

Traffic Impact Statement / Study

Clark Street Distribution Center

3301 Clark Street
Tampa, Florida 33605

Prepared For:
Keating Acquisitions, LLC
&
City of Tampa

Prepared By:
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May 4, 2018

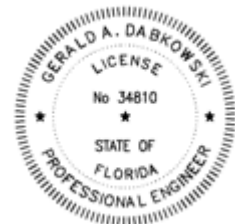




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Introduction:

Keating Acquisitions, LLC intends to build a distribution warehouse for the recently purchased undeveloped land located at 3301 Clark St., Tampa, Florida. The proposed project will consist of a 179,080 square feet warehouse and 289 parking spaces within the existing land boundary, as displayed in Figure 1. The site plan of the project can be found in the Appendix.



Figure 1: Site Location¹

The purpose of this Traffic Impact Study (TIS) is to assess the existing level of service (LOS) of the roads and intersections that will be affected by the proposed development and compare these levels of service with proposed future levels of service at these roads and intersections, and establish any necessary transportation mitigation measures that may be needed within the immediate area of the proposed project. This project's affected area includes three signalized intersections (State Road 60 & 34th Street, State Road 60 & 22nd Street, and State Road 60 & 21st Street), one unsignalized intersection (Clark Street & 34th Street).

¹ Google Earth image



Existing Roadway Characteristics:

Clark Street, between 30th Street and 34th Street

The existing roadway is two-lane, undivided local road in an industrial area. Characteristics the roadway lacks are roadway lighting and sidewalks. Additionally, the roadway lacks a paved shoulder and pavement markings. Curb and gutter exists along S. 34th St. and terminates at the intersection with Clark St. Drainage inlets and manholes are along both sides of Clark St., west of the project area. There is no posted speed limit along this segment.

Clark Street and 34th Street intersection

The intersection at Clark Street and 34th Street is an unsignalized intersection. Existing traffic control devices includes STOP sign along Clark Street, however there are no pavement markings. 34th Street is a four lane highway with a four foot traffic separator. The east approach of the intersection provides ingress and egress for another parcel. It is assumed that no project traffic will use this approach.

34th Street, between State Road 60 and Clark Street

As previously stated, 34th Street is a four lane highway with a four foot traffic separator. The existing posted speed limit is 30 mph. The roadway's AADT² is approximately 3600 vehicles. Lighting exists along the west side of the roadway. Curb and gutter drainage is present throughout the length of roadway affected by this project. Due to the industrial location, there are access drives along this roadway: three on the west, and three on the east. To the north of the roadway, a mid-block crosswalk is present for the bike trail.

State Road 60 and 34th Street intersection

At the intersection of State Road 60 (Adamo Drive) and 34th Street, the northbound approach consists of one 330-foot left turn lane, one through lane, and one through/right turn lane; the southbound approach consists of one 230-foot left turn lane, one through lane, and one right turn lane; the eastbound approach consists of one 395-foot left turn lane, two through lanes, and one 345-foot right turn lane with 5-foot wide bike lane; the westbound approach consists of one 395-foot left turn lane, two through lanes and on 515-foot right lane with a 5-foot wide bike lane. Along 34th Street, the roadway maintains similar characteristics previously mentioned. Roadway characteristics of State Road 60 that are present are curb and gutter drainage to the east with 6-foot wide sidewalks, and 22-foot median with drainage inlets. Roadway lighting is not present at this intersection along State Road 60.

² Florida Department of Transportation Data and Analytics Office, Florida Transportation Information, 2016.



State Road 60 and 22nd Street/21st Street intersections

At the intersections at State Road 60 and 22nd Street and State Road 60 and 21st Street, State Road 60 accommodates eastbound and westbound traffic; northbound traffic travels along 22nd Street, and southbound traffic travels along 21st Street. At 22nd Street, State Road 60 consists of four through lanes, which become two left turn lanes and two through lanes at 21st Street and one right turn lane into 22nd Street. 22nd Street consists of one left turn lane, one through-left lane, two through lanes, and one right turn lane.

Level of Service Analysis

Level of service (LOS) analysis was performed using HCS software, based the Highway Capacity Manual 2010 methodology.

Table 1:

EXISTING LEVEL OF SERVICE					
Intersection	Approach	AM Peak		PM Peak	
		Delay (s)	LOS	Delay (s)	LOS
34th Street/ Clark Street	NB	--	--	--	--
	SB	--	--	--	--
	EB	11.1	B	10.3	B
	WB	9.3	A	9.1	A
State Road 60/ 34th Street	NB	104.2	F	103.3	F
	SB	112.9	F	195.5	F
	EB	28.5	C	46.0	D
	WB	34.9	C	36.9	C
	Overall	43.6	D	53.3	D
State Road 60/ 22nd Street	NB	68.6	E	84.7	F
	SB	--	--	--	--
	EB	9.8	A	16.9	B
	WB	21.0	C	18.2	B
	Overall	44.2	D	41.9	D
State Road 60/ 21st Street	NB	--	--	--	--
	SB	44.1	D	49.3	D
	EB	30.9	C	42.5	D
	WB	18.4	B	19.7	B
	Overall	28.0	C	35.5	D

From the existing level of service analysis, an excessive delay exists along the northbound and southbound approaches of 34th Street at State Road 60, due to extreme demand along the westbound approach in the AM peak hour and the eastbound and westbound approaches in the PM peak hour. Traffic counts and HCS reports are located in the Appendix.



Future Roadway Characteristics:

For the purpose of this analysis, a 2% growth rate is applied to existing traffic counts with a build out year of 2020 to obtain the future background traffic for the subject area. There are no capital improvement projects scheduled for construction within the affected roadway network, for both the City of Tampa³ and Florida Department of Transportation⁴ that would create additional demand or capacity. The level of service of the future background traffic will be compared the level of service of the future background traffic plus the project traffic.

Table 2:

FUTURE BACKGROUND LEVEL OF SERVICE					
Intersection	Approach	AM Peak		PM Peak	
		Delay (s)	LOS	Delay (s)	LOS
34th Street/ Clark Street	NB	--	--	--	--
	SB	--	--	--	--
	EB	11.3	B	10.5	B
	WB	9.5	A	9.1	A
State Road 60/ 34th Street	NB	106.4	F	103.5	F
	SB	117.2	F	243.5	F
	EB	29.2	C	47.1	D
	WB	35.6	D	37.1	D
	Overall	42.2	D	57.1	E
State Road 60/ 22nd Street	NB	111.2	F	110.7	F
	SB	--	--	--	--
	EB	10.1	B	17.2	B
	WB	21.7	C	18.4	B
	Overall	55.5	E	51.5	D
State Road 60/ 21st Street	NB	--	--	--	--
	SB	44.8	D	50.7	D
	EB	31.0	C	43.8	D
	WB	19.3	B	20.6	C
	Overall	28.9	C	36.8	D

Trip generation calculations were performed using Institute of Transportation Engineers' (ITE) *Trip Generation, 9th edition*. The following assumptions were made, regarding entering and exiting traffic within the peak hours:

1. In order to perform analysis for a worst case, it is assumed that all traffic entering and exiting the site shall be trucks and will contribute to additional heavy vehicle percent in determining the level of service at each intersection.

³ <https://www.tampagov.net/tss-transportation/info/projects>

⁴ <http://www2.dot.state.fl.us/fmsupportapps/workprogram/WorkProgram.aspx>



- To eliminate project trips within the adjacent neighborhood to the west, a “NO TRUCKS” sign shall be placed westbound along Clark Street, prior to 30th Street. Additionally, “NO TRUCKS” signs with left directional arrow may be placed along Clark Street, facing the project driveways, to further discourage westbound project traffic along Clark Street.

The estimated trip ends for AM peak hour, PM peak hour, and daily trips are summarized in Table 3.

Table 3: Project Trip Generation

Land Use	ITE LUC	Size	Daily Trips	AM Peak Hour Trip Ends			PM Peak Hour Trip Ends		
				In	Out	Total	In	Out	Total
High Cube Warehouse/ Distribution Center	152	180 KSF	302	14	6	20	7	15	22

Table 4:

FUTURE BACKGROUND + PROJECT LEVEL OF SERVICE						
Intersection	Approach	AM Peak		PM Peak		
		Delay (s)	LOS	Delay (s)	LOS	
34th Street/ Clark Street	NB	--	--	--	--	
	SB	--	--	--	--	
	EB	11.6	B	11.1	B	
	WB	9.8	A	9.2	A	
State Road 60/ 34th Street	NB	111.6	F	104.9	F	
	SB	117.2	F	251.1	F	
	EB	29.1	C	47.0	D	
	WB	35.5	D	37.1	C	
	Overall	42.4	D	57.8	E	
State Road 60/ 22nd Street	NB	116.7	F	110.7	F	
	SB	--	--	--	--	
	EB	10.1	A	16.9	B	
	WB	21.7	C	18.4	B	
	Overall	69.8	E	51.8	D	
State Road 60/ 21st Street	NB	--	--	--	--	
	SB	44.8	D	50.7	D	
	EB	31.0	C	43.8	D	
	WB	19.3	B	20.6	C	
	Overall	28.9	C	36.8	D	

The delay at the unsignalized intersection at Clark Street and 34th Street increased an average of 0.5 seconds. The signalized intersections of State Road 60 and 34 Street, 22nd Street, and 21st Street, respectively increased 0.2, 14.3, and 0 seconds in the AM peak hour and 0.6, 0.3, and 0



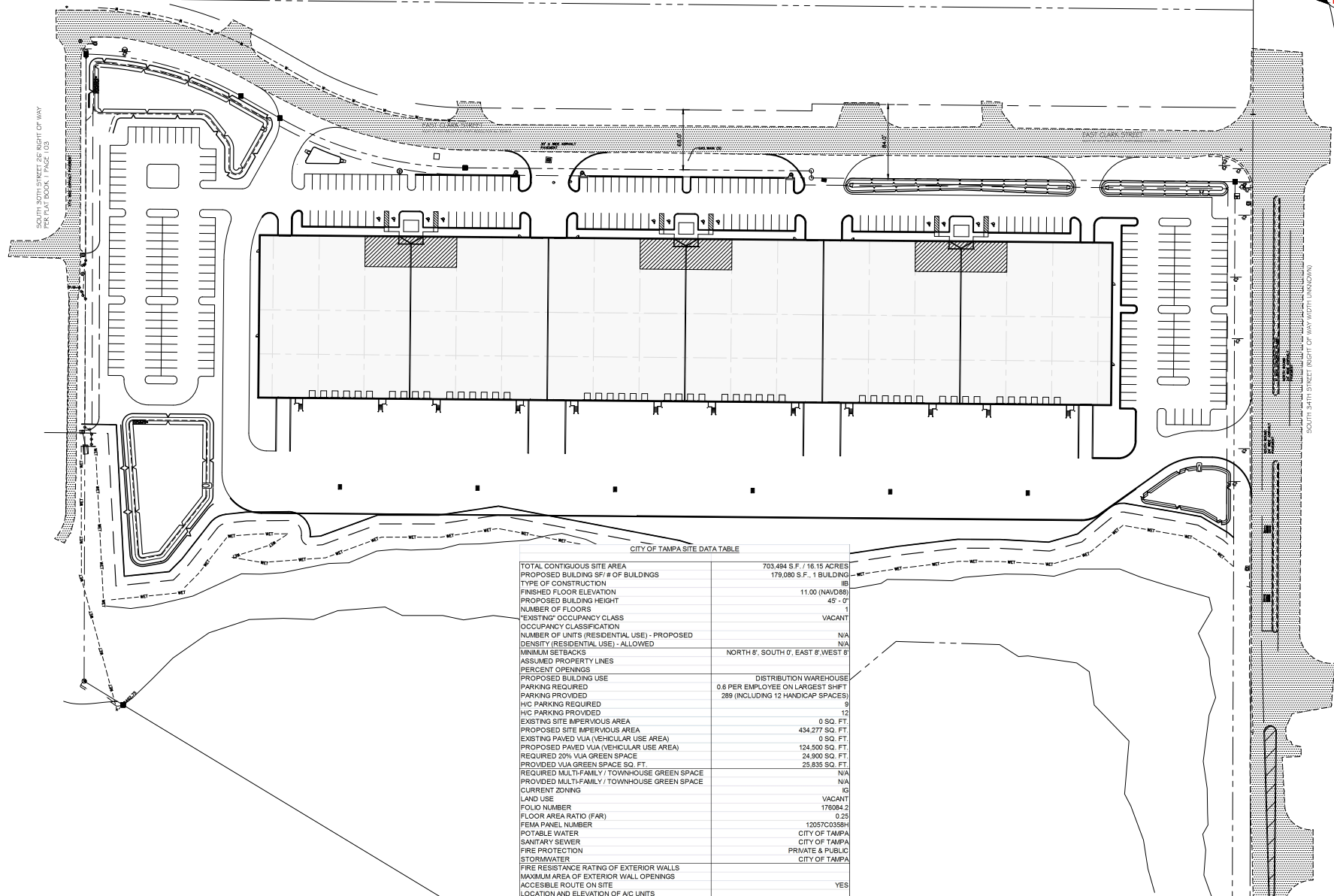
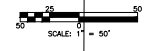
seconds in the PM peak hour. Due to the relatively low volume of demand generated from the project compared to the east–west volume along State Road 60 (Adamo Drive), no geometry changes should be made the roadway network of this project.

Study Conclusions:

- The Clark Street Distribution Center’s traffic will have little impact to delay at existing intersections within the project area.
- No roadway geometry changes will be necessary to accommodate the trips generated from this project.
- “NO TRUCKS” sign will be placed along Clark Street to eliminate disruption to adjacent neighborhood.



APPENDIX



CITY OF TAMPA SITE DATA TABLE

TOTAL CONTIGUOUS SITE AREA	703,484 S.F. / 16.15 ACRES
PROPOSED BUILDING SF/ # OF BUILDINGS	179,080 S.F., 1 BUILDING
TYPE OF CONSTRUCTION	IB
FINISHED FLOOR ELEVATION	11.00 (NAVD88)
PROPOSED BUILDING HEIGHT	45' - 0"
NUMBER OF FLOORS	1
'EXISTING' OCCUPANCY CLASS	VACANT
OCCUPANCY CLASSIFICATION	
NUMBER OF UNITS (RESIDENTIAL USE) - PROPOSED	N/A
DENSITY (RESIDENTIAL USE) - ALLOWED	N/A
MINIMUM SETBACKS	NORTH 8', SOUTH 0', EAST 8', WEST 8'
ASSUMED PROPERTY LINES	
PERCENT OPENINGS	
PROPOSED BUILDING USE	DISTRIBUTION WAREHOUSE
PARKING REQUIRED	0.6 PER EMPLOYEE ON LARGEST SHFT
PARKING PROVIDED	289 (INCLUDING 12 HANDICAP SPACES)
H/C PARKING REQUIRED	9
H/C PARKING PROVIDED	12
EXISTING SITE IMPERVIOUS AREA	0 SQ. FT.
PROPOSED SITE IMPERVIOUS AREA	434,277 SQ. FT.
EXISTING PAVED VUA (VEHICULAR USE AREA)	0 SQ. FT.
PROPOSED PAVED VUA (VEHICULAR USE AREA)	124,500 SQ. FT.
REQUIRED 20% VUA GREEN SPACE	24,900 SQ. FT.
PROVIDED VUA GREEN SPACE SQ. FT.	25,835 SQ. FT.
REQUIRED MULTI-FAMILY / TOWNHOUSE GREEN SPACE	N/A
PROVIDED MULTI-FAMILY / TOWNHOUSE GREEN SPACE	N/A
CURRENT ZONING	IS
LAND USE	VACANT
FOLIO NUMBER	176084.2
FLOOR AREA RATIO (FAR)	0.25
PERM PANEL NUMBER	12057C0358H
POTABLE WATER	CITY OF TAMPA
SANITARY SEWER	CITY OF TAMPA
FIRE PROTECTION	PRIVATE & PUBLIC
STORMWATER	CITY OF TAMPA
FIRE RESISTANCE RATING OF EXTERIOR WALLS	
MAXIMUM AREA OF EXTERIOR WALL OPENINGS	
ACCESSIBLE ROUTE ON SITE	YES
LOCATION AND ELEVATION OF A/C UNITS	

George F. Young, Inc.
 107 TAMPA EAST BOLLIVARD TAMPA, FLORIDA 33619-2023
 PHONE (813) 281-1111 FAX (813) 281-1112
 WWW.GEORGEFYOUNG.COM
 ONE E THUNDERBOLT DRIVE SUITE 200 TAMPA FLORIDA 33619

CLARK STREET DISTRIBUTION CENTER
OVERALL SITE PLAN

SECTION 20, TOWNSHIP 29 S., RANGE 19 E.
 JOB NO. 17001700TC
 SHEET NO. 1

NO.	DATE	DESCRIPTION

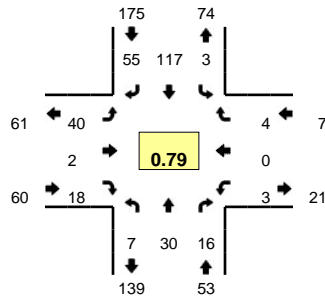
PREPARED FOR:
KEATING ACQUISITIONS, LLC
 9128 STRAUM PLACE, SUITE 10115
 NAPLES FLORIDA 34109
 (813) 281-2020

