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July 1, 2020

VIA EMAIL

Mr. Mark Pyskadlo, P.E.
Regional Traffic Engineer
New York State Department of Transportation
50 Wolf Road
Albany, NY 12232

Re: Rapp Road Residential and Costco
Western Ave Mixed-Use Development
Routes 20 and 910F
Town of Guilderland, Albany County
MC Project No. 19002502A

Dear Mr. Pyskadlo:

The following items are in response to the New York State Department of Transportation (NYSDOT) letter dated May 26, 2020. We appreciate the time the New York State Department of Transportation and the Town of Guilderland representatives have spent discussing many of the items below. The items are numbered according to their review comments.

1. Fuller Road Alternate (FRA), State Route 910F, was referred to incorrectly as I-87 on/off ramp by Maser in the TIS. The ramps to/from Crossgates Mall Road cross over I-87 (New York State Thruway) and connect to FRA and the I-90/I-87 interchange.

   Response: Comment noted.

2. Since the CDTA/Crossgates Transit Center is proposed and not yet scheduled for construction, we concur with no trip credits.

   Response: Comment noted.

3. The trip credits identified as "interplay" should be categorized as internal and/or pass-by trips per ITE Trip Generation Handbook.

   Response: Comment noted.

4. Since Costco is a discount club, pass-by trips are not entirely applicable (secondary trip to site by vehicles on adjacent roadway network with other primary destination) due to having to be a member and pay a fee to use services and purchase goods; a more appropriate trip credit distribution would be 10% internal trip credit for Costco from/to the mall, 10% internal trip credit for Costco from/to fueling stations, 25% internal trip credit for the fueling stations from/to Costco and 15% pass-by credit for both Costco and fueling stations.

   Response: ***After consultation with NYSDOT, all recommendations have been accepted with respect to trip rates. Note: The trip credits between the fueling station and Costco have been eliminated. The updated table, figures and analysis are included in Appendix "A".***

5. Pass-by credits for Saturday at the Costco site are unusual since it would be a primary destination and not a secondary destination; there should be no pass-by trip credit for Saturday. A pass-by credit of 15% would be appropriate for the fueling stations on Saturday.

   Response: ***Based on consultations with NYSDOT, the trip credits have been updated. The updated table, figures and analysis are included in Appendix "A".***

6. The 3900 SF commercial in Site 1 is unidentified, please assign an ITE Land Use Code to this proposed development.

   Response: ***As noted in the TIS, the commercial space was considered as ancillary spaces and would be accounted for as interplay/internal trips from the proposed residential and as pass-by from the existing roadway network and surrounding uses. If the commercial retail space (3,900 s.f.) was considered as a separate traffic generation, it would equate to an additional 4 (AM), 15 (PM) and 17 (SAT) trips based on ITE Land Use 820 and would be more than accounted for as interplay/internal and pass-by credit.***

7. Depending on land use, the 3900 SF commercial space may generate few or many trips; it is unusual to see trips to be attributed completely to other adjacent development (pass-by, internal) – provide the guidance/standard this was based on.

   Response: ***See Response 6.***

8. The trip distribution of Site 1 apartment seems skewed to the southern section of ring road. Vehicles would have to go through 4 signals to access the on-ramp, instead of 2 on the northern section of ring road?

   Response: ***In developing the Site 1 - residential trip distribution, consideration was given the fact that the southern ring road distance is a shorter and less circuitous route than the northern section. While it is noted that Site 1 could also access the Fuller Road Alternate and the I-87/I-90 ramps, a conservative analysis assuming more traffic along the southern ring road was analyzed.***

9. Should Springsteen Road be made two-way as part of the project to consolidate traffic? It will become increasingly difficult to have trips generated to/from the North and West of site(s) avoid use of Springsteen and Rapp Roads to access/depart from the sites.

   Response: ***There are no plans to make Springsteen Road two-way as part of the Project. In fact, making it two-way would encourage greater use through the Historic District.***

10. The following NYSDOT intersections have a lane group that has LOS degrade from LOS D to LOS E (unsatisfactory operation) during various build peak hours:
    - Western Avenue and Johnston/Rapp Rd.
    - Western Avenue and Crossgates Mall Driveway
    - Western Avenue and Gabriel Terrance

    There appears to be no mitigation provided or narrative explaining why mitigation will not be provided for the unsatisfactory condition. The developer must provide Department-approved mitigation. Signal timing adjustments are not considered appropriate traffic mitigation measures.

    Response: ***Based on consultation with NYSDOT, the build traffic volumes have been updated to reflect no interplay credit between the fueling stations and Costco, the restriction of left turns to and from Western Avenue at Gabriel Terrace, and signal timing adjustments on Western Avenue. Updated figures, tables and analysis at the two signalized intersections noted above have also been provided. Appendix A contains the information for the 2022***

Design Year with Appendix B containing the information for the 2025 Design Year. Based on these, we note the following:

Western Avenue and Johnston/Rapp Road

- ***For the 2022 Design Year, signal timing adjustments will be required to maintain similar operations conditions. However, to provide a means to adjust these timings or provide coordination, it is suggested that the Applicant provide a modem for this location.***

- ***For the 2025 Design Year, in addition to signal timing changes, the Applicant is proposing to construct a westbound right turn lane on Western Avenue. This will maintain similar operating conditions compared to No-Build Conditions.***

Western Avenue and Gabriel Terrace

- ***It is recommended that left turn entering and exiting movements at this location be prohibited on the north side of Western Avenue.***

11. Due to the existing occurrence of frequent, crash inducing, queues on the Crossgates ramp from the southbound FRA during peak periods and that this proposed project will only exacerbate that condition, we strongly recommended the proposed roundabout at the Crossgates Mall Rd. and FRA ramps to be constructed with this proposed development, or alternative traffic mitigation measures presented to reduce ramp queues.

Response: ***The roundabout has been part of the Capital District Transit Authority (CDTA) Bus Rapid Transit (purple line) for several years and has been previously examined from a SEQRA perspective. As part of the Project, the Town of Guilderland and other key stakeholders have agreed to work with the Applicant to implement the planned roundabout at Crossgates Mall and the Fuller Road Alternate ramps to/from I-87/I-90. Thus, the roundabout will be constructed and operational prior to the opening of Costco to customers on Site 2.***

While not a capacity issue, the roundabout has been recommended by the NYSDOT to address existing crash history. For informational purposes, the roundabout analysis for 2022 and 2025 is contained in Appendix C.

12. Intersection 10, Crossgates Mall Rd and FRA ramps is not modeled correctly in Synchro. Right turns are assigned to the northern left-turn lane.

Response: ***As discussed in the TIS, the Fuller Road Alternate Off Ramp (westbound approach) consists of three lanes in the form of a double left turn lane and a separate channelized right turn lane at Crossgates Mall Road. For analysis purposes, the FRA Off Ramp approach was analyzed as two lanes in the form of a separate left turn lane and shared left/right turn lane to account for short storage lanes and the one lane ramp from the Interstate. However, as noted in Response 11, a roundabout will be constructed and operational prior to the opening of Costco to customers on Site 2.***

13. All state signalized intersections appear to be modeled incorrectly since timings and phasing do not match existing timing and phasing. Intersections are shown as coordinated when by controller settings they do not appear to be coordinated. Maximum recalls are modeled where minimum recalls are used. Obtain current signal timing and updated model.

Response: ***The signal timings were modified after discussion with NYSDOT for the following three (3) intersections. The results of the analysis are shown in Appendix A and B, respectively.***

- ***Western Avenue and Crossgates Mall Driveway***
- ***Western Avenue and Johnston Road/Rapp Road***
- ***Washington Avenue Extension and Springsteen Street/Crossgates Commons***

14. Page 18, Washington Avenue Extension (WAE) northbound approach has a shared through/right-turn movement.

Response: ***The geometry for the Washington Avenue Extension/Springsteen Road/Crossgates Commons intersections was verified in the field. The Washington Avenue Extension northbound approach is a five-lane approach consisting of a separate left turn lane, three through lanes and a separate right turn lane as indicated on page 18 of the TIS and used in the Synchro Model. A further review of Google Earth shows that sometime between 2015 and 2017, this approach was restriped.***

15. Pedestrian connections (sidewalks/crosswalks) from the proposed dwelling sites to the mall should be included in design.

    Response: ***Pedestrians and bicyclists considerations are included within the DEIS (Section 2 – Description of the Proposed Action, Section 3.5.1.4 Pedestrian Transportation System, and Trail Map Enlargement 1 – Figure 2) relative to the provision of sidewalks, crosswalks, bike lanes, and location of bike racks. The proposal for mitigation improvements at the intersection of Rapp Road and Crossgates Mall Road also considered these elements as part of the overall design.***

16. The primary access for Sites 2 and 3 should be at Gabriel Terrance and Crossgates Mall Driveway with center turn-lanes provided on Crossgates Mall Road. Limiting left-out movements from Gabriel Terrace to Crossgates Mall Road should be considered.

    Response: ***Based on consultation with the Town and to avoid turn prohibition, the Gabriel Terrace Connector Road will be relocated to the east resulting in two "T" intersections. As part of the design, a center turn-lane will be provided on Crosssgates Mall Road. The primary access to Site 3 (hypothetical Mixed-Use Development), would also be from Crossgates Mall Road via the Gabriel Terrace Connector Road and Hotel Connector Road. The analysis is contained in Appendix D.***

17. A second access, further north on Gabriel Drive, should be added for Site 2, closer to Crossgates Mall Road.

    Response: ***The location of a second access from the Costco site to Gabriel Terrace south of Crossgates Mall Road would enter/exit onto a service drive behind the building. This will mix customers with employee and delivery vehicles. Customers would then be required to use the roadway behind the building to reach the parking areas provided along the north-south section of Rapp Road (Crossgates Mall Road). As a result, a second access point is not recommended.***

18. The northern access onto Rapp Road, for Site 2 should be eliminated.

Response: ***Based on comments from the Town, the northerly (main) access to Costco from Rapp Road has been modified to be a right turn in/out driveway with geometrics to discourage left turns. The southern access has been modified as a right turn in only driveway for access to the fueling area.***

19. The southern access for Site 2, a right-in/right-out should be relocated further north, away from the Western Avenue intersection.

Response: ***See Response 18.***

20. The Department will require closure of all existing driveways for properties on Western Ave, including Lawton Terrace, which per the proposed site plan will be abandoned.

Response: ***Those driveways that are under the control of the Applicant and part of the proposed action will be closed.***

21. Left-turn movements for Gabriel Terrace should be restricted.

Response: ***As noted in Response 10, it is recommended that left turn entering and exiting movements at Western Avenue and Gabriel Terrace on the north side of Western Avenue be prohibited.***

22. The Department will require a Stage 1, Commercial driveway permit application (perm33-com) be submitted for this Major Commercial development (work type 5a4).

Response: ***Comment noted: Part I of the PERM 33 COM will be completed and submitted to NYSDOT with the Major Commercial Permit Fee of $2,000.00.***

Again, we appreciate the feedback and communication between all parties. The applicant is affirmatively committed to completing all of the measures as outlined above.

If you have any questions regarding the above, please do not hesitate to contact us.

Very truly yours,

MASER CONSULTING P.A.

John T. Collins, Ph.D., P.E.
Executive Principal

RPR/ces
Enclosures
cc: Patrick Barnes, NYSDOT
Kristina Crowley, NYSDOT
Kenneth Kovalchik, AICP, Town of Guilderland
Shawn Raymond, NYSDOT

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WESTERN AVENUE MIXED-USE DEVELOPMENT

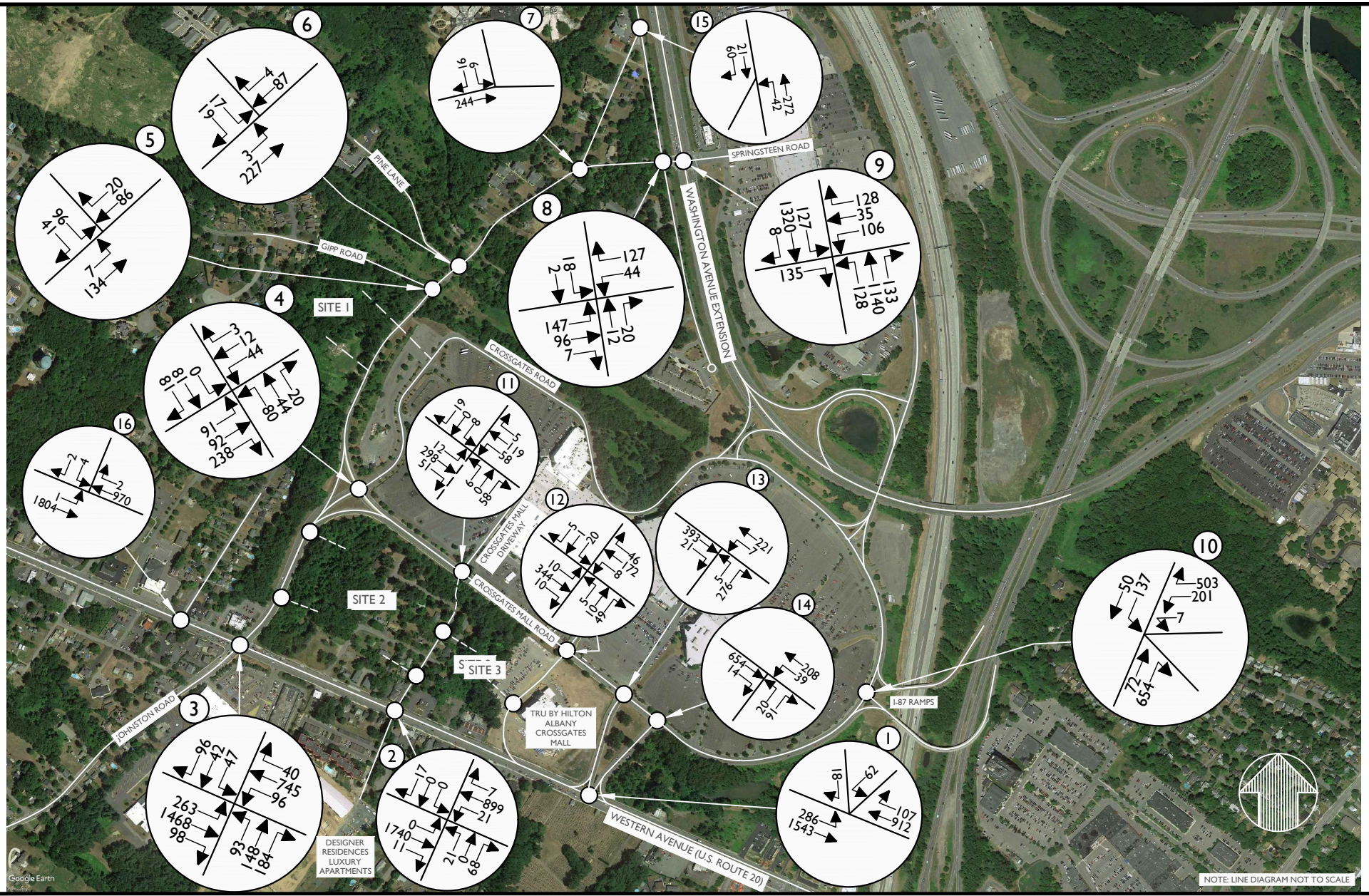
ATTACHMENT A

UPDATED YEAR 2022 ANALYSIS

- INTERSECTION #1
Western Avenue & Crossgates Mall Driveway

- INTERSECTION #3
Western Avenue & Johnston Road / Rapp Road

- INTERSECTION #9
Washington Avenue Extension
Springsteen Road / Crossgates Commons



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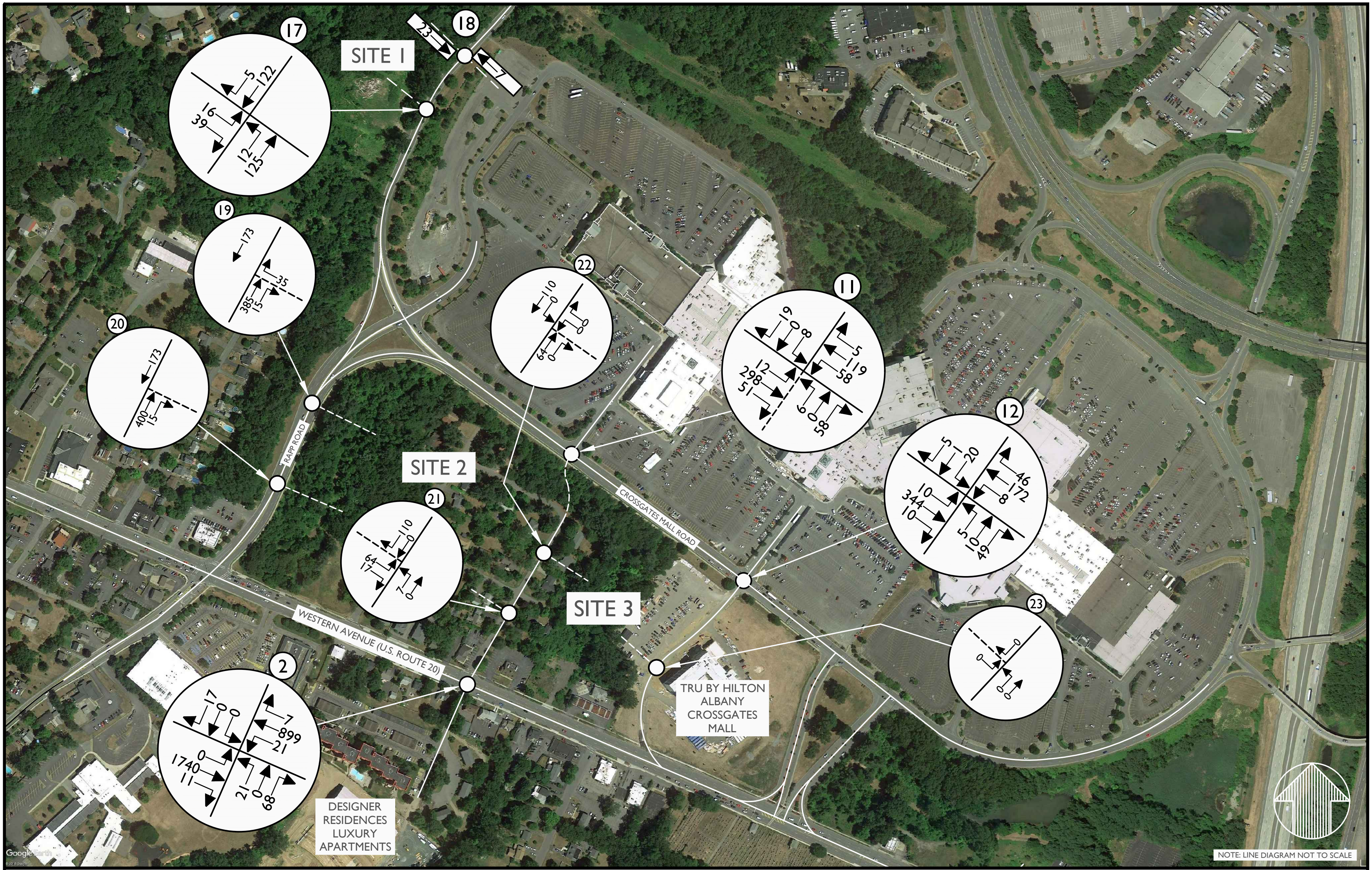
SHEET TITLE:
2022 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
FIGURE NO. 24-R



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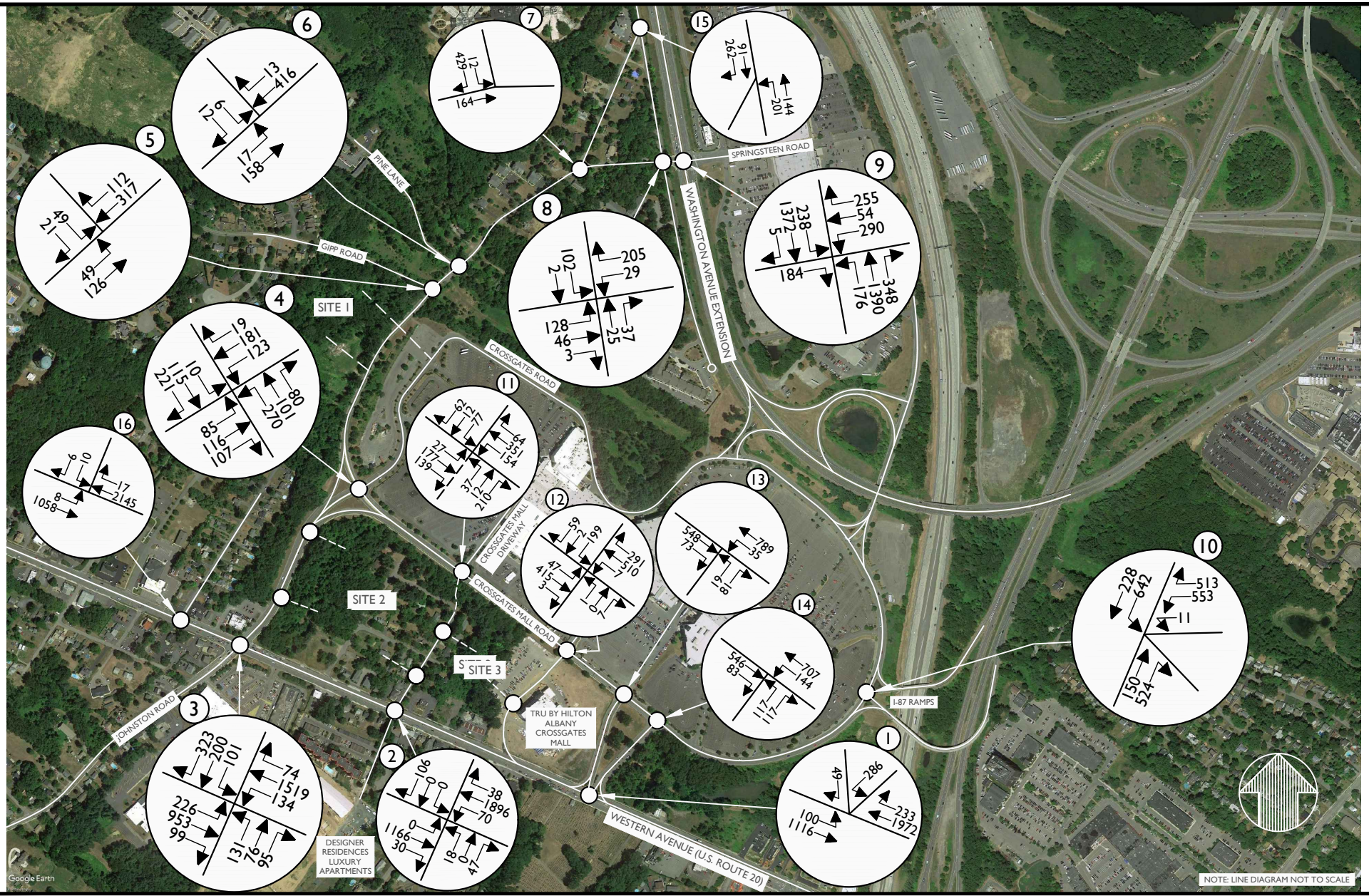

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WEEKDAY PEAK PM HOUR

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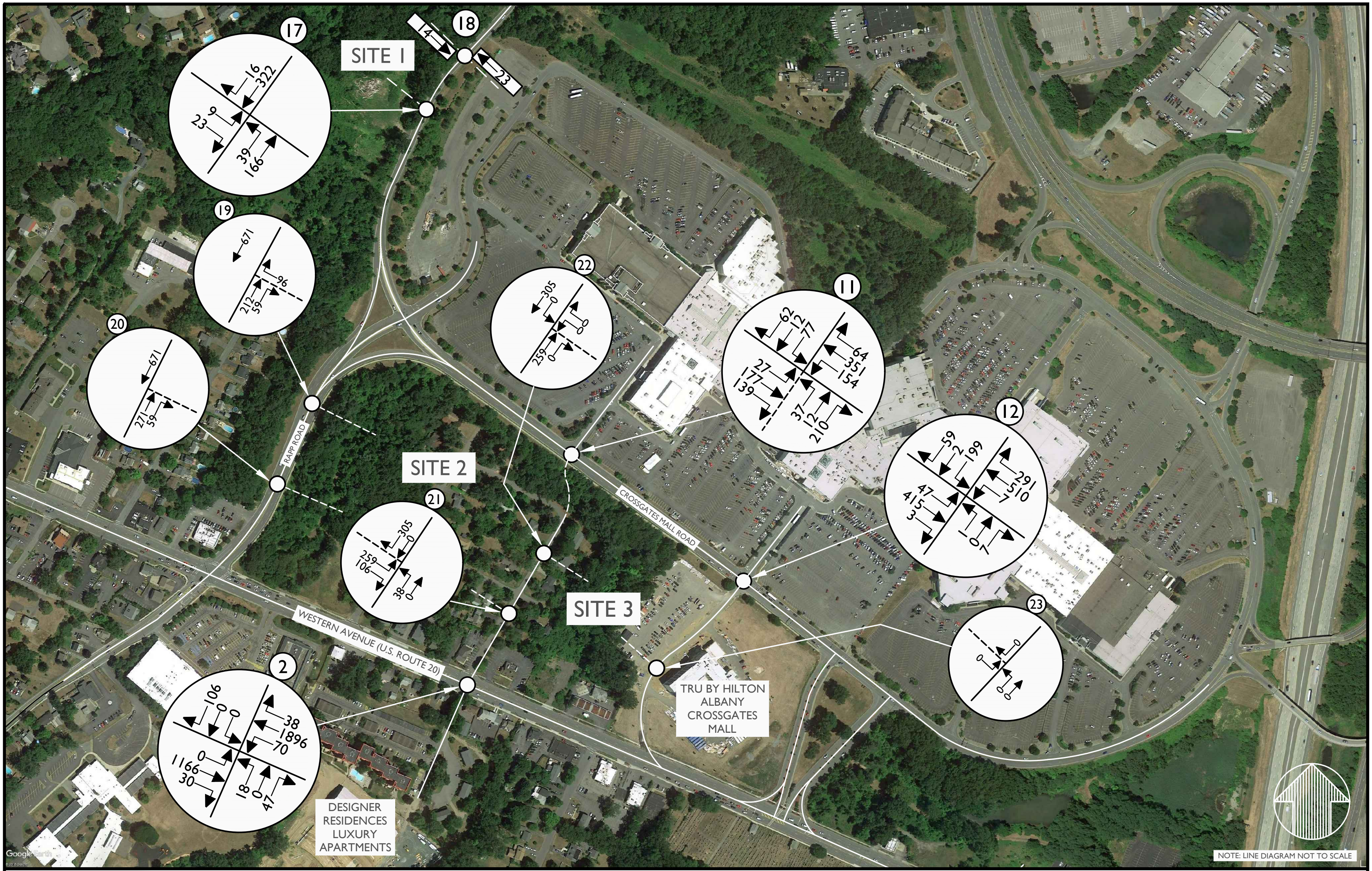

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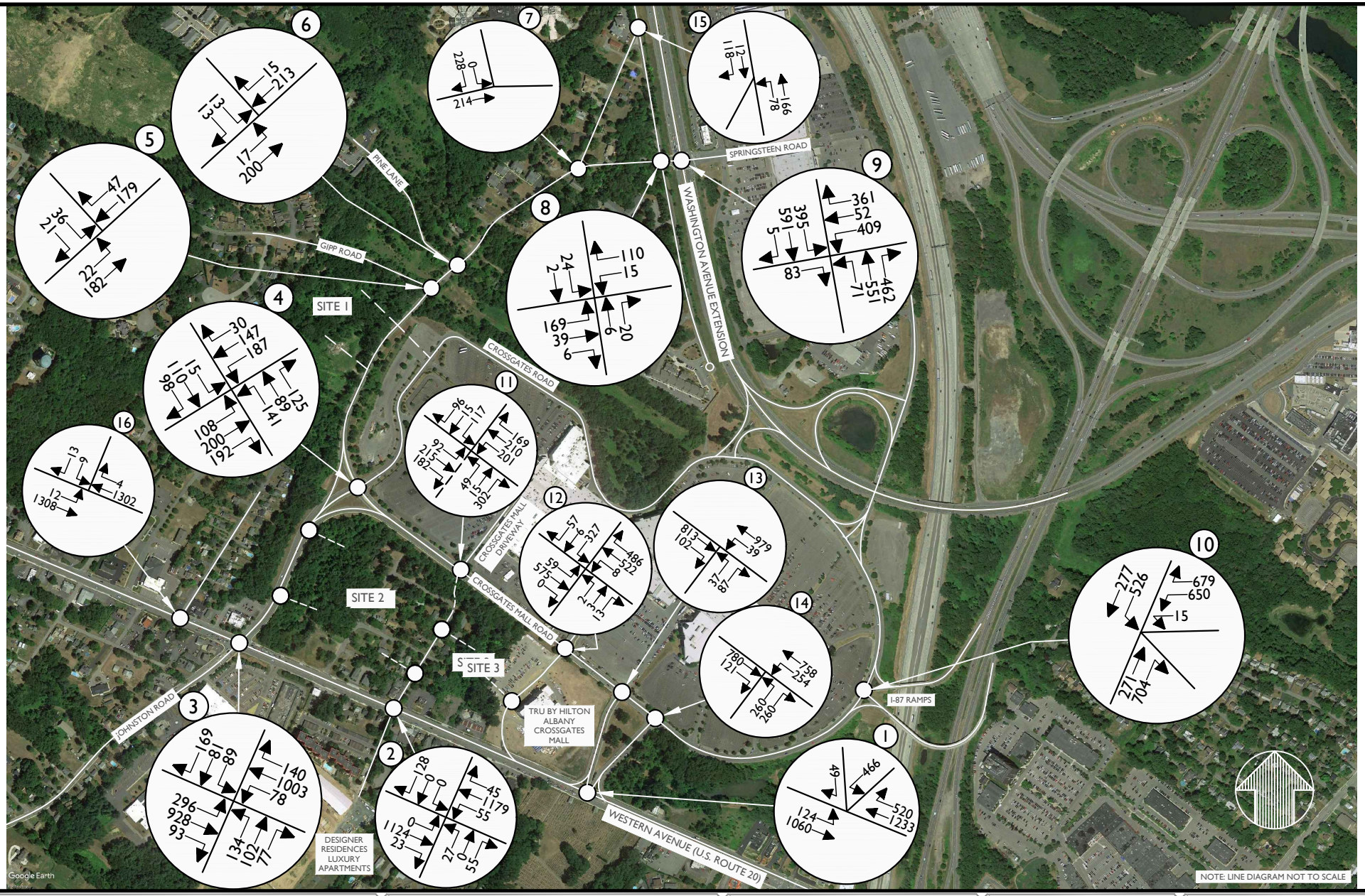

