



MASER
CONSULTING

Traffic Impact Study

Epic Church

Block 257, Lot 3.06

Borough of Sayreville, Middlesex County, New Jersey

February 12, 2021

Prepared For

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I. INTRODUCTION

The following report has been prepared for Sayreville Seaport Associates Urban Renewal, LP (“Applicant”) in association with proposed site improvements (“The Project”) along Main Street Extension in the Borough of Sayreville, Middlesex County, New Jersey. The site is currently developed with a 2,500-seat church. It is proposed to develop the surrounding area as part of the Riverton development. This project will modify the site to better align with the Riverton development. As such, no changes are proposed to the intensity or use of the Epic Church property. The site is designated as Block 257, Lot 3.06 on the Borough of Sayreville Tax Maps. A site location map is included as **Figure 1 in Appendix A**.

Access to the site is proposed via the existing right-in/right-out only driveway along Main Street Extension. The existing full-movement driveway along Chevalier Avenue will become a right-in/right-out only driveway with the proposed expansion of Riverton Boulevard. A full-movement driveway is proposed along Peter Fisher Boulevard to the south of the site. **Figure 2 in Appendix A** illustrates the proposed Dimension Plan.

This study presents an evaluation of the current and future traffic conditions in the vicinity of the site. Specific elements included in this study are:

- An inventory of the roadway facilities in the vicinity of the project, including the existing physical and traffic operating characteristics;
- Determination of the Existing Conditions;
- Site Generated Trips;
- Trip Distribution and Assignment;
- Forecast of No-Build Traffic Volumes;
- Peak Hour Capacity Analysis for the No-Build Conditions;
- Forecast of the Build Traffic Volumes;
- Peak Hour Capacity Analysis for the Build Conditions;
- Site Access and Parking Assessment; and
- Summary and Conclusions.

This report relies in part on the *Traffic Planning Study*, prepared by Maser Consulting, Inc., which was previously submitted to the Planning Board as part of the now-approved development application for Riverton, projecting the build-out scenario for the adjacent redevelopment.

II. EXISTING ROADWAY CONDITIONS

A field investigation was conducted adjacent to the project site to obtain an inventory of existing roadway conditions, posted traffic controls, adjacent land uses, lane configurations, and existing vehicular/pedestrian traffic patterns.

Roadways

Main Street Extension is an urban minor arterial roadway under jurisdiction of the Borough of Sayreville with a general north-south orientation. The roadway provides two (2) travel lanes in each direction with a posted speed limit of 45 MPH.

Garden State Parkway Ramps are under jurisdiction of the New Jersey Turnpike Authority (NJTA) within the vicinity of the site. The roadway provides seven (7) travel lanes in each direction with a posted speed limit of 65 MPH.

Chevalier Avenue is an urban minor arterial roadway under jurisdiction of the Borough of Sayreville. The roadway provides one (1) travel lane in each direction with a posted speed limit of 25 MPH. It is noted Chevalier Avenue is proposed to be renamed “Riverton Boulevard” and is referred to as such in this report.

Signaled Intersections

Riverton Boulevard (Chevalier Avenue) & Main Street Extension was previously an unsignalized ‘T’ intersection, with Chevalier Avenue having the right of way. All movements were permitted. The northbound approach of Main Street Extension, which was stop controlled, provided a channelized right-turn lane and a dedicated left-turn lane. Both the eastbound and westbound approaches of Chevalier Avenue provided one (1) lane for all turning movements. Since the construction of the GSP SB Off-Ramp, the intersection of Chevalier Avenue & Main Street Extension has been signalized and the approaches expanded. The intersection is currently under temporary traffic control operation associated with the GSP Interchange 125 project. The southbound approach of the GSP SB Off-Ramp provides one (1) dedicated left-turn lane, two (2) dedicated through lanes, and one (1) dedicated right-turn lane. The northbound approach of Main Street Extension provides one (1) dedicated left-turn lane and a channelized right-turn lane under signal control. The westbound approach of Chevalier Avenue provides one (1) dedicated left-turn lane and one (1) shared left-turn/through lane. The eastbound approach of Chevalier Avenue provides one (1) shared through/right-turn lane. Under the full build-out Phase 4 of Riverton, the GSP NB On-Ramp will become operational as part of the northern leg of the intersection. As such, the lane geometry will be revised accordingly. The northbound approach of Main Street Extension will provide two (2) dedicated left-turn lanes, two (2) dedicated through lanes, and a channelized right-turn lane under signal control. Both the southbound approach of the GSP SB Off-Ramp and the eastbound approach of Riverton Boulevard will provide two (2) dedicated left-turn lanes, two (2) dedicated through lanes, and one (1) dedicated right-turn lane. The westbound approach of Riverton Boulevard will provide two (2) dedicated left-turn lanes and two (2) dedicated through lanes.

III. EXISTING TRAFFIC CONDITIONS

Traffic volume data for the roadway network adjacent to the subject property was obtained through turning movement counts (“TMC”) on Thursday, August 9, 2012 from 6:30 PM to 9:30 PM and on Sunday, August 12, 2012 from 9:00 AM to 1:00 PM at the following intersections:

- Chevalier Avenue & Main Street Extension;
- Chevalier Avenue & Site Driveway;
- Main Street Extension & North Site Driveway; and
- Main Street Extension & South Site Driveway.

Table 1 details the data collection efforts and peak hours.

Table 1 – Data Collection Efforts and Established Peak Hours

Peak Period	Date Collected	Traffic Count Time Frame	Established Peak Hour
Weekday Evening	Thursday, August 9, 2012	6:30 PM – 9:30 PM	6:45 PM – 7:45 PM
Weekend Midday	Sunday, August 12, 2012	9:00 AM – 1:00 PM	9:45 AM – 10:45 AM

Automatic Traffic Recorders (“ATR”) were installed along Chevalier Avenue, east of Main Street Extension, and along Main Street Extension, south of Chevalier Avenue, from Thursday, August 9, 2012 to Friday, August 17, 2012 to capture a week of traffic data. The TMC and ATR data were cross-referenced to establish the existing traffic volumes. A copy of the data collection is included in **Appendix B**.

IV. TRIP GENERATION & DISTRIBUTION

Trip Generation

The ability of any roadway network to serve anticipated traffic volumes is measured by comparing peak hour traffic volumes to roadway capacities. Thus, it is essential to determine the hourly traffic volumes to be generated by The Project and add them to the No-Build traffic volumes during the peak hours.

Trip generation estimates for The Project were based on the traffic data collected at the site driveways. To provide the most conservative analysis, the Sunday peak hour trips of The Project were combined with the Saturday peak hour volumes of the adjacent roadway network to establish the weekend peak hour traffic volumes. **Table 2** details the anticipated trips for The Project.

Table 2 – Site Generated Trips

Land Use	PM Peak			Weekend Peak		
	In	Out	Total	In	Out	Total
Church	154	26	180	373	513	886

Trip Distribution

Trip distribution methodology is developed based on a variety of factors. These factors include the existing travel patterns within the adjacent roadway network, adjacent land uses, proposed land use, development locations, driveway locations, and the proximity of major arterials within the project vicinity.

The following trip distribution patterns were established upon a review of the existing roadway volumes, adjacent land uses, and anticipated commuter travel patterns.

Table 3 – Trip Distribution

To/From	Distribution
Main Street Extension – South of Site	15%
Route 35 – North of Site	5%
Route 9 – North of Site	15%
Route 35/Route 9 – South of Site	5%
Garden State Parkway – North of Site	35%
Garden State Parkway – South of Site	25%
Total	100%

Figure 4 in **Appendix A** illustrates the trip distribution. The site generated trips were implemented into the roadway network based upon the anticipated distribution and are illustrated as **Figure 5** in **Appendix A**.

V. FUTURE TRAFFIC CONDITIONS

To determine the traffic impact of the development, an estimation of the traffic operational characteristics at the Build date, without the construction of the project (or “No-Build” condition), is made.

Adjacent Development

The adjacent site is approved for a mixed-use, multi-phase development known as Riverton. Under the full-build of Phase 4, the site is proposed to include: 1,320,288 SF of retail/entertainment space, 1,961,000 SF of office/commercial space, 622,000 SF of hotel/conference space, and 2,000 residential units. The site generated trips were included within the study area per the previously prepared *Traffic Phasing Study*, prepared by Maser Consulting, dated January 2019.

No-Build Conditions

The No-Build traffic volumes represent the traffic volumes after completion of Phase 4 of Riverton, per the previously prepared *Traffic Phasing Study*. The No-Build Conditions are illustrated as **Figure 3 in Appendix A**.

Build Conditions

The Build traffic volumes were forecasted by adding the site generated traffic of The Project to the No-Build traffic volumes within the roadway network. The Build Conditions are illustrated as **Figure 6 in Appendix A**.

VI. HCM CAPACITY ANALYSIS

The peak hour traffic operations within the project vicinity were evaluated at the study intersections. The analyses were performed using the latest version of *Synchro Trafficware*, a traffic analysis and simulation program. The results of these analyses provide Levels of Service (LOS), volume/capacity descriptions, and average seconds of delay for the intersection movements.

The efficiency with which an intersection operates is a function of volume and capacity. The capacity of an intersection is the volume of vehicles it can accommodate during a given time period. LOS is a qualitative measure describing operational conditions within a traffic stream in terms of traffic characteristics such as freedom to maneuver, traffic interruption, comfort, and convenience. Six (6) LOS are defined for each type of facility with analysis procedures available. Levels of Service range from "A" through "F," with Level "A" representing excellent conditions with no delays, and failure and deficient operations denoted by Level "F." The HCM LOS criteria for signalized and unsignalized intersections are summarized in **Table 4**.

Table 4 – HCM Signalized and Unsignalized LOS/Delay Criteria

Level of Service	Average Control Delay (sec/veh)	
	Signalized Intersection	Unsignalized Intersection
A	< 10	< 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

The Levels of Service for the No-Build and Build Conditions are detailed in **Tables 5** and **6**. The capacity analysis calculation worksheets are provided in **Appendix C**.

Table 5 – Level of Service Summary (1 of 2)

Intersection	Lane Group	No-Build				Build				
		PM Peak		Weekend Peak		PM Peak		Weekend Peak		
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	
Riverton Boulevard (EB/WB) & Main Street Extension (NB)/GSP SB Off-Ramp (SB)/GSP NB On-Ramp	EB	L	D	38.8	D	41.4	D	38.8	D	44.5
		T	D	50.8	D	37.8	D	51.5	D	41.0
		R	D	37.4	C	32.8	D	37.4	C	32.8
	WB	L	D	47.1	C	32.3	D	54.1	D	35.5
		T	C	23.9	C	25.8	C	24.1	C	29.9
	NB	L	D	42.6	D	42.3	D	42.6	D	42.3
		T	E	55.7	D	36.5	E	55.7	D	36.5
		R	B	13.1	B	19.2	B	13.1	B	19.2
	SB	L	D	46.2	D	40.3	D	46.2	D	40.3
		T	D	38.3	C	28.6	D	42.4	C	30.1
		R	C	24.2	D	51.7	C	23.8	C	31.2
Overall		D	39.1	D	35.9	D	41.6	C	34.6	
Peter Fisher Boulevard (EB)/GSP NB Off-Ramp (WB)/GSP SB On-Ramp & Main Street Extension (NB/SB)	EB	L	D	53.1	C	34.6	D	53.1	D	38.0
		T	D	42.1	A	9.8	D	43.1	C	20.8
		R	C	33.1	A	6.9	C	32.9	B	13.8
	WB	L	D	41.2	D	41.9	D	41.2	D	41.9
		T	C	32.7	C	22.2	C	34.3	C	25.6
		R	B	15.1	B	12.2	B	15.5	B	12.4
	NB	L	D	38.2	D	38.5	D	37.9	D	39.5
		T	C	28.1	C	34.8	C	27.5	D	34.5
		R	C	28.1	C	34.9	C	27.5	D	34.6
	SB	L	E	75.6	D	44.7	E	76.8	D	50.1
		T	E	57.1	D	39.6	E	57.6	D	40.0
		R	C	27.9	D	40.4	C	27.9	D	39.3
Overall		D	46.1	C	30.5	D	46.3	C	33.1	

Note: Uppercase represents signalized intersections; lowercase represents unsignalized intersections.

Table 6 – Level of Service Summary (2 of 2)

Intersection	Lane Group	No-Build				Build				
		PM Peak		Weekend Peak		PM Peak		Weekend Peak		
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	
Riverton Boulevard (EB/WB) & Riverton Crossing (NB/SB)	EB	L	B	15.5	B	16.0	B	15.5	B	16.0
		T	C	21.4	C	21.1	C	21.4	C	21.1
		R	C	21.3	C	21.1	C	21.3	C	21.1
	WB	L	B	11.9	B	14.0	B	11.9	B	14.0
		T	A	6.3	C	22.6	A	6.3	C	22.6
		R	A	3.5	B	15.4	A	3.5	B	15.4
	NB	L	D	40.1	D	40.3	D	40.1	D	40.3
		T	D	38.0	D	37.1	D	38.0	D	37.1
		R	D	38.1	D	35.8	D	38.1	D	35.8
	SB	L	D	37.1	D	35.6	D	37.1	D	35.6
		T	C	26.2	C	26.7	C	26.2	C	26.7
		R	C	26.2	C	26.8	C	26.2	C	26.8
	Overall		C	23.6	C	25.4	C	23.6	C	25.4
Peter Fisher Boulevard (EB/WB) & Power Center South (NB)/Site Driveway (SB)	EB	L	A	4.5	A	4.7	A	4.5	A	5.8
		T	A	8.2	A	7.8	A	8.3	A	9.4
		R	A	8.2	A	7.7	A	8.3	A	9.4
	WB	L	A	3.8	A	3.5	A	3.9	A	4.5
		T	A	0.4	A	0.6	A	0.5	A	0.9
		R	A	0.4	A	0.6	A	0.5	A	0.9
	NB	L	C	31.9	C	31.8	C	32.0	C	32.7
		TR	D	39.9	D	40.0	D	39.9	D	40.1
		L	C	32.1	C	32.2	C	31.9	C	31.1
	SB	TR	D	36.7	D	36.7	D	36.5	C	33.8
		Overall		A	8.1	A	7.2	A	8.0	A
Riverton Boulevard (EB/WB) & Site Driveway (NB)	NB	R	b	14.6	b	13.2	c	15.0	d	33.9
Main Street Extension (NB/SB) & Site Driveway (EB)	EB	R	c	20.3	b	12.2	c	20.6	b	14.2

Note: Uppercase represents signalized intersections; lowercase represents unsignalized intersections.



Riverton Boulevard & Main Street Extension/GSP Ramps

The *Traffic Phasing Study* proposes improvements to the intersection of Riverton Boulevard & Main Street Extension/GSP Ramps. The analysis was conducted under the assumption that the proposed improvements will be fully operational by the Build year.

No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Levels of Service "E" or better during both peak hours studied. The intersection will operate at an overall Level of Service "D" during both peak hours studied.

Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service.

Peter Fisher Boulevard/GSP Ramps & Main Street Extension

The *Traffic Phasing Study* proposes improvements to the intersection of Peter Fisher Boulevard/GSP Ramps & Main Street Extension. The analysis was conducted under the assumption that the proposed improvements will be fully operational by the Build year.

No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Levels of Service "E" or better during both peak hours studied. The intersection will operate at overall Levels of Service "D" or better during both peak hours studied.

Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service.

Riverton Boulevard & Riverton Crossing

No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Levels of Service "D" or better during both peak hours studied. The intersection will operate at an overall Level of Service "C" during both peak hours studied.

Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service.



Peter Fisher Boulevard & Power Center South/Site Driveway

No-Build Analysis

Under the No-Build condition, all intersection movements will operate at Levels of Service “D” or better during both peak hours studied. The intersection will operate at an overall Level of Service “A” during both peak hours studied.

Build Analysis

Under the Build condition, all intersection movements will continue to operate at or near No-Build Levels of Service.

Riverton Boulevard & Site Driveway

No-Build Analysis

Under the No-Build condition, the northbound movement will operate at a Level of Service “B” during both peak hours studied.

Build Analysis

Under the Build condition, the northbound movement will continue to operate at or near No-Build Levels of Service during both peak hours studied.

Main Street Extension & Site Driveway

No-Build Analysis

Under the No-Build condition, the eastbound movement will operate at Levels of Service “C” or better during both peak hours studied.

Build Analysis

Under the Build condition, the eastbound movement will continue to operate at or near No-Build Levels of Service during both peak hours studied.

VII. SITE ACCESS AND PARKING ASSESSMENT

Site Access

Access to the site is proposed via the existing right-in/right-out only driveway along Main Street Extension. The existing full-movement driveway along Chevalier Avenue will become a right-in/right-out only driveway with the proposed expansion of Riverton Boulevard. A full-movement driveway is proposed along Peter Fisher Boulevard to the south of the site. The proposed site plan provides minimum 24-foot wide aisles, which can accommodate two-way circulation throughout the site. The layout of the site provides sufficient circulation for garbage trucks, delivery trucks, and emergency vehicles to efficiently maneuver through the site.

Parking Assessment

The Borough of Sayreville Ordinance sets forth a parking requirement of one (1) space for every three (3) seats for places of worship and one and a half (1.5) spaces per classroom, but not less than one (1) space per teacher and staff, for intermediate schools. Per the recommendation of the Board Planner, Thomas E. Sheehan, PP, AICP, as part of the original site plan review, the following parking requirements were adopted:

Table 7 – Parking Requirements

Land Use	Size		Ordinance Requirement		Parking Supply
Church	Auditorium	2,500 seats	1.0 space per 3 seats	834 spaces	860 spaces (Existing) 866 spaces (Proposed)
	Sunday School	10 classrooms	1.5 spaces per classroom, but not less than 1.0 space per teacher and staff	15 spaces	
Total			849 spaces		

It is noted sections of the parking lot will be reconfigured in association with the proposed site improvements. It is proposed to provide 866 parking spaces, thus exceeding the Ordinance requirement.

VIII. SUMMARY AND CONCLUSIONS

The Traffic Impact Study evaluated the proposed site improvements within the Borough of Sayreville, Middlesex County, New Jersey. The findings of the Traffic Impact Study are summarized as follows:

- 1.** The Applicant proposes to improve the site to better align with the Riverton development. As such, no changes are proposed to the intensity or use of the Epic Church property.
- 2.** Access to the site is proposed via the existing right-in/right-out only driveway along Main Street Extension. The existing full-movement driveway along Chevalier Avenue will become a right-in/right-out only driveway with the proposed expansion of Riverton Boulevard. A full-movement driveway is proposed along Peter Fisher Boulevard to the south of the site.
- 3.** Under the Build condition, all movements at the intersection of Riverton Boulevard & Main Street Extension/GSP Ramps will continue to operate at or near No-Build Levels of Service during both peak hours studied.
- 4.** Under the Build condition, all movements at the intersection of Peter Fisher Boulevard/GSP Ramps & Main Street Extension will continue to operate at or near No-Build Levels of Service during both peak hours studied.
- 5.** Under the Build condition, all movements at the intersection of Riverton Boulevard & Riverton Crossing will continue to operate at or near No-Build Levels of Service during both peak hours studied.
- 6.** Under the Build condition, all movements at the intersection of Peter Fisher Boulevard & Power Center South/Site Driveway will continue to operate at or near No-Build Levels of Service during both peak hours studied.
- 7.** Under the Build condition, all movements at the Site Driveway along Riverton Boulevard will continue to operate at or near No-Build Levels of Service during both peak hours studied.
- 8.** Under the Build condition, all movements at the Site Driveway along Main Street Extension will continue to operate at or near No-Build Levels of Service during both peak hours studied.
- 9.** The proposed site plan provides minimum 24-foot wide aisles and can accommodate two-way circulation throughout the site. The layout of the site provides sufficient circulation for the design vehicles to safely and efficiently maneuver through the site.
- 10.** The proposed parking supply of 866 spaces satisfies the Ordinance requirement.



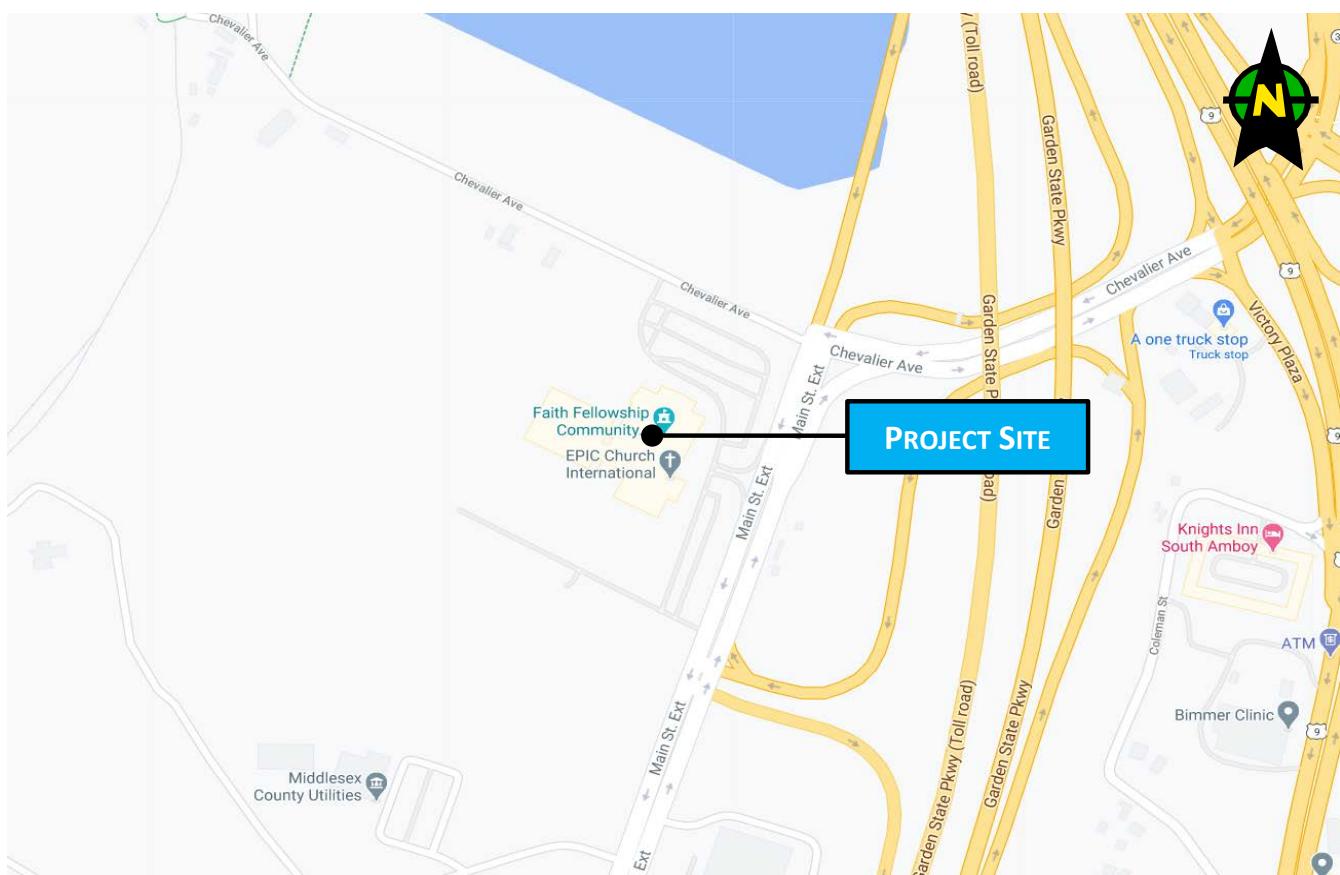
Epic Church
Borough of Sayreville, Middlesex County, New Jersey
MC Project No. 05000500F
Appendix