ISSUED	DATE	BY	SCALE

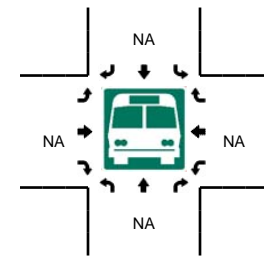
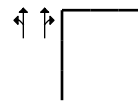
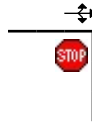
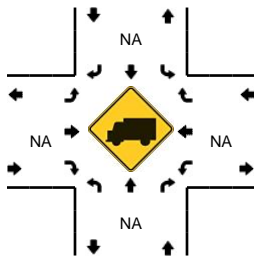
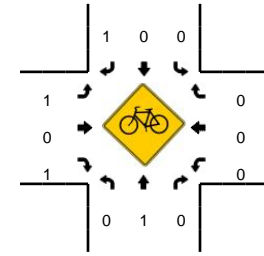
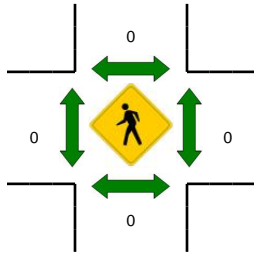
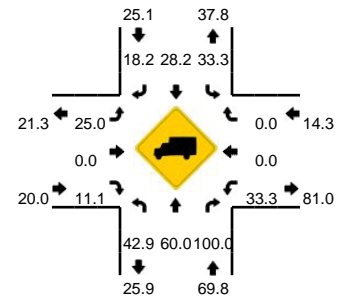
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 PROJECT NO. 17001700TC
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 CHECKED BY: [Name]
 SCALE: AS SHOWN
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 PLOT: 17001700TC.dwg

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CITY/STATE: Tampa, FL

QC JOB #: 14664801
DATE: Thu, Mar 29 2018



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



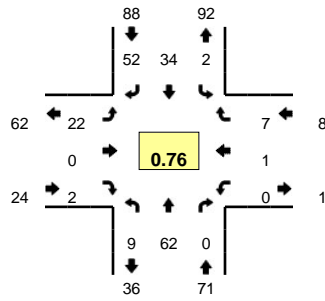
R* = RTOR

15-Min Count Period Beginning At	34th St (Northbound)					34th St (Southbound)					Clark St (Eastbound)					Clark St (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	2	2	0	0	3	20	7	0	0	4	0	1	0	0	0	0	2	0	0	41	
7:15 AM	0	6	3	0	0	1	27	16	0	0	7	0	5	0	0	0	0	0	0	0	65	
7:30 AM	2	6	8	1	0	1	35	20	0	0	13	0	3	0	0	1	0	3	0	0	93	
7:45 AM	2	7	4	0	0	1	43	16	0	0	8	0	9	0	0	0	0	0	0	0	90	289
8:00 AM	2	11	1	0	0	0	12	3	0	0	12	2	1	0	0	2	0	1	0	0	47	295
8:15 AM	2	9	4	0	0	0	11	6	0	0	9	0	0	0	0	0	0	1	0	0	42	272
8:30 AM	1	9	0	0	0	1	18	8	0	0	11	0	1	0	0	0	0	0	0	0	49	228
8:45 AM	0	12	1	0	0	0	17	11	0	0	8	1	0	0	0	1	0	1	0	0	52	190
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	8	24	32	4	0	4	140	80	0	0	52	0	12	0	0	4	0	12	0	0	372	
Heavy Trucks	4	16	32			4	36	12			4	0	0			4	0	0			112	
Pedestrians	0					0					0					0					0	
Bicycles	0					0					0					0					0	
Railroad																						
Stopped Buses																						

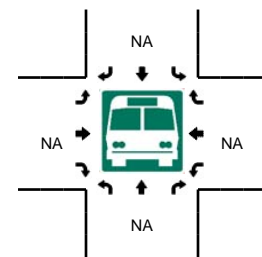
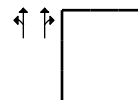
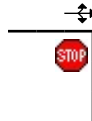
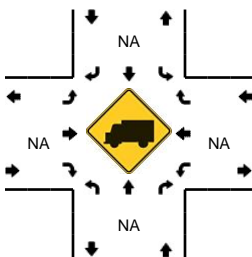
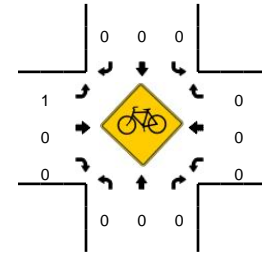
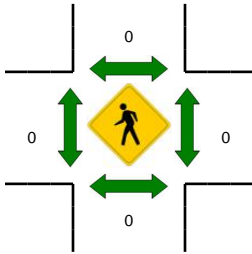
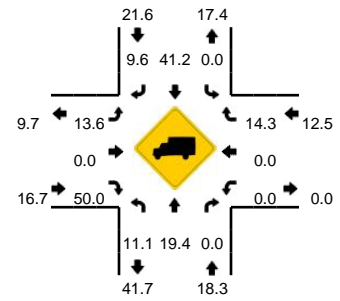
Comments:

LOCATION: 34th St -- Clark St
CITY/STATE: Tampa, FL

QC JOB #: 14664803
DATE: Thu, Mar 29 2018



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Peak 15-Min: 4:30 PM -- 4:45 PM



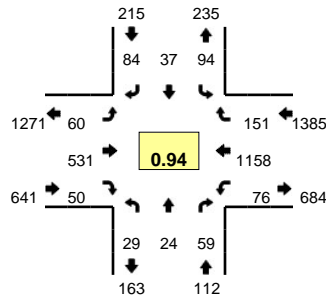
R* = RTOR

15-Min Count Period Beginning At	34th St (Northbound)					34th St (Southbound)					Clark St (Eastbound)					Clark St (Westbound)					Total	Hourly Totals
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4:00 PM	0	12	0	0	0	0	10	10	0	0	7	0	1	0	0	0	0	3	0	0	43	
4:15 PM	2	18	0	0	0	0	10	9	0	0	6	0	1	0	0	0	1	1	0	0	48	
4:30 PM	3	24	0	0	0	1	5	20	0	0	7	0	0	0	0	0	0	3	0	0	63	
4:45 PM	4	8	0	0	0	0	9	13	1	0	2	0	0	0	0	0	0	0	0	0	37	191
5:00 PM	1	17	0	0	0	0	6	12	1	0	3	0	0	0	0	0	0	1	0	0	41	189
5:15 PM	1	4	0	0	0	0	9	18	0	0	12	0	1	0	0	0	0	1	0	0	46	187
5:30 PM	1	17	0	1	0	0	6	19	0	0	9	1	0	0	0	0	0	2	0	0	56	180
5:45 PM	3	13	0	0	0	0	7	13	0	0	9	0	2	0	0	0	1	0	0	0	48	191
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	12	96	0	0	0	4	20	80	0	0	28	0	0	0	0	0	0	12	0	0	252	
Heavy Trucks	4	12	0			0	8	8			4	0	0			0	0	4			40	
Pedestrians	0					0					0					0					0	
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0	
Railroad																						
Stopped Buses																						

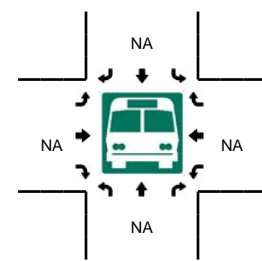
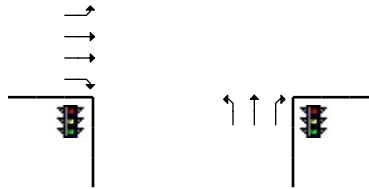
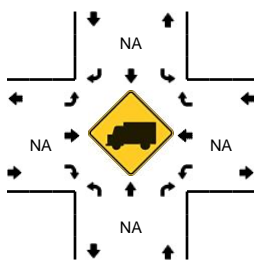
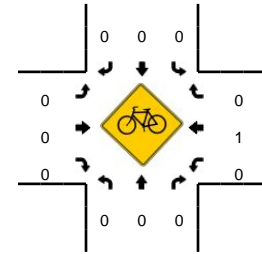
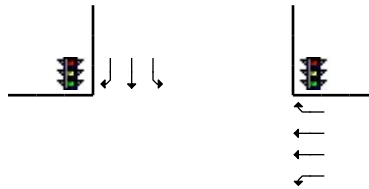
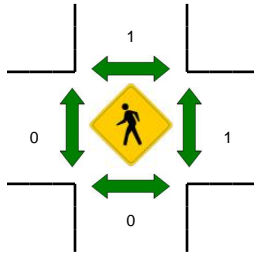
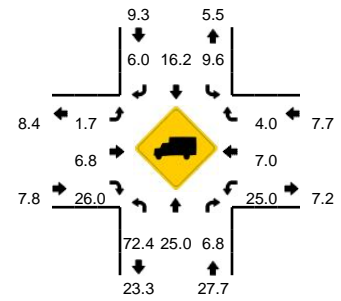
Comments:

LOCATION: 34th St -- SR 60
CITY/STATE: Tampa, FL

QC JOB #: 14664804
DATE: Thu, Apr 05 2018



Peak-Hour: 7:15 AM -- 8:15 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



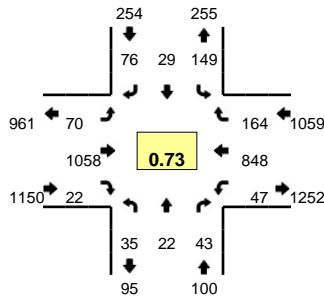
R* = RTOR

15-Min Count Period Beginning At	34th St (Northbound)					34th St (Southbound)					SR 60 (Eastbound)					SR 60 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	3	3	0	0	6	28	5	7	0	12	14	102	7	2	2	15	292	23	0	6	527	
7:15 AM	10	4	1	0	13	21	7	6	0	16	12	106	9	0	2	25	307	32	0	8	579	
7:30 AM	4	7	3	0	8	29	14	5	0	8	11	138	7	0	5	22	312	28	0	13	614	
7:45 AM	7	5	4	0	20	28	12	6	0	28	23	151	10	0	6	15	275	29	0	8	627	2347
8:00 AM	8	8	2	0	8	16	4	2	0	13	14	136	7	0	4	14	264	28	0	5	533	2353
8:15 AM	8	4	1	0	12	24	10	1	0	10	17	130	7	0	6	17	296	30	0	6	579	2353
8:30 AM	6	5	0	0	13	22	8	4	0	12	23	107	6	0	3	10	267	12	0	5	503	2242
8:45 AM	9	5	4	0	6	12	5	1	0	20	7	114	8	0	4	14	267	7	0	6	489	2104
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	28	20	16	0	80	112	48	24	0	112	92	604	40	0	24	60	1100	116	0	32	2508	
Heavy Trucks	24	4	4			8	4	4			0	40	24			16	92	4			224	
Pedestrians		0					0					0					0				0	
Bicycles		0	0				0	0				0	0				1	0			1	
Railroad																						
Stopped Buses																						

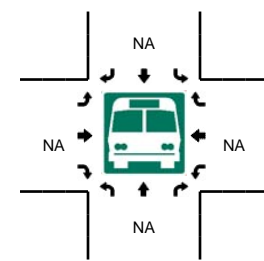
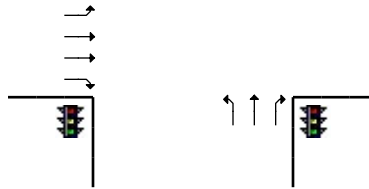
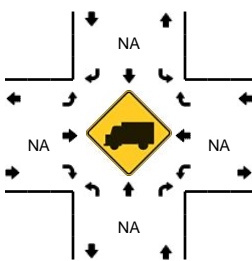
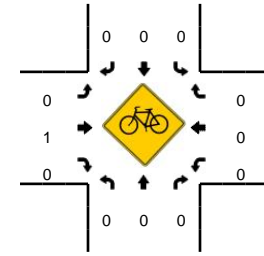
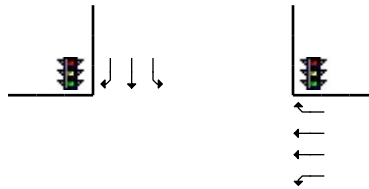
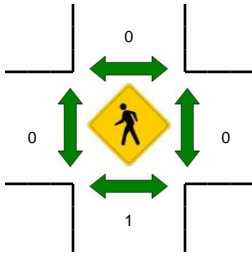
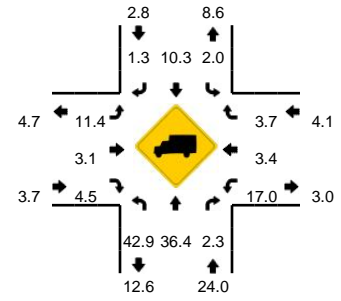
Comments:

LOCATION: 34th St -- SR 60
CITY/STATE: Tampa, FL

QC JOB #: 14664806
DATE: Thu, Apr 05 2018



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM



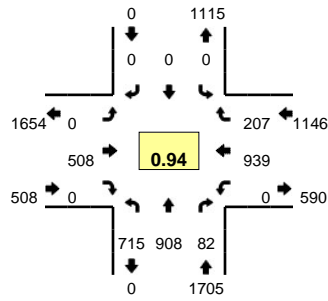
R* = RTOR

15-Min Count Period Beginning At	34th St (Northbound)					34th St (Southbound)					SR 60 (Eastbound)					SR 60 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	11	9	8	0	10	29	6	3	0	10	19	255	5	1	2	21	203	17	0	6	615	
4:15 PM	26	11	2	0	23	25	3	0	0	18	14	267	10	0	0	11	189	23	1	7	630	
4:30 PM	13	3	3	0	16	27	8	2	0	13	22	269	4	0	1	12	185	20	1	3	602	
4:45 PM	14	3	0	0	8	40	4	3	1	18	14	261	4	1	0	11	193	37	0	11	623	2470
5:00 PM	6	6	1	0	21	43	13	10	0	9	13	128	6	0	2	8	144	49	2	1	462	2317
5:15 PM	8	9	1	0	4	41	9	5	0	20	25	394	5	0	0	14	301	30	0	9	875	2562
5:30 PM	7	4	1	0	7	24	3	1	0	10	16	275	5	1	0	11	210	19	1	8	603	2563
5:45 PM	11	0	0	0	11	23	2	0	0	23	13	220	5	0	0	7	180	25	0	3	523	2463
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
All Vehicles	32	36	4	0	16	164	36	20	0	80	100	1576	20	0	0	56	1204	120	0	36		3500
Heavy Trucks	16	8	0			4	4	0			8	44	0			12	48	0			144	
Pedestrians	0					0					0					0					0	
Bicycles	0	0	0			0	0	0			0	1	0			0	0	0			1	
Railroad																						
Stopped Buses																						

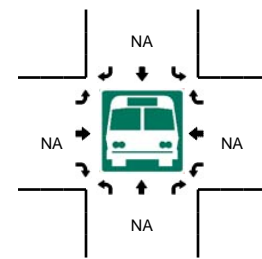
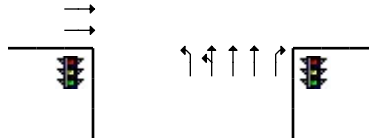
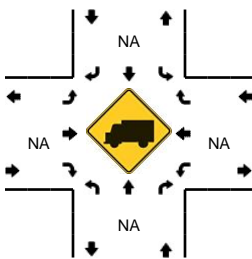
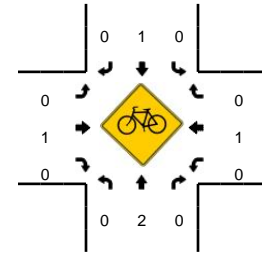
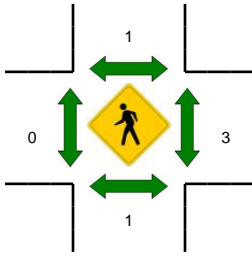
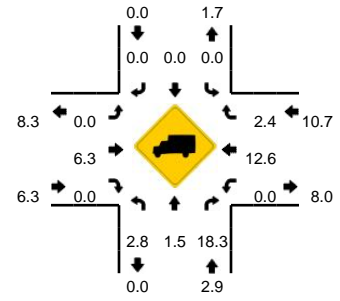
Comments:

LOCATION: 22nd St -- SR 60
CITY/STATE: Tampa, FL

QC JOB #: 14664807
DATE: Thu, Apr 05 2018



Peak-Hour: 7:00 AM -- 8:00 AM
Peak 15-Min: 7:45 AM -- 8:00 AM



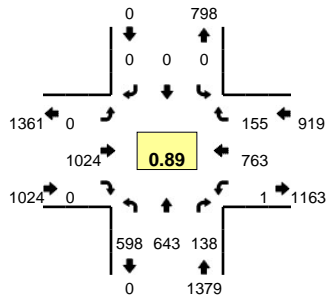
R* = RTOR

15-Min Count Period Beginning At	22nd St (Northbound)					22nd St (Southbound)					SR 60 (Eastbound)					SR 60 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	197	239	12	0	17	0	0	0	0	0	0	95	0	0	0	0	199	21	0	33	813	
7:15 AM	163	205	5	0	10	0	0	0	0	0	0	107	0	0	0	0	235	23	0	31	779	
7:30 AM	174	224	15	0	1	0	0	0	0	0	0	150	0	0	0	0	265	27	0	18	874	
7:45 AM	181	240	20	0	2	0	0	0	0	0	0	156	0	0	0	0	240	26	0	28	893	3359
8:00 AM	172	224	17	0	4	0	0	0	0	0	0	122	0	0	0	0	202	20	0	26	787	3333
8:15 AM	133	185	15	0	14	0	0	0	0	0	0	141	0	0	0	0	240	17	0	24	769	3323
8:30 AM	179	212	16	0	20	0	0	0	0	0	0	104	0	0	0	0	193	60	0	0	784	3233
8:45 AM	204	199	4	0	15	0	0	0	0	0	0	130	0	0	0	0	201	35	0	11	799	3139
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	724	960	80	0	8	0	0	0	0	0	0	624	0	0	0	0	960	104	0	112	3572	
Heavy Trucks	32	16	16			0	0	0			0	48	0			0	140	16			268	
Pedestrians	4					0					0					0					4	
Bicycles	0	0	0			0	0	0			0	0	0			0	1	0			1	
Railroad																						
Stopped Buses																						

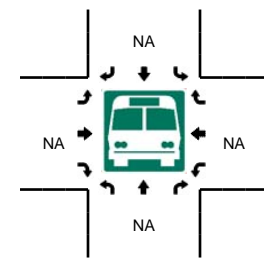
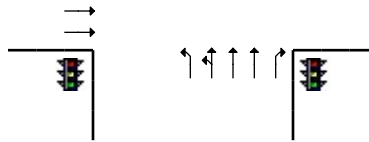
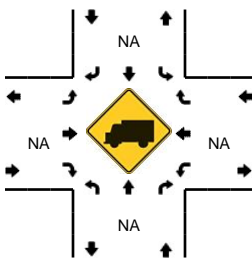
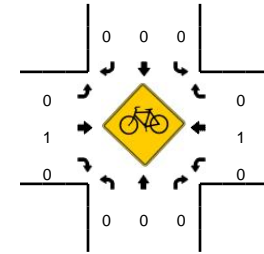
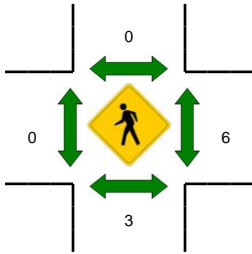
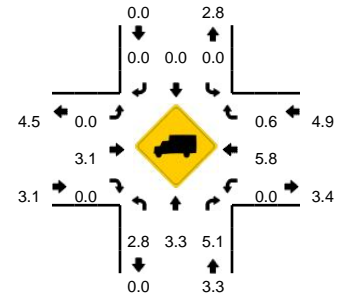
Comments:

LOCATION: 22nd St -- SR 60
CITY/STATE: Tampa, FL

QC JOB #: 14664809
DATE: Thu, Apr 05 2018



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM



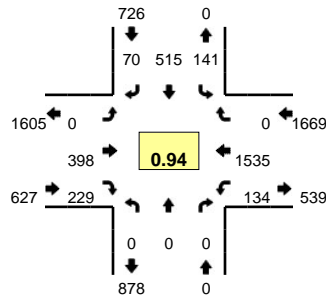
R* = RTOR

15-Min Count Period Beginning At	22nd St (Northbound)					22nd St (Southbound)					SR 60 (Eastbound)					SR 60 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	151	171	21	0	30	0	0	0	0	0	1	243	0	0	0	0	179	25	0	18	839	
4:15 PM	104	155	8	0	25	0	0	0	0	0	0	234	0	0	0	0	132	22	0	16	696	
4:30 PM	121	145	13	0	30	0	0	0	0	0	1	252	0	0	0	0	190	29	0	19	800	
4:45 PM	179	189	11	0	22	0	0	0	0	0	0	279	0	0	0	0	195	21	0	16	912	3247
5:00 PM	120	127	21	0	20	0	0	0	0	0	0	241	0	0	0	0	89	10	0	21	649	3057
5:15 PM	158	161	13	0	23	0	0	0	0	0	0	248	0	0	0	0	270	30	1	25	929	3290
5:30 PM	141	166	11	0	17	0	0	0	0	0	0	256	0	0	0	0	209	16	0	16	832	3322
5:45 PM	133	157	12	0	25	0	0	0	0	0	1	225	0	0	0	0	167	31	0	11	762	3172
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	632	644	52	0	92	0	0	0	0	0	0	992	0	0	0	0	1080	120	4	100	3716	
Heavy Trucks	20	28	0			0	0	0			0	28	0			0	56	0			132	
Pedestrians		12					0					0					4				16	
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0	
Railroad																						
Stopped Buses																						

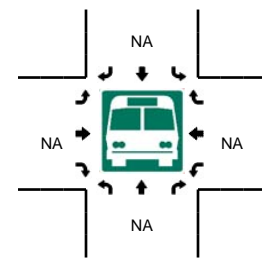
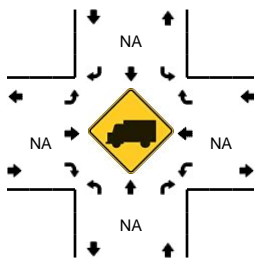
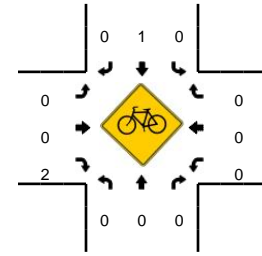
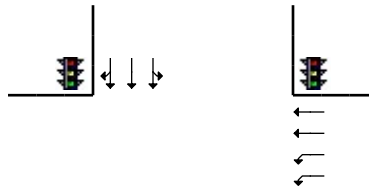
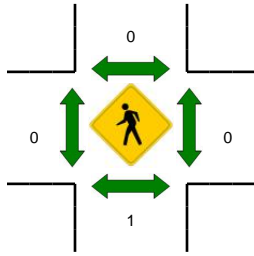
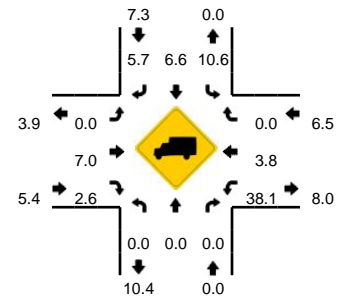
Comments:

LOCATION: 21st St -- SR 60
CITY/STATE: Tampa, FL

QC JOB #: 14664810
DATE: Thu, Mar 29 2018



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



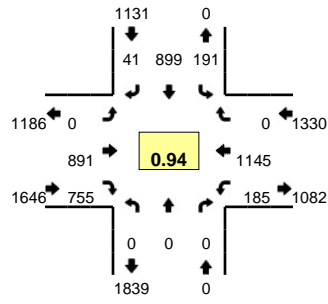
R* = RTOR

15-Min Count Period Beginning At	21st St (Northbound)					21st St (Southbound)					SR 60 (Eastbound)					SR 60 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
7:00 AM	0	0	0	0	0	29	146	16	0	1	0	41	10	0	29	22	364	0	0	0	658	
7:15 AM	0	0	0	0	0	39	168	24	0	3	0	94	25	0	22	36	390	0	0	0	801	
7:30 AM	0	0	0	0	0	34	97	15	0	0	0	111	33	0	50	35	423	0	0	0	798	
7:45 AM	0	0	0	0	0	43	132	12	0	0	0	106	24	0	34	27	384	0	0	0	762	3019
8:00 AM	0	0	0	0	0	25	118	13	0	3	0	87	10	0	31	36	338	0	0	0	661	3022
8:15 AM	0	0	0	0	0	29	114	10	0	2	0	99	20	0	37	26	387	0	0	0	724	2945
8:30 AM	0	0	0	0	0	24	71	8	0	1	0	106	12	0	34	29	352	0	0	0	637	2784
8:45 AM	0	0	0	0	0	36	103	15	0	1	0	87	5	0	33	24	313	0	0	0	617	2639
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	0	0	0	0	0	156	672	96	0	12	0	376	100	0	88	144	1560	0	0	0	3204	
Heavy Trucks	0	0	0			20	28	4			0	12	4			52	60	0			180	
Pedestrians						0					0					0					0	
Bicycles	0	0	0			0	0	0			0	0	0			0	0	0			0	
Railroad																					0	
Stopped Buses																					0	

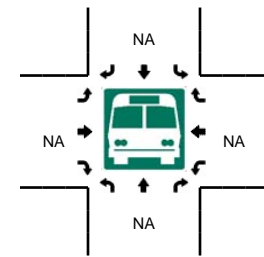
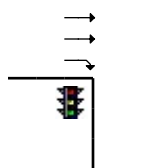
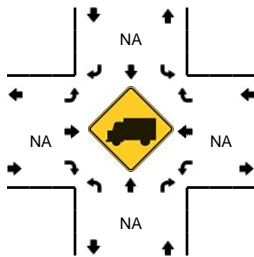
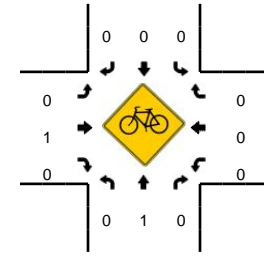
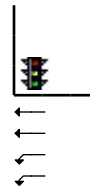
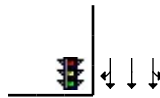
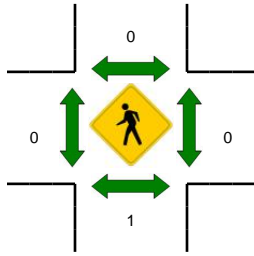
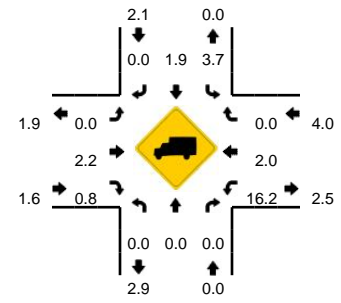
Comments:

LOCATION: 21st St -- SR 60
CITY/STATE: Tampa, FL

QC JOB #: 14664812
DATE: Thu, Mar 29 2018



Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM



R* = RTOR

15-Min Count Period Beginning At	21st St (Northbound)					21st St (Southbound)					SR 60 (Eastbound)					SR 60 (Westbound)					Total	Hourly Totals
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
4:00 PM	0	0	0	0	0	44	233	10	0	2	0	197	77	0	87	45	247	0	0	0	942	
4:15 PM	0	0	0	0	0	58	239	15	0	1	0	190	91	0	70	51	235	0	0	0	950	
4:30 PM	0	0	0	0	0	51	211	9	0	0	0	209	124	0	62	51	274	0	0	0	991	
4:45 PM	0	0	0	0	0	41	200	10	0	0	0	238	98	0	95	35	296	0	0	0	1013	3896
5:00 PM	0	0	0	0	0	53	221	12	0	2	0	189	87	0	91	45	275	0	0	0	975	3929
5:15 PM	0	0	0	0	0	52	253	4	0	3	0	232	121	0	69	56	307	0	0	0	1097	4076
5:30 PM	0	0	0	0	0	45	225	10	0	0	0	232	126	0	68	49	267	0	0	0	1022	4107
5:45 PM	0	0	0	0	0	31	234	9	0	0	0	194	103	0	79	50	235	0	0	0	935	4029
Peak 15-Min Flowrates	Northbound					Southbound					Eastbound					Westbound					Total	
	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*	Left	Thru	Right	U	R*		
All Vehicles	0	0	0	0	0	208	1012	16	0	12	0	928	484	0	276	224	1228	0	0	0	4388	
Heavy Trucks	0	0	0	0	0	12	12	0	0	0	0	16	8	0	0	24	28	0	0	0	100	
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bicycles	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
Railroad	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Stopped Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Comments:

City of Tampa Signal Timing Sheet

Section ID: 408 Computer: M CCU: 28 Drop: 2 Shop ID: 1506

Timing Date: 4/28/2015 Phase Date: 5/5/2015 Controller: ASC3

Intersection: ADAMO / 34TH ST

Phase Numbers	1	2	3	4	5	6	7	8
Direction	EBLT	WB	SBLT	NB	WBLT	EB	NBLT	SB
Minimum Green	5	15	5	10	5	15	5	10
Walk	---	7	---	7	---	7	---	7
Flash Don't Walk	---	26	---	32	---	26	---	32
Vehicle Extension	2.0	3.0	2.0	3.0	2.0	3.0	2.0	3.0
Max. Green I	20	140	25	40	20	140	25	40
Max. Green II	20	150	25	40	20	150	25	40
Yellow Clearance	5.1	5.1	4.5	4.5	5.1	5.1	4.5	4.5
All Red Clearance	2.1	2.0	2.4	3.2	2.1	2.0	2.4	3.2
Phase Recall	---	MAX	---	---	---	MAX	---	---
Detector Memory	ON	---	ON	---	ON	---	ON	---
Ped. Recall	---	ON	---	---	---	ON	---	---
Flash Operation	RED	YEL	RED	RED	RED	YEL	RED	RED

Special Modes and Times of Operation:

Surveillance Times:

Flash Source: Flash Times:

C = Computer Flash T = Time Clock/Controller

Special Functions:

FDOT SOP: 10 MOD

Backup Protection (Y/N): Y

FDOT FDW (Y/N): Y

Please Implement Within: 1 Week [] 1 Month

Comments:

Submitted By: 601
Date: 7-21-2015

Reviewed By: RS
Date: 7-21-15

Approved By: WB
Date: 7/22/15

Signal Timing Implemented: As sent [] With the following revisions

Date: 23 JUN 15 By: RS

Signal Timing Not Implemented: [] Reasons: _____

Date: _____ By: _____

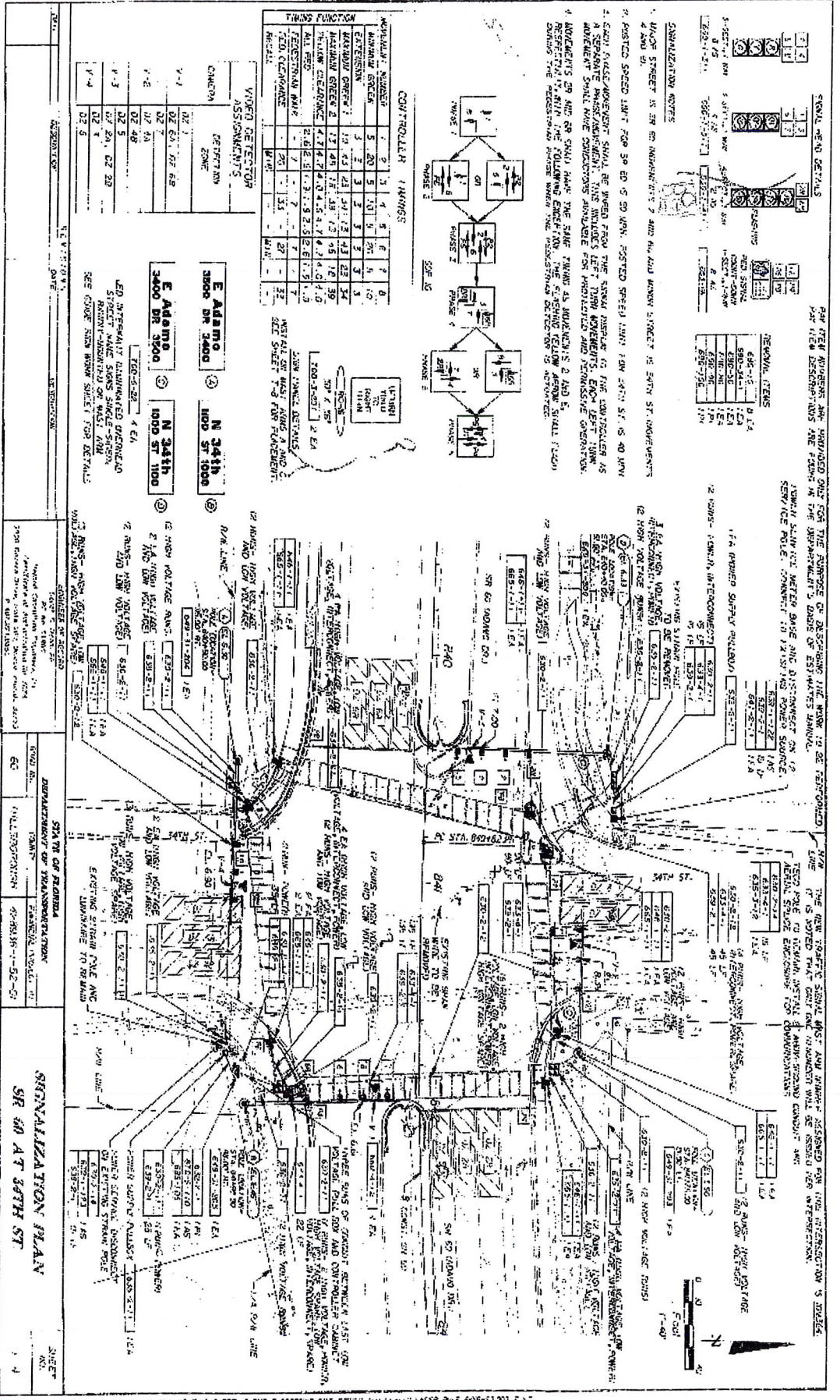
408 - ADAMO & 34TH ST

ECONOLITE

Timing Date: 07/21/2015			MIN	15	5	10	5
MSX: M CCU: 28 Drop: 2			YEL	5.1	4.5	4.5	5.1
Structures: 1			RED	2	2.4	3.2	2.1
Lead / Lag:			WLK	7		7	
			FDW	26		32	
			Min - 84	41	12	18	13
Pat	CYC	OS	EW	NSLT	NS	EWLT	
1 Am 0600 - 0915	190	121	98	25	47	20	
2 Am off 0915 - 1115	180	70	88	25	47	20	
3 Noon 1115 - 1330	180	70	88	25	47	20	
4 Pm off 1330 - 1445	180	70	88	25	47	20	
5 Pm 1445 - 1900	190	182	105	20	50	15	
6 Evening 1900 - 2200	160	75	83	16	47	14	
7 Late 2200 - 0600	160	75	83	16	47	14	
8	140	30	68	12	47	13	
9 X-town Detour EB	180	10	105	12	50	13	
10	120	62	48	12	47	13	
11 Large Band EB	200	124	128	12	47	13	
12 Guavaween IN	150	53	78	12	47	13	
13 Guavaween OUT	150	53	78	12	47	13	
14 Larger band WB	250	236	178	12	47	13	
15 Large band WB	200	92	128	12	47	13	
16 Hurricane	250	123	178	12	47	13	

T.B.C. Day Plan 1: M-Th patt 1-7 Day Plan 2: Fri patt 1-7
 Day Plan 3: S-Su patt 7 and patt 2 @ 6:15 to 22:00

Intersection Drawing



NOTICE: THE FINAL LOCATION OF THIS SHEET IS THE PROJECTING FILE SHEET AND SHALL BE UNDER FILE 6045-21,003, P.12.