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SATURDAY PEAK HOUR

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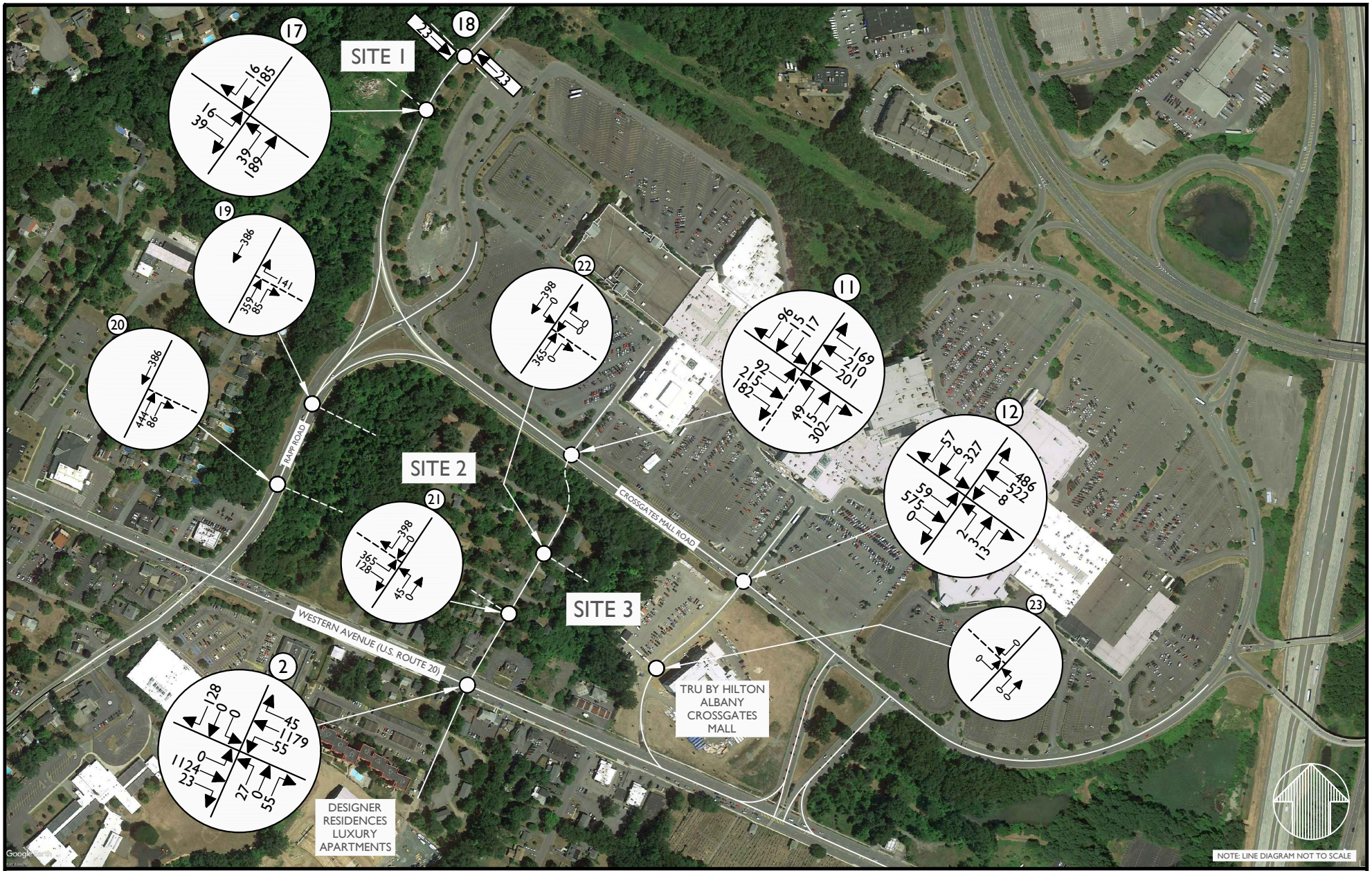

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SATURDAY PEAK HOUR

SHEET NUMBER:
FIGURE NO. 26-A-R

TABLE NO. 2

HOURLY TRIP GENERATION RATES
AND ANTICIPATED SITE GENERATED TRAFFIC VOLUMES

SITE 2 COSTCO	ENTRY		EXIT		TOTAL	
	HTGR*	VOLUME	HTGR*	VOLUME	HTGR*	VOLUME
160,000 S.F.						
WEEKDAY PEAK AM HOUR	0.34	54	0.15	24	0.49	78
WEEKDAY PEAK PM HOUR	2.09	334	2.09	334	4.18	668
SATURDAY PEAK HOUR	3.12	499	3.25	520	6.37	1019
W/ 10% INTERNAL / INTERPLAY W/ MALL						
WEEKDAY PEAK AM HOUR	----	----	----	----	----	----
WEEKDAY PEAK PM HOUR	----	-33	----	-33	----	-66
SATURDAY PEAK HOUR	----	-51	----	-51	----	-102
W/ 25 % PASS-BY						
WEEKDAY PEAK AM HOUR	----	----	----	----	----	----
WEEKDAY PEAK PM HOUR	----	-83	----	-83	----	-166
SATURDAY PEAK HOUR	----	-127	----	-127	----	-254
18 FUEING STATIONS						
WEEKDAY PEAK AM HOUR	5.14	92	5.14	92	10.28	184
WEEKDAY PEAK PM HOUR	7.015	126	7.015	126	14.03	252
SATURDAY PEAK HOUR	6.385	115	6.385	115	12.77	230
W/ 10% INTERNAL / INTERPLAY W/ MALL						
WEEKDAY PEAK AM HOUR	----	----	----	----	----	----
WEEKDAY PEAK PM HOUR	----	-13	----	-13	----	-26
SATURDAY PEAK HOUR	----	-11	----	-11	----	-22
W/ 25 % PASS-BY						
WEEKDAY PEAK AM HOUR	----	----	----	----	----	----
WEEKDAY PEAK PM HOUR	----	-31	----	-31	----	-62
SATURDAY PEAK HOUR	----	-29	----	-29	----	-58
"NEW' TRIPS						
WEEKDAY PEAK AM HOUR	**----**	**146**	**----**	**116**	**----**	**262**
WEEKDAY PEAK PM HOUR	**----**	**300**	**----**	**300**	**----**	**600**
SATURDAY PEAK HOUR	**----**	**396**	**----**	**417**	**----**	**813**

THE ABOVE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE
INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 10th EDITION, 2017.
* ITE LAND USE 857 - DISCOUNT CLUB & ITE LAND USE 944 - GASOLINE/SERVICE STATION

TABLE NO. 3

LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2019 EXISTING									YEAR 2022 NO-BUILD									YEAR 2022 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
1	WESTERN AVENUE (U.S. ROUTE 20) & CROSSGATES MALL DRIVEWAY																											
	SIGNALIZED (COUPLET)																											
	EAST LEG																											
	WESTERN AVENUE (U.S. ROUTE 20)	EB T / T	A	1.3	0.57	A	1.0	0.43	A	1.1	0.43	A	1.3	0.60	A	1.1	0.45	A	1.2	0.46	A	1.3	0.60	A	1.1	0.45	A	1.2	0.45
		EB APPROACH	**A**	**1.3**	**----**	**A**	**1.0**	**----**	**A**	**1.1**	**----**	**A**	**1.3**	**----**	**A**	**1.1**	**----**	**A**	**1.2**	**----**	**A**	**1.3**	**----**	**A**	**1.1**	**----**	**A**	**1.2**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / TR	A	7.7	0.35	B	15.5	0.76	B	13.7	0.63	A	7.7	0.36	B	16.5	0.79	B	14.8	0.66	A	7.7	0.36	B	18.3	0.81	B	15.7	0.69
		WB APPROACH	**A**	**7.7**	**----**	**B**	**15.5**	**----**	**B**	**13.7**	**----**	**A**	**7.7**	**----**	**B**	**16.5**	**----**	**B**	**14.8**	**----**	**A**	**7.7**	**----**	**B**	**18.3**	**----**	**B**	**15.7**	**----**
	CROSSGATES MALL DRIVEWAY	SB L / L	D	47.6	0.16	D	47.7	0.57	D	50.6	0.74	D	47.7	0.17	D	47.7	0.58	D	52.5	0.79	D	48.1	0.21	D	48.9	0.65	E	55.9	0.83
		SB APPROACH	**D**	**47.6**	**----**	**D**	**47.7**	**----**	**D**	**50.6**	**----**	**D**	**47.7**	**----**	**D**	**47.7**	**----**	**D**	**52.5**	**----**	**D**	**48.1**	**----**	**D**	**48.9**	**----**	**E**	**55.9**	**----**
	OVERALL INTERSECTION		**A**	**4.7**	**----**	**B**	**13.0**	**----**	**B**	**13.9**	**----**	**A**	**4.7**	**----**	**B**	**13.5**	**----**	**B**	**15.1**	**----**	**A**	**4.9**	**----**	**B**	**15.4**	**----**	**B**	**16.8**	**----**
	WEST LEG																											
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	A	1.7	0.40	A	6.7	0.19	A	0.6	0.18	A	1.8	0.41	A	6.8	0.19	A	0.7	0.18	A	1.9	0.42	A	6.6	0.19	A	0.7	0.18
		EB T / T	A	4.3	0.56	A	4.6	0.43	A	5.9	0.43	A	4.5	0.58	A	4.8	0.45	A	6.5	0.46	A	4.5	0.58	A	5.3	0.45	A	6.7	0.45
		EB APPROACH	**A**	**3.9**	**----**	**A**	**4.8**	**----**	**A**	**5.3**	**----**	**A**	**4.0**	**----**	**A**	**4.9**	**----**	**A**	**5.9**	**----**	**A**	**4.1**	**----**	**A**	**5.4**	**----**	**A**	**6.0**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / T	A	1.5	0.28	A	2.2	0.64	A	2.5	0.40	A	1.5	0.29	A	2.3	0.66	A	3.7	0.43	A	1.5	0.29	A	2.4	0.69	A	2.6	0.45
		WB APPROACH	**A**	**1.5**	**----**	**A**	**2.2**	**----**	**A**	**2.5**	**----**	**A**	**1.5**	**----**	**A**	**2.3**	**----**	**A**	**3.7**	**----**	**A**	**1.5**	**----**	**A**	**2.4**	**----**	**A**	**2.6**	**----**
	CROSSGATES MALL DRIVEWAY	SB R	A	0.0	0.01	A	0.0	0.03	A	0.0	0.03	A	0.0	0.01	A	0.0	0.03	A	0.0	0.03	A	0.0	0.01	D	0.0	0.03	A	0.0	0.03
		SB APPROACH	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**D**	**0.0**	**----**	**A**	**0.0**	**----**
	OVERALL INTERSECTION		**A**	**3.1**	**----**	**A**	**3.1**	**----**	**A**	**3.8**	**----**	**A**	**3.2**	**----**	**A**	**3.3**	**----**	**A**	**4.7**	**----**	**A**	**3.2**	**----**	**A**	**3.5**	**----**	**A**	**4.2**	**----**
	W/ TIMING IMPROVEMENTS																											
	EAST LEG																											
	WESTERN AVENUE (U.S. ROUTE 20)	EB T / T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	1.2	0.45
		EB APPROACH	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	----	**A**	**1.2**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / TR	-	----	**----**	**-**	**----**	----	**-**	**----**	----	-	----	**----**	**-**	**----**	----	**-**	**----**	----	-	----	**----**	**-**	**----**	----	B	16.2	0.69
		WB APPROACH	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	**B**	**16.2**	**----**
	CROSSGATES MALL DRIVEWAY	SB L / L	-	----	**----**	**-**	**----**	----	**-**	**----**	----	-	----	**----**	**-**	**----**	----	**-**	**----**	----	-	----	**----**	**-**	**----**	----	D	53.8	0.82
		SB APPROACH	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	**D**	**53.8**	**----**
	OVERALL INTERSECTION		**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	**B**	**16.7**	**----**
	WEST LEG																											
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	0.7	0.18
		EB T / T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	6.9	0.45
		EB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**6.2**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	2.6	0.45
		WB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**2.6**	**----**
	CROSSGATES MALL DRIVEWAY	SB R	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	0.0	0.03
		SB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**0.0**	**----**
	OVERALL INTERSECTION		**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**4.3**	**----**

TABLE NO. 3

LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2019 EXISTING									YEAR 2022 NO-BUILD									YEAR 2022 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
3	WESTERN AVENUE (U.S. ROUTE 20) & JOHNSTON ROAD / RAPP ROAD																											
	SIGNALIZED																											
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	C	34.7	0.40	E	67.8	0.86	D	37.3	0.81	D	36.4	0.42	E	69.3	0.86	D	38.7	0.82	D	38.7	0.48	F	92.5	0.92	D	54.9	0.90
		EB T	C	27.1	0.79	D	38.1	0.71	B	15.5	0.57	C	28.0	0.80	D	38.0	0.72	B	15.6	0.57	C	28.2	0.80	D	46.2	0.74	C	26.6	0.64
		EB T-R	C	27.6	0.80	D	38.0	0.71	B	15.5	0.57	C	28.6	0.81	D	38.0	0.72	B	15.6	0.58	C	28.8	0.81	D	46.1	0.74	C	26.5	0.64
		EB APPROACH	**C**	**28.3**	**----**	**D**	**41.6**	**----**	**B**	**18.7**	**----**	**C**	**29.4**	**----**	**D**	**41.7**	**----**	**B**	**18.9**	**----**	**C**	**30.0**	**----**	**D**	**54.4**	**----**	**C**	**32.9**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB L	F	90.1	0.85	D	48.8	0.36	D	36.1	0.47	F	92.4	0.85	D	51.4	0.39	D	37.5	0.48	F	92.7	0.85	D	50.5	0.33	C	33.5	0.19
		WB T	D	54.1	0.74	C	32.7	0.79	B	17.7	0.58	D	53.6	0.75	C	34.6	0.81	B	17.9	0.59	D	52.5	0.75	D	50.5	0.91	C	24.0	0.66
		WB T-R	D	53.8	0.74	C	32.6	0.79	B	17.6	0.58	D	53.3	0.75	C	34.4	0.81	B	17.9	0.59	D	52.3	0.75	D	51.4	0.92	C	24.0	0.66
		WB APPROACH	**E**	**58.1**	**----**	**C**	**33.9**	**----**	**B**	**18.9**	**----**	**E**	**57.8**	**----**	**D**	**35.8**	**----**	**B**	**19.2**	**----**	**E**	**56.8**	**----**	**D**	**50.9**	**----**	**C**	**24.6**	**----**
	JOHNSTON ROAD	NEB L	E	61.4	0.43	E	76.7	0.85	D	36.4	0.58	E	62.2	0.44	F	80.6	0.86	D	38.1	0.61	E	62.2	0.43	F	95.5	0.87	D	56.0	0.72
		NEB T-R	E	63.2	0.72	E	60.0	0.46	D	37.2	0.62	E	64.7	0.73	E	61.5	0.47	D	38.7	0.63	E	64.9	0.73	E	69.2	0.48	D	50.6	0.68
		NEB R	D	52.2	0.55	D	35.4	0.18	C	29.3	0.28	D	52.8	0.56	D	37.4	0.19	C	30.4	0.28	D	53.0	0.56	D	36.4	0.16	C	26.9	0.16
		NEB APPROACH	**E**	**58.6**	**----**	**E**	**60.3**	**----**	**C**	**34.9**	**----**	**E**	**59.6**	**----**	**E**	**62.9**	**----**	**D**	**36.4**	**----**	**E**	**59.8**	**----**	**E**	**71.3**	**----**	**D**	**44.8**	**----**
	RAPP ROAD	SWB L	E	72.3	0.49	E	55.5	0.36	D	36.4	0.39	E	73.4	0.51	E	56.3	0.36	D	38.1	0.41	E	73.9	0.58	E	63.7	0.40	D	50.9	0.58
		SWB T	E	63.6	0.27	E	59.8	0.73	D	37.1	0.56	E	64.5	0.27	E	62.0	0.74	D	38.5	0.57	E	64.7	0.27	E	72.0	0.76	D	50.7	0.60
		SWB R	C	22.8	0.13	E	59.9	0.85	C	29.1	0.52	C	24.0	0.13	E	62.6	0.86	C	30.2	0.53	C	25.3	0.15	E	51.0	0.73	C	33.5	0.41
		SWB APPROACH	**D**	**44.4**	**----**	**E**	**59.2**	**----**	**C**	**32.9**	**----**	**D**	**45.6**	**----**	**E**	**61.4**	**----**	**C**	**34.2**	**----**	**D**	**46.6**	**----**	**E**	**61.9**	**----**	**D**	**42.2**	**----**
	OVERALL INTERSECTION		**D**	**40.9**	**----**	**D**	**42.8**	**----**	**C**	**22.1**	**----**	**D**	**41.7**	**----**	**D**	**44.2**	**----**	**C**	**22.6**	**----**	**D**	**41.9**	**----**	**E**	**55.4**	**----**	**C**	**31.9**	**----**
	W/ TIMING IMPROVEMENTS																											
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	E	67.6	0.91	-	----	----
		EB T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	D	40.4	0.72	-	----	----
		EB T-R	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	D	40.3	0.72	-	----	----
		EB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**D**	**45.2**	**----**	**-**	**----**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB L	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	D	49.6	0.36	-	----	----
		WB T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	D	54.0	0.94	-	----	----
		WB T-R	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	D	54.6	0.95	-	----	----
		WB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**D**	**53.7**	**----**	**-**	**----**	**----**
	JOHNSTON ROAD	NEB L	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	E	78.0	0.86	-	----	----
		NEB T-R	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	E	63.2	0.48	-	----	----
		NEB R	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	D	36.0	0.18	-	----	----
		NEB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**E**	**61.9**	**----**	**-**	**----**	**----**
	RAPP ROAD	SWB L	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	E	58.2	0.39	-	----	----
		SWB T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	E	65.1	0.75	-	----	----
		SWB R	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	D	49.6	0.72	-	----	----
		SWB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**E**	**55.9**	**----**	**-**	**----**	**----**
	OVERALL INTERSECTION		**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**D**	**51.9**	**----**	**-**	**----**	**----**

TABLE NO. 3

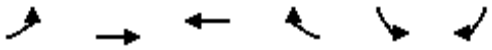
LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2019 EXISTING									YEAR 2022 NO-BUILD									YEAR 2022 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
9	WASHINGTON AVENUE EXTENSION & SPRINGSTEEN ROAD / CROSSGATES COMMONS																												
	SIGNALIZED																												
	SPRINGSTEEN ROAD	EB R	A	1.1	0.25	A	1.9	0.36	A	0.7	0.17	A	1.1	0.26	A	2.0	0.37	A	0.8	0.17	A	1.1	0.26	A	2.0	0.37	A	0.8	0.17
		EB APPROACH	**A**	**1.1**	**----**	**A**	**1.9**	**----**	**A**	**0.7**	**----**	**A**	**1.1**	**----**	**A**	**2.0**	**----**	**A**	**0.8**	**----**	**A**	**1.1**	**----**	**A**	**2.0**	**----**	**A**	**0.8**	**----**
	CROSSGATES COMMONS	WB L / L	E	57.0	0.34	E	59.4	0.53	D	44.8	0.56	E	57.6	0.34	E	59.2	0.53	D	44.6	0.56	E	57.8	0.34	E	59.2	0.53	D	44.6	0.56
		WB T-R	D	49.2	0.74	E	64.7	0.88	D	49.7	0.89	D	51.5	0.76	E	65.1	0.88	D	50.0	0.89	D	51.8	0.76	E	65.1	0.88	D	50.0	0.89
		WB APPROACH	**D**	**52.2**	**----**	**E**	**62.1**	**----**	**D**	**47.3**	**----**	**D**	**53.9**	**----**	**E**	**62.2**	**----**	**D**	**47.3**	**----**	**D**	**54.2**	**----**	**E**	**62.2**	**----**	**D**	**47.3**	**----**
	WASHINGTON AVE. EXT.	NB L	E	70.5	0.65	E	79.2	0.73	E	68.9	0.49	E	71.3	0.65	F	80.5	0.75	E	69.5	0.49	E	71.6	0.65	F	80.5	0.75	E	69.7	0.49
		NB T / T / T	B	19.2	0.41	C	32.3	0.57	D	40.0	0.39	B	19.5	0.42	C	33.0	0.58	D	40.5	0.40	B	19.5	0.42	C	33.0	0.59	D	40.7	0.41
		NB R	A	6.4	0.16	B	17.7	0.42	A	8.0	0.61	A	6.6	0.16	B	18.4	0.43	A	8.1	0.61	A	6.5	0.16	B	18.5	0.43	A	8.0	0.61
		NB APPROACH	**C**	**22.6**	**----**	**C**	**33.9**	**----**	**C**	**28.0**	**----**	**C**	**23.0**	**----**	**C**	**34.7**	**----**	**C**	**28.3**	**----**	**C**	**23.0**	**----**	**C**	**34.8**	**----**	**C**	**28.7**	**----**
	WASHINGTON AVE. EXT.	SB L	E	71.9	0.67	F	84.3	0.84	D	46.9	0.71	E	73.6	0.68	F	83.6	0.83	D	47.9	0.73	E	74.0	0.68	F	83.6	0.83	D	48.1	0.73
		SB T / T	C	24.3	0.68	C	33.7	0.76	C	24.4	0.32	C	24.7	0.69	C	34.4	0.77	C	24.9	0.33	C	24.7	0.69	C	34.7	0.78	C	25.1	0.34
		SB R	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01
		SB APPROACH	**C**	**28.3**	**----**	**D**	**41.2**	**----**	**C**	**33.5**	**----**	**C**	**28.9**	**----**	**D**	**41.7**	**----**	**C**	**34.1**	**----**	**C**	**28.9**	**----**	**D**	**41.8**	**----**	**C**	**34.1**	**----**
	OVERALL INTERSECTION		**C**	**26.7**	**----**	**D**	**39.2**	**----**	**C**	**34.4**	**----**	**C**	**27.3**	**----**	**D**	**39.7**	**----**	**C**	**34.8**	**----**	**C**	**27.3**	**----**	**D**	**39.8**	**----**	**C**	**34.9**	**----**

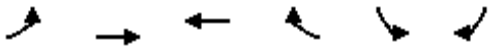
THE ABOVE REPRESENTS THE LEVELS OF SERVICE, VEHICLE DELAY IN SECONDS AND VOLUME-TO-CAPACITY (V/C) RATIO FOR THE ABOVE INTERSECTIONS.

INTERSECTION #1
Western Avenue & Crossgates Mall Driveway

WEEKDAY PEAK AM HOUR



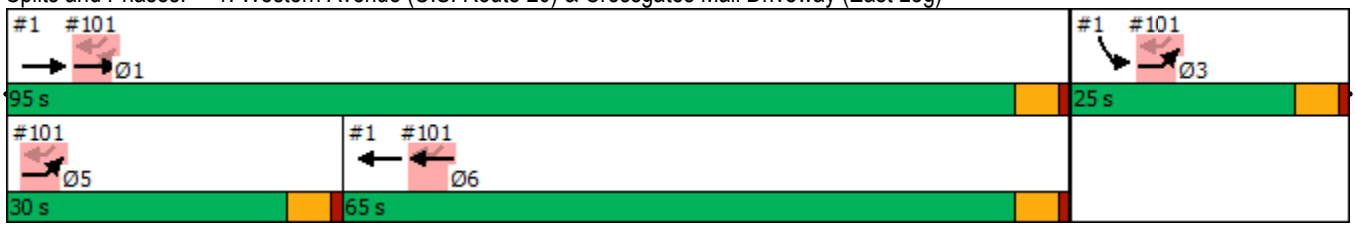
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1467	867	105	50	0	
Future Volume (vph)	0	1467	867	105	50	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3438	4541	0	3432	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3438	4541	0	3432	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			25				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	5%	8%	4%	0%	0%	
Adj. Flow (vph)	0	1595	942	114	54	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1595	1056	0	54	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				

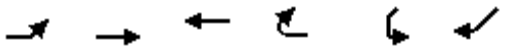


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Turn Type		NA	NA		Prot		
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		84.7	69.5		10.1		
Actuated g/C Ratio		0.81	0.66		0.10		
v/c Ratio		0.57	0.35		0.16		
Control Delay		1.3	7.7		47.6		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.3	7.7		47.6		
LOS		A	A		D		
Approach Delay		1.3	7.7		47.6		
Approach LOS		A	A		D		
Queue Length 50th (ft)		14	98		18		
Queue Length 95th (ft)		15	120		38		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2937	3130		662		
Starvation Cap Reductn		0	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.54	0.34		0.08		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 104.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 4.7		Intersection LOS: A	
Intersection Capacity Utilization 57.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



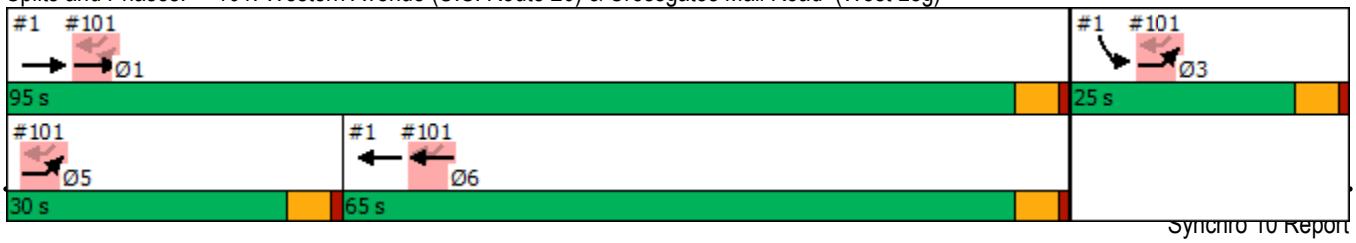


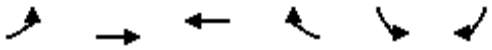
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	282	1467	867	0	0	18		
Future Volume (vph)	282	1467	867	0	0	18		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.259							
Satd. Flow (perm)	482	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	307	1595	942	0	0	20		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	307	1595	942	0	0	20		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	99.8	84.7	69.5			104.9		
Actuated g/C Ratio	0.95	0.81	0.66			1.00		
v/c Ratio	0.40	0.56	0.28			0.01		
Control Delay	1.7	4.3	1.3			0.0		
Queue Delay	0.0	0.0	0.2			0.0		
Total Delay	1.7	4.3	1.5			0.0		
LOS	A	A	A			A		
Approach Delay		3.9	1.5					
Approach LOS		A	A					
Queue Length 50th (ft)	0	148	9			0		
Queue Length 95th (ft)	0	183	10			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	955	3024	3496			1611		
Starvation Cap Reductn	0	0	1492			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.32	0.53	0.47			0.01		

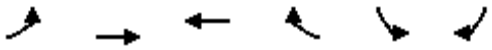
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 104.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 3.1		Intersection LOS: A	
Intersection Capacity Utilization 44.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





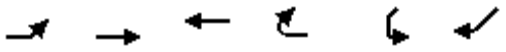
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1535	895	107	51	0	
Future Volume (vph)	0	1535	895	107	51	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3438	4541	0	3432	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3438	4541	0	3432	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			25				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	5%	8%	4%	0%	0%	
Adj. Flow (vph)	0	1668	973	116	55	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1668	1089	0	55	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Turn Type		NA	NA		Prot		
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		86.8	71.8		10.0		
Actuated g/C Ratio		0.81	0.67		0.09		
v/c Ratio		0.60	0.36		0.17		
Control Delay		1.3	7.7		47.7		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.3	7.7		47.7		
LOS		A	A		D		
Approach Delay		1.3	7.7		47.7		
Approach LOS		A	A		D		
Queue Length 50th (ft)		14	102		19		
Queue Length 95th (ft)		16	125		39		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2904	3061		644		
Starvation Cap Reductn		0	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.57	0.36		0.09		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 106.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 4.7		Intersection LOS: A	
Intersection Capacity Utilization 59.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)

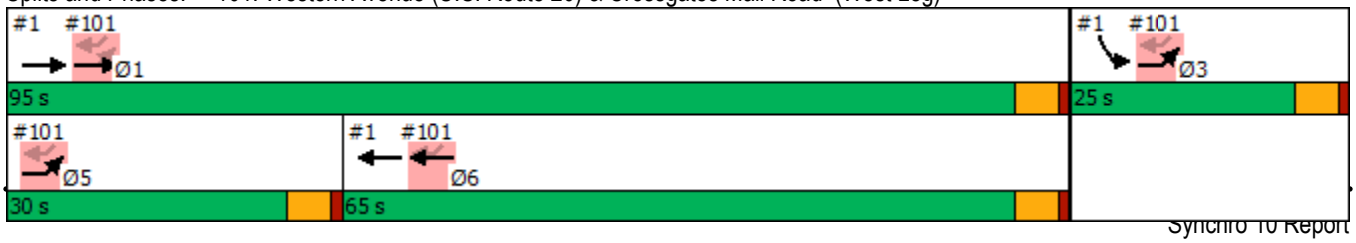


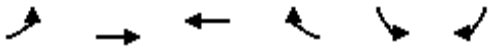
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	286	1535	895	0	0	18		
Future Volume (vph)	286	1535	895	0	0	18		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.250							
Satd. Flow (perm)	466	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	311	1668	973	0	0	20		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	311	1668	973	0	0	20		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	101.9	86.8	71.8			106.9		
Actuated g/C Ratio	0.95	0.81	0.67			1.00		
v/c Ratio	0.41	0.58	0.29			0.01		
Control Delay	1.8	4.5	1.3			0.0		
Queue Delay	0.0	0.0	0.2			0.0		
Total Delay	1.8	4.5	1.5			0.0		
LOS	A	A	A			A		
Approach Delay		4.0	1.5					
Approach LOS		A	A					
Queue Length 50th (ft)	0	162	9			0		
Queue Length 95th (ft)	0	197	10			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	934	2989	3419			1611		
Starvation Cap Reductn	0	0	1433			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.33	0.56	0.49			0.01		

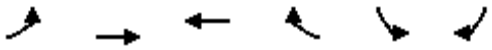
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 106.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 3.2		Intersection LOS: A	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





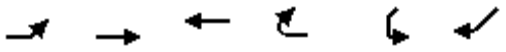
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1543	912	107	62	0	
Future Volume (vph)	0	1543	912	107	62	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3438	4540	0	3432	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3438	4540	0	3432	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			24				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	5%	8%	4%	0%	0%	
Adj. Flow (vph)	0	1677	991	116	67	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1677	1107	0	67	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Turn Type		NA	NA		Prot		
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		87.0	72.0		10.0		
Actuated g/C Ratio		0.81	0.67		0.09		
v/c Ratio		0.60	0.36		0.21		
Control Delay		1.3	7.7		48.1		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.3	7.7		48.1		
LOS		A	A		D		
Approach Delay		1.3	7.7		48.1		
Approach LOS		A	A		D		
Queue Length 50th (ft)		14	105		23		
Queue Length 95th (ft)		16	128		45		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2896	3060		643		
Starvation Cap Reductn		0	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.58	0.36		0.10		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 4.9		Intersection LOS: A	
Intersection Capacity Utilization 59.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)

