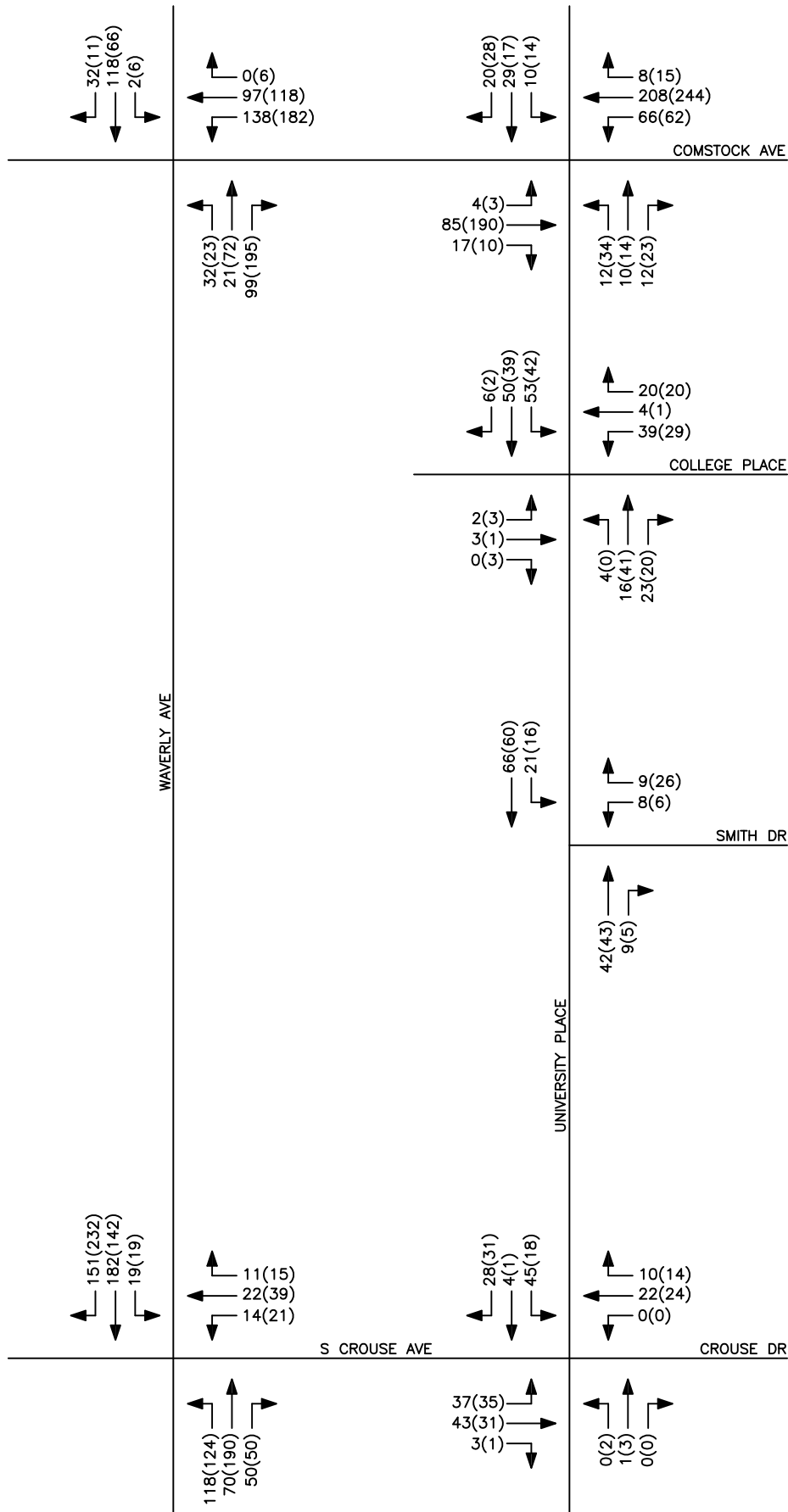


FIGURE 2

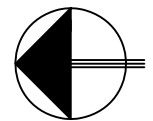
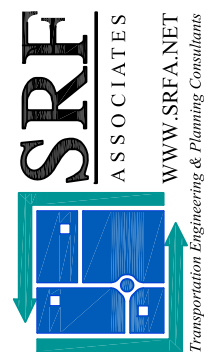
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LANE GEOMETRY &
 AVERAGE DAILY TRAFFIC

PROPOSED UNIVERSITY PLACE CLOSURE,
 CITY OF SYRACUSE, NY



PROJECT NO: 36013



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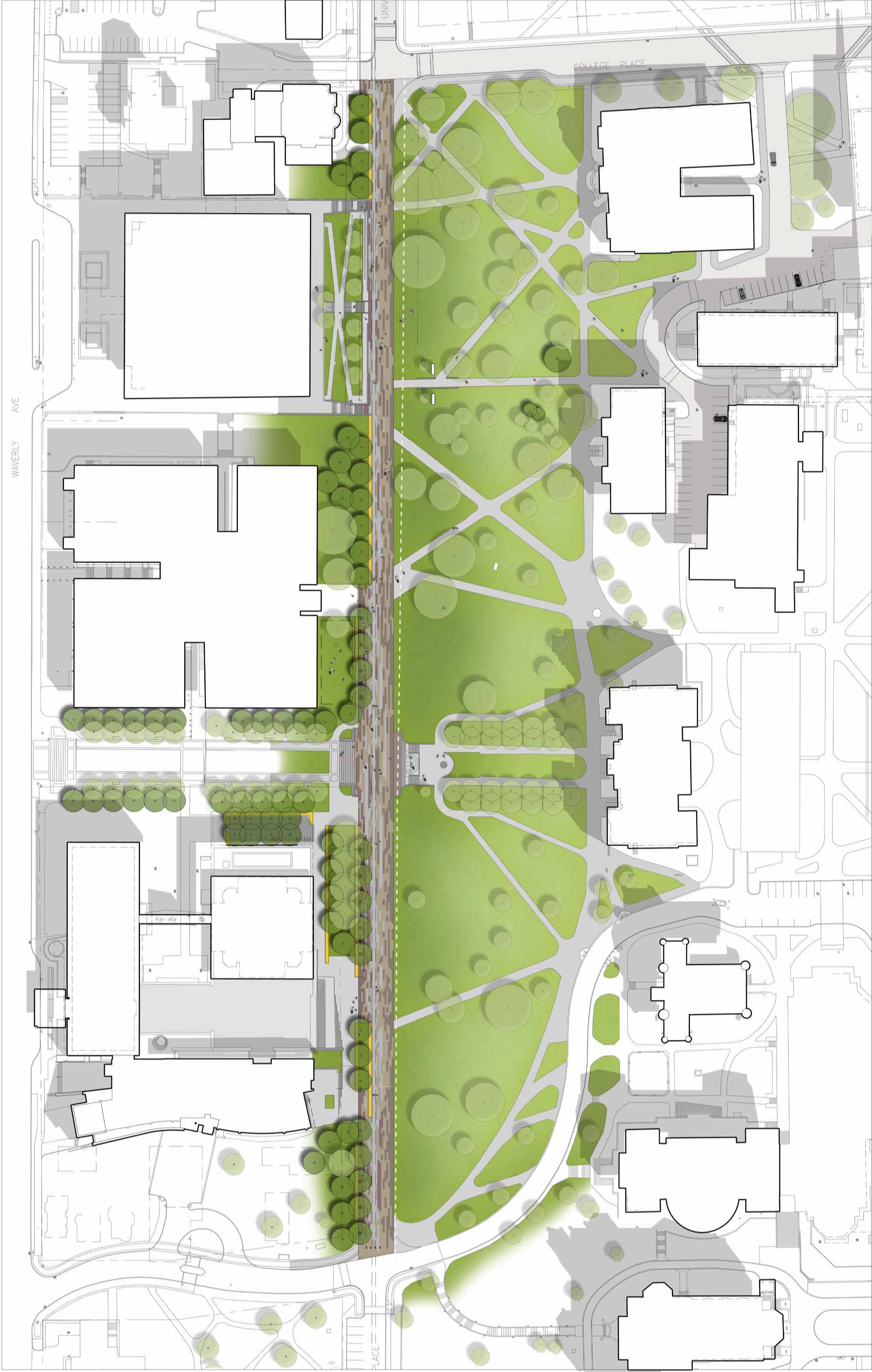
FIGURE 3

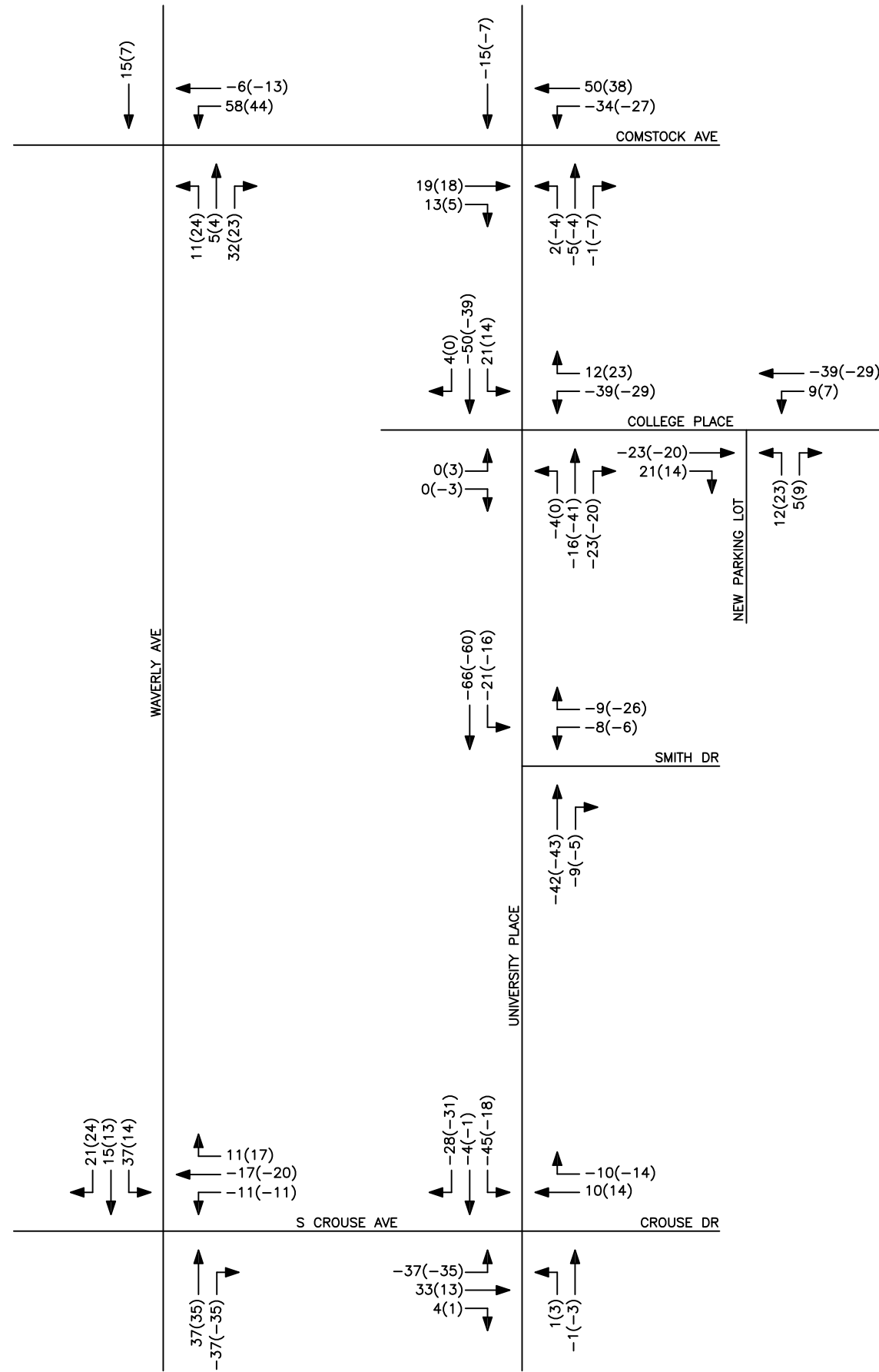
PEAK HOUR VOLUMES
2016 EXISTING CONDITIONS

PROPOSED UNIVERSITY PLACE CLOSURE,
CITY OF SYRACUSE, NY

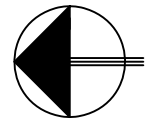
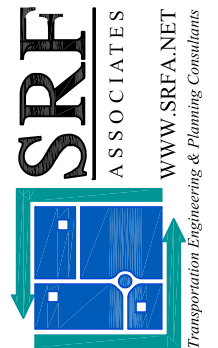
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00(00) = AM(PM)





PROJECT NO: 36013



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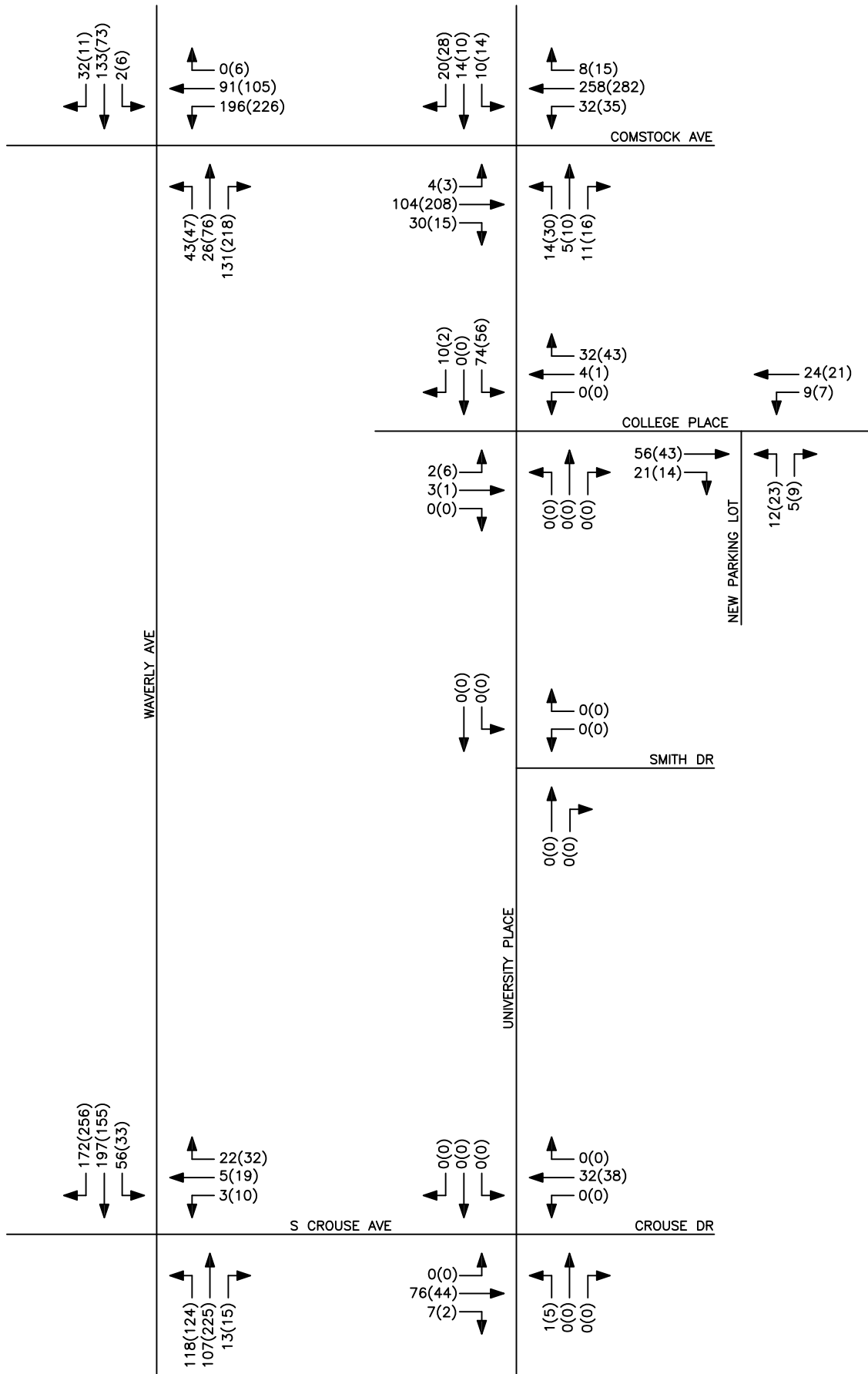
FIGURE 5