EPIC CHURCH

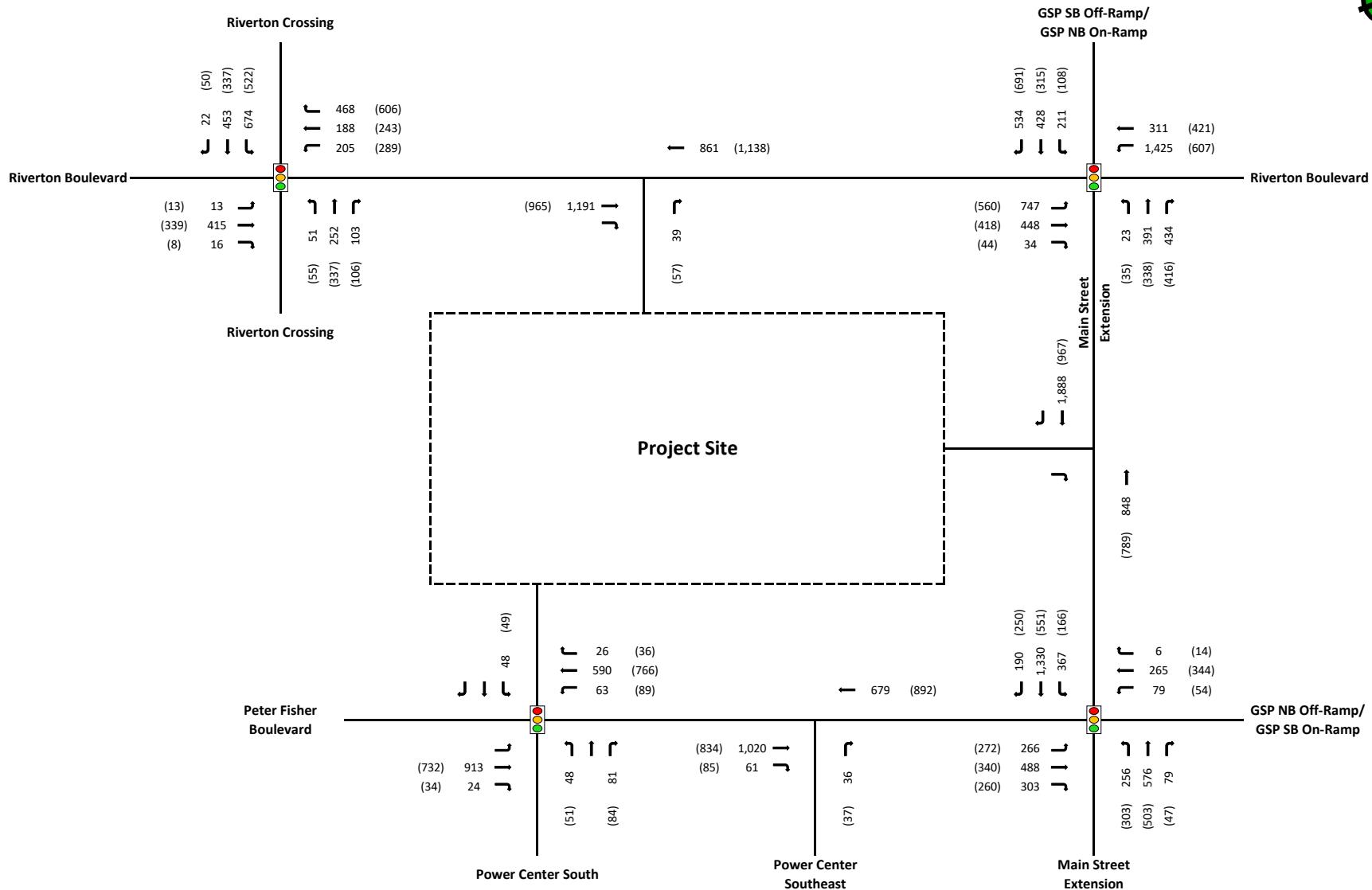
TRAFFIC IMPACT STUDY

APPENDIX A

TRAFFIC FIGURES



 05000500F	Epic Church	Figure 1
	Borough of Sayreville, Middlesex County, New Jersey	Site Location Map



Epic Church

MC Project No. 05000500F

Borough of Sayreville, Middlesex County, New Jersey

Legend

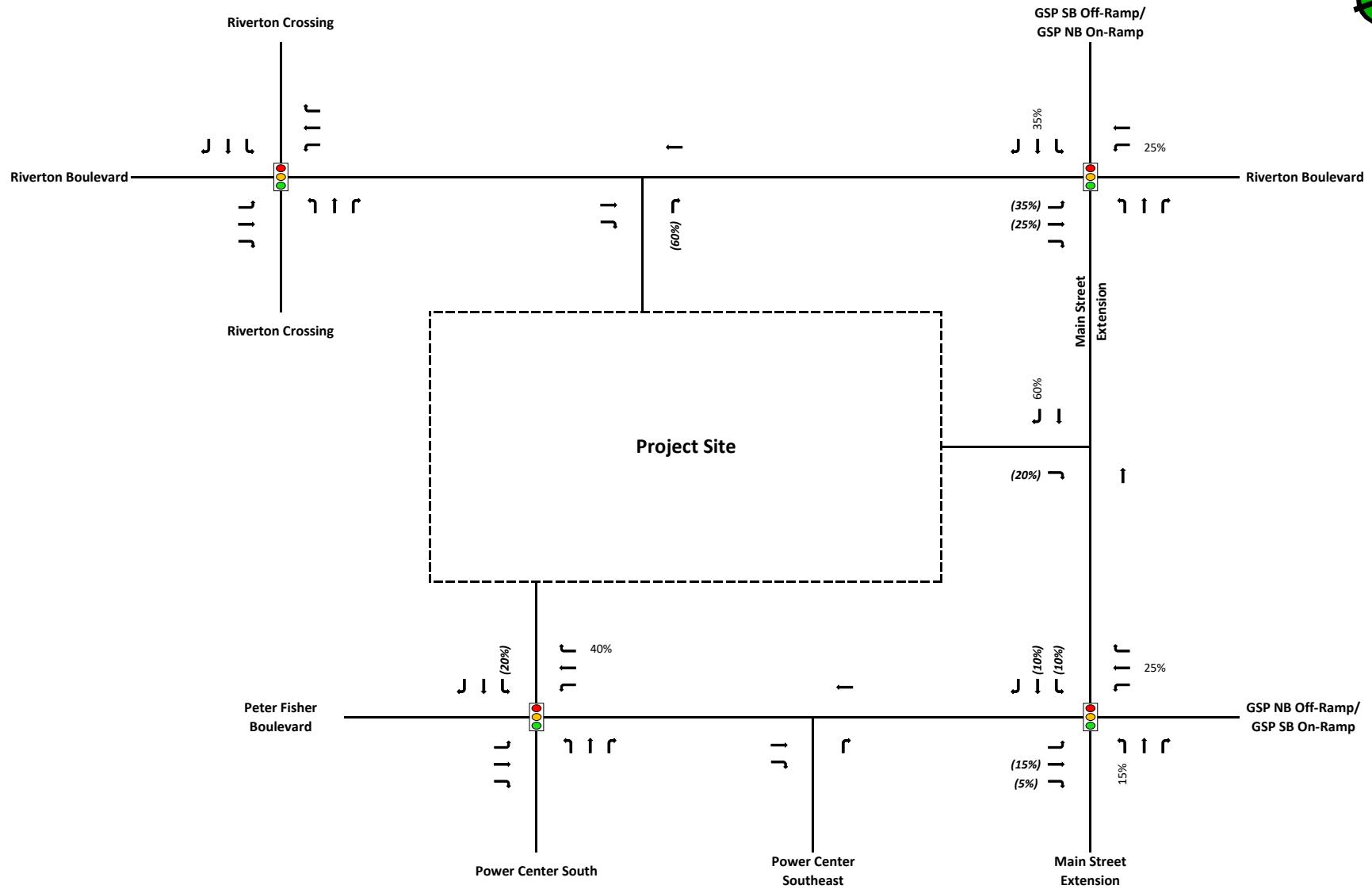
PM Peak Hour: ###
SAT Peak Hour: (###)

Thru Movement:
Turning Movement:
Signalized Intersection:

Figure 3

No-Build Conditions

PM & SAT Peak Hours



Epic Church

MC Project No. 05000500F

Borough of Sayreville, Middlesex County, New Jersey

Legend

Entering: #%%

Exiting: (###%)

Thru Movement: ↑

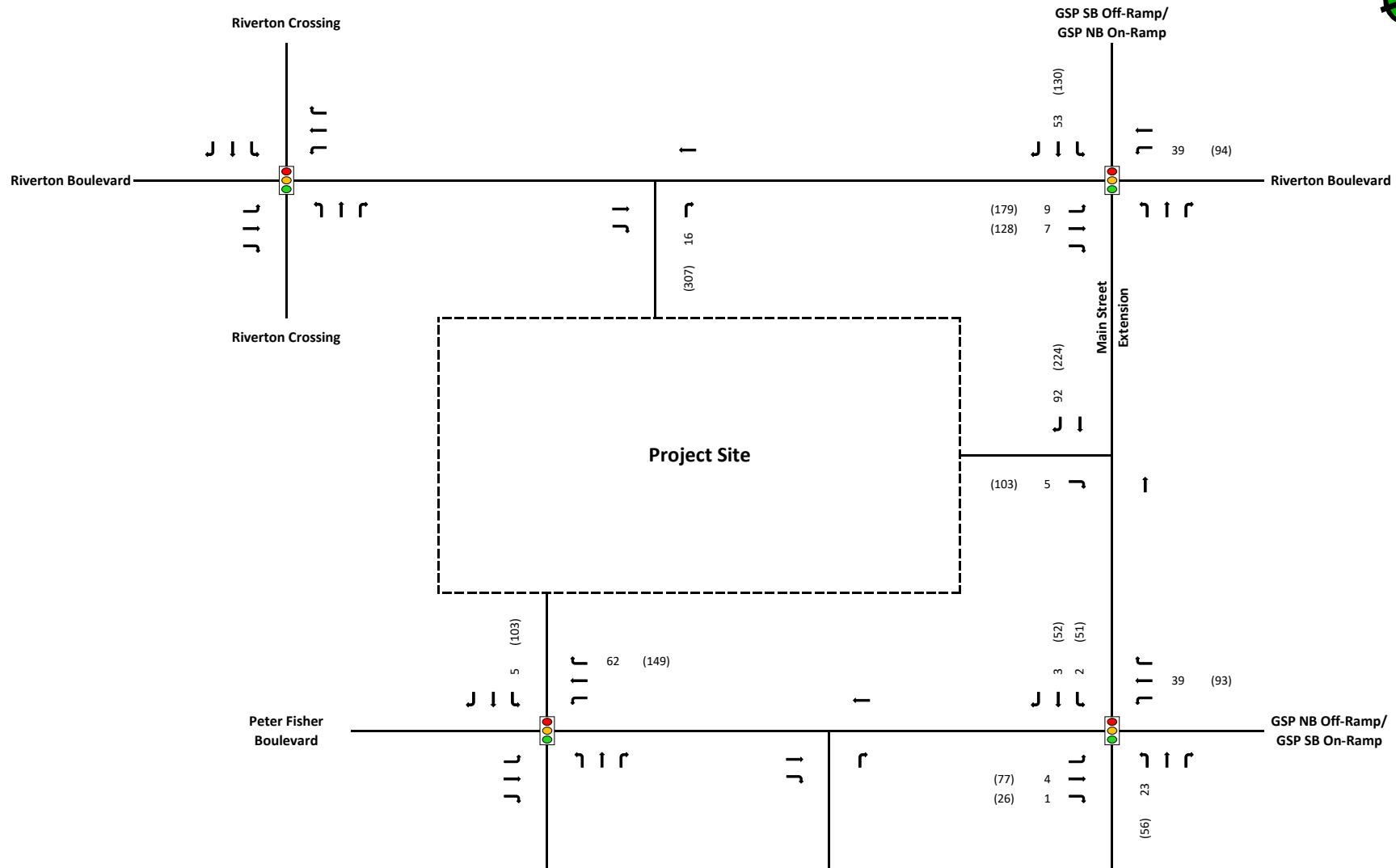
Turning Movement: ↗, ↙, ↛, ↜

Signalized Intersection: ⚡

Figure 4

Trip Distribution

PM & SAT Peak Hours



Epic Church
MC Project No. 05000500F
Borough of Sayreville, Middlesex County, New Jersey

Legend

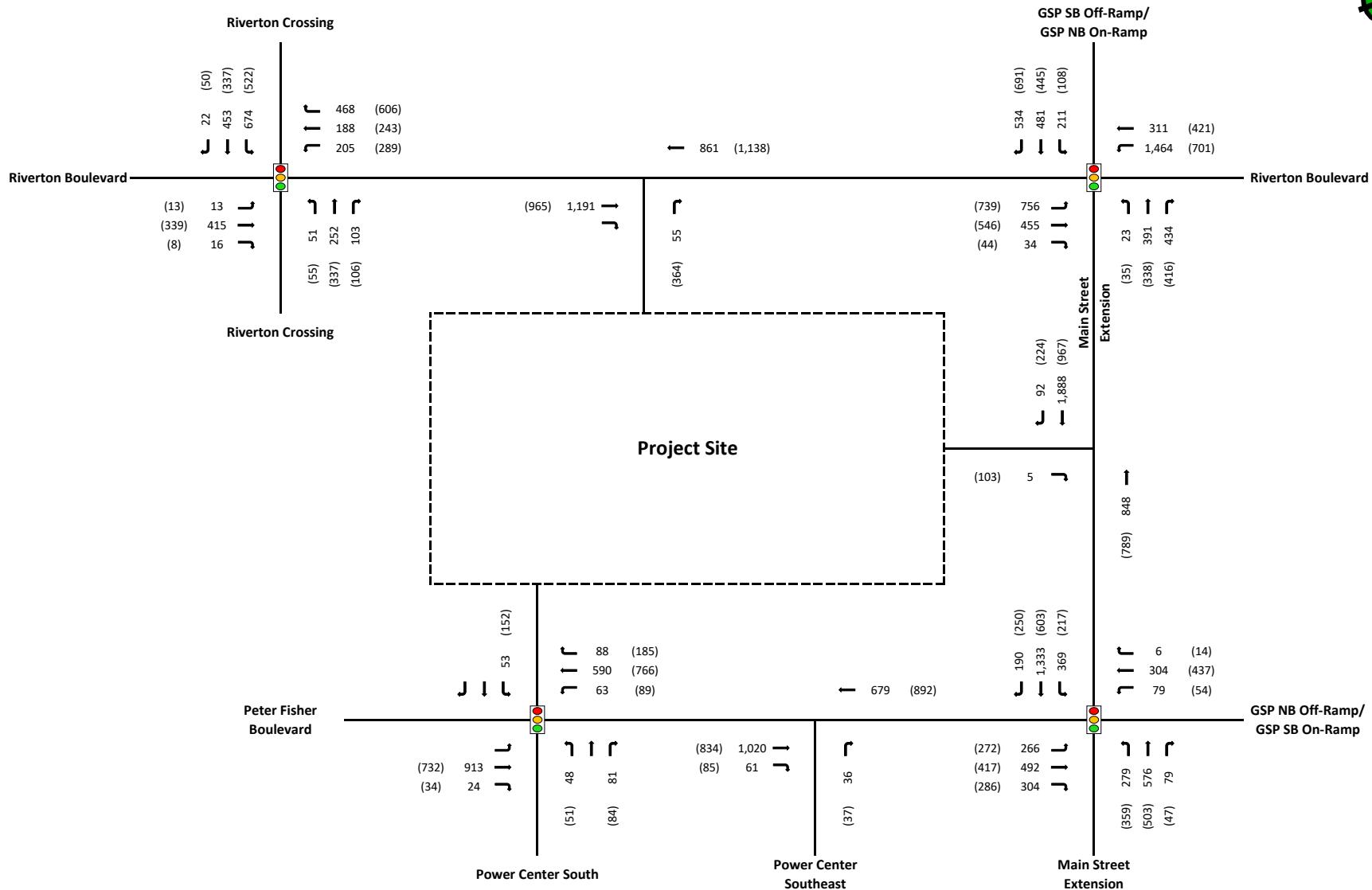
PM Peak Hour: ###
SUN Peak Hour: (###)

Thru Movement:
Turning Movement:
Signalized Intersection:

Figure 5

Epic Church Site Generated Trips
PM & SAT Peak Hours





Epic Church

MC Project No. 05000500F

Borough of Sayreville, Middlesex County, New Jersey

Legend

PM Peak Hour: ###
SAT Peak Hour: (###)

Thru Movement:
Turning Movement:
Signalized Intersection:

Figure 6

Build Conditions

PM & SAT Peak Hours



Epic Church
Borough of Sayreville, Middlesex County, New Jersey
MC Project No. 05000500F
Appendix

EPIC CHURCH

TRAFFIC IMPACT STUDY

APPENDIX B

TRAFFIC COUNT DATA

MASER CONSULTING

100 American Metro Boulevard

Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point
 FFM Traffic Impact Study
 Thursday Evening Peak Hour
 Chevalier Avenue & Main Street Ext

File Name : main st ext at chevalier ave wkday
 Site Code : 05000500
 Start Date : 8/9/2012
 Page No : 1

Groups Printed- CARS - TRUCKS

	Southbound					Chevalier Ave Westbound					Main Street Extension Northbound					Chevalier Ave Eastbound						
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	U-Turn	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
Start Time	06:45 PM	0	0	0	0	0	0	1	235	0	236	61	7	0	0	68	0	2	0	0	2	306
	Total	0	0	0	0	0	0	1	235	0	236	61	7	0	0	68	0	2	0	0	2	306
07:00 PM	0	0	0	0	0	0	0	2	206	0	208	87	5	0	0	92	0	1	0	0	1	301
07:15 PM	0	0	0	0	0	0	0	4	184	0	188	83	6	3	0	92	0	4	0	0	4	284
07:30 PM	0	0	0	0	0	0	0	0	163	0	163	82	9	0	0	91	0	1	0	0	1	255
07:45 PM	0	0	0	0	0	0	0	0	140	0	140	59	3	0	0	62	0	2	0	0	2	204
	Total	0	0	0	0	0	0	6	693	0	699	311	23	3	0	337	0	8	0	0	8	1044
08:00 PM	0	0	0	0	0	0	0	2	107	0	109	63	3	0	0	66	0	5	0	0	5	180
08:15 PM	0	0	0	0	0	0	0	0	74	0	74	27	0	0	0	27	0	0	0	0	0	101
08:30 PM	0	0	0	0	0	0	0	2	84	0	86	44	3	0	0	47	0	3	0	0	3	136
08:45 PM	0	0	0	0	0	0	0	1	66	0	67	26	0	0	0	26	4	39	0	0	43	136
	Total	0	0	0	0	0	0	5	331	0	336	160	6	0	0	166	4	47	0	0	51	553
09:00 PM	0	0	0	0	0	0	0	0	63	0	63	31	1	0	0	32	5	62	0	0	67	162
09:15 PM	0	0	0	0	0	0	0	0	76	0	76	28	1	0	0	29	0	15	0	0	15	120
Grand Total	0	0	0	0	0	0	0	12	1398	0	1410	591	38	3	0	632	9	134	0	0	143	2185
Apprch %	0	0	0	0	0	0	0	0.9	99.1	0	93.5	6	0.5	0	0	6.3	93.7	0	0	0	0	
Total %	0	0	0	0	0	0	0	0.5	64	0	64.5	27	1.7	0.1	0	28.9	0.4	6.1	0	0	6.5	
CARS	0	0	0	0	0	0	0	12	1358	0	1370	567	38	3	0	608	9	134	0	0	143	2121
% CARS	0	0	0	0	0	0	0	100	97.1	0	97.2	95.9	100	100	0	96.2	100	100	0	0	100	97.1
TRUCKS	0	0	0	0	0	0	0	0	40	0	40	24	0	0	0	24	0	0	0	0	0	64
% TRUCKS	0	0	0	0	0	0	0	0	2.9	0	2.8	4.1	0	0	0	3.8	0	0	0	0	0	2.9

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100 American Metro Boulevard

Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Thursday Evening Peak Hour

Chevalier Avenue & Main Street Ext

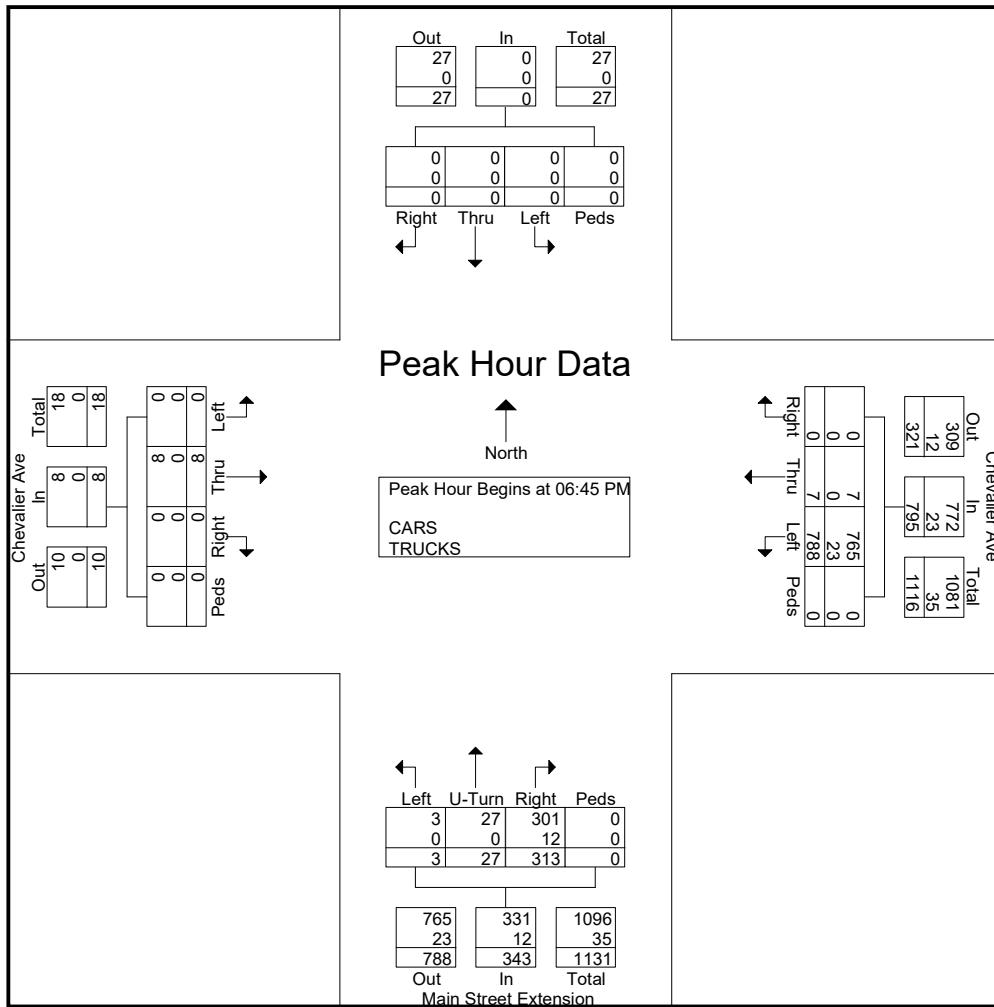
File Name : main st ext at chevalier ave wkday

Site Code : 05000500

Start Date : 8/9/2012

Page No : 2

	Southbound					Chevalier Ave Westbound					Main Street Extension Northbound					Chevalier Ave Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	U-Turn	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:45 PM to 07:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 PM																					
06:45 PM	0	0	0	0	0	0	1	235	0	236	61	7	0	0	68	0	2	0	0	2	306
07:00 PM	0	0	0	0	0	0	2	206	0	208	87	5	0	0	92	0	1	0	0	1	301
07:15 PM	0	0	0	0	0	0	4	184	0	188	83	6	3	0	92	0	4	0	0	4	284
07:30 PM	0	0	0	0	0	0	0	163	0	163	82	9	0	0	91	0	1	0	0	1	255
Total Volume	0	0	0	0	0	0	7	788	0	795	313	27	3	0	343	0	8	0	0	8	1146
% App. Total	0	0	0	0	0	0	0.9	99.1	0	91.3	7.9	0.9	0	0	0	0	100	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.438	.838	.000	.842	.899	.750	.250	.000	.932	.000	.500	.000	.000	.500	.936
CARS	0	0	0	0	0	0	7	765	0	772	301	27	3	0	331	0	8	0	0	8	1111
% CARS	0	0	0	0	0	0	100	97.1	0	97.1	96.2	100	100	0	96.5	0	100	0	0	100	96.9
TRUCKS	0	0	0	0	0	0	0	23	0	23	12	0	0	0	12	0	0	0	0	0	35
% TRUCKS																					



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FFM Traffic Impact Study

Thursday Evening Peak Hour

Chevalier Ave & FFM Drive #1

File Name : Chevalier Ave at Driveway 1 Wkday
Site Code : 05000500
Start Date : 8/9/2012
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Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Thursday Evening Peak Hour