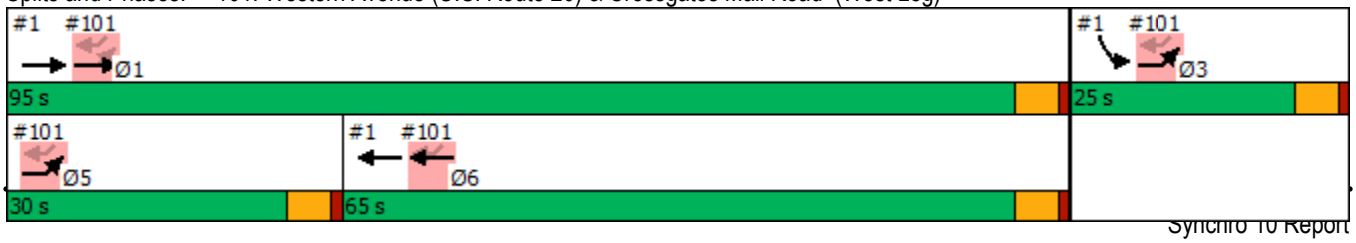


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	286	1543	912	0	0	18		
Future Volume (vph)	286	1543	912	0	0	18		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.245							
Satd. Flow (perm)	456	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	311	1677	991	0	0	20		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	311	1677	991	0	0	20		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

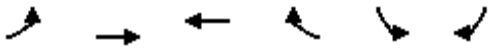
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	102.1	87.0	72.0			107.1		
Actuated g/C Ratio	0.95	0.81	0.67			1.00		
v/c Ratio	0.42	0.58	0.29			0.01		
Control Delay	1.9	4.5	1.3			0.0		
Queue Delay	0.0	0.0	0.2			0.0		
Total Delay	1.9	4.5	1.5			0.0		
LOS	A	A	A			A		
Approach Delay		4.1	1.5					
Approach LOS		A	A					
Queue Length 50th (ft)	0	163	9			0		
Queue Length 95th (ft)	0	200	10			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	927	2982	3419			1611		
Starvation Cap Reductn	0	0	1399			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.34	0.56	0.49			0.01		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 3.2		Intersection LOS: A	
Intersection Capacity Utilization 46.8%		ICU Level of Service A	
Analysis Period (min) 15			

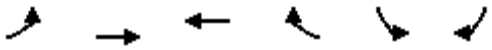
Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)



WEEKDAY PEAK PM HOUR



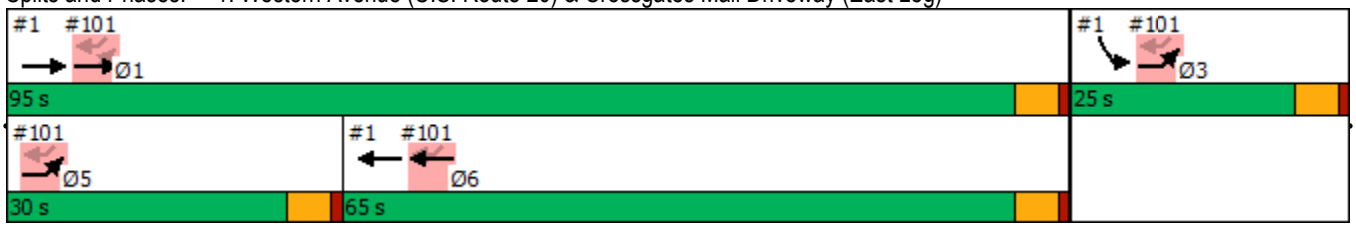
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1096	1859	230	224	0	
Future Volume (vph)	0	1096	1859	230	224	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.983				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4784	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4784	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			26				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1191	2021	250	243	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1191	2271	0	243	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

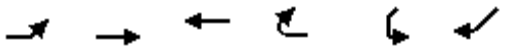


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		78.0	62.9		12.7		
Actuated g/C Ratio		0.77	0.62		0.13		
v/c Ratio		0.43	0.76		0.57		
Control Delay		1.0	15.5		47.7		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.0	15.5		47.7		
LOS		A	B		D		
Approach Delay		1.0	15.5		47.7		
Approach LOS		A	B		D		
Queue Length 50th (ft)		10	340		74		
Queue Length 95th (ft)		12	453		130		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		3215	2996		671		
Starvation Cap Reductn		322	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.41	0.76		0.36		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 100.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 57.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



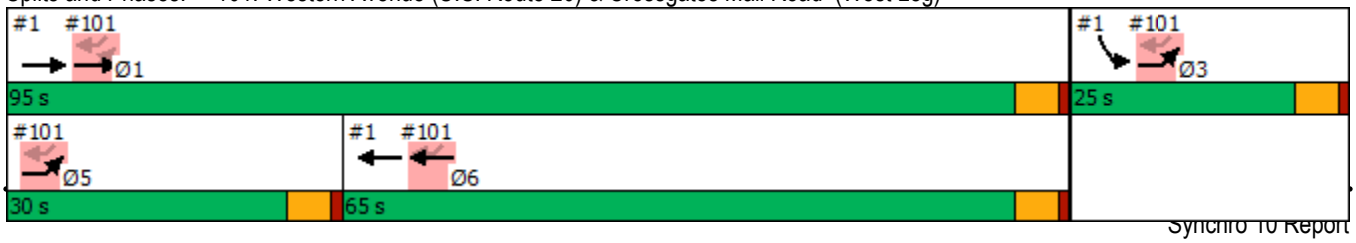


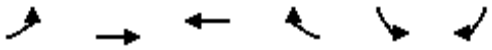
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	99	1096	1859	0	0	48		
Future Volume (vph)	99	1096	1859	0	0	48		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.059							
Satd. Flow (perm)	110	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	108	1191	2021	0	0	52		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	108	1191	2021	0	0	52		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	95.8	78.0	62.9			100.8		
Actuated g/C Ratio	0.95	0.77	0.62			1.00		
v/c Ratio	0.19	0.43	0.64			0.03		
Control Delay	6.7	4.6	1.9			0.0		
Queue Delay	0.0	0.0	0.3			0.0		
Total Delay	6.7	4.6	2.2			0.0		
LOS	A	A	A			A		
Approach Delay		4.8	2.2					
Approach LOS		A	A					
Queue Length 50th (ft)	0	107	18			0		
Queue Length 95th (ft)	44	171	19			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	804	3215	3174			1604		
Starvation Cap Reductn	0	0	476			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.13	0.37	0.75			0.03		

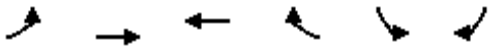
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 100.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 3.1		Intersection LOS: A	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





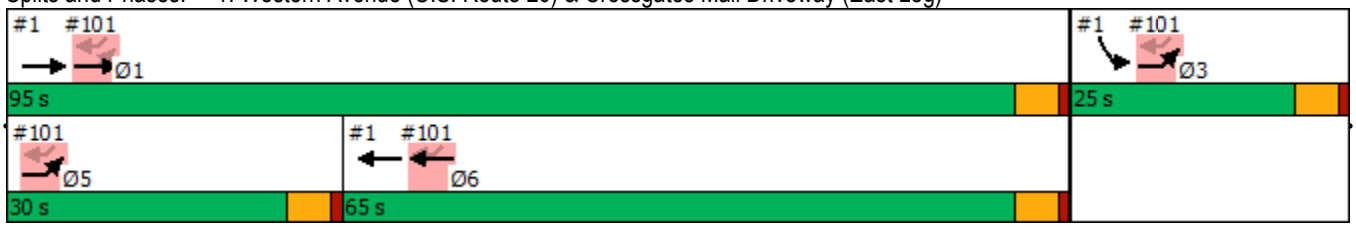
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1141	1934	233	227	0	
Future Volume (vph)	0	1141	1934	233	227	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4789	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4789	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			25				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1240	2102	253	247	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1240	2355	0	247	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

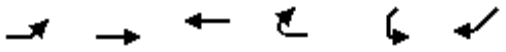


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		78.1	63.0		12.9		
Actuated g/C Ratio		0.77	0.62		0.13		
v/c Ratio		0.45	0.79		0.58		
Control Delay		1.0	16.5		47.7		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.1	16.5		47.7		
LOS		A	B		D		
Approach Delay		1.1	16.5		47.7		
Approach LOS		A	B		D		
Queue Length 50th (ft)		11	365		75		
Queue Length 95th (ft)		12	488		131		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		3208	2994		669		
Starvation Cap Reductn		227	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.79		0.37		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 101.1			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 13.5		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



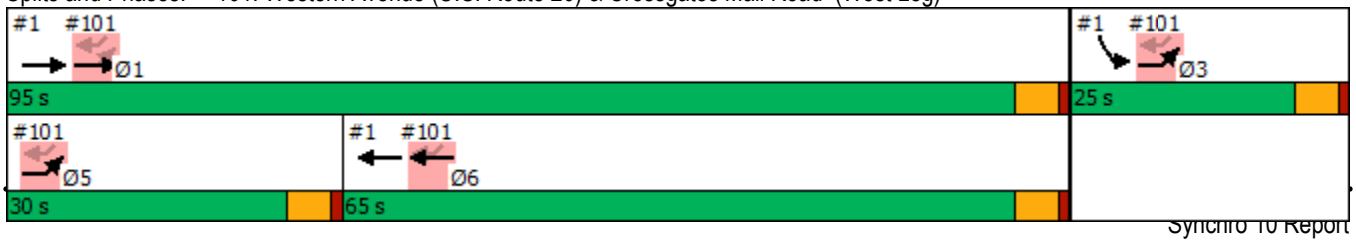


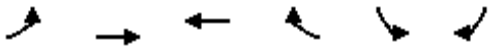
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	100	1141	1934	0	0	49		
Future Volume (vph)	100	1141	1934	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.059							
Satd. Flow (perm)	110	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	109	1240	2102	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	109	1240	2102	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	96.1	78.1	63.0			101.1		
Actuated g/C Ratio	0.95	0.77	0.62			1.00		
v/c Ratio	0.19	0.45	0.66			0.03		
Control Delay	6.8	4.8	1.9			0.0		
Queue Delay	0.0	0.0	0.4			0.0		
Total Delay	6.8	4.8	2.3			0.0		
LOS	A	A	A			A		
Approach Delay		4.9	2.3					
Approach LOS		A	A					
Queue Length 50th (ft)	0	114	18			0		
Queue Length 95th (ft)	45	184	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	804	3208	3169			1604		
Starvation Cap Reductn	0	0	465			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.14	0.39	0.78			0.03		

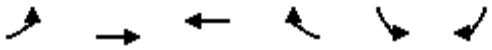
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 101.1			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 3.3		Intersection LOS: A	
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





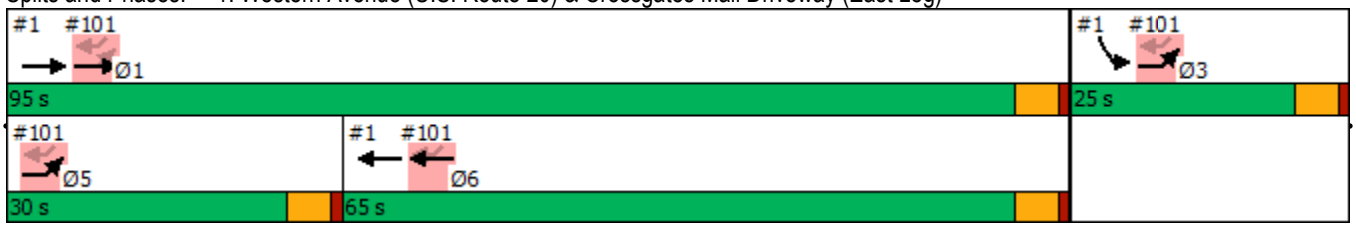
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1116	1972	233	286	0	
Future Volume (vph)	0	1116	1972	233	286	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4789	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4789	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			24				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1213	2143	253	311	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1213	2396	0	311	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

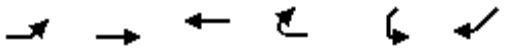


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		78.1	63.0		14.6		
Actuated g/C Ratio		0.76	0.61		0.14		
v/c Ratio		0.45	0.81		0.65		
Control Delay		1.1	18.3		48.9		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.1	18.3		48.9		
LOS		A	B		D		
Approach Delay		1.1	18.3		48.9		
Approach LOS		A	B		D		
Queue Length 50th (ft)		10	403		96		
Queue Length 95th (ft)		12	536		162		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		3120	2943		658		
Starvation Cap Reductn		226	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.81		0.47		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 102.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 15.4		Intersection LOS: B	
Intersection Capacity Utilization 60.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



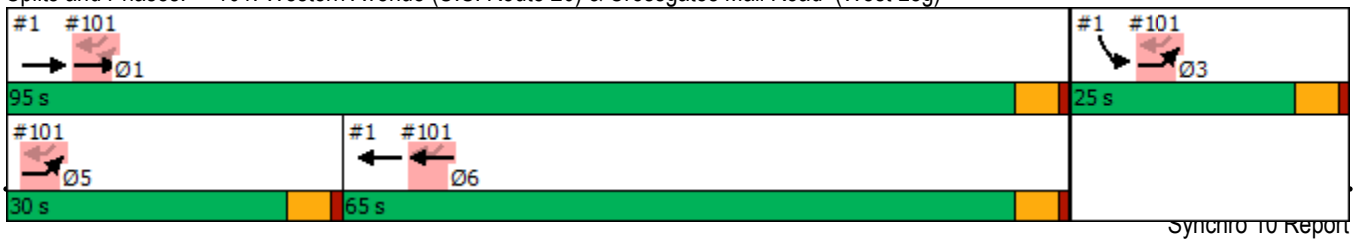


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	100	1116	1972	0	0	49		
Future Volume (vph)	100	1116	1972	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.059							
Satd. Flow (perm)	110	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	109	1213	2143	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	109	1213	2143	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

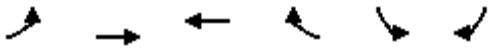
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	97.8	78.1	63.0			102.8		
Actuated g/C Ratio	0.95	0.76	0.61			1.00		
v/c Ratio	0.19	0.45	0.69			0.03		
Control Delay	6.6	5.3	2.0			0.0		
Queue Delay	0.0	0.0	0.4			0.0		
Total Delay	6.6	5.3	2.4			0.0		
LOS	A	A	A			A		
Approach Delay		5.4	2.4					
Approach LOS		A	A					
Queue Length 50th (ft)	0	124	19			0		
Queue Length 95th (ft)	44	197	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	825	3120	3115			1608		
Starvation Cap Reductn	0	0	451			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.13	0.39	0.80			0.03		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 102.8			
Natural Cycle: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 3.5		Intersection LOS: A	
Intersection Capacity Utilization 54.8%		ICU Level of Service A	
Analysis Period (min) 15			

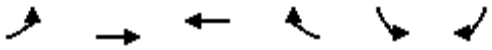
Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)



SATURDAY PEAK HOUR



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1040	1122	512	369	0	
Future Volume (vph)	0	1040	1122	512	369	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.953				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4638	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4638	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			137				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1130	1220	557	401	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1130	1777	0	401	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

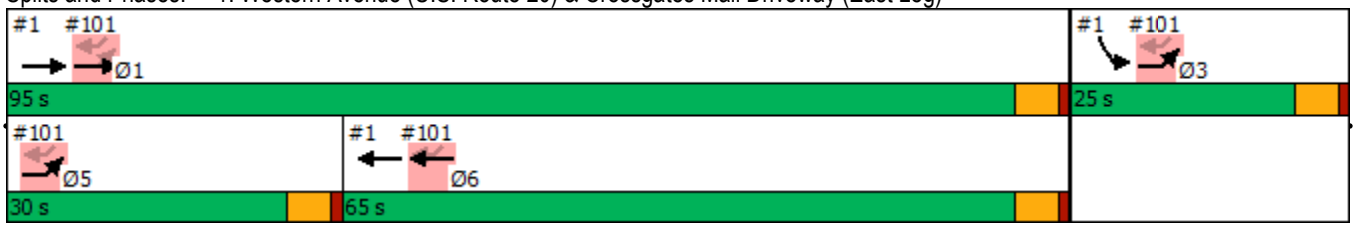


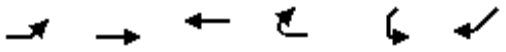
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		77.2	62.1		16.9		
Actuated g/C Ratio		0.74	0.60		0.16		
v/c Ratio		0.43	0.63		0.74		
Control Delay		1.1	13.7		50.6		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.1	13.7		50.6		
LOS		A	B		D		
Approach Delay		1.1	13.7		50.6		
Approach LOS		A	B		D		
Queue Length 50th (ft)		10	242		128		
Queue Length 95th (ft)		11	305		201		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		3068	2823		648		
Starvation Cap Reductn		325	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.41	0.63		0.62		

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 104.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 13.9 — Intersection LOS: B
Intersection Capacity Utilization 52.0% — ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



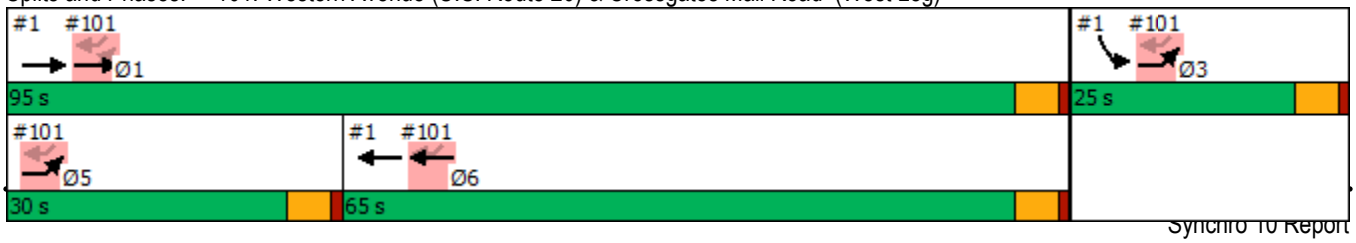


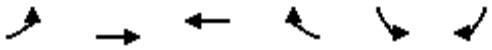
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	122	1040	1122	0	0	48		
Future Volume (vph)	122	1040	1122	0	0	48		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.173							
Satd. Flow (perm)	322	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	133	1130	1220	0	0	52		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	133	1130	1220	0	0	52		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	99.1	77.2	62.1			104.1		
Actuated g/C Ratio	0.95	0.74	0.60			1.00		
v/c Ratio	0.18	0.43	0.40			0.03		
Control Delay	0.6	5.9	2.2			0.0		
Queue Delay	0.0	0.0	0.3			0.0		
Total Delay	0.6	5.9	2.5			0.0		
LOS	A	A	A			A		
Approach Delay		5.3	2.5					
Approach LOS		A	A					
Queue Length 50th (ft)	0	129	18			0		
Queue Length 95th (ft)	0	178	19			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	935	3068	3035			1586		
Starvation Cap Reductn	0	0	1037			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.14	0.37	0.61			0.03		

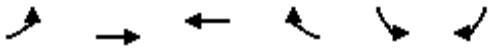
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 104.1			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 3.8		Intersection LOS: A	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1103	1186	520	375	49	
Future Volume (vph)	0	1103	1186	520	375	49	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	0.95	
Frt			0.954		0.983		
Flt Protected					0.958		
Satd. Flow (prot)	0	3539	4643	0	3335	0	
Flt Permitted					0.958		
Satd. Flow (perm)	0	3539	4643	0	3335	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			132		10		
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1199	1289	565	408	53	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1199	1854	0	461	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

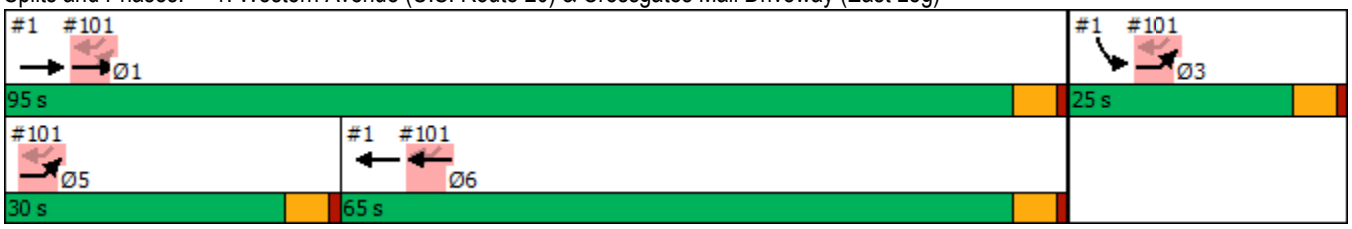


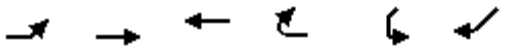
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		78.0	62.9		18.4		
Actuated g/C Ratio		0.73	0.59		0.17		
v/c Ratio		0.46	0.66		0.79		
Control Delay		1.2	14.8		52.5		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.2	14.8		52.5		
LOS		A	B		D		
Approach Delay		1.2	14.8		52.5		
Approach LOS		A	B		D		
Queue Length 50th (ft)		10	278		147		
Queue Length 95th (ft)		12	327		#251		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		3007	2800		637		
Starvation Cap Reductn		167	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.66		0.72		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 106.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 15.1		Intersection LOS: B	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



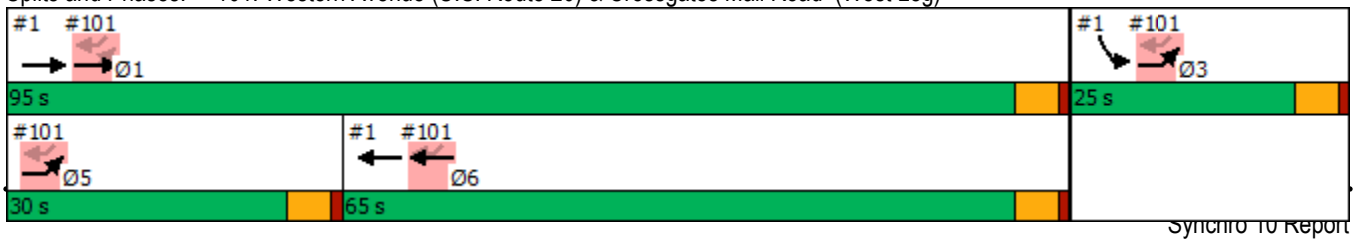


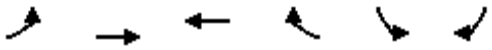
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	124	1103	1186	0	0	49		
Future Volume (vph)	124	1103	1186	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.157							
Satd. Flow (perm)	292	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	135	1199	1289	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	135	1199	1289	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	101.4	78.0	62.9			106.4		
Actuated g/C Ratio	0.95	0.73	0.59			1.00		
v/c Ratio	0.18	0.46	0.43			0.03		
Control Delay	0.7	6.5	3.3			0.0		
Queue Delay	0.0	0.0	0.4			0.0		
Total Delay	0.7	6.5	3.7			0.0		
LOS	A	A	A			A		
Approach Delay		5.9	3.7					
Approach LOS		A	A					
Queue Length 50th (ft)	0	157	31			0		
Queue Length 95th (ft)	0	194	36			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	927	3007	3007			1588		
Starvation Cap Reductn	0	0	1078			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.15	0.40	0.67			0.03		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 106.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 4.7		Intersection LOS: A	
Intersection Capacity Utilization 39.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)



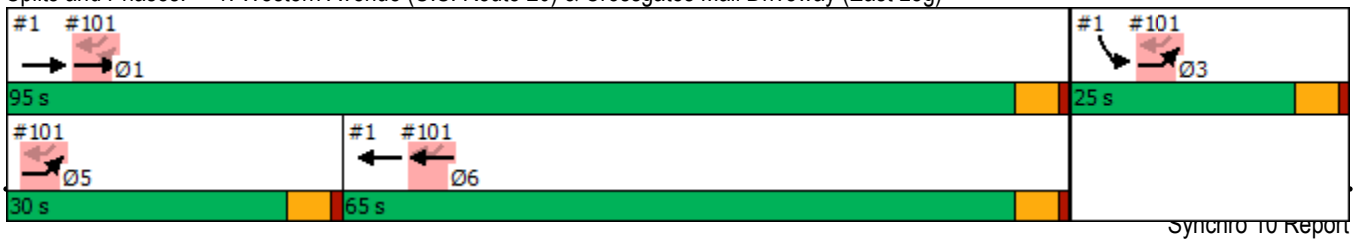


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1060	1233	520	466	0	
Future Volume (vph)	0	1060	1233	520	466	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Ped Bike Factor							
Frt			0.956				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4652	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4652	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			126				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Growth Factor	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	
Bus Blockages (#/hr)	0	0	0	0	0	0	
Parking (#/hr)							
Mid-Block Traffic (%)		0%	0%		0%		
Adj. Flow (vph)	0	1152	1340	565	507	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1152	1905	0	507	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Turn Type		NA	NA		Prot		
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		77.9	62.9		19.5		
Actuated g/C Ratio		0.73	0.59		0.18		
v/c Ratio		0.45	0.69		0.83		
Control Delay		1.2	15.7		55.9		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.2	15.7		55.9		
LOS		A	B		E		
Approach Delay		1.2	15.7		55.9		
Approach LOS		A	B		E		
Queue Length 50th (ft)		10	295		168		
Queue Length 95th (ft)		11	343		#297		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2974	2775		628		
Starvation Cap Reductn		252	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.69		0.81		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 57.1%		ICU Level of Service B	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)

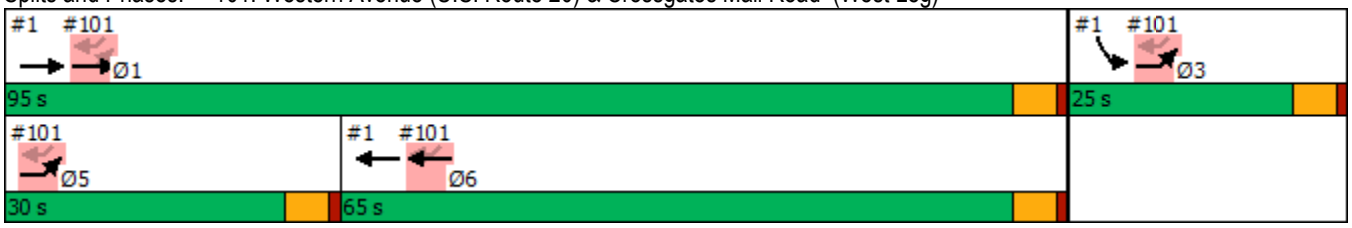


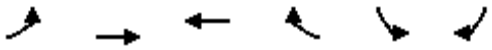
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	124	1060	1233	0	0	49		
Future Volume (vph)	124	1060	1233	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Width (ft)	12	12	12	12	12	12		
Grade (%)		0%	0%		0%			
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Ped Bike Factor								
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.145							
Satd. Flow (perm)	270	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Confl. Peds. (#/hr)								
Confl. Bikes (#/hr)								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Growth Factor	100%	100%	100%	100%	100%	100%		
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%		
Bus Blockages (#/hr)	0	0	0	0	0	0		
Parking (#/hr)								
Mid-Block Traffic (%)		0%	0%		0%			
Adj. Flow (vph)	135	1152	1340	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	135	1152	1340	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	102.4	77.9	62.9			107.4		
Actuated g/C Ratio	0.95	0.73	0.59			1.00		
v/c Ratio	0.18	0.45	0.45			0.03		
Control Delay	0.7	6.7	2.2			0.0		
Queue Delay	0.0	0.0	0.4			0.0		
Total Delay	0.7	6.7	2.6			0.0		
LOS	A	A	A			A		
Approach Delay		6.0	2.6					
Approach LOS		A	A					
Queue Length 50th (ft)	0	150	19			0		
Queue Length 95th (ft)	0	183	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	942	2974	2976			1604		
Starvation Cap Reductn	0	0	982			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.14	0.39	0.67			0.03		

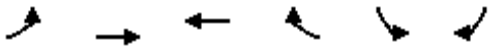
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.4			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 4.2		Intersection LOS: A	
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1060	1233	520	466	0	
Future Volume (vph)	0	1060	1233	520	466	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.956				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4652	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4652	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			124				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1152	1340	565	507	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1152	1905	0	507	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

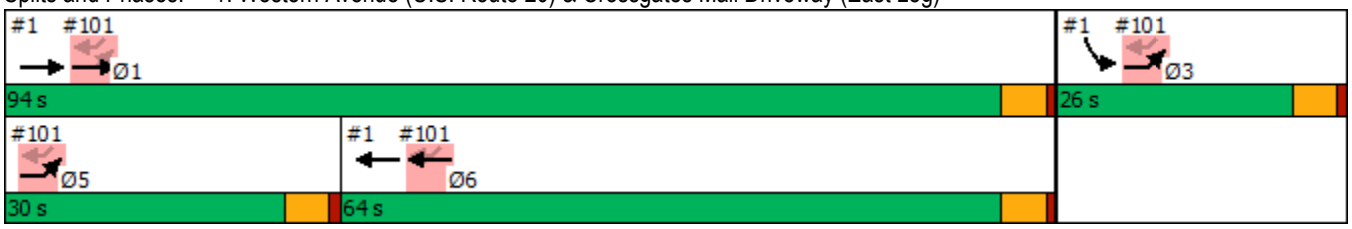


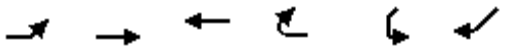
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		94.0	64.0		26.0		30.0
Total Split (%)		78.3%	53.3%		21.7%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		76.9	61.9		19.7		
Actuated g/C Ratio		0.72	0.58		0.18		
v/c Ratio		0.45	0.69		0.82		
Control Delay		1.2	16.2		53.8		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.2	16.2		53.8		
LOS		A	B		D		
Approach Delay		1.2	16.2		53.8		
Approach LOS		A	B		D		
Queue Length 50th (ft)		10	304		166		
Queue Length 95th (ft)		11	353		#286		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2962	2749		664		
Starvation Cap Reductn		221	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.69		0.76		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 106.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 16.7		Intersection LOS: B	
Intersection Capacity Utilization 57.1%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