TRIP DIVERSION

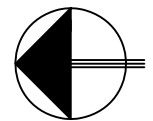
PROPOSED UNIVERSITY PLACE CLOSURE,
CITY OF SYRACUSE, NY

KEY

00(00) = AM(PM)



PROJECT NO: 36013



NOT TO SCALE

FIGURE 6

PEAK HOUR VOLUMES
2016 FUTURE CONDITIONS

PROPOSED UNIVERSITY PLACE CLOSURE,
CITY OF SYRACUSE, NY

KEY

00(00) = AM(PM)
↑ = ENTERING TRIPS
↓ = EXITING TRIPS

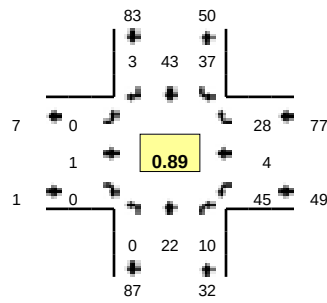
APPENDICES

A1

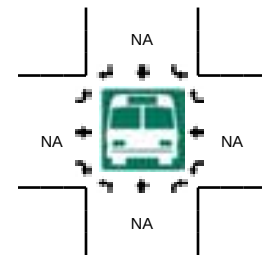
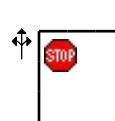
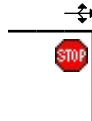
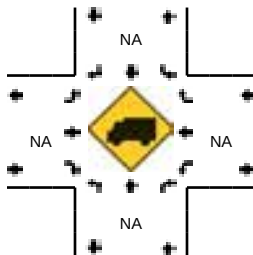
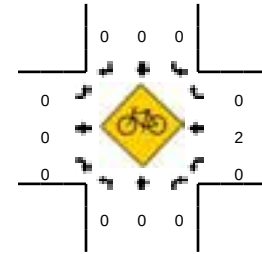
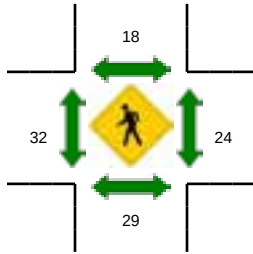
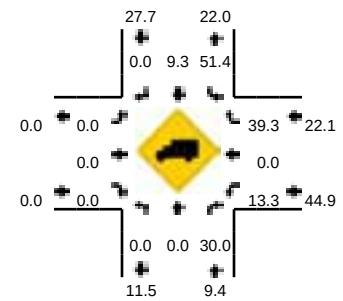
Collected Traffic Volume Data

LOCATION: Crouse Dr -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733901
DATE: Tue, Mar 01 2016



Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM



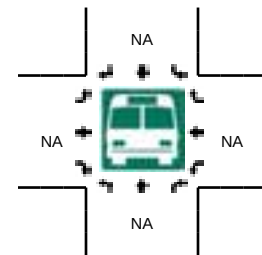
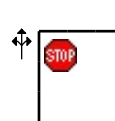
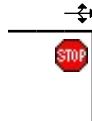
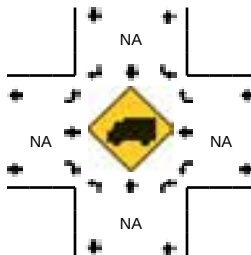
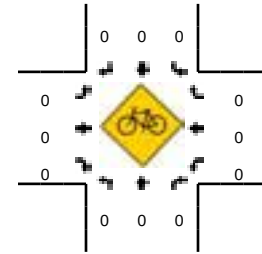
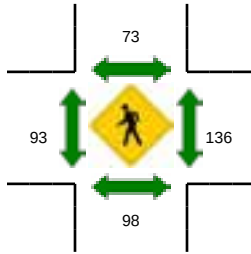
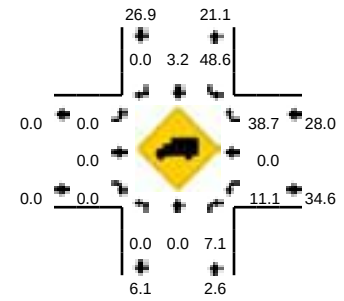
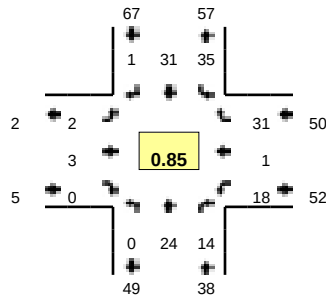
15-Min Count Period Beginning At	Crouse Dr (Northbound)				Crouse Dr (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	3	1	0	9	9	0	0	0	0	0	0	6	0	9	0	37	
7:15 AM	0	2	1	0	1	11	0	0	0	0	0	0	4	1	3	0	23	
7:30 AM	0	2	2	0	8	4	1	0	0	0	0	0	8	0	6	0	31	
7:45 AM	0	5	2	0	11	7	1	0	0	0	0	0	12	1	7	0	46	137
8:00 AM	0	6	2	0	12	10	0	0	0	0	0	0	8	0	4	0	42	142
8:15 AM	0	5	0	0	6	11	1	0	0	1	0	0	17	3	10	0	54	173
8:30 AM	0	6	6	0	8	15	1	0	0	0	0	0	7	0	7	1	51	193
8:45 AM	1	7	1	0	4	8	0	0	0	0	0	0	9	0	10	0	40	187
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	20	0	0	24	44	4	0	0	4	0	0	68	12	40	0	216	
Heavy Trucks	0	0	0		16	0	0		0	0	0		8	0	8		32	
Pedestrians		12				32				52				40			136	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: Crouse Dr -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733902
DATE: Tue, Mar 01 2016

Peak-Hour: 4:15 PM -- 5:15 PM
Peak 15-Min: 4:45 PM -- 5:00 PM

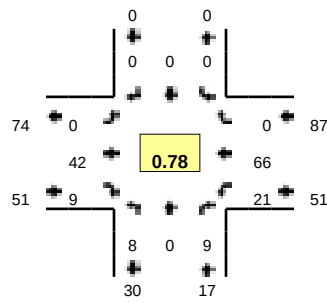


15-Min Count Period Beginning At	Crouse Dr (Northbound)				Crouse Dr (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	4	2	0	1	4	0	0	0	1	1	0	4	0	7	0	24	
4:15 PM	0	6	0	0	9	7	0	0	0	0	0	0	3	0	7	0	32	
4:30 PM	0	2	6	0	6	11	0	0	0	0	0	0	6	0	8	0	39	
4:45 PM	0	8	3	0	10	7	0	0	1	3	0	0	6	1	8	0	47	142
5:00 PM	0	8	5	0	10	6	1	0	1	0	0	0	3	0	8	0	42	160
5:15 PM	0	2	2	0	3	1	0	0	0	0	0	0	4	0	13	0	25	153
5:30 PM	0	3	2	0	5	7	1	0	1	2	0	0	2	1	12	0	36	150
5:45 PM	0	2	3	0	5	8	0	0	1	1	0	0	3	1	6	0	30	133
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	32	12	0	40	28	0	0	4	12	0	0	24	4	32	0	188	
Heavy Trucks	0	0	0		16	4	0		0	0	0		0	0	12		32	
Pedestrians	168				196				160				268				792	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

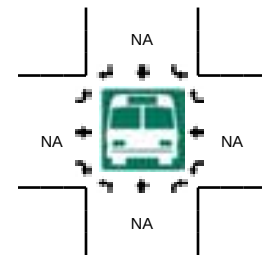
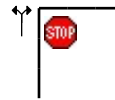
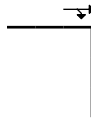
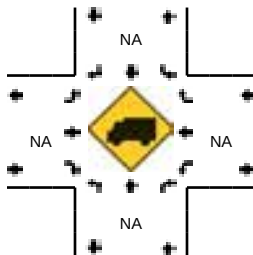
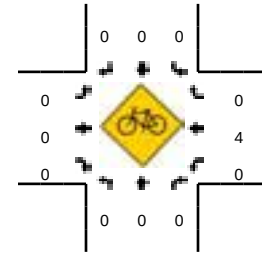
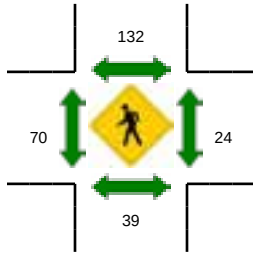
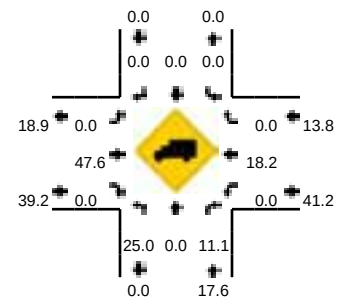
Comments:

LOCATION: Smith Dr -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733903
DATE: Tue, Mar 01 2016



Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

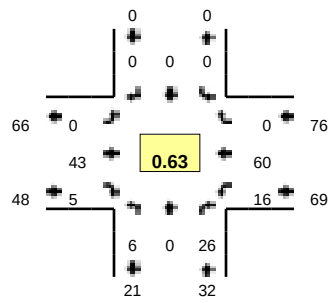


15-Min Count Period Beginning At	Smith Dr (Northbound)				Smith Dr (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	0	0	0	0	0	0	0	0	9	2	0	2	13	0	0	27	
7:15 AM	0	0	4	0	0	0	0	0	0	2	2	0	8	9	0	0	25	
7:30 AM	3	0	0	0	0	0	0	0	0	5	2	0	6	16	0	0	32	
7:45 AM	2	0	3	0	0	0	0	0	0	13	1	0	5	13	0	0	37	121
8:00 AM	1	0	2	0	0	0	0	0	0	12	3	0	3	11	0	0	32	126
8:15 AM	3	0	2	0	0	0	0	0	0	8	1	0	8	28	0	0	50	151
8:30 AM	2	0	2	0	0	0	0	0	0	9	4	0	5	14	0	0	36	155
8:45 AM	1	0	3	0	0	0	0	0	0	7	2	0	0	19	0	0	32	150
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	12	0	8	0	0	0	0	0	0	32	4	0	32	112	0	0	200	
Heavy Trucks	0	0	0		0	0	0		0	20	0		0	16	0		36	
Pedestrians		16				152				44				20			232	
Bicycles	0	0	0		0	0	0		0	0	0		0	2	0		2	
Railroad																		
Stopped Buses																		

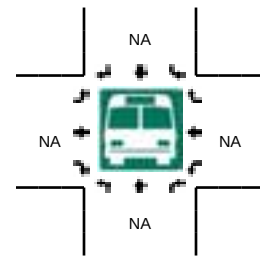
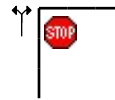
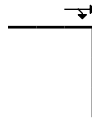
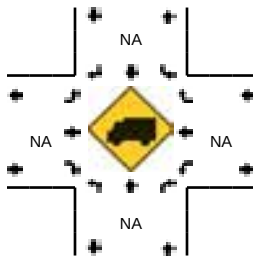
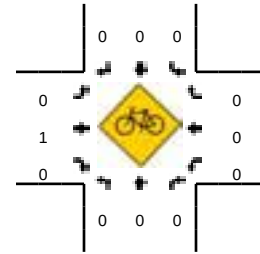
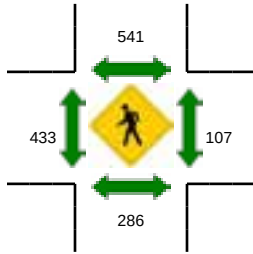
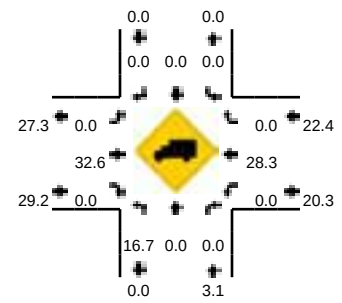
Comments:

LOCATION: Smith Dr -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733904
DATE: Tue, Mar 01 2016



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

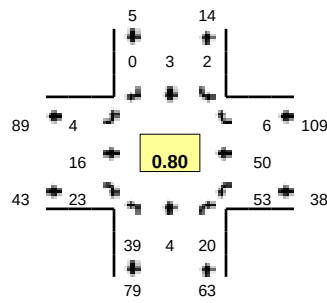


15-Min Count Period Beginning At	Smith Dr (Northbound)				Smith Dr (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	2	0	0	0	0	0	0	3	0	0	3	11	0	0	19	
4:15 PM	0	0	0	0	0	0	0	0	0	9	0	0	1	12	0	0	22	
4:30 PM	2	0	2	0	0	0	0	0	0	8	1	0	1	12	0	0	26	
4:45 PM	2	0	0	0	0	0	0	0	0	11	2	0	3	17	0	0	35	102
5:00 PM	0	0	16	0	0	0	0	0	0	23	1	0	6	16	0	0	62	145
5:15 PM	2	0	9	0	0	0	0	0	0	2	1	0	3	14	0	0	31	154
5:30 PM	2	0	1	0	0	0	0	0	0	7	1	0	4	13	0	0	28	156
5:45 PM	2	0	2	0	0	0	0	0	0	7	0	0	0	8	0	0	19	140
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	64	0	0	0	0	0	0	92	4	0	24	64	0	0	248	
Heavy Trucks	0	0	0		0	0	0		0	28	0		0	16	0		44	
Pedestrians		288				620				420				128			1456	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Railroad																		
Stopped Buses																		

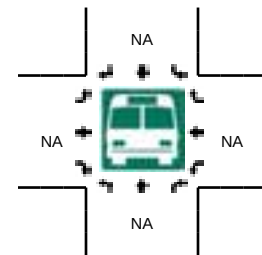
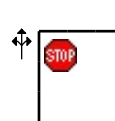
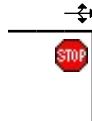
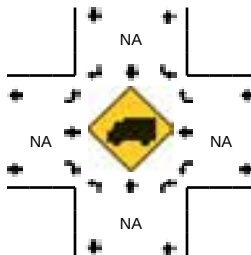
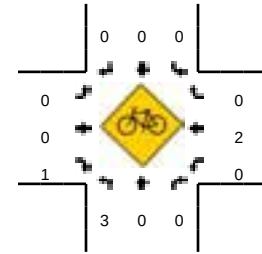
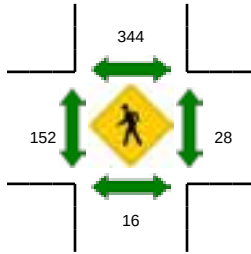
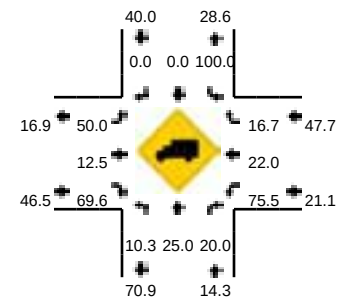
Comments:

LOCATION: College Pl -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733905
DATE: Tue, Mar 01 2016



Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM



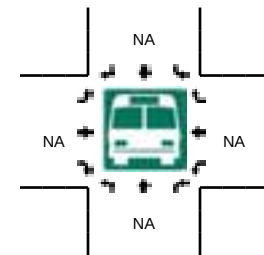
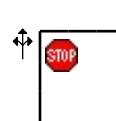
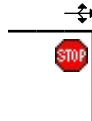
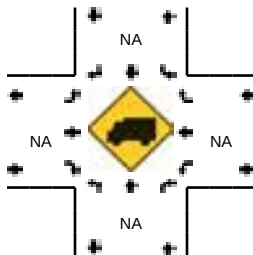
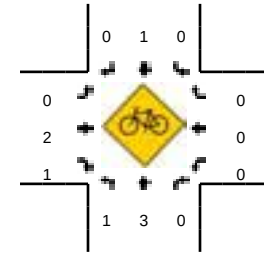
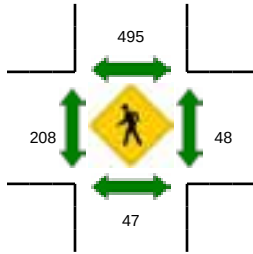
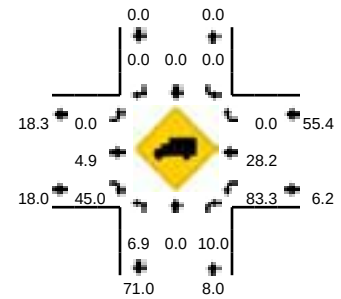
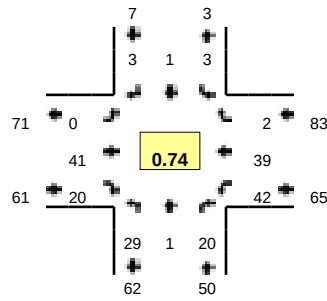
15-Min Count Period Beginning At	College Pl (Northbound)				College Pl (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	1	2	0	0	1	0	0	0	3	5	0	5	8	1	0	32	
7:15 AM	8	0	0	0	1	2	1	0	1	3	3	0	5	9	1	0	34	
7:30 AM	10	0	6	0	0	0	0	0	0	3	4	0	10	10	1	0	44	
7:45 AM	5	2	9	0	0	1	0	0	1	4	9	0	12	12	1	0	56	166
8:00 AM	7	0	3	0	2	1	0	0	3	6	4	0	16	7	2	0	51	185
8:15 AM	17	2	2	0	0	1	0	0	0	3	6	0	15	21	2	0	69	220
8:30 AM	8	1	1	0	0	0	1	0	0	5	8	0	11	7	2	0	44	220
8:45 AM	8	0	1	0	1	0	1	0	1	2	4	0	13	11	0	0	42	206
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	68	8	8	0	0	4	0	0	0	12	24	0	60	84	8	0	276	
Heavy Trucks	4	4	4		0	0	0		0	0	20		40	16	0		88	
Pedestrians		16				340				120				12			488	
Bicycles	1	0	0		0	0	0		0	0	0		0	1	0		2	
Railroad																		
Stopped Buses																		