Chevalier Ave & FFM Drive #1

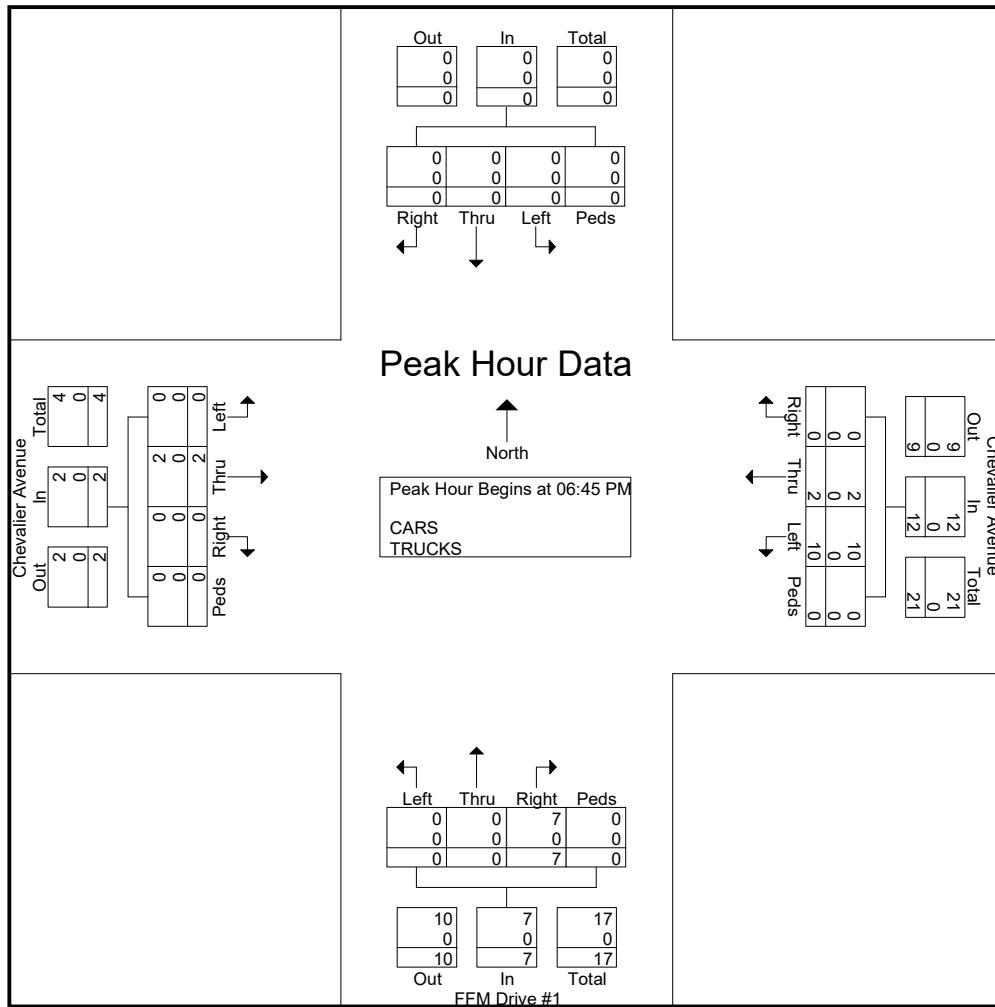
File Name : Chevalier Ave at Driveway 1 Wkday

Site Code : 05000500

Start Date : 8/9/2012

Page No : 2

	Southbound					Chevalier Avenue Westbound					FFM Drive #1 Northbound					Chevalier Avenue Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:45 PM to 07:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 PM																					
06:45 PM	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	0	1	0	0	1	4
07:00 PM	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	3
07:15 PM	0	0	0	0	0	0	1	7	0	8	4	0	0	0	4	0	1	0	0	1	13
07:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	2	10	0	12	7	0	0	0	7	0	2	0	0	2	21
% App. Total	0	0	0	0	0	0	16.7	83.3	0	100	100	0	0	0	100	0	100	0	0	0	100
PHF	.000	.000	.000	.000	.000	.000	.500	.357	.000	.375	.438	.000	.000	.000	.438	.000	.500	.000	.500	.404	
CARS	0	0	0	0	0	0	2	10	0	12	7	0	0	0	7	0	2	0	0	2	21
% CARS	0	0	0	0	0	0	0	100	100	0	100	100	0	0	100	0	100	0	0	100	100
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% TRUCKS																					



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Customer Loyalty through Client Satisfaction

The Point
FFM Traffic Impact Study
Thursday Evening Peak Hour
Main Street Ext & FFM Drive #2

File Name : Main St Ext at Driveway 2 Wkday
Site Code : 05000500
Start Date : 8/9/2012
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Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Thursday Evening Peak Hour

Main Street Ext & FFM Drive #2

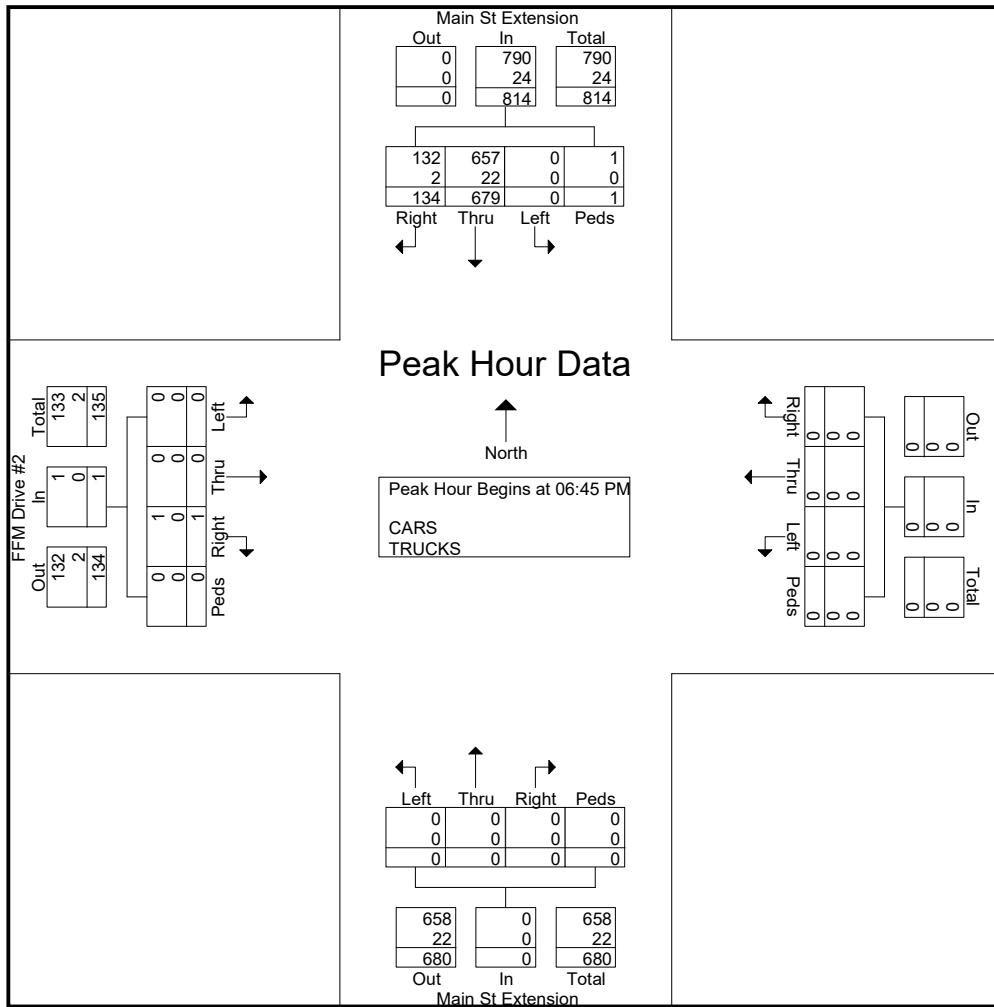
File Name : Main St Ext at Driveway 2 Wkday

Site Code : 05000500

Start Date : 8/9/2012

Page No : 2

	Main St Extension Southbound					Westbound					Main St Extension Northbound					FFM Drive #2 Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:45 PM to 07:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 PM																					
06:45 PM	28	213	0	0	241	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	242
07:00 PM	32	179	0	0	211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	211
07:15 PM	45	144	0	1	190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	190
07:30 PM	29	143	0	0	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172
Total Volume	134	679	0	1	814	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	815
% App. Total	16.5	83.4	0	0.1		0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	
PHF	.744	.797	.000	.250	.844	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.000	.250	.842
CARS	132	657	0	1	790	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	791
% CARS	98.5	96.8	0	100	97.1	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	97.1
TRUCKS	2	22	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
% TRUCKS																					



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Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Thursday Evening Peak Hour

Main Street Ext & FFM Drive #3

File Name : Main St Ext at Driveway 3 Wkday
Site Code : 05000500
Start Date : 8/9/2012
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Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Thursday Evening Peak Hour

Main Street Ext & FFM Drive #3

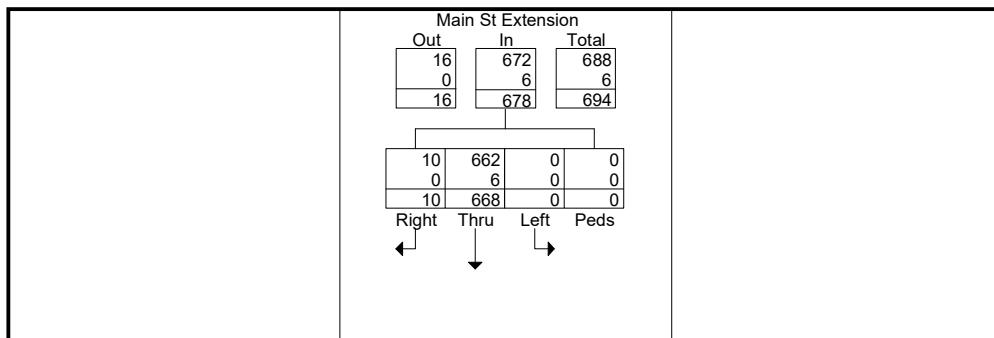
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Site Code : 05000500

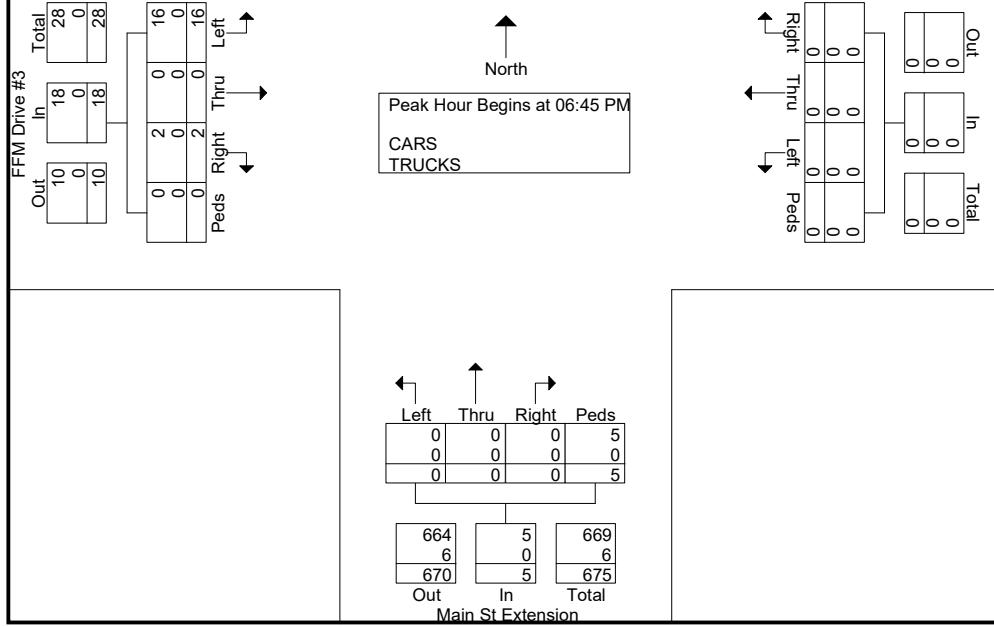
Start Date : 8/9/2012

Page No : 2

	Main St Extension Southbound					Westbound					Main St Extension Northbound					FFM Drive #3 Eastbound						
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
Peak Hour Analysis From 06:45 PM to 07:30 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 06:45 PM																						
06:45 PM	0	213	0	0	213	0	0	0	0	0	0	0	0	3	3	0	0	16	0	16	232	
07:00 PM	2	177	0	0	179	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	1	182
07:15 PM	5	138	0	0	143	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	144
07:30 PM	3	140	0	0	143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	143
Total Volume	10	668	0	0	678	0	0	0	0	0	0	0	0	5	5	2	0	16	0	18	701	
% App. Total	1.5	98.5	0	0	0	0	0	0	0	0	0	0	0	100	11.1	0	88.9	0	0	0	0	701
PHF	.500	.784	.000	.000	.796	.000	.000	.000	.000	.000	.000	.000	.000	.417	.417	.500	.000	.250	.000	.281	.755	
CARS	10	662	0	0	672	0	0	0	0	0	0	0	0	5	5	2	0	16	0	18	695	
% CARS	100	99.1	0	0	99.1	0	0	0	0	0	0	0	0	100	100	100	0	100	0	100	99.1	
TRUCKS	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
% TRUCKS																						



Peak Hour Data



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Customer Loyalty through Client Satisfaction

The Point
 FFM Traffic Impact Study
 Sunday Morning & Mid-Day Peak Hours
 Chevalier Ave & Main Street Ext

File Name : Main St Ext at Chevalier Ave Sunday
 Site Code : 05000500
 Start Date : 8/12/2012
 Page No : 1

Groups Printed- CARS - TRUCKS																						
Start Time	Southbound					Chevalier Ave Westbound					Main Street Extension Northbound					Chevalier Ave Eastbound						
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	U-Turn	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
09:00 AM	0	0	0	0	0	0	0	57	0	57	0	0	0	0	0	0	3	0	0	3	60	
09:15 AM	0	0	0	0	0	0	0	2	55	0	57	0	0	0	0	0	3	0	0	0	60	
09:30 AM	0	0	0	0	0	0	0	7	63	0	70	46	7	2	0	55	0	8	0	0	8	133
09:45 AM	0	0	0	0	0	0	0	5	61	0	66	62	12	0	0	74	6	129	0	0	135	275
Total	0	0	0	0	0	0	0	14	236	0	250	108	19	2	0	129	6	143	0	0	149	528
10:00 AM	0	0	0	0	0	0	0	12	112	0	124	102	11	5	0	118	3	88	0	0	91	333
10:15 AM	0	0	0	0	0	0	0	16	116	0	132	44	30	3	0	77	0	46	0	0	46	255
10:30 AM	0	0	0	0	0	0	0	14	106	0	120	63	14	2	0	79	1	27	0	0	28	227
10:45 AM	0	0	0	0	0	0	0	2	120	0	122	47	11	1	0	59	1	16	0	0	17	198
Total	0	0	0	0	0	0	0	44	454	0	498	256	66	11	0	333	5	177	0	0	182	1013
11:00 AM	0	0	0	0	0	0	0	6	87	0	93	37	9	1	0	47	2	10	0	0	12	152
11:15 AM	0	0	0	0	0	0	0	8	74	0	82	50	2	0	0	52	3	10	0	0	13	147
11:30 AM	0	0	0	0	0	0	0	2	65	0	67	41	8	1	0	50	0	2	0	0	2	119
11:45 AM	0	0	0	0	0	0	0	6	76	0	82	40	1	0	0	41	0	5	0	0	5	128
Total	0	0	0	0	0	0	0	22	302	0	324	168	20	2	0	190	5	27	0	0	32	546
12:00 PM	0	0	0	0	0	0	0	3	54	0	57	45	0	0	0	45	0	17	0	0	17	119
12:15 PM	0	0	0	0	0	0	0	2	86	0	88	78	1	1	0	80	4	201	0	0	205	373
12:30 PM	0	0	0	0	0	0	0	1	79	0	80	65	2	0	0	67	6	71	0	0	77	224
12:45 PM	0	0	0	0	0	0	0	4	82	0	86	63	2	0	0	65	2	44	0	0	46	197
Total	0	0	0	0	0	0	0	10	301	0	311	251	5	1	0	257	12	333	0	0	345	913
01:00 PM	0	0	0	0	0	0	0	2	80	0	82	46	0	0	0	46	2	20	0	0	22	150
01:15 PM	0	0	0	0	0	0	0	0	62	0	62	50	0	0	0	50	2	19	0	0	21	133
01:30 PM	0	0	0	0	0	0	0	2	49	0	51	49	0	0	0	49	0	9	0	0	9	109
01:45 PM	0	0	0	0	0	0	0	0	67	0	67	48	0	0	0	48	0	9	0	0	9	124
Total	0	0	0	0	0	0	0	4	258	0	262	193	0	0	0	193	4	57	0	0	61	516
Grand Total	0	0	0	0	0	0	0	94	1551	0	1645	976	110	16	0	1102	32	737	0	0	769	3516
Apprch %	0	0	0	0	0	0	0	5.7	94.3	0	88.6	10	1.5	0	0	4.2	95.8	0	0	0	0	
Total %	0	0	0	0	0	0	0	2.7	44.1	0	46.8	27.8	3.1	0.5	0	31.3	0.9	21	0	0	21.9	
CARS	0	0	0	0	0	0	0	94	1535	0	1629	956	109	16	0	1081	32	736	0	0	768	3478
% CARS	0	0	0	0	0	0	0	100	99	0	99	98	99.1	100	0	98.1	100	99.9	0	0	99.9	98.9
TRUCKS	0	0	0	0	0	0	0	0	16	0	16	20	1	0	0	21	0	1	0	0	1	38
% TRUCKS	0	0	0	0	0	0	0	0	1	0	1	2	0.9	0	0	1.9	0	0.1	0	0	0.1	1.1

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Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Chevalier Ave & Main Street Ext

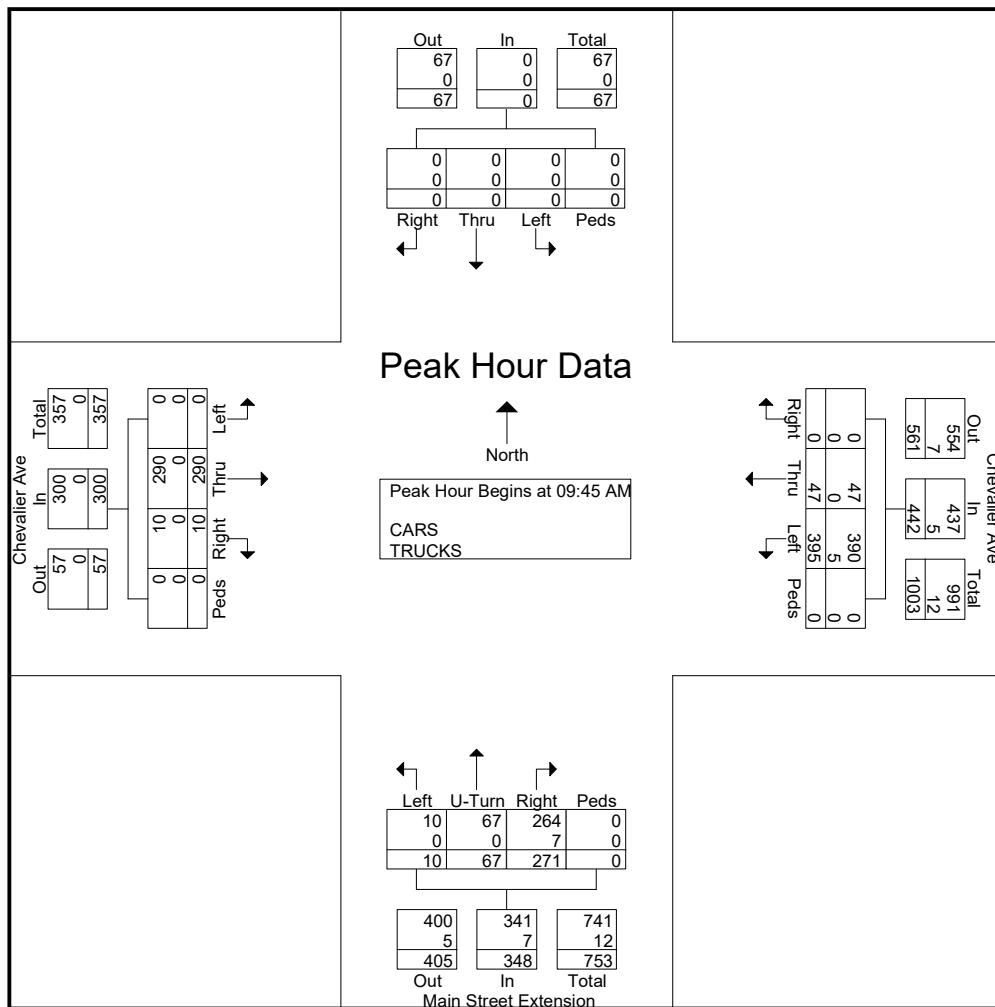
File Name : Main St Ext at Chevalier Ave Sunday

Site Code : 05000500

Start Date : 8/12/2012

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	Southbound					Chevalier Ave Westbound					Main Street Extension Northbound					Chevalier Ave Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	U-Turn	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 09:45 AM to 10:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 09:45 AM																					
09:45 AM	0	0	0	0	0	0	5	61	0	66	62	12	0	0	74	6	129	0	0	135	275
10:00 AM	0	0	0	0	0	0	12	112	0	124	102	11	5	0	118	3	88	0	0	91	333
10:15 AM	0	0	0	0	0	0	16	116	0	132	44	30	3	0	77	0	46	0	0	46	255
10:30 AM	0	0	0	0	0	0	14	106	0	120	63	14	2	0	79	1	27	0	0	28	227
Total Volume	0	0	0	0	0	0	47	395	0	442	271	67	10	0	348	10	290	0	0	300	1090
% App. Total	0	0	0	0	0	0	10.6	89.4	0	77.9	19.3	2.9	0	3.3	96.7	0	0	0	0	0	1090
PHF	.000	.000	.000	.000	.000	.000	.734	.851	.000	.837	.664	.558	.500	.000	.737	.417	.562	.000	.000	.556	.818
CARS	0	0	0	0	0	0	47	390	0	437	264	67	10	0	341	10	290	0	0	300	1078
% CARS	0	0	0	0	0	0	100	98.7	0	98.9	97.4	100	100	0	98.0	100	100	0	0	100	98.9
TRUCKS	0	0	0	0	0	0	0	5	0	5	7	0	0	0	7	0	0	0	0	0	12
% TRUCKS																					



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FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Chevalier Ave & Main Street Ext

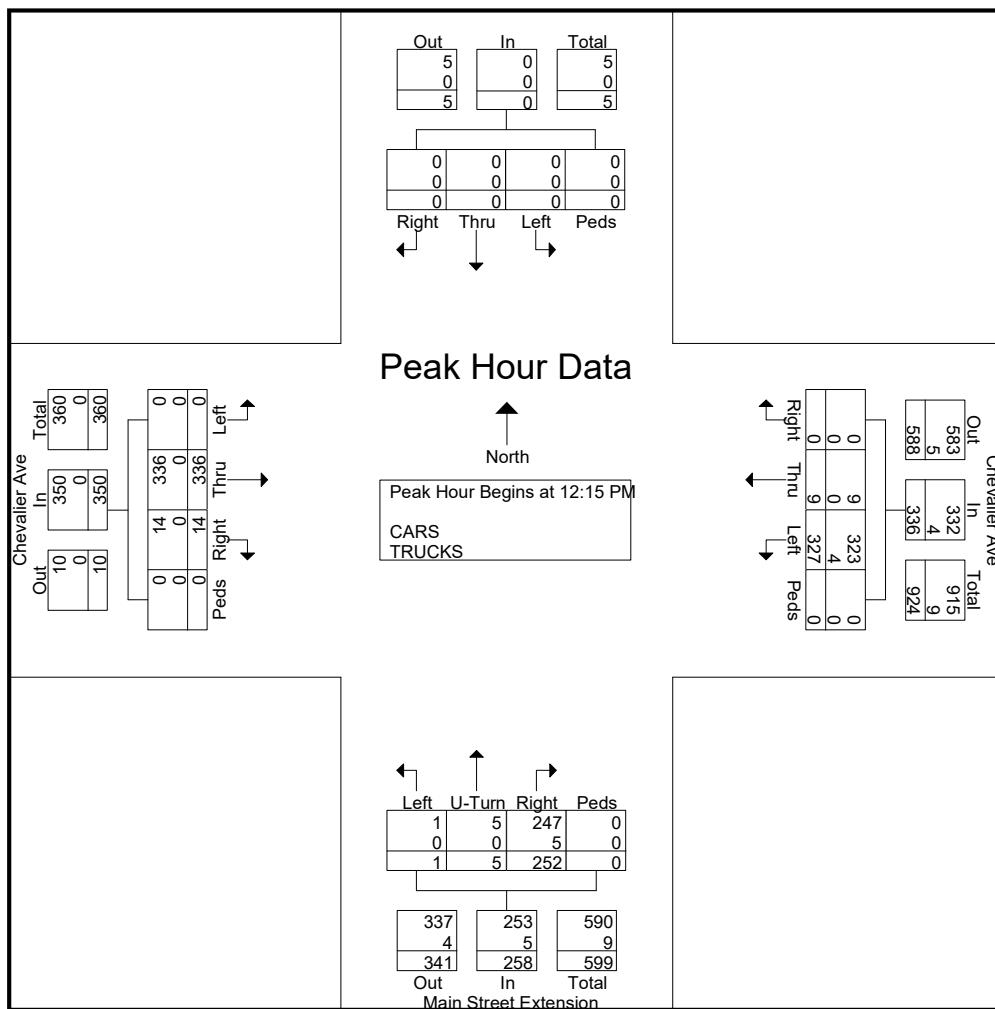
File Name : Main St Ext at Chevalier Ave Sunday