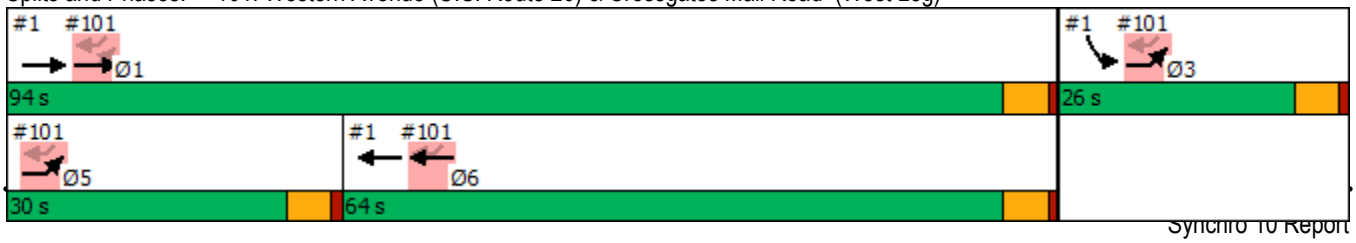


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	124	1060	1233	0	0	49		
Future Volume (vph)	124	1060	1233	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.144							
Satd. Flow (perm)	268	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	135	1152	1340	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	135	1152	1340	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		94.0	64.0				26.0	30.0
Total Split (%)		78.3%	53.3%				22%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	101.7	76.9	61.9			106.7		
Actuated g/C Ratio	0.95	0.72	0.58			1.00		
v/c Ratio	0.18	0.45	0.45			0.03		
Control Delay	0.7	6.9	2.2			0.0		
Queue Delay	0.0	0.0	0.4			0.0		
Total Delay	0.7	6.9	2.6			0.0		
LOS	A	A	A			A		
Approach Delay		6.2	2.6					
Approach LOS		A	A					
Queue Length 50th (ft)	0	156	19			0		
Queue Length 95th (ft)	0	190	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	944	2962	2948			1599		
Starvation Cap Reductn	0	0	965			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.14	0.39	0.68			0.03		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 106.7			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 4.3		Intersection LOS: A	
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)



INTERSECTION #3
Western Avenue & Johnson Road / Rapp Road

WEEKDAY PEAK AM HOUR

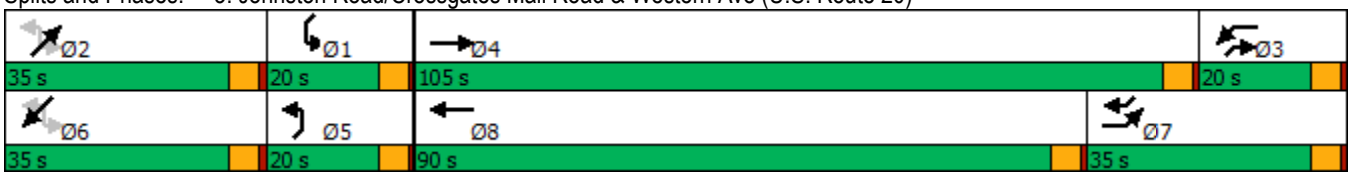
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	235	1440	97	95	697	30	92	146	181	39	41	87
Future Volume (vph)	235	1440	97	95	697	30	92	146	181	39	41	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			0.99	0.97	0.99		
Frt		0.991			0.994			0.975	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3451	0	1612	3342	0	1626	1720	1447	1440	1872	1623
Flt Permitted	0.950			0.950			0.726			0.580		
Satd. Flow (perm)	1765	3451	0	1610	3342	0	1243	1720	1404	870	1872	1623
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			3			5	127			99
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	3%	10%	12%	7%	14%	11%	1%	6%	26%	2%	0%
Adj. Flow (vph)	267	1636	110	108	792	34	105	166	206	44	47	99
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	267	1746	0	108	826	0	105	199	173	44	47	99
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.43	0.83		0.77	0.72		0.35	0.79	0.41	0.43	0.47	0.13
Control Delay	45.0	30.3		105.5	49.5		57.9	87.5	17.6	68.1	93.0	6.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.0	30.3		105.5	49.5		57.9	87.5	17.6	68.1	93.0	6.2
Queue Length 50th (ft)	213	747		115	414		97	216	40	39	50	0
Queue Length 95th (ft)	354	962		#224	475		152	316	109	75	98	39
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	626	2279		159	1876		309	344	440	181	370	743
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.43	0.77		0.68	0.44		0.34	0.58	0.39	0.24	0.13	0.13

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 156	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	235	1440	97	95	697	30	92	146	181	39	41	87
Future Volume (veh/h)	235	1440	97	95	697	30	92	146	181	39	41	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.97		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1856	1722	1796	1796	1737	1885	1811	1549	1909	1939
Adj Flow Rate, veh/h	267	1636	110	108	792	34	105	196	186	44	47	99
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	3	3	12	7	7	11	1	6	26	2	0
Cap, veh/h	666	2068	138	128	1069	46	243	271	336	89	176	761
Arrive On Green	0.37	0.62	0.62	0.08	0.32	0.32	0.08	0.14	0.14	0.03	0.09	0.09
Sat Flow, veh/h	1781	3353	224	1640	3333	143	1654	1885	1503	1475	1909	1590
Grp Volume(v), veh/h	267	854	892	108	405	421	105	196	186	44	47	99
Grp Sat Flow(s),veh/h/ln	1781	1763	1814	1640	1706	1770	1654	1885	1503	1475	1909	1590
Q Serve(g_s), s	16.5	54.0	55.5	9.7	31.7	31.7	0.0	14.9	4.5	0.0	3.4	0.0
Cycle Q Clear(g_c), s	16.5	54.0	55.5	9.7	31.7	31.7	0.0	14.9	4.5	0.0	3.4	0.0
Prop In Lane	1.00		0.12	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	666	1087	1119	128	547	568	243	271	336	89	176	761
V/C Ratio(X)	0.40	0.79	0.80	0.85	0.74	0.74	0.43	0.72	0.55	0.49	0.27	0.13
Avail Cap(c_a), veh/h	666	1176	1211	164	968	1004	276	377	420	196	382	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	21.3	21.6	68.2	45.3	45.3	60.9	61.3	51.7	70.8	63.3	22.7
Incr Delay (d2), s/veh	0.1	5.7	5.9	21.9	8.7	8.5	0.5	2.0	0.5	1.6	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	22.6	24.0	4.8	14.6	15.1	3.7	7.3	6.2	1.7	1.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	27.1	27.6	90.1	54.1	53.8	61.4	63.2	52.2	72.3	63.6	22.8
LnGrp LOS	C	C	C	F	D	D	E	E	D	E	E	C
Approach Vol, veh/h		2013			934			487			190	
Approach Delay, s/veh		28.3			58.1			58.6			44.4	
Approach LOS		C			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	26.6	16.7	97.4	17.0	18.8	61.0	53.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.0	16.9	11.7	57.5	2.0	5.4	18.5	33.7
Green Ext Time (p_c), s	0.0	0.7	0.0	34.9	0.1	0.3	0.4	14.3

Intersection Summary	
HCM 6th Ctrl Delay	40.9
HCM 6th LOS	D

Notes

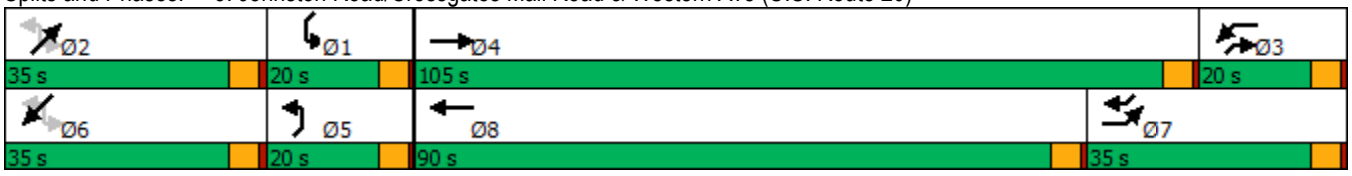
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	239	1468	98	96	728	30	93	148	184	40	42	88
Future Volume (vph)	239	1468	98	96	728	30	93	148	184	40	42	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			1.00	0.97	0.99		
Frt		0.991			0.994			0.975	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3452	0	1612	3342	0	1626	1720	1447	1440	1872	1623
Flt Permitted	0.950			0.950			0.726			0.563		
Satd. Flow (perm)	1766	3452	0	1610	3342	0	1243	1720	1404	844	1872	1623
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			3			5	124			100
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	3%	10%	12%	7%	14%	11%	1%	6%	26%	2%	0%
Adj. Flow (vph)	272	1668	111	109	827	34	106	168	209	45	48	100
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	272	1779	0	109	861	0	106	201	176	45	48	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.45	0.84		0.77	0.73		0.35	0.80	0.42	0.44	0.48	0.14
Control Delay	46.9	31.2		106.5	49.0		58.1	88.9	18.9	69.0	93.5	6.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.9	31.2		106.5	49.0		58.1	88.9	18.9	69.0	93.5	6.4
Queue Length 50th (ft)	222	781		116	432		98	220	45	40	51	0
Queue Length 95th (ft)	369	1000		#229	490		154	320	116	77	101	41
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	611	2250		157	1851		308	340	436	178	365	731
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.45	0.79		0.69	0.47		0.34	0.59	0.40	0.25	0.13	0.14

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 157.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	239	1468	98	96	728	30	93	148	184	40	42	88
Future Volume (veh/h)	239	1468	98	96	728	30	93	148	184	40	42	88
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.97		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1856	1722	1796	1796	1737	1885	1811	1549	1909	1939
Adj Flow Rate, veh/h	272	1668	111	109	827	34	106	199	188	45	48	100
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	3	3	12	7	7	11	1	6	26	2	0
Cap, veh/h	648	2073	137	128	1110	46	242	272	337	89	175	744
Arrive On Green	0.36	0.62	0.62	0.08	0.33	0.33	0.08	0.14	0.14	0.03	0.09	0.09
Sat Flow, veh/h	1781	3356	222	1640	3340	137	1654	1885	1503	1475	1909	1590
Grp Volume(v), veh/h	272	870	909	109	422	439	106	199	188	45	48	100
Grp Sat Flow(s),veh/h/ln	1781	1763	1815	1640	1706	1771	1654	1885	1503	1475	1909	1590
Q Serve(g_s), s	17.4	56.5	58.3	10.0	33.3	33.4	0.0	15.3	4.7	0.0	3.6	0.0
Cycle Q Clear(g_c), s	17.4	56.5	58.3	10.0	33.3	33.4	0.0	15.3	4.7	0.0	3.6	0.0
Prop In Lane	1.00		0.12	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	648	1089	1121	128	567	588	242	272	337	89	175	744
V/C Ratio(X)	0.42	0.80	0.81	0.85	0.75	0.75	0.44	0.73	0.56	0.51	0.27	0.13
Avail Cap(c_a), veh/h	648	1161	1196	162	956	992	273	373	417	193	377	912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	21.9	22.2	69.1	45.0	45.0	61.7	62.1	52.3	71.7	64.2	24.0
Incr Delay (d2), s/veh	0.2	6.1	6.4	23.3	8.6	8.3	0.5	2.5	0.5	1.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	23.8	25.3	5.0	15.3	15.8	3.8	7.6	6.4	1.8	1.8	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.4	28.0	28.6	92.4	53.6	53.3	62.2	64.7	52.8	73.4	64.5	24.0
LnGrp LOS	D	C	C	F	D	D	E	E	D	E	E	C
Approach Vol, veh/h		2051			970			493			193	
Approach Delay, s/veh		29.4			57.8			59.6			45.6	
Approach LOS		C			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	26.9	16.9	98.8	17.2	19.0	60.2	55.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.0	17.3	12.0	60.3	2.0	5.6	19.4	35.4
Green Ext Time (p_c), s	0.0	0.7	0.0	33.5	0.1	0.3	0.4	15.1

Intersection Summary	
HCM 6th Ctrl Delay	41.7
HCM 6th LOS	D

Notes

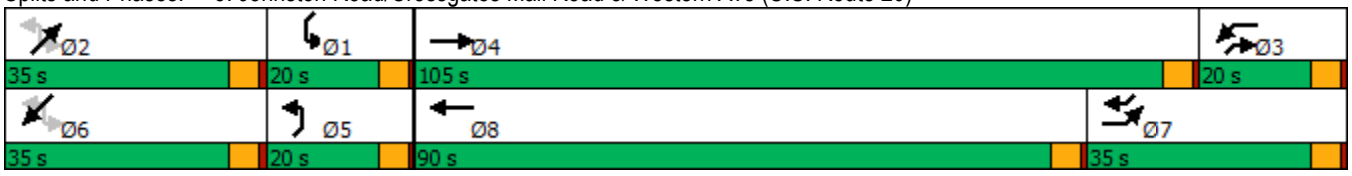
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	263	1468	98	96	745	40	93	148	184	47	42	96
Future Volume (vph)	263	1468	98	96	745	40	93	148	184	47	42	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			1.00	0.97	0.99		
Frt		0.991			0.992			0.975	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3452	0	1612	3333	0	1626	1720	1447	1440	1872	1623
Flt Permitted	0.950			0.950			0.726			0.563		
Satd. Flow (perm)	1766	3452	0	1610	3333	0	1243	1720	1404	844	1872	1623
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			4			5	118			109
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	3%	10%	12%	7%	14%	11%	1%	6%	26%	2%	0%
Adj. Flow (vph)	299	1668	111	109	847	45	106	168	209	53	48	109
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	299	1779	0	109	892	0	106	201	176	53	48	109
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.51	0.85		0.78	0.74		0.34	0.81	0.42	0.48	0.48	0.15
Control Delay	50.6	31.9		107.7	48.6		57.5	90.1	20.7	71.9	94.2	6.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	31.9		107.7	48.6		57.5	90.1	20.7	71.9	94.2	6.5
Queue Length 50th (ft)	256	794		117	448		98	222	51	47	52	0
Queue Length 95th (ft)	420	1020		#230	507		153	322	124	87	101	43
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	588	2240		156	1838		315	338	430	177	364	715
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.79		0.70	0.49		0.34	0.59	0.41	0.30	0.13	0.15

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 158.1	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	263	1468	98	96	745	40	93	148	184	47	42	96
Future Volume (veh/h)	263	1468	98	96	745	40	93	148	184	47	42	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.97		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1856	1722	1796	1796	1737	1885	1811	1549	1909	1939
Adj Flow Rate, veh/h	299	1668	111	109	847	45	106	199	188	53	48	109
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	3	3	12	7	7	11	1	6	26	2	0
Cap, veh/h	626	2070	137	128	1133	60	244	272	337	91	176	723
Arrive On Green	0.35	0.62	0.62	0.08	0.34	0.34	0.08	0.14	0.14	0.03	0.09	0.09
Sat Flow, veh/h	1781	3356	222	1640	3295	175	1654	1885	1503	1475	1909	1590
Grp Volume(v), veh/h	299	870	909	109	439	453	106	199	188	53	48	109
Grp Sat Flow(s),veh/h/ln	1781	1763	1815	1640	1706	1764	1654	1885	1503	1475	1909	1590
Q Serve(g_s), s	19.9	56.8	58.5	10.0	34.5	34.5	0.0	15.4	4.7	0.4	3.6	0.0
Cycle Q Clear(g_c), s	19.9	56.8	58.5	10.0	34.5	34.5	0.0	15.4	4.7	0.4	3.6	0.0
Prop In Lane	1.00		0.12	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	626	1087	1119	128	587	607	244	272	337	91	176	723
V/C Ratio(X)	0.48	0.80	0.81	0.85	0.75	0.75	0.43	0.73	0.56	0.58	0.27	0.15
Avail Cap(c_a), veh/h	626	1159	1193	162	953	986	272	372	416	193	376	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	22.1	22.4	69.2	44.1	44.1	61.7	62.3	52.4	71.7	64.3	25.3
Incr Delay (d2), s/veh	0.2	6.2	6.5	23.5	8.4	8.2	0.5	2.6	0.5	2.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	24.0	25.4	5.0	15.8	16.3	3.8	7.6	6.4	2.1	1.8	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	28.2	28.8	92.7	52.5	52.3	62.2	64.9	53.0	73.9	64.7	25.3
LnGrp LOS	D	C	C	F	D	D	E	E	D	E	E	C
Approach Vol, veh/h		2078			1001			493			210	
Approach Delay, s/veh		30.0			56.8			59.8			46.6	
Approach LOS		C			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	26.9	16.9	98.8	17.4	19.0	58.4	57.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.4	17.4	12.0	60.5	2.0	5.6	21.9	36.5
Green Ext Time (p_c), s	0.1	0.7	0.0	33.3	0.1	0.3	0.4	15.8

Intersection Summary	
HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

WEEKDAY PEAK PM HOUR

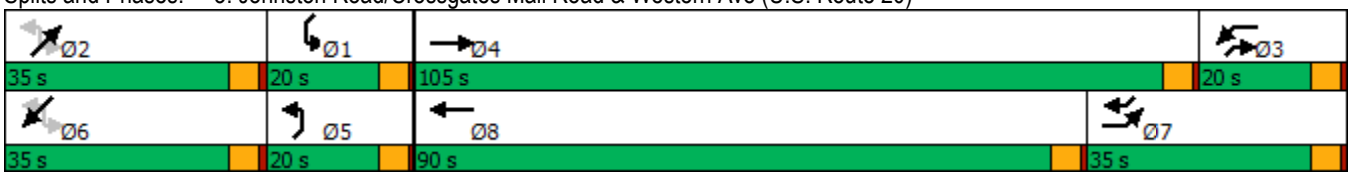
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	142	948	98	126	1431	28	129	75	94	95	203	323
Future Volume (vph)	142	948	98	126	1431	28	129	75	94	95	203	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			1.00	0.97	0.98		
Frt		0.986			0.997			0.975	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3517	0	1805	3519	0	1770	1751	1534	1634	1909	1607
Flt Permitted	0.950			0.950			0.234			0.573		
Satd. Flow (perm)	1768	3517	0	1800	3519	0	436	1751	1488	971	1909	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			1			5	85			49
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	1%	0%	0%	2%	14%	2%	0%	0%	11%	0%	1%
Adj. Flow (vph)	153	1019	105	135	1539	30	139	81	101	102	218	347
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	153	1124	0	135	1569	0	139	97	85	102	218	347
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.54	0.73		0.33	0.88		0.81	0.52	0.15	0.35	0.84	0.62
Control Delay	72.1	40.3		60.8	44.2		101.0	75.7	7.8	57.9	96.4	44.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	40.3		60.8	44.2		101.0	75.7	7.8	57.9	96.4	44.5
Queue Length 50th (ft)	158	560		124	833		130	108	0	94	244	282
Queue Length 95th (ft)	251	573		231	#1053		197	170	46	151	348	399
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	330	2192		414	1862		210	331	564	299	356	560
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.51		0.33	0.84		0.66	0.29	0.15	0.34	0.61	0.62

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 163	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	142	948	98	126	1431	28	129	75	94	95	203	323
Future Volume (veh/h)	142	948	98	126	1431	28	129	75	94	95	203	323
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.97	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1870	1870	1870	1900	1900	1774	1939	1924
Adj Flow Rate, veh/h	153	1019	105	135	1539	30	139	96	91	102	218	347
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	2	2	2	0	0	11	0	1
Cap, veh/h	178	1435	148	373	1939	38	163	210	504	283	299	409
Arrive On Green	0.10	0.44	0.44	0.21	0.54	0.54	0.06	0.11	0.11	0.11	0.15	0.15
Sat Flow, veh/h	1781	3276	337	1810	3565	69	1781	1900	1566	1690	1939	1599
Grp Volume(v), veh/h	153	557	567	135	766	803	139	96	91	102	218	347
Grp Sat Flow(s),veh/h/ln	1781	1791	1823	1810	1777	1858	1781	1900	1566	1690	1939	1599
Q Serve(g_s), s	12.1	36.2	36.2	9.1	49.3	49.5	6.7	6.8	0.0	0.0	15.3	14.9
Cycle Q Clear(g_c), s	12.1	36.2	36.2	9.1	49.3	49.5	6.7	6.8	0.0	0.0	15.3	14.9
Prop In Lane	1.00		0.19	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	178	785	798	373	967	1011	163	210	504	283	299	409
V/C Ratio(X)	0.86	0.71	0.71	0.36	0.79	0.79	0.85	0.46	0.18	0.36	0.73	0.85
Avail Cap(c_a), veh/h	375	1256	1278	373	1059	1107	240	400	661	283	408	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	32.7	32.7	48.6	26.1	26.1	64.6	59.5	35.3	55.2	57.5	50.5
Incr Delay (d2), s/veh	4.6	5.4	5.3	0.2	6.6	6.4	12.1	0.6	0.1	0.3	2.3	9.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	16.5	16.8	4.1	21.6	22.6	5.5	3.3	2.3	3.3	7.7	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.8	38.1	38.0	48.8	32.7	32.6	76.7	60.0	35.4	55.5	59.8	59.9
LnGrp LOS	E	D	D	D	C	C	E	E	D	E	E	E
Approach Vol, veh/h		1277			1704			326			667	
Approach Delay, s/veh		41.6			33.9			60.3			59.2	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.1	20.7	34.4	67.5	13.8	27.0	19.3	82.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.0	8.8	11.1	38.2	8.7	17.3	14.1	51.5
Green Ext Time (p_c), s	0.1	0.4	0.1	24.3	0.1	1.2	0.2	26.1

Intersection Summary	
HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

Notes

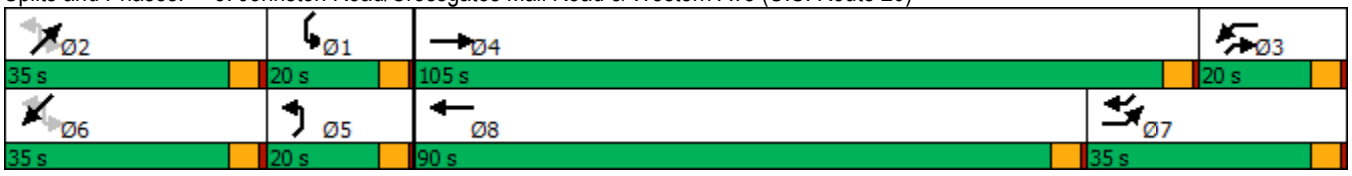
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	144	982	99	128	1465	28	131	76	95	96	206	328
Future Volume (vph)	144	982	99	128	1465	28	131	76	95	96	206	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			1.00	0.97	0.98		
Frt		0.986			0.997			0.976	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3517	0	1805	3520	0	1770	1753	1534	1634	1909	1607
Flt Permitted	0.950			0.950			0.231			0.567		
Satd. Flow (perm)	1768	3517	0	1801	3520	0	430	1753	1488	961	1909	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			1			5	86			46
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	1%	0%	0%	2%	14%	2%	0%	0%	11%	0%	1%
Adj. Flow (vph)	155	1056	106	138	1575	30	141	82	102	103	222	353
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	155	1162	0	138	1605	0	141	98	86	103	222	353
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.54	0.74		0.34	0.90		0.82	0.52	0.16	0.36	0.85	0.63
Control Delay	72.7	40.2		63.4	46.4		102.8	76.6	8.0	58.1	98.2	45.8
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.7	40.2		63.4	46.4		102.8	76.6	8.0	58.1	98.2	45.8
Queue Length 50th (ft)	161	575		131	879		132	110	0	95	250	293
Queue Length 95th (ft)	254	584		241	#1131		200	172	47	153	355	411
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	324	2152		400	1828		207	325	553	298	349	557
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.54		0.34	0.88		0.68	0.30	0.16	0.35	0.64	0.63

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 165.2	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	144	982	99	128	1465	28	131	76	95	96	206	328
Future Volume (veh/h)	144	982	99	128	1465	28	131	76	95	96	206	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.97	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1870	1870	1870	1900	1900	1774	1939	1924
Adj Flow Rate, veh/h	155	1056	106	138	1575	30	141	97	92	103	222	353
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	2	2	2	0	0	11	0	1
Cap, veh/h	180	1475	148	354	1938	37	164	209	486	287	299	411
Arrive On Green	0.10	0.45	0.45	0.20	0.54	0.54	0.06	0.11	0.11	0.11	0.15	0.15
Sat Flow, veh/h	1781	3285	330	1810	3567	68	1781	1900	1566	1690	1939	1599
Grp Volume(v), veh/h	155	575	587	138	783	822	141	97	92	103	222	353
Grp Sat Flow(s),veh/h/ln	1781	1791	1824	1810	1777	1858	1781	1900	1566	1690	1939	1599
Q Serve(g_s), s	12.5	38.0	38.1	9.7	52.5	52.8	7.3	7.0	0.0	0.0	15.9	15.7
Cycle Q Clear(g_c), s	12.5	38.0	38.1	9.7	52.5	52.8	7.3	7.0	0.0	0.0	15.9	15.7
Prop In Lane	1.00		0.18	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	804	819	354	966	1010	164	209	486	287	299	411
V/C Ratio(X)	0.86	0.72	0.72	0.39	0.81	0.81	0.86	0.47	0.19	0.36	0.74	0.86
Avail Cap(c_a), veh/h	367	1228	1251	354	1036	1083	233	391	637	287	399	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.6	32.6	32.6	51.1	27.2	27.2	65.9	60.9	37.3	56.1	58.9	51.7
Incr Delay (d2), s/veh	4.7	5.4	5.3	0.3	7.4	7.2	14.6	0.6	0.1	0.3	3.1	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	17.3	17.6	4.4	23.2	24.3	5.9	3.4	2.4	3.4	8.1	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.3	38.0	38.0	51.4	34.6	34.4	80.6	61.5	37.4	56.3	62.0	62.6
LnGrp LOS	E	D	D	D	C	C	F	E	D	E	E	E
Approach Vol, veh/h		1317			1743			330			678	
Approach Delay, s/veh		41.7			35.8			62.9			61.4	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	21.0	33.5	70.4	14.4	27.5	19.7	84.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.0	9.0	11.7	40.1	9.3	17.9	14.5	54.8
Green Ext Time (p_c), s	0.1	0.4	0.1	25.3	0.1	1.2	0.2	24.5

Intersection Summary	
HCM 6th Ctrl Delay	44.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

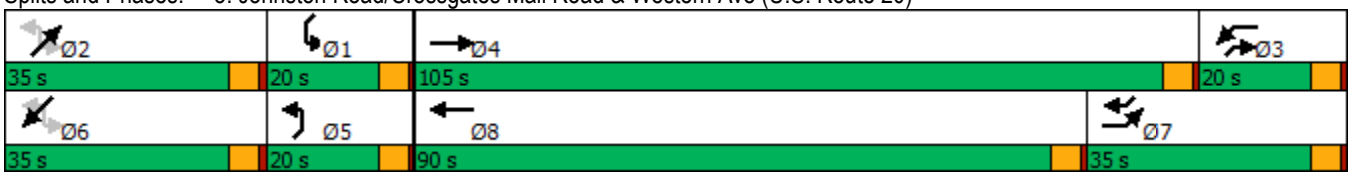
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	226	953	99	134	1519	74	131	76	95	101	200	323
Future Volume (vph)	226	953	99	134	1519	74	131	76	95	101	200	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			1.00	0.97	0.98		
Frt		0.986			0.993			0.976	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3517	0	1805	3492	0	1770	1753	1534	1634	1909	1607
Flt Permitted	0.950			0.950			0.230			0.565		
Satd. Flow (perm)	1768	3517	0	1800	3492	0	428	1753	1488	957	1909	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			4			5	86			45
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	1%	0%	0%	2%	14%	2%	0%	0%	11%	0%	1%
Adj. Flow (vph)	243	1025	106	144	1633	80	141	82	102	109	215	347
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	243	1131	0	144	1713	0	141	98	86	109	215	347
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.85	0.74		0.33	0.95		0.83	0.52	0.15	0.39	0.84	0.63
Control Delay	94.4	41.7		60.7	52.3		105.7	76.6	7.6	59.8	98.5	46.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	94.4	41.7		60.7	52.3		105.7	76.6	7.6	59.8	98.5	46.2
Queue Length 50th (ft)	265	560		134	988		132	109	0	101	240	286
Queue Length 95th (ft)	#427	575		246	#1274		200	172	46	160	343	404
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	320	2127		436	1794		205	321	582	291	345	551
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.76	0.53		0.33	0.95		0.69	0.31	0.15	0.37	0.62	0.63

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 166.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	226	953	99	134	1519	74	131	76	95	101	200	323
Future Volume (veh/h)	226	953	99	134	1519	74	131	76	95	101	200	323
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1870	1870	1870	1900	1900	1774	1939	1924
Adj Flow Rate, veh/h	243	1025	106	144	1633	80	141	97	92	109	215	347
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	2	2	2	0	0	11	0	1
Cap, veh/h	264	1378	142	443	1784	87	162	200	559	273	282	474
Arrive On Green	0.15	0.42	0.42	0.24	0.52	0.52	0.07	0.11	0.11	0.11	0.15	0.15
Sat Flow, veh/h	1781	3275	338	1810	3448	168	1781	1900	1564	1690	1939	1597
Grp Volume(v), veh/h	243	560	571	144	838	875	141	97	92	109	215	347
Grp Sat Flow(s),veh/h/ln	1781	1791	1822	1810	1777	1840	1781	1900	1564	1690	1939	1597
Q Serve(g_s), s	21.9	42.9	42.9	10.6	70.0	71.2	8.7	7.8	0.0	0.3	17.3	7.1
Cycle Q Clear(g_c), s	21.9	42.9	42.9	10.6	70.0	71.2	8.7	7.8	0.0	0.3	17.3	7.1
Prop In Lane	1.00		0.19	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	754	767	443	919	952	162	200	559	273	282	474
V/C Ratio(X)	0.92	0.74	0.74	0.33	0.91	0.92	0.87	0.48	0.16	0.40	0.76	0.73
Avail Cap(c_a), veh/h	329	1102	1121	443	929	962	209	351	683	273	358	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.3	39.7	39.7	50.4	35.8	36.1	73.6	68.5	36.4	63.3	66.8	51.5
Incr Delay (d2), s/veh	24.2	6.5	6.5	0.2	14.7	15.3	21.9	0.7	0.1	0.4	5.2	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	20.0	20.3	4.8	33.0	34.8	6.8	3.9	2.5	4.1	9.0	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.5	46.2	46.1	50.5	50.5	51.4	95.5	69.2	36.4	63.7	72.0	55.1
LnGrp LOS	F	D	D	D	D	D	F	E	D	E	E	E
Approach Vol, veh/h		1374			1857			330			671	
Approach Delay, s/veh		54.4			50.9			71.3			61.9	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	22.1	44.8	73.4	15.7	28.6	29.1	89.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.3	9.8	12.6	44.9	10.7	19.3	23.9	73.2
Green Ext Time (p_c), s	0.1	0.4	0.1	23.5	0.1	1.1	0.3	10.8

Intersection Summary	
HCM 6th Ctrl Delay	55.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	226	953	99	134	1519	74	131	76	95	101	200	323
Future Volume (vph)	226	953	99	134	1519	74	131	76	95	101	200	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			1.00	0.97	0.98		
Frt		0.986			0.993			0.976	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3517	0	1805	3492	0	1770	1753	1534	1634	1909	1607
Flt Permitted	0.950			0.950			0.237			0.576		
Satd. Flow (perm)	1768	3517	0	1800	3492	0	441	1753	1488	976	1909	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			3			5	86			54
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	1%	0%	0%	2%	14%	2%	0%	0%	11%	0%	1%
Adj. Flow (vph)	243	1025	106	144	1633	80	141	82	102	109	215	347
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	243	1131	0	144	1713	0	141	98	86	109	215	347
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