Comments:

LOCATION: College Pl -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733906
DATE: Tue, Mar 01 2016

Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

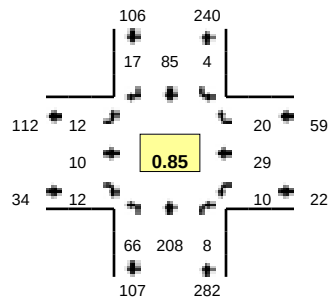


15-Min Count Period Beginning At	College Pl (Northbound)				College Pl (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	8	0	0	1	0	0	0	0	0	5	2	0	8	7	0	0	31	
4:15 PM	4	0	2	0	0	0	2	0	0	3	6	0	13	6	1	0	37	
4:30 PM	7	0	2	0	0	0	0	0	0	6	6	0	7	6	1	0	35	
4:45 PM	7	0	3	0	1	0	1	0	0	10	3	0	9	9	0	0	43	146
5:00 PM	6	0	7	0	1	0	0	0	0	22	8	0	15	9	0	0	68	183
5:15 PM	4	1	3	0	0	1	0	0	0	4	4	0	10	15	0	1	43	189
5:30 PM	12	0	7	0	1	0	2	0	0	5	5	0	7	6	2	0	47	201
5:45 PM	3	0	3	0	0	0	0	0	0	6	4	0	10	4	0	0	30	188
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	24	0	28	0	4	0	0	0	0	88	32	0	60	36	0	0	272	
Heavy Trucks	4	0	4		0	0	0		0	0	12		56	8	0		84	
Pedestrians		32				500				200				56			788	
Bicycles	0	1	0		0	0	0		0	0	0		0	0	0		1	
Railroad																		
Stopped Buses																		

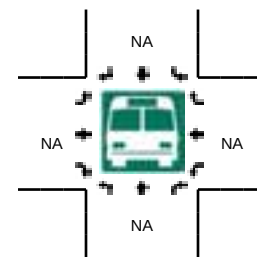
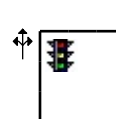
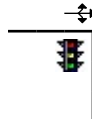
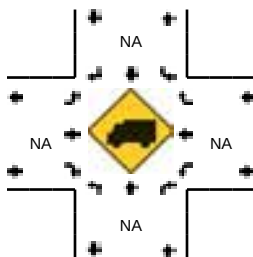
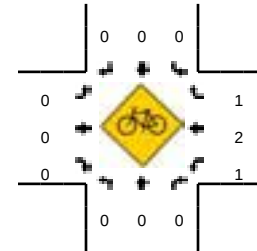
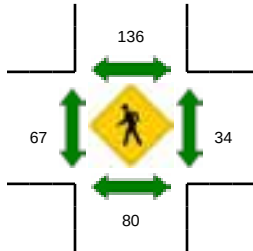
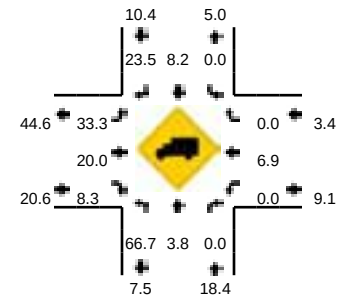
Comments:

LOCATION: Comstock Ave -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733907
DATE: Tue, Mar 01 2016



Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

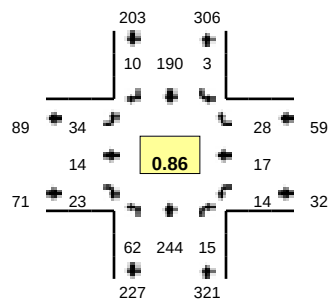


15-Min Count Period Beginning At	Comstock Ave (Northbound)				Comstock Ave (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	6	26	0	0	0	11	4	0	1	2	2	0	0	4	3	0	59	
7:15 AM	9	22	0	0	0	8	2	0	0	1	2	0	2	4	1	0	51	
7:30 AM	15	40	6	0	1	15	2	0	3	1	3	0	1	4	8	0	99	
7:45 AM	13	58	1	0	0	19	7	0	5	3	6	0	1	7	9	0	129	338
8:00 AM	16	40	2	0	1	19	4	0	3	4	3	0	3	5	3	0	103	382
8:15 AM	24	63	4	0	1	23	4	0	4	1	0	0	4	10	4	0	142	473
8:30 AM	13	47	1	0	2	24	2	0	0	2	3	0	2	7	4	0	107	481
8:45 AM	16	67	0	0	1	17	3	0	2	2	4	0	0	4	4	0	120	472
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	96	252	16	0	4	92	16	0	16	4	0	0	16	40	16	0	568	
Heavy Trucks	52	0	0		0	8	4		12	0	0		0	0	0		76	
Pedestrians		80				124				80				16			300	
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1	
Railroad																		
Stopped Buses																		

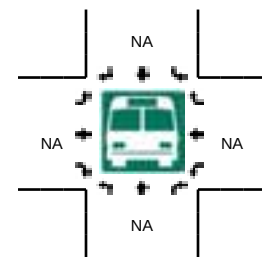
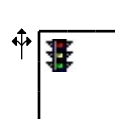
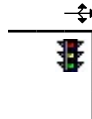
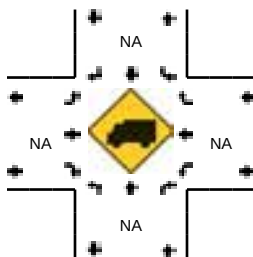
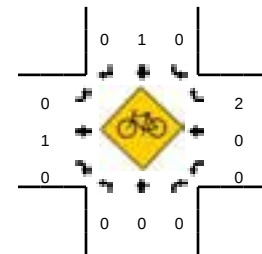
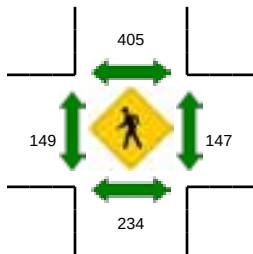
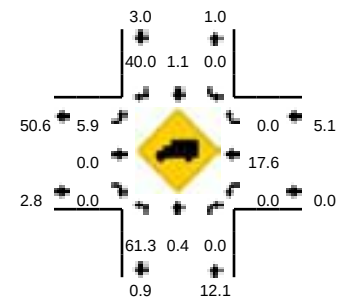
Comments:

LOCATION: Comstock Ave -- University Pl
CITY/STATE: Syracuse, NY

QC JOB #: 13733908
DATE: Tue, Mar 01 2016



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

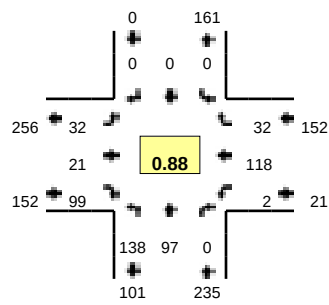


15-Min Count Period Beginning At	Comstock Ave (Northbound)				Comstock Ave (Southbound)				University Pl (Eastbound)				University Pl (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	10	54	2	0	2	46	2	0	3	0	2	0	1	4	2	0	128	
4:15 PM	15	48	4	0	0	26	3	0	2	1	2	0	2	2	5	0	110	
4:30 PM	9	35	8	0	1	61	2	0	3	3	4	0	6	5	2	0	139	
4:45 PM	16	62	5	0	1	56	4	0	7	2	6	0	1	1	14	0	175	552
5:00 PM	22	55	4	0	0	57	3	0	15	5	13	0	6	5	6	0	191	615
5:15 PM	18	56	4	0	1	39	1	0	4	5	3	0	3	5	4	0	143	648
5:30 PM	6	71	2	0	1	38	2	0	8	2	1	0	4	6	4	0	145	654
5:45 PM	8	47	2	0	4	41	7	0	8	1	3	0	5	5	2	0	133	612
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	88	220	16	0	0	228	12	0	60	20	52	0	24	20	24	0	764	
Heavy Trucks	56	4	0		0	0	4		4	0	0		0	4	0		72	
Pedestrians		212				472				172				128			984	
Bicycles	0	0	0		0	1	0		0	0	0		0	0	2		3	
Railroad																		
Stopped Buses																		

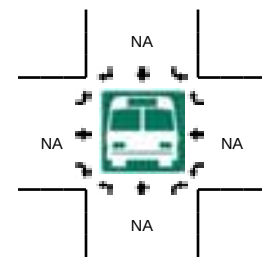
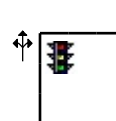
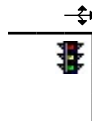
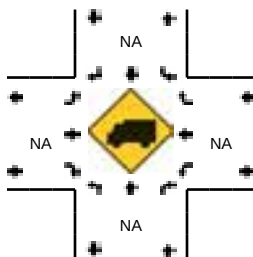
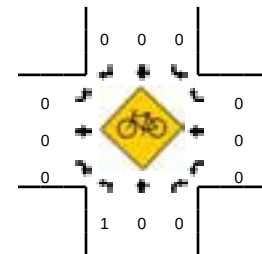
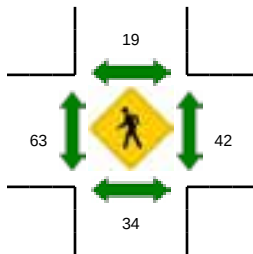
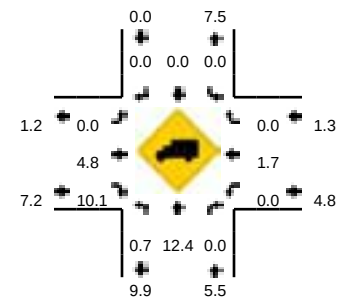
Comments:

LOCATION: Comstock Ave -- Waverly Ave
CITY/STATE: Syracuse, NY

QC JOB #: 13733909
DATE: Tue, Mar 01 2016



Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

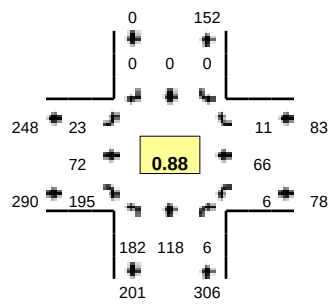


15-Min Count Period Beginning At	Comstock Ave (Northbound)				Comstock Ave (Southbound)				Waverly Ave (Eastbound)				Waverly Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	18	9	0	0	0	0	0	0	1	5	16	0	0	20	5	0	74	
7:15 AM	14	9	0	0	0	0	0	0	0	2	10	0	1	13	5	0	54	
7:30 AM	33	17	0	0	0	0	0	0	2	2	21	0	1	24	2	0	102	
7:45 AM	41	31	0	0	0	0	0	0	6	3	22	0	0	40	7	0	150	380
8:00 AM	25	18	0	0	0	0	0	0	10	8	23	0	1	24	8	0	117	423
8:15 AM	40	29	0	0	0	0	0	0	8	6	27	0	0	32	12	0	154	523
8:30 AM	32	19	0	0	0	0	0	0	8	4	27	0	1	22	5	0	118	539
8:45 AM	40	31	1	0	0	0	0	0	12	7	27	0	0	21	5	0	144	533
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	160	116	0	0	0	0	0	0	32	24	108	0	0	128	48	0	616	
Heavy Trucks	0	8	0	0	0	0	0	0	0	4	12	0	0	4	0	0	28	
Pedestrians		40				20				84				44			188	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Railroad																		
Stopped Buses																		

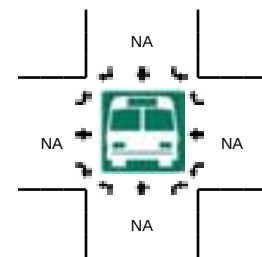
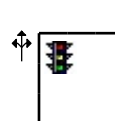
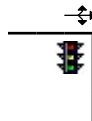
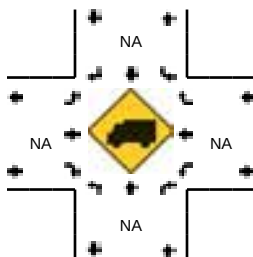
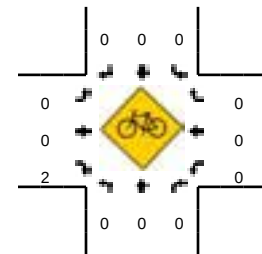
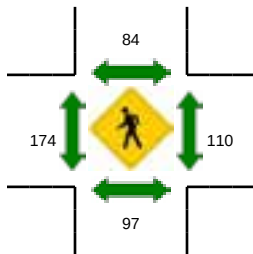
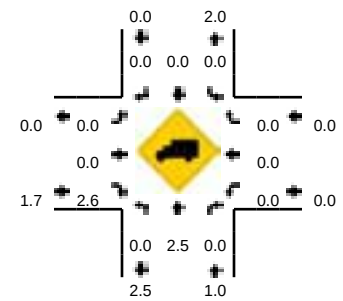
Comments:

LOCATION: Comstock Ave -- Waverly Ave
CITY/STATE: Syracuse, NY

QC JOB #: 13733910
DATE: Tue, Mar 01 2016



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

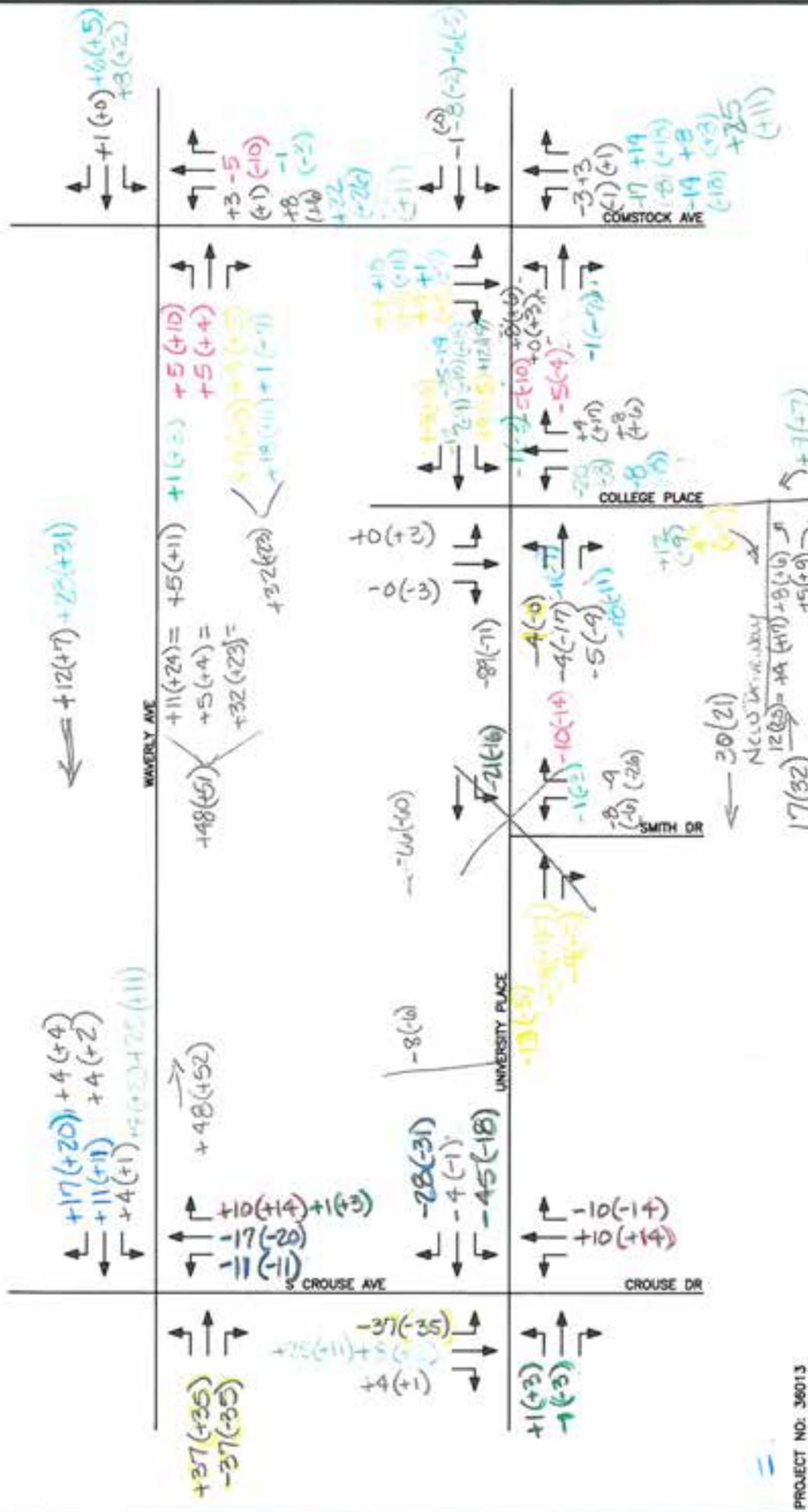


15-Min Count Period Beginning At	Comstock Ave (Northbound)				Comstock Ave (Southbound)				Waverly Ave (Eastbound)				Waverly Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	31	28	1	0	0	0	0	0	6	11	51	0	0	13	3	0	144	
4:15 PM	31	20	1	0	0	0	0	0	4	24	30	0	2	11	2	0	125	
4:30 PM	19	24	0	0	0	0	0	0	2	19	63	0	0	21	0	0	148	
4:45 PM	54	26	1	0	0	0	0	0	6	12	57	0	4	20	3	0	183	600
5:00 PM	44	31	0	0	0	0	0	0	7	27	58	0	0	23	3	0	193	649
5:15 PM	38	24	2	0	0	0	0	0	6	16	38	0	2	17	3	0	146	670
5:30 PM	46	37	3	0	0	0	0	0	4	17	42	0	0	6	2	0	157	679
5:45 PM	27	31	0	0	0	0	0	0	5	17	56	0	2	26	4	0	168	664
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	176	124	0	0	0	0	0	0	28	108	232	0	0	92	12	0	772	
Heavy Trucks	0	8	0		0	0	0		0	0	4		0	0	0		12	
Pedestrians		140				88				252				152			632	
Bicycles	0	0	0		0	0	0		0	0	1		0	0	0		1	
Railroad																		
Stopped Buses																		

Comments:

A2

Miscellaneous Traffic Data
and Calculations



PROJECT NO: 36013

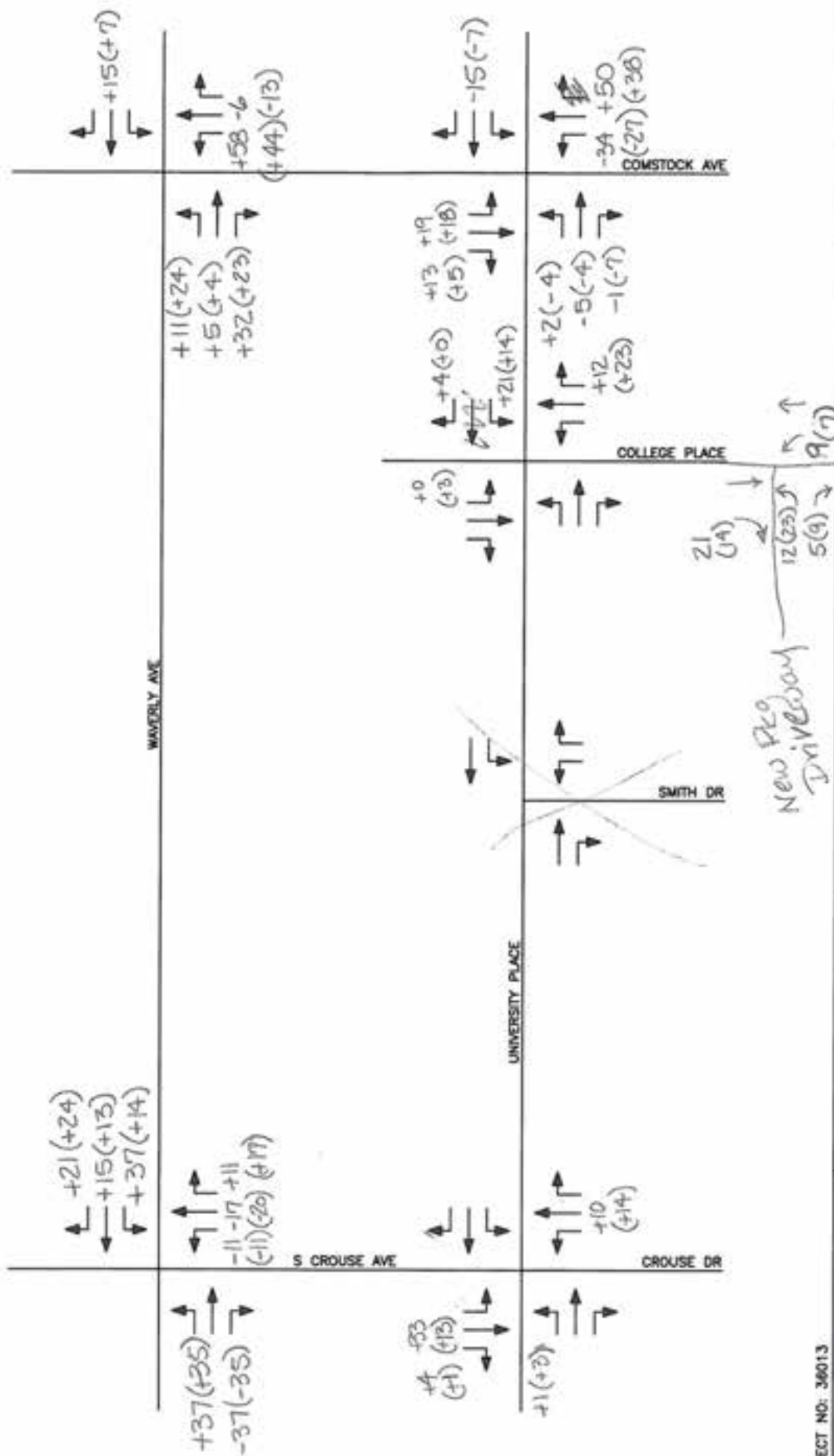


NOT TO SCALE

FIGURE 3

PEAK HOUR VOLUMES
2016 EXISTING CONDITIONS

PROPOSED UNIVERSITY PLACE CLOSURE,
CITY OF SYRACUSE, NY



PROJECT NO: 36013



NOT TO SCALE

FIGURE 3

PEAK HOUR VOLUMES
2016 EXISTING CONDITIONS

PROPOSED UNIVERSITY PLACE CLOSURE,
CITY OF SYRACUSE, NY

KEY

00(00) = AM(PM)

**PROPOSED UNIVERSITY PLACE CLOSURE
CITY OF SYRACUSE, NY
AM PEAK**

LOCATION NUMBER	INTERSECTION DESCRIPTION	2016 Existing Volume	Trip Diversion	2016 Future Volume
1	Waverly Ave/ S Crouse Ave			
	SR			
	ST			
	SL			
	WR	151	21	172
	WT	182	15	197
	WL	19	37	56
	NR	11	11	22
	NT	22	-17	5
	NL	14	-11	3
2	ER	50	-37	13
	ET	70	37	107
	EL	118		118
	University Place/ S Crouse Ave/Crouse Dr			
	SR	3	4	7
	ST	43	33	76
	SL	37	-37	
	WR	28	-28	
	WT	4	-4	
	WL	45	-45	
3	NR	10	-10	
	NT	22	10	32
	NL			
	ER			
	ET	1	-1	
	EL		1	1
	University Place/ Smith Dr			
	SR			
	ST			
	SL			
	WR			
	WT	66	-66	
	WL	21	-21	
	NR	9	-9	
	NT			
	NL	8	-8	
	ER	9	-9	
	ET	42	-42	
	EL			

PROPOSED UNIVERSITY PLACE CLOSURE
CITY OF SYRACUSE, NY
AM PEAK

LOCATION NUMBER	INTERSECTION DESCRIPTION	2016 Existing Volume	Trip Diversion	2016 Future Volume
4	University Place/ College Place			
	SR			
	ST	3		3
	SL	2		2
	WR	6	4	10
	WT	50	-50	
	WL	53	21	74
	NR	20	12	32
	NT	4		4
	NL	39	-39	
	ER	23	-23	
	ET	16	-16	
	EL	4	-4	
5	University Place/ Comstock Ave			
	SR	17	13	30
	ST	85	19	104
	SL	4		4
	WR	20		20
	WT	29	-15	14
	WL	10		10
	NR	8		8
	NT	208	50	258
	NL	66	-34	32
	ER	12	-1	11
	ET	10	-5	5
	EL	12	2	14
6	Waverly Ave/ Comstock Ave			
	SR			
	ST			
	SL			
	WR	32		32
	WT	118	15	133
	WL	2		2
	NR			
	NT	97	-6	91
	NL	138	58	196
	ER	99	32	131
	ET	21	5	26
	EL	32	11	43
7	College Place/ New Parking Lot Driveway			
	SR		21	21
	ST	79	-23	56
	SL			
	WR			
	WT			
	WL			
	NR			
	NT	63	-39	24
	NL		9	9
	ER		5	5
	ET			
	EL		12	12

**PROPOSED UNIVERSITY PLACE CLOSURE
CITY OF SYRACUSE, NY
PM PEAK**

LOCATION NUMBER	INTERSECTION DESCRIPTION	2016 Existing Volume	Trip Diversion	2016 Future Volume
1	Waverly Ave/ S Crouse Ave			
	SR			
	ST			
	SL			
	WR	232	24	256
	WT	142	13	155
	WL	19	14	33
	NR	15	17	32
	NT	39	-20	19
	NL	21	-11	10
2	ER	50	-35	15
	ET	190	35	225
	EL	124		124
	University Place/ S Crouse Ave/Crouse Dr			
	SR	1	1	2
	ST	31	13	44
	SL	35	-35	
	WR	31	-31	
	WT	1	-1	
	WL	18	-18	
3	NR	14	-14	
	NT	24	14	38
	NL			
	ER	3	-3	
	ET	2	3	5
	EL			
	University Place/ Smith Dr			
	SR			
	ST			
	SL			
	WR			
	WT	60	-60	
	WL	16	-16	
	NR	26	-26	
	NT			
	NL	6	-6	
	ER	5	-5	
	ET	43	-43	
	EL			

PROPOSED UNIVERSITY PLACE CLOSURE
CITY OF SYRACUSE, NY
PM PEAK

LOCATION NUMBER	INTERSECTION DESCRIPTION	2016 Existing Volume	Trip Diversion	2016 Future Volume
4	University Place/ College Place			
	SR	3	-3	
	ST	1		1
	SL	3	3	6
	WR	2		2
	WT	39	-39	
	WL	42	14	56
	NR	20	23	43
	NT	1		1
	NL	29	-29	
	ER	20	-20	
	ET	41	-41	
	EL			
5	University Place/ Comstock Ave			
	SR	10	5	15
	ST	190	18	208
	SL	3		3
	WR	28		28
	WT	17	-7	10
	WL	14		14
	NR	15		15
	NT	244	38	282
	NL	62	-27	35
	ER	23	-7	16
	ET	14	-4	10
	EL	34	-4	30
6	Waverly Ave/ Comstock Ave			
	SR			
	ST			
	SL			
	WR	11		11
	WT	66	7	73
	WL	6		6
	NR	6		6
	NT	118	-13	105
	NL	182	44	226
	ER	195	23	218
	ET	72	4	76
	EL	23	24	47
7	College Place/ New Parking Lot Driveway			
	SR		14	14
	ST	63	-20	43
	SL			
	WR			
	WT			
	WL			
	NR			
	NT	50	-29	21
	NL		7	7
	ER		9	9
	ET			
	EL		23	23

A3

Level of Service:
Criteria and Definitions

Level of Service Criteria

Highway Capacity Manual 2010

SIGNALIZED INTERSECTIONS

Level of Service is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. Level of Service for signalized intersections is defined in terms of delay specifically, average total delay per vehicle for a 15 minute analysis period. The ranges are as follows:

Level of Service	Control Delay per vehicle (seconds)
A	< 10
B	10 – 20
C	20 – 35
D	35 – 55
E	55 – 80
F	>80

UNSIGNALIZED INTERSECTIONS

Level of Service for unsignalized intersections is also defined in terms of delay. However, the delay criteria are different from a signalized intersection. The primary reason for this is driver expectation that a signalized intersection is designed to carry higher volumes than an unsignalized intersection. The total delay threshold for any given Level of Service is less for an unsignalized intersection than for a signalized intersection. The ranges are as follows:

Level of Service	Control Delay per vehicle (seconds)
A	< 10
B	10 – 15
C	15 – 25
D	25 – 35
E	35 - 50
F	>50

A4

Level of Service
Calculations: **2016** Existing
Conditions

Lanes, Volumes, Timings
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔
Traffic Volume (vph)	0	1	0	45	4	28	0	22	10	37	43	3
Future Volume (vph)	0	1	0	45	4	28	0	22	10	37	43	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.950				0.958			0.995	
Flt Protected				0.972							0.978	
Satd. Flow (prot)	0	1863	0	0	1720	0	0	1785	0	0	1813	0
Flt Permitted				0.972							0.978	
Satd. Flow (perm)	0	1863	0	0	1720	0	0	1785	0	0	1813	0
Link Speed (mph)		30		30		30		30		30		30
Link Distance (ft)		319		960		199		408		408		199
Travel Time (s)		7.3		21.8		4.5		9.3		9.3		4.5
Peak Hour Factor	0.25	0.25	0.25	0.64	0.64	0.64	0.67	0.67	0.67	0.94	0.94	0.94
Adj. Flow (vph)	0	4	0	70	6	44	0	33	15	39	46	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	120	0	0	48	0	0	88	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Link Offset(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Crosswalk Width(ft)	16	16	16	16	16	16	16	16	16	16	16	16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15	15	9	15	15	9	15	15	9
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	28.9%											
Analysis Period (min)	15											
	ICU Level of Service A											

HCM 2010 AWSC
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Intersection Delay, s/veh	7.7								
Intersection LOS	A								
Movement	EBU	EBL	EBT	WBU	WBL	WBT	WBR	NBU	NBT
Traffic Vol, veh/h	0	0	1	0	45	4	28	0	22
Future Vol, veh/h	0	0	1	0	45	4	28	0	22
Peak Hour Factor	0.92	0.25	0.25	0.92	0.64	0.64	0.92	0.67	0.67
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	4	0	70	6	44	0	33
Number of Lanes	0	0	1	0	0	1	0	0	1
Approach	EB	EB	WB	WB	EB	EB	WB	NB	NB
Opposing Approach			WB				EB		SB
Opposing Lanes			1				1		1
Conflicting Approach Left			SB				NB		EB
Conflicting Lanes Left			1				1		1
Conflicting Approach Right			NB				SB		WB
Conflicting Lanes Right			1				1		1
HCM Control Delay			7.4				7.8		7.3
HCM LOS			A				A		A
Lane	NBLn1	EBLn1	WBLn1	SBLn1					
Vol Left, %	0%	0%	58%	45%					
Vol Thru, %	69%	100%	5%	52%					
Vol Right, %	31%	0%	36%	4%					
Sign Control	Stop	Stop	Stop	Stop					
Traffic Vol by Lane	32	1	77	83					
LT Vol	0	0	45	37					
Through Vol	22	1	4	43					
RT Vol	10	0	28	3					
Lane Flow Rate	48	4	120	88					
Geometry Grp	1	1	1	1					
Degree of Util (X)	0.053	0.005	0.136	0.104					
Departure Headway (Hd)	4.032	4.262	4.069	4.256					
Convergence, Y/N	Yes	Yes	Yes	Yes					
Cap	875	826	871	834					
Service Time	2.115	2.361	2.141	2.325					
HCM Lane V/C Ratio	0.055	0.005	0.138	0.106					
HCM Control Delay	7.3	7.4	7.8	7.8					
HCM Lane LOS	A	A	A	A					
HCM 95th-ile Q	0.2	0	0.5	0.3					