Site Code : 05000500

Start Date : 8/12/2012

Page No : 3

	Southbound					Chevalier Ave Westbound					Main Street Extension Northbound					Chevalier Ave Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	U-Turn	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:15 PM to 01:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	0	0	0	0	0	0	2	86	0	88	78	1	1	0	80	4	201	0	0	205	373
12:30 PM	0	0	0	0	0	0	1	79	0	80	65	2	0	0	67	6	71	0	0	77	224
12:45 PM	0	0	0	0	0	0	4	82	0	86	63	2	0	0	65	2	44	0	0	46	197
01:00 PM	0	0	0	0	0	0	2	80	0	82	46	0	0	0	46	2	20	0	0	22	150
Total Volume	0	0	0	0	0	0	9	327	0	336	252	5	1	0	258	14	336	0	0	350	944
% App. Total	0	0	0	0	0	0	2.7	97.3	0	97.7	1.9	0.4	0	0	4	96	0	0	0	100	99.0
PHF	.000	.000	.000	.000	.000	.000	.563	.951	.000	.955	.808	.625	.250	.000	.806	.583	.418	.000	.000	.427	.633
CARS	0	0	0	0	0	0	0	323	0	332	247	5	1	0	253	14	336	0	0	350	935
% CARS	0	0	0	0	0	0	0	100	98.8	0	98.8	98.0	100	100	0	98.1	100	100	0	0	100
TRUCKS	0	0	0	0	0	0	0	0	4	0	4	5	0	0	0	5	0	0	0	0	9
% TRUCKS																					



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Customer Loyalty through Client Satisfaction

The Point
FFM Traffic Impact Study
Sunday Morning & Mid-Day Peak Hours
Chevalier Ave & FFM Drive #1

File Name : Chevalier Ave at Driveway 1 Sunday
Site Code : 05000500
Start Date : 8/12/2012
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The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Chevalier Ave & FFM Drive #1

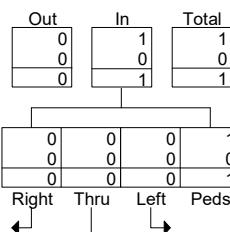
File Name : Chevalier Ave at Driveway 1 Sunday

Site Code : 05000500

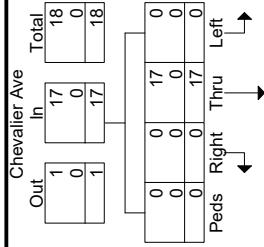
Start Date : 8/12/2012

Page No : 2

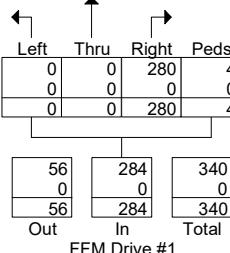
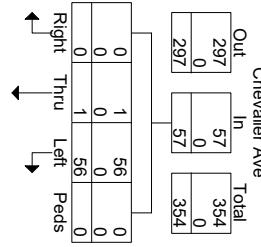
	Southbound				Chevalier Ave Westbound				FFM Drive #1 Northbound				Chevalier Ave Eastbound								
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total					
Peak Hour Analysis From 09:45 AM to 10:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 09:45 AM																					
09:45 AM	0	0	0	0	0	0	0	5	0	5	122	0	0	2	124	0	11	0	0	11	140
10:00 AM	0	0	0	0	0	0	1	17	0	18	88	0	0	1	89	0	4	0	0	4	111
10:15 AM	0	0	0	0	0	0	0	20	0	20	44	0	0	0	44	0	2	0	0	2	66
10:30 AM	0	0	0	1	1	0	0	14	0	14	26	0	0	1	27	0	0	0	0	0	42
Total Volume	0	0	0	1	1	0	1	56	0	57	280	0	0	4	284	0	17	0	0	17	359
% App. Total	0	0	0	100	100	0	1.8	98.2	0	98.6	0	0	0	1.4	0	100	0	0	0	0	359
PHF	.000	.000	.000	.250	.250	.000	.250	.700	.000	.713	.574	.000	.000	.500	.573	.000	.386	.000	.000	.386	.641
CARS	0	0	0	1	1	0	1	56	0	57	280	0	0	4	284	0	17	0	0	17	359
% CARS	0	0	0	100	100	0	100	100	0	100	100	0	0	100	100	0	100	0	0	100	100
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% TRUCKS																					



Peak Hour Data



↑
North
Peak Hour Begins at 09:45 AM
CARS
TRUCKS



FFM Drive #1

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100 American Metro Boulevard

Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Chevalier Ave & FFM Drive #1

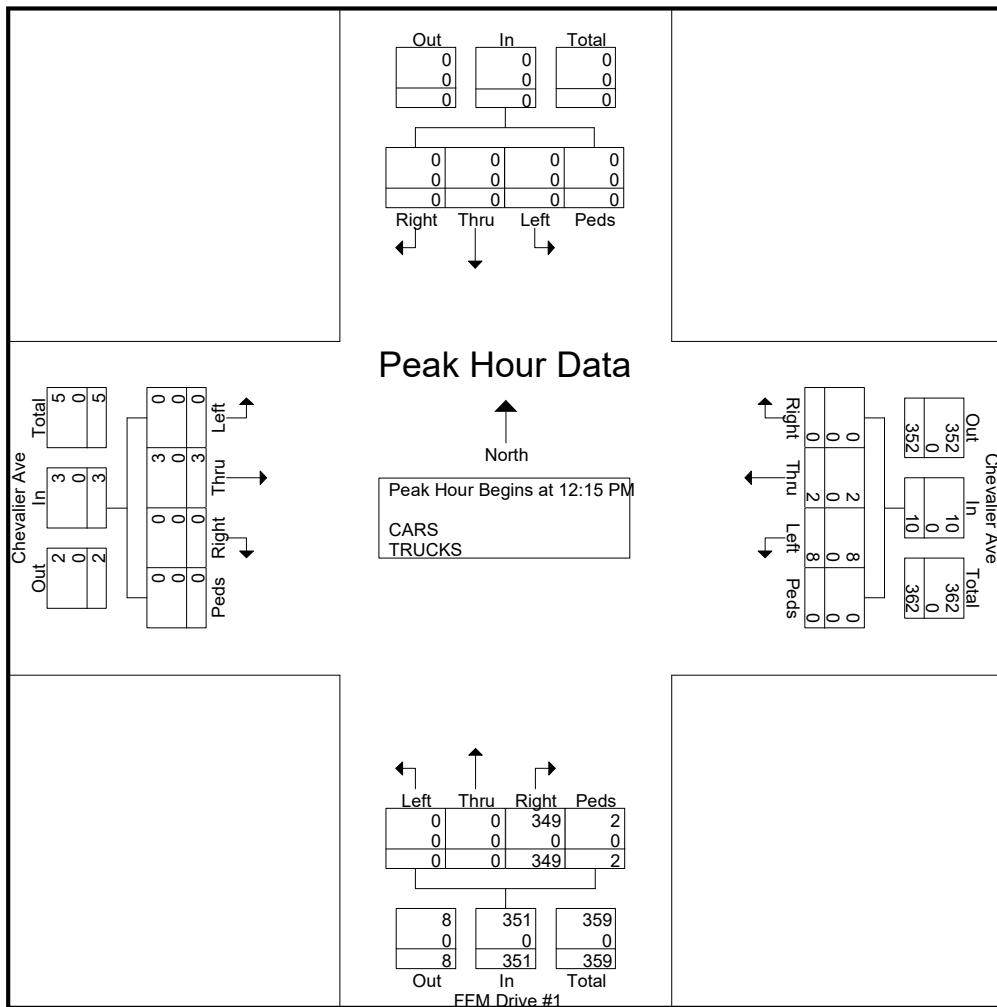
File Name : Chevalier Ave at Driveway 1 Sunday

Site Code : 05000500

Start Date : 8/12/2012

Page No : 3

	Southbound					Chevalier Ave Westbound					FFM Drive #1 Northbound					Chevalier Ave Eastbound						
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:15 PM to 01:00 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 12:15 PM																						
12:15 PM	0	0	0	0	0	0	0	0	4	0	4	204	0	0	1	205	0	0	0	0	0	209
12:30 PM	0	0	0	0	0	0	0	0	1	0	1	77	0	0	0	77	0	0	0	0	0	78
12:45 PM	0	0	0	0	0	0	0	0	3	0	3	46	0	0	1	47	0	0	0	0	0	50
01:00 PM	0	0	0	0	0	0	0	2	0	0	2	22	0	0	0	22	0	3	0	0	0	27
Total Volume	0	0	0	0	0	0	0	2	8	0	10	349	0	0	2	351	0	3	0	0	3	364
% App. Total	0	0	0	0	0	0	0	20	80	0	99.4	0	0	0.6	0	100	0	0	0	0	0	100
PHF	.000	.000	.000	.000	.000	.000	.250	.500	.000	.625	.428	.000	.000	.500	.428	.000	.250	.000	.000	.250	.435	
CARS	0	0	0	0	0	0	0	2	8	0	10	349	0	0	2	351	0	3	0	0	3	364
% CARS	0	0	0	0	0	0	0	100	100	0	100	100	0	0	100	100	0	100	0	0	100	100
TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% TRUCKS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



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**100 American Metro Boulevard
Hamilton, NJ 08619**
Customer Loyalty through Client Satisfaction

The Point
FFM Traffic Impact Study
Sunday Morning & Mid-Day Peak Hours
Main Street Ext & FFM Drive #2

File Name : Main St Ext at Driveway 2 Sunday
Site Code : 05000500
Start Date : 8/12/2012
Page No : 1

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100 American Metro Boulevard

Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Main Street Ext & FFM Drive #2

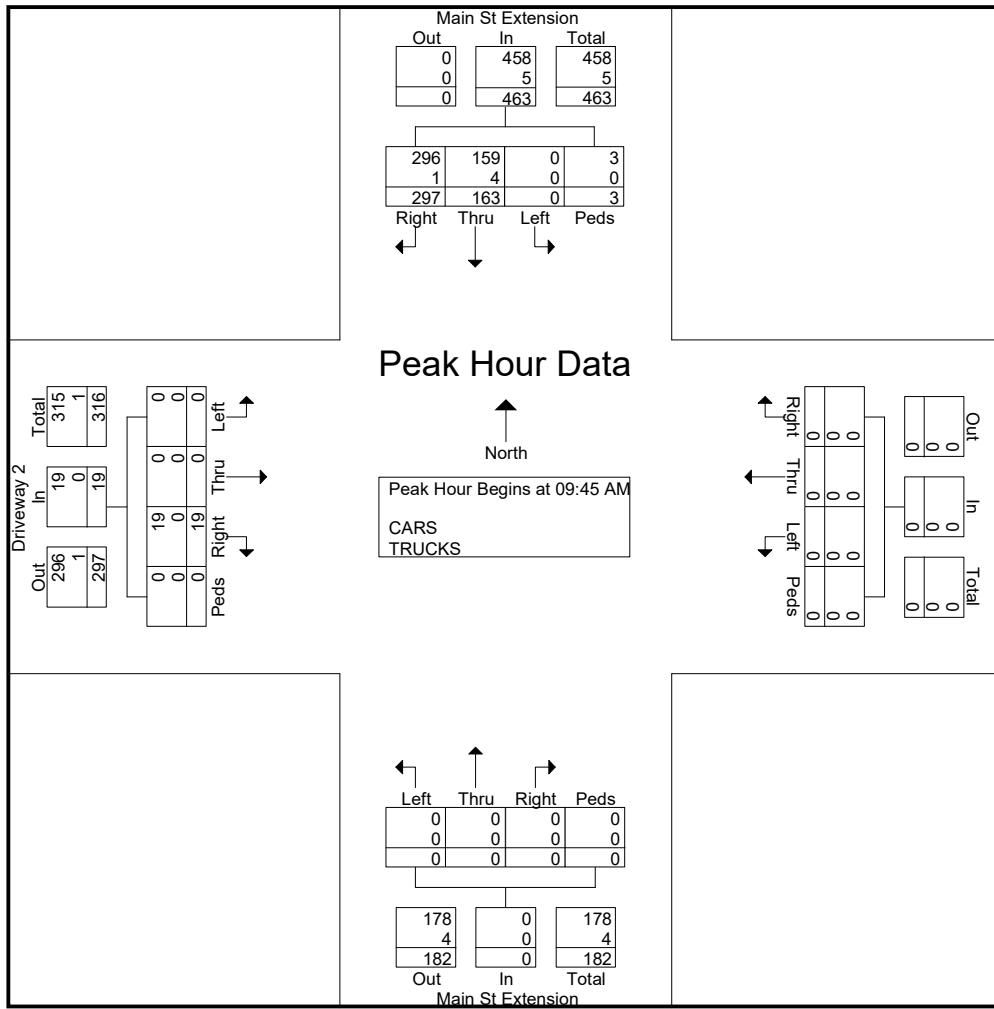
File Name : Main St Ext at Driveway 2 Sunday

Site Code : 05000500

Start Date : 8/12/2012

Page No : 2

	Main St Extension Southbound					Westbound					Main St Extension Northbound					Driveway 2 Eastbound						
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
Peak Hour Analysis From 09:45 AM to 10:30 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 09:45 AM																						
09:45 AM	41	32	0	2	75	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	86	
10:00 AM	75	48	0	1	124	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	131
10:15 AM	101	43	0	0	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	144	
10:30 AM	80	40	0	0	120	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	121	
Total Volume	297	163	0	3	463	0	0	0	0	0	0	0	0	0	0	19	0	0	0	19	482	
% App. Total	64.1	35.2	0	0.6		0	0	0	0	0	0	0	0	0	0	100	0	0	0	0		
PHF	.735	.849	.000	.375	.804	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.432	.000	.000	.000	.432	.837	
CARS	296	159	0	3	458	0	0	0	0	0	0	0	0	0	0	19	0	0	0	19	477	
% CARS	99.7	97.5	0	100	98.9	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	99.0	
TRUCKS	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
% TRUCKS																						



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Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Main Street Ext & FFM Drive #2

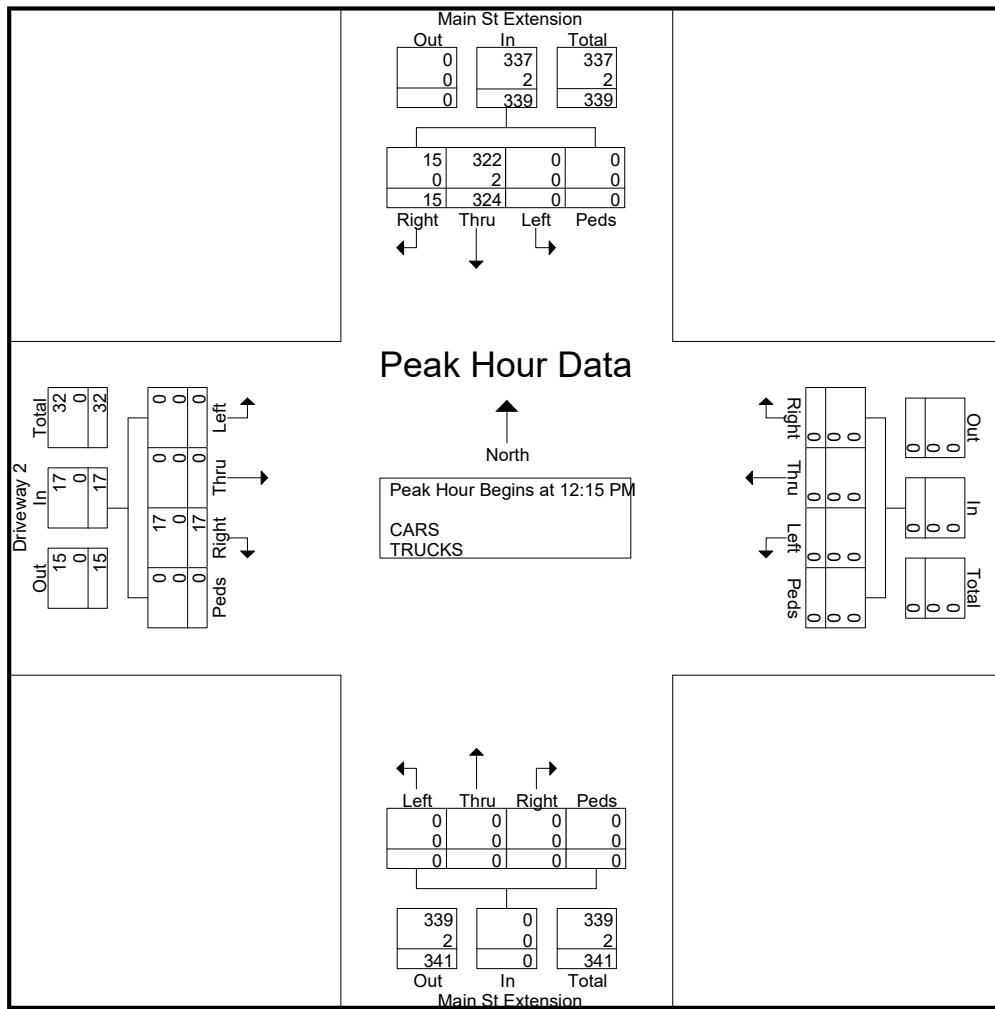
File Name : Main St Ext at Driveway 2 Sunday

Site Code : 05000500

Start Date : 8/12/2012

Page No : 3

	Main St Extension Southbound					Westbound					Main St Extension Northbound					Driveway 2 Eastbound						
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total	
Peak Hour Analysis From 12:15 PM to 01:00 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 12:15 PM																						
12:15 PM	3	88	0	0	91	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	96	
12:30 PM	8	75	0	0	83	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	90
12:45 PM	3	81	0	0	84	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	89
01:00 PM	1	80	0	0	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81
Total Volume	15	324	0	0	339	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17	356
% App. Total	4.4	95.6	0	0		0	0	0	0		0	0	0	0	0	100	0	0	0	0	0	99.4
PHF	.469	.920	.000	.000	.931	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.607	.000	.000	.000	.000	.607	.927
CARS	15	322	0	0	337	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17	354
% CARS	100	99.4	0	0	99.4	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	100	99.4
TRUCKS	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% TRUCKS																						



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Hamilton, NJ 08619**
Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Main Street Ext & FFM Drive #3

File Name : Main St Ext at Driveway 3 Sunday
Site Code : 05000500
Start Date : 8/12/2012
Page No : 1

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100 American Metro Boulevard

Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Main Street Ext & FFM Drive #3

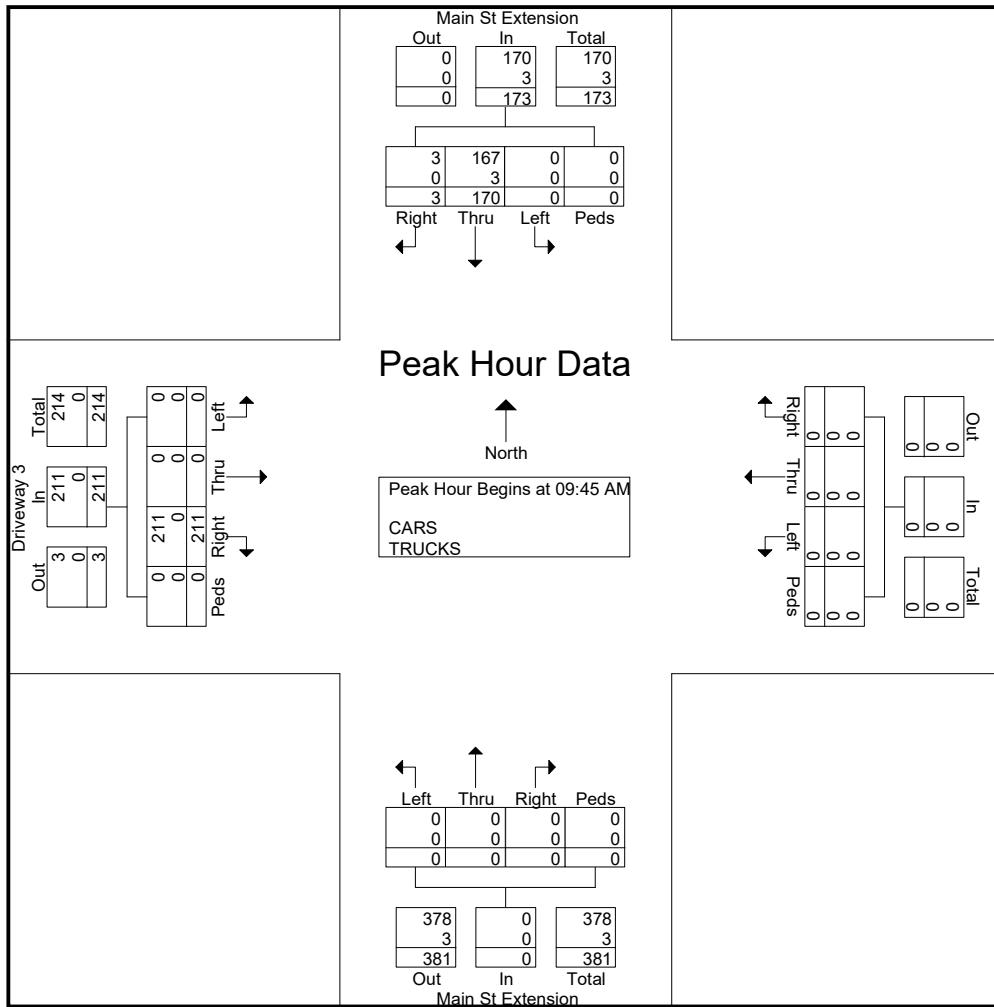
File Name : Main St Ext at Driveway 3 Sunday

Site Code : 05000500

Start Date : 8/12/2012

Page No : 2

	Main St Extension Southbound					Westbound					Main St Extension Northbound					Driveway 3 Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 09:45 AM to 10:30 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 09:45 AM																					
09:45 AM	0	43	0	0	43	0	0	0	0	0	0	0	0	0	0	102	0	0	0	102	145
10:00 AM	1	47	0	0	48	0	0	0	0	0	0	0	0	0	0	77	0	0	0	77	125
10:15 AM	2	40	0	0	42	0	0	0	0	0	0	0	0	0	0	22	0	0	0	22	64
10:30 AM	0	40	0	0	40	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	50
Total Volume	3	170	0	0	173	0	0	0	0	0	0	0	0	0	0	211	0	0	0	211	384
% App. Total	1.7	98.3	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0
PHF	.375	.904	.000	.000	.901	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.517	.000	.000	.000	.517	.662
CARS	3	167	0	0	170	0	0	0	0	0	0	0	0	0	0	211	0	0	0	211	381
% CARS	100	98.2	0	0	98.3	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	99.2
TRUCKS	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
% TRUCKS																					



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100 American Metro Boulevard

Hamilton, NJ 08619

Customer Loyalty through Client Satisfaction

The Point

FFM Traffic Impact Study

Sunday Morning & Mid-Day Peak Hours

Main Street Ext & FFM Drive #3

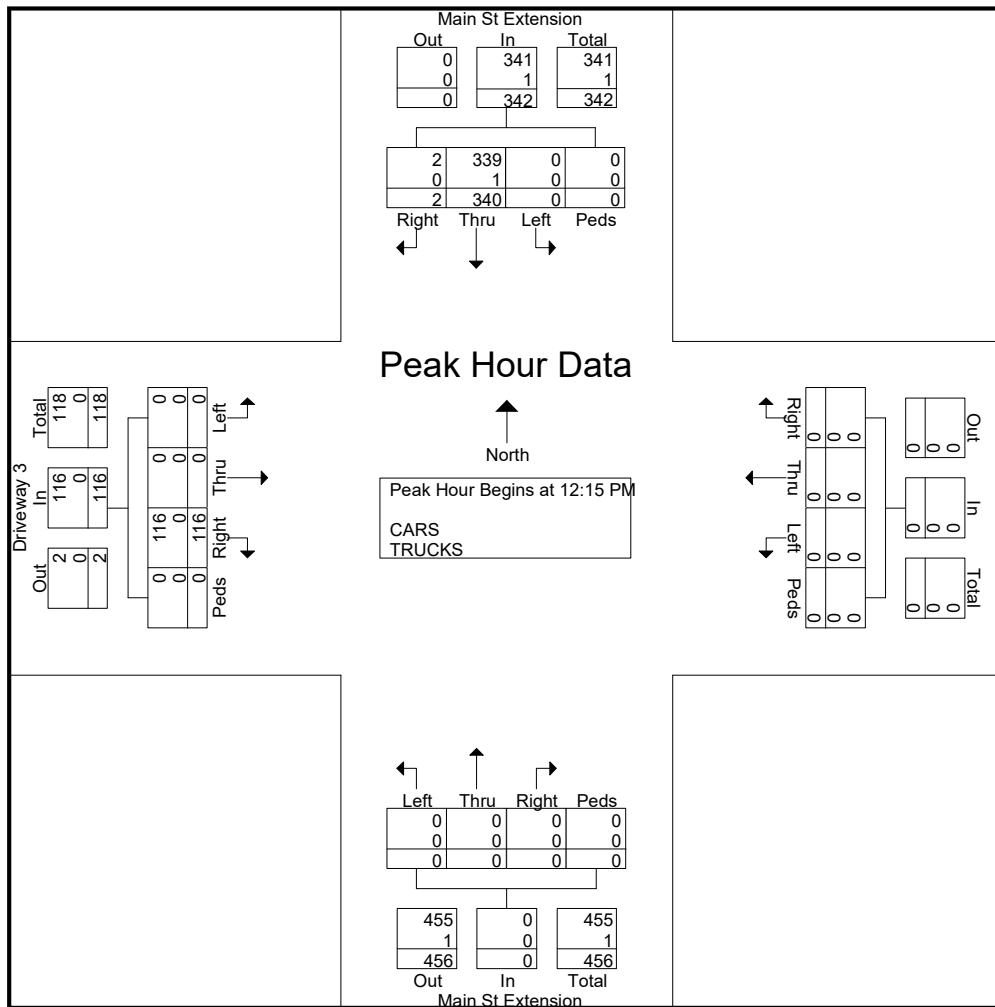
File Name : Main St Ext at Driveway 3 Sunday