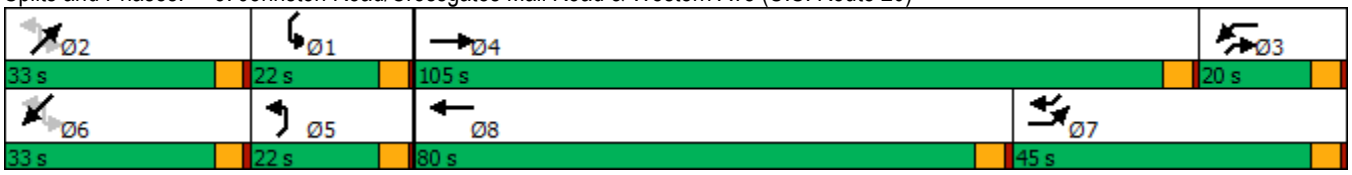
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	45.0	105.0		20.0	80.0		22.0	33.0	20.0	22.0	33.0	45.0
Total Split (%)	25.0%	58.3%		11.1%	44.4%		12.2%	18.3%	11.1%	12.2%	18.3%	25.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.78	0.73		0.36	1.01		0.77	0.51	0.15	0.38	0.84	0.59
Control Delay	79.5	38.9		60.8	65.2		91.9	72.0	7.8	55.9	94.8	39.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.5	38.9		60.8	65.2		91.9	72.0	7.8	55.9	94.8	39.2
Queue Length 50th (ft)	242	508		127	~992		119	100	0	91	219	250
Queue Length 95th (ft)	366	575		246	#1402		200	172	46	160	348	365
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	456	2272		405	1691		241	324	561	314	344	596
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.50		0.36	1.01		0.59	0.30	0.15	0.35	0.63	0.58

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 156.6	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	226	953	99	134	1519	74	131	76	95	101	200	323
Future Volume (veh/h)	226	953	99	134	1519	74	131	76	95	101	200	323
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.97	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1870	1870	1870	1900	1900	1774	1939	1924
Adj Flow Rate, veh/h	243	1025	106	144	1633	80	141	97	92	109	215	347
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	2	2	2	0	0	11	0	1
Cap, veh/h	268	1422	147	395	1731	84	164	203	519	278	287	482
Arrive On Green	0.15	0.43	0.43	0.22	0.50	0.50	0.06	0.11	0.11	0.11	0.15	0.15
Sat Flow, veh/h	1781	3275	339	1810	3448	168	1781	1900	1565	1690	1939	1598
Grp Volume(v), veh/h	243	560	571	144	838	875	141	97	92	109	215	347
Grp Sat Flow(s),veh/h/ln	1781	1791	1822	1810	1777	1840	1781	1900	1565	1690	1939	1598
Q Serve(g_s), s	20.0	38.3	38.4	10.1	66.0	67.3	7.5	7.1	0.0	0.0	15.8	6.0
Cycle Q Clear(g_c), s	20.0	38.3	38.4	10.1	66.0	67.3	7.5	7.1	0.0	0.0	15.8	6.0
Prop In Lane	1.00		0.19	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	778	791	395	892	924	164	203	519	278	287	482
V/C Ratio(X)	0.91	0.72	0.72	0.36	0.94	0.95	0.86	0.48	0.18	0.39	0.75	0.72
Avail Cap(c_a), veh/h	479	1204	1225	395	896	927	252	358	646	292	365	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	34.7	34.7	49.4	34.9	35.2	67.3	62.6	35.9	57.9	60.7	46.5
Incr Delay (d2), s/veh	5.4	5.7	5.6	0.2	18.5	19.4	10.7	0.7	0.1	0.3	4.4	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	17.6	17.9	4.6	31.9	33.8	5.8	3.5	2.4	3.7	8.2	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.6	40.4	40.3	49.6	53.4	54.6	78.0	63.2	36.0	58.2	65.1	49.6
LnGrp LOS	E	D	D	D	D	D	E	E	D	E	E	D
Approach Vol, veh/h		1374			1857			330			671	
Approach Delay, s/veh		45.2			53.7			61.9			55.9	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	20.9	37.5	69.6	14.6	27.0	27.4	79.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	28.0	15.0	100.0	17.0	28.0	40.0	75.0
Max Q Clear Time (g_c+I1), s	2.0	9.1	12.1	40.4	9.5	17.8	22.0	69.3
Green Ext Time (p_c), s	0.2	0.4	0.1	24.2	0.1	1.1	0.4	5.4

Intersection Summary	
HCM 6th Ctrl Delay	51.9
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

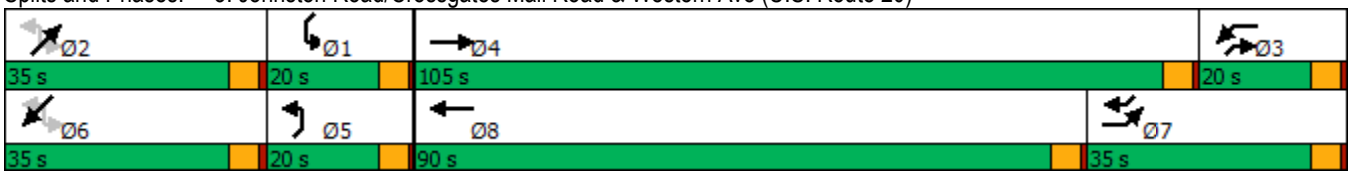
SATURDAY PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	176	944	92	72	897	86	132	100	76	80	85	169
Future Volume (vph)	176	944	92	72	897	86	132	100	76	80	85	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor							1.00					0.99
Frt		0.987			0.987			0.989	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3531	0	1805	3513	0	1787	1785	1534	1680	1909	1607
Flt Permitted	0.950			0.950			0.699			0.591		
Satd. Flow (perm)	1787	3531	0	1805	3513	0	1313	1785	1534	1045	1909	1585
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			8			2	73			135
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	1%	6%	1%	0%	0%	8%	0%	1%
Adj. Flow (vph)	183	983	96	75	934	90	138	104	79	83	89	176
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	183	1079	0	75	1024	0	138	112	71	83	89	176
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.64	0.61		0.35	0.64		0.46	0.50	0.14	0.43	0.48	0.34
Control Delay	56.5	21.3		53.8	24.7		44.4	54.0	7.5	47.1	60.6	11.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.5	21.3		53.8	24.7		44.4	54.0	7.5	47.1	60.6	11.6
Queue Length 50th (ft)	107	238		43	243		73	68	0	43	53	18
Queue Length 95th (ft)	255	469		123	480		173	167	35	112	145	90
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	543	3176		289	2904		435	544	497	357	580	636
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.34		0.26	0.35		0.32	0.21	0.14	0.23	0.15	0.28

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 105.5	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	176	944	92	72	897	86	132	100	76	80	85	169
Future Volume (veh/h)	176	944	92	72	897	86	132	100	76	80	85	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1885	1885	1885	1900	1900	1819	1939	1924
Adj Flow Rate, veh/h	183	983	96	75	934	90	138	104	79	83	89	176
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	0	1	1	1	0	0	8	0	1
Cap, veh/h	225	1732	169	159	1610	155	237	167	283	215	160	339
Arrive On Green	0.13	0.53	0.53	0.09	0.49	0.49	0.06	0.09	0.09	0.05	0.08	0.08
Sat Flow, veh/h	1795	3296	322	1810	3301	318	1795	1900	1605	1733	1939	1625
Grp Volume(v), veh/h	183	534	545	75	507	517	138	104	79	83	89	176
Grp Sat Flow(s),veh/h/ln	1795	1791	1827	1810	1791	1828	1795	1900	1605	1733	1939	1625
Q Serve(g_s), s	8.1	16.4	16.4	3.2	16.5	16.5	0.0	4.3	0.0	0.0	3.6	0.0
Cycle Q Clear(g_c), s	8.1	16.4	16.4	3.2	16.5	16.5	0.0	4.3	0.0	0.0	3.6	0.0
Prop In Lane	1.00		0.18	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	941	960	159	873	891	237	167	283	215	160	339
V/C Ratio(X)	0.81	0.57	0.57	0.47	0.58	0.58	0.58	0.62	0.28	0.39	0.56	0.52
Avail Cap(c_a), veh/h	662	2201	2245	334	1871	1909	462	700	733	442	715	804
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	13.1	13.1	35.3	14.9	14.9	35.6	35.8	29.1	36.0	35.9	28.6
Incr Delay (d2), s/veh	2.7	2.5	2.4	0.8	2.8	2.8	0.8	1.4	0.2	0.4	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	6.3	6.4	1.4	6.5	6.6	2.6	2.0	1.3	1.6	1.7	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	15.5	15.5	36.1	17.7	17.6	36.4	37.2	29.3	36.4	37.1	29.1
LnGrp LOS	D	B	B	D	B	B	D	D	C	D	D	C
Approach Vol, veh/h		1262			1099			321			348	
Approach Delay, s/veh		18.7			18.9			34.9			32.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	12.2	12.1	47.8	9.8	11.7	15.2	44.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.0	6.3	5.2	18.4	2.0	5.6	10.1	18.5
Green Ext Time (p_c), s	0.1	0.4	0.1	24.4	0.2	0.6	0.3	21.2

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Notes

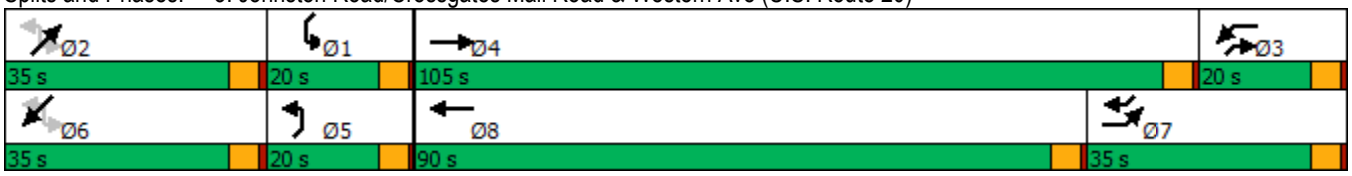
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	179	978	93	73	931	87	134	102	77	81	86	172
Future Volume (vph)	179	978	93	73	931	87	134	102	77	81	86	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor							1.00					0.99
Frt		0.987			0.987			0.989	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3531	0	1805	3513	0	1787	1785	1534	1680	1909	1607
Flt Permitted	0.950			0.950			0.692			0.568		
Satd. Flow (perm)	1787	3531	0	1805	3513	0	1300	1785	1534	1004	1909	1585
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			7			2	73			128
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	1%	6%	1%	0%	0%	8%	0%	1%
Adj. Flow (vph)	186	1019	97	76	970	91	140	106	80	84	90	179
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	186	1116	0	76	1061	0	140	114	72	84	90	179
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.65	0.62		0.36	0.65		0.47	0.51	0.14	0.45	0.49	0.36
Control Delay	58.4	21.5		55.8	25.1		46.6	56.3	8.0	50.1	62.9	13.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.4	21.5		55.8	25.1		46.6	56.3	8.0	50.1	62.9	13.2
Queue Length 50th (ft)	114	255		46	261		77	72	0	45	56	23
Queue Length 95th (ft)	266	497		128	512		181	174	37	116	152	102
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	525	3132		282	2829		424	526	490	343	560	620
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.36		0.27	0.38		0.33	0.22	0.15	0.24	0.16	0.29

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 109.1	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	179	978	93	73	931	87	134	102	77	81	86	172
Future Volume (veh/h)	179	978	93	73	931	87	134	102	77	81	86	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1885	1885	1885	1900	1900	1819	1939	1924
Adj Flow Rate, veh/h	186	1019	97	76	970	91	140	106	80	84	90	179
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	0	1	1	1	0	0	8	0	1
Cap, veh/h	227	1773	169	159	1647	154	229	167	283	206	159	339
Arrive On Green	0.13	0.54	0.54	0.09	0.50	0.50	0.06	0.09	0.09	0.05	0.08	0.08
Sat Flow, veh/h	1795	3305	314	1810	3310	310	1795	1900	1605	1733	1939	1625
Grp Volume(v), veh/h	186	552	564	76	525	536	140	106	80	84	90	179
Grp Sat Flow(s),veh/h/ln	1795	1791	1829	1810	1791	1829	1795	1900	1605	1733	1939	1625
Q Serve(g_s), s	8.5	17.4	17.5	3.4	17.6	17.6	0.3	4.6	0.0	0.0	3.8	0.0
Cycle Q Clear(g_c), s	8.5	17.4	17.5	3.4	17.6	17.6	0.3	4.6	0.0	0.0	3.8	0.0
Prop In Lane	1.00		0.17	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	960	981	159	891	910	229	167	283	206	159	339
V/C Ratio(X)	0.82	0.57	0.58	0.48	0.59	0.59	0.61	0.63	0.28	0.41	0.57	0.53
Avail Cap(c_a), veh/h	638	2120	2165	321	1802	1841	446	675	711	425	689	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	13.1	13.1	36.7	15.1	15.1	37.1	37.2	30.2	37.6	37.3	29.7
Incr Delay (d2), s/veh	2.8	2.5	2.5	0.8	2.9	2.8	1.0	1.5	0.2	0.5	1.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.7	6.8	1.5	7.0	7.1	2.8	2.1	1.4	1.7	1.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	15.6	15.6	37.5	17.9	17.9	38.1	38.7	30.4	38.1	38.5	30.2
LnGrp LOS	D	B	B	D	B	B	D	D	C	D	D	C
Approach Vol, veh/h		1302			1137			326			353	
Approach Delay, s/veh		18.9			19.2			36.4			34.2	
Approach LOS		B			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	12.4	12.4	50.3	9.8	11.9	15.7	47.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.0	6.6	5.4	19.5	2.3	5.8	10.5	19.6
Green Ext Time (p_c), s	0.1	0.4	0.1	25.8	0.2	0.6	0.3	22.4

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

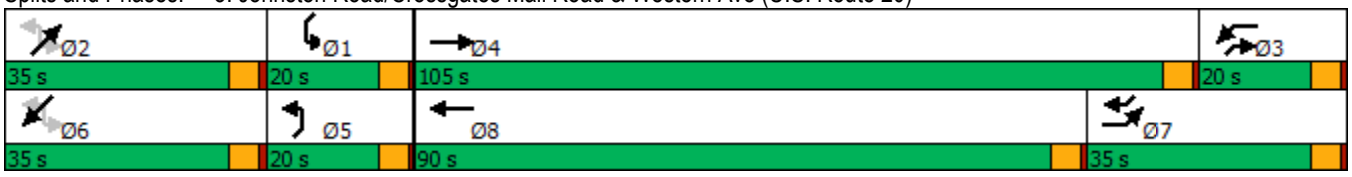
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	296	928	93	78	1003	140	134	102	77	89	81	169
Future Volume (vph)	296	928	93	78	1003	140	134	102	77	89	81	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor							1.00					0.99
Frt		0.986			0.982			0.989	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3527	0	1805	3489	0	1787	1785	1534	1680	1909	1607
Flt Permitted	0.950			0.950			0.648			0.451		
Satd. Flow (perm)	1787	3527	0	1805	3489	0	1217	1785	1534	797	1909	1585
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			12			2	73			113
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)							1					1
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	0%	0%	1%	6%	1%	0%	0%	8%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	308	967	97	81	1045	146	140	106	80	93	84	176
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	308	1064	0	81	1191	0	140	114	72	93	84	176
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.77	0.69		0.19	0.74		0.49	0.52	0.11	0.65	0.57	0.31
Control Delay	67.2	33.8		50.2	34.2		57.0	66.8	6.7	77.3	81.7	16.9
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.2	33.8		50.2	34.2		57.0	66.8	6.7	77.3	81.7	16.9
Queue Length 50th (ft)	241	354		54	410		105	95	0	68	69	35
Queue Length 95th (ft)	#570	561		133	626		199	194	36	141	157	124
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	400	2638		436	2220		357	401	658	250	427	562
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.40		0.19	0.54		0.39	0.28	0.11	0.37	0.20	0.31

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 138.4
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	296	928	93	78	1003	140	134	102	77	89	81	169
Future Volume (veh/h)	296	928	93	78	1003	140	134	102	77	89	81	169
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1885	1885	1885	1900	1900	1819	1939	1924
Adj Flow Rate, veh/h	308	967	97	81	1045	146	140	106	80	93	84	176
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	0	1	1	1	0	0	8	0	1
Cap, veh/h	341	1504	151	424	1583	221	195	155	508	161	139	427
Arrive On Green	0.19	0.46	0.46	0.23	0.50	0.50	0.05	0.08	0.08	0.04	0.07	0.07
Sat Flow, veh/h	1795	3287	330	1810	3156	440	1795	1900	1604	1733	1939	1624
Grp Volume(v), veh/h	308	527	537	81	592	599	140	106	80	93	84	176
Grp Sat Flow(s),veh/h/ln	1795	1791	1826	1810	1791	1806	1795	1900	1604	1733	1939	1624
Q Serve(g_s), s	18.3	24.6	24.6	3.9	26.9	26.9	2.2	5.9	0.0	0.2	4.6	0.0
Cycle Q Clear(g_c), s	18.3	24.6	24.6	3.9	26.9	26.9	2.2	5.9	0.0	0.2	4.6	0.0
Prop In Lane	1.00		0.18	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	341	819	835	424	898	906	195	155	508	161	139	427
V/C Ratio(X)	0.90	0.64	0.64	0.19	0.66	0.66	0.72	0.68	0.16	0.58	0.60	0.41
Avail Cap(c_a), veh/h	494	1643	1675	424	1397	1408	347	523	819	325	534	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	22.7	22.7	33.5	20.2	20.3	48.7	48.7	26.8	49.7	49.1	33.3
Incr Delay (d2), s/veh	11.8	3.9	3.8	0.1	3.8	3.8	1.9	2.0	0.1	1.2	1.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	10.7	10.8	1.7	11.4	11.5	3.8	2.9	1.5	2.5	2.3	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	26.6	26.5	33.5	24.0	24.0	50.6	50.6	26.9	50.9	50.7	33.5
LnGrp LOS	D	C	C	C	C	C	D	D	C	D	D	C
Approach Vol, veh/h		1372			1272			326			353	
Approach Delay, s/veh		32.9			24.6			44.8			42.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	13.9	30.5	54.9	10.8	12.8	25.7	59.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.2	7.9	5.9	26.6	4.2	6.6	20.3	28.9
Green Ext Time (p_c), s	0.1	0.4	0.1	23.2	0.2	0.6	0.5	25.7

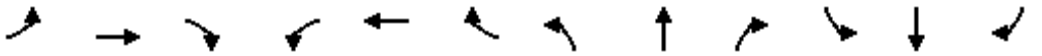
Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

INTERSECTION #9
Washington Avenue Extension
Springsteen Road / Crossgates Commons

WEEKDAY PEAK AM HOUR



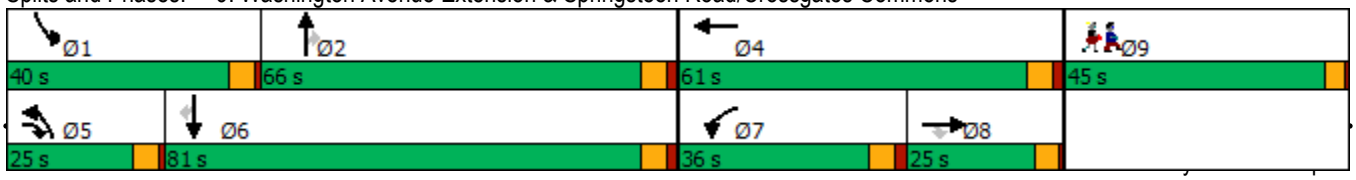
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	133	104	34	126	126	1117	131	125	1293	8
Future Volume (vph)	0	0	133	104	34	126	126	1117	131	125	1293	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.882				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1742	3240	1524	0	1761	4963	1435	1703	3505	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1715	3217	1524	0	1759	4963	1435	1703	3505	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			403		84				118			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	7%	6%	8%	2%	4%	12%	6%	3%	0%
Adj. Flow (vph)	0	0	143	112	37	135	135	1201	141	134	1390	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	143	112	172	0	135	1201	141	134	1390	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			14.9	12.8	12.8		14.9	73.5	73.5	14.8	73.5	73.5
Actuated g/C Ratio			0.12	0.10	0.10		0.12	0.59	0.59	0.12	0.59	0.59
v/c Ratio			0.25	0.34	0.74		0.65	0.41	0.16	0.67	0.68	0.01
Control Delay			1.1	57.0	49.2		70.5	19.2	6.4	71.9	24.3	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			1.1	57.0	49.2		70.5	19.2	6.4	71.9	24.3	0.0
LOS			A	E	D		E	B	A	E	C	A
Approach Delay		1.1			52.2			22.6			28.3	
Approach LOS		A			D			C			C	
Queue Length 50th (ft)			0	38	60		91	147	6	91	315	0
Queue Length 95th (ft)			0	97	192		#248	473	68	233	#998	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			625	808	742		293	2919	892	495	2186	1020
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.23	0.14	0.23		0.46	0.41	0.16	0.27	0.64	0.01

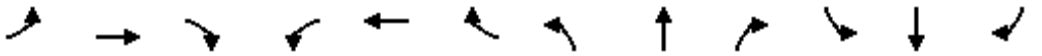
Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 125			
Natural Cycle: 135			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 26.7		Intersection LOS: C	
Intersection Capacity Utilization 66.7%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



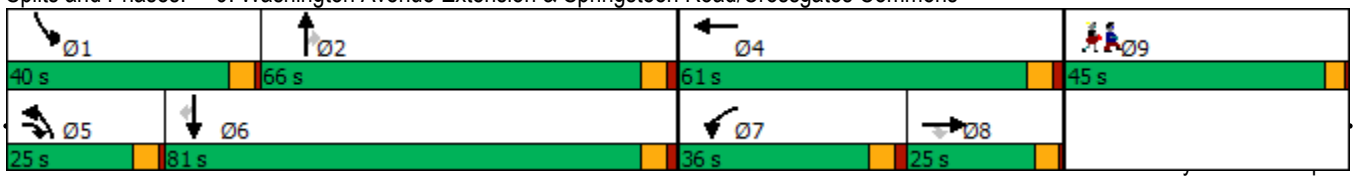
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	135	106	35	128	128	1134	133	127	1312	8
Future Volume (vph)	0	0	135	106	35	128	128	1134	133	127	1312	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.882				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1742	3240	1524	0	1761	4963	1435	1703	3505	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1715	3217	1524	0	1759	4963	1435	1703	3505	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			401		83				118			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	7%	6%	8%	2%	4%	12%	6%	3%	0%
Adj. Flow (vph)	0	0	145	114	38	138	138	1219	143	137	1411	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	145	114	176	0	138	1219	143	137	1411	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			15.3	13.2	13.2		15.3	74.8	74.8	15.0	74.5	74.5
Actuated g/C Ratio			0.12	0.10	0.10		0.12	0.59	0.59	0.12	0.59	0.59
v/c Ratio			0.26	0.34	0.76		0.65	0.42	0.16	0.68	0.69	0.01
Control Delay			1.1	57.6	51.5		71.3	19.5	6.6	73.6	24.7	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			1.1	57.6	51.5		71.3	19.5	6.6	73.6	24.7	0.0
LOS			A	E	D		E	B	A	E	C	A
Approach Delay		1.1			53.9			23.0			28.9	
Approach LOS		A			D			C			C	
Queue Length 50th (ft)			0	40	66		97	153	7	97	332	0
Queue Length 95th (ft)			0	98	200		#260	488	72	239	#1032	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			620	794	730		287	2925	894	487	2148	1004
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.23	0.14	0.24		0.48	0.42	0.16	0.28	0.66	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 126.9			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 67.5%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

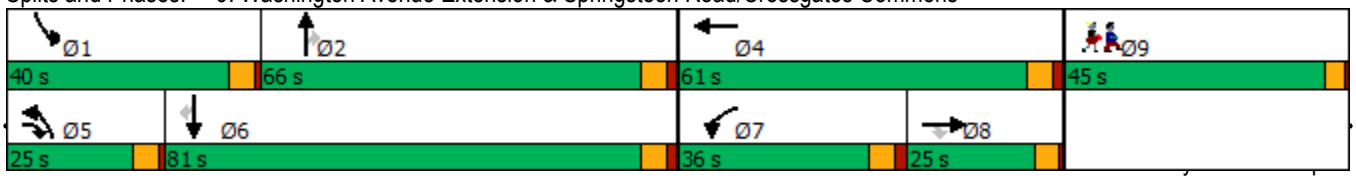
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	135	106	35	128	128	1140	133	127	1320	8
Future Volume (vph)	0	0	135	106	35	128	128	1140	133	127	1320	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.882				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1742	3240	1524	0	1761	4963	1435	1703	3505	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1715	3217	1524	0	1759	4963	1435	1703	3505	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			401		83				118			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	7%	6%	8%	2%	4%	12%	6%	3%	0%
Adj. Flow (vph)	0	0	145	114	38	138	138	1226	143	137	1419	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	145	114	176	0	138	1226	143	137	1419	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			15.3	13.1	13.1		15.3	75.1	75.1	15.0	74.9	74.9
Actuated g/C Ratio			0.12	0.10	0.10		0.12	0.59	0.59	0.12	0.59	0.59
v/c Ratio			0.26	0.34	0.76		0.65	0.42	0.16	0.68	0.69	0.01
Control Delay			1.1	57.8	51.8		71.6	19.5	6.5	74.0	24.7	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			1.1	57.8	51.8		71.6	19.5	6.5	74.0	24.7	0.0
LOS			A	E	D		E	B	A	E	C	A
Approach Delay		1.1			54.2			23.0			28.9	
Approach LOS		A			D			C			C	
Queue Length 50th (ft)			0	40	67		98	155	7	98	335	0
Queue Length 95th (ft)			0	98	200		#260	491	72	239	#1044	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			619	792	728		286	2931	895	485	2142	1001
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.23	0.14	0.24		0.48	0.42	0.16	0.28	0.66	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 127.2			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

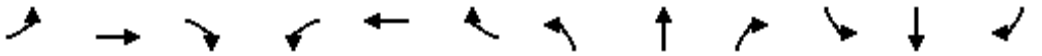
Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

WEEKDAY PEAK PM HOUR



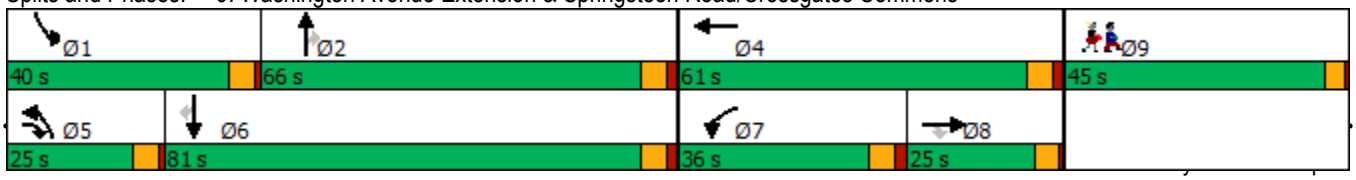
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	181	286	53	251	173	1355	343	234	1337	5
Future Volume (vph)	0	0	181	286	53	251	173	1355	343	234	1337	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.876				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1759	3333	1613	0	1796	5110	1560	1787	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1732	3310	1613	0	1795	5110	1560	1787	3574	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			332		109				180			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	0%	1%	0%	1%	3%	1%	1%	0%
Adj. Flow (vph)	0	0	193	304	56	267	184	1441	365	249	1422	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	193	304	323	0	184	1441	365	249	1422	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			20.6	25.2	25.2		20.6	73.3	73.3	24.6	77.2	77.2
Actuated g/C Ratio			0.14	0.17	0.17		0.14	0.50	0.50	0.17	0.52	0.52
v/c Ratio			0.36	0.53	0.88		0.73	0.57	0.42	0.84	0.76	0.01
Control Delay			1.9	59.4	64.7		79.2	32.3	17.7	84.3	33.7	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			1.9	59.4	64.7		79.2	32.3	17.7	84.3	33.7	0.0
LOS			A	E	E		E	C	B	F	C	A
Approach Delay		1.9			62.1			33.9			41.2	
Approach LOS		A			E			C			D	
Queue Length 50th (ft)			0	126	191		156	296	88	213	470	0
Queue Length 95th (ft)			0	234	405		#446	#786	345	#463	#1240	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			531	751	688		251	2545	867	437	1876	873
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.36	0.40	0.47		0.73	0.57	0.42	0.57	0.76	0.01

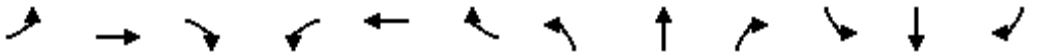
Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 147.1			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 39.2		Intersection LOS: D	
Intersection Capacity Utilization 79.2%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	184	290	54	255	176	1375	348	238	1357	5
Future Volume (vph)	0	0	184	290	54	255	176	1375	348	238	1357	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.876				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1759	3333	1613	0	1796	5110	1560	1787	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1732	3310	1613	0	1795	5110	1560	1787	3574	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			331		109				180			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	0%	1%	0%	1%	3%	1%	1%	0%
Adj. Flow (vph)	0	0	196	309	57	271	187	1463	370	253	1444	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	196	309	328	0	187	1463	370	253	1444	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

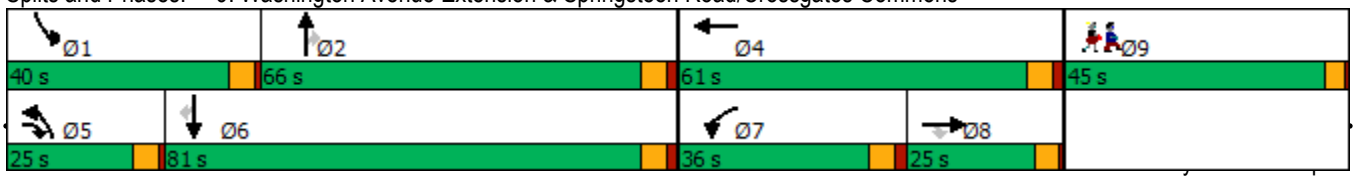
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			20.6	25.8	25.8		20.6	72.7	72.7	25.1	77.3	77.3
Actuated g/C Ratio			0.14	0.17	0.17		0.14	0.49	0.49	0.17	0.52	0.52
v/c Ratio			0.37	0.53	0.88		0.75	0.58	0.43	0.83	0.77	0.01
Control Delay			2.0	59.2	65.1		80.5	33.0	18.4	83.6	34.4	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			2.0	59.2	65.1		80.5	33.0	18.4	83.6	34.4	0.0
LOS			A	E	E		F	C	B	F	C	A
Approach Delay		2.0			62.2			34.7			41.7	
Approach LOS		A			E			C			D	
Queue Length 50th (ft)			0	129	197		159	309	93	216	487	0
Queue Length 95th (ft)			0	237	414		#460	#815	358	#481	#1282	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			530	752	686		250	2516	859	436	1869	870
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.37	0.41	0.48		0.75	0.58	0.43	0.58	0.77	0.01

Intersection Summary

Area Type: Other
Cycle Length: 212
Actuated Cycle Length: 147.7
Natural Cycle: 145
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 39.7 Intersection LOS: D
Intersection Capacity Utilization 80.3% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