Intersection					
Intersection Delay, s/veh					
Intersection LOS					
Movement	SBU	SBL	SBT	SBR	
Traffic Vol, veh/h	0	37	43	3	
Future Vol, veh/h	0	37	43	3	
Peak Hour Factor	0.92	0.94	0.94	0.94	
Heavy Vehicles, %	2	2	2	2	
Mvmt Flow	0	39	46	3	
Number of Lanes	0	0	1	0	
Approach	SB				
Opposing Approach	NB				
Opposing Lanes	1				
Conflicting Approach Left	WB				
Conflicting Lanes Left	1				
Conflicting Approach Right	EB				
Conflicting Lanes Right	1				
HCM Control Delay	7.8				
HCM LOS	A				
Lane					

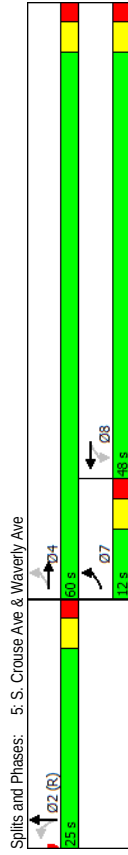


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	118	70	50	19	182	151	14	22	11	0	0	0
Future Volume (vph)	118	70	50	19	182	151	14	22	11	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.950	0.937			0.942			0.968				
Flt Protected					0.997			0.985				
Satd. Flow (prot)	1770	1745	0	0	1749	0	0	1776	0	0	0	0
Flt Permitted	0.424				0.983			0.985				
Satd. Flow (perm)	790	1745	0	0	1725	0	0	1776	0	0	0	0
Right Turn on Red			Yes		Yes			Yes				Yes
Satd. Flow (RTOR)		58			65			15				
Link Speed (mph)		30			30			30				30
Link Distance (ft)		294			1736			408				256
Travel Time (s)		6.7			39.5			9.3				5.8
Peak Hour Factor	0.86	0.86	0.86	0.85	0.85	0.85	0.73	0.73	0.73	0.92	0.92	0.92
Adj. Flow (vph)	137	81	58	22	214	178	19	30	15	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	137	139	0	0	414	0	0	64	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	No	No	No	No	No	No	No	No	No	No	No	No
Left	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	12	12			12			0				0
Link Offset(ft)	0				0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	NA	Perm	NA	Perm	NA	NA	Perm	NA		
Protected Phases	7	4			8			2				
Permitted Phases	4			8			2					
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0		
Total Split (s)	12.0	60.0	48.0	48.0	48.0	48.0	25.0	25.0	25.0	25.0		
Total Split (%)	14.1%	70.6%	56.5%	56.5%	56.5%	56.5%	29.4%	29.4%	29.4%	29.4%		
Maximum Green (s)	7.0	55.0	43.0	43.0	43.0	43.0	20.0	20.0	20.0	20.0		
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	5.0	5.0			5.0			5.0				
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Walk Time (s)		5.0		5.0	5.0		5.0	5.0				
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)	55.0	55.0			43.0			20.0				
Actuated g/C Ratio	0.65	0.65			0.51			0.24				
v/c Ratio	0.23	0.12			0.46			0.15				
Control Delay	6.8	3.7			13.2			22.0				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay	6.8	3.7			13.2			22.0				

Lanes, Volumes, Timings
5: S. Crouse Ave & Waverly Ave

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A			B			C				
Approach Delay	5.2			13.2				22.0				
Approach LOS	A			B				C				
Intersection Summary												
Area Type:	Other											
Cycle Length: 85												
Actuated Cycle Length: 85												
Offset: 0 (0%). Referenced to phase 2/NBTL and 6-. Start of Green												
Natural Cycle: 55												
Control Type: Prelimed												
Maximum v/c Ratio: 0.46												
Intersection Signal Delay: 11.0	Intersection LOS: B											
Intersection Capacity Utilization 42.4%	ICU Level of Service A											
Analysis Period (min) 15												



Lanes, Volumes, Timings
8: Cornstock Ave & University Place

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Volume (vph)	12	10	12	10	29	20	66	208	8	4	85	17
Future Volume (vph)	12	10	12	10	29	20	66	208	8	4	85	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.952			0.955			0.996				0.978	
Flt Protected	0.982			0.991			0.988				0.998	
Satd. Flow (prot)	0	1741	0	0	1763	0	0	1833	0	0	1818	0
Flt Permitted	0.915			0.963			0.895				0.988	
Satd. Flow (perm)	0	1623	0	0	1713	0	0	1660	0	0	1800	0
Right Turn on Red	Yes			Yes			Yes				Yes	
Satd. Flow (RTOR)	20			35			2				12	
Link Speed (mph)	30			30			30				30	
Link Distance (ft)	414			259			550				410	
Travel Time (s)	9.4			5.9			12.5				9.3	
Peak Hour Factor	0.61	0.61	0.61	0.57	0.57	0.57	0.77	0.77	0.77	0.95	0.95	0.95
Adj. Flow (vph)	20	16	20	18	51	35	86	270	10	4	89	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	104	0	0	366	0	0	111	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			0			0			0		0
Link Offset(ft)	0			0			0			0		0
Crosswalk Width(ft)	16			16			16			16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			15			15			15		9
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases	4			4			2			2		2
Permitted Phases	23.0	23.0	23.0	23.0	23.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Minimum Split (s)	55.0	55.0	55.0	55.0	55.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Total Split (s)	61.1%	61.1%	61.1%	61.1%	61.1%	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%
Total Split (%)	61.1%	61.1%	61.1%	61.1%	61.1%	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%
Maximum Green (s)	50.0	50.0	50.0	50.0	50.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0			0.0			0.0		0.0
Total Lost Time (s)	5.0			5.0			5.0			5.0		5.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0			7.0			7.0			7.0		7.0
Flash Dont Walk (s)	11.0			11.0			8.0			8.0		8.0
Pedestrian Calls (#/hr)	100			100			5			5		5
Act Effct Green (s)	50.0			50.0			30.0			30.0		30.0
Actuated g/C Ratio	0.56			0.56			0.33			0.33		0.33
v/c Ratio	0.06			0.11			0.66			0.66		0.66
Control Delay	6.8			6.8			32.3			32.3		38.4
Queue Delay	0.0			0.0			0.0			0.0		0.0
Total Delay	6.8			6.8			32.3			32.3		38.4

Lanes, Volumes, Timings
8: Cornstock Ave & University Place

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A		A	A		C	C			D	
Approach Delay	6.8	6.8		6.8	6.8		32.3	32.3			38.4	
Approach LOS	A	A		A	A		C	C			D	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%): Referenced to phase 2/NBSB, Start of Yellow												
Natural Cycle: 50												
Control Type: Pretimed												
Maximum v/c Ratio: 0.66												
Intersection Signal Delay: 27.0												
Intersection Capacity Utilization 40.1%												
Analysis Period (min) 15												



Lanes, Volumes, Timings
9: Cornstock Ave & Waverly Ave

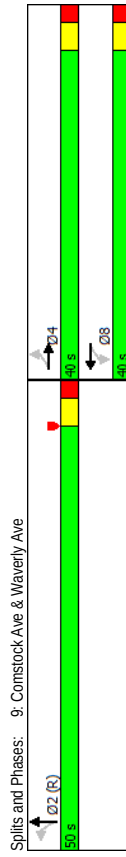
University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4		4	4							
Traffic Volume (vph)	32	21	99	2	118	32	138	97	0	0	0	0
Future Volume (vph)	32	21	99	2	118	32	138	97	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.912				0.971							
Flt Protected	0.990				0.999			0.971				
Satd. Flow (prot)	0	1682	0	0	1809	0	0	1809	0	0	0	0
Flt Permitted	0.915				0.998			0.971				
Satd. Flow (perm)	0	1554	0	0	1805	0	0	1809	0	0	0	0
Right Turn on Red	No				No			No				
Satd. Flow (RTOR)												
Link Speed (mph)	30				30			30				30
Link Distance (ft)	1736				280			410				291
Travel Time (s)	39.5				6.4			9.3				6.6
Peak Hour Factor	0.93	0.93	0.93	0.81	0.81	0.81	0.82	0.82	0.82	0.92	0.92	0.92
Adj. Flow (vph)	34	23	106	2	146	40	168	118	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	0	0	188	0	0	286	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Link Offset(ft)	0				0			0				0
Crosswalk Width(ft)	16				16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15	9	15	9	15	9	15	9	9
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA	Perm	NA	NA	Perm	NA
Protected Phases	4		4		8		8		2		2	
Permitted Phases	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Minimum Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	50.0	50.0	50.0	50.0	50.0	50.0
Total Split (s)	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	55.6%	55.6%	55.6%	55.6%	55.6%	55.6%
Total Split (%)	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	55.6%	55.6%	55.6%	55.6%	55.6%	55.6%
Maximum Green (s)	35.0	35.0	35.0	35.0	35.0	35.0	45.0	45.0	45.0	45.0	45.0	45.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	35.0	35.0	35.0	35.0	35.0	35.0	45.0	45.0	45.0	45.0	45.0	45.0
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.39	0.50	0.50	0.50	0.50	0.50	0.50
v/c Ratio	0.27	0.27	0.27	0.27	0.27	0.27	0.32	0.32	0.32	0.32	0.32	0.32
Control Delay	20.3	20.3	20.3	20.3	20.3	20.3	9.2	9.2	9.2	9.2	9.2	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	20.3	20.3	20.3	20.3	20.3	9.2	9.2	9.2	9.2	9.2	9.2

Lanes, Volumes, Timings
9: Constock Ave & Waverly Ave

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS												
Approach Delay	C	20.3		C	20.1		A					
Approach LOS	C			C			A					
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%): Referenced to phase 2/NBTL, Start of Yellow												
Natural Cycle: 50												
Control Type: Prelimed												
Maximum v/c Ratio: 0.32												
Intersection Signal Delay: 15.2												
Intersection Capacity Utilization 42.5%												
Analysis Period (min) 15												



Lanes, Volumes, Timings
12: College Place/Driveway & University Place

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	4	16	23	53	50	6	39	4	20	2	3	0
Future Volume (vph)	4	16	23	53	50	6	39	4	20	2	3	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.928				0.993			0.957				
Flt Protected	0.996				0.976			0.970				0.980
Satd. Flow (prot)	0	1722	0	0	1805	0	0	1729	0	0	1825	0
Flt Permitted	0.996				0.976			0.970				0.980
Satd. Flow (perm)	0	1722	0	0	1805	0	0	1729	0	0	1825	0
Link Speed (mph)	30				30			30			30	
Link Distance (ft)	370				414			222			157	
Travel Time (s)	8.4				9.4			5.0			3.6	
Peak Hour Factor	0.77	0.77	0.77	0.72	0.72	0.72	0.75	0.75	0.75	0.42	0.42	0.42
Adj. Flow (vph)	5	21	30	74	69	8	52	5	27	5	7	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	56	0	0	151	0	0	84	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15				9	15	9	15	9	15	15	9
Sign Control	Stop				Stop		Stop	Stop		Stop	Stop	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 24.9%	ICU Level of Service A											
Analysis Period (min) 15												

HCM 2010 AWSC
12: College Place/Driveway & University Place

HCM 2010 AWSC
12: College Place/Driveway & University Place

Intersection													
Intersection Delay, s/veh													7.9
Intersection LOS													A
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	
Traffic Vol, veh/h	0	4	16	23	0	53	50	6	0	39	4	20	
Future Vol, veh/h	0	4	16	23	0	53	50	6	0	39	4	20	
Peak Hour Factor	0.92	0.77	0.77	0.77	0.92	0.72	0.72	0.72	0.92	0.75	0.75	0.75	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	5	21	30	0	74	69	8	0	52	5	27	
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	
Approach	EB	WB	WB	WB	WB	WB	WB	NB	NB	NB	NB	NB	
Opposing Approach	WB				EB			SB					
Opposing Lanes	1				1			1					
Conflicting Approach Left	SB				NB			EB					
Conflicting Lanes Left	1				1			1					
Conflicting Approach Right	NB				SB			WB					
Conflicting Lanes Right	1				1			1					
HCM Control Delay	7.3				8.2			7.8					
HCM LOS	A				A			A					
Lane	NBLn1	EBLn1	WBLn1	SBLn1									
Vol Left, %	62%	9%	49%	40%									
Vol Thru, %	6%	37%	46%	60%									
Vol Right, %	32%	53%	6%	0%									
Sign Control	Stop	Stop	Stop	Stop									
Traffic Vol by Lane	63	43	109	5									
LT Vol	39	4	53	2									
Through Vol	4	16	50	3									
RT Vol	20	23	6	0									
Lane Flow Rate	84	56	151	12									
Geometry Grp	1	1	1	1									
Degree of Util (X)	0.101	0.061	0.177	0.015									
Departure Headway (Hd)	4.34	3.916	4.21	4.567									
Convergence, Y/N	Yes	Yes	Yes	Yes									
Cap	831	898	843	788									
Service Time	2.34	2.014	2.279	2.569									
HCM Lane V/C Ratio	0.101	0.062	0.179	0.015									
HCM Control Delay	7.8	7.3	8.2	7.6									
HCM Lane LOS	A	A	A	A									
HCM 95th-ile Q	0.3	0.2	0.6	0									

Lanes, Volumes, Timings
14: Smith & University Place

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	1	4	4	1	1
Traffic Volume (vph)	42	9	21	66	8	9
Future Volume (vph)	42	9	21	66	8	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.975				0.926	
Flt Protected				0.988	0.978	
Satd. Flow (prot)	1816	0	0	1840	1687	0
Flt Permitted				0.988	0.978	
Satd. Flow (perm)	1816	0	0	1840	1687	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	960			370	305	
Travel Time (s)	21.8			8.4	6.9	
Peak Hour Factor	0.85	0.85	0.60	0.60	0.85	0.85
Adj. Flow (vph)	49	11	35	110	9	11
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	0	0	145	20	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free	Free	Free	Free	Stop	Stop
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	21.3%					
Analysis Period (min)	15					
	ICU Level of Service A					

HCM 2010 TWSC
14: Smith & University Place

University Place Closure - Syracuse University
AM Peak Hour - Existing Conditions

Intersection									
Int Delay, s/veh	2								
Movement	EBT	EBR	WBL	WBT	NBL	NBR			
Traffic Vol, veh/h	42	9	21	66	8	9			
Future Vol, veh/h	42	9	21	66	8	9			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Free	Free	Free	Free	Stop	Stop			
RT Channelized	-	None	-	None	-	None			
Storage Length	-	-	-	-	0	-			
Veh in Median Storage, #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	85	85	60	60	85	85			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	49	11	35	110	9	11			
Major/Minor	Major1	Major2	Minor1						
Conflicting Flow All	0	0	60	0	235	55			
Stage 1	-	-	-	-	55	-			
Stage 2	-	-	-	-	180	-			
Critical Hdwy	-	-	4.12	-	6.42	6.22			
Critical Hdwy Stg 1	-	-	-	-	5.42	-			
Critical Hdwy Stg 2	-	-	-	-	5.42	-			
Follow-up Hdwy	-	-	2.218	-	3518	3318			
Pot Cap-1 Maneuver	-	-	1544	-	753	1012			
Stage 1	-	-	-	-	968	-			
Stage 2	-	-	-	-	851	-			
Platoon blocked, %	-	-	-	-	-	-			
Mov Cap-1 Maneuver	-	-	1544	-	735	1012			
Mov Cap-2 Maneuver	-	-	-	-	735	-			
Stage 1	-	-	-	-	968	-			
Stage 2	-	-	-	-	831	-			
Approach	EB	WB	NB						
HCM Control Delay, s	0	1.8	9.3						
HCM LOS	A								

Lanes, Volumes, Timings
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	3	0	18	1	31	0	24	14	35	31	1
Future Volume (vph)	2	3	0	18	1	31	0	24	14	35	31	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.915				0.951			0.998	
Flt Protected				0.982							0.975	
Satd. Flow (prot)	0	1829	0	0	1674	0	0	1771	0	0	1813	0
Flt Permitted				0.982							0.975	
Satd. Flow (perm)	0	1829	0	0	1674	0	0	1771	0	0	1813	0
Link Speed (mph)		30		30		30		30		30		30
Link Distance (ft)		319		960		199		408				
Travel Time (s)		7.3		21.8		4.5		9.3				
Peak Hour Factor	0.31	0.31	0.31	0.74	0.74	0.74	0.73	0.73	0.73	0.98	0.98	0.98
Adj. Flow (vph)	6	10	0	24	1	42	0	33	19	36	32	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	16	0	0	67	0	0	52	0	0	69	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Right	Left	Left	Right	Right
Median Width(ft)		0		0		0		0		0		0
Link Offset(ft)		0		0		0		0		0		0
Crosswalk Width(ft)		16		16		16		16		16		16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop		Stop		Stop		Stop		Stop		Stop
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	20.6%											
Analysis Period (min)	15											
	ICU Level of Service A											