City of Tampa Signal Timing Sheet

Section ID: 405 Computer: M CCU: 28 Drop: 1 Shop ID: 1821
 Timing Date: 1/27/2015 Phase Date: 1/23/2014 Controller: PEEK 3000
 Intersection: ADAMO / 21ST ST / 22ND ST

Phase Numbers	2	3	6	7
Direction	E/W	WBLT	N - W	S-E
Minimum Green	15	5	10	10
Walk	7	---	7	7
Flash Don't Walk	19	---	23	28
Vehicle Extension	3.0	3.0	3.0	3.0
Max. Green I	35	15	35	35
Max. Green II	50	20	60	50
Yellow Clearance	4.5	4.5	4.0	3.7
All Red Clearance	2.5	2.5	2.9	3.3
Phase Recall	MAX	MAX	MAX	MAX
Detector Memory	---	---	---	---
Ped. Recall	ON	---	---	---
Flash Operation	YEL	RED	---	---

Special Modes and Times of Operation:

Surveillance Times:
 Flash Source: Flash Times:
 C = Computer Flash T = Time Clock/Controller
 Special Functions:

FDOT SOP: 20 MOD
 Backup Protection (Y/N): N
 FDOT FDW (Y/N): Y

Please Implement Within : 1 Week 1 Month

Comments:

- *Overlap assignments - OLE (2+3+4+7), OLF (2), OLG (7), OLI (2+3+6), OLJ (2+3), OLK (6),*
- *OLL (3+6), P2, POLN (6), POLP (7).*
- *Phasing Sequence Ø2(OLE+OLF+OLI+OLJ+P2+P2A+P6A+P6B), Ø3(OLE+OLI+OLJ+OLL), Ø7(OLE+OLG+POLP), *
- *Ø6(OLI+OLK+OLL+POLN).*
- *Actuated Pre-Timed Operation.*

Submitted By: [Signature] Reviewed By: _____ Approved By: _____
 Date: 1/27/15 Date: _____ Date: _____

Signal Timing Implemented: As sent . With the following revisions

Date: 1/27/15 By: [Signature]

Signal Timing Not Implemented: Reasons: _____

Date: _____ By: _____

405
CITY OF TAMPA COMPUTER PATTERN SHEET

405

405 - ADAMO & 21ST ST & 22ND ST

PEEK 3000E

Timing Date: 09/09/2016	MIN	15	5	10	10		
MSX: M CCU: 28 Drop: 1	YEL	4.5	4.5	3.7	4		
Structures: 1	RED	2.5	2.5	3.3	2.9		
Lead / Lag:	WLK	7		7	7		
	FDW	19		28	23		
	Min - 82	34	13	18	17		
Pat	CYC	OS	EW	WBLT	SBLT	NBLT	
1 Am 0600 - 0915	190	74	55	20	55	60	
2 Am off 0915 - 1115	180	28	55	20	45	60	
3 Noon 1115 - 1330	180	28	55	20	45	60	
4 Pm off 1330 - 1445	180	28	55	20	45	60	
5 Pm 1445 - 1900	190	139	65	15	55	55	
6 Evening 1900 - 2200	160	26	50	20	42	48	
7 Late 2200 - 0600	160	23	61	20	42	37	
8	140	134	35	27	37	41	
9 X-town Detour EB	180	152	90	13	36	41	
10	140	134	35	27	37	41	
11 Large Band EB	200	71	110	13	36	41	
12 Guavaween IN	150	128	49	13	46	42	
13 Guavaween OUT	150	128	44	13	36	57	
14 Larger band WB	250	55	40	133	36	41	
15 Large band WB	200	139	40	83	36	41	
16 Hurricane	250	63	160	13	36	41	

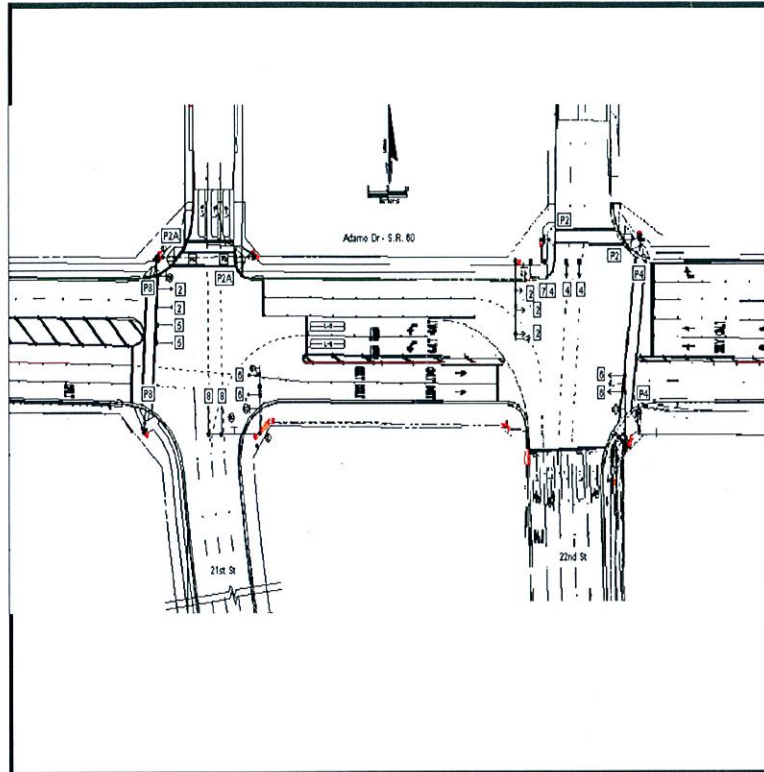
T.B.C. Day Plan 1: M-Th patt 1-7 Day Plan 2: Fri patt 1-7
Day Plan 3: S-Su patt 7 and patt 2 @ 6:15 to 22:00



City of Tampa - Phasing Diagram



DWG	1/26/2011
Vers.	8/27/2010
Pg:	1 of 2
Prepared by	GT
Reviewed by	



Sect. I.D.# 405

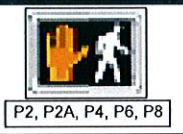
Location: ADAMO / 21ST ST & 22ND ST

Phasing Date: 1/26/2011	Overlaps	OL8	OL6	OL5	OL7	OL2	OL1	OL7	OL3	P2A	POL4	POL8
	Signal Head Numbers	1	2	2A	4	6	6A	7	8	P2	P6	P8

Controller: Econolite

Vehicle Movements	Flashing Operation	← R	Y	Y	R	Y	Y	R	R			
-------------------	--------------------	-----	---	---	---	---	---	---	---	--	--	--

Phase	Interval	Display Sequence										
Ø2	RW	← R	G	G	R	G	G	R	R			
Ø2	Clr to Ped	← R	G	G	R	G	G	R	R			
OL1	Clr to	← R	G	G	R	Y	G	R	R			
OL2	Ø3	← R	G	G	R	R	G	R	R			
OL5	Clr to	← R	Y	G	R	Y	G	R	R			
OL6	Ø4	← R	R	G	R	R	G	R	R			
OL6	&	← R	Y	Y	R	Y	Y	R	R			
P2	Ø5	← R	R	R	R	R	R	R	R			
P2A	Clr to	← R	Y	G	R	Y	Y	R	R			
	Ø6	← R	R	G	R	R	R	R	R			
	Clr to	← R	Y	Y	R	Y	G	R	R			
	Ø7	← R	R	R	R	R	G	R	R			
OL5	RW	← G	G	G	R	R	G	R	R			
OL6	Ø3	← Y	Y	G	R	R	G	R	R			
OL1	Ø4	← R	R	G	R	R	G	R	R			
OL5	Clr to	← Y	Y	Y	R	R	Y	R	R			
OL6	Ø5	← R	R	R	R	R	R	R	R			
OL8	Clr to	← G	Y	G	R	R	Y	R	R			
	Ø6	← G	R	G	R	R	R	R	R			
	Clr to	← Y	Y	Y	R	R	G	R	R			
	Ø7	← R	R	R	R	R	G	R	R			
	Clr to	← Y	G	G	R	R	G	R	R			
	Ø2	← R	G	G	R	R	G	R	R			
	RW	← R	R	G	R	R	G	R	R			
	Clr to	← R	R	Y	R	R	Y	R	R			
Ø4	Ø5	← R	R	R	R	R	R	R	R			
OL1	Clr to	← R	R	G	R	R	Y	R	R			
OL5	Ø6	← R	R	G	R	R	R	R	R			
	Clr to	← R	R	Y	R	R	G	R	R			
	Ø7	← R	R	R	R	R	G	R	R			
	Clr to	← R	R	G	R	R	G	R	R			
	Ø2	← R	R	G	R	R	G	R	R			



8 phase controller w/ 6 phases in actuated pre-timed sequential operation. CNA phase is Ø2. Ped heads and buttons on P2, P2A, P6, and P8. Phases are Ø2(OL1+OL2+OL5+OL6+P2+P2A), Ø3(OL1+OL5+OL6+OL8), Ø4(OL1+OL5), Ø5(OL3+OL7+POL4+POL8), Ø6(OL5+OL7+OL8+POL4), Ø7(OL1+OL3+POL8).

FDOT SOP 20 MOD

Signal Head #	1	2	2A	4	6	6A	7	8					
Econolite Overlaps	OL8	OL6	OL5	OL7	OL2	OL1	OL7	OL3			P2	P6	P8
Load Switch #	LS8	LS6	LS5	LS7	LS2	LS1	LS7	LS3			LS9	LS10	LS12
Peek Overlaps	OLL	OLJ	OLI	OLK	OLF	OLE	OLK	OLG			POLN		POLP



City of Tampa - Phasing Diagram

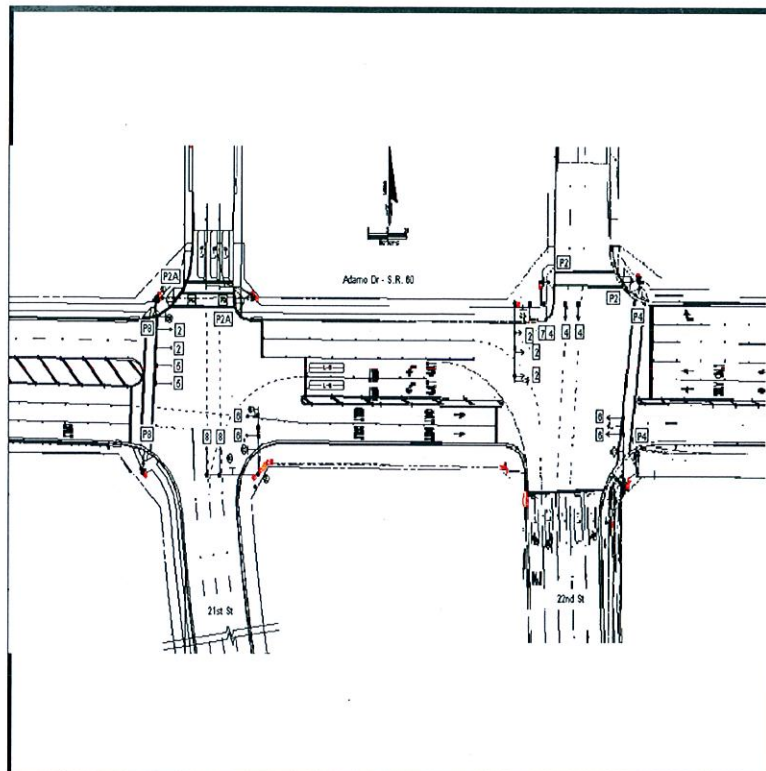


DWG 1/26/2011

Vers. 8/27/2010

Pg: 2 of 2

Prepared by GT Reviewed by *[Signature]*



Sect. I.D.# 405

Location: ADAMO / 21ST ST & 22ND ST

Phasing Date: 1/26/2011

Overlaps
Signal Head Numbers

OL8	OL6	OL5	OL7	OL2	OL1	OL7	OL3
1	2	2A	4	6	6A	7	8

Controller: Econolite

Flashing Operation

OLL	OLJ	OLI	OLK	OLF	OLE	OLK	OLG
-----	-----	-----	-----	-----	-----	-----	-----

Vehicle Movements

Phase Interval

← R	Y	Y	R	Y	Y	R	R
-----	---	---	---	---	---	---	---

P2A	POL4	POL8
P2	P6	P8

Phase Interval

Display Sequence

← R	R	R	G	R	R	G	G	DW	W	W
-----	---	---	---	---	---	---	---	----	---	---

POL4

Ø5 Clr to Ped

← R	R	R	G	R	R	G	G	DW	FDW	FDW
-----	---	---	---	---	---	---	---	----	-----	-----

OL3

Ø3 Clr to

← R	R	R	G	R	R	G	Y	DW	W	DW
-----	---	---	---	---	---	---	---	----	---	----

OL7

Ø6

← R	R	R	G	R	R	G	R	DW	W	DW
-----	---	---	---	---	---	---	---	----	---	----

&

Clr to

← R	R	R	Y	R	R	Y	G	DW	DW	W
-----	---	---	---	---	---	---	---	----	----	---

POL4

Ø7

← R	R	R	R	R	R	R	G	DW	DW	W
-----	---	---	---	---	---	---	---	----	----	---

POL8

Clr to

← R	R	R	Y	R	R	Y	Y	DW	DW	DW
-----	---	---	---	---	---	---	---	----	----	----

OL7

Ø2

← R	R	R	R	R	R	R	R	DW	DW	DW
-----	---	---	---	---	---	---	---	----	----	----

OL5

POL4

← G	R	G	G	R	R	G	R	DW	W	DW
-----	---	---	---	---	---	---	---	----	---	----

OL5

Ø6 Clr to Ped

← G	R	G	G	R	R	G	R	DW	FDW	DW
-----	---	---	---	---	---	---	---	----	-----	----

OL7

Ø7

← R	R	R	R	R	R	R	R	DW	DW	DW
-----	---	---	---	---	---	---	---	----	----	----

OL8

Clr to

← Y	R	Y	Y	R	R	Y	R	DW	DW	DW
-----	---	---	---	---	---	---	---	----	----	----

&

Ø2

← R	R	G	R	R	R	R	R	DW	DW	DW
-----	---	---	---	---	---	---	---	----	----	----

POL4

OL7

OL3

POL8

← R	R	R	R	R	G	R	G	DW	DW	W
-----	---	---	---	---	---	---	---	----	----	---

OL3

Ø7 Clr to Ped

← R	R	R	R	R	G	R	G	DW	DW	FDW
-----	---	---	---	---	---	---	---	----	----	-----

OL1

Clr to

← R	R	R	R	R	G	R	Y	DW	DW	DW
-----	---	---	---	---	---	---	---	----	----	----

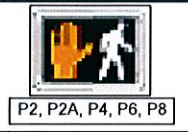
&

Ø2

← R	R	R	R	R	G	R	R	DW	DW	DW
-----	---	---	---	---	---	---	---	----	----	----

POL8

OL1



8 phase controller w/ 6 phases in actuated pre-timed sequential operation. CNA phase is Ø2. Ped heads and buttons on P2, P2A, P6, and P8. Phases are Ø2(OL1+OL2+OL5+OL6+P2+P2A), Ø3(OL1+OL5+OL6+OL8), Ø4(OL1+OL5), Ø5(OL3+OL7+POL4+POL8), Ø6(OL5+OL7+OL8+POL4), Ø7(OL1+OL3+POL8).