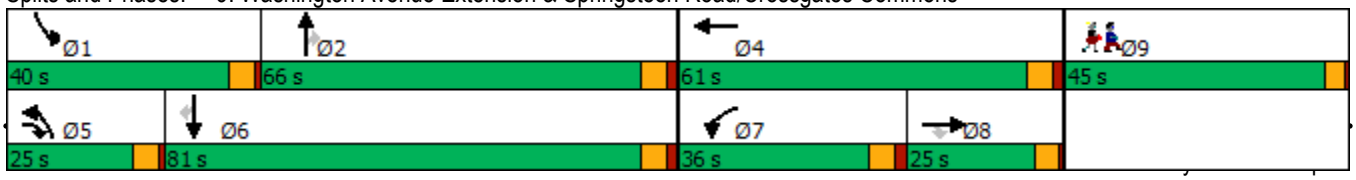
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	184	290	54	255	176	1390	348	238	1372	5
Future Volume (vph)	0	0	184	290	54	255	176	1390	348	238	1372	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.876				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1759	3333	1613	0	1796	5110	1560	1787	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1732	3310	1613	0	1795	5110	1560	1787	3574	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			331		109				178			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	0%	1%	0%	1%	3%	1%	1%	0%
Adj. Flow (vph)	0	0	196	309	57	271	187	1479	370	253	1460	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	196	309	328	0	187	1479	370	253	1460	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			20.6	25.8	25.8		20.6	72.7	72.7	25.1	77.3	77.3
Actuated g/C Ratio			0.14	0.17	0.17		0.14	0.49	0.49	0.17	0.52	0.52
v/c Ratio			0.37	0.53	0.88		0.75	0.59	0.43	0.83	0.78	0.01
Control Delay			2.0	59.2	65.1		80.5	33.0	18.5	83.6	34.7	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			2.0	59.2	65.1		80.5	33.0	18.5	83.6	34.7	0.0
LOS			A	E	E		F	C	B	F	C	A
Approach Delay		2.0			62.2			34.8			41.8	
Approach LOS		A			E			C			D	
Queue Length 50th (ft)			0	129	197		159	313	94	216	496	0
Queue Length 95th (ft)			0	237	414		#460	#831	360	#481	#1305	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			530	752	686		250	2516	858	436	1869	870
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.37	0.41	0.48		0.75	0.59	0.43	0.58	0.78	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 147.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 39.8		Intersection LOS: D	
Intersection Capacity Utilization 80.7%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

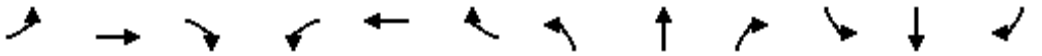
Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

SATURDAY PEAK HOUR



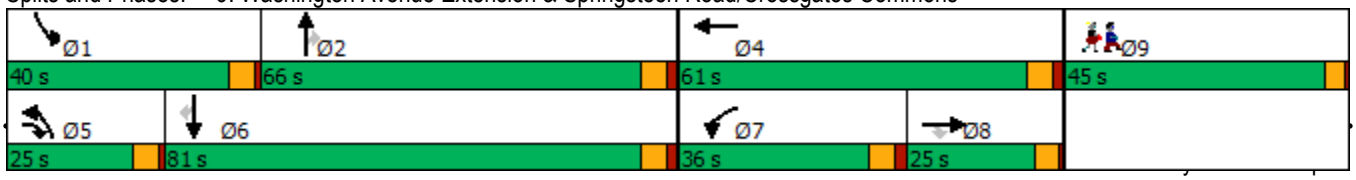
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	82	403	51	356	70	522	455	389	563	5
Future Volume (vph)	0	0	82	403	51	356	70	522	455	389	563	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99								
Frt			0.850		0.869				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1777	3432	1620	0	1796	5060	1591	1805	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1750	3408	1620	0	1796	5060	1591	1805	3574	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			384		159				469			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	2%	1%	0%	1%	0%
Adj. Flow (vph)	0	0	85	415	53	367	72	538	469	401	580	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	85	415	420	0	72	538	469	401	580	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			9.8	25.4	25.4		9.8	32.1	32.1	36.9	59.2	59.2
Actuated g/C Ratio			0.08	0.21	0.21		0.08	0.27	0.27	0.31	0.50	0.50
v/c Ratio			0.17	0.56	0.89		0.49	0.39	0.61	0.71	0.32	0.01
Control Delay			0.7	44.8	49.7		68.9	40.0	8.0	46.9	24.4	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			0.7	44.8	49.7		68.9	40.0	8.0	46.9	24.4	0.0
LOS			A	D	D		E	D	A	D	C	A
Approach Delay		0.7			47.3			28.0			33.5	
Approach LOS		A			D			C			C	
Queue Length 50th (ft)			0	128	177		47	105	0	229	108	0
Queue Length 95th (ft)			0	267	441		142	260	115	#778	374	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			632	991	875		320	2705	1069	563	2388	1110
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.13	0.42	0.48		0.23	0.20	0.44	0.71	0.24	0.00

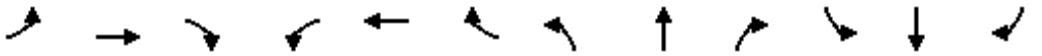
Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 118.2			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 34.4		Intersection LOS: C	
Intersection Capacity Utilization 85.4%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



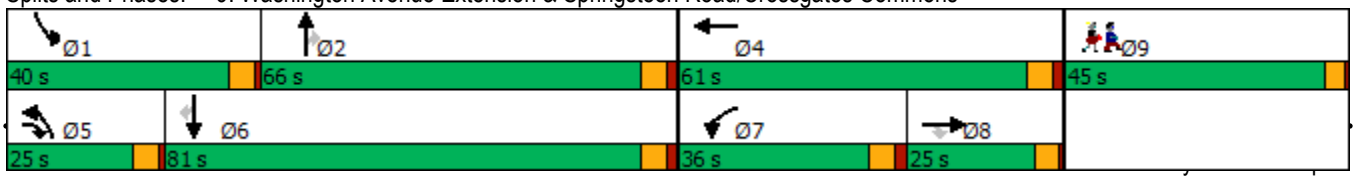
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	83	409	52	361	71	530	462	395	571	5
Future Volume (vph)	0	0	83	409	52	361	71	530	462	395	571	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99								
Frt			0.850		0.869				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1777	3432	1620	0	1796	5060	1591	1805	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1750	3408	1620	0	1796	5060	1591	1805	3574	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			381		158				476			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	2%	1%	0%	1%	0%
Adj. Flow (vph)	0	0	86	422	54	372	73	546	476	407	589	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	86	422	426	0	73	546	476	407	589	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			9.9	26.2	26.2		9.9	32.1	32.1	36.9	59.2	59.2
Actuated g/C Ratio			0.08	0.22	0.22		0.08	0.27	0.27	0.31	0.50	0.50
v/c Ratio			0.17	0.56	0.89		0.49	0.40	0.61	0.73	0.33	0.01
Control Delay			0.8	44.6	50.0		69.5	40.5	8.1	47.9	24.9	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			0.8	44.6	50.0		69.5	40.5	8.1	47.9	24.9	0.0
LOS			A	D	D		E	D	A	D	C	A
Approach Delay		0.8			47.3			28.3			34.1	
Approach LOS		A			D			C			C	
Queue Length 50th (ft)			0	130	183		48	108	0	235	112	0
Queue Length 95th (ft)			0	271	452		145	266	117	#806	385	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			628	990	870		318	2688	1068	559	2374	1104
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.14	0.43	0.49		0.23	0.20	0.45	0.73	0.25	0.00

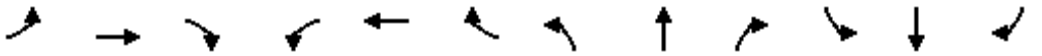
Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 119			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 34.8		Intersection LOS: C	
Intersection Capacity Utilization 86.1%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	83	409	52	361	71	551	462	395	591	5
Future Volume (vph)	0	0	83	409	52	361	71	551	462	395	591	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99								
Frt			0.850		0.869				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1777	3432	1620	0	1796	5060	1591	1805	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1750	3408	1620	0	1796	5060	1591	1805	3574	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			377		158				476			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)												
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	2%	1%	0%	1%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Adj. Flow (vph)	0	0	86	422	54	372	73	568	476	407	609	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	86	422	426	0	73	568	476	407	609	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												

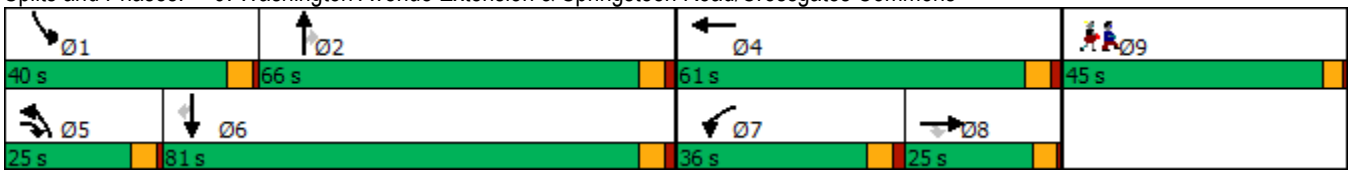
Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	
Growth Factor	
Heavy Vehicles (%)	
Bus Blockages (#/hr)	
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Turn Type	
Protected Phases	9
Permitted Phases	
Detector Phase	
Switch Phase	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			9.9	26.3	26.3		9.9	32.3	32.3	37.0	59.4	59.4
Actuated g/C Ratio			0.08	0.22	0.22		0.08	0.27	0.27	0.31	0.50	0.50
v/c Ratio			0.17	0.56	0.89		0.49	0.41	0.61	0.73	0.34	0.01
Control Delay			0.8	44.6	50.0		69.7	40.7	8.0	48.1	25.1	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			0.8	44.6	50.0		69.7	40.7	8.0	48.1	25.1	0.0
LOS			A	D	D		E	D	A	D	C	A
Approach Delay		0.8			47.3			28.7			34.1	
Approach LOS		A			D			C			C	
Queue Length 50th (ft)			0	130	183		48	113	0	235	116	0
Queue Length 95th (ft)			0	273	455		146	278	117	#813	400	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			624	990	868		317	2685	1067	558	2371	1102
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.14	0.43	0.49		0.23	0.21	0.45	0.73	0.26	0.00

Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 119.4			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 34.9		Intersection LOS: C	
Intersection Capacity Utilization 86.1%		ICU Level of Service E	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

LEVEL OF SERVICE STANDARDS

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.

LOS D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.

LOS E describes operations with control delay between 55 and 80 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long.

LOS F describes operations with control delay exceeding 80 s/veh or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long.

A lane group can incur a delay less than 80 s/veh when the volume-to-capacity ratio exceeds 1.0. This condition typically occurs when the cycle length is short, the signal progression is favorable, or both. As a result, both the delay and volume-to-capacity ratio are considered when lane group LOS is established. A ratio of 1.0 or more indicates that cycle capacity is fully utilized and represents failure from a capacity perspective (just as delay in excess of 80 s/veh represents failure from a delay perspective).

The Level of Service Criteria for signalized intersections are given in Exhibit 18-4 from the *2010 Highway Capacity Manual* published by the Transportation Research Board.

Exhibit 18-4

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

For approach-based and intersection wide assessments, LOS is defined solely by control delay.

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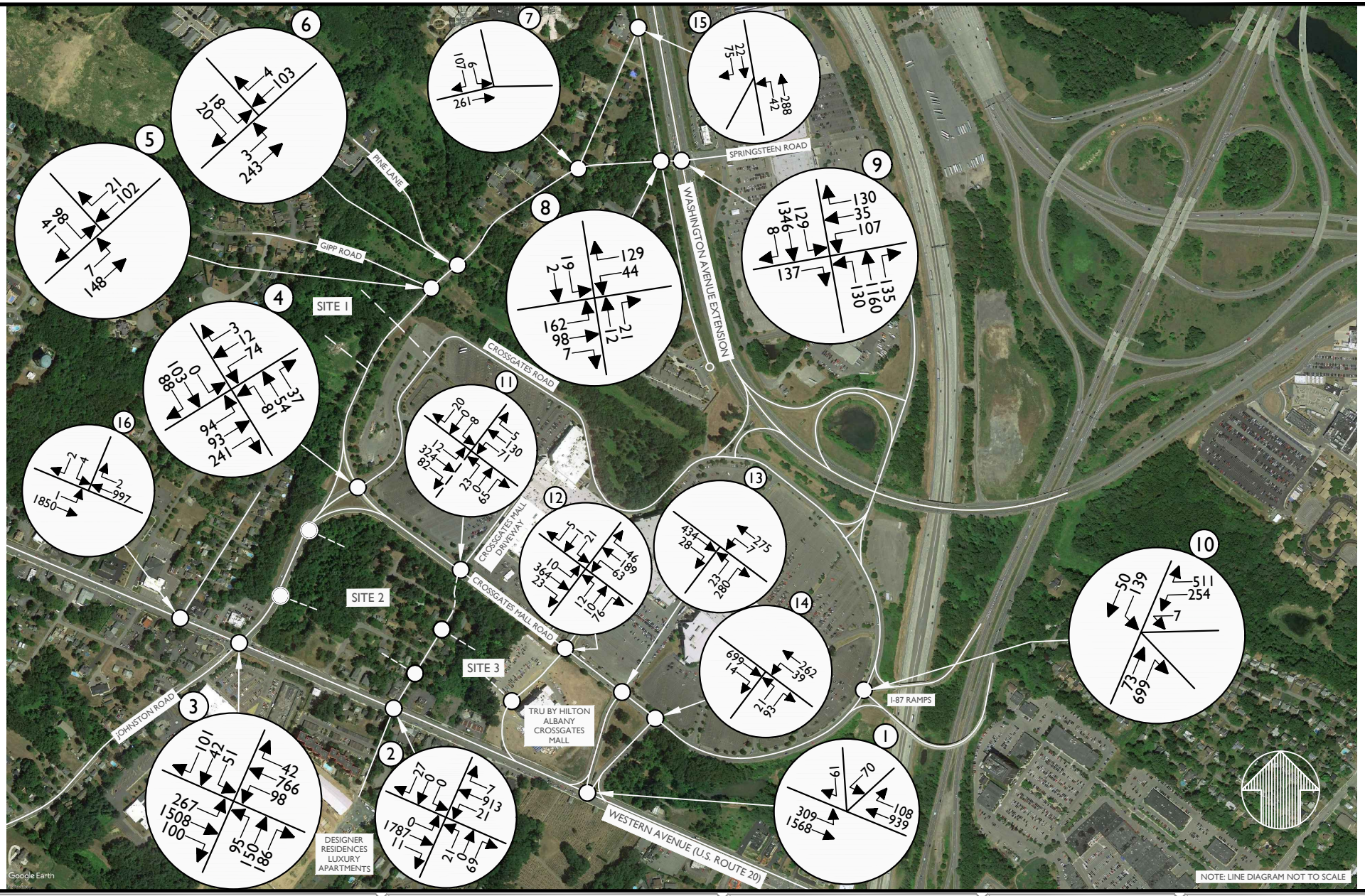
ATTACHMENT B

UPDATED YEAR 2025 ANALYSIS

- INTERSECTION #1
Western Avenue & Crossgates Mall Driveway

- INTERSECTION #3
Western Avenue & Johnston Road / Rapp Road

- INTERSECTION #9
Washington Avenue Extension
Springsteen Road / Crossgates Commons



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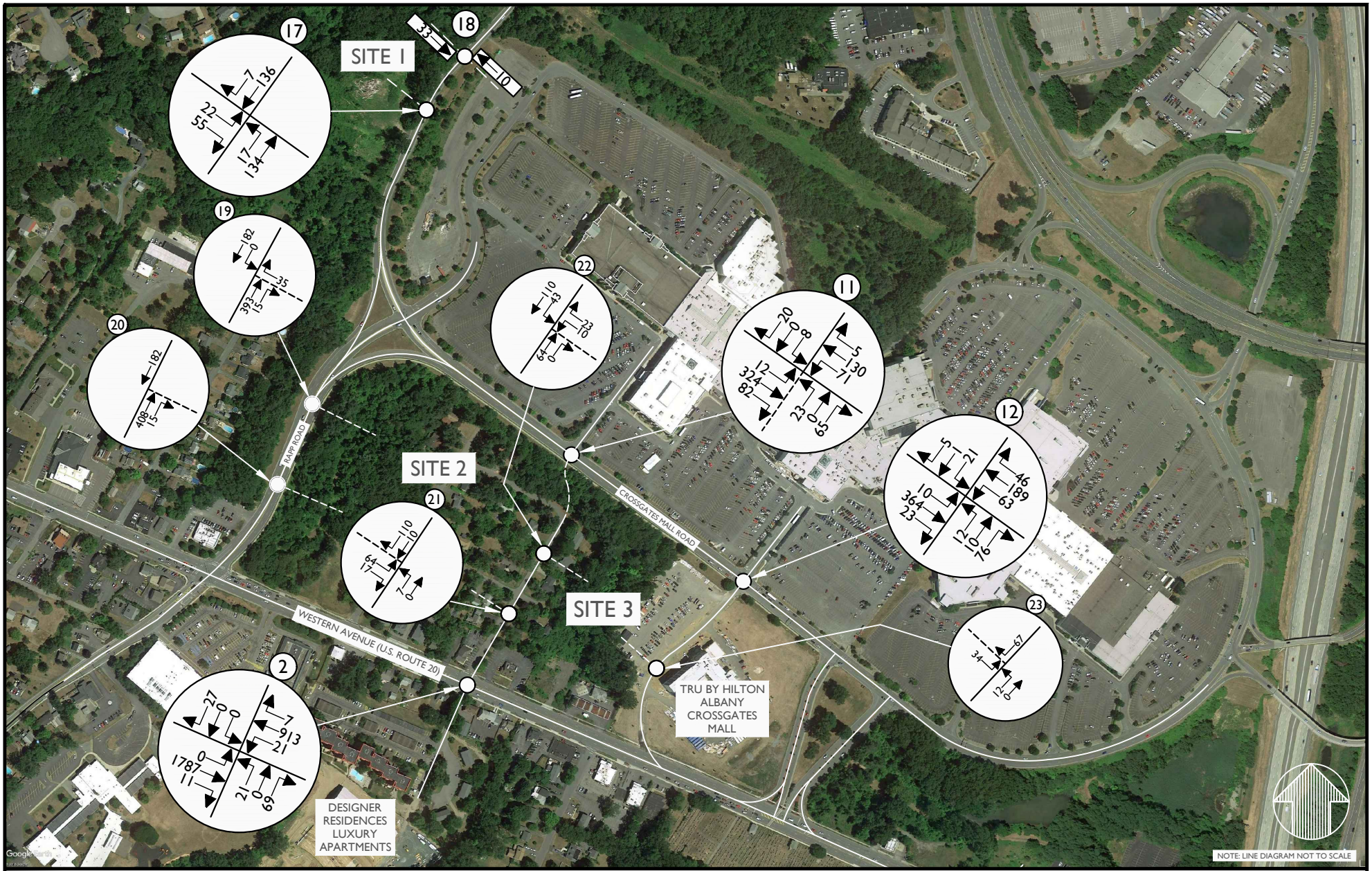
SCALE:	DATE:	DRAWN BY:	CHECKED BY:
N.T.S.	06/29/20	N.S.T.	R.P.R.

PROJECT NUMBER: 19002502A
DRAWING NAME: FIGURES - PHASE 2 - 02.17.2020 - 04.08.2020 - 06.29.2020

SHEET TITLE:
2025 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
FIGURE NO. 38



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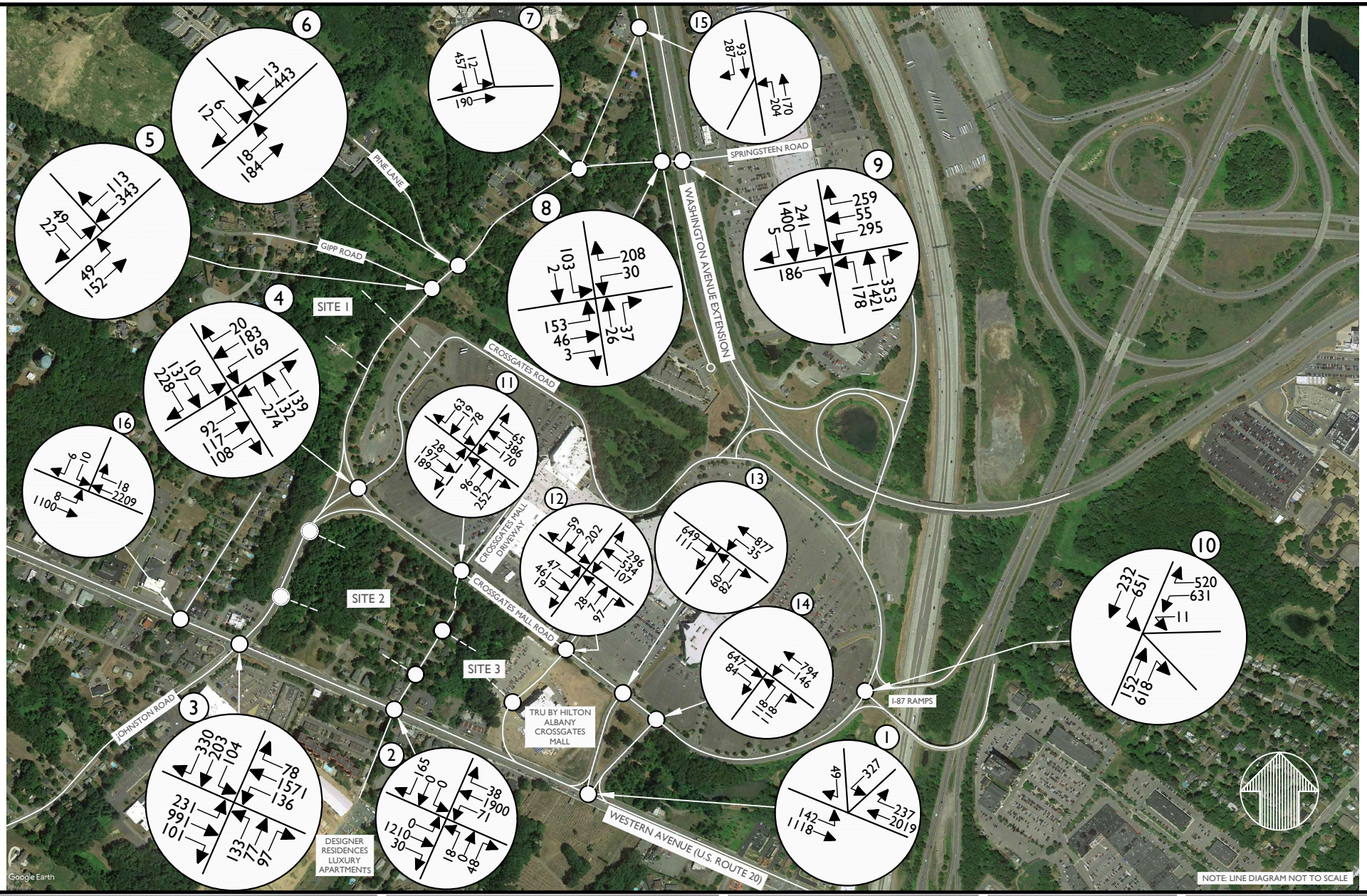
PROJECT NUMBER: 19002502A
DRAWING NAME: I:\19002\FIGURES - PHASE 2 - 02.17.2020 - 04.08.2020 - 06.29.2020

SHEET TITLE:
2025 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK AM HOUR

SHEET NUMBER:
FIGURE NO. 38-A



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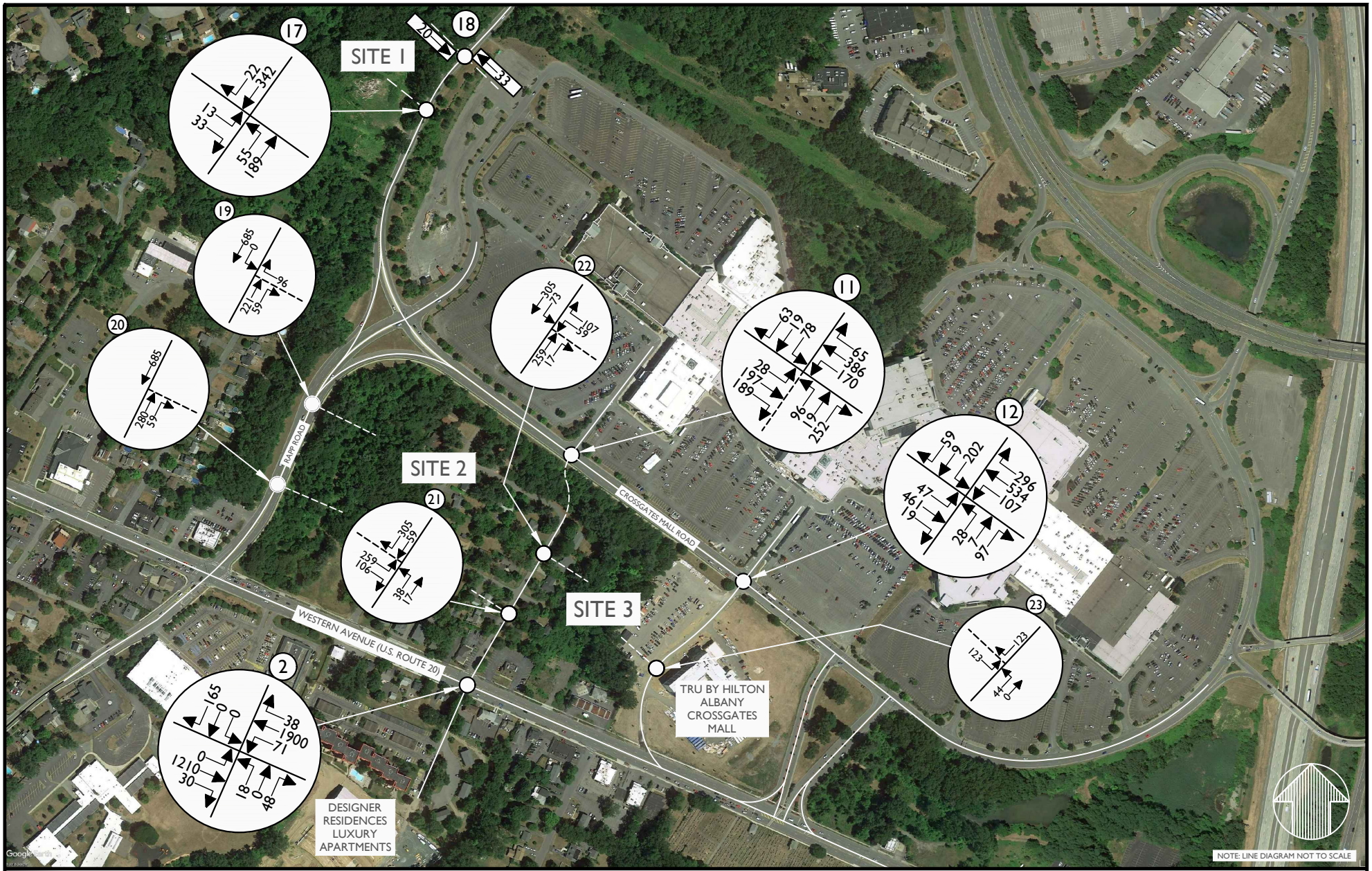
SHEET TITLE:
2025 BUILD TRAFFIC VOLUMES
WEEKDAY PEAK PM HOUR

SHEET NUMBER:
FIGURE NO. 39



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WEEKDAY PEAK PM HOUR

SHEET NUMBER:
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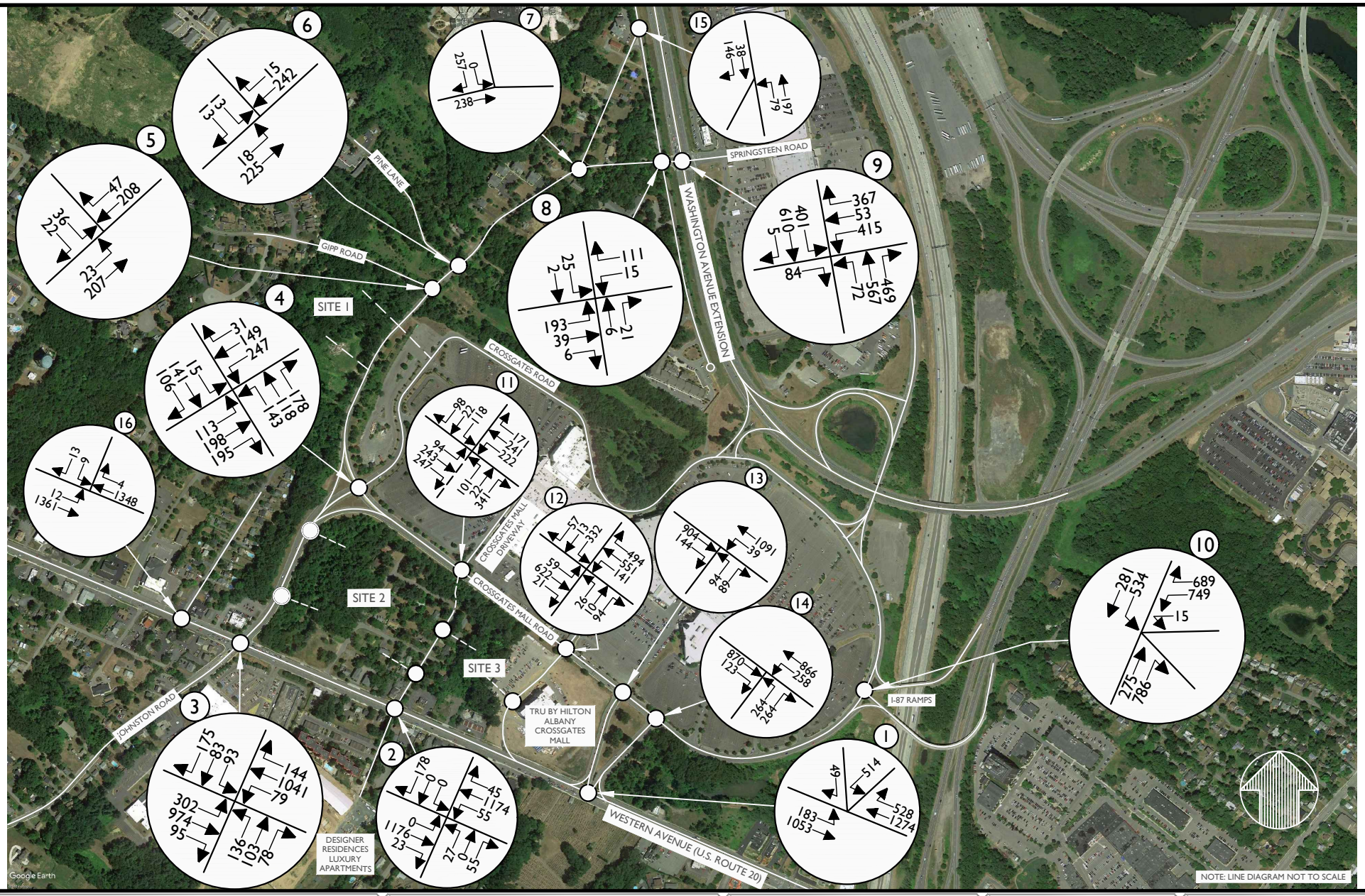