Site Code : 05000500

Start Date : 8/12/2012

Page No : 3

	Main St Extension Southbound					Westbound					Main St Extension Northbound					Driveway 3 Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:15 PM to 01:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	0	93	0	0	93	0	0	0	0	0	0	0	0	0	0	86	0	0	0	86	179
12:30 PM	2	80	0	0	82	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	17
12:45 PM	0	86	0	0	86	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	94
01:00 PM	0	81	0	0	81	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	86
Total Volume	2	340	0	0	342	0	0	0	0	0	0	0	0	0	0	116	0	0	0	0	116
% App. Total	0.6	99.4	0	0		0	0	0	0		0	0	0	0	0	100	0	0	0	0	458
PHF	.250	.914	.000	.000	.919	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.337	.000	.000	.000	.000	.640
CARS	2	339	0	0	341	0	0	0	0	0	0	0	0	0	0	116	0	0	0	0	116
% CARS	100	99.7	0	0	99.7	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	99.8
TRUCKS	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% TRUCKS																					



Maser Consulting

100 American Metro Boulevard, Suite 152

Hamilton, New Jersey 08619

Customer Loyalty through Client Satisfaction

Main Street Extension SB
 August 9, 2012 to August 17, 2012
 Sayreville, NJ
 The Point

Site Code: 1

Station ID:

Start Time	06-Aug-12		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	*	26	86	43	85	41	56	37	76
12:15	*	*	*	*	*	*	*	*	24	104	31	89	45	54	33	82
12:30	*	*	*	*	*	*	*	*	32	97	36	100	38	65	35	87
12:45	*	*	*	*	*	*	*	*	16	111	28	95	40	72	28	93
01:00	*	*	*	*	*	*	*	*	29	99	30	83	44	82	34	88
01:15	*	*	*	*	*	*	*	*	20	89	23	71	42	82	28	81
01:30	*	*	*	*	*	*	*	*	16	127	18	84	26	78	20	96
01:45	*	*	*	*	*	*	*	*	4	119	24	106	21	54	16	93
02:00	*	*	*	*	*	*	*	*	18	106	19	86	30	66	22	86
02:15	*	*	*	*	*	*	*	*	16	120	28	85	24	72	23	92
02:30	*	*	*	*	*	*	*	*	7	142	13	120	28	63	16	108
02:45	*	*	*	*	*	*	*	*	22	140	24	98	23	86	23	108
03:00	*	*	*	*	*	*	*	*	10	149	22	103	16	78	16	110
03:15	*	*	*	*	*	*	*	139	17	143	18	99	20	56	18	109
03:30	*	*	*	*	*	*	*	148	7	169	14	86	13	69	11	118
03:45	*	*	*	*	*	*	*	183	6	178	11	91	14	64	10	129
04:00	*	*	*	*	*	*	*	188	8	182	14	103	15	60	12	133
04:15	*	*	*	*	*	*	234	16	198	15	76	6	68	12	144	
04:30	*	*	*	*	*	*	215	15	197	15	118	6	68	12	150	
04:45	*	*	*	*	*	*	244	16	220	7	93	12	71	12	157	
05:00	*	*	*	*	*	*	223	22	204	12	88	10	76	15	148	
05:15	*	*	*	*	*	*	161	30	230	11	70	11	83	17	136	
05:30	*	*	*	*	*	*	128	33	216	22	87	19	78	25	127	
05:45	*	*	*	*	*	*	177	43	198	19	95	12	64	25	134	
06:00	*	*	*	*	*	*	196	44	197	24	95	16	74	28	140	
06:15	*	*	*	*	*	*	208	50	162	26	73	16	68	31	128	
06:30	*	*	*	*	*	*	185	95	190	34	89	24	86	51	138	
06:45	*	*	*	*	*	*	192	118	158	40	68	34	83	64	125	
07:00	*	*	*	*	*	*	204	88	132	38	100	26	66	51	126	
07:15	*	*	*	*	*	*	147	88	112	42	76	12	65	47	100	
07:30	*	*	*	*	*	*	122	113	106	26	83	24	89	54	100	
07:45	*	*	*	*	*	*	133	141	106	37	86	26	54	68	95	
08:00	*	*	*	*	*	*	118	134	86	29	66	47	60	70	82	
08:15	*	*	*	*	*	*	83	113	96	32	74	50	70	65	81	
08:30	*	*	*	*	*	*	70	119	78	34	64	32	66	62	70	
08:45	*	*	*	*	*	*	94	108	102	40	68	40	49	63	78	
09:00	*	*	*	*	*	*	52	98	73	45	70	24	60	56	64	
09:15	*	*	*	*	*	*	81	78	79	36	62	36	63	50	71	
09:30	*	*	*	*	*	*	73	68	67	44	73	33	59	48	68	
09:45	*	*	*	*	*	*	52	65	70	69	63	35	59	56	61	
10:00	*	*	*	*	*	*	54	93	52	56	58	34	78	61	60	
10:15	*	*	*	*	*	*	59	82	54	52	62	48	50	61	56	
10:30	*	*	*	*	*	*	49	92	74	54	64	44	44	63	58	
10:45	*	*	*	*	*	*	48	79	57	59	60	45	44	61	52	
11:00	*	*	*	*	*	*	50	84	56	64	58	51	69	52		
11:15	*	*	*	*	*	*	47	60	65	58	56	46	59	54		
11:30	*	*	*	*	*	*	48	85	44	62	62	47	56	65	52	
11:45	*	*	*	*	*	*	44	92	57	74	61	56	32	74	48	
Total Day Total	0	0	0	0	0	0	4449	8537	5468	1572	3896	1421	3137	1877	4644	
% Splits	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0 %	30.9%	69.1%	28.7%	71.3%	31.2%	68.8%	28.8%	71.2%	
Peak Vol.							04:15	07:45	04:45	11:00	02:30	11:00	00:45	11:00	04:15	
P.H.F.							916	507	870	258	420	219	314	267	599	
							0.939	0.899	0.946	0.872	0.875	0.944	0.957	0.902	0.954	

Main Street Extension SB
 August 9, 2012 to August 17, 2012
 Sayreville, NJ
 The Point

Maser Consulting
 100 American Metro Boulevard, Suite 152
 Hamilton, New Jersey 08619
Customer Loyalty through Client Satisfaction

Site Code: 1

Station ID:

Start Time	13-Aug-12		Tue		Wed		Thu		Fri		Sat		Sun		Average Day	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	27	110	26	92	27	109	37	100	*	*	*	*	*	*	29	103
12:15	20	90	28	115	26	107	28	99	*	*	*	*	*	*	26	103
12:30	36	81	9	80	17	88	25	104	*	*	*	*	*	*	22	88
12:45	24	104	18	111	24	111	28	116	*	*	*	*	*	*	24	110
01:00	22	90	13	105	16	101	20	97	*	*	*	*	*	*	18	98
01:15	10	88	15	122	24	120	18	67	*	*	*	*	*	*	17	99
01:30	5	93	4	89	13	85	9	*	*	*	*	*	*	*	8	89
01:45	16	86	12	102	12	110	16	*	*	*	*	*	*	*	14	99
02:00	9	94	12	108	14	96	19	*	*	*	*	*	*	*	14	99
02:15	11	106	18	109	18	114	10	*	*	*	*	*	*	*	14	110
02:30	8	114	10	112	8	122	7	*	*	*	*	*	*	*	8	116
02:45	9	128	8	121	8	130	10	*	*	*	*	*	*	*	9	126
03:00	8	120	6	124	9	148	10	*	*	*	*	*	*	*	8	131
03:15	7	140	12	162	9	144	8	*	*	*	*	*	*	*	9	149
03:30	5	144	8	152	11	144	4	*	*	*	*	*	*	*	7	147
03:45	7	142	6	190	11	188	12	*	*	*	*	*	*	*	9	173
04:00	14	162	5	178	6	172	7	*	*	*	*	*	*	*	8	171
04:15	8	192	8	218	18	210	16	*	*	*	*	*	*	*	12	207
04:30	7	218	17	200	18	209	15	*	*	*	*	*	*	*	14	209
04:45	18	224	14	236	20	227	20	*	*	*	*	*	*	*	18	229
05:00	19	206	19	226	18	222	28	*	*	*	*	*	*	*	21	218
05:15	26	254	32	242	36	256	33	*	*	*	*	*	*	*	32	251
05:30	28	271	35	276	24	264	32	*	*	*	*	*	*	*	30	270
05:45	42	236	42	269	54	246	45	*	*	*	*	*	*	*	46	250
06:00	46	219	36	242	46	203	54	*	*	*	*	*	*	*	46	221
06:15	54	190	56	207	56	186	56	*	*	*	*	*	*	*	56	194
06:30	83	220	124	193	123	178	102	*	*	*	*	*	*	*	108	197
06:45	112	191	128	200	118	167	102	*	*	*	*	*	*	*	115	186
07:00	90	168	105	148	102	177	107	*	*	*	*	*	*	*	101	164
07:15	76	120	86	122	83	140	94	*	*	*	*	*	*	*	85	127
07:30	110	140	78	109	98	126	116	*	*	*	*	*	*	*	100	125
07:45	106	114	110	116	106	134	110	*	*	*	*	*	*	*	108	121
08:00	130	110	156	84	134	97	138	*	*	*	*	*	*	*	140	97
08:15	106	106	112	110	106	82	116	*	*	*	*	*	*	*	110	99
08:30	118	66	118	84	137	86	112	*	*	*	*	*	*	*	121	79
08:45	98	86	98	60	90	72	101	*	*	*	*	*	*	*	97	73
09:00	74	57	94	74	130	68	114	*	*	*	*	*	*	*	103	66
09:15	71	66	76	80	86	74	101	*	*	*	*	*	*	*	84	73
09:30	99	66	80	78	78	79	84	*	*	*	*	*	*	*	85	74
09:45	95	62	66	57	70	73	80	*	*	*	*	*	*	*	78	64
10:00	67	66	72	54	66	74	82	*	*	*	*	*	*	*	72	65
10:15	80	58	60	57	82	61	76	*	*	*	*	*	*	*	74	59
10:30	71	54	65	56	96	60	80	*	*	*	*	*	*	*	78	57
10:45	82	54	74	48	72	58	77	*	*	*	*	*	*	*	76	53
11:00	64	48	69	39	93	46	92	*	*	*	*	*	*	*	80	44
11:15	89	46	68	39	63	42	84	*	*	*	*	*	*	*	76	42
11:30	63	42	82	42	82	41	73	*	*	*	*	*	*	*	75	42
11:45	84	31	102	35	112	38	87	*	*	*	*	*	*	*	96	35
Total Day	2454	5873	2492	6073	2670	6085	2695	583	0	0	0	0	0	0	2581	6002
Total	8327		8565		8755		3278		0	0	0	0	0	0	8583	
% Splits	29.5%	70.5%	29.1%	70.9%	30.5%	69.5%	82.2%	17.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	30.1%	69.9%
Peak Vol.	07:45	05:15	07:45	05:15	07:45	05:00	07:30	12:00							07:45	05:15
P.H.F.	460	980	496	1029	483	988	480	419							479	992
	0.885	0.904	0.795	0.932	0.881	0.936	0.870	0.903							0.855	0.919

ADT

ADT 7,513

AADT 7,513



Epic Church
Borough of Sayreville, Middlesex County, New Jersey
MC Project No. 05000500F
Appendix

EPIC CHURCH

TRAFFIC IMPACT STUDY

APPENDIX C

CAPACITY ANALYSIS SUMMARY SHEETS

05000500F - Epic Church

No-Build Conditions

PM Peak

1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	747	448	34	1425	311	23	391	434	211	428	534
Future Volume (vph)	747	448	34	1425	311	23	391	434	211	428	534
Lane Group Flow (vph)	786	472	36	1500	327	24	412	457	222	451	562
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	pt+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	3	8	18	7	4	5
Permitted Phases				2							4
Detector Phase	5	2	2	1	6	3	8	18	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	5.0	7.0		5.0	7.0	5.0
Minimum Split (s)	11.0	13.0	13.0	11.0	13.0	11.0	13.0		11.0	13.0	11.0
Total Split (s)	43.0	19.0	19.0	43.0	19.0	12.0	16.0		12.0	16.0	43.0
Total Split (%)	47.8%	21.1%	21.1%	47.8%	21.1%	13.3%	17.8%		13.3%	17.8%	47.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
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)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None		None	None	None
v/c Ratio	0.68	0.79	0.09	1.00	0.34	0.08	0.86	0.50	0.71	0.58	0.59
Control Delay	13.4	47.6	0.3	49.6	29.4	41.6	49.9	11.1	53.8	37.9	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.4	47.6	0.3	49.6	29.4	41.6	49.9	11.1	53.8	37.9	14.7
Queue Length 50th (ft)	114	153	0	425	77	4	126	169	64	113	163
Queue Length 95th (ft)	111	m#214	m0	#592	133	m9	m#202	m248	#112	#228	269
Internal Link Dist (ft)		372			690		386			277	
Turn Bay Length (ft)	375		100	400		150					
Base Capacity (vph)	1517	601	420	1502	969	311	481	922	311	772	1117
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.79	0.09	1.00	0.34	0.08	0.86	0.50	0.71	0.58	0.50

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 90

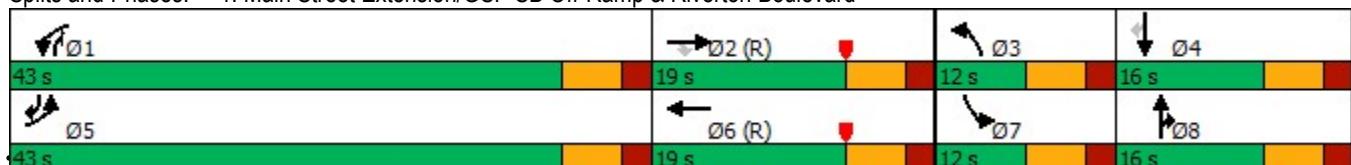
Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



Timings

ABZ

Synchro 10 Report

05000500F - Epic Church

1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard

No-Build Conditions

PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	0	23	391	434	211	428	534
Traffic Volume (veh/h)	747	448	34	1425	311	0	23	391	434	211	428	534
Future Volume (veh/h)	747	448	34	1425	311	0	23	391	434	211	428	534
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	0	1900	1900	1796	1900	1900	1900
Adj Flow Rate, veh/h	786	472	36	1500	327	0	24	412	457	222	451	562
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	0	0	0	0	7	0	0	0
Cap, veh/h	1002	602	268	1509	1136	0	166	481	863	312	632	741
Arrive On Green	0.09	0.06	0.06	0.43	0.31	0.00	0.02	0.04	0.04	0.09	0.17	0.17
Sat Flow, veh/h	3510	3610	1610	3483	3705	0	3510	3610	1522	3510	3610	1610
Grp Volume(v), veh/h	786	472	36	1500	327	0	24	412	457	222	451	562
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1742	1805	0	1755	1805	1522	1755	1805	1610
Q Serve(g_s), s	19.7	11.6	1.9	38.6	6.1	0.0	0.6	10.2	12.0	5.5	10.6	15.7
Cycle Q Clear(g_c), s	19.7	11.6	1.9	38.6	6.1	0.0	0.6	10.2	12.0	5.5	10.6	15.7
Prop In Lane	1.00			1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	1002	602	268	1509	1136	0	166	481	863	312	632	741
V/C Ratio(X)	0.78	0.78	0.13	0.99	0.29	0.00	0.14	0.86	0.53	0.71	0.71	0.76
Avail Cap(c_a), veh/h	1521	602	268	1509	1136	0	312	481	863	312	632	741
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	40.9	36.3	25.4	23.2	0.0	42.5	42.2	12.8	39.9	35.0	20.1
Incr Delay (d2), s/veh	0.7	9.9	1.0	21.7	0.6	0.0	0.1	13.5	0.3	6.4	3.3	4.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	9.3	6.4	0.8	19.4	2.7	0.0	0.3	5.6	5.5	2.6	4.9	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.8	50.8	37.4	47.1	23.9	0.0	42.6	55.7	13.1	46.2	38.3	24.2
LnGrp LOS	D	D	D	D	C	A	D	E	B	D	D	C
Approach Vol, veh/h	1294				1827			893			1235	
Approach Delay, s/veh	43.1				43.0			33.5			33.3	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	43.0	19.0	8.3	19.7	29.7	32.3	12.0	16.0				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	13.0	6.0	10.0	37.0	13.0	6.0	10.0				
Max Q Clear Time (g_c+l1), s	40.6	13.6	2.6	17.7	21.7	8.1	7.5	14.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	2.0	0.4	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				39.1								
HCM 6th LOS				D								

05000500F - Epic Church

No-Build Conditions

PM Peak

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (vph)	266	488	303	79	265	6	256	576	367	1330	190
Future Volume (vph)	266	488	303	79	265	6	256	576	367	1330	190
Lane Group Flow (vph)	280	514	319	83	279	6	269	689	386	1400	200
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2	1	6	
Permitted Phases						8					6
Detector Phase	7	4	5	3	8	1	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.0	13.0	11.0	11.0	13.0	11.0	11.0	13.0	11.0	13.0	13.0
Total Split (s)	13.0	13.0	24.0	13.0	13.0	24.0	24.0	40.0	24.0	40.0	40.0
Total Split (%)	14.4%	14.4%	26.7%	14.4%	14.4%	26.7%	26.7%	44.4%	26.7%	44.4%	44.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.76	0.97	0.51	0.48	0.69	0.01	0.50	0.53	0.96	0.87	0.28
Control Delay	56.0	81.9	20.8	48.1	48.9	0.0	37.5	22.3	53.1	32.6	19.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.0	81.9	20.8	48.1	48.9	0.0	37.5	22.3	53.1	32.6	19.0
Queue Length 50th (ft)	89	~219	79	45	82	0	73	146	191	431	79
Queue Length 95th (ft)	#148	#324	138	91	#143	0	103	199	m#261	m478	m127
Internal Link Dist (ft)		784			195			214		441	
Turn Bay Length (ft)	200		200						250		350
Base Capacity (vph)	369	530	732	181	407	680	778	1358	401	1605	725
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.97	0.44	0.46	0.69	0.01	0.35	0.51	0.96	0.87	0.28

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 48 (53%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.

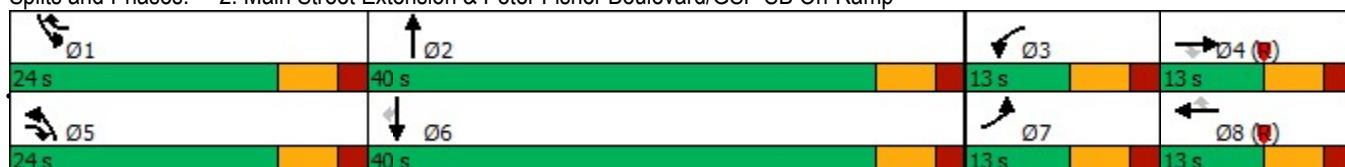
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp



05000500F - Epic Church

No-Build Conditions

PM Peak

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	266	488	303	79	265	6	256	576	79	367	1330	190
Future Volume (veh/h)	266	488	303	79	265	6	256	576	79	367	1330	190
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1811	1811	1900	1885	1900
Adj Flow Rate, veh/h	280	514	319	83	279	6	269	606	83	386	1400	200
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	6	6	0	1	0
Cap, veh/h	351	794	550	146	724	681	427	911	125	402	1433	644
Arrive On Green	0.03	0.07	0.07	0.08	0.20	0.20	0.12	0.30	0.30	0.07	0.13	0.13
Sat Flow, veh/h	3510	3610	1610	1810	3610	1610	3510	3041	416	1810	3582	1610
Grp Volume(v), veh/h	280	514	319	83	279	6	269	342	347	386	1400	200
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1810	1805	1610	1755	1721	1736	1810	1791	1610
Q Serve(g_s), s	7.1	12.5	14.9	4.0	6.0	0.2	6.6	15.7	15.7	19.1	35.1	10.1
Cycle Q Clear(g_c), s	7.1	12.5	14.9	4.0	6.0	0.2	6.6	15.7	15.7	19.1	35.1	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	351	794	550	146	724	681	427	515	520	402	1433	644
V/C Ratio(X)	0.80	0.65	0.58	0.57	0.39	0.01	0.63	0.66	0.67	0.96	0.98	0.31
Avail Cap(c_a), veh/h	351	794	550	181	724	681	780	688	695	402	1433	644
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(l)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	38.3	29.0	39.9	31.2	15.1	37.6	27.6	27.6	41.3	38.7	27.8
Incr Delay (d2), s/veh	10.5	3.7	4.1	1.3	1.6	0.0	0.6	0.6	0.6	34.3	18.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.7	6.4	7.0	1.8	2.7	0.1	2.7	6.0	6.1	12.9	20.1	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.1	42.1	33.1	41.2	32.7	15.1	38.2	28.1	28.1	75.6	57.1	27.9
LnGrp LOS	D	D	C	D	C	B	D	C	C	E	E	C
Approach Vol, veh/h	1113				368			958			1986	
Approach Delay, s/veh	42.3				34.4			30.9			57.7	
Approach LOS	D				C			C			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	24.0	31.0	11.2	23.8	15.0	40.0	13.0	22.0				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	18.0	34.0	7.0	7.0	18.0	34.0	7.0	7.0				
Max Q Clear Time (g_c+l1), s	21.1	17.7	6.0	16.9	8.6	37.1	9.1	8.0				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.4	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				46.1								
HCM 6th LOS				D								

05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

No-Build Conditions
PM Peak

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑↑	↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑
Traffic Volume (vph)	13	415	205	188	468	51	252	103	674	453
Future Volume (vph)	13	415	205	188	468	51	252	103	674	453
Lane Group Flow (vph)	14	468	223	204	509	55	274	112	733	516
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	7	3	8		7	4
Permitted Phases	2		6		6			8		
Detector Phase	5	2	1	6	7	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	10.0	10.0	13.0	13.0	10.0	13.0
Total Split (s)	20.0	20.0	20.0	20.0	28.0	28.0	22.0	22.0	28.0	22.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	31.1%	31.1%	24.4%	24.4%	31.1%	24.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.03	0.43	0.44	0.13	0.38	0.29	0.51	0.32	0.79	0.43
Control Delay	13.9	28.2	16.7	15.2	2.5	40.4	38.4	6.8	37.7	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.9	28.2	16.7	15.2	2.5	40.4	38.4	6.8	37.7	25.0
Queue Length 50th (ft)	4	112	74	34	1	29	76	0	195	119
Queue Length 95th (ft)	15	181	131	68	65	63	111	33	261	165
Internal Link Dist (ft)		221		510			399		420	
Turn Bay Length (ft)	100		250		175	125		150	300	
Base Capacity (vph)	720	1095	575	1605	1357	501	722	429	972	1187
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.43	0.39	0.13	0.38	0.11	0.38	0.26	0.75	0.43

Intersection Summary

Cycle Length: 90

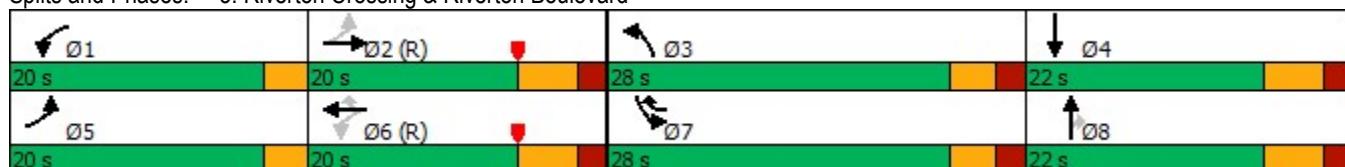
Actuated Cycle Length: 90

Offset: 16 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Splits and Phases: 3: Riverton Crossing & Riverton Boulevard