HCM 2010 AWSC
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

Intersection	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR
Intersection Delay, s/veh	7.3								
Intersection LOS	A								
Movement	EBU	EBL	EBR	WBU	WBL	WBR	NBU	NBL	NBR
Traffic Vol, veh/h	0	2	3	0	18	1	31	0	24
Future Vol, veh/h	0	2	3	0	18	1	31	0	24
Peak Hour Factor	0.92	0.31	0.31	0.92	0.74	0.74	0.92	0.73	0.73
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	6	10	0	24	1	42	0	33
Number of Lanes	0	0	1	0	0	1	0	0	1
Approach	EB	WB	WB	EB	WB	EB	NB	NB	SB
Opposing Approach		WB			EB				SB
Opposing Lanes		1			1				1
Conflicting Approach Left		SB			NB				EB
Conflicting Lanes Left		1			1				1
Conflicting Approach Right		NB			SB				WB
Conflicting Lanes Right		1			1				1
HCM Control Delay	7.4			7.2			7.2		A
HCM LOS	A			A			A		A
Lane									
	NBLn1	EBLn1	WBLn1	SBLn1					
Vol Left, %	0%	40%	36%	52%					
Vol Thru, %	63%	2%	46%						
Vol Right, %	37%	0%	62%	1%					
Sign Control	Stop	Stop	Stop	Stop					
Traffic Vol by Lane	38	5	50	67					
LT Vol	0	2	18	35					
Through Vol	24	3	1	31					
RT Vol	14	0	31	1					
Lane Flow Rate	52	16	68	68					
Geometry Grip	1	1	1	1					
Degree of Util (X)	0.057	0.019	0.072	0.08					
Departure Headway (Hd)	3.91	4.275	3.854	4.214					
Convergence, Y/N	Yes	Yes	Yes	Yes					
Cap	910	829	920	846					
Service Time	1.96	2.344	1.916	2.257					
HCM Lane V/C Ratio	0.057	0.019	0.074	0.08					
HCM Control Delay	7.2	7.4	7.2	7.6					
HCM Lane LOS	A	A	A	A					
HCM 95th-tile Q	0.2	0.1	0.2	0.3					

HCM 2010 AWSC
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

Intersection					
Intersection Delay, s/veh					
Intersection LOS					
Movement	SBU	SBL	SBT	SBR	
Traffic Vol, veh/h	0	35	31	1	
Future Vol, veh/h	0	35	31	1	
Peak Hour Factor	0.92	0.98	0.98	0.98	
Heavy Vehicles, %	2	2	2	2	
Mvmt Flow	0	36	32	1	
Number of Lanes	0	0	1	0	
Approach	SB				
Opposing Approach	NB				
Opposing Lanes	1				
Conflicting Approach Left	WB				
Conflicting Lanes Left	1				
Conflicting Approach Right	EB				
Conflicting Lanes Right	1				
HCM Control Delay	7.6				
HCM LOS	A				
Lane					

Lanes, Volumes, Timings
5: S. Crouse Ave & Waverly Ave

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

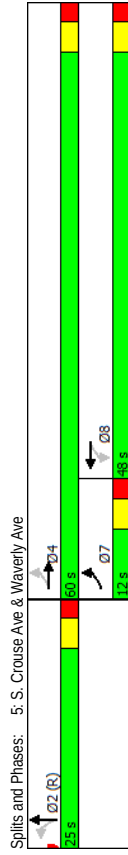
	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations												
Traffic Volume (vph)	124	190	50	19	142	232	21	39	15	0	0	0
Future Volume (vph)	124	190	50	19	142	232	21	39	15	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt Protected	0.950				0.920			0.973				
Satd. Flow (prot)	1770	1805	0	0	1710	0	0	1787	0	0	0	0
Frt Permitted	0.396				0.979			0.986				
Satd. Flow (perm)	738	1805	0	0	1678	0	0	1787	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32			124			14				
Link Speed (mph)		30			30			30				30
Link Distance (ft)		294			1736			408				256
Travel Time (s)		6.7			39.5			9.3				5.8
Peak Hour Factor	0.88	0.88	0.88	0.85	0.85	0.85	0.69	0.69	0.69	0.92	0.92	0.92
Adj. Flow (vph)	141	216	57	22	167	273	30	57	22	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	141	273	0	0	462	0	0	109	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	12	12			12			0				0
Link Offset(ft)	0				0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA	NA	Perm	NA	Perm	NA	Perm	NA	NA		
Protected Phases	7	4			8			2				
Permitted Phases	4			8			2					
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0		
Total Split (s)	12.0	60.0	48.0	48.0	48.0	48.0	25.0	25.0	25.0	25.0		
Total Split (%)	14.1%	70.6%	56.5%	56.5%	56.5%	56.5%	29.4%	29.4%	29.4%	29.4%		
Maximum Green (s)	7.0	55.0	43.0	43.0	43.0	43.0	20.0	20.0	20.0	20.0		
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0			0.0			0.0				
Total Lost Time (s)	5.0	5.0			5.0			5.0				
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Walk Time (s)		5.0		5.0	5.0		5.0	5.0				
Flash Dont Walk (s)		11.0		11.0	11.0		11.0	11.0				
Pedestrian Calls (#/hr)		0		0	0		0	0				
Act Effct Green (s)	55.0	55.0			43.0			20.0				
Actuated g/C Ratio	0.65	0.65			0.51			0.24				
v/c Ratio	0.25	0.23			0.51			0.25				
Control Delay	6.9	6.0			12.2			24.8				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay	6.9	6.0			12.2			24.8				

Lanes, Volumes, Timings
5: S. Crouse Ave & Waverly Ave

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
LOS	A	A			B			C		
Approach Delay	6.3			12.2				24.8		
Approach LOS	A			B				C		
Intersection Summary										
Area Type:	Other									
Cycle Length: 85										
Actuated Cycle Length: 85										
Offset: 0 (0%). Referenced to phase 2/NBTL and 6-. Start of Green										
Natural Cycle: 55										
Control Type: Prelimed										
Maximum v/c Ratio: 0.51										
Intersection Signal Delay: 11.1										
Intersection Capacity Utilization 52.4%										
Analysis Period (min) 15										



Lanes, Volumes, Timings
8: Cornstock Ave & University Place

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBR
Lane Configurations	4	4		4	4			4		4
Traffic Volume (vph)	34	14	23	14	17	28	62	244	15	3
Future Volume (vph)	34	14	23	14	17	28	62	244	15	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.956			0.936			0.994			0.993
Flt Protected	0.977			0.988			0.990			0.999
Satd. Flow (prot)	0	1740	0	0	1723	0	0	1833	0	1848
Flt Permitted	0.855			0.942			0.890			0.995
Satd. Flow (perm)	0	1523	0	0	1642	0	0	1648	0	1840
Right Turn on Red	Yes			Yes			Yes			Yes
Satd. Flow (RTOR)	43			32			3			3
Link Speed (mph)	30			30			30			30
Link Distance (ft)	414			259			550			410
Travel Time (s)	9.4			5.9			12.5			9.3
Peak Hour Factor	0.54	0.54	0.54	0.87	0.87	0.87	0.97	0.97	0.83	0.83
Adj. Flow (vph)	63	26	43	16	20	32	64	252	15	4
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	132	0	0	68	0	0	331	0	245
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Right
Median Width(ft)	0			0			0			0
Link Offset(ft)	0			0			0			0
Crosswalk Width(ft)	16			16			16			16
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9	15	9	15	9
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases	4			4			2			2
Permitted Phases	23.0	23.0	23.0	23.0	23.0	25.0	25.0	25.0	25.0	25.0
Minimum Split (s)	55.0	55.0	55.0	55.0	55.0	35.0	35.0	35.0	35.0	35.0
Total Split (s)	61.1%	61.1%	61.1%	61.1%	61.1%	38.9%	38.9%	38.9%	38.9%	38.9%
Total Split (%)	61.1%	61.1%	61.1%	61.1%	61.1%	38.9%	38.9%	38.9%	38.9%	38.9%
Maximum Green (s)	50.0	50.0	50.0	50.0	50.0	30.0	30.0	30.0	30.0	30.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0			0.0			0.0
Total Lost Time (s)	5.0			5.0			5.0			5.0
Lead/Lag										
Lead-Lag Optimize?										
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	100	100	100	100	100	5	5	5	5	5
Act Effct Green (s)	50.0	50.0	50.0	50.0	50.0	30.0	30.0	30.0	30.0	30.0
Actuated g/C Ratio	0.56			0.56			0.33			0.33
v/c Ratio	0.15			0.07			0.60			0.40
Control Delay	7.0			5.9			30.3			41.6
Queue Delay	0.0			0.0			0.0			0.0
Total Delay	7.0			5.9			30.3			41.6

Lanes, Volumes, Timings
8: Constock Ave & University Place

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A		A	A			C			D	
Approach Delay	7.0	5.9		5.9				30.3			41.6	
Approach LOS	A	A		A				C			D	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%): Referenced to phase 2/NBSB, Start of Yellow												
Natural Cycle: 50												
Control Type: Prelimed												
Maximum v/c Ratio: 0.60												
Intersection Signal Delay: 27.8												
Intersection Capacity Utilization 56.3%												
Analysis Period (min) 15												



Lanes, Volumes, Timings
9: Constock Ave & Waverly Ave

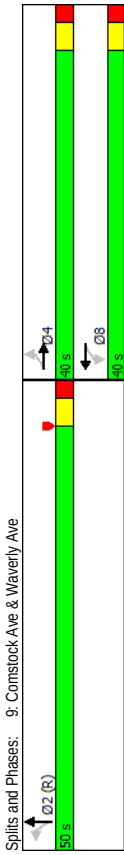
University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	4		4	4			4				
Traffic Volume (vph)	23	72	195	6	66	11	182	118	6	0	0	0
Future Volume (vph)	23	72	195	6	66	11	182	118	6	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.909				0.982			0.997				
Flt Protected					0.996			0.971				
Satd. Flow (prot)	0	1686	0	0	1822	0	0	1803	0	0	0	0
Flt Permitted		0.973			0.971			0.971				
Satd. Flow (perm)	0	1643	0	0	1776	0	0	1803	0	0	0	0
Right Turn on Red			No			No			No			Yes
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1736			280			410				291
Travel Time (s)		39.5			6.4			9.3				6.6
Peak Hour Factor	0.79	0.79	0.79	0.77	0.77	0.77	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	29	91	247	8	86	14	138	128	7	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	367	0	0	108	0	0	333	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Link Offset(ft)	0							0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	9	15	15	9	15	15	9	15	9	15
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA	NA	Perm	NA	NA	Perm
Protected Phases		4			8			2				
Permitted Phases	4			8			2					
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	50.0	50.0	40.0	50.0	50.0	50.0
Total Split (%)	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	55.6%	55.6%	44.4%	55.6%	55.6%	55.6%
Maximum Green (s)	35.0	35.0	35.0	35.0	35.0	35.0	45.0	45.0	35.0	45.0	45.0	45.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	35.0	35.0	35.0	35.0	35.0	35.0	45.0	45.0	35.0	45.0	45.0	45.0
Actuated g/C Ratio	0.39	0.39	0.39	0.39	0.39	0.39	0.50	0.50	0.39	0.50	0.50	0.50
v/c Ratio	0.57	0.57	0.57	0.57	0.57	0.57	0.66	0.66	0.57	0.66	0.66	0.66
Control Delay	26.0	26.0	26.0	26.0	26.0	26.0	31.7	31.7	26.0	31.7	31.7	31.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.2
Total Delay	26.0	26.0	26.0	26.0	26.0	26.0	31.9	31.9	26.0	31.9	31.9	31.9

Lanes, Volumes, Timings
 9: Constock Ave & Waverly Ave

University Place Closure - Syracuse University
 PM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS												
Approach Delay	C	26.0		B	18.7		B					
Approach LOS	C			B			B					
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%): Referenced to phase 2/NBTL, Start of Yellow												
Natural Cycle: 50												
Control Type: Prelimed												
Maximum v/c Ratio: 0.57												
Intersection Signal Delay: 18.5												
Intersection Capacity Utilization 47.7%												
Analysis Period (min) 15												



Lanes, Volumes, Timings
 12: College Place/Driveaway & University Place

University Place Closure - Syracuse University
 PM Peak Hour - Existing Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	41	20	42	39	2	29	1	20	3	1	3
Future Volume (vph)	0	41	20	42	39	2	29	1	20	3	1	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.956				0.997			0.947			0.944	
Flt Protected					0.975			0.972			0.980	
Satd. Flow (prot)	0	1781	0	0	1811	0	0	1715	0	0	1723	0
Flt Permitted					0.975			0.972			0.980	
Satd. Flow (perm)	0	1781	0	0	1811	0	0	1715	0	0	1723	0
Link Speed (mph)	30				30			30			30	
Link Distance (ft)	370				414			222			157	
Travel Time (s)	8.4				9.4			5.0			3.6	
Peak Hour Factor	0.51	0.51	0.51	0.83	0.83	0.83	0.66	0.66	0.66	0.58	0.58	0.58
Adj. Flow (vph)	0	80	39	51	47	2	44	2	30	5	2	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	119	0	0	100	0	0	76	0	0	12	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Left	Left	Right	Left	Right	Left
Median Width(ft)	0				0			0			0	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15				9	15	9	15	9	15	9	15
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 22.0%	ICU Level of Service A											
Analysis Period (min) 15												

HCM 2010 AWSC
12: College Place/Driveway & University Place

HCM 2010 AWSC
12: College Place/Driveway & University Place

Intersection													
Intersection Delay, s/veh													7.8
Intersection LOS													A
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	
Traffic Vol, veh/h	0	0	41	20	0	42	39	2	0	29	1	20	
Future Vol, veh/h	0	0	41	20	0	42	39	2	0	29	1	20	
Peak Hour Factor	0.92	0.51	0.51	0.51	0.92	0.83	0.83	0.83	0.92	0.66	0.66	0.66	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	0	80	39	0	51	47	2	0	44	2	30	
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	
Approach													
Approach	EB			WB			NB			SB			
Opposing Approach	WB			EB						SB			
Opposing Lanes	1			1						1			
Conflicting Approach Left	SB			NB			EB			WB			
Conflicting Lanes Left	1			1			1			1			
Conflicting Approach Right	NB			SB			WB			EB			
Conflicting Lanes Right	1			1			1			1			
HCM Control Delay	7.7			7.9			7.7			7.4			
HCM LOS	A			A			A			A			
Lane													
Lane	NBLn1		EBLn1		WBLn1		SBLn1						
Vol Left, %	58%		0%		51%		43%						
Vol Thru, %	2%		67%		47%		14%						
Vol Right, %	40%		33%		2%		43%						
Sign Control	Stop		Stop		Stop		Stop						
Traffic Vol by Lane	50		61		83		7						
LT Vol	29		0		42		3						
Through Vol	1		41		39		1						
RT Vol	20		20		2		3						
Lane Flow Rate	76		120		100		12						
Geometry Grp	1		1		1		1						
Degree of Util (X)	0.091		0.132		0.118		0.014						
Departure Headway (Hd)	4.302		3.966		4.265		4.325						
Convergence, Y/N	Yes		Yes		Yes		Yes						
Cap	838		892		831		832						
Service Time	2.302		2.045		2.342		2.328						
HCM Lane V/C Ratio	0.091		0.135		0.12		0.014						
HCM Control Delay	7.7		7.7		7.9		7.4						
HCM Lane LOS	A		A		A		A						
HCM 95th-tile Q	0.3		0.5		0.4		0						

Lanes, Volumes, Timings
14: Smith & University Place

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	1	1	4	4	4	4
Traffic Volume (vph)	43	5	16	60	6	26
Future Volume (vph)	43	5	16	60	6	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.986				0.890	
Flt Protected				0.989	0.991	
Satd. Flow (prot)	1837	0	0	1842	1643	0
Flt Permitted				0.989	0.991	
Satd. Flow (perm)	1837	0	0	1842	1643	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	960			370	305	
Travel Time (s)	21.8			8.4	6.9	
Peak Hour Factor	0.50	0.50	0.86	0.86	0.50	0.50
Adj. Flow (vph)	86	10	19	70	12	52
Shared Lane Traffic (%)						
Lane Group Flow (vph)	96	0	0	89	64	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free	Free	Free	Free	Stop	Stop