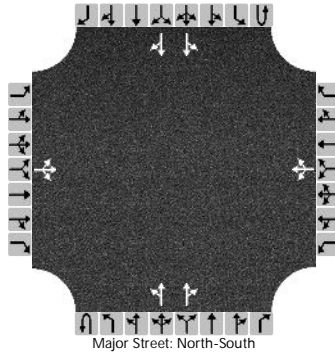
FDOT SOP 20 MOD

Signal Head #	1	2	2A	4	6	6A	7	8	P2	P6	P8
Econolite Overlaps	OL8	OL6	OL5	OL7	OL2	OL1	OL7	OL3		POL4	POL8
Load Switch #	LS8	LS6	LS5	LS7	LS2	LS1	LS7	LS3	LS9	LS10	LS12
Peek Overlaps	OLL	OLJ	OLI	OLK	OLF	OLE	OLK	OLG	POLN	POLP	

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	MDS	Intersection	Clark Street and 34th Str				
Agency/Co.	GFY	Jurisdiction	City of Tampa				
Date Performed	04/25/2018	East/West Street	Clark Street				
Analysis Year	2018	North/South Street	34th Street				
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.79				
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00				
Project Description	Clark Street Distribution Center						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	2	0	0	0	2	0
Configuration			LTR				LTR			LT		TR		LT		TR
Volume (veh/h)		55	0	13		5	0	13		9	25	34		5	146	84
Percent Heavy Vehicles (%)		8	0	0		100	0	0		50				100		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.66	6.50	6.90		9.50	6.50	6.90		5.10				6.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.58	4.00	3.30		4.50	4.00	3.30		2.70				3.20		

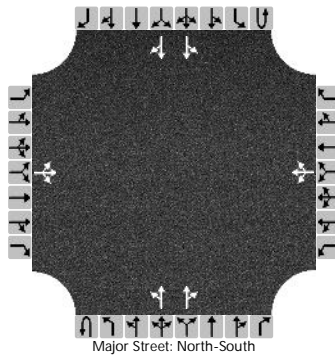
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			86				23				11				6	
Capacity, c (veh/h)			662				828				983				1025	
v/c Ratio			0.13				0.03				0.01				0.01	
95% Queue Length, Q ₉₅ (veh)			0.4				0.1				0.0				0.0	
Control Delay (s/veh)			11.3				9.5				8.7				8.5	
Level of Service (LOS)			B				A				A				A	
Approach Delay (s/veh)	11.3				9.5				1.2				0.2			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	MDS	Intersection	Clark Street and 34th Str				
Agency/Co.	GFY	Jurisdiction	City of Tampa				
Date Performed	04/25/2018	East/West Street	Clark Street				
Analysis Year	2018	North/South Street	34th Street				
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.76				
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00				
Project Description	Clark Street Distribution Center						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	2	0	0	0	2	0
Configuration			LTR				LTR			LT		TR		LT		TR
Volume (veh/h)		28	0	0		0	0	12		12	96	0		4	20	80
Percent Heavy Vehicles (%)		14	0	0		0	0	33		33				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.78	6.50	6.90		7.50	6.50	7.56		4.76				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.64	4.00	3.30		3.50	4.00	3.63		2.53				2.20		

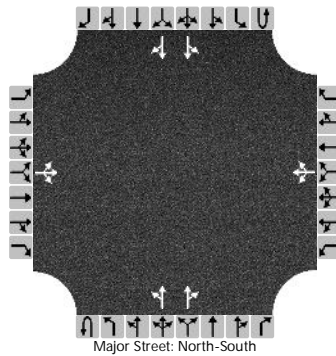
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			37				16				16				5	
Capacity, c (veh/h)			711				896				1252				1473	
v/c Ratio			0.05				0.02				0.01				0.00	
95% Queue Length, Q ₉₅ (veh)			0.2				0.1				0.0				0.0	
Control Delay (s/veh)			10.3				9.1				7.9				7.5	
Level of Service (LOS)			B				A				A				A	
Approach Delay (s/veh)	10.3				9.1				0.9				0.3			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	MDS	Intersection	Clark Street and 34th Str				
Agency/Co.	GFY	Jurisdiction	City of Tampa				
Date Performed	4/25/2018	East/West Street	Clark Street				
Analysis Year	2018	North/South Street	34th Street				
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.79				
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00				
Project Description	Clark Street Distribution Center						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	2	0	0	0	2	0
Configuration			LTR				LTR			LT		TR		LT		TR
Volume (veh/h)		55	0	13		5	0	13		9	25	34		5	146	84
Percent Heavy Vehicles (%)		15	0	0		100	0	33		56				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.80	6.50	6.90		9.50	6.50	7.56		5.22				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.65	4.00	3.30		4.50	4.00	3.63		2.76				2.20		

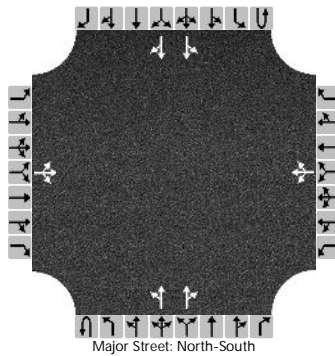
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			86				23				11				6	
Capacity, c (veh/h)			647				780				954				1537	
v/c Ratio			0.13				0.03				0.01				0.00	
95% Queue Length, Q ₉₅ (veh)			0.5				0.1				0.0				0.0	
Control Delay (s/veh)			11.4				9.8				8.8				7.4	
Level of Service (LOS)			B				A				A				A	
Approach Delay (s/veh)	11.4				9.8				1.2				0.2			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	MDS	Intersection	Clark Street and 34th Str				
Agency/Co.	GFY	Jurisdiction	City of Tampa				
Date Performed	04/25/2018	East/West Street	Clark Street				
Analysis Year	2018	North/South Street	34th Street				
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.76				
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00				
Project Description	Clark Street Distribution Center						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	2	0	0	0	2	0
Configuration			LTR				LTR			LT		TR		LT		TR
Volume (veh/h)		30	0	0		0	0	13		13	100	0		5	21	84
Percent Heavy Vehicles (%)		14	0	0		0	0	33		33				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage					Left + Thru								1			

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.78	6.50	6.90		7.50	6.50	7.56		4.76				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.64	4.00	3.30		3.50	4.00	3.63		2.53				2.20		

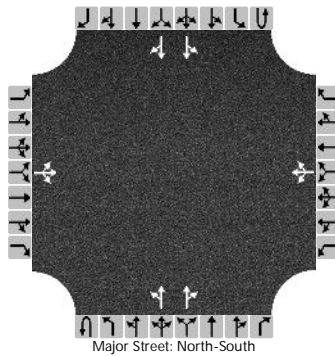
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			39				17				17				7	
Capacity, c (veh/h)			699				893				1244				1466	
v/c Ratio			0.06				0.02				0.01				0.00	
95% Queue Length, Q ₉₅ (veh)			0.2				0.1				0.0				0.0	
Control Delay (s/veh)			10.5				9.1				7.9				7.5	
Level of Service (LOS)			B				A				A				A	
Approach Delay (s/veh)	10.5				9.1				1.0				0.3			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	MDS	Intersection	Clark Street and 34th Str				
Agency/Co.	GFY	Jurisdiction	City of Tampa				
Date Performed	4/25/2018	East/West Street	Clark Street				
Analysis Year	2018	North/South Street	34th Street				
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.79				
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00				
Project Description	Clark Street Distribution Center						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement																
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	2	0	0	0	2	0
Configuration			LTR				LTR			LT		TR		LT		TR
Volume (veh/h)		59	0	13		5	0	13		9	27	34		5	146	98
Percent Heavy Vehicles (%)		15	0	0		100	0	33		56				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		7.80	6.50	6.90		9.50	6.50	7.56		5.22				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.65	4.00	3.30		4.50	4.00	3.63		2.76				2.20		

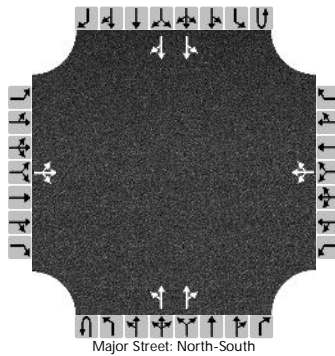
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			91				23				11				6	
Capacity, c (veh/h)			636				778				936				1534	
v/c Ratio			0.14				0.03				0.01				0.00	
95% Queue Length, Q ₉₅ (veh)			0.5				0.1				0.0				0.0	
Control Delay (s/veh)			11.6				9.8				8.9				7.4	
Level of Service (LOS)			B				A				A				A	
Approach Delay (s/veh)	11.6				9.8				1.2				0.2			
Approach LOS	B				A											

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	MDS	Intersection	Clark Street and 34th Str				
Agency/Co.	GFY	Jurisdiction	City of Tampa				
Date Performed	04/25/2018	East/West Street	Clark Street				
Analysis Year	2018	North/South Street	34th Street				
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.76				
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00				
Project Description	Clark Street Distribution Center						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	2	0	0	0	2	0
Configuration			LTR				LTR			LT		TR		LT		TR
Volume (veh/h)		40	0	0		0	0	13		13	105	0		5	21	91
Percent Heavy Vehicles (%)		38	0	0		0	33	38		38				0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Left + Thru								1							

Critical and Follow-up Headways

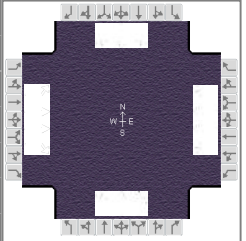
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		8.26	6.50	6.90		7.50	7.16	7.66		4.86				4.10		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.88	4.00	3.30		3.50	4.33	3.68		2.58				2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			53				17			17				7		
Capacity, c (veh/h)			640				875			1205				1458		
v/c Ratio			0.08				0.02			0.01				0.00		
95% Queue Length, Q ₉₅ (veh)			0.3				0.1			0.0				0.0		
Control Delay (s/veh)			11.1				9.2			8.0				7.5		
Level of Service (LOS)			B				A			A				A		
Approach Delay (s/veh)	11.1				9.2				0.9				0.3			
Approach LOS	B				A											

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 16, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	AM Peak	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	34th Street and State R...	File Name	34th-SR60-EX-AM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	92	604	64	60	1100	148	28	20	96	112	48	136

Signal Information													
Cycle, s	263.9	Reference Phase	2										
Offset, s	0	Reference Point	Begin										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	20.0	150.0	25.0	40.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.1	5.1	4.5	4.5	0.0	0.0			
				Red	2.1	2.0	2.4	3.2	0.0	0.0			

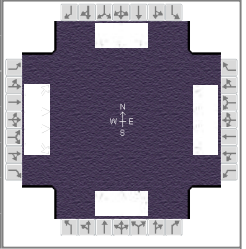
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	27.2	157.1	27.2	157.1	31.9	47.7	31.9	47.7
Change Period, ($Y+R_c$), s	7.2	7.1	7.2	7.1	6.9	7.7	6.9	7.7
Max Allow Headway (MAH), s	3.1	4.0	3.1	4.0	3.2	4.3	3.2	4.3
Queue Clearance Time (g_s), s	7.0	26.4	6.1	56.7	13.8	16.0	18.7	10.3
Green Extension Time (g_e), s	0.1	11.6	0.1	11.6	0.0	0.7	0.1	0.7
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	92	604	64	60	1100	112	28	20	80	112	48	56
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1710	1133	1428	1696	1553	596	1604	1359	1711	1767	1572
Queue Service Time (g_s), s	5.0	24.4	5.3	4.1	54.7	6.9	11.8	2.8	14.0	16.7	6.3	8.3
Cycle Queue Clearance Time (g_c), s	5.0	24.4	5.3	4.1	54.7	6.9	11.8	2.8	14.0	16.7	6.3	8.3
Green Ratio (g/C)	0.64	0.57	0.66	0.64	0.57	0.66	0.09	0.15	0.15	0.09	0.15	0.15
Capacity (c), veh/h	349	1944	751	442	1928	1032	56	243	206	162	268	238
Volume-to-Capacity Ratio (X)	0.264	0.311	0.085	0.136	0.571	0.109	0.496	0.082	0.388	0.691	0.179	0.235
Back of Queue (Q), ft/ln (50 th percentile)	55.4	276.7	48.8	43.5	621.7	67.5	80.4	35.1	127.8	213.4	79.1	89
Back of Queue (Q), veh/ln (50 th percentile)	2.2	10.5	1.5	1.4	23.4	2.6	1.9	1.2	5.1	8.1	3.0	3.5
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	25.0	29.9	15.9	18.9	36.4	16.1	113.5	96.2	100.9	115.7	97.6	98.5
Incremental Delay (d_2), s/veh	0.1	0.4	0.2	0.1	1.2	0.2	2.5	0.1	1.2	10.5	0.3	0.5
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	25.1	30.3	16.1	18.9	37.6	16.4	116.0	96.3	102.1	126.2	98.0	99.0
Level of Service (LOS)	C	C	B	B	D	B	F	F	F	F	F	F
Approach Delay, s/veh / LOS	28.5	C		34.9	C		104.2	F		112.9	F	
Intersection Delay, s/veh / LOS	43.6						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.14	B	2.40	B	2.54	C	2.49	B
Bicycle LOS Score / LOS	1.11	A	1.54	B	0.59	A	0.84	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 13, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM Peak	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	34th Street and State R...	File Name	34th-SR60-EX-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	100	1576	20	56	1204	156	32	36	20	164	36	100

Signal Information												
Cycle, s	263.9	Reference Phase	2									
Offset, s	0	Reference Point	Begin									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
		Green	20.0	150.0	25.0	40.0	0.0	0.0				
		Yellow	5.1	5.1	4.5	4.5	0.0	0.0				
		Red	2.1	2.0	2.4	3.2	0.0	0.0				

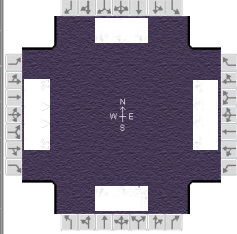
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	27.2	157.1	27.2	157.1	31.9	47.7	31.9	47.7
Change Period, (Y+R _c), s	7.2	7.1	7.2	7.1	6.9	7.7	6.9	7.7
Max Allow Headway (MAH), s	3.1	4.0	3.1	4.0	3.2	4.1	3.2	4.1
Queue Clearance Time (g _s), s	7.9	93.7	5.6	61.6	9.3	5.0	26.2	6.7
Green Extension Time (g _e), s	0.1	26.5	0.0	30.5	0.0	0.3	0.0	0.3
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.24	0.00	0.10	0.00	0.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	100	1576	20	56	1204	120	32	20	20	164	36	20
Adjusted Saturation Flow Rate (s), veh/h/ln	1681	1766	1723	1513	1752	1667	1083	1574	1525	1781	1737	1759
Queue Service Time (g _s), s	5.9	91.7	1.0	3.6	59.6	6.9	7.3	2.9	3.0	24.2	4.7	2.6
Cycle Queue Clearance Time (g _c), s	5.9	91.7	1.0	3.6	59.6	6.9	7.3	2.9	3.0	24.2	4.7	2.6
Green Ratio (g/C)	0.64	0.57	0.66	0.64	0.57	0.66	0.09	0.15	0.15	0.09	0.15	0.15
Capacity (c), veh/h	303	2008	1146	201	1992	1105	103	239	231	169	263	267
Volume-to-Capacity Ratio (X)	0.330	0.785	0.017	0.279	0.604	0.109	0.312	0.084	0.086	0.972	0.137	0.075
Back of Queue (Q), ft/ln (50 th percentile)	64.8	1053.1	11	47	679	70.5	73.9	35.7	30.3	422.3	59.8	30.2
Back of Queue (Q), veh/ln (50 th percentile)	2.4	41.1	0.4	1.6	26.3	2.8	2.1	1.2	1.2	16.6	2.2	1.2
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	27.1	44.4	15.1	38.2	37.4	16.1	111.4	96.2	96.2	119.1	97.0	96.1
Incremental Delay (d ₂), s/veh	0.2	3.2	0.0	0.3	1.4	0.2	0.6	0.1	0.2	110.1	0.2	0.1
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	27.3	47.6	15.2	38.5	38.8	16.3	112.1	96.4	96.4	229.2	97.2	96.2
Level of Service (LOS)	C	D	B	D	D	B	F	F	F	F	F	F
Approach Delay, s/veh / LOS	46.0		D	36.9		D	103.3		F	195.5		F
Intersection Delay, s/veh / LOS	53.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.14	B	2.40	B	2.54	C	2.49	B
Bicycle LOS Score / LOS	1.89	B	1.63	B	0.55	A	0.85	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 16, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	AM Peak	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	34th Street and State R...	File Name	34th-SR60-FB-AM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	96	629	67	63	1145	154	30	21	100	117	50	142