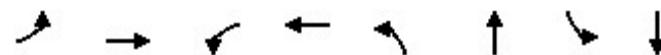


05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

No-Build Conditions
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	
Traffic Volume (veh/h)	13	415	16	205	188	468	51	252	103	674	453	22
Future Volume (veh/h)	13	415	16	205	188	468	51	252	103	674	453	22
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	451	17	223	204	509	55	274	112	733	492	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	432	1336	50	559	1639	1135	141	444	198	881	1038	51
Arrive On Green	0.04	0.38	0.38	0.19	0.76	0.76	0.08	0.12	0.12	0.25	0.30	0.30
Sat Flow, veh/h	1810	3547	133	1810	3610	1610	1810	3610	1610	3510	3504	171
Grp Volume(v), veh/h	14	229	239	223	204	509	55	274	112	733	253	263
Grp Sat Flow(s), veh/h/ln	1810	1805	1876	1810	1805	1610	1810	1805	1610	1755	1805	1869
Q Serve(g_s), s	0.4	8.2	8.2	6.2	1.4	7.9	2.6	6.5	5.9	17.8	10.3	10.4
Cycle Q Clear(g_c), s	0.4	8.2	8.2	6.2	1.4	7.9	2.6	6.5	5.9	17.8	10.3	10.4
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	432	680	706	559	1639	1135	141	444	198	881	535	554
V/C Ratio(X)	0.03	0.34	0.34	0.40	0.12	0.45	0.39	0.62	0.57	0.83	0.47	0.48
Avail Cap(c_a), veh/h	744	680	706	730	1639	1135	503	722	322	975	535	554
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	20.0	20.0	11.7	6.1	2.2	39.5	37.5	37.2	31.9	25.9	25.9
Incr Delay (d2), s/veh	0.0	1.3	1.3	0.2	0.2	1.3	0.7	0.5	0.9	5.2	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	3.6	3.7	2.1	0.5	1.6	1.2	2.9	2.3	8.0	4.4	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.5	21.4	21.3	11.9	6.3	3.5	40.1	38.0	38.1	37.1	26.2	26.2
LnGrp LOS	B	C	C	B	A	A	D	D	D	D	C	C
Approach Vol, veh/h		482			936			441			1249	
Approach Delay, s/veh		21.2			6.1			38.3			32.6	
Approach LOS		C			A			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	11.5	37.9	10.0	30.7	4.5	44.9	25.6	15.1				
Change Period (Y+R _c), s	3.0	6.0	5.0	6.0	3.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	17.0	14.0	23.0	16.0	17.0	14.0	23.0	16.0				
Max Q Clear Time (g _{c+l1}), s	8.2	10.2	4.6	12.4	2.4	9.9	19.8	8.5				
Green Ext Time (p _c), s	0.3	0.4	0.1	0.4	0.0	0.9	0.8	0.6				
Intersection Summary												
HCM 6th Ctrl Delay			23.6									
HCM 6th LOS				C								

4: Power Center South/Site Driveway & Peter Fisher Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↑	↑↓	↑	↑↓	↑	↑↓	↑	↑↓
Traffic Volume (vph)	1	913	63	590	48	1	48	1
Future Volume (vph)	1	913	63	590	48	1	48	1
Lane Group Flow (vph)	1	1018	68	669	52	89	52	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2				8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	8.0	13.0	8.0	13.0
Total Split (s)	8.0	53.0	10.0	55.0	10.0	17.0	10.0	17.0
Total Split (%)	8.9%	58.9%	11.1%	61.1%	11.1%	18.9%	11.1%	18.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	1.0	4.0	1.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.00	0.40	0.15	0.25	0.16	0.36	0.23	0.01
Control Delay	4.0	8.8	4.3	4.9	28.1	13.1	34.8	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	8.8	4.3	4.9	28.1	13.1	34.8	30.5
Queue Length 50th (ft)	0	153	7	46	23	1	28	1
Queue Length 95th (ft)	1	220	m21	74	51	43	51	7
Internal Link Dist (ft)		167		784		181		201
Turn Bay Length (ft)	75		200					
Base Capacity (vph)	674	2514	483	2728	331	309	236	254
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.40	0.14	0.25	0.16	0.29	0.22	0.01

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Power Center South/Site Driveway & Peter Fisher Boulevard



05000500F - Epic Church

No-Build Conditions

PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↑	↑	
Traffic Volume (veh/h)	1	913	24	63	590	26	48	1	81	48	1	1
Future Volume (veh/h)	1	913	24	63	590	26	48	1	81	48	1	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	992	26	68	641	28	52	1	88	52	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	638	2375	62	501	2484	108	332	2	156	253	85	85
Arrive On Green	0.02	0.66	0.66	0.14	1.00	1.00	0.06	0.10	0.10	0.06	0.10	0.10
Sat Flow, veh/h	1810	3594	94	1810	3524	154	1810	18	1595	1810	872	872
Grp Volume(v), veh/h	1	498	520	68	328	341	52	0	89	52	0	2
Grp Sat Flow(s), veh/h/ln	1810	1805	1883	1810	1805	1872	1810	0	1613	1810	0	1743
Q Serve(g_s), s	0.0	11.6	11.6	0.8	0.0	0.0	2.2	0.0	4.7	2.2	0.0	0.1
Cycle Q Clear(g_c), s	0.0	11.6	11.6	0.8	0.0	0.0	2.2	0.0	4.7	2.2	0.0	0.1
Prop In Lane	1.00		0.05	1.00		0.08	1.00		0.99	1.00		0.50
Lane Grp Cap(c), veh/h	638	1193	1244	501	1272	1320	332	0	158	253	0	171
V/C Ratio(X)	0.00	0.42	0.42	0.14	0.26	0.26	0.16	0.00	0.56	0.21	0.00	0.01
Avail Cap(c_a), veh/h	736	1193	1244	560	1272	1320	400	0	233	321	0	252
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.85	0.85	0.85	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	7.2	7.2	3.8	0.0	0.0	31.8	0.0	38.8	32.0	0.0	36.7
Incr Delay (d2), s/veh	0.0	1.1	1.0	0.0	0.4	0.4	0.1	0.0	1.2	0.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.0	4.2	4.4	0.2	0.1	0.1	1.0	0.0	1.9	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.5	8.2	8.2	3.8	0.4	0.4	31.9	0.0	39.9	32.1	0.0	36.7
LnGrp LOS	A	A	A	A	A	A	C	A	D	C	A	D
Approach Vol, veh/h	1019			737			141			54		
Approach Delay, s/veh	8.2			0.7			37.0			32.3		
Approach LOS	A			A			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	7.1	63.5	6.6	12.8	3.1	67.4	6.6	12.8				
Change Period (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0				
Max Green Setting (Gmax), s	7.0	47.0	7.0	11.0	5.0	49.0	7.0	11.0				
Max Q Clear Time (g_c+l1), s	2.8	13.6	4.2	2.1	2.0	2.0	4.2	6.7				
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	1.3	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			8.1									
HCM 6th LOS			A									

05000500F - Epic Church
5: Site Driveway & Riverton Boulevard

No-Build Conditions
PM Peak

Intersection													
Int Delay, s/veh	0.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Vol, veh/h	0	1191	1	0	861	0	0	0	39	0	0	0	
Future Vol, veh/h	0	1191	1	0	861	0	0	0	39	0	0	0	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop	
RT Channelized	-	-	Free	-	-	None	-	-	Stop	-	-	None	
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16983	-	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0	
Mvmt Flow	0	1295	1	0	936	0	0	0	42	0	0	0	
Major/Minor													
Major1		Major2			Minor1								
Conflicting Flow All	-	0	-	-	-	0	-	-	648				
Stage 1	-	-	-	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	-	-	-	6.9				
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3				
Pot Cap-1 Maneuver	0	-	0	0	-	0	0	0	418				
Stage 1	0	-	0	0	-	0	0	0	-				
Stage 2	0	-	0	0	-	0	0	0	-				
Platoon blocked, %	-												
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	0	418				
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-				
Stage 1	-	-	-	-	-	-	-	0	-				
Stage 2	-	-	-	-	-	-	-	0	-				
Approach													
EB			WB			NB							
HCM Control Delay, s	0			0		14.6							
HCM LOS						B							
Minor Lane/Major Mvmt													
Capacity (veh/h)	418	-	-										
HCM Lane V/C Ratio	0.101	-	-										
HCM Control Delay (s)	14.6	-	-										
HCM Lane LOS	B	-	-										
HCM 95th %tile Q(veh)	0.3	-	-										

05000500F - Epic Church
6: Main Street Extension & Site Driveway

No-Build Conditions
PM Peak

Intersection									
Int Delay, s/veh	0								
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations		↑		↑↑	↑↑	↑			
Traffic Vol, veh/h	0	1	0	848	1888	1			
Future Vol, veh/h	0	1	0	848	1888	1			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Stop	Stop	Free	Free	Free	Free			
RT Channelized	-	Stop	-	None	-	Free			
Storage Length	-	0	-	-	-	150			
Veh in Median Storage, #	0	-	-	0	0	-			
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	92	92			
Heavy Vehicles, %	0	0	0	0	0	0			
Mvmt Flow	0	1	0	922	2052	1			
Major/Minor	Minor2	Major1		Major2					
Conflicting Flow All	-	1026	-	0	-	0			
Stage 1	-	-	-	-	-	-			
Stage 2	-	-	-	-	-	-			
Critical Hdwy	-	6.9	-	-	-	-			
Critical Hdwy Stg 1	-	-	-	-	-	-			
Critical Hdwy Stg 2	-	-	-	-	-	-			
Follow-up Hdwy	-	3.3	-	-	-	-			
Pot Cap-1 Maneuver	0	236	0	-	-	0			
Stage 1	0	-	0	-	-	0			
Stage 2	0	-	0	-	-	0			
Platoon blocked, %				-	-	-			
Mov Cap-1 Maneuver	-	236	-	-	-	-			
Mov Cap-2 Maneuver	-	-	-	-	-	-			
Stage 1	-	-	-	-	-	-			
Stage 2	-	-	-	-	-	-			
Approach	EB	NB		SB					
HCM Control Delay, s	20.3	0		0					
HCM LOS	C								
Minor Lane/Major Mvmt	NBT	EBLn1	SBT						
Capacity (veh/h)	-	236	-						
HCM Lane V/C Ratio	-	0.005	-						
HCM Control Delay (s)	-	20.3	-						
HCM Lane LOS	-	C	-						
HCM 95th %tile Q(veh)	-	0	-						

05000500F - Epic Church

No-Build Conditions

Weekend Peak

1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	560	418	44	607	421	35	338	416	108	315	691
Future Volume (vph)	560	418	44	607	421	35	338	416	108	315	691
Lane Group Flow (vph)	589	440	46	639	443	37	356	438	114	332	727
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	pt+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	3	8	18	7	4	5
Permitted Phases				2							4
Detector Phase	5	2	2	1	6	3	8	18	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	5.0	7.0		5.0	7.0	5.0
Minimum Split (s)	11.0	13.0	13.0	11.0	13.0	11.0	13.0		11.0	13.0	11.0
Total Split (s)	29.0	26.0	26.0	29.0	26.0	11.0	24.0		11.0	24.0	29.0
Total Split (%)	32.2%	28.9%	28.9%	32.2%	28.9%	12.2%	26.7%		12.2%	26.7%	32.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
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)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None		None	None	None
v/c Ratio	0.66	0.50	0.09	0.58	0.40	0.14	0.48	0.51	0.42	0.40	0.85
Control Delay	21.1	29.8	1.4	29.6	28.1	32.8	15.2	21.3	44.6	31.0	29.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	29.8	1.4	29.6	28.1	32.8	15.2	21.3	44.6	31.0	29.2
Queue Length 50th (ft)	89	140	0	165	114	8	76	269	32	85	321
Queue Length 95th (ft)	139	184	m4	223	161	m15	106	364	59	126	#559
Internal Link Dist (ft)					372		690			386	277
Turn Bay Length (ft)	375		100	400		150					
Base Capacity (vph)	972	882	532	1101	1111	272	802	845	272	889	893
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.50	0.09	0.58	0.40	0.14	0.44	0.52	0.42	0.37	0.81

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 60

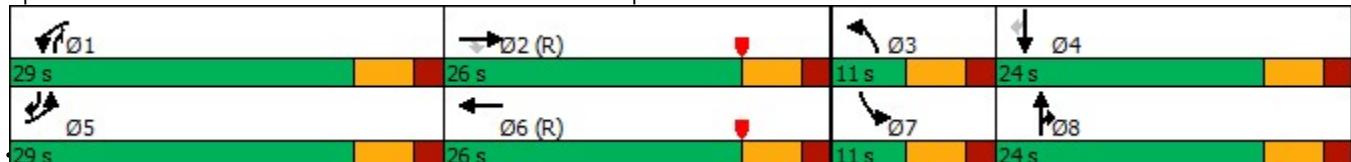
Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



Timings

ABZ

Synchro 10 Report

05000500F - Epic Church

1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard

No-Build Conditions

Weekend Peak

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	0	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (veh/h)	560	418	44	607	421	0	35	338	416	108	315	691
Future Volume (veh/h)	560	418	44	607	421	0	35	338	416	108	315	691
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00			1.00	1.00		1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	0	1900	1900	1796	1900	1900	1900
Adj Flow Rate, veh/h	589	440	46	639	443	0	37	356	438	114	332	727
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	0	0	0	0	7	0	0	0
Cap, veh/h	771	894	399	968	1104	0	196	802	761	262	870	742
Arrive On Green	0.07	0.08	0.08	0.28	0.31	0.00	0.02	0.07	0.07	0.07	0.24	0.24
Sat Flow, veh/h	3510	3610	1610	3483	3705	0	3510	3610	1522	3510	3610	1610
Grp Volume(v), veh/h	589	440	46	639	443	0	37	356	438	114	332	727
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1742	1805	0	1755	1805	1522	1755	1805	1610
Q Serve(g_s), s	14.8	10.5	2.4	14.6	8.7	0.0	0.9	8.5	17.0	2.8	6.9	21.7
Cycle Q Clear(g_c), s	14.8	10.5	2.4	14.6	8.7	0.0	0.9	8.5	17.0	2.8	6.9	21.7
Prop In Lane	1.00			1.00			0.00	1.00		1.00		1.00
Lane Grp Cap(c), veh/h	771	894	399	968	1104	0	196	802	761	262	870	742
V/C Ratio(X)	0.76	0.49	0.12	0.66	0.40	0.00	0.19	0.44	0.58	0.44	0.38	0.98
Avail Cap(c_a), veh/h	975	894	399	968	1104	0	273	802	761	273	870	742
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	35.9	32.2	28.7	24.7	0.0	42.2	36.4	18.5	39.8	28.5	23.9
Incr Delay (d2), s/veh	2.0	1.9	0.6	3.5	1.1	0.0	0.2	0.1	0.7	0.4	0.1	27.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	7.2	5.3	1.0	6.4	3.8	0.0	0.4	3.8	6.8	1.2	3.0	18.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	41.4	37.8	32.8	32.3	25.8	0.0	42.3	36.5	19.2	40.3	28.6	51.7
LnGrp LOS	D	D	C	C	C	A	D	D	B	D	C	D
Approach Vol, veh/h	1075				1082				831			1173
Approach Delay, s/veh	39.6				29.6				27.6			44.1
Approach LOS	D				C				C			D
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	29.0	26.3	9.0	25.7	23.8	31.5	10.7	24.0				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	23.0	20.0	5.0	18.0	23.0	20.0	5.0	18.0				
Max Q Clear Time (g_c+l1), s	16.6	12.5	2.9	23.7	16.8	10.7	4.8	19.0				
Green Ext Time (p_c), s	1.1	0.8	0.0	0.0	1.0	0.8	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				35.9								
HCM 6th LOS				D								

05000500F - Epic Church

No-Build Conditions

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp

Weekend Peak

	↑	→	↓	↗	←	↖	↑	↙	↓	↖	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (vph)	272	340	260	54	344	14	303	503	166	551	250
Future Volume (vph)	272	340	260	54	344	14	303	503	166	551	250
Lane Group Flow (vph)	286	358	274	57	362	15	319	578	175	580	263
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2	1	6	
Permitted Phases						8					6
Detector Phase	7	4	5	3	8	1	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.0	13.0	11.0	11.0	13.0	11.0	11.0	13.0	11.0	13.0	13.0
Total Split (s)	20.0	18.0	19.0	20.0	18.0	19.0	19.0	33.0	19.0	33.0	33.0
Total Split (%)	22.2%	20.0%	21.1%	22.2%	20.0%	21.1%	21.1%	36.7%	21.1%	36.7%	36.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.54	0.29	0.28	0.30	0.37	0.02	0.60	0.68	0.64	0.65	0.66
Control Delay	35.5	33.7	9.1	40.5	30.4	0.1	40.3	33.6	42.0	25.8	29.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	33.7	9.1	40.5	30.4	0.1	40.3	33.6	42.0	25.8	29.9
Queue Length 50th (ft)	79	106	0	30	88	0	87	155	71	183	158
Queue Length 95th (ft)	122	154	101	65	150	0	128	189	131	242	240
Internal Link Dist (ft)	784				195			214		441	
Turn Bay Length (ft)	200		200						250		350
Base Capacity (vph)	623	1224	1012	320	974	833	583	1095	300	1151	520
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.29	0.27	0.18	0.37	0.02	0.55	0.53	0.58	0.50	0.51

Intersection Summary

Cycle Length: 90

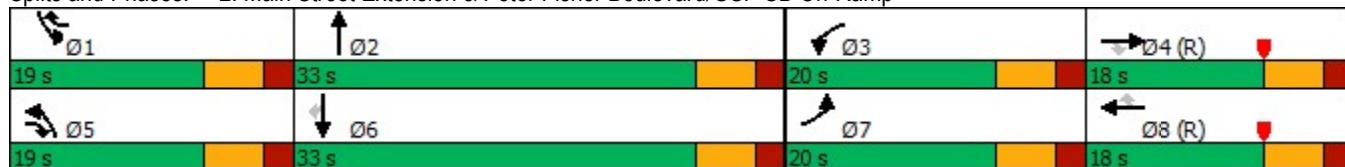
Actuated Cycle Length: 90

Offset: 44 (49%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Splits and Phases: 2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp



05000500F - Epic Church

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp

No-Build Conditions

Weekend Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	272	340	260	54	344	14	303	503	47	166	551	250
Future Volume (veh/h)	272	340	260	54	344	14	303	503	47	166	551	250
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No			No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1811	1811	1900	1885	1900
Adj Flow Rate, veh/h	286	358	274	57	362	15	319	529	49	175	580	263
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	6	6	0	1	0
Cap, veh/h	432	1452	863	117	1240	777	470	690	64	252	795	357
Arrive On Green	0.21	0.67	0.67	0.06	0.34	0.34	0.13	0.22	0.22	0.05	0.07	0.07
Sat Flow, veh/h	3510	3610	1610	1810	3610	1610	3510	3184	294	1810	3582	1610
Grp Volume(v), veh/h	286	358	274	57	362	15	319	285	293	175	580	263
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1810	1805	1610	1755	1721	1758	1810	1791	1610
Q Serve(g_s), s	6.7	3.5	5.5	2.7	6.6	0.4	7.8	14.0	14.1	8.6	14.3	14.4
Cycle Q Clear(g_c), s	6.7	3.5	5.5	2.7	6.6	0.4	7.8	14.0	14.1	8.6	14.3	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	432	1452	863	117	1240	777	470	373	381	252	795	357
V/C Ratio(X)	0.66	0.25	0.32	0.49	0.29	0.02	0.68	0.77	0.77	0.70	0.73	0.74
Avail Cap(c_a), veh/h	624	1452	863	322	1240	777	585	554	567	302	1154	519
HCM Platoon Ratio	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(l)	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	9.4	6.0	40.7	21.6	12.2	37.1	33.1	33.1	41.1	39.1	39.1
Incr Delay (d2), s/veh	0.6	0.4	0.9	1.2	0.6	0.0	1.3	1.7	1.7	3.6	0.5	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	2.7	1.3	1.7	1.2	2.8	0.2	3.3	5.7	5.8	4.2	6.8	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	34.6	9.8	6.9	41.9	22.2	12.2	38.5	34.8	34.9	44.7	39.6	40.4
LnGrp LOS	C	A	A	D	C	B	D	C	C	D	D	D
Approach Vol, veh/h	918				434			897			1018	
Approach Delay, s/veh	16.7				24.4			36.1			40.7	
Approach LOS	B				C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	16.5	23.5	9.8	40.2	16.0	24.0	15.1	34.9				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	27.0	14.0	12.0	13.0	27.0	14.0	12.0				
Max Q Clear Time (g_c+l1), s	10.6	16.1	4.7	7.5	9.8	16.4	8.7	8.6				
Green Ext Time (p_c), s	0.1	0.8	0.0	0.8	0.2	1.6	0.3	0.3				
Intersection Summary												
HCM 6th Ctrl Delay				30.5								
HCM 6th LOS				C								

05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

No-Build Conditions
Weekend Peak

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↑	↑↓	↑	↑↓	↑	↑	↑↓	↑	↑↓	↑↓
Traffic Volume (vph)	13	339	289	243	606	55	337	106	522	337
Future Volume (vph)	13	339	289	243	606	55	337	106	522	337
Lane Group Flow (vph)	14	377	314	264	659	60	366	115	567	420
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	7	3	8		7	4
Permitted Phases	2		6		6			8		
Detector Phase	5	2	1	6	7	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	10.0	10.0	13.0	13.0	10.0	13.0
Total Split (s)	20.0	20.0	20.0	20.0	28.0	28.0	22.0	22.0	28.0	22.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	31.1%	31.1%	24.4%	24.4%	31.1%	24.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.03	0.38	0.55	0.16	0.49	0.31	0.60	0.30	0.67	0.36
Control Delay	15.0	30.0	16.0	13.5	3.4	40.5	38.5	6.5	34.5	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	30.0	16.0	13.5	3.4	40.5	38.5	6.5	34.5	23.2
Queue Length 50th (ft)	4	92	105	40	42	32	101	0	148	92
Queue Length 95th (ft)	15	150	m139	m68	m89	68	143	34	196	129
Internal Link Dist (ft)		221		510			399		420	
Turn Bay Length (ft)	100		250		175	125		150	300	
Base Capacity (vph)	695	999	610	1605	1373	501	722	429	972	1171
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.38	0.51	0.16	0.48	0.12	0.51	0.27	0.58	0.36

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

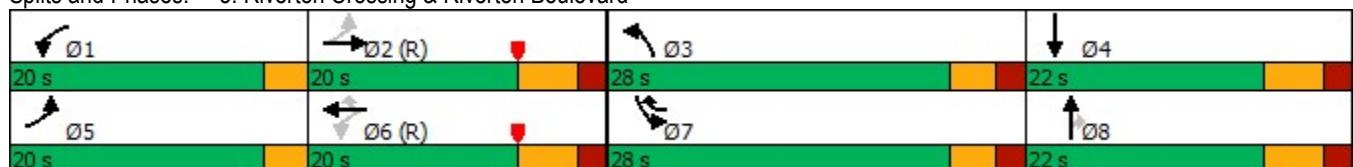
Offset: 21 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Riverton Crossing & Riverton Boulevard

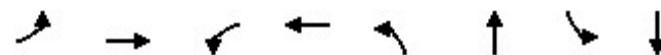


05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

No-Build Conditions
Weekend Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	
Traffic Volume (veh/h)	13	339	8	289	243	606	55	337	106	522	337	50
Future Volume (veh/h)	13	339	8	289	243	606	55	337	106	522	337	50
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	368	9	314	264	659	60	366	115	567	366	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	376	1321	32	642	1705	1096	141	533	238	730	878	129
Arrive On Green	0.04	0.37	0.37	0.05	0.16	0.16	0.08	0.15	0.15	0.21	0.28	0.28
Sat Flow, veh/h	1810	3601	88	1810	3610	1610	1810	3610	1610	3510	3159	462
Grp Volume(v), veh/h	14	184	193	314	264	659	60	366	115	567	208	212
Grp Sat Flow(s), veh/h/ln	1810	1805	1884	1810	1805	1610	1810	1805	1610	1755	1805	1817
Q Serve(g_s), s	0.4	6.5	6.5	8.6	5.7	21.8	2.8	8.7	5.9	13.7	8.5	8.6
Cycle Q Clear(g_c), s	0.4	6.5	6.5	8.6	5.7	21.8	2.8	8.7	5.9	13.7	8.5	8.6
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	376	662	691	642	1705	1096	141	533	238	730	502	505
V/C Ratio(X)	0.04	0.28	0.28	0.49	0.15	0.60	0.43	0.69	0.48	0.78	0.41	0.42
Avail Cap(c_a), veh/h	688	662	691	763	1705	1096	503	722	322	975	502	505
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	20.1	20.1	13.8	22.4	12.9	39.6	36.4	35.2	33.7	26.5	26.6
Incr Delay (d2), s/veh	0.0	1.0	1.0	0.2	0.2	2.4	0.8	0.7	0.6	1.9	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.8	3.0	3.8	2.5	9.8	1.3	3.8	2.3	5.9	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.0	21.1	21.1	14.0	22.6	15.4	40.3	37.1	35.8	35.6	26.7	26.8
LnGrp LOS	B	C	C	B	C	B	D	D	D	D	C	C
Approach Vol, veh/h		391			1237			541			987	
Approach Delay, s/veh		20.9			16.6			37.2			31.8	
Approach LOS		C			B			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	14.0	37.0	10.0	29.0	4.5	46.5	21.7	17.3				
Change Period (Y+R _c), s	3.0	6.0	5.0	6.0	3.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	17.0	14.0	23.0	16.0	17.0	14.0	23.0	16.0				
Max Q Clear Time (g _{c+l1}), s	10.6	8.5	4.8	10.6	2.4	23.8	15.7	10.7				
Green Ext Time (p _c), s	0.4	0.4	0.1	0.5	0.0	0.0	1.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay			25.4									
HCM 6th LOS			C									