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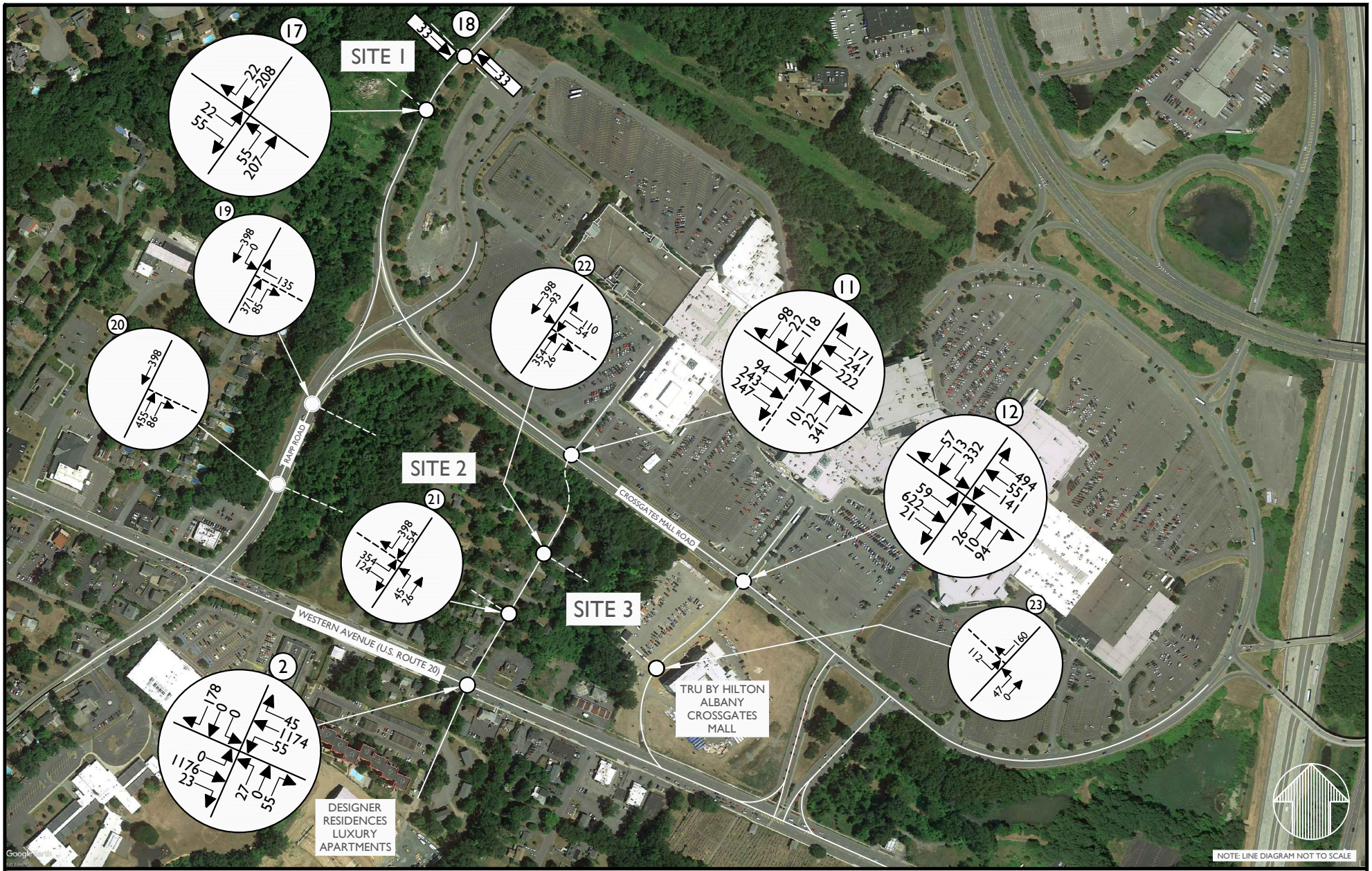
SHEET TITLE:

2025 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:

FIGURE NO. 40



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SHEET TITLE:
2025 BUILD TRAFFIC VOLUMES
SATURDAY PEAK HOUR

SHEET NUMBER:
FIGURE NO. 40-A

TABLE NO. 5

HOURLY TRIP GENERATION RATES
AND ANTICIPATED SITE GENERATED TRAFFIC VOLUMES

SITE 3 POTENTAIL WESTERN AVENUE MIXED-USE DEVELOPMENT	ENTRY		EXIT		TOTAL	
	HTGR*	VOLUME	HTGR*	VOLUME	HTGR*	VOLUME
RETAIL - 115,000 S.F						
WEEKDAY PEAK AM HOUR	0.58	67	0.36	42	0.94	109
WEEKDAY PEAK PM HOUR	1.83	211	1.98	228	3.81	439
SATURDAY PEAK HOUR	2.34	270	2.16	249	4.50	519
OFFICE - 50,000 S.F.						
WEEKDAY PEAK AM HOUR	1.00	50	0.16	8	1.16	58
WEEKDAY PEAK PM HOUR	0.18	9	0.97	49	1.15	58
SATURDAY PEAK HOUR	0.29	15	0.24	12	0.53	27
RESIDENTIAL - 48 UNITS						
WEEKDAY PEAK AM HOUR	0.11	5	0.35	17	0.46	22
WEEKDAY PEAK PM HOUR	0.35	17	0.21	10	0.56	27
SATURDAY PEAK HOUR	0.35	17	0.35	17	0.70	34
W/ 10% INTERPLAY W/ MALL						
WEEKDAY PEAK AM HOUR	----	----	----	----	----	----
WEEKDAY PEAK PM HOUR	----	-26	----	-26	----	-52
SATURDAY PEAK HOUR	----	-29	----	-29	----	-58
W/ 25 % RETAIL PASS-BY						
WEEKDAY PEAK AM HOUR	----	----	----	----	----	----
WEEKDAY PEAK PM HOUR	----	-55	----	-55	----	-110
SATURDAY PEAK HOUR	----	-65	----	-65	----	-130
"NEW' TRIPS						
WEEKDAY PEAK AM HOUR	**----**	**122**	**----**	**67**	**----**	**189**
WEEKDAY PEAK PM HOUR	**----**	**156**	**----**	**206**	**----**	**362**
SATURDAY PEAK HOUR	**----**	**208**	**----**	**184**	**----**	**392**

THE ABOVE HOURLY TRIP GENERATION RATES (HTGR) ARE BASED ON DATA PUBLISHED BY THE
INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) AS CONTAINED IN THE TRIP GENERATION HANDBOOK, 10th EDITION, 2017.
* ITE LAND USE 820 - SHOPPING CENTER; ITE LAND USE 710 - OFFICE; ITE LAND USE 220 - MULTIFAMILY HOUSING

TABLE NO. 6

LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2025 NO-BUILD									YEAR 2025 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
1	WESTERN AVENUE (U.S. ROUTE 20) & CROSSGATES MALL DRIVEWAY																			
	SIGNALIZED (COUPLET)																			
	EAST LEG																			
	WESTERN AVENUE (U.S. ROUTE 20)	EB T / T	A	1.4	0.61	A	1.1	0.46	A	1.2	0.46	A	1.4	0.61	A	1.1	0.46	A	1.2	0.45
		EB APPROACH	**A**	**1.4**	**----**	**A**	**1.1**	**----**	**A**	**1.2**	**----**	**A**	**1.4**	**----**	**A**	**1.1**	**----**	**A**	**1.2**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / TR	A	7.7	0.37	B	18.7	0.82	B	16.0	0.70	A	8.0	0.37	B	19.9	0.84	B	16.5	0.71
		WB APPROACH	**A**	**7.7**	**----**	**B**	**18.7**	**----**	**B**	**16.0**	**----**	**A**	**8.0**	**----**	**B**	**19.9**	**----**	**B**	**16.5**	**----**
	CROSSGATES MALL DRIVEWAY	SB L / L	D	48.1	0.21	D	49.0	0.65	E	56.2	0.84	D	47.9	0.23	D	50.1	0.70	E	61.6	0.89
		SB APPROACH	**D**	**48.1**	**----**	**D**	**49.0**	**----**	**E**	**56.2**	**----**	**D**	**47.9**	**----**	**D**	**50.1**	**----**	**E**	**61.6**	**----**
	OVERALL INTERSECTION		**A**	**4.9**	**----**	**B**	**15.7**	**----**	**B**	**16.9**	**----**	**A**	**5.2**	**----**	**B**	**16.9**	**----**	**B**	**18.6**	**----**
	WEST LEG																			
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	A	2.0	0.43	A	6.8	0.19	A	0.7	0.19	A	2.8	0.46	B	11.2	0.26	A	2.5	0.27
		EB T / T	A	4.6	0.59	A	5.4	0.46	A	6.7	0.46	A	4.8	0.59	A	5.7	0.46	A	6.8	0.45
		EB APPROACH	**A**	**4.2**	**----**	**A**	**5.5**	**----**	**A**	**6.1**	**----**	**A**	**4.5**	**----**	**A**	**6.3**	**----**	**A**	**6.2**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / T	A	1.5	0.29	A	2.5	0.70	A	2.6	0.46	A	1.5	0.30	A	2.6	0.71	A	2.7	0.47
		WB APPROACH	**A**	**1.5**	**----**	**A**	**2.5**	**----**	**A**	**2.6**	**----**	**A**	**1.5**	**----**	**A**	**2.6**	**----**	**A**	**2.7**	**----**
	CROSSGATES MALL DRIVEWAY	SB R	A	0.0	0.01	A	0.0	0.03	A	0.0	0.03	A	0.0	0.01	A	0.0	0.03	A	0.0	0.03
		SB APPROACH	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**	**A**	**0.0**	**----**
	OVERALL INTERSECTION		**A**	**3.3**	**----**	**A**	**3.6**	**----**	**A**	**4.2**	**----**	**A**	**3.5**	**----**	**A**	**4.0**	**----**	**A**	**4.3**	**----**
	W/ TIMING IMPROVEMENTS																			
	EAST LEG																			
	WESTERN AVENUE (U.S. ROUTE 20)	EB T / T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	1.3	0.46
		EB APPROACH	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	**A**	**1.3**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / TR	-	----	**----**	**-**	**----**	----	**-**	**----**	----	-	----	**----**	**-**	**----**	----	B	17.8	0.73
		WB APPROACH	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	**B**	**17.8**	**----**
	CROSSGATES MALL DRIVEWAY	SB L / L	-	----	**----**	**-**	**----**	----	**-**	**----**	----	-	----	**----**	**-**	**----**	----	D	54.3	0.84
		SB APPROACH	**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	**D**	**54.3**	**----**
	OVERALL INTERSECTION		**-**	**----**	----	-	----	**----**	-	----	**----**	**-**	**----**	----	-	----	**----**	**B**	**18.2**	**----**
	WEST LEG																			
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	2.5	0.26
		EB T / T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	7.5	0.46
		EB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**6.7**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB T / T / T	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	2.8	0.48
		WB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**2.8**	**----**
	CROSSGATES MALL DRIVEWAY	SB R	-	----	----	-	----	----	-	----	----	-	----	----	-	----	----	A	0.0	0.03
		SB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**0.0**	**----**
	OVERALL INTERSECTION		**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**A**	**4.6**	**----**

TABLE NO. 6

LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2025 NO-BUILD									YEAR 2025 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
3	WESTERN AVENUE (U.S. ROUTE 20) & JOHNSTON ROAD / RAPP ROAD																			
	SIGNALIZED																			
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	D	39.5	0.49	F	92.4	0.92	E	55.3	0.90	D	40.1	0.49	F	94.9	0.92	E	59.7	0.91
		EB T	C	29.2	0.81	D	45.7	0.74	C	26.3	0.64	C	29.8	0.82	D	45.6	0.75	C	26.9	0.65
		EB T-R	C	30.0	0.83	D	45.6	0.75	C	26.2	0.64	C	30.6	0.83	D	45.5	0.75	C	26.8	0.65
		EB APPROACH	**C**	**31.0**	**----**	**D**	**53.7**	**----**	**C**	**32.7**	**----**	**C**	**31.7**	**----**	**D**	**54.1**	**----**	**C**	**34.1**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB L	F	95.2	0.85	D	51.8	0.34	C	34.3	0.20	F	96.0	0.85	D	53.1	0.35	D	35.5	0.20
		WB T	D	52.8	0.75	D	51.9	0.92	C	24.1	0.66	D	52.7	0.75	E	57.2	0.95	C	24.9	0.67
		WB T-R	D	52.5	0.75	D	52.9	0.93	C	24.1	0.66	D	52.5	0.75	E	58.9	0.96	C	25.0	0.68
		WB APPROACH	**E**	**57.3**	**----**	**D**	**52.4**	**----**	**C**	**24.7**	**----**	**E**	**57.3**	**----**	**E**	**57.7**	**----**	**C**	**25.6**	**----**
	JOHNSTON ROAD	NEB L	E	62.9	0.44	F	96.5	0.87	D	51.2	0.74	E	63.2	0.44	F	98.0	0.87	D	53.7	0.76
		NEB T-R	E	66.1	0.74	E	69.4	0.49	D	51.0	0.69	E	66.6	0.74	E	70.2	0.49	D	53.1	0.69
		NEB R	D	53.5	0.56	D	37.4	0.17	C	27.5	0.16	D	53.8	0.56	D	38.5	0.17	C	28.5	0.16
		NEB APPROACH	**E**	**60.6**	**----**	**E**	**72.0**	**----**	**D**	**45.3**	**----**	**E**	**61.0**	**----**	**E**	**73.1**	**----**	**D**	**47.3**	**----**
	RAPP ROAD	SWB L	E	75.0	0.61	E	63.7	0.40	D	51.3	0.58	E	77.0	0.64	E	64.4	0.41	D	57.0	0.62
		SWB T	E	65.4	0.27	E	72.6	0.77	D	50.9	0.61	E	65.8	0.27	E	73.8	0.77	D	53.0	0.62
		SWB R	C	25.9	0.15	E	56.1	0.75	C	33.8	0.42	C	26.4	0.16	E	56.1	0.74	C	34.9	0.42
		SWB APPROACH	**D**	**47.5**	**----**	**E**	**62.6**	**----**	**D**	**42.5**	**----**	**D**	**47.9**	**----**	**E**	**63.1**	**----**	**D**	**44.2**	**----**
	OVERALL INTERSECTION		**D**	**42.7**	**----**	**E**	**56.0**	**----**	**C**	**31.9**	**----**	**D**	**43.1**	**----**	**E**	**58.6**	**----**	**C**	**33.2**	**----**
	W/ WB RIGHT TURN LANE																			
	WESTERN AVENUE (U.S. ROUTE 20)	EB L	-	----	----	-	----	----	-	----	----	D	40.1	0.67	E	60.5	0.90	D	47.9	0.90
		EB T	-	----	----	-	----	----	-	----	----	D	42.3	0.94	D	35.1	0.71	C	24.1	0.64
		EB T-R	-	----	----	-	----	----	-	----	----	D	44.8	0.96	D	35.1	0.72	C	24.0	0.64
		EB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**D**	**43.1**	**----**	**D**	**39.5**	**----**	**C**	**29.3**	**----**
	WESTERN AVENUE (U.S. ROUTE 20)	WB L	-	----	----	-	----	----	-	----	----	D	54.6	0.81	D	49.8	0.45	D	35.8	0.22
		WB T-T	-	----	----	-	----	----	-	----	----	C	33.0	0.69	D	54.3	0.99	C	21.5	0.62
		WB R	-	----	----	-	----	----	-	----	----	C	20.6	0.08	B	12.7	0.10	B	13.3	0.18
		WB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**C**	**34.7**	**----**	**D**	**52.2**	**----**	**C**	**21.4**	**----**
	JOHNSTON ROAD	NEB L	-	----	----	-	----	----	-	----	----	D	43.6	0.37	E	65.4	0.84	D	49.5	0.72
		NEB T-R	-	----	----	-	----	----	-	----	----	D	44.7	0.66	E	56.7	0.46	D	49.5	0.68
		NEB R	-	----	----	-	----	----	-	----	----	D	36.6	0.51	D	36.0	0.20	C	28.9	0.18
		NEB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**D**	**41.4**	**----**	**D**	**54.6**	**----**	**D**	**44.5**	**----**
	RAPP ROAD	SWB L	-	----	----	-	----	----	-	----	----	D	52.6	0.47	D	53.0	0.39	D	49.8	0.59
		SWB T	-	----	----	-	----	----	-	----	----	D	46.2	0.24	E	56.9	0.73	D	49.5	0.60
		SWB R	-	----	----	-	----	----	-	----	----	C	24.9	0.20	D	43.7	0.71	C	32.4	0.42
		SWB APPROACH	**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**D**	**36.8**	**----**	**D**	**49.4**	**----**	**D**	**41.1**	**----**
	OVERALL INTERSECTION		**-**	**----**	**----**	**-**	**----**	**----**	**-**	**----**	**----**	**D**	**40.3**	**----**	**D**	**47.8**	**----**	**C**	**29.0**	**----**

TABLE NO. 6

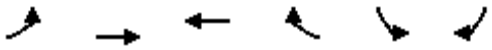
LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2025 NO-BUILD									YEAR 2025 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
9	WASHINGTON AVENUE EXTENSION & SPRINGSTEEN ROAD / CROSSGATES COMMONS																			
	SIGNALIZED																			
	SPRINGSTEEN ROAD	EB R	A	1.1	0.26	A	2.0	0.37	A	0.8	0.18	A	1.1	0.26	A	2.0	0.37	A	0.8	0.18
		EB APPROACH	**A**	**1.1**	**----**	**A**	**2.0**	**----**	**A**	**0.8**	**----**	**A**	**1.1**	**----**	**A**	**2.0**	**----**	**A**	**0.8**	**----**
	CROSSGATES COMMONS	WB L / L	E	58.5	0.35	E	58.7	0.52	D	44.3	0.55	E	58.7	0.35	E	58.7	0.52	D	44.3	0.55
		WB T-R	D	52.8	0.77	E	65.7	0.89	D	49.7	0.89	D	53.0	0.77	E	65.7	0.89	D	49.7	0.89
		WB APPROACH	**E**	**55.0**	**----**	**E**	**62.3**	**----**	**D**	**47.0**	**----**	**E**	**55.2**	**----**	**E**	**62.3**	**----**	**D**	**47.0**	**----**
	WASHINGTON AVE. EXT.	NB L	E	72.3	0.66	F	82.2	0.76	E	70.2	0.50	E	72.6	0.66	F	82.2	0.76	E	70.2	0.50
		NB T / T / T	B	19.6	0.42	C	34.0	0.61	D	41.3	0.42	B	19.6	0.42	C	34.1	0.61	D	41.3	0.43
		NB R	A	6.7	0.16	B	19.3	0.44	A	8.1	0.62	A	6.7	0.16	B	19.4	0.44	A	8.1	0.62
		NB APPROACH	**C**	**23.2**	**----**	**D**	**35.8**	**----**	**C**	**29.0**	**----**	**C**	**23.2**	**----**	**D**	**35.8**	**----**	**C**	**29.0**	**----**
	WASHINGTON AVE. EXT.	SB L	E	75.5	0.69	F	82.9	0.83	D	49.3	0.75	E	75.8	0.69	F	82.9	0.83	D	49.3	0.75
		SB T / T	C	25.0	0.70	D	35.7	0.80	C	25.7	0.35	C	25.0	0.70	D	35.9	0.80	C	25.7	0.35
		SB R	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01	A	0.0	0.01
		SB APPROACH	**C**	**29.2**	**----**	**D**	**42.5**	**----**	**D**	**35.0**	**----**	**C**	**29.3**	**----**	**D**	**42.7**	**----**	**D**	**35.0**	**----**
	OVERALL INTERSECTION		**C**	**27.6**	**----**	**D**	**40.6**	**----**	**D**	**35.2**	**----**	**C**	**27.6**	**----**	**D**	**40.6**	**----**	**D**	**35.2**	**----**

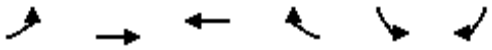
THE ABOVE REPRESENTS THE LEVELS OF SERVICE, VEHICLE DELAY IN SECONDS AND VOLUME-TO-CAPACITY (V/C) RATIO FOR THE ABOVE INTERSECTIONS.

INTERSECTION #1
Western Avenue & Crossgates Mall Driveway

WEEKDAY PEAK AM HOUR



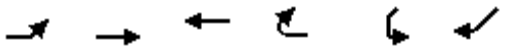
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1565	925	108	63	0	
Future Volume (vph)	0	1565	925	108	63	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3438	4540	0	3432	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3438	4540	0	3432	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			24				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	5%	8%	4%	0%	0%	
Adj. Flow (vph)	0	1701	1005	117	68	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1701	1122	0	68	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Turn Type		NA	NA		Prot		
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		87.8	72.8		10.1		
Actuated g/C Ratio		0.81	0.67		0.09		
v/c Ratio		0.61	0.37		0.21		
Control Delay		1.4	7.7		48.1		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.4	7.7		48.1		
LOS		A	A		D		
Approach Delay		1.4	7.7		48.1		
Approach LOS		A	A		D		
Queue Length 50th (ft)		14	107		23		
Queue Length 95th (ft)		16	132		45		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2872	3069		637		
Starvation Cap Reductn		0	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.59	0.37		0.11		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 4.9		Intersection LOS: A	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)

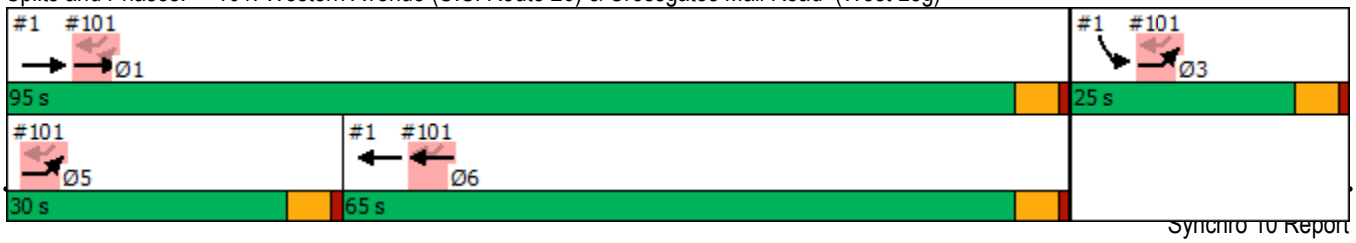


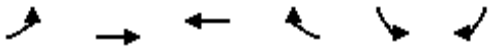
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	291	1565	925	0	0	19		
Future Volume (vph)	291	1565	925	0	0	19		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.241							
Satd. Flow (perm)	449	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	316	1701	1005	0	0	21		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	316	1701	1005	0	0	21		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	102.9	87.8	72.8			107.9		
Actuated g/C Ratio	0.95	0.81	0.67			1.00		
v/c Ratio	0.43	0.59	0.29			0.01		
Control Delay	2.0	4.6	1.3			0.0		
Queue Delay	0.0	0.0	0.2			0.0		
Total Delay	2.0	4.6	1.5			0.0		
LOS	A	A	A			A		
Approach Delay		4.2	1.5					
Approach LOS		A	A					
Queue Length 50th (ft)	0	168	9			0		
Queue Length 95th (ft)	0	211	10			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	919	2957	3429			1611		
Starvation Cap Reductn	0	0	1369			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.34	0.58	0.49			0.01		

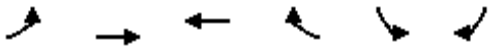
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.9			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 3.3		Intersection LOS: A	
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





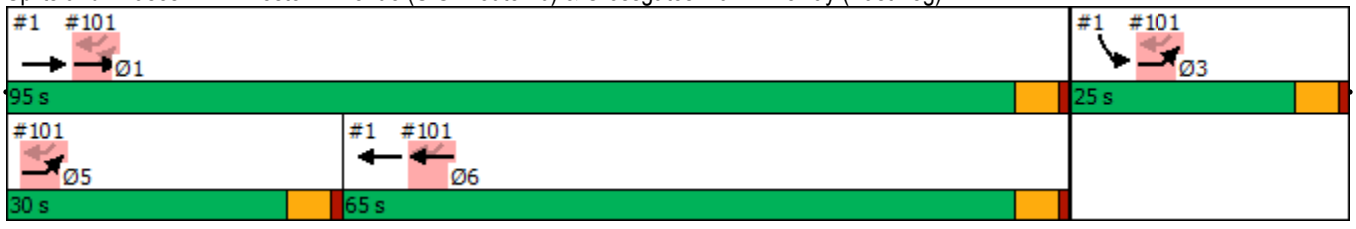
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1568	939	108	70	0	
Future Volume (vph)	0	1568	939	108	70	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.985				
Flt Protected					0.950		
Satd. Flow (prot)	0	3438	4545	0	3432	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3438	4545	0	3432	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			23				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Heavy Vehicles (%)	0%	5%	8%	4%	0%	0%	
Adj. Flow (vph)	0	1704	1021	117	76	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1704	1138	0	76	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				

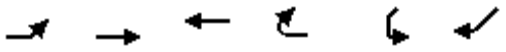


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Turn Type		NA	NA		Prot		
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		88.1	73.0		10.5		
Actuated g/C Ratio		0.81	0.67		0.10		
v/c Ratio		0.61	0.37		0.23		
Control Delay		1.4	8.0		47.9		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.4	8.0		47.9		
LOS		A	A		D		
Approach Delay		1.4	8.0		47.9		
Approach LOS		A	A		D		
Queue Length 50th (ft)		14	109		26		
Queue Length 95th (ft)		16	144		49		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2854	3063		633		
Starvation Cap Reductn		0	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.60	0.37		0.12		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 108.6			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 5.2		Intersection LOS: A	
Intersection Capacity Utilization 60.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



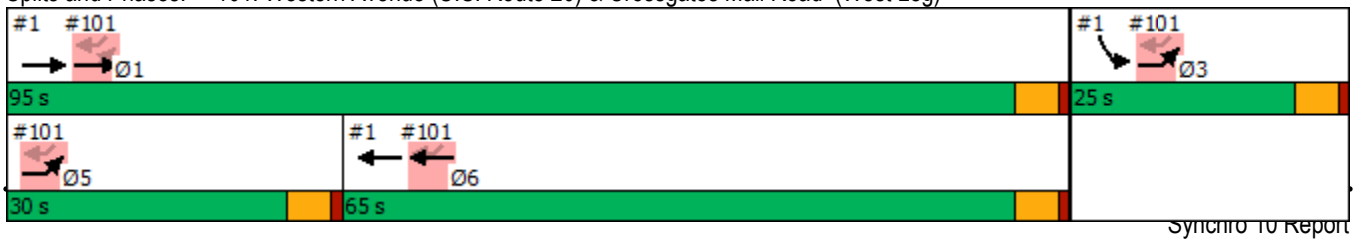


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	309	1568	939	0	0	19		
Future Volume (vph)	309	1568	939	0	0	19		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.236							
Satd. Flow (perm)	440	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	336	1704	1021	0	0	21		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	336	1704	1021	0	0	21		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

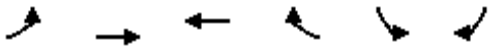
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	103.6	88.1	73.0			108.6		
Actuated g/C Ratio	0.95	0.81	0.67			1.00		
v/c Ratio	0.46	0.59	0.30			0.01		
Control Delay	2.8	4.8	1.3			0.0		
Queue Delay	0.0	0.0	0.2			0.0		
Total Delay	2.8	4.8	1.5			0.0		
LOS	A	A	A			A		
Approach Delay		4.5	1.5					
Approach LOS		A	A					
Queue Length 50th (ft)	0	168	9			0		
Queue Length 95th (ft)	8	243	11			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	916	2938	3419			1611		
Starvation Cap Reductn	0	0	1317			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.37	0.58	0.49			0.01		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 108.6			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 3.5		Intersection LOS: A	
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

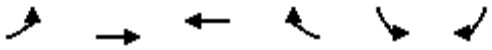
Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)



WEEKDAY PEAK PM HOUR



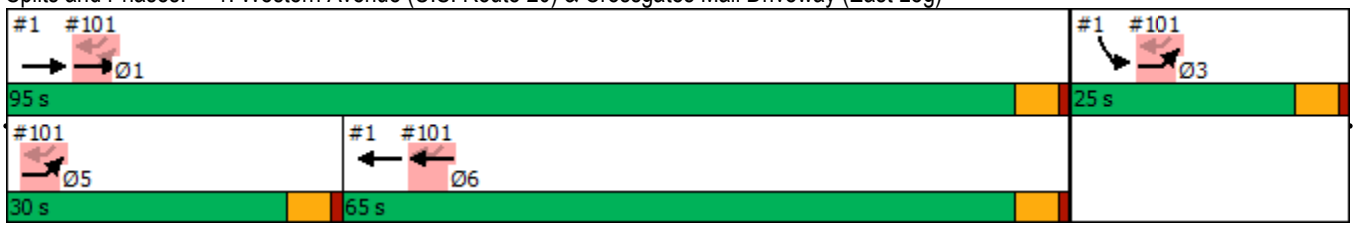
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1133	1997	237	287	0	
Future Volume (vph)	0	1133	1997	237	287	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4789	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4789	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			24				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1232	2171	258	312	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1232	2429	0	312	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

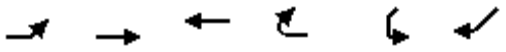


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		78.2	63.1		14.7		
Actuated g/C Ratio		0.76	0.61		0.14		
v/c Ratio		0.46	0.82		0.65		
Control Delay		1.1	18.7		49.0		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.1	18.7		49.0		
LOS		A	B		D		
Approach Delay		1.1	18.7		49.0		
Approach LOS		A	B		D		
Queue Length 50th (ft)		11	414		97		
Queue Length 95th (ft)		12	552		163		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		3113	2945		657		
Starvation Cap Reductn		190	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.82		0.47		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 103			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