Signal Information													
Cycle, s	263.9	Reference Phase	2										
Offset, s	0	Reference Point	Begin										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	20.0	150.0	25.0	40.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	5.1	5.1	4.5	4.5	0.0	0.0			
				Red	2.1	2.0	2.4	3.2	0.0	0.0			

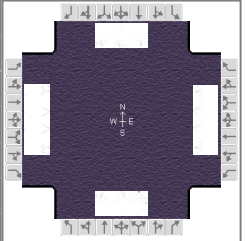
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	27.2	157.1	27.2	157.1	31.9	47.7	31.9	47.7
Change Period, ($Y+R_c$), s	7.2	7.1	7.2	7.1	6.9	7.7	6.9	7.7
Max Allow Headway (MAH), s	3.1	4.0	3.1	4.0	3.2	4.2	3.2	4.2
Queue Clearance Time (g_s), s	7.3	27.7	6.3	60.0	14.7	5.0	19.5	8.5
Green Extension Time (g_e), s	0.1	12.3	0.1	12.3	0.0	0.4	0.1	0.4
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	96	629	42	63	1145	120	30	19	18	117	50	25
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1710	1133	1428	1696	1553	596	1604	1386	1711	1767	1572
Queue Service Time (g_s), s	5.3	25.7	3.4	4.3	58.0	7.4	12.7	2.6	3.0	17.5	6.5	3.6
Cycle Queue Clearance Time (g_c), s	5.3	25.7	3.4	4.3	58.0	7.4	12.7	2.6	3.0	17.5	6.5	3.6
Green Ratio (g/C)	0.64	0.57	0.66	0.64	0.57	0.66	0.09	0.15	0.15	0.09	0.15	0.15
Capacity (c), veh/h	335	1944	751	432	1928	1032	56	243	210	162	268	238
Volume-to-Capacity Ratio (X)	0.287	0.324	0.056	0.146	0.594	0.116	0.532	0.077	0.088	0.722	0.187	0.105
Back of Queue (Q), ft/ln (50 th percentile)	58	291	31.3	45.7	659.9	72.8	87.9	32.7	27.9	226.8	82.5	38.9
Back of Queue (Q), veh/ln (50 th percentile)	2.3	11.0	1.0	1.5	24.8	2.8	2.1	1.1	1.1	8.6	3.1	1.5
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	26.1	30.1	15.6	19.1	37.1	16.2	113.9	96.1	96.3	116.1	97.7	96.5
Incremental Delay (d_2), s/veh	0.2	0.4	0.1	0.1	1.4	0.2	5.0	0.1	0.2	13.7	0.3	0.2
Initial Queue Delay (d_3), 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
Control Delay (d), s/veh	26.3	30.6	15.7	19.1	38.5	16.5	118.8	96.2	96.4	129.8	98.1	96.7
Level of Service (LOS)	C	C	B	B	D	B	F	F	F	F	F	F
Approach Delay, s/veh / LOS	29.2	C		35.6	D		106.4	F		117.2	F	
Intersection Delay, s/veh / LOS	42.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.24	B	2.45	B	2.54	C	2.53	C
Bicycle LOS Score / LOS	1.12	A	1.58	B	0.54	A	0.80	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 26, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM Peak	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	34th Street and State R...	File Name	34th-SR60-FB-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	105	1640	21	59	1253	163	34	38	21	171	38	105

Signal Information												
Cycle, s	263.9	Reference Phase	2									
Offset, s	0	Reference Point	Begin									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	20.0	150.0	25.0	40.0	0.0	0.0						
Yellow	5.1	5.1	4.5	4.5	0.0	0.0						
Red	2.1	2.0	2.4	3.2	0.0	0.0						

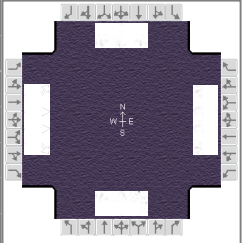
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	27.2	157.1	27.2	157.1	31.9	47.7	31.9	47.7
Change Period, (Y+R _c), s	7.2	7.1	7.2	7.1	6.9	7.7	6.9	7.7
Max Allow Headway (MAH), s	3.1	4.0	3.1	4.0	3.2	4.2	3.2	4.2
Queue Clearance Time (g _s), s	8.3	100.7	5.8	65.4	9.6	5.1	27.0	7.0
Green Extension Time (g _e), s	0.1	26.9	0.1	33.3	0.0	0.3	0.0	0.3
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.34	0.00	0.15	0.00	0.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	105	1640	21	59	1253	125	34	21	21	171	38	21
Adjusted Saturation Flow Rate (s), veh/h/ln	1681	1766	1723	1513	1752	1667	1104	1574	1550	1748	1737	1638
Queue Service Time (g _s), s	6.3	98.7	1.1	3.8	63.4	7.2	7.6	3.0	3.1	25.0	5.0	2.9
Cycle Queue Clearance Time (g _c), s	6.3	98.7	1.1	3.8	63.4	7.2	7.6	3.0	3.1	25.0	5.0	2.9
Green Ratio (g/C)	0.64	0.57	0.66	0.64	0.57	0.66	0.09	0.15	0.15	0.09	0.15	0.15
Capacity (c), veh/h	290	2008	1146	190	1992	1105	105	239	235	166	263	248
Volume-to-Capacity Ratio (X)	0.362	0.817	0.018	0.310	0.629	0.113	0.325	0.088	0.089	1.033	0.144	0.085
Back of Queue (Q), ft/ln (50 th percentile)	68.3	1128.1	11.4	55.4	716.2	72.5	78.6	37.4	31.8	498.9	63.2	31.8
Back of Queue (Q), veh/ln (50 th percentile)	2.6	44.1	0.5	1.9	27.8	2.9	2.2	1.3	1.3	19.6	2.3	1.3
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	28.6	45.9	15.2	42.2	38.3	16.2	111.6	96.3	96.3	119.5	97.1	96.2
Incremental Delay (d ₂), s/veh	0.3	2.8	0.0	0.3	0.6	0.0	0.7	0.2	0.2	174.5	0.2	0.1
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	28.9	48.7	15.2	42.6	38.9	16.2	112.2	96.4	96.4	294.0	97.4	96.4
Level of Service (LOS)	C	D	B	D	D	B	F	F	F	F	F	F
Approach Delay, s/veh / LOS	47.1	D		37.1	D		103.5	F		243.5	F	
Intersection Delay, s/veh / LOS	57.1						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.14	B	2.41	B	2.55	C	2.49	B
Bicycle LOS Score / LOS	1.94	B	1.67	B	0.55	A	0.87	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 16, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	AM Peak	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	34th Street and State R...	File Name	34th-SR60-FBP-AM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	96	629	74	70	1145	154	33	21	103	117	50	142

Signal Information												
Cycle, s	263.9	Reference Phase	2									
Offset, s	0	Reference Point	Begin									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	20.0	150.0	25.0	40.0	0.0	0.0						
Yellow	5.1	5.1	4.5	4.5	0.0	0.0						
Red	2.1	2.0	2.4	3.2	0.0	0.0						

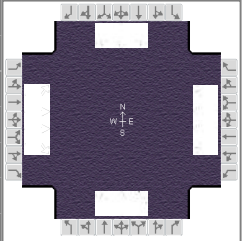
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	27.2	157.1	27.2	157.1	31.9	47.7	31.9	47.7
Change Period, (Y+R _c), s	7.2	7.1	7.2	7.1	6.9	7.7	6.9	7.7
Max Allow Headway (MAH), s	3.1	4.0	3.1	4.0	3.2	4.2	3.2	4.2
Queue Clearance Time (g _s), s	7.3	27.7	7.2	60.0	16.8	5.3	19.5	8.6
Green Extension Time (g _e), s	0.1	12.4	0.1	12.4	0.0	0.4	0.1	0.4
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00

Movement Group Results	EB			WB			NB			SB			
	L	T	R	L	T	R	L	T	R	L	T	R	
Approach Movement													
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18	
Adjusted Flow Rate (v), veh/h	96	629	49	70	1145	120	33	20	20	117	50	25	
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1710	1045	1330	1696	1553	567	1604	1368	1711	1752	1560	
Queue Service Time (g _s), s	5.3	25.7	4.4	5.2	58.0	7.4	14.8	2.8	3.3	17.5	6.6	3.6	
Cycle Queue Clearance Time (g _c), s	5.3	25.7	4.4	5.2	58.0	7.4	14.8	2.8	3.3	17.5	6.6	3.6	
Green Ratio (g/C)	0.64	0.57	0.66	0.64	0.57	0.66	0.09	0.15	0.15	0.09	0.15	0.15	
Capacity (c), veh/h	335	1944	693	404	1928	1032	54	243	207	162	266	236	
Volume-to-Capacity Ratio (X)	0.287	0.324	0.071	0.173	0.594	0.116	0.614	0.083	0.096	0.722	0.188	0.106	
Back of Queue (Q), ft/ln (50 th percentile)	58	291	38.6	53.7	659.9	72.8	104.4	35.4	30.2	226.8	83.1	39.2	
Back of Queue (Q), veh/ln (50 th percentile)	2.3	11.0	1.1	1.7	24.8	2.8	2.5	1.2	1.2	8.6	3.1	1.5	
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	26.1	30.1	15.7	19.3	37.1	16.2	114.8	96.2	96.4	116.1	97.8	96.5	
Incremental Delay (d ₂), s/veh	0.2	0.4	0.2	0.1	1.4	0.2	15.1	0.1	0.2	13.7	0.3	0.2	
Initial Queue Delay (d ₃), 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	
Control Delay (d), s/veh	26.3	30.6	15.9	19.4	38.5	16.5	129.9	96.3	96.6	129.8	98.1	96.7	
Level of Service (LOS)	C	C	B	B	D	B	F	F	F	F	F	F	
Approach Delay, s/veh / LOS	29.1	C		35.5			D		111.6	F		117.2	F
Intersection Delay, s/veh / LOS	42.4						D						

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.24	B	2.45	B	2.54	C	2.53	C
Bicycle LOS Score / LOS	1.13	A	1.59	B	0.55	A	0.80	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GFY			Duration, h	1.00		
Analyst	MDS	Analysis Date	Apr 26, 2018	Area Type	Other		
Jurisdiction	City of Tampa	Time Period	PM Peak	PHF	1.00		
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00		
Intersection	34th Street and State R...	File Name	34th-SR60-FBP-PM.xus				
Project Description	Clark Street Distribution Center						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h	105	1640	25	62	1253	163	42	38	28	171	38	105

Signal Information												
Cycle, s	263.9	Reference Phase	2									
Offset, s	0	Reference Point	Begin									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	20.0	150.0	25.0	40.0	0.0	0.0						
Yellow	5.1	5.1	4.5	4.5	0.0	0.0						
Red	2.1	2.0	2.4	3.2	0.0	0.0						

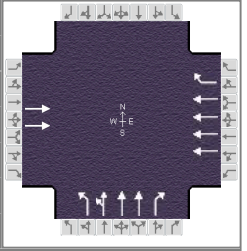
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	27.2	157.1	27.2	157.1	31.9	47.7	31.9	47.7
Change Period, (Y+R _c), s	7.2	7.1	7.2	7.1	6.9	7.7	6.9	7.7
Max Allow Headway (MAH), s	3.1	4.0	3.1	4.0	3.2	4.2	3.2	4.2
Queue Clearance Time (g _s), s	8.3	100.7	6.2	65.4	12.9	5.7	27.0	7.1
Green Extension Time (g _e), s	0.1	26.9	0.1	33.3	0.0	0.3	0.0	0.3
Phase Call Probability	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Max Out Probability	0.00	0.34	0.00	0.15	0.00	0.00	1.00	0.00

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (v), veh/h	105	1640	25	62	1253	125	42	25	24	171	38	21
Adjusted Saturation Flow Rate (s), veh/h/ln	1681	1766	1508	1443	1752	1667	963	1544	1491	1734	1707	1638
Queue Service Time (g _s), s	6.3	98.7	1.5	4.2	63.4	7.2	10.9	3.6	3.7	25.0	5.1	2.9
Cycle Queue Clearance Time (g _c), s	6.3	98.7	1.5	4.2	63.4	7.2	10.9	3.6	3.7	25.0	5.1	2.9
Green Ratio (g/C)	0.64	0.57	0.66	0.64	0.57	0.66	0.09	0.15	0.15	0.09	0.15	0.15
Capacity (c), veh/h	290	2008	1003	183	1992	1105	91	234	226	164	259	248
Volume-to-Capacity Ratio (X)	0.362	0.817	0.025	0.339	0.629	0.113	0.461	0.105	0.108	1.041	0.147	0.085
Back of Queue (Q), ft/ln (50 th percentile)	68.3	1128.1	15.4	62.2	716.2	72.5	104.4	44.5	37.2	510.8	64.1	31.8
Back of Queue (Q), veh/ln (50 th percentile)	2.6	44.1	0.5	2.1	27.8	2.9	2.8	1.5	1.5	20.0	2.3	1.3
Queue Storage Ratio (RQ) (50 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d ₁), s/veh	28.6	45.9	15.2	43.1	38.3	16.2	113.1	96.5	96.6	119.5	97.1	96.2
Incremental Delay (d ₂), s/veh	0.3	2.8	0.0	0.4	0.6	0.0	1.4	0.2	0.2	184.7	0.3	0.1
Initial Queue Delay (d ₃), 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
Control Delay (d), s/veh	28.9	48.7	15.2	43.5	38.9	16.2	114.4	96.7	96.8	304.2	97.4	96.4
Level of Service (LOS)	C	D	B	D	D	B	F	F	F	F	F	F
Approach Delay, s/veh / LOS	47.0		D	37.1		D	104.9		F	251.1		F
Intersection Delay, s/veh / LOS	57.8						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.14	B	2.41	B	2.55	C	2.49	B
Bicycle LOS Score / LOS	1.95	B	1.68	B	0.56	A	0.87	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GFY			Duration, h	1.00		
Analyst	MDS	Analysis Date	3/29/2018	Area Type	Other		
Jurisdiction	City of Tampa	Time Period	AM	PHF	1.00		
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00		
Intersection	22nd Street and State R...	File Name	22nd-21st-SR60-EX-AM.xus				
Project Description	Clark Street Distribution Center						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		624			960	216	724	960	88			

Signal Information												
Cycle, s	151.0	Reference Phase	2									
Offset, s	1	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	Off									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	77.1	60.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	2.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

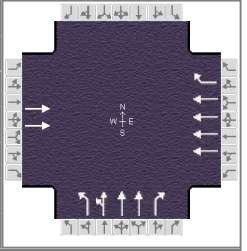
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		4		
Case Number		8.0		7.0		9.0		
Phase Duration, s		84.1		84.1		66.9		
Change Period, (Y+R _c), s		7.0		7.0		6.9		
Max Allow Headway (MAH), s		0.0		0.0		3.1		
Queue Clearance Time (g _s), s						62.0		
Green Extension Time (g _e), s		0.0		0.0		0.0		
Phase Call Probability						1.00		
Max Out Probability						1.00		

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6			2	12	7	4	14			
Adjusted Flow Rate (v), veh/h		532			960	104	724	960	80			
Adjusted Saturation Flow Rate (s), veh/h/ln		1809			1725	1609	1810	1900	1605			
Queue Service Time (g _s), s		6.7			11.9	5.1	60.0	18.4	4.8			
Cycle Queue Clearance Time (g _c), s		6.7			11.9	5.1	60.0	18.4	4.8			
Green Ratio (g/C)		0.51			0.51	0.51	0.40	0.40	0.40			
Capacity (c), veh/h		1847			3524	822	719	2265	638			
Volume-to-Capacity Ratio (X)		0.288			0.272	0.127	1.007	0.424	0.125			
Back of Queue (Q), ft/ln (50 th percentile)		62.2			122.5	50.2	1030	216.2	48.4			
Back of Queue (Q), veh/ln (50 th percentile)		2.5			4.9	2.0	41.2	8.6	1.9			
Queue Storage Ratio (RQ) (50 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00			
Uniform Delay (d ₁), s/veh		9.5			21.0	19.3	45.5	33.0	28.9			
Incremental Delay (d ₂), s/veh		0.4			0.2	0.3	73.9	0.6	0.4			
Initial Queue Delay (d ₃), s/veh		0.0			0.0	0.0	0.0	0.0	0.0			
Control Delay (d), s/veh		9.8			21.2	19.7	119.4	33.6	29.3			
Level of Service (LOS)		A			C	B	F	C	C			
Approach Delay, s/veh / LOS	9.8	A		21.0	C		68.6	E		0.0		
Intersection Delay, s/veh / LOS	44.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.28	B	1.91	B	2.79	C	2.49	B
Bicycle LOS Score / LOS	1.00	A	0.93	A	1.46	A		

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 19, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	22nd Street and State R...	File Name	22nd-21st-SR60-EX-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		992			1080	220	632	644	144			