4: Power Center South/Site Driveway & Peter Fisher Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↑	↑↓	↑	↑↓	↑	↑	↑	↑
Traffic Volume (vph)	1	732	89	766	51	1	49	1
Future Volume (vph)	1	732	89	766	51	1	49	1
Lane Group Flow (vph)	1	833	97	872	55	92	53	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2				8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	8.0	13.0	8.0	13.0
Total Split (s)	8.0	53.0	10.0	55.0	10.0	17.0	10.0	17.0
Total Split (%)	8.9%	58.9%	11.1%	61.1%	11.1%	18.9%	11.1%	18.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	1.0	4.0	1.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.00	0.33	0.17	0.32	0.17	0.37	0.23	0.01
Control Delay	4.0	8.3	3.7	4.7	28.3	13.1	34.8	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	8.3	3.7	4.7	28.3	13.1	34.8	30.5
Queue Length 50th (ft)	0	117	9	59	24	1	28	1
Queue Length 95th (ft)	1	173	m22	82	53	44	52	7
Internal Link Dist (ft)		167		784		181		201
Turn Bay Length (ft)	75		200					
Base Capacity (vph)	558	2493	571	2725	331	311	236	254
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.33	0.17	0.32	0.17	0.30	0.22	0.01

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 45

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Power Center South/Site Driveway & Peter Fisher Boulevard



05000500F - Epic Church

No-Build Conditions

4: Power Center South/Site Driveway & Peter Fisher Boulevard

Weekend Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↑	↑	
Traffic Volume (veh/h)	1	732	34	89	766	36	51	1	84	49	1	1
Future Volume (veh/h)	1	732	34	89	766	36	51	1	84	49	1	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	796	37	97	833	39	55	1	91	53	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	545	2298	107	582	2470	116	335	2	158	253	85	85
Arrive On Green	0.02	0.65	0.65	0.15	1.00	1.00	0.06	0.10	0.10	0.06	0.10	0.10
Sat Flow, veh/h	1810	3512	163	1810	3511	164	1810	18	1595	1810	872	872
Grp Volume(v), veh/h	1	409	424	97	428	444	55	0	92	53	0	2
Grp Sat Flow(s), veh/h/ln	1810	1805	1871	1810	1805	1870	1810	0	1613	1810	0	1743
Q Serve(g_s), s	0.0	9.1	9.1	1.2	0.0	0.0	2.3	0.0	4.9	2.3	0.0	0.1
Cycle Q Clear(g_c), s	0.0	9.1	9.1	1.2	0.0	0.0	2.3	0.0	4.9	2.3	0.0	0.1
Prop In Lane	1.00		0.09	1.00		0.09	1.00		0.99	1.00		0.50
Lane Grp Cap(c), veh/h	545	1181	1224	582	1270	1316	335	0	159	253	0	171
V/C Ratio(X)	0.00	0.35	0.35	0.17	0.34	0.34	0.16	0.00	0.58	0.21	0.00	0.01
Avail Cap(c_a), veh/h	643	1181	1224	631	1270	1316	400	0	233	320	0	252
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.84	0.84	0.84	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.7	7.0	7.0	3.5	0.0	0.0	31.7	0.0	38.8	32.0	0.0	36.7
Incr Delay (d2), s/veh	0.0	0.8	0.8	0.0	0.6	0.6	0.1	0.0	1.2	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.0	3.3	3.4	0.3	0.2	0.2	1.0	0.0	2.0	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.7	7.8	7.7	3.5	0.6	0.6	31.8	0.0	40.0	32.2	0.0	36.7
LnGrp LOS	A	A	A	A	A	A	C	A	D	C	A	D
Approach Vol, veh/h		834			969			147			55	
Approach Delay, s/veh		7.7			0.9			36.9			32.3	
Approach LOS		A			A			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	7.6	62.9	6.7	12.8	3.1	67.3	6.7	12.9				
Change Period (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0				
Max Green Setting (Gmax), s	7.0	47.0	7.0	11.0	5.0	49.0	7.0	11.0				
Max Q Clear Time (g_c+l1), s	3.2	11.1	4.3	2.1	2.0	2.0	4.3	6.9				
Green Ext Time (p_c), s	0.0	1.7	0.0	0.0	0.0	1.8	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			7.2									
HCM 6th LOS			A									

05000500F - Epic Church
5: Site Driveway & Riverton Boulevard

No-Build Conditions
Weekend Peak

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑				↑			
Traffic Vol, veh/h	0	965	1	0	1138	0	0	0	57	0	0	0
Future Vol, veh/h	0	965	1	0	1138	0	0	0	57	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16983	-	-
Grade, %	-	0	-	-	0	-	-	0	-	0	-	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1049	1	0	1237	0	0	0	62	0	0	0
Major/Minor												
Major1		Major2			Minor1							
Conflicting Flow All	-	0	-	-	-	0	-	-	525			
Stage 1	-	-	-	-	-	-	-	-				
Stage 2	-	-	-	-	-	-	-	-				
Critical Hdwy	-	-	-	-	-	-	-	-	6.9			
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-				
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-				
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.3			
Pot Cap-1 Maneuver	0	-	0	0	-	0	0	0	502			
Stage 1	0	-	0	0	-	0	0	0	-			
Stage 2	0	-	0	0	-	0	0	0	-			
Platoon blocked, %	-											
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	0	502			
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-			
Stage 1	-	-	-	-	-	-	-	0	-			
Stage 2	-	-	-	-	-	-	-	0	-			
Approach												
EB			WB			NB						
HCM Control Delay, s	0			0		13.2						
HCM LOS						B						
Minor Lane/Major Mvmt												
Capacity (veh/h)	502	-	-									
HCM Lane V/C Ratio	0.123	-	-									
HCM Control Delay (s)	13.2	-	-									
HCM Lane LOS	B	-	-									
HCM 95th %tile Q(veh)	0.4	-	-									

05000500F - Epic Church
6: Main Street Extension & Site Driveway

No-Build Conditions
Weekend Peak

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑	↑↑	↑
Traffic Vol, veh/h	0	1	0	789	967	1
Future Vol, veh/h	0	1	0	789	967	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1	0	858	1051	1
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	526	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	502	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	502	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	12.2	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT			
Capacity (veh/h)	-	502	-			
HCM Lane V/C Ratio	-	0.002	-			
HCM Control Delay (s)	-	12.2	-			
HCM Lane LOS	-	B	-			
HCM 95th %tile Q(veh)	-	0	-			

05000500F - Epic Church

Build Conditions

PM Peak

1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑
Traffic Volume (vph)	756	455	34	1464	311	23	391	434	211	481	534
Future Volume (vph)	756	455	34	1464	311	23	391	434	211	481	534
Lane Group Flow (vph)	796	479	36	1541	327	24	412	457	222	506	562
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	pt+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	3	8	18	7	4	5
Permitted Phases				2							4
Detector Phase	5	2	2	1	6	3	8	18	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	5.0	7.0		5.0	7.0	5.0
Minimum Split (s)	11.0	13.0	13.0	11.0	13.0	11.0	13.0		11.0	13.0	11.0
Total Split (s)	43.0	19.0	19.0	43.0	19.0	12.0	16.0		12.0	16.0	43.0
Total Split (%)	47.8%	21.1%	21.1%	47.8%	21.1%	13.3%	17.8%		13.3%	17.8%	47.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
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)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None		None	None	None
v/c Ratio	0.68	0.80	0.09	1.03	0.34	0.08	0.86	0.50	0.71	0.66	0.59
Control Delay	13.5	48.2	0.3	56.7	29.5	41.5	49.9	11.1	53.8	40.0	14.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.5	48.2	0.3	56.7	29.5	41.5	49.9	11.1	53.8	40.0	14.7
Queue Length 50th (ft)	115	155	0	~486	77	4	126	169	64	128	161
Queue Length 95th (ft)	116	#220	m0	#618	133	m9	m#200	m246	#112	#267	269
Internal Link Dist (ft)		372			690		386			277	
Turn Bay Length (ft)	375		100	400		150					
Base Capacity (vph)	1517	601	420	1502	965	311	481	922	311	772	1117
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.80	0.09	1.03	0.34	0.08	0.86	0.50	0.71	0.66	0.50

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 90

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.

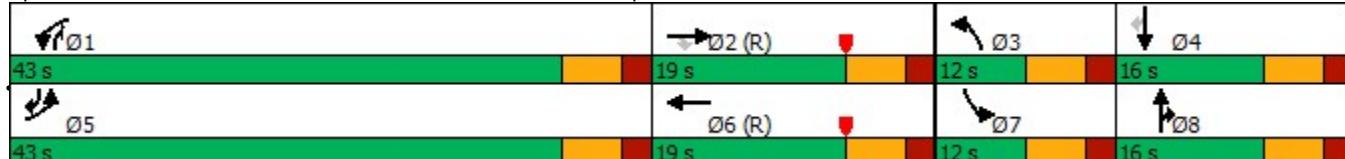
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



05000500F - Epic Church
1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard

Build Conditions

PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	0	23	391	434	211	481	534
Traffic Volume (veh/h)	756	455	34	1464	311	0	23	391	434	211	481	534
Future Volume (veh/h)	756	455	34	1464	311	0	23	391	434	211	481	534
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	0	1900	1900	1796	1900	1900	1900
Adj Flow Rate, veh/h	796	479	36	1541	327	0	24	412	457	222	506	562
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	0	0	0	0	7	0	0	0
Cap, veh/h	1012	602	268	1509	1125	0	166	481	863	312	632	746
Arrive On Green	0.10	0.06	0.06	0.43	0.31	0.00	0.02	0.04	0.04	0.09	0.17	0.17
Sat Flow, veh/h	3510	3610	1610	3483	3705	0	3510	3610	1522	3510	3610	1610
Grp Volume(v), veh/h	796	479	36	1541	327	0	24	412	457	222	506	562
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1742	1805	0	1755	1805	1522	1755	1805	1610
Q Serve(g_s), s	20.0	11.8	1.9	39.0	6.2	0.0	0.6	10.2	12.0	5.5	12.1	15.7
Cycle Q Clear(g_c), s	20.0	11.8	1.9	39.0	6.2	0.0	0.6	10.2	12.0	5.5	12.1	15.7
Prop In Lane	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1012	602	268	1509	1125	0	166	481	863	312	632	746
V/C Ratio(X)	0.79	0.80	0.13	1.02	0.29	0.00	0.14	0.86	0.53	0.71	0.80	0.75
Avail Cap(c_a), veh/h	1521	602	268	1509	1125	0	312	481	863	312	632	746
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	41.0	36.3	25.5	23.5	0.0	42.5	42.2	12.8	39.9	35.6	19.9
Incr Delay (d2), s/veh	0.8	10.5	1.0	28.6	0.7	0.0	0.1	13.5	0.3	6.4	6.8	3.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	9.4	6.6	0.8	21.0	2.7	0.0	0.3	5.6	5.5	2.6	5.8	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.8	51.5	37.4	54.1	24.1	0.0	42.6	55.7	13.1	46.2	42.4	23.8
LnGrp LOS	D	D	D	F	C	A	D	E	B	D	D	C
Approach Vol, veh/h	1311				1868			893			1290	
Approach Delay, s/veh	43.4				48.8			33.5			35.0	
Approach LOS	D				D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	43.0	19.0	8.3	19.7	30.0	32.0	12.0	16.0				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	37.0	13.0	6.0	10.0	37.0	13.0	6.0	10.0				
Max Q Clear Time (g_c+l1), s	41.0	13.8	2.6	17.7	22.0	8.2	7.5	14.0				
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	2.0	0.4	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				41.6								
HCM 6th LOS				D								

05000500F - Epic Church

Build Conditions

PM Peak

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (vph)	266	492	304	79	304	6	279	576	369	1333	190
Future Volume (vph)	266	492	304	79	304	6	279	576	369	1333	190
Lane Group Flow (vph)	280	518	320	83	320	6	294	689	388	1403	200
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2	1	6	
Permitted Phases						8					6
Detector Phase	7	4	5	3	8	1	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.0	13.0	11.0	11.0	13.0	11.0	11.0	13.0	11.0	13.0	13.0
Total Split (s)	13.0	13.0	24.0	13.0	13.0	24.0	24.0	40.0	24.0	40.0	40.0
Total Split (%)	14.4%	14.4%	26.7%	14.4%	14.4%	26.7%	26.7%	44.4%	26.7%	44.4%	44.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.77	1.00	0.51	0.48	0.80	0.01	0.52	0.53	0.97	0.88	0.28
Control Delay	56.4	89.8	20.3	48.3	56.1	0.0	37.6	22.1	52.9	33.1	19.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.4	89.8	20.3	48.3	56.1	0.0	37.6	22.1	52.9	33.1	19.7
Queue Length 50th (ft)	89	~222	74	45	96	0	80	146	193	433	82
Queue Length 95th (ft)	#149	#328	138	91	#172	0	111	199	m#258	m472	m126
Internal Link Dist (ft)		784			195			214		441	
Turn Bay Length (ft)	200		200						250		350
Base Capacity (vph)	363	519	727	180	401	678	778	1358	401	1597	721
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	1.00	0.44	0.46	0.80	0.01	0.38	0.51	0.97	0.88	0.28

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 48 (53%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

~ Volume exceeds capacity, queue is theoretically infinite.

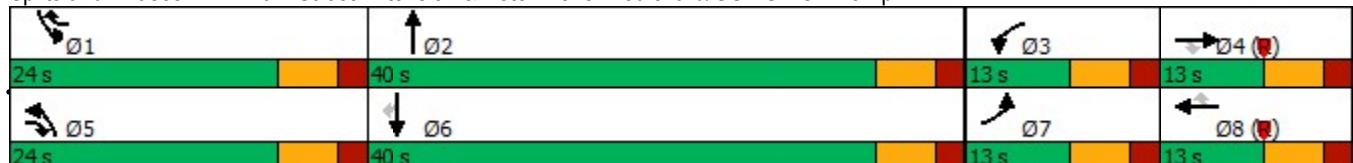
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp



05000500F - Epic Church

Build Conditions

PM Peak

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp

Movement	EBL	EBT	EBC	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	266	492	304	79	304	6	279	576	79	369	1333	190
Future Volume (veh/h)	266	492	304	79	304	6	279	576	79	369	1333	190
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1811	1811	1900	1885	1900
Adj Flow Rate, veh/h	280	518	320	83	320	6	294	606	83	388	1403	200
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	6	6	0	1	0
Cap, veh/h	351	768	550	146	698	669	453	933	127	402	1433	644
Arrive On Green	0.03	0.07	0.07	0.08	0.19	0.19	0.13	0.31	0.31	0.07	0.13	0.13
Sat Flow, veh/h	3510	3610	1610	1810	3610	1610	3510	3041	416	1810	3582	1610
Grp Volume(v), veh/h	280	518	320	83	320	6	294	342	347	388	1403	200
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1810	1805	1610	1755	1721	1736	1810	1791	1610
Q Serve(g_s), s	7.1	12.6	14.9	4.0	7.1	0.2	7.2	15.5	15.6	19.2	35.1	10.1
Cycle Q Clear(g_c), s	7.1	12.6	14.9	4.0	7.1	0.2	7.2	15.5	15.6	19.2	35.1	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	351	768	550	146	698	669	453	528	533	402	1433	644
V/C Ratio(X)	0.80	0.67	0.58	0.57	0.46	0.01	0.65	0.65	0.65	0.96	0.98	0.31
Avail Cap(c_a), veh/h	351	768	550	181	698	669	780	688	695	402	1433	644
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(l)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	38.8	28.8	39.9	32.1	15.4	37.3	27.0	27.0	41.3	38.7	27.8
Incr Delay (d2), s/veh	10.5	4.3	4.1	1.3	2.2	0.0	0.6	0.5	0.5	35.5	18.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.7	6.5	7.0	1.8	3.2	0.1	3.0	6.0	6.0	13.1	20.3	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.1	43.1	32.9	41.2	34.3	15.5	37.9	27.5	27.5	76.8	57.6	27.9
LnGrp LOS	D	D	C	D	C	B	D	C	C	E	E	C
Approach Vol, veh/h	1118				409			983			1991	
Approach Delay, s/veh	42.7				35.4			30.6			58.3	
Approach LOS	D				D			C			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	24.0	31.6	11.2	23.2	15.6	40.0	13.0	21.4				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	18.0	34.0	7.0	7.0	18.0	34.0	7.0	7.0				
Max Q Clear Time (g_c+l1), s	21.2	17.6	6.0	16.9	9.2	37.1	9.1	9.1				
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.4	0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				46.3								
HCM 6th LOS				D								

05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

Build Conditions
PM Peak

	↗	→	↖	←	↙	↑	↗	↖	↓	
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations	↖	↑↓	↖	↑↓	↖	↖	↑↓	↖	↖↓	↑↓
Traffic Volume (vph)	13	415	205	188	468	51	252	103	674	453
Future Volume (vph)	13	415	205	188	468	51	252	103	674	453
Lane Group Flow (vph)	14	468	223	204	509	55	274	112	733	516
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	7	3	8		7	4
Permitted Phases	2		6		6			8		
Detector Phase	5	2	1	6	7	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	10.0	10.0	13.0	13.0	10.0	13.0
Total Split (s)	20.0	20.0	20.0	20.0	28.0	28.0	22.0	22.0	28.0	22.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	31.1%	31.1%	24.4%	24.4%	31.1%	24.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.03	0.43	0.44	0.13	0.38	0.29	0.51	0.32	0.79	0.43
Control Delay	13.9	28.2	16.7	15.2	2.5	40.4	38.4	6.8	37.7	25.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.9	28.2	16.7	15.2	2.5	40.4	38.4	6.8	37.7	25.0
Queue Length 50th (ft)	4	112	73	34	1	29	76	0	195	119
Queue Length 95th (ft)	15	181	131	68	65	63	111	33	261	165
Internal Link Dist (ft)		221		510			399		420	
Turn Bay Length (ft)	100		250		175	125		150	300	
Base Capacity (vph)	720	1095	575	1605	1357	501	722	429	972	1187
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.43	0.39	0.13	0.38	0.11	0.38	0.26	0.75	0.43

Intersection Summary

Cycle Length: 90

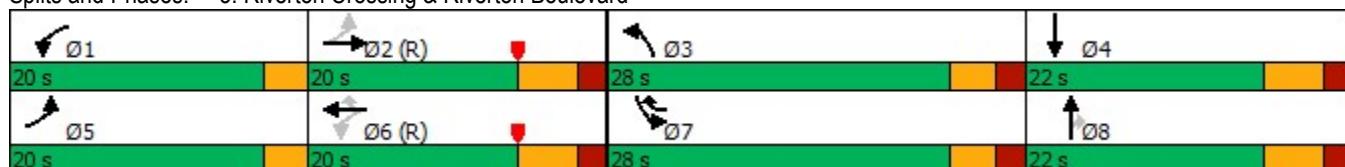
Actuated Cycle Length: 90

Offset: 16 (18%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 55

Control Type: Actuated-Coordinated

Splits and Phases: 3: Riverton Crossing & Riverton Boulevard

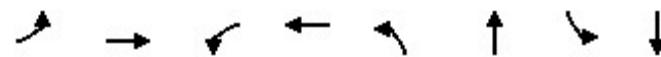


05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

Build Conditions
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	
Traffic Volume (veh/h)	13	415	16	205	188	468	51	252	103	674	453	22
Future Volume (veh/h)	13	415	16	205	188	468	51	252	103	674	453	22
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	451	17	223	204	509	55	274	112	733	492	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	432	1336	50	559	1639	1135	141	444	198	881	1038	51
Arrive On Green	0.04	0.38	0.38	0.19	0.76	0.76	0.08	0.12	0.12	0.25	0.30	0.30
Sat Flow, veh/h	1810	3547	133	1810	3610	1610	1810	3610	1610	3510	3504	171
Grp Volume(v), veh/h	14	229	239	223	204	509	55	274	112	733	253	263
Grp Sat Flow(s), veh/h/ln	1810	1805	1876	1810	1805	1610	1810	1805	1610	1755	1805	1869
Q Serve(g_s), s	0.4	8.2	8.2	6.2	1.4	7.9	2.6	6.5	5.9	17.8	10.3	10.4
Cycle Q Clear(g_c), s	0.4	8.2	8.2	6.2	1.4	7.9	2.6	6.5	5.9	17.8	10.3	10.4
Prop In Lane	1.00		0.07	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	432	680	706	559	1639	1135	141	444	198	881	535	554
V/C Ratio(X)	0.03	0.34	0.34	0.40	0.12	0.45	0.39	0.62	0.57	0.83	0.47	0.48
Avail Cap(c_a), veh/h	744	680	706	730	1639	1135	503	722	322	975	535	554
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	20.0	20.0	11.7	6.1	2.2	39.5	37.5	37.2	31.9	25.9	25.9
Incr Delay (d2), s/veh	0.0	1.3	1.3	0.2	0.2	1.3	0.7	0.5	0.9	5.2	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	3.6	3.7	2.1	0.5	1.6	1.2	2.9	2.3	8.0	4.4	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.5	21.4	21.3	11.9	6.3	3.5	40.1	38.0	38.1	37.1	26.2	26.2
LnGrp LOS	B	C	C	B	A	A	D	D	D	D	C	C
Approach Vol, veh/h		482			936			441			1249	
Approach Delay, s/veh		21.2			6.1			38.3			32.6	
Approach LOS		C			A			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	11.5	37.9	10.0	30.7	4.5	44.9	25.6	15.1				
Change Period (Y+R _c), s	3.0	6.0	5.0	6.0	3.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	17.0	14.0	23.0	16.0	17.0	14.0	23.0	16.0				
Max Q Clear Time (g _{c+l1}), s	8.2	10.2	4.6	12.4	2.4	9.9	19.8	8.5				
Green Ext Time (p _c), s	0.3	0.4	0.1	0.4	0.0	0.9	0.8	0.6				
Intersection Summary												
HCM 6th Ctrl Delay			23.6									
HCM 6th LOS				C								

4: Power Center South/Site Driveway & Peter Fisher Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↑	↑↓	↑	↑↓	↑	↑↓	↑	↑↓
Traffic Volume (vph)	1	913	63	590	48	1	53	1
Future Volume (vph)	1	913	63	590	48	1	53	1
Lane Group Flow (vph)	1	1018	68	737	52	89	58	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2				8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	8.0	13.0	8.0	13.0
Total Split (s)	8.0	53.0	10.0	55.0	10.0	17.0	10.0	17.0
Total Split (%)	8.9%	58.9%	11.1%	61.1%	11.1%	18.9%	11.1%	18.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	1.0	4.0	1.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.00	0.42	0.15	0.28	0.15	0.36	0.23	0.01
Control Delay	4.0	9.6	4.3	4.8	27.2	13.1	33.9	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	9.6	4.3	4.8	27.2	13.1	33.9	30.5
Queue Length 50th (ft)	0	153	7	50	23	1	31	1
Queue Length 95th (ft)	1	220	m18	70	51	43	55	7
Internal Link Dist (ft)		167		784		181		201
Turn Bay Length (ft)	75		200					
Base Capacity (vph)	616	2438	466	2622	357	309	258	275
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.42	0.15	0.28	0.15	0.29	0.22	0.01

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Power Center South/Site Driveway & Peter Fisher Boulevard



05000500F - Epic Church
4: Power Center South/Site Driveway & Peter Fisher Boulevard

Build Conditions
PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↑	↑	
Traffic Volume (veh/h)	1	913	24	63	590	88	48	1	81	53	1	1
Future Volume (veh/h)	1	913	24	63	590	88	48	1	81	53	1	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	992	26	68	641	96	52	1	88	58	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	605	2367	62	500	2213	331	335	2	156	257	87	87
Arrive On Green	0.02	0.66	0.66	0.14	1.00	1.00	0.06	0.10	0.10	0.06	0.10	0.10
Sat Flow, veh/h	1810	3594	94	1810	3149	471	1810	18	1595	1810	872	872
Grp Volume(v), veh/h	1	498	520	68	367	370	52	0	89	58	0	2
Grp Sat Flow(s), veh/h/ln	1810	1805	1883	1810	1805	1815	1810	0	1613	1810	0	1743
Q Serve(g_s), s	0.0	11.7	11.7	0.9	0.0	0.0	2.2	0.0	4.7	2.5	0.0	0.1
Cycle Q Clear(g_c), s	0.0	11.7	11.7	0.9	0.0	0.0	2.2	0.0	4.7	2.5	0.0	0.1
Prop In Lane	1.00		0.05	1.00		0.26	1.00		0.99	1.00		0.50
Lane Grp Cap(c), veh/h	605	1189	1240	500	1268	1276	335	0	158	257	0	174
V/C Ratio(X)	0.00	0.42	0.42	0.14	0.29	0.29	0.15	0.00	0.56	0.23	0.00	0.01
Avail Cap(c_a), veh/h	703	1189	1240	558	1268	1276	403	0	233	321	0	252
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.5	7.2	7.2	3.8	0.0	0.0	32.0	0.0	38.8	31.8	0.0	36.5
Incr Delay (d2), s/veh	0.0	1.1	1.0	0.0	0.5	0.5	0.1	0.0	1.2	0.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.0	4.2	4.4	0.2	0.2	0.2	1.0	0.0	1.9	1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	4.5	8.3	8.3	3.9	0.5	0.5	32.0	0.0	39.9	31.9	0.0	36.5
LnGrp LOS	A	A	A	A	A	A	C	A	D	C	A	D
Approach Vol, veh/h	1019				805				141			60
Approach Delay, s/veh	8.3				0.7				37.0			32.1
Approach LOS	A				A				D			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	7.1	63.3	6.6	13.0	3.1	67.2	6.8	12.8				
Change Period (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0				
Max Green Setting (Gmax), s	7.0	47.0	7.0	11.0	5.0	49.0	7.0	11.0				
Max Q Clear Time (g_c+l1), s	2.9	13.7	4.2	2.1	2.0	2.0	4.5	6.7				
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	1.5	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				8.0								
HCM 6th LOS				A								