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 20.7%

Analysis Period (min) 15

ICU Level of Service A

HCM 2010 TWSC
14: Smith & University Place

University Place Closure - Syracuse University
PM Peak Hour - Existing Conditions

Intersection	EBT	EBR	WBL	WBT	NBL	NBR
Int Delay, s/veh	2.9					
Movement						
Traffic Vol, veh/h	43	5	16	60	6	26
Future Vol, veh/h	43	5	16	60	6	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	50	50	86	86	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	10	19	70	12	52

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	198
Stage 1	-	-	91
Stage 2	-	-	107
Critical Hdwy	-	4.12	6.42
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	2.218	3.518
Pot Cap-1 Maneuver	-	1498	791
Stage 1	-	-	933
Stage 2	-	-	917
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	1498	781
Mov Cap-2 Maneuver	-	-	781
Stage 1	-	-	933
Stage 2	-	-	905

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	9.2
HCM LOS		A	A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	926	-	-	1498	-
HCM Lane V/C Ratio	0.069	-	-	0.012	-
HCM Control Delay (s)	9.2	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %ile Q(veh)	0.2	-	-	0	-

A5

Level of Service
Calculations: **2016 Future**
Conditions

Lanes, Volumes, Timings
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	4	4
Traffic Volume (vph)	1	0	0	32	76	7
Future Volume (vph)	1	0	0	32	76	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.950				0.989	
Satd. Flow (prot)	1770	0	0	1863	1842	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1863	1842	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	319			199	408	
Travel Time (s)	7.3			4.5	9.3	
Peak Hour Factor	0.25	0.25	0.67	0.67	0.94	0.94
Adj. Flow (vph)	4	0	0	48	81	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	0	48	88	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	14.4%					
Analysis Period (min)	15					
	ICU Level of Service A					

HCM 2010 AWSC
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

Intersection												
Intersection Delay, s/veh		7.3										
Intersection LOS		A										
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBRL	SBTR	SBTL	
Traffic Vol, veh/h	0	1	0	0	0	32	0	76	7	7	7	
Future Vol, veh/h	0	1	0	0	0	32	0	76	7	7	7	
Peak Hour Factor	0.92	0.25	0.25	0.92	0.67	0.67	0.92	0.94	0.94	0.94	0.94	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	4	0	0	0	48	0	81	7	7	7	
Number of Lanes	0	1	0	0	0	1	0	1	0	1	0	
Approach												
Approach	EB		EB		NB		NB		SB		SB	
Opposing Approach												
Opposing Lanes	0		SB		1		SB		NB		1	
Conflicting Approach Left	SB		SB		EB		EB		1		0	
Conflicting Lanes Left	1		1		1		1		0		0	
Conflicting Approach Right	NB		NB						EB		EB	
Conflicting Lanes Right	1		1		0		0		1		1	
HCM Control Delay	7.4		7.4		7.2		7.4		7.4		7.4	
HCM LOS	A		A		A		A		A		A	
Lane												
Lane	NBLn1		EBLn1		SBLn1							
Vol Left, %	0%		100%		0%							
Vol Thru, %	100%		0%		92%							
Vol Right, %	0%		0%		8%							
Sign Control	Stop		Stop		Stop							
Traffic Vol by Lane	32		1		83							
LT Vol	0		1		0							
Through Vol	32		0		76							
RT Vol	0		0		7							
Lane Flow Rate	48		4		88							
Geometry Grp	1		1		1							
Degree of Util (X)	0.053		0.005		0.096							
Departure Headway (Hd)	4.007		4.367		3.926							
Convergence, Y/N	Yes		Yes		Yes							
Cap	896		814		916							
Service Time	2.024		2.422		1.937							
HCM Lane V/C Ratio	0.054		0.005		0.096							
HCM Control Delay	7.2		7.4		7.4							
HCM Lane LOS	A		A		A							
HCM 95th-tile Q	0.2		0		0.3							

Lanes, Volumes, Timings
5: S. Crouse Ave & Waverly Ave

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

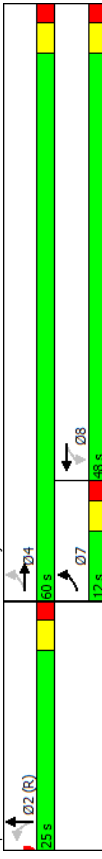
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	118	107	13	56	197	172	10	19	32	0	0	0
Traffic Volume (vph)	118	107	13	56	197	172	10	19	32	0	0	0
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.984											
Frt	0.950											
Flt Protected	0.930											
Satd. Flow (prot)	1770	1833	0	0	1748	0	0	1717	0	0	0	0
Flt Permitted	0.390											
Satd. Flow (perm)	726	1833	0	0	1658	0	0	1717	0	0	0	0
Right Turn on Red			Yes		Yes			Yes				Yes
Satd. Flow (RTOR)		15			58			44				
Link Speed (mph)		30			30			30				30
Link Distance (ft)		294			1736			408				256
Travel Time (s)		6.7			39.5			9.3				5.8
Peak Hour Factor	0.86	0.86	0.85	0.85	0.85	0.73	0.73	0.73	0.73	0.92	0.92	0.92
Adj. Flow (vph)	137	124	15	66	232	202	14	26	44	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	137	139	0	0	500	0	0	84	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Right	Left	Left	Left	Right	Left	Left	Right
Median Width(ft)	12	12	12	12	12	12	0	0	0	0	0	0
Link Offset(ft)	0				0			0				0
Crosswalk Width(ft)	16				16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15	9	15	9	15	9	15	9	15
Turn Type	pm+pt	NA	NA	Perm	NA	Perm	NA	NA	NA	NA	NA	NA
Protected Phases	7	4			8			2				
Permitted Phases	4			8			2					
Minimum Split (s)	9.0	21.0		21.0		21.0		21.0				
Total Split (s)	12.0	60.0		48.0		48.0		25.0		25.0		
Total Split (%)	14.1%	70.6%		56.5%		56.5%		29.4%		29.4%		
Maximum Green (s)	7.0	95.0		43.0		43.0		20.0		20.0		
Yellow Time (s)	3.0	3.0		3.0		3.0		3.0		3.0		
All-Red Time (s)	2.0	2.0		2.0		2.0		2.0		2.0		
Lost Time Adjust (s)	0.0	0.0		0.0		0.0		0.0		0.0		
Total Lost Time (s)	5.0	5.0		5.0		5.0		5.0		5.0		
Lead/Lag	Lead			Lag		Lag		Lead		Lag		
Lead-Lag Optimize?	Yes			Yes		Yes		Yes		Yes		
Walk Time (s)		5.0		5.0		5.0		5.0		5.0		
Flash Dont Walk (s)		11.0		11.0		11.0		11.0		11.0		
Pedestrian Calls (#/hr)		0		0		0		0		0		
Act Effct Green (s)	55.0	55.0		43.0		43.0		20.0		20.0		
Actuated g/C Ratio	0.65	0.65		0.51		0.51		0.24		0.24		
v/c Ratio	0.25	0.12		0.58		0.58		0.19		0.19		
Control Delay	6.9	5.4		16.0		16.0		15.7		15.7		
Queue Delay	0.0	0.0		0.0		0.0		0.0		0.0		
Total Delay	6.9	5.4		16.0		16.0		15.7		15.7		

Lanes, Volumes, Timings
5: S. Crouse Ave & Waverly Ave

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A		B	B		B	B		B	B	B
Approach Delay	6.1			16.0			15.7					
Approach LOS	A			B			B					
Intersection Summary												
Area Type:	Other											
Cycle Length: 85												
Actuated Cycle Length: 85												
Offset: 0 (0%): Referenced to phase 2/NBTL and 6.: Start of Green												
Natural Cycle: 60												
Control Type: Pretimed												
Maximum v/c Ratio: 0.58												
Intersection Signal Delay: 12.8												
Intersection Capacity Utilization 44.8%												
Analysis Period (min) 15												

Splits and Phases: 5: S. Crouse Ave & Waverly Ave



Lanes, Volumes, Timings
8: Constock Ave & University Place

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	4	5	11	10	14	20	32	258	8	4	104	30
Traffic Volume (vph)	14	5	11	10	14	20	32	258	8	4	104	30
Future Volume (vph)	14	5	11	10	14	20	32	258	8	4	104	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.950				0.939			0.997			0.970	
Flt Protected	0.977				0.989			0.995			0.999	
Satd. Flow (prot)	0	1729	0	0	1730	0	0	1848	0	0	1805	0
Flt Permitted	0.895				0.952			0.954			0.990	
Satd. Flow (perm)	0	1584	0	0	1665	0	0	1772	0	0	1789	0
Right Turn on Red		Yes			Yes			Yes			Yes	
Satd. Flow (RTOR)	18				35			2			17	
Link Speed (mph)	30				30			30			30	
Link Distance (ft)	414				259			550			410	
Travel Time (s)	9.4				5.9			12.5			9.3	
Peak Hour Factor	0.61	0.61	0.61	0.57	0.57	0.77	0.77	0.77	0.77	0.95	0.95	0.95
Adj. Flow (vph)	23	8	18	18	25	35	42	335	10	4	109	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	49	0	0	78	0	0	387	0	0	145	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Link Offset(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15				15			9	15		9	
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	NA
Protected Phases	4			4			2			2		
Permitted Phases												
Minimum Split (s)	23.0	23.0	23.0	23.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (s)	55.0	55.0	55.0	55.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Total Split (%)	61.1%	61.1%	61.1%	61.1%	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%	38.9%
Maximum Green (s)	50.0	50.0	50.0	50.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0			5.0			5.0			5.0		
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Pedestrian Calls (#/hr)	100	100	100	100	5	5	5	5	5	5	5	5
Act Effct Green (s)	50.0			50.0			30.0			30.0		
Actuated g/C Ratio	0.56			0.56			0.33			0.33		
v/c Ratio	0.06			0.08			0.65			0.24		
Control Delay	6.7			6.0			31.7			38.8		
Queue Delay	0.0			0.0			0.0			0.0		
Total Delay	6.7			6.0			31.7			38.8		

Lanes, Volumes, Timings
8: Constock Ave & University Place

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A	A	A	A	A	C	C	C	C	D	D
Approach Delay	6.7			6.0			31.7			38.8		
Approach LOS	A			A			C			D		
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%): Referenced to phase 2:NBSB, Start of Yellow												
Natural Cycle: 50												
Control Type: Pretimed												
Maximum v/c Ratio: 0.65												
Intersection Signal Delay: 28.4												
Intersection Capacity Utilization 47.5%												
Analysis Period (min) 15												
Splits and Phases:	8: Constock Ave & University Place											

Lanes, Volumes, Timings
9: Constock Ave & Waverly Ave

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	43	26	131	2	133	32	196	91	0	0	0	0
Traffic Volume (vph)	43	26	131	2	133	32	196	91	0	0	0	0
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.911				0.974							
Frt	0.989											
Flt Protected	0	1678	0	0	1814	0	0	1801	0	0	0	0
Satd. Flow (prot)	0.901				0.998			0.967				
Flt Permitted	0	1529	0	0	1811	0	0	1801	0	0	0	0
Satd. Flow (perm)		No			No			No				Yes
Right Turn on Red												
Satd. Flow (RTOR)												
Link Speed (mph)	30				30			30				30
Link Distance (ft)	1736				280			410				291
Travel Time (s)	39.5				6.4			9.3				6.6
Peak Hour Factor	0.93	0.93	0.93	0.81	0.81	0.81	0.82	0.82	0.82	0.92	0.92	0.92
Adj. Flow (vph)	46	28	141	2	164	40	239	111	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	215	0	0	206	0	0	350	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Link Offset(ft)	0				0			0				0
Crosswalk Width(ft)	16				16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15				9	15	9	15	9	15	9	15
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	NA	NA	NA	NA
Protected Phases		4			8			2				
Permitted Phases	4			8		2						
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0				
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	50.0	50.0		
Total Split (%)	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	55.6%	55.6%		
Maximum Green (s)	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	45.0	45.0		
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.0				5.0			5.0				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0				
Act Effct Green (s)	35.0			35.0		35.0		45.0				
Actuated g/C Ratio	0.39			0.39		0.39		0.50				
v/c Ratio	0.36			0.29		0.29		0.39				
Control Delay	21.8			20.4		20.4		9.0				
Queue Delay	0.0			0.0		0.0		0.1				
Total Delay	21.8			20.4		20.4		9.1				

Lanes, Volumes, Timings
9: Constock Ave & Waverly Ave

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C			C			A					
Approach Delay	21.8			20.4			9.1					
Approach LOS	C			C			A					
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%): Referenced to phase 2/NBTL, Start of Yellow												
Natural Cycle: 50												
Control Type: Pretimed												
Maximum v/c Ratio: 0.39												
Intersection Signal Delay: 15.7												
Intersection Capacity Utilization 49.0%												
Analysis Period (min) 15												
Intersection LOS: B												
ICU Level of Service A												
Spits and Phases:	9: Constock Ave & Waverly Ave											
	50 s	02 (R)	40 s	40 s	08	40 s						

Lanes, Volumes, Timings
12: College Place/Driveway & University Place

HCM 2010 AWSC
12: College Place/Driveway & University Place

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

University Place Closure - Syracuse University
AM Peak Hour - Future Conditions

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W					4
Traffic Volume (vph)	74	10	4	32	2	3
Future Volume (vph)	74	10	4	32	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.984		0.879			
Flt Protected	0.958					0.980
Satd. Flow (prot)	1756	0	1637	0	0	1825
Flt Permitted	0.958					0.980
Satd. Flow (perm)	1756	0	1637	0	0	1825
Link Speed (mph)	30		30			30
Link Distance (ft)	414		474			157
Travel Time (s)	9.4		10.8			3.6
Peak Hour Factor	0.72	0.72	0.75	0.75	0.42	0.42
Adj. Flow (vph)	103	14	5	43	5	7
Shared Lane Traffic (%)						
Lane Group Flow (vph)	117	0	48	0	0	12
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Stop		Stop	Stop
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	14.7%					
Analysis Period (min)	15					
	ICU Level of Service A					

Intersection										
Intersection Delay, s/veh	7.5									
Intersection LOS	A									
Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT	
Traffic Vol, veh/h	0	74	10	0	4	32	0	2	3	
Future Vol, veh/h	0	74	10	0	4	32	0	2	3	
Peak Hour Factor	0.92	0.72	0.72	0.92	0.75	0.75	0.92	0.42	0.42	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	103	14	0	5	43	0	5	7	
Number of Lanes	0	1	0	0	1	0	0	0	1	
Approach										
Opposing Approach										
Opposing Lanes	0									
Conflicting Approach Left	NB									
Conflicting Lanes Left	1									
Conflicting Approach Right	SB									
Conflicting Lanes Right	1									
HCM Control Delay	7.8									
HCM LOS	A									
Lane	NBLn1	WBLn1	SBLn1							
Vol Left, %	0%	88%	40%							
Vol Thru, %	11%	0%	60%							
Vol Right, %	89%	12%	0%							
Sign Control	Stop	Stop	Stop							
Traffic Vol by Lane	36	84	5							
LT Vol	0	74	2							
Through Vol	4	0	3							
RT Vol	32	10	0							
Lane Flow Rate	48	117	12							
Geometry Grp	1	1	1							
Degree of Util (X)	0.048	0.134	0.014							
Departure Headway (Hd)	3.614	4.144	4.257							
Convergence, Y/N	Yes	Yes	Yes							
Cap	980	867	833							
Service Time	1.676	2.16	2.321							
HCM Lane V/C Ratio	0.049	0.135	0.014							
HCM Control Delay	6.9	7.8	7.4							
HCM Lane LOS	A	A	A							
HCM 95th-tile Q	0.2	0.5	0							

Lanes, Volumes, Timings
 13: College Place & New Parking Lot

University Place Closure - Syracuse University
 AM Peak Hour - Future Conditions



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		4	4		
Traffic Volume (vph)	12	5	9	24	56	21
Future Volume (vph)	12	5	9	24	56	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.959				0.963	
Flt Protected	0.966			0.987		
Satd. Flow (prot)	1726	0	0	1839	1794	0
Flt Permitted	0.966			0.987		
Satd. Flow (perm)	1726	0	0	1839	1794	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	267			285	474	
Travel Time (s)	6.1			6.5	10.8	
Peak Hour Factor	0.85	0.85	0.75	0.75	0.75	0.75
Adj. Flow (vph)	14	6	12	32	75	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	0	0	44	103	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	18.4%					
Analysis Period (min)	15					
	ICU Level of Service A					