Signal Information				Phase Diagram									
Cycle, s	151.0	Reference Phase	2	→	↔	↔	↔	↔	↔	↔	↔	↔	↔
Offset, s	92	Reference Point	End	→	↔	↔	↔	↔	↔	↔	↔	↔	↔
Uncoordinated	No	Simult. Gap E/W	Off	Green	83.2	53.1	0.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.5	4.0	0.0	0.0	0.0	0.0			
				Red	3.3	2.9	0.0	0.0	0.0	0.0			

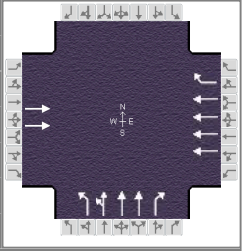
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		4		
Case Number		8.0		7.0		9.0		
Phase Duration, s		91.0		91.0		60.0		
Change Period, (Y+R _c), s		7.8		7.8		6.9		
Max Allow Headway (MAH), s		0.0		0.0		3.1		
Queue Clearance Time (g _s), s						55.1		
Green Extension Time (g _e), s		0.0		0.0		0.0		
Phase Call Probability						1.00		
Max Out Probability						1.00		

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6			2	12		7	4	14		
Adjusted Flow Rate (v), veh/h		1136			1080	120		632	644	52		
Adjusted Saturation Flow Rate (s), veh/h/ln		1766			1658	1610		1767	1841	1610		
Queue Service Time (g _s), s		26.8			13.2	5.5		53.1	12.9	3.3		
Cycle Queue Clearance Time (g _c), s		26.8			13.2	5.5		53.1	12.9	3.3		
Green Ratio (g/C)		0.55			0.55	0.55		0.35	0.35	0.35		
Capacity (c), veh/h		1947			3654	887		621	1942	566		
Volume-to-Capacity Ratio (X)		0.584			0.296	0.135		1.017	0.332	0.092		
Back of Queue (Q), ft/ln (50 th percentile)		254			133.2	52.9		987.2	151.1	32.4		
Back of Queue (Q), veh/ln (50 th percentile)		9.9			5.1	2.1		38.6	5.9	1.3		
Queue Storage Ratio (RQ) (50 th percentile)		0.00			0.00	0.00		0.00	0.00	0.00		
Uniform Delay (d ₁), s/veh		16.0			18.2	16.4		49.0	35.9	32.8		
Incremental Delay (d ₂), s/veh		0.9			0.2	0.3		89.7	0.0	0.0		
Initial Queue Delay (d ₃), s/veh		0.0			0.0	0.0		0.0	0.0	0.0		
Control Delay (d), s/veh		16.9			18.4	16.8		138.7	36.0	32.8		
Level of Service (LOS)		B			B	B		F	D	C		
Approach Delay, s/veh / LOS	16.9	B		18.2	B		84.7	F		0.0		
Intersection Delay, s/veh / LOS	41.9						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.40	B	1.91	B	2.77	C	2.49	B
Bicycle LOS Score / LOS	1.31	A	0.98	A	1.22	A		

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GFY			Duration, h	1.00		
Analyst	MDS	Analysis Date	3/29/2018	Area Type	Other		
Jurisdiction	City of Tampa	Time Period	AM	PHF	1.00		
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00		
Intersection	22nd Street and State R...	File Name	22nd-21st-SR60-FB-AM.xus				
Project Description	Clark Street Distribution Center						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		650			999	225	754	999	92			

Signal Information													
Cycle, s	151.0	Reference Phase	2										
Offset, s	1	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	Off	Green	77.1	60.0	0.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.5	4.0	0.0	0.0	0.0	0.0			
				Red	2.5	2.9	0.0	0.0	0.0	0.0			

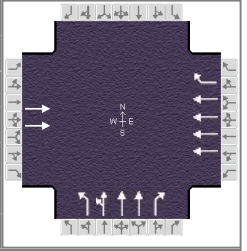
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		4		
Case Number		8.0		7.0		9.0		
Phase Duration, s		84.1		84.1		66.9		
Change Period, (Y+R _c), s		7.0		7.0		6.9		
Max Allow Headway (MAH), s		0.0		0.0		3.1		
Queue Clearance Time (g _s), s						62.0		
Green Extension Time (g _e), s		0.0		0.0		0.0		
Phase Call Probability						1.00		
Max Out Probability						1.00		

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6			2	12	7	4	14			
Adjusted Flow Rate (v), veh/h		555			999	108	754	999	83			
Adjusted Saturation Flow Rate (s), veh/h/ln		1696			1523	1522	1753	1870	1384			
Queue Service Time (g _s), s		7.7			14.5	5.6	60.0	19.7	5.8			
Cycle Queue Clearance Time (g _c), s		7.7			14.5	5.6	60.0	19.7	5.8			
Green Ratio (g/C)		0.51			0.51	0.51	0.40	0.40	0.40			
Capacity (c), veh/h		1732			3111	777	697	2230	550			
Volume-to-Capacity Ratio (X)		0.320			0.321	0.139	1.082	0.448	0.151			
Back of Queue (Q), ft/ln (50 th percentile)		70.1			147.1	55.5	1543.8	231.3	58.5			
Back of Queue (Q), veh/ln (50 th percentile)		2.6			5.3	2.1	59.8	9.1	2.0			
Queue Storage Ratio (RQ) (50 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00			
Uniform Delay (d ₁), s/veh		9.6			21.6	19.5	45.5	33.4	29.2			
Incremental Delay (d ₂), s/veh		0.5			0.3	0.4	176.8	0.7	0.6			
Initial Queue Delay (d ₃), s/veh		0.0			0.0	0.0	0.0	0.0	0.0			
Control Delay (d), s/veh		10.1			21.9	19.8	222.3	34.0	29.8			
Level of Service (LOS)		B			C	B	F	C	C			
Approach Delay, s/veh / LOS	10.1	B		21.7	C		111.2	F		0.0		
Intersection Delay, s/veh / LOS	66.8						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	1.91	B	2.80	C	2.49	B
Bicycle LOS Score / LOS	1.02	A	0.94	A	1.50	A		

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 19, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	22nd Street and State R...	File Name	22nd-21st-SR60-FB-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		1033			1124	229	658	671	150			

Signal Information												
Cycle, s	151.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	Off									
Force Mode	Fixed	Simult. Gap N/S	On									
		Green	83.2	53.1	0.0	0.0	0.0	0.0				
		Yellow	4.5	4.0	0.0	0.0	0.0	0.0				
		Red	3.3	2.9	0.0	0.0	0.0	0.0				

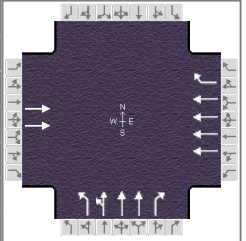
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		4		
Case Number		8.0		7.0		9.0		
Phase Duration, s		91.0		91.0		60.0		
Change Period, ($Y+R_c$), s		7.8		7.8		6.9		
Max Allow Headway (MAH), s		0.0		0.0		3.1		
Queue Clearance Time (g_s), s						55.1		
Green Extension Time (g_e), s		0.0		0.0		0.0		
Phase Call Probability						1.00		
Max Out Probability						1.00		

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement		6			2	12	7	4	14			
Adjusted Flow Rate (v), veh/h		1183			1124	124	658	671	54			
Adjusted Saturation Flow Rate (s), veh/h/ln		1766			1658	1610	1767	1841	1610			
Queue Service Time (g_s), s		28.6			13.8	5.7	53.1	13.5	3.4			
Cycle Queue Clearance Time (g_c), s		28.6			13.8	5.7	53.1	13.5	3.4			
Green Ratio (g/C)		0.55			0.55	0.55	0.35	0.35	0.35			
Capacity (c), veh/h		1947			3654	887	621	1942	566			
Volume-to-Capacity Ratio (X)		0.608			0.308	0.140	1.059	0.346	0.095			
Back of Queue (Q), ft/ln (50 th percentile)		270.5			139.6	54.8	1228	158.2	33.7			
Back of Queue (Q), veh/ln (50 th percentile)		10.6			5.4	2.2	48.0	6.1	1.3			
Queue Storage Ratio (RQ) (50 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00			
Uniform Delay (d_1), s/veh		16.3			18.3	16.5	49.0	36.1	32.8			
Incremental Delay (d_2), s/veh		0.9			0.2	0.3	144.2	0.0	0.0			
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0			
Control Delay (d), s/veh		17.2			18.5	16.8	193.1	36.2	32.9			
Level of Service (LOS)		B			B	B	F	D	C			
Approach Delay, s/veh / LOS	17.2	B		18.4	B		110.7	F		0.0		
Intersection Delay, s/veh / LOS	51.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.40	B	1.91	B	2.78	C	2.49	B
Bicycle LOS Score / LOS	1.34	A	1.00	A	1.25	A		

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GFY			Duration, h	1.00		
Analyst	MDS	Analysis Date	3/29/2018	Area Type	Other		
Jurisdiction	City of Tampa	Time Period	AM	PHF	1.00		
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00		
Intersection	22nd Street and State R...	File Name	22nd-21st-SR60-FBP-AM.xus				
Project Description	Clark Street Distribution Center						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		650			1001	226		754	999	99		

Signal Information													
Cycle, s	151.0	Reference Phase	2										
Offset, s	1	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	Off	Green	77.1	60.0	0.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.5	4.0	0.0	0.0	0.0	0.0			
				Red	2.5	2.9	0.0	0.0	0.0	0.0			

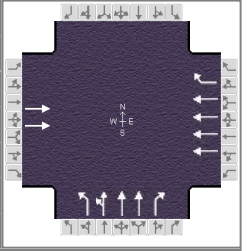
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		4		
Case Number		8.0		7.0		9.0		
Phase Duration, s		84.1		84.1		66.9		
Change Period, ($Y+R_c$), s		7.0		7.0		6.9		
Max Allow Headway (MAH), s		0.0		0.0		3.1		
Queue Clearance Time (g_s), s						62.0		
Green Extension Time (g_e), s		0.0		0.0		0.0		
Phase Call Probability						1.00		
Max Out Probability						1.00		

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6			2	12		7	4	14		
Adjusted Flow Rate (v), veh/h		555			1001	109		754	999	90		
Adjusted Saturation Flow Rate (s), veh/h/ln		1696			1523	1510		1739	1870	1309		
Queue Service Time (g_s), s		7.7			14.5	5.8		60.0	19.7	6.7		
Cycle Queue Clearance Time (g_c), s		7.7			14.5	5.8		60.0	19.7	6.7		
Green Ratio (g/C)		0.51			0.51	0.51		0.40	0.40	0.40		
Capacity (c), veh/h		1732			3111	771		691	2230	520		
Volume-to-Capacity Ratio (X)		0.320			0.322	0.141		1.091	0.448	0.173		
Back of Queue (Q), ft/ln (50 th percentile)		70.1			147.6	56.6		1613.8	231.3	66.9		
Back of Queue (Q), veh/ln (50 th percentile)		2.6			5.3	2.1		62.1	9.1	2.2		
Queue Storage Ratio (RQ) (50 th percentile)		0.00			0.00	0.00		0.00	0.00	0.00		
Uniform Delay (d_1), s/veh		9.6			21.6	19.5		45.5	33.4	29.4		
Incremental Delay (d_2), s/veh		0.5			0.3	0.4		191.0	0.7	0.7		
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0		0.0	0.0	0.0		
Control Delay (d), s/veh		10.1			21.9	19.9		236.5	34.0	30.2		
Level of Service (LOS)		B			C	B		F	C	C		
Approach Delay, s/veh / LOS	10.1		B	21.7		C	116.7		F	0.0		
Intersection Delay, s/veh / LOS	69.8						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.29	B	1.91	B	2.80	C	2.49	B
Bicycle LOS Score / LOS	1.02	A	0.95	A	1.50	B		

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 19, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	22nd Street and State R...	File Name	22nd-21st-SR60-FBP-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		1033			1124	229	658	671	150			

Signal Information												
Cycle, s	151.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	Off									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	83.2	53.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	3.3	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

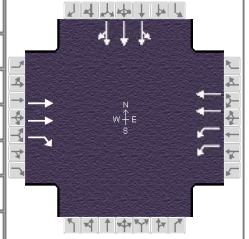
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6		2		4		
Case Number		8.0		7.0		9.0		
Phase Duration, s		91.0		91.0		60.0		
Change Period, ($Y+R_c$), s		7.8		7.8		6.9		
Max Allow Headway (MAH), s		0.0		0.0		3.1		
Queue Clearance Time (g_s), s						55.1		
Green Extension Time (g_e), s		0.0		0.0		0.0		
Phase Call Probability						1.00		
Max Out Probability						1.00		

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement		6			2	12		7	4	14		
Adjusted Flow Rate (v), veh/h		1183			1124	124		658	671	54		
Adjusted Saturation Flow Rate (s), veh/h/ln		1766			1658	1610		1767	1841	1610		
Queue Service Time (g_s), s		28.6			13.8	5.7		53.1	13.5	3.4		
Cycle Queue Clearance Time (g_c), s		28.6			13.8	5.7		53.1	13.5	3.4		
Green Ratio (g/C)		0.55			0.55	0.55		0.35	0.35	0.35		
Capacity (c), veh/h		1947			3654	887		621	1942	566		
Volume-to-Capacity Ratio (X)		0.608			0.308	0.140		1.059	0.346	0.095		
Back of Queue (Q), ft/ln (50 th percentile)		270.5			139.6	54.8		1228	158.2	33.7		
Back of Queue (Q), veh/ln (50 th percentile)		10.6			5.4	2.2		48.0	6.1	1.3		
Queue Storage Ratio (RQ) (50 th percentile)		0.00			0.00	0.00		0.00	0.00	0.00		
Uniform Delay (d_1), s/veh		16.3			18.3	16.5		49.0	36.1	32.8		
Incremental Delay (d_2), s/veh		0.9			0.2	0.3		144.2	0.0	0.0		
Initial Queue Delay (d_3), s/veh		0.0			0.0	0.0		0.0	0.0	0.0		
Control Delay (d), s/veh		17.2			18.5	16.8		193.1	36.2	32.9		
Level of Service (LOS)		B			B	B		F	D	C		
Approach Delay, s/veh / LOS	17.2	B		18.4	B		110.7	F		0.0		
Intersection Delay, s/veh / LOS	51.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.40	B	1.91	B	2.78	C	2.49	B
Bicycle LOS Score / LOS	1.34	A	1.00	A	1.25	A		

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	3/29/2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	AM	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	21st Street and State R...	File Name	22nd-21st-SR60-EX-AM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		376	188	144	1560					156	672	108

Signal Information				Phase Diagram								
Cycle, s	151.0	Reference Phase	2									
Offset, s	15	Reference Point	Begin									
Uncoordinated	No	Simult. Gap E/W	Off									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	20.0	60.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.5	4.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red	2.5	2.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

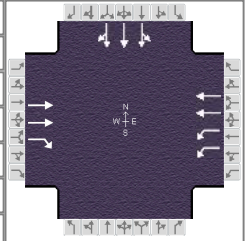
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6	5	2				4
Case Number		7.3	1.0	4.0				12.0
Phase Duration, s		67.0	27.0	94.0				57.0
Change Period, (Y+R _c), s		7.0	7.0	7.0				7.0
Max Allow Headway (MAH), s		0.0	3.1	0.0				4.1
Queue Clearance Time (g _s), s			6.3					24.6
Green Extension Time (g _e), s		0.0	0.2	0.0				3.5
Phase Call Probability			1.00					1.00
Max Out Probability			0.00					0.01

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6	16	5	2					7	4	14
Adjusted Flow Rate (v), veh/h		376	100	142	1537					329	305	290
Adjusted Saturation Flow Rate (s), veh/h/ln		1766	1585	1264	1752					1798	1841	1737
Queue Service Time (g _s), s		10.8	6.1	4.3	42.7					22.6	20.1	20.3
Cycle Queue Clearance Time (g _c), s		10.8	6.1	4.3	42.7					22.6	20.1	20.3
Green Ratio (g/C)		0.40	0.40	0.54	0.58					0.33	0.33	0.33
Capacity (c), veh/h		1404	630	909	2019					595	610	575
Volume-to-Capacity Ratio (X)		0.268	0.159	0.156	0.761					0.552	0.501	0.504
Back of Queue (Q), ft/ln (50 th percentile)		121.7	62.4	43.4	392.8					265.9	248.2	229.9
Back of Queue (Q), veh/ln (50 th percentile)		4.8	2.5	1.3	15.2					10.6	9.6	9.2
Queue Storage Ratio (RQ) (50 th percentile)		0.00	0.00	0.00	0.00					0.00	0.00	0.00
Uniform Delay (d ₁), s/veh		30.7	29.3	18.8	16.1					41.3	40.5	40.6
Incremental Delay (d ₂), s/veh		0.5	0.5	0.3	2.2					3.7	3.0	3.2
Initial Queue Delay (d ₃), s/veh		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Control Delay (d), s/veh		31.2	29.8	19.1	18.3					45.0	43.4	43.7
Level of Service (LOS)		C	C	B	B					D	D	D
Approach Delay, s/veh / LOS	30.9	C		18.4	B		0.0			44.1	D	
Intersection Delay, s/veh / LOS	28.0						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.93	B	1.92	B	2.49	B	2.46	B
Bicycle LOS Score / LOS	0.88	A	1.89	B			1.00	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 19, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	21st Street and State R...	File Name	22nd-21st-SR60-EX-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		928	760	224	1228					208	1012	28