05000500F - Epic Church
5: Site Driveway & Riverton Boulevard

Build Conditions
PM Peak

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1191	1	0	861	0	0	0	55	0	0	0
Future Vol, veh/h	0	1191	1	0	861	0	0	0	55	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16983	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1295	1	0	936	0	0	0	60	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.9
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.3
Pot Cap-1 Maneuver	0	0	418
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	418
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15
HCM LOS			C
<hr/>			
Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	418	-	-
HCM Lane V/C Ratio	0.143	-	-
HCM Control Delay (s)	15	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.5	-	-

05000500F - Epic Church
6: Main Street Extension & Site Driveway

Build Conditions
PM Peak

Intersection

Int Delay, s/veh 0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations 

Traffic Vol, veh/h 0 5 0 848 1888 92

Future Vol, veh/h 0 5 0 848 1888 92

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - Stop - None - Free

Storage Length - 0 - - - 150

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 92 92 92 92 92 92

Heavy Vehicles, % 0 0 0 0 0 0

Mvmt Flow 0 5 0 922 2052 100

Major/Minor	Minor2	Major1	Major2
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Conflicting Flow All - 1026 - 0 - 0

Stage 1 - - - - - -

Stage 2 - - - - - -

Critical Hdwy - 6.9 - - - -

Critical Hdwy Stg 1 - - - - - -

Critical Hdwy Stg 2 - - - - - -

Follow-up Hdwy - 3.3 - - - -

Pot Cap-1 Maneuver 0 236 0 - - 0

Stage 1 0 - 0 - - 0

Stage 2 0 - 0 - - 0

Platoon blocked, % - -

Mov Cap-1 Maneuver - 236 - - - -

Mov Cap-2 Maneuver - - - - - -

Stage 1 - - - - - -

Stage 2 - - - - - -

Approach	EB	NB	SB
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HCM Control Delay, s 20.6 0 0

HCM LOS C

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
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Capacity (veh/h) - 236 -

HCM Lane V/C Ratio - 0.023 -

HCM Control Delay (s) - 20.6 -

HCM Lane LOS - C -

HCM 95th %tile Q(veh) - 0.1 -

05000500F - Epic Church

Build Conditions

Weekend Peak

1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	739	546	44	701	421	35	338	416	108	445	691
Future Volume (vph)	739	546	44	701	421	35	338	416	108	445	691
Lane Group Flow (vph)	778	575	46	738	443	37	356	438	114	468	727
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	pt+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	3	8	18	7	4	5
Permitted Phases				2							4
Detector Phase	5	2	2	1	6	3	8	18	7	4	5
Switch Phase											
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	5.0	7.0		5.0	7.0	5.0
Minimum Split (s)	11.0	13.0	13.0	11.0	13.0	11.0	13.0		11.0	13.0	11.0
Total Split (s)	29.0	26.0	26.0	29.0	26.0	11.0	24.0		11.0	24.0	29.0
Total Split (%)	32.2%	28.9%	28.9%	32.2%	28.9%	12.2%	26.7%		12.2%	26.7%	32.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
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)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes						
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None		None	None	None
v/c Ratio	0.84	0.65	0.09	0.67	0.42	0.14	0.47	0.51	0.42	0.56	0.83
Control Delay	30.1	33.6	0.7	31.7	28.9	32.9	14.6	20.6	44.6	33.5	27.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.1	33.6	0.7	31.7	28.9	32.9	14.6	20.6	44.6	33.5	27.2
Queue Length 50th (ft)	140	178	0	197	114	8	76	268	32	125	321
Queue Length 95th (ft)	198	233	m2	264	161	m15	106	364	59	176	#559
Internal Link Dist (ft)					372		690				277
Turn Bay Length (ft)	375		100	400		150					
Base Capacity (vph)	973	882	532	1096	1063	272	802	845	272	889	896
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.65	0.09	0.67	0.42	0.14	0.44	0.52	0.42	0.53	0.81

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Yellow, Master Intersection

Natural Cycle: 60

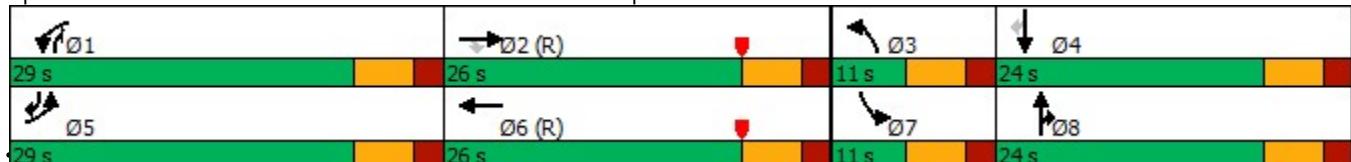
Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard



Timings

ABZ

Synchro 10 Report

05000500F - Epic Church
1: Main Street Extension/GSP SB Off-Ramp & Riverton Boulevard

Build Conditions
Weekend Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	0	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (veh/h)	739	546	44	701	421	0	35	338	416	108	445	691
Future Volume (veh/h)	739	546	44	701	421	0	35	338	416	108	445	691
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1885	1900	0	1900	1900	1796	1900	1900	1900
Adj Flow Rate, veh/h	778	575	46	738	443	0	37	356	438	114	468	727
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	1	0	0	0	0	7	0	0	0
Cap, veh/h	938	894	399	968	933	0	196	802	761	262	870	818
Arrive On Green	0.09	0.08	0.08	0.28	0.26	0.00	0.02	0.07	0.07	0.07	0.24	0.24
Sat Flow, veh/h	3510	3610	1610	3483	3705	0	3510	3610	1522	3510	3610	1610
Grp Volume(v), veh/h	778	575	46	738	443	0	37	356	438	114	468	727
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1742	1805	0	1755	1805	1522	1755	1805	1610
Q Serve(g_s), s	19.6	13.9	2.4	17.5	9.3	0.0	0.9	8.5	17.0	2.8	10.2	21.7
Cycle Q Clear(g_c), s	19.6	13.9	2.4	17.5	9.3	0.0	0.9	8.5	17.0	2.8	10.2	21.7
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h	938	894	399	968	933	0	196	802	761	262	870	818
V/C Ratio(X)	0.83	0.64	0.12	0.76	0.47	0.00	0.19	0.44	0.58	0.44	0.54	0.89
Avail Cap(c_a), veh/h	975	894	399	968	933	0	273	802	761	273	870	818
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	37.5	32.2	29.8	28.2	0.0	42.2	36.4	18.5	39.8	29.8	19.9
Incr Delay (d2), s/veh	5.5	3.6	0.6	5.7	1.7	0.0	0.2	0.1	0.7	0.4	0.4	11.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	9.9	7.1	1.0	7.9	4.2	0.0	0.4	3.8	6.8	1.2	4.4	14.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	44.5	41.0	32.8	35.5	29.9	0.0	42.3	36.5	19.2	40.3	30.1	31.2
LnGrp LOS	D	D	C	D	C	A	D	D	B	D	C	C
Approach Vol, veh/h	1399				1181				831			1309
Approach Delay, s/veh	42.7				33.4				27.6			31.6
Approach LOS	D				C				C			C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	29.0	26.3	9.0	25.7	28.0	27.3	10.7	24.0				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	23.0	20.0	5.0	18.0	23.0	20.0	5.0	18.0				
Max Q Clear Time (g _{c+l1}), s	19.5	15.9	2.9	23.7	21.6	11.3	4.8	19.0				
Green Ext Time (p _c), s	0.9	0.7	0.0	0.0	0.4	0.8	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay				34.6								
HCM 6th LOS				C								

05000500F - Epic Church

Build Conditions

Weekend Peak

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑
Traffic Volume (vph)	272	417	286	54	437	14	359	503	217	603	250
Future Volume (vph)	272	417	286	54	437	14	359	503	217	603	250
Lane Group Flow (vph)	286	439	301	57	460	15	378	578	228	635	263
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	5	3	8	1	5	2	1	6	
Permitted Phases						8					6
Detector Phase	7	4	5	3	8	1	5	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	5.0	5.0	7.0	5.0	7.0	7.0
Minimum Split (s)	11.0	13.0	11.0	11.0	13.0	11.0	11.0	13.0	11.0	13.0	13.0
Total Split (s)	20.0	18.0	19.0	20.0	18.0	19.0	19.0	33.0	19.0	33.0	33.0
Total Split (%)	22.2%	20.0%	21.1%	22.2%	20.0%	21.1%	21.1%	36.7%	21.1%	36.7%	36.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?											
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.54	0.38	0.30	0.30	0.50	0.02	0.68	0.66	0.79	0.69	0.63
Control Delay	38.7	31.2	7.3	40.5	33.3	0.1	42.3	32.9	50.6	28.1	29.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.7	31.2	7.3	40.5	33.3	0.1	42.3	32.9	50.6	28.1	29.9
Queue Length 50th (ft)	80	118	0	30	120	0	104	151	106	201	156
Queue Length 95th (ft)	122	177	86	65	#210	0	151	189	m#222	258	237
Internal Link Dist (ft)	784				195			214		441	
Turn Bay Length (ft)	200		200						250		350
Base Capacity (vph)	623	1170	1003	320	920	810	583	1095	300	1151	520
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.38	0.30	0.18	0.50	0.02	0.65	0.53	0.76	0.55	0.51

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 44 (49%), Referenced to phase 4:EBT and 8:WBT, Start of Yellow

Natural Cycle: 55

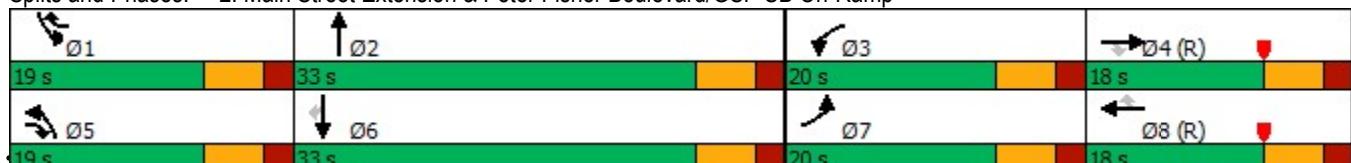
Control Type: Actuated-Coordinated

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp



Timings

ABZ

Synchro 10 Report

05000500F - Epic Church

Build Conditions

Weekend Peak

2: Main Street Extension & Peter Fisher Boulevard/GSP SB On-Ramp

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	272	417	286	54	437	14	359	503	47	217	603	250
Future Volume (veh/h)	272	417	286	54	437	14	359	503	47	217	603	250
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No		No		No		No	No		No
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1811	1811	1900	1885	1900
Adj Flow Rate, veh/h	286	439	301	57	460	15	378	529	49	228	635	263
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	6	6	0	1	0
Cap, veh/h	441	1345	840	117	1124	770	524	696	64	302	845	380
Arrive On Green	0.13	0.37	0.37	0.06	0.31	0.31	0.15	0.22	0.22	0.06	0.08	0.08
Sat Flow, veh/h	3510	3610	1610	1810	3610	1610	3510	3184	294	1810	3582	1610
Grp Volume(v), veh/h	286	439	301	57	460	15	378	285	293	228	635	263
Grp Sat Flow(s), veh/h/ln	1755	1805	1610	1810	1805	1610	1755	1721	1758	1810	1791	1610
Q Serve(g_s), s	7.0	7.8	9.9	2.7	9.1	0.4	9.2	14.0	14.1	11.2	15.6	14.3
Cycle Q Clear(g_c), s	7.0	7.8	9.9	2.7	9.1	0.4	9.2	14.0	14.1	11.2	15.6	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	441	1345	840	117	1124	770	524	376	384	302	845	380
V/C Ratio(X)	0.65	0.33	0.36	0.49	0.41	0.02	0.72	0.76	0.76	0.76	0.75	0.69
Avail Cap(c_a), veh/h	624	1345	840	322	1124	770	585	554	567	302	1154	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(l)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	20.2	12.7	40.7	24.5	12.4	36.5	32.9	33.0	40.7	38.9	38.3
Incr Delay (d2), s/veh	0.6	0.6	1.1	1.2	1.1	0.0	3.0	1.6	1.6	9.4	1.1	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.0	3.3	3.6	1.2	3.9	0.2	4.0	5.6	5.8	6.0	7.5	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.0	20.8	13.8	41.9	25.6	12.4	39.5	34.5	34.6	50.1	40.0	39.3
LnGrp LOS	D	C	B	D	C	B	D	C	C	D	D	D
Approach Vol, veh/h	1026				532			956			1126	
Approach Delay, s/veh	23.5				26.9			36.5			41.9	
Approach LOS	C				C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	19.0	23.7	9.8	37.5	17.4	25.2	15.3	32.0				
Change Period (Y+R _c), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	27.0	14.0	12.0	13.0	27.0	14.0	12.0				
Max Q Clear Time (g_c+l1), s	13.2	16.1	4.7	11.9	11.2	17.6	9.0	11.1				
Green Ext Time (p_c), s	0.0	0.8	0.0	0.0	0.2	1.6	0.3	0.2				
Intersection Summary												
HCM 6th Ctrl Delay				33.1								
HCM 6th LOS				C								

05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

Build Conditions
Weekend Peak

	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Configurations	↑	↑↓	↑	↑↓	↑	↑	↑↓	↑	↑↓	↑↓
Traffic Volume (vph)	13	339	289	243	606	55	337	106	522	337
Future Volume (vph)	13	339	289	243	606	55	337	106	522	337
Lane Group Flow (vph)	14	377	314	264	659	60	366	115	567	420
Turn Type	pm+pt	NA	pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	7	3	8		7	4
Permitted Phases	2		6		6			8		
Detector Phase	5	2	1	6	7	3	8	8	7	4
Switch Phase										
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	10.0	10.0	13.0	13.0	10.0	13.0
Total Split (s)	20.0	20.0	20.0	20.0	28.0	28.0	22.0	22.0	28.0	22.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	31.1%	31.1%	24.4%	24.4%	31.1%	24.4%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	3.0	3.0	4.0	4.0	3.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes			Yes						
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None	None
v/c Ratio	0.03	0.38	0.55	0.16	0.49	0.31	0.60	0.30	0.67	0.36
Control Delay	15.0	30.0	15.8	13.4	3.4	40.5	38.5	6.5	34.5	23.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	30.0	15.8	13.4	3.4	40.5	38.5	6.5	34.5	23.2
Queue Length 50th (ft)	4	92	105	40	42	32	101	0	148	92
Queue Length 95th (ft)	15	150	m140	m68	m91	68	143	34	196	129
Internal Link Dist (ft)		221		510			399		420	
Turn Bay Length (ft)	100		250		175	125		150	300	
Base Capacity (vph)	695	999	610	1605	1373	501	722	429	972	1171
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.38	0.51	0.16	0.48	0.12	0.51	0.27	0.58	0.36

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

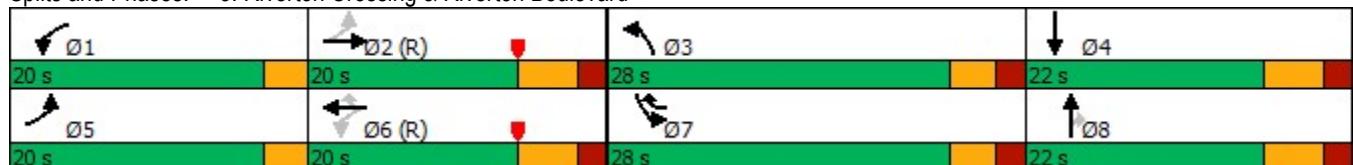
Offset: 21 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Riverton Crossing & Riverton Boulevard

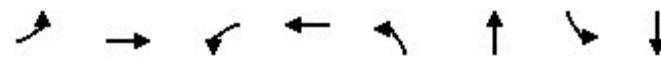


05000500F - Epic Church
3: Riverton Crossing & Riverton Boulevard

Build Conditions
Weekend Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	
Traffic Volume (veh/h)	13	339	8	289	243	606	55	337	106	522	337	50
Future Volume (veh/h)	13	339	8	289	243	606	55	337	106	522	337	50
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	14	368	9	314	264	659	60	366	115	567	366	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	376	1321	32	642	1705	1096	141	533	238	730	878	129
Arrive On Green	0.04	0.37	0.37	0.05	0.16	0.16	0.08	0.15	0.15	0.21	0.28	0.28
Sat Flow, veh/h	1810	3601	88	1810	3610	1610	1810	3610	1610	3510	3159	462
Grp Volume(v), veh/h	14	184	193	314	264	659	60	366	115	567	208	212
Grp Sat Flow(s), veh/h/ln	1810	1805	1884	1810	1805	1610	1810	1805	1610	1755	1805	1817
Q Serve(g_s), s	0.4	6.5	6.5	8.6	5.7	21.8	2.8	8.7	5.9	13.7	8.5	8.6
Cycle Q Clear(g_c), s	0.4	6.5	6.5	8.6	5.7	21.8	2.8	8.7	5.9	13.7	8.5	8.6
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	376	662	691	642	1705	1096	141	533	238	730	502	505
V/C Ratio(X)	0.04	0.28	0.28	0.49	0.15	0.60	0.43	0.69	0.48	0.78	0.41	0.42
Avail Cap(c_a), veh/h	688	662	691	763	1705	1096	503	722	322	975	502	505
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	20.1	20.1	13.8	22.4	12.9	39.6	36.4	35.2	33.7	26.5	26.6
Incr Delay (d2), s/veh	0.0	1.0	1.0	0.2	0.2	2.4	0.8	0.7	0.6	1.9	0.2	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.2	2.8	3.0	3.8	2.5	9.8	1.3	3.8	2.3	5.9	3.6	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.0	21.1	21.1	14.0	22.6	15.4	40.3	37.1	35.8	35.6	26.7	26.8
LnGrp LOS	B	C	C	B	C	B	D	D	D	D	C	C
Approach Vol, veh/h		391			1237			541			987	
Approach Delay, s/veh		20.9			16.6			37.2			31.8	
Approach LOS		C			B			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	14.0	37.0	10.0	29.0	4.5	46.5	21.7	17.3				
Change Period (Y+R _c), s	3.0	6.0	5.0	6.0	3.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	17.0	14.0	23.0	16.0	17.0	14.0	23.0	16.0				
Max Q Clear Time (g _{c+l1}), s	10.6	8.5	4.8	10.6	2.4	23.8	15.7	10.7				
Green Ext Time (p _c), s	0.4	0.4	0.1	0.5	0.0	0.0	1.0	0.6				
Intersection Summary												
HCM 6th Ctrl Delay			25.4									
HCM 6th LOS			C									

4: Power Center South/Site Driveway & Peter Fisher Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↑	↑↓	↑	↑↓	↑	↑	↑	↑
Traffic Volume (vph)	1	732	89	766	51	1	152	1
Future Volume (vph)	1	732	89	766	51	1	152	1
Lane Group Flow (vph)	1	833	97	1034	55	92	165	2
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	5	2	1	6	3	8	7	4
Permitted Phases	2				8		4	
Detector Phase	5	2	1	6	3	8	7	4
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	8.0	13.0	8.0	13.0	8.0	13.0	8.0	13.0
Total Split (s)	8.0	53.0	10.0	55.0	10.0	17.0	10.0	17.0
Total Split (%)	8.9%	58.9%	11.1%	61.1%	11.1%	18.9%	11.1%	18.9%
Yellow Time (s)	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	1.0	4.0	1.0	4.0	1.0	4.0	1.0	4.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?								
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
v/c Ratio	0.00	0.37	0.19	0.42	0.16	0.37	0.61	0.01
Control Delay	4.0	9.5	3.5	4.4	27.2	13.1	44.5	30.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.0	9.5	3.5	4.4	27.2	13.1	44.5	30.5
Queue Length 50th (ft)	0	117	8	58	24	1	95	1
Queue Length 95th (ft)	1	173	m18	77	53	44	131	7
Internal Link Dist (ft)		167		784		181		201
Turn Bay Length (ft)	75		200					
Base Capacity (vph)	444	2276	530	2468	359	311	272	277
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.37	0.18	0.42	0.15	0.30	0.61	0.01

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow

Natural Cycle: 50

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: Power Center South/Site Driveway & Peter Fisher Boulevard



05000500F - Epic Church
4: Power Center South/Site Driveway & Peter Fisher Boulevard

Build Conditions
Weekend Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↑	↑	
Traffic Volume (veh/h)	1	732	34	89	766	185	51	1	84	152	1	1
Future Volume (veh/h)	1	732	34	89	766	185	51	1	84	152	1	1
Initial Q (Q _b), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1	796	37	97	833	201	55	1	91	165	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	465	2170	101	551	1924	464	336	2	157	319	117	117
Arrive On Green	0.02	0.62	0.62	0.15	1.00	1.00	0.06	0.10	0.10	0.10	0.13	0.13
Sat Flow, veh/h	1810	3512	163	1810	2884	696	1810	18	1595	1810	872	872
Grp Volume(v), veh/h	1	409	424	97	521	513	55	0	92	165	0	2
Grp Sat Flow(s), veh/h/ln	1810	1805	1871	1810	1805	1775	1810	0	1613	1810	0	1743
Q Serve(g_s), s	0.0	10.1	10.1	1.4	0.0	0.0	2.4	0.0	4.9	7.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	10.1	10.1	1.4	0.0	0.0	2.4	0.0	4.9	7.0	0.0	0.1
Prop In Lane	1.00		0.09	1.00		0.39	1.00		0.99	1.00		0.50
Lane Grp Cap(c), veh/h	465	1115	1156	551	1204	1184	336	0	158	319	0	234
V/C Ratio(X)	0.00	0.37	0.37	0.18	0.43	0.43	0.16	0.00	0.58	0.52	0.00	0.01
Avail Cap(c_a), veh/h	563	1115	1156	600	1204	1184	402	0	233	319	0	252
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.78	0.78	0.78	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	8.5	8.5	4.5	0.0	0.0	32.6	0.0	38.8	30.4	0.0	33.8
Incr Delay (d2), s/veh	0.0	0.9	0.9	0.0	0.9	0.9	0.1	0.0	1.3	0.7	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.0	3.8	3.9	0.4	0.3	0.3	1.0	0.0	2.0	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	5.8	9.4	9.4	4.5	0.9	0.9	32.7	0.0	40.1	31.1	0.0	33.8
LnGrp LOS	A	A	A	A	A	A	C	A	D	C	A	C
Approach Vol, veh/h	834			1131			147			167		
Approach Delay, s/veh	9.4			1.2			37.3			31.1		
Approach LOS	A			A			D			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R _c), s	7.6	59.6	6.7	16.1	3.1	64.0	10.0	12.8				
Change Period (Y+R _c), s	3.0	6.0	3.0	6.0	3.0	6.0	3.0	6.0				
Max Green Setting (Gmax), s	7.0	47.0	7.0	11.0	5.0	49.0	7.0	11.0				
Max Q Clear Time (g_c+l1), s	3.4	12.1	4.4	2.1	2.0	2.0	9.0	6.9				
Green Ext Time (p_c), s	0.0	1.7	0.0	0.0	0.0	2.3	0.0	0.1				
Intersection Summary												
HCM 6th Ctrl Delay			8.7									
HCM 6th LOS			A									

05000500F - Epic Church
5: Site Driveway & Riverton Boulevard

Build Conditions
Weekend Peak

Intersection

Int Delay, s/veh 5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	965	1	0	1138	0	0	0	364	0	0	0
Future Vol, veh/h	0	965	1	0	1138	0	0	0	364	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	Stop	-	-	None
Storage Length	-	-	-	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	16983	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1049	1	0	1237	0	0	0	396	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.9
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.3
Pot Cap-1 Maneuver	0	0	502
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	0
Mov Cap-2 Maneuver	-	-	0
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	33.9
HCM LOS			D
<hr/>			
Minor Lane/Major Mvmt	NBLn1	EBT	WBT
Capacity (veh/h)	502	-	-
HCM Lane V/C Ratio	0.788	-	-
HCM Control Delay (s)	33.9	-	-
HCM Lane LOS	D	-	-
HCM 95th %tile Q(veh)	7.2	-	-

05000500F - Epic Church
6: Main Street Extension & Site Driveway

Build Conditions
Weekend Peak

Intersection

Int Delay, s/veh 0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations						
Traffic Vol, veh/h	0	103	0	789	967	224
Future Vol, veh/h	0	103	0	789	967	224
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	Free
Storage Length	-	0	-	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	112	0	858	1051	243

Major/Minor	Minor2	Major1	Major2
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Conflicting Flow All	-	526	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	502	0	-	-	0
Stage 1	0	-	0	-	-	0
Stage 2	0	-	0	-	-	0
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	502	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
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HCM Control Delay, s	14.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT
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Capacity (veh/h)	-	502	-
HCM Lane V/C Ratio	-	0.223	-
HCM Control Delay (s)	-	14.2	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.8	-