HCM 2010 TWSC
 13: College Place & New Parking Lot

University Place Closure - Syracuse University
 AM Peak Hour - Future Conditions

Intersection	1.6					
Int Delay, s/veh						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	12	5	9	24	56	21
Future Vol, veh/h	12	5	9	24	56	21
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	85	85	75	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	6	12	32	75	28
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	145	89	103	0	-	0
Stage 1	89	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	847	969	1489	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	840	969	1489	-	-	-
Mov Cap-2 Maneuver	840	-	-	-	-	-
Stage 1	934	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.2	2		0		
HCM LOS	A					

Lanes, Volumes, Timings
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4		
Traffic Volume (vph)	5	0	0	38	44	2
Future Volume (vph)	5	0	0	38	44	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.950				0.994	
Satd. Flow (prot)	1770	0	0	1863	1852	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1863	1852	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	319			199	408	
Travel Time (s)	7.3			4.5	9.3	
Peak Hour Factor	0.31	0.31	0.73	0.73	0.88	0.98
Adj. Flow (vph)	16	0	0	52	45	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	0	0	52	47	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Stop	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	13.3%					
Analysis Period (min)	15					
	ICU Level of Service A					

HCM 2010 AWSC
3: University Place & S. Crouse Ave

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

Intersection										
Intersection Delay, s/veh	7.3									
Intersection LOS	A									
Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBRL	SBR
Traffic Vol, veh/h	0	5	0	0	0	38	0	44	2	2
Future Vol, veh/h	0	5	0	0	0	38	0	44	2	2
Peak Hour Factor	0.92	0.31	0.31	0.92	0.73	0.73	0.92	0.98	0.98	0.98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	0	0	0	52	0	45	2	2
Number of Lanes	0	1	0	0	0	1	0	1	0	0
Approach	EBU	EBL	EBR	NBU	NBL	NBT	SBU	SBT	SBRL	SBR
Opposing Approach	SB									
Opposing Lanes	1									
Conflicting Approach Left	EB									
Conflicting Lanes Left	1									
Conflicting Approach Right	EB									
Conflicting Lanes Right	1									
HCM Control Delay	7.2									
HCM LOS	A									
Lane	NBLn1	EBLn1	SBLn1							
Vol Left, %	0%	100%	0%							
Vol Thru, %	100%	0%	96%							
Vol Right, %	0%	0%	4%							
Sign Control	Stop	Stop	Stop							
Traffic Vol by Lane	38	5	46							
LT Vol	0	5	0							
Through Vol	38	0	44							
RT Vol	0	0	2							
Lane Flow Rate	52	16	47							
Geometry Grp	1	1	1							
Degree of Util (X)	0.058	0.019	0.052							
Departure Headway (Hd)	3.997	4.305	3.974							
Convergence, Y/N	Yes	Yes	Yes							
Cap	897	828	902							
Service Time	2.015	2.347	1.994							
HCM Lane V/C Ratio	0.058	0.019	0.052							
HCM Control Delay	7.3	7.4	7.2							
HCM Lane LOS	A	A	A							
HCM 95th-ile Q	0.2	0.1	0.2							

Lanes, Volumes, Timings
5: S. Crouse Ave & Waverly Ave

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

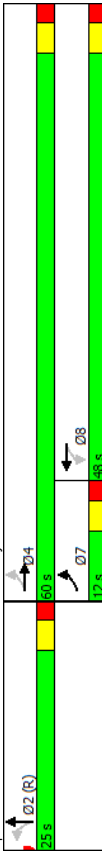
	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	124	225	15	33	155	256	10	19	32	0	0	0
Traffic Volume (vph)	124	225	15	33	155	256	10	19	32	0	0	0
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.991											
Ft	0.950											
Flt Protected	1770	1846	0	0	1711	0	0	1717	0	0	0	0
Satd. Flow (prot)	0.369											
Flt Permitted	687	1846	0	0	1650	0	0	1717	0	0	0	0
Satd. Flow (perm)			Yes			Yes			Yes			
Right Turn on Red	8				117			46				
Satd. Flow (RTOR)	30				30			30				
Link Speed (mph)	294				1736			408				
Link Distance (ft)	6.7				39.5			9.3				
Travel Time (s)	0.88	0.88	0.85	0.85	0.85	0.85	0.69	0.69	0.69	0.92	0.92	0.92
Peak Hour Factor	141	256	17	39	182	301	14	28	46	0	0	0
Adj. Flow (vph)												
Shared Lane Traffic (%)	141	273	0	0	522	0	0	88	0	0	0	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	12	12	12	12	12	12	12	12	12	12	12	12
Link Offset(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Crosswalk Width(ft)	16	16	16	16	16	16	16	16	16	16	16	16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	15	15	15	15	15	15	15	15	15	15	15
Turn Type	pm+pt	NA	NA	Perm	NA	Perm	NA	NA	NA	NA	NA	NA
Protected Phases	7	4			8			2				
Permitted Phases	4			8			2					
Minimum Split (s)	9.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Split (s)	12.0	60.0	48.0	48.0	48.0	48.0	25.0	25.0	25.0	25.0	25.0	25.0
Total Split (%)	14.1%	70.6%	56.5%	56.5%	56.5%	56.5%	29.4%	29.4%	29.4%	29.4%	29.4%	29.4%
Maximum Green (s)	7.0	55.0	43.0	43.0	43.0	43.0	20.0	20.0	20.0	20.0	20.0	20.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lag	Lag	Lag	Lag	Lag	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Walk Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effct Green (s)	55.0	55.0	43.0	43.0	43.0	43.0	20.0	20.0	20.0	20.0	20.0	20.0
Actuated g/C Ratio	0.65	0.65	0.51	0.51	0.51	0.51	0.24	0.24	0.24	0.24	0.24	0.24
v/c Ratio	0.26	0.23	0.59	0.59	0.59	0.59	0.20	0.20	0.20	0.20	0.20	0.20
Control Delay	7.1	6.6	14.3	14.3	14.3	14.3	15.7	15.7	15.7	15.7	15.7	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.1	6.6	14.3	14.3	14.3	14.3	15.7	15.7	15.7	15.7	15.7	15.7

Lanes, Volumes, Timings
5: S. Crouse Ave & Waverly Ave

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A	A	B	B	B	B	B	B	B	B	B
Approach Delay	6.8			14.3			15.7					
Approach LOS	A			B			B					
Intersection Summary												
Area Type:	Other											
Cycle Length: 85												
Actuated Cycle Length: 85												
Offset: 0 (0%): Referenced to phase 2/NBTL and 6.: Start of Green												
Natural Cycle: 60												
Control Type: Pretimed												
Maximum v/c Ratio: 0.59												
Intersection Signal Delay: 11.4												
Intersection Capacity Utilization 54.4%												
Analysis Period (min) 15												

Splits and Phases: 5: S. Crouse Ave & Waverly Ave



Lanes, Volumes, Timings
8: Constock Ave & University Place

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	30	10	16	14	10	28	35	282	15	3	208	15
Traffic Volume (vph)	30	10	16	14	10	28	35	282	15	3	208	15
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.961											
Ft	0.974											
Flt Protected	0.974											
Satd. Flow (prot)	0.1744	0	0	1704	0	0	1842	0	0	1844	0	0
Flt Permitted	0.950											
Satd. Flow (perm)	0.1522	0	0	1620	0	0	1750	0	0	1837	0	0
Right Turn on Red	Yes											
Satd. Flow (RTOR)	30	30	32	30	30	30	30	30	30	30	30	30
Link Speed (mph)	414											
Link Distance (ft)	9.4											
Travel Time (s)	56	19	30	16	11	32	36	291	15	4	251	18
Adj. Flow (vph)	0.54	0.54	0.54	0.87	0.87	0.87	0.97	0.97	0.97	0.83	0.83	0.83
Shared Lane Traffic (%)	0	105	0	0	59	0	0	342	0	0	273	0
Lane Group Flow (vph)	No	No	No	No	No	No	No	No	No	No	No	No
Enter Blocked Intersection	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Lane Alignment	0	0	0	0	0	0	0	0	0	0	0	0
Median Width(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Link Offset(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Crosswalk Width(ft)	16											
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15	9	15	9	15	9	15	9	15	9
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases	4	4	4	4	4	4	4	4	4	4	4	4
Permitted Phases	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
Minimum Split (s)	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
Total Split (s)	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%
Total Split (%)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Maximum Green (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Yellow Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lost Time Adjust (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Total Lost Time (s)												
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	100	100	100	100	100	100	100	100	100	100	100	100
Act Effct Green (s)	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Actuated g/C Ratio	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
v/c Ratio	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Control Delay	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3

Lanes, Volumes, Timings
8: Constock Ave & University Place

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	A	A	A	A	A	A	C	C	C	C	D	D
Approach Delay	7.3			5.4			29.5				40.8	
Approach LOS	A			A			C				D	
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%): Referenced to phase 2:NBSB, Start of Yellow												
Natural Cycle: 50												
Control Type: Pretimed												
Maximum v/c Ratio: 0.58												
Intersection Signal Delay: 28.6												
Intersection Capacity Utilization 55.8%												
Analysis Period (min) 15												
Splits and Phases: 8: Constock Ave & University Place												

Lanes, Volumes, Timings
9: Constock Ave & Waverly Ave

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	47	76	218	6	73	11	226	105	6	0	0	0
Traffic Volume (vph)	47	76	218	6	73	11	226	105	6	0	0	0
Future Volume (vph)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Ideal Flow (vphpl)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Util. Factor	0.914											
Ft	0.993											
Flt Protected	0	1691	0	0	1827	0	0	1798	0	0	0	0
Satd. Flow (prot)	0.943											
Flt Permitted	0	1606	0	0	1778	0	0	1798	0	0	0	0
Satd. Flow (perm)	0	1606	0	0	1778	0	0	1798	0	0	0	0
Right Turn on Red			No			No			No			Yes
Satd. Flow (RTOR)												
Link Speed (mph)	30				30			30				30
Link Distance (ft)	1736				280			410				291
Travel Time (s)	39.5				6.4			9.3				6.6
Peak Hour Factor	0.79	0.79	0.79	0.77	0.77	0.77	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	96	276	8	95	14	246	114	7	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	431	0	0	117	0	0	367	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Link Offset(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Crosswalk Width(ft)	16				16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15											
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	NA	Perm	NA	Perm
Protected Phases	4		8		8		2					
Permitted Phases	4		8		8		2					
Minimum Split (s)	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0				
Total Split (s)	40.0	40.0	40.0	40.0	40.0	40.0	50.0	50.0				
Total Split (%)	44.4%	44.4%	44.4%	44.4%	44.4%	44.4%	55.6%	55.6%				
Maximum Green (s)	35.0	35.0	35.0	35.0	35.0	45.0	45.0	45.0				
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0				
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Total Lost Time (s)	5.0				5.0		5.0					
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)	0											
Act Effct Green (s)	35.0				35.0		45.0					
Actuated g/C Ratio	0.39				0.39		0.50					
v/c Ratio	0.69				0.17		0.41					
Control Delay	30.0				18.9		9.5					
Queue Delay	0.0				0.0		0.1					
Total Delay	30.0				18.9		9.6					

Lanes, Volumes, Timings
9: Constock Ave & Waverly Ave

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C			B			A					
Approach Delay	30.0			18.9			9.6					
Approach LOS	C			B			A					
Intersection Summary												
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 90												
Offset: 0 (0%) Referenced to phase 2/NBTL, Start of Yellow												
Natural Cycle: 50												
Control Type: Pretimed												
Maximum v/c Ratio: 0.69												
Intersection Signal Delay: 20.4												
Intersection Capacity Utilization 53.4%												
Analysis Period (min) 15												
Splits and Phases:	9: Constock Ave & Waverly Ave											
	50 s						40 s					
							40 s					
							40 s					

Lanes, Volumes, Timings
12: College Place/Driveway & University Place

HCM 2010 AWSC
12: College Place/Driveway & University Place

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			+
Traffic Volume (vph)	56	2	1	43	6	1
Future Volume (vph)	56	2	1	43	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.996		0.869			
Flt Protected	0.954					0.960
Satd. Flow (prot)	1770	0	1619	0	0	1788
Flt Permitted	0.954					0.960
Satd. Flow (perm)	1770	0	1619	0	0	1788
Link Speed (mph)	30		30			30
Link Distance (ft)	414		474			157
Travel Time (s)	9.4		10.8			3.6
Peak Hour Factor	0.83	0.83	0.66	0.66	0.58	0.58
Adj. Flow (vph)	67	2	2	65	10	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	69	0	67	0	0	12
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	15.2%					
Analysis Period (min)	15					
	ICU Level of Service A					

Intersection	WBL	WBR	NBT	NBR	SBL	SBT
Intersection Delay, s/veh	7.2					
Intersection LOS	A					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	0	56	2	0	43	6
Future Vol, veh/h	0	56	2	0	43	6
Peak Hour Factor	0.92	0.83	0.92	0.66	0.92	0.58
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	67	2	0	65	10
Number of Lanes	0	1	0	1	0	1
Approach	WB		NB		SB	
Opposing Approach			SB			NB
Conflicting Lanes	0		1			1
Conflicting Approach Left						
Conflicting Lanes Left	1		0			1
Conflicting Approach Right						
Conflicting Lanes Right	1		1			0
HCM Control Delay	7.6		6.8		7.4	
HCM LOS	A		A		A	
Lane	NBLn1	WBLn1	SBLn1			
Vol Left, %	0%	97%	86%			
Vol Thru, %	2%	0%	14%			
Vol Right, %	98%	3%	0%			
Sign Control	Stop	Stop	Stop			
Traffic Vol by Lane	44	58	7			
LT Vol	0	56	6			
Through Vol	1	0	1			
RT Vol	43	2	0			
Lane Flow Rate	67	70	12			
Geometry Grp	1	1	1			
Degree of Util (X)	0.064	0.082	0.014			
Departure Headway (Hd)	3.479	4.243	4.279			
Convergence, Y/N	Yes	Yes	Yes			
Cap	1023	846	833			
Service Time	1.521	2.258	2.323			
HCM Lane V/C Ratio	0.065	0.083	0.014			
HCM Control Delay	6.8	7.6	7.4			
HCM Lane LOS	A	A	A			
HCM 95th-tile Q	0.2	0.3	0			

Lanes, Volumes, Timings
13: College Place

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		4			
Traffic Volume (vph)	23	9	7	21	43	14
Future Volume (vph)	23	9	7	21	43	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Flt	0.962				0.967	
Flt Protected	0.965			0.987		
Satd. Flow (prot)	1729	0	0	1839	1801	0
Flt Permitted	0.965			0.987		
Satd. Flow (perm)	1729	0	0	1839	1801	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	261			318	474	
Travel Time (s)	5.9			7.2	10.8	
Peak Hour Factor	0.50	0.50	0.66	0.66	0.66	0.66
Adj. Flow (vph)	46	18	11	32	65	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	64	0	0	43	86	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	17.2%					
Analysis Period (min)	15					
ICU Level of Service A						

HCM 2010 TWSC
13: College Place

University Place Closure - Syracuse University
PM Peak Hour - Future Conditions

Intersection		3.5					
Int Delay, s/veh							
Movement		EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h		23	9	7	21	43	14
Future Vol, veh/h		23	9	7	21	43	14
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		50	50	66	66	66	66
Heavy Vehicles, %		2	2	2	2	2	2
Mvmt Flow		46	18	11	32	65	21
Major/Minor		Minor2	Major1	Major2			
Conflicting Flow All		129	76	86	0	-	0
Stage 1		76	-	-	-	-	-
Stage 2		53	-	-	-	-	-
Critical Hdwy		6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1		5.42	-	-	-	-	-
Critical Hdwy Stg 2		5.42	-	-	-	-	-
Follow-up Hdwy		3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver		865	985	1510	-	-	-
Stage 1		947	-	-	-	-	-
Stage 2		970	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver		859	985	1510	-	-	-
Mov Cap-2 Maneuver		859	-	-	-	-	-
Stage 1		947	-	-	-	-	-
Stage 2		963	-	-	-	-	-
Approach		EB	NB	SB			
HCM Control Delay, s		9.4	1.9	0			
HCM LOS		A					
Minor Lane/Major Mvmt		NBL	NBT	EBL	EBT	SBL	SBR
Capacity (veh/h)		1510	-	891	-	-	-
HCM Lane V/C Ratio		0.007	-	0.072	-	-	-
HCM Control Delay (s)		7.4	0	94	-	-	-
HCM Lane LOS		A	A	A	-	-	-
HCM 95th %ile Q(veh)		0	-	0.2	-	-	-