Signal Information													
Cycle, s	151.0	Reference Phase	2										
Offset, s	90	Reference Point	Begin										
Uncoordinated	No	Simult. Gap E/W	Off										
Force Mode	Fixed	Simult. Gap N/S	On										
		Green		20.0	60.0	50.0	0.0	0.0	0.0				
		Yellow		4.5	4.5	3.7	0.0	0.0	0.0				
		Red		2.5	2.5	3.3	0.0	0.0	0.0				

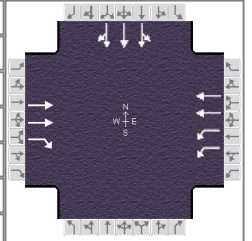
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6	5	2				4
Case Number		7.3	1.0	4.0				12.0
Phase Duration, s		67.0	27.0	94.0				57.0
Change Period, (Y+R _c), s		7.0	7.0	7.0				7.0
Max Allow Headway (MAH), s		0.0	3.1	0.0				4.1
Queue Clearance Time (g _s), s			8.2					33.1
Green Extension Time (g _e), s		0.0	0.5	0.0				4.7
Phase Call Probability			1.00					1.00
Max Out Probability			0.00					0.15

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6	16	5	2					7	4	14
Adjusted Flow Rate (v), veh/h		928	484	262	1439					431	404	401
Adjusted Saturation Flow Rate (s), veh/h/ln		1781	1598	1606	1781					1831	1885	1872
Queue Service Time (g _s), s		32.1	39.6	6.2	38.5					31.1	27.5	27.5
Cycle Queue Clearance Time (g _c), s		32.1	39.6	6.2	38.5					31.1	27.5	27.5
Green Ratio (g/C)		0.40	0.40	0.54	0.58					0.33	0.33	0.33
Capacity (c), veh/h		1415	635	728	2052					606	624	620
Volume-to-Capacity Ratio (X)		0.656	0.762	0.361	0.701					0.711	0.647	0.647
Back of Queue (Q), ft/ln (50 th percentile)		361.4	423.1	64.7	365.1					385.2	348.5	343.8
Back of Queue (Q), veh/ln (50 th percentile)		14.2	16.8	2.4	14.4					15.4	13.8	13.8
Queue Storage Ratio (RQ) (50 th percentile)		0.00	0.00	0.00	0.00					0.00	0.00	0.00
Uniform Delay (d ₁), s/veh		37.1	39.3	22.3	17.4					44.2	43.0	43.0
Incremental Delay (d ₂), s/veh		2.4	8.9	1.1	1.7					7.2	5.2	5.3
Initial Queue Delay (d ₃), s/veh		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Control Delay (d), s/veh		39.5	48.3	23.4	19.0					51.4	48.2	48.3
Level of Service (LOS)		D	D	C	B					D	D	D
Approach Delay, s/veh / LOS	42.5	D		19.7	B		0.0			49.3	D	
Intersection Delay, s/veh / LOS	35.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.93	B	1.99	B	2.49	B	2.72	C
Bicycle LOS Score / LOS	1.65	B	1.69	B			1.17	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information			
Agency	GFY			Duration, h	1.00		
Analyst	MDS	Analysis Date	3/29/2018	Area Type	Other		
Jurisdiction	City of Tampa	Time Period	AM	PHF	1.00		
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00		
Intersection	21st Street and State R...	File Name	22nd-21st-SR60-FB-AM.xus				
Project Description	Clark Street Distribution Center						



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		392	196	150	1624					163	700	113

Signal Information				Signal Timing (s)											
Cycle, s	151.0	Reference Phase	2	Green			Yellow			Red			Phase Diagrams		
Offset, s	15	Reference Point	Begin	20.0	60.0	50.0	0.0	0.0	0.0	1			2		
Uncoordinated	No	Simult. Gap E/W	Off	4.5	4.5	3.7	0.0	0.0	0.0	5			6		
Force Mode	Fixed	Simult. Gap N/S	On	2.5	2.5	3.3	0.0	0.0	0.0	7			8		

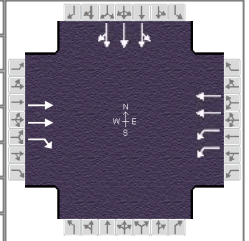
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6	5	2				4
Case Number		7.3	1.0	4.0				12.0
Phase Duration, s		67.0	27.0	94.0				57.0
Change Period, (Y+R _c), s		7.0	7.0	7.0				7.0
Max Allow Headway (MAH), s		0.0	3.1	0.0				4.1
Queue Clearance Time (g _s), s			6.4					25.8
Green Extension Time (g _e), s		0.0	0.2	0.0				3.7
Phase Call Probability			1.00					1.00
Max Out Probability			0.00					0.01

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6	16	5	2					7	4	14
Adjusted Flow Rate (v), veh/h		392	104	143	1552					342	318	302
Adjusted Saturation Flow Rate (s), veh/h/ln		1766	1585	1264	1752					1798	1841	1737
Queue Service Time (g _s), s		11.4	6.4	4.4	44.6					23.8	21.1	21.3
Cycle Queue Clearance Time (g _c), s		11.4	6.4	4.4	44.6					23.8	21.1	21.3
Green Ratio (g/C)		0.40	0.40	0.54	0.58					0.33	0.33	0.33
Capacity (c), veh/h		1404	630	897	2019					595	610	575
Volume-to-Capacity Ratio (X)		0.279	0.165	0.160	0.769					0.575	0.522	0.525
Back of Queue (Q), ft/ln (50 th percentile)		127.5	65.2	43.9	418.8					280.6	261.5	242
Back of Queue (Q), veh/ln (50 th percentile)		5.0	2.6	1.4	16.2					11.2	10.1	9.7
Queue Storage Ratio (RQ) (50 th percentile)		0.00	0.00	0.00	0.00					0.00	0.00	0.00
Uniform Delay (d ₁), s/veh		30.8	29.3	19.0	17.2					41.7	40.8	40.9
Incremental Delay (d ₂), s/veh		0.5	0.6	0.3	2.1					4.1	3.2	3.5
Initial Queue Delay (d ₃), s/veh		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Control Delay (d), s/veh		31.3	29.9	19.2	19.3					45.8	44.1	44.3
Level of Service (LOS)		C	C	B	B					D	D	D
Approach Delay, s/veh / LOS	31.0	C		19.3	B		0.0			44.8	D	
Intersection Delay, s/veh / LOS	28.9						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.93	B	1.92	B	2.49	B	2.47	B
Bicycle LOS Score / LOS	0.90	A	1.95	B			1.02	A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 19, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	21st Street and State R...	File Name	22nd-21st-SR60-FB-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		966	791	234	1278					217	1053	30

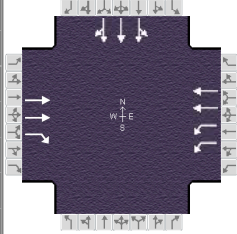
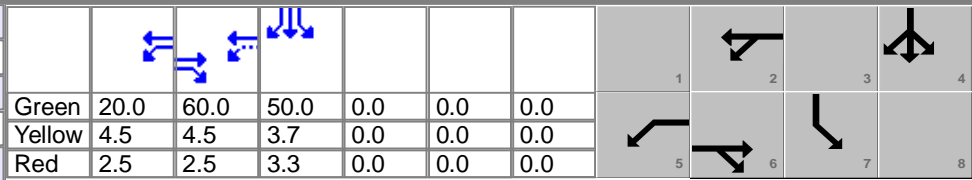
Signal Information				Signal Timing (s)										
Cycle, s	151.0	Reference Phase	2											
Offset, s	90	Reference Point	Begin											
Uncoordinated	No	Simult. Gap E/W	Off	Green	20.0	60.0	50.0	0.0	0.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.5	4.5	3.7	0.0	0.0	0.0				
				Red	2.5	2.5	3.3	0.0	0.0	0.0				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6	5	2				4
Case Number		7.3	1.0	4.0				12.0
Phase Duration, s		67.0	27.0	94.0				57.0
Change Period, (Y+R _c), s		7.0	7.0	7.0				7.0
Max Allow Headway (MAH), s		0.0	3.1	0.0				4.1
Queue Clearance Time (g _s), s			8.3					34.8
Green Extension Time (g _e), s		0.0	0.5	0.0				4.7
Phase Call Probability			1.00					1.00
Max Out Probability			0.00					0.22

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement		6	16	5	2					7	4	14
Adjusted Flow Rate (v), veh/h		966	503	270	1475					449	421	418
Adjusted Saturation Flow Rate (s), veh/h/ln		1781	1598	1606	1781					1831	1885	1871
Queue Service Time (g _s), s		33.9	41.8	6.3	40.9					32.8	29.0	29.0
Cycle Queue Clearance Time (g _c), s		33.9	41.8	6.3	40.9					32.8	29.0	29.0
Green Ratio (g/C)		0.40	0.40	0.54	0.58					0.33	0.33	0.33
Capacity (c), veh/h		1415	635	708	2052					606	624	620
Volume-to-Capacity Ratio (X)		0.683	0.792	0.382	0.719					0.741	0.674	0.674
Back of Queue (Q), ft/ln (50 th percentile)		383	452.4	66.8	392.6					409.2	369	363.6
Back of Queue (Q), veh/ln (50 th percentile)		15.1	18.0	2.5	15.5					16.4	14.6	14.5
Queue Storage Ratio (RQ) (50 th percentile)		0.00	0.00	0.00	0.00					0.00	0.00	0.00
Uniform Delay (d ₁), s/veh		37.6	40.0	23.0	18.2					44.8	43.5	43.5
Incremental Delay (d ₂), s/veh		2.7	10.5	1.2	1.8					8.3	5.9	5.9
Initial Queue Delay (d ₃), s/veh		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Control Delay (d), s/veh		40.4	50.5	24.2	19.9					53.1	49.4	49.4
Level of Service (LOS)		D	D	C	B					D	D	D
Approach Delay, s/veh / LOS	43.8		D	20.6		C	0.0			50.7		D
Intersection Delay, s/veh / LOS	36.8						D					

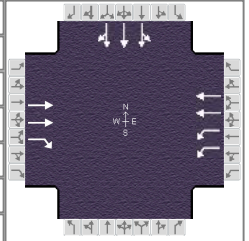
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.93	B	1.99	B	2.49	B	2.74	C
Bicycle LOS Score / LOS	1.70	B	1.74	B			1.20	A

HCS7 Signalized Intersection Results Summary

General Information						Intersection Information											
Agency	GFY					Duration, h	1.00										
Analyst	MDS	Analysis Date	3/29/2018			Area Type	Other										
Jurisdiction	City of Tampa		Time Period	AM		PHF	1.00										
Urban Street	State Road 60		Analysis Year	2018		Analysis Period	1 > 7:00										
Intersection	21st Street and State R...		File Name	22nd-21st-SR60-FBP-AM.xus													
Project Description	Clark Street Distribution Center																
Demand Information						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h							392	196	151	1625				163	700	113	
Signal Information																	
Cycle, s	151.0	Reference Phase	2			Green	20.0	60.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Offset, s	15	Reference Point	Begin			Yellow	4.5	4.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	Off			Red	2.5	2.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On														
Timer Results						EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT				
Assigned Phase							6	5	2				4				
Case Number							7.3	1.0	4.0				12.0				
Phase Duration, s							67.0	27.0	94.0				57.0				
Change Period, (Y+R _c), s							7.0	7.0	7.0				7.0				
Max Allow Headway (MAH), s							0.0	3.1	0.0				4.1				
Queue Clearance Time (g _s), s								6.4					25.8				
Green Extension Time (g _e), s							0.0	0.2	0.0				3.7				
Phase Call Probability								1.00					1.00				
Max Out Probability								0.00					0.01				
Movement Group Results						EB			WB			NB			SB		
Approach Movement						L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement							6	16	5	2				7	4	14	
Adjusted Flow Rate (v), veh/h							392	104	144	1548				342	318	302	
Adjusted Saturation Flow Rate (s), veh/h/ln							1766	1585	1250	1752				1798	1841	1737	
Queue Service Time (g _s), s							11.4	6.4	4.4	44.5				23.8	21.1	21.3	
Cycle Queue Clearance Time (g _c), s							11.4	6.4	4.4	44.5				23.8	21.1	21.3	
Green Ratio (g/C)							0.40	0.40	0.54	0.58				0.33	0.33	0.33	
Capacity (c), veh/h							1404	630	888	2019				595	610	575	
Volume-to-Capacity Ratio (X)							0.279	0.165	0.162	0.767				0.575	0.522	0.525	
Back of Queue (Q), ft/ln (50 th percentile)							127.5	65.2	44.4	418.7				280.6	261.5	242	
Back of Queue (Q), veh/ln (50 th percentile)							5.0	2.6	1.4	16.2				11.2	10.1	9.7	
Queue Storage Ratio (RQ) (50 th percentile)							0.00	0.00	0.00	0.00				0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh							30.8	29.3	19.0	17.3				41.7	40.8	40.9	
Incremental Delay (d ₂), s/veh							0.5	0.6	0.3	2.1				4.1	3.2	3.5	
Initial Queue Delay (d ₃), s/veh							0.0	0.0	0.0	0.0				0.0	0.0	0.0	
Control Delay (d), s/veh							31.3	29.9	19.3	19.3				45.8	44.1	44.3	
Level of Service (LOS)							C	C	B	B				D	D	D	
Approach Delay, s/veh / LOS						31.0	C	19.3	B	0.0			44.8	D			
Intersection Delay, s/veh / LOS						28.9			C								
Multimodal Results						EB			WB			NB			SB		
Pedestrian LOS Score / LOS						1.93	B	1.92	B	2.49	B	2.47	B				
Bicycle LOS Score / LOS						0.90	A	1.95	B			1.02	A				

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	GFY			Duration, h	1.00
Analyst	MDS	Analysis Date	Apr 19, 2018	Area Type	Other
Jurisdiction	City of Tampa	Time Period	PM	PHF	1.00
Urban Street	State Road 60	Analysis Year	2018	Analysis Period	1 > 7:00
Intersection	21st Street and State R...	File Name	22nd-21st-SR60-FBP-PM.xus		
Project Description	Clark Street Distribution Center				



Demand Information	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Demand (v), veh/h		966	791	234	1278					217	1053	30

Signal Information				Signal Timing (s)											
Cycle, s	151.0	Reference Phase	2	EB			WB			NB			SB		
Offset, s	90	Reference Point	Begin	Green	20.0	60.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Uncoordinated	No	Simult. Gap E/W	Off	Yellow	4.5	4.5	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.5	2.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		6	5	2				4
Case Number		7.3	1.0	4.0				12.0
Phase Duration, s		67.0	27.0	94.0				57.0
Change Period, (Y+R _c), s		7.0	7.0	7.0				7.0
Max Allow Headway (MAH), s		0.0	3.1	0.0				4.1
Queue Clearance Time (g _s), s			8.3					34.8
Green Extension Time (g _e), s		0.0	0.5	0.0				4.7
Phase Call Probability			1.00					1.00
Max Out Probability			0.00					0.22

Movement Group Results	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Approach Movement												
Assigned Movement		6	16	5	2					7	4	14
Adjusted Flow Rate (v), veh/h		966	503	270	1475					449	421	418
Adjusted Saturation Flow Rate (s), veh/h/ln		1781	1598	1606	1781					1831	1885	1871
Queue Service Time (g _s), s		33.9	41.8	6.3	40.9					32.8	29.0	29.0
Cycle Queue Clearance Time (g _c), s		33.9	41.8	6.3	40.9					32.8	29.0	29.0
Green Ratio (g/C)		0.40	0.40	0.54	0.58					0.33	0.33	0.33
Capacity (c), veh/h		1415	635	708	2052					606	624	620
Volume-to-Capacity Ratio (X)		0.683	0.792	0.382	0.719					0.741	0.674	0.674
Back of Queue (Q), ft/ln (50 th percentile)		383	452.4	66.8	392.6					409.2	369	363.6
Back of Queue (Q), veh/ln (50 th percentile)		15.1	18.0	2.5	15.5					16.4	14.6	14.5
Queue Storage Ratio (RQ) (50 th percentile)		0.00	0.00	0.00	0.00					0.00	0.00	0.00
Uniform Delay (d ₁), s/veh		37.6	40.0	23.0	18.2					44.8	43.5	43.5
Incremental Delay (d ₂), s/veh		2.7	10.5	1.2	1.8					8.3	5.9	5.9
Initial Queue Delay (d ₃), s/veh		0.0	0.0	0.0	0.0					0.0	0.0	0.0
Control Delay (d), s/veh		40.4	50.5	24.2	19.9					53.1	49.4	49.4
Level of Service (LOS)		D	D	C	B					D	D	D
Approach Delay, s/veh / LOS	43.8		D	20.6		C	0.0			50.7		D
Intersection Delay, s/veh / LOS	36.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	1.93	B	1.99	B	2.49	B	2.74	C
Bicycle LOS Score / LOS	1.70	B	1.74	B			1.20	A