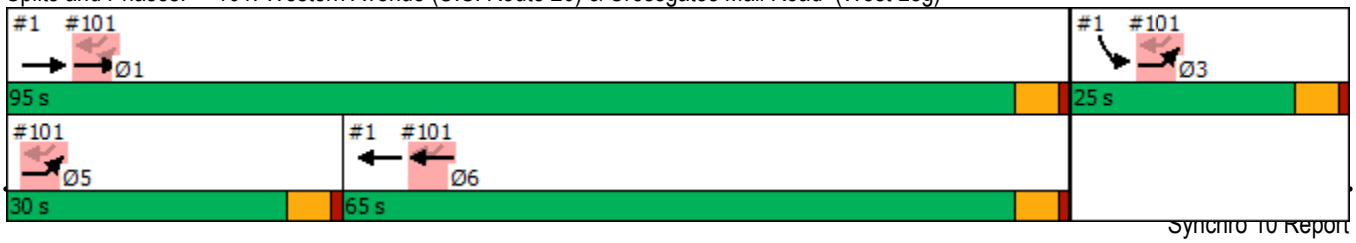


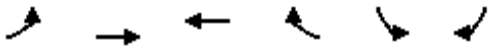
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	102	1133	1997	0	0	49		
Future Volume (vph)	102	1133	1997	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.059							
Satd. Flow (perm)	110	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	111	1232	2171	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	111	1232	2171	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	98.0	78.2	63.1			103.0		
Actuated g/C Ratio	0.95	0.76	0.61			1.00		
v/c Ratio	0.19	0.46	0.70			0.03		
Control Delay	6.8	5.4	2.0			0.0		
Queue Delay	0.0	0.0	0.5			0.0		
Total Delay	6.8	5.4	2.5			0.0		
LOS	A	A	A			A		
Approach Delay		5.5	2.5					
Approach LOS		A	A					
Queue Length 50th (ft)	1	127	19			0		
Queue Length 95th (ft)	45	202	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	823	3113	3117			1607		
Starvation Cap Reductn	0	0	453			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.13	0.40	0.81			0.03		

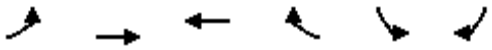
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 103			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 3.6		Intersection LOS: A	
Intersection Capacity Utilization 55.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





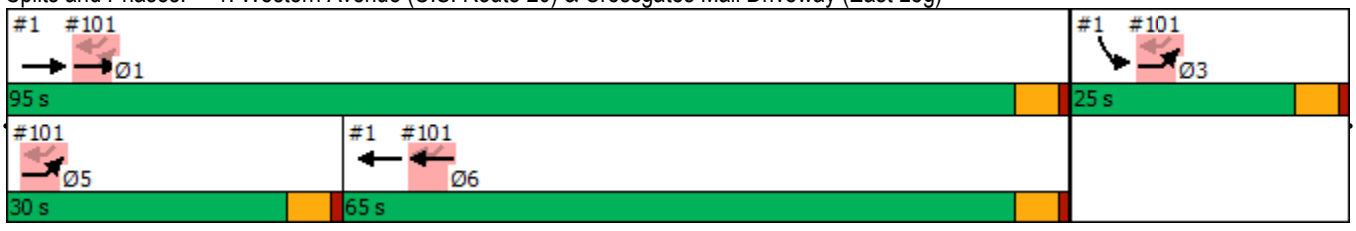
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1118	2019	237	327	0	
Future Volume (vph)	0	1118	2019	237	327	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.984				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4789	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4789	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			24				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1215	2195	258	355	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1215	2453	0	355	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

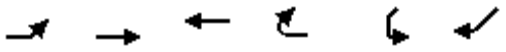


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		78.0	62.9		15.7		
Actuated g/C Ratio		0.75	0.61		0.15		
v/c Ratio		0.46	0.84		0.70		
Control Delay		1.1	19.9		50.1		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.1	19.9		50.1		
LOS		A	B		D		
Approach Delay		1.1	19.9		50.1		
Approach LOS		A	B		D		
Queue Length 50th (ft)		10	440		112		
Queue Length 95th (ft)		12	563		185		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		3085	2913		651		
Starvation Cap Reductn		199	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.84		0.55		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 103.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



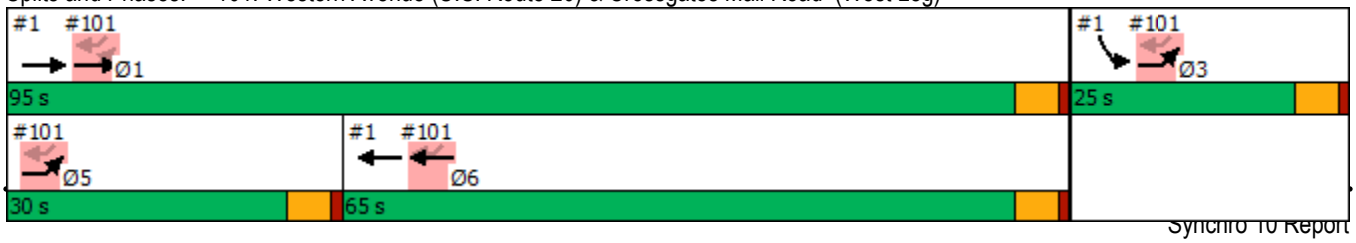


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	142	1118	2019	0	0	49		
Future Volume (vph)	142	1118	2019	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.059							
Satd. Flow (perm)	110	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	154	1215	2195	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	154	1215	2195	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

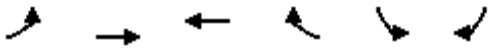
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	98.8	78.0	62.9			103.8		
Actuated g/C Ratio	0.95	0.75	0.61			1.00		
v/c Ratio	0.26	0.46	0.71			0.03		
Control Delay	11.2	5.7	2.0			0.0		
Queue Delay	0.0	0.0	0.6			0.0		
Total Delay	11.2	5.7	2.6			0.0		
LOS	B	A	A			A		
Approach Delay		6.3	2.6					
Approach LOS		A	A					
Queue Length 50th (ft)	21	133	19			0		
Queue Length 95th (ft)	81	197	21			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	826	3085	3083			1600		
Starvation Cap Reductn	0	0	446			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.19	0.39	0.83			0.03		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 103.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 4.0		Intersection LOS: A	
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			

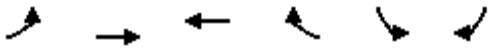
Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)



SATURDAY PEAK HOUR



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1076	1248	528	469	0	
Future Volume (vph)	0	1076	1248	528	469	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.955				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4648	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4648	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			127				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1170	1357	574	510	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1170	1931	0	510	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

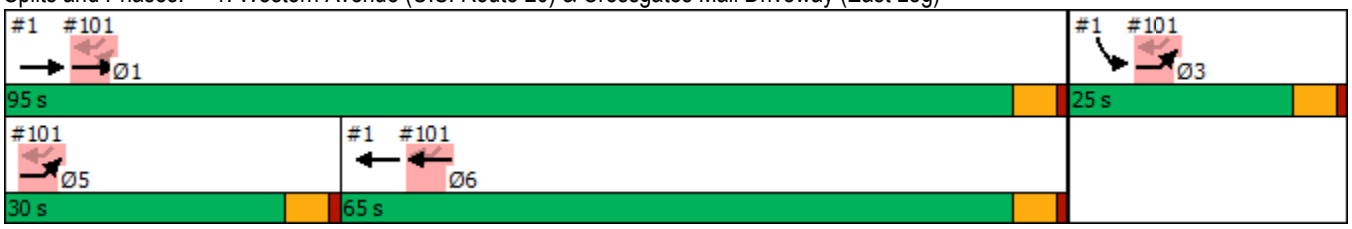


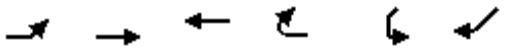
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		78.0	62.9		19.5		
Actuated g/C Ratio		0.73	0.59		0.18		
v/c Ratio		0.46	0.70		0.84		
Control Delay		1.2	16.0		56.2		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.2	16.0		56.2		
LOS		A	B		E		
Approach Delay		1.2	16.0		56.2		
Approach LOS		A	B		E		
Queue Length 50th (ft)		10	302		170		
Queue Length 95th (ft)		11	351		#300		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2973	2772		627		
Starvation Cap Reductn		218	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.70		0.81		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.5			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



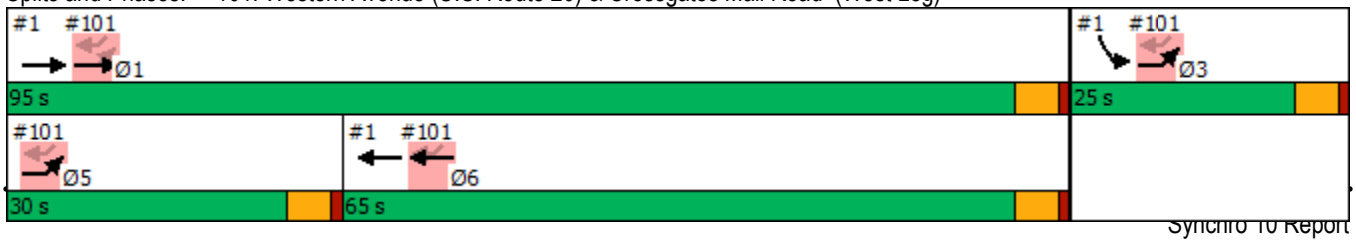


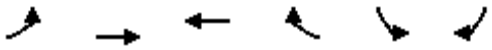
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	126	1076	1248	0	0	49		
Future Volume (vph)	126	1076	1248	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.142							
Satd. Flow (perm)	265	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	137	1170	1357	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	137	1170	1357	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	102.5	78.0	62.9			107.5		
Actuated g/C Ratio	0.95	0.73	0.59			1.00		
v/c Ratio	0.19	0.46	0.46			0.03		
Control Delay	0.7	6.7	2.2			0.0		
Queue Delay	0.0	0.0	0.4			0.0		
Total Delay	0.7	6.7	2.6			0.0		
LOS	A	A	A			A		
Approach Delay		6.1	2.6					
Approach LOS		A	A					
Queue Length 50th (ft)	0	153	19			0		
Queue Length 95th (ft)	0	186	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	939	2973	2975			1604		
Starvation Cap Reductn	0	0	985			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.15	0.39	0.68			0.03		

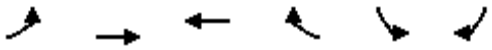
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.5			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 4.2		Intersection LOS: A	
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1053	1274	528	514	0	
Future Volume (vph)	0	1053	1274	528	514	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.956				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4652	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4652	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			124				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1145	1385	574	559	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1145	1959	0	559	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

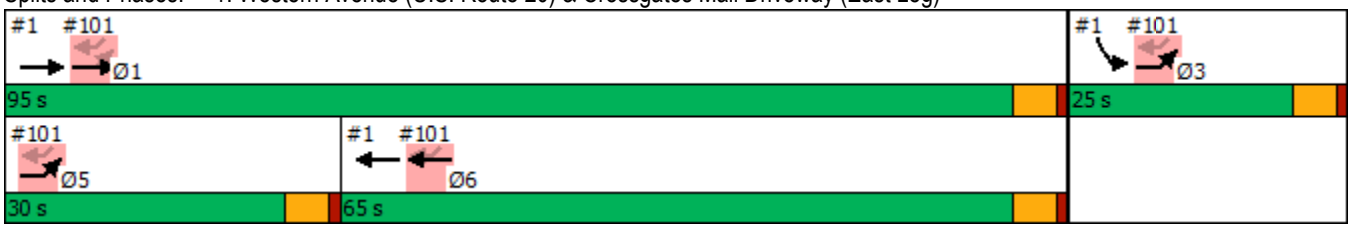


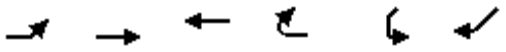
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		95.0	65.0		25.0		30.0
Total Split (%)		79.2%	54.2%		20.8%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		77.8	62.8		20.1		
Actuated g/C Ratio		0.72	0.58		0.19		
v/c Ratio		0.45	0.71		0.89		
Control Delay		1.2	16.5		61.6		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.2	16.5		61.6		
LOS		A	B		E		
Approach Delay		1.2	16.5		61.6		
Approach LOS		A	B		E		
Queue Length 50th (ft)		10	311		189		
Queue Length 95th (ft)		11	361		#341		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2960	2758		625		
Starvation Cap Reductn		263	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.71		0.89		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.9			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



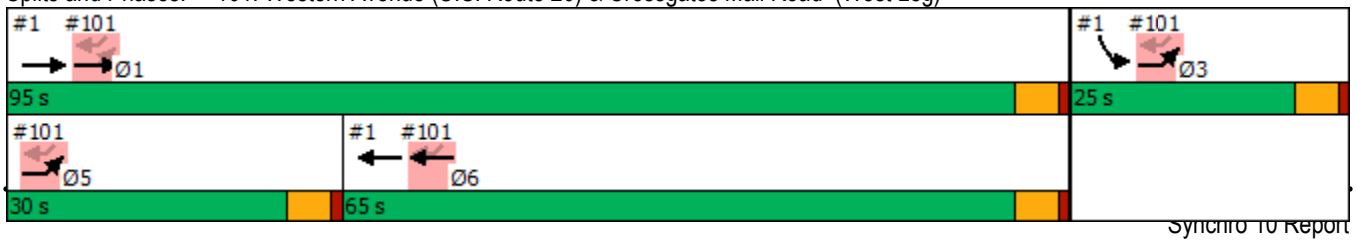


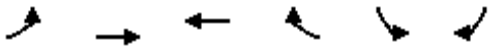
Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	183	1053	1274	0	0	49		
Future Volume (vph)	183	1053	1274	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.135							
Satd. Flow (perm)	251	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	199	1145	1385	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	199	1145	1385	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		95.0	65.0				25.0	30.0
Total Split (%)		79.2%	54.2%				21%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	102.9	77.8	62.8			107.9		
Actuated g/C Ratio	0.95	0.72	0.58			1.00		
v/c Ratio	0.27	0.45	0.47			0.03		
Control Delay	2.5	6.8	2.2			0.0		
Queue Delay	0.0	0.0	0.5			0.0		
Total Delay	2.5	6.8	2.7			0.0		
LOS	A	A	A			A		
Approach Delay		6.2	2.7					
Approach LOS		A	A					
Queue Length 50th (ft)	0	148	19			0		
Queue Length 95th (ft)	25	181	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	945	2960	2957			1599		
Starvation Cap Reductn	0	0	971			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.21	0.39	0.70			0.03		

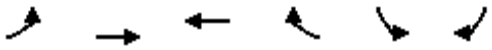
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.9			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 4.3		Intersection LOS: A	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Lane Configurations							
Traffic Volume (vph)	0	1053	1274	528	514	0	
Future Volume (vph)	0	1053	1274	528	514	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	11	12	11	14	12	12	
Grade (%)		0%	2%		4%		
Storage Length (ft)	125			0	0	0	
Storage Lanes	1			0	2	0	
Taper Length (ft)	50				25		
Lane Util. Factor	1.00	0.95	0.91	0.91	0.97	1.00	
Frt			0.956				
Flt Protected					0.950		
Satd. Flow (prot)	0	3539	4652	0	3364	0	
Flt Permitted					0.950		
Satd. Flow (perm)	0	3539	4652	0	3364	0	
Right Turn on Red				Yes		Yes	
Satd. Flow (RTOR)			120				
Link Speed (mph)		40	40		30		
Link Distance (ft)		139	969		590		
Travel Time (s)		2.4	16.5		13.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	1145	1385	574	559	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1145	1959	0	559	0	
Enter Blocked Intersection	No	No	No	No	No	No	
Lane Alignment	Left	Left	Left	Right	Left	Right	
Median Width(ft)		0	0		24		
Link Offset(ft)		0	0		0		
Crosswalk Width(ft)		16	16		16		
Two way Left Turn Lane		Yes	Yes				
Headway Factor	1.04	1.00	1.06	0.93	1.03	1.03	
Turning Speed (mph)	15			9	15	9	
Number of Detectors		2	2		1		
Detector Template		Thru	Thru		Left		
Leading Detector (ft)		100	100		20		
Trailing Detector (ft)		0	0		0		
Detector 1 Position(ft)		0	0		0		
Detector 1 Size(ft)		6	6		20		
Detector 1 Type		Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel							
Detector 1 Extend (s)		0.0	0.0		0.0		
Detector 1 Queue (s)		0.0	0.0		0.0		
Detector 1 Delay (s)		0.0	0.0		0.0		
Detector 2 Position(ft)		94	94				
Detector 2 Size(ft)		6	6				
Detector 2 Type		Cl+Ex	Cl+Ex				
Detector 2 Channel							
Detector 2 Extend (s)		0.0	0.0				
Turn Type		NA	NA		Prot		

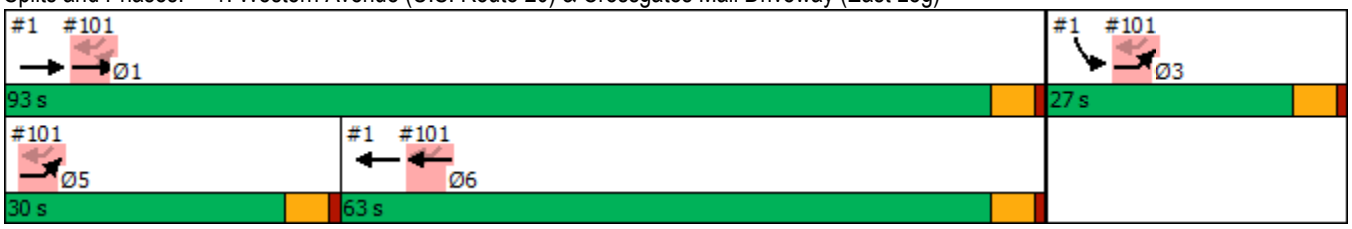


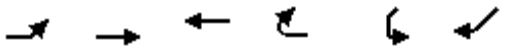
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR	Ø5
Protected Phases		1	6		3		5
Permitted Phases							
Detector Phase		1	6		3		
Switch Phase							
Minimum Initial (s)		10.0	10.0		10.0		10.0
Minimum Split (s)		15.0	15.0		15.0		15.0
Total Split (s)		93.0	63.0		27.0		30.0
Total Split (%)		77.5%	52.5%		22.5%		25%
Yellow Time (s)		4.0	4.0		4.0		4.0
All-Red Time (s)		1.0	1.0		1.0		1.0
Lost Time Adjust (s)		0.0	0.0		0.0		
Total Lost Time (s)		5.0	5.0		5.0		
Lead/Lag			Lag				Lead
Lead-Lag Optimize?			Yes				Yes
Recall Mode		Min	Min		None		Min
Act Effct Green (s)		75.9	60.9		21.2		
Actuated g/C Ratio		0.71	0.57		0.20		
v/c Ratio		0.46	0.73		0.84		
Control Delay		1.3	17.8		54.3		
Queue Delay		0.0	0.0		0.0		
Total Delay		1.3	17.8		54.3		
LOS		A	B		D		
Approach Delay		1.3	17.8		54.3		
Approach LOS		A	B		D		
Queue Length 50th (ft)		10	328		185		
Queue Length 95th (ft)		11	380		#321		
Internal Link Dist (ft)		59	889		510		
Turn Bay Length (ft)							
Base Capacity (vph)		2914	2693		692		
Starvation Cap Reductn		204	0		0		
Spillback Cap Reductn		0	0		0		
Storage Cap Reductn		0	0		0		
Reduced v/c Ratio		0.42	0.73		0.81		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.2			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 18.2		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Western Avenue (U.S. Route 20) & Crossgates Mall Driveway (East Leg)



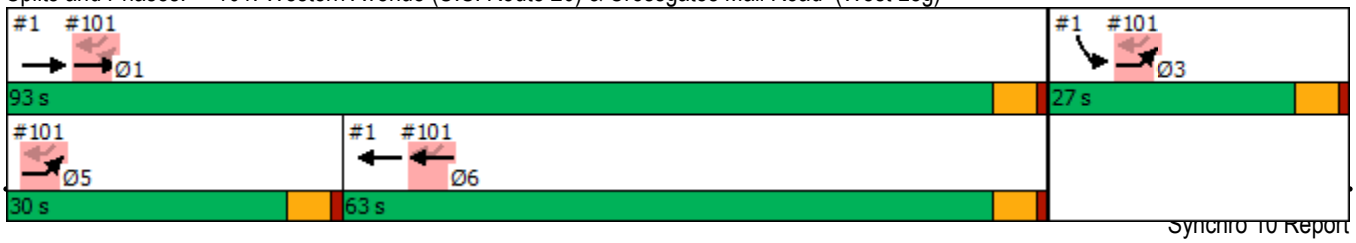


Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Lane Configurations								
Traffic Volume (vph)	183	1053	1274	0	0	49		
Future Volume (vph)	183	1053	1274	0	0	49		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Storage Length (ft)	100			0	0	0		
Storage Lanes	1			0	0	1		
Taper Length (ft)	25				25			
Lane Util. Factor	1.00	0.95	0.91	1.00	1.00	1.00		
Frt						0.865		
Flt Protected	0.950							
Satd. Flow (prot)	1770	3539	5085	0	0	1611		
Flt Permitted	0.133							
Satd. Flow (perm)	248	3539	5085	0	0	1611		
Right Turn on Red				Yes		Yes		
Satd. Flow (RTOR)								
Link Speed (mph)		40	30		30			
Link Distance (ft)		204	139		639			
Travel Time (s)		3.5	3.2		14.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	199	1145	1385	0	0	53		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	199	1145	1385	0	0	53		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Left	Left	Right	Left	Right		
Median Width(ft)		12	12		0			
Link Offset(ft)		0	0		0			
Crosswalk Width(ft)		16	16		16			
Two way Left Turn Lane		Yes	Yes					
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15			9	15	9		
Number of Detectors	1	2	2			1		
Detector Template	Left	Thru	Thru			Right		
Leading Detector (ft)	20	100	100			20		
Trailing Detector (ft)	0	0	0			0		
Detector 1 Position(ft)	0	0	0			0		
Detector 1 Size(ft)	20	6	6			20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex		
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0	0.0			0.0		
Detector 1 Queue (s)	0.0	0.0	0.0			0.0		
Detector 1 Delay (s)	0.0	0.0	0.0			0.0		
Detector 2 Position(ft)		94	94					
Detector 2 Size(ft)		6	6					
Detector 2 Type		Cl+Ex	Cl+Ex					
Detector 2 Channel								
Detector 2 Extend (s)		0.0	0.0					
Turn Type	pm+pt	NA	NA			Perm		
Protected Phases	3 5	1	6				3	5
Permitted Phases	1					1 3 5 6		

Lane Group	EBL	EBT	WBT	WBR	SWL	SWR	Ø3	Ø5
Detector Phase	3 5	1	6			1 3 5 6		
Switch Phase								
Minimum Initial (s)		10.0	10.0				10.0	10.0
Minimum Split (s)		15.0	15.0				15.0	15.0
Total Split (s)		93.0	63.0				27.0	30.0
Total Split (%)		77.5%	52.5%				23%	25%
Yellow Time (s)		4.0	4.0				4.0	4.0
All-Red Time (s)		1.0	1.0				1.0	1.0
Lost Time Adjust (s)		0.0	0.0					
Total Lost Time (s)		5.0	5.0					
Lead/Lag			Lag					Lead
Lead-Lag Optimize?			Yes					Yes
Recall Mode		Min	Min				None	Min
Act Effct Green (s)	102.2	75.9	60.9			107.2		
Actuated g/C Ratio	0.95	0.71	0.57			1.00		
v/c Ratio	0.26	0.46	0.48			0.03		
Control Delay	2.5	7.5	2.3			0.0		
Queue Delay	0.0	0.0	0.5			0.0		
Total Delay	2.5	7.5	2.8			0.0		
LOS	A	A	A			A		
Approach Delay		6.7	2.8					
Approach LOS		A	A					
Queue Length 50th (ft)	0	161	19			0		
Queue Length 95th (ft)	27	196	20			0		
Internal Link Dist (ft)		124	59		559			
Turn Bay Length (ft)	100							
Base Capacity (vph)	944	2914	2887			1592		
Starvation Cap Reductn	0	0	940			0		
Spillback Cap Reductn	0	0	0			0		
Storage Cap Reductn	0	0	0			0		
Reduced v/c Ratio	0.21	0.39	0.71			0.03		

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 107.2			
Natural Cycle: 60			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 4.6		Intersection LOS: A	
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 101: Western Avenue (U.S. Route 20) & Crossgates Mall Road (West Leg)



INTERSECTION #3
Western Avenue & Johnson Road / Rapp Road

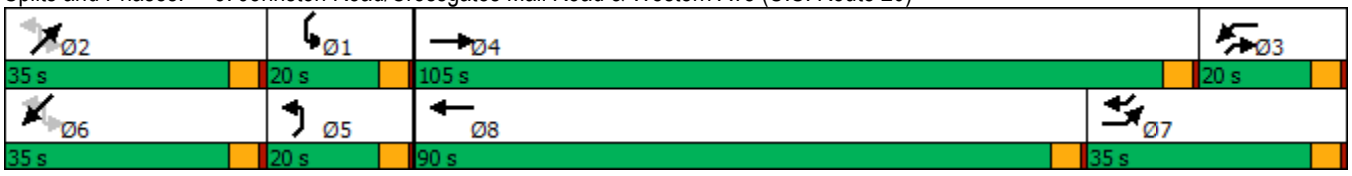
WEEKDAY PEAK AM HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	266	1490	100	98	756	41	95	150	186	48	42	97
Future Volume (vph)	266	1490	100	98	756	41	95	150	186	48	42	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			0.99	0.97	0.99		
Frt		0.991			0.992			0.975	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3451	0	1612	3332	0	1626	1719	1447	1440	1872	1623
Flt Permitted	0.950			0.950			0.726			0.563		
Satd. Flow (perm)	1766	3451	0	1610	3332	0	1243	1719	1404	844	1872	1623
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			4			5	115			110
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	3%	10%	12%	7%	14%	11%	1%	6%	26%	2%	0%
Adj. Flow (vph)	302	1693	114	111	859	47	108	170	211	55	48	110
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	302	1807	0	111	906	0	108	204	177	55	48	110
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.51	0.86		0.79	0.75		0.35	0.82	0.43	0.49	0.49	0.15
Control Delay	51.6	33.0		110.0	49.0		57.7	92.3	21.6	72.8	95.0	6.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.6	33.0		110.0	49.0		57.7	92.3	21.6	72.8	95.0	6.6
Queue Length 50th (ft)	263	831		120	458		100	226	55	49	52	0
Queue Length 95th (ft)	428	1060		#236	516		156	329	130	90	101	44
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	587	2206		154	1810		316	333	425	175	358	715
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.82		0.72	0.50		0.34	0.61	0.42	0.31	0.13	0.15

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 159.7	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	266	1490	100	98	756	41	95	150	186	48	42	97
Future Volume (veh/h)	266	1490	100	98	756	41	95	150	186	48	42	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.97		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1856	1722	1796	1796	1737	1885	1811	1549	1909	1939
Adj Flow Rate, veh/h	302	1693	114	111	859	47	108	201	190	55	48	110
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	3	3	12	7	7	11	1	6	26	2	0
Cap, veh/h	621	2069	138	130	1144	63	244	272	339	90	175	718
Arrive On Green	0.35	0.62	0.62	0.08	0.35	0.35	0.08	0.14	0.14	0.03	0.09	0.09
Sat Flow, veh/h	1781	3353	224	1640	3290	180	1654	1885	1503	1475	1909	1590
Grp Volume(v), veh/h	302	883	924	111	446	460	108	201	190	55	48	110
Grp Sat Flow(s),veh/h/ln	1781	1763	1814	1640	1706	1763	1654	1885	1503	1475	1909	1590
Q Serve(g_s), s	20.5	59.1	61.1	10.3	35.5	35.5	0.0	15.7	4.8	0.7	3.6	0.0
Cycle Q Clear(g_c), s	20.5	59.1	61.1	10.3	35.5	35.5	0.0	15.7	4.8	0.7	3.6	0.0
Prop In Lane	1.00		0.12	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	621	1088	1119	130	593	613	244	272	339	90	175	718
V/C Ratio(X)	0.49	0.81	0.83	0.85	0.75	0.75	0.44	0.74	0.56	0.61	0.27	0.15
Avail Cap(c_a), veh/h	621	1146	1179	160	943	974	269	368	415	191	372	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	22.6	23.0	69.9	44.3	44.3	62.4	63.1	52.9	72.5	65.1	25.8
Incr Delay (d2), s/veh	0.2	6.6	7.0	25.3	8.5	8.2	0.5	3.0	0.5	2.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	25.1	26.7	5.2	16.2	16.7	4.0	7.8	6.5	2.2	1.8	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	29.2	30.0	95.2	52.8	52.5	62.9	66.1	53.5	75.0	65.4	25.9
LnGrp LOS	D	C	C	F	D	D	E	E	D	E	E	C
Approach Vol, veh/h		2109			1017			499			213	
Approach Delay, s/veh		31.0			57.3			60.6			47.5	
Approach LOS		C			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	27.2	17.2	99.9	17.6	19.1	58.6	58.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.7	17.7	12.3	63.1	2.0	5.6	22.5	37.5
Green Ext Time (p_c), s	0.1	0.7	0.0	31.8	0.1	0.3	0.4	16.0

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

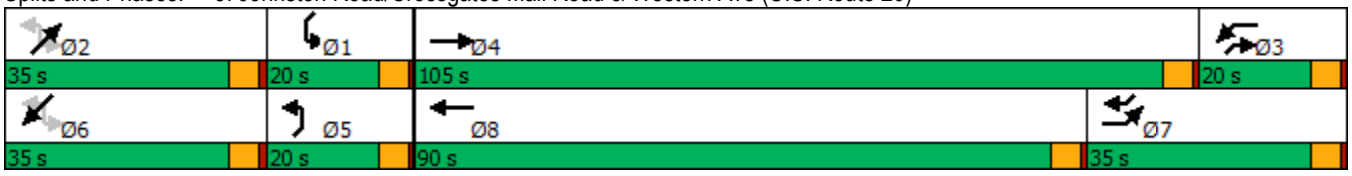
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	267	1508	100	98	766	42	95	150	186	51	42	101
Future Volume (vph)	267	1508	100	98	766	42	95	150	186	51	42	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			0.99	0.97	0.99		
Frt		0.991			0.992			0.975	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3452	0	1612	3332	0	1626	1719	1447	1440	1872	1623
Flt Permitted	0.950			0.950			0.726			0.556		
Satd. Flow (perm)	1766	3452	0	1610	3332	0	1243	1719	1404	834	1872	1623
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			4			5	112			115
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	3%	10%	12%	7%	14%	11%	1%	6%	26%	2%	0%
Adj. Flow (vph)	303	1714	114	111	870	48	108	170	211	58	48	115
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	303	1828	0	111	918	0	108	204	177	58	48	115
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.52	0.87		0.80	0.75		0.34	0.83	0.43	0.50	0.49	0.16
Control Delay	52.4	33.8		111.4	49.3		57.6	93.3	22.5	73.9	95.4	6.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.4	33.8		111.4	49.3		57.6	93.3	22.5	73.9	95.4	6.6
Queue Length 50th (ft)	267	856		121	466		100	226	58	52	52	0
Queue Length 95th (ft)	435	1093		#237	523		156	330	133	93	101	45
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	583	2188		153	1795		318	330	421	174	355	714
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.84		0.73	0.51		0.34	0.62	0.42	0.33	0.14	0.16

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 160.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	267	1508	100	98	766	42	95	150	186	51	42	101
Future Volume (veh/h)	267	1508	100	98	766	42	95	150	186	51	42	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.97		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1856	1722	1796	1796	1737	1885	1811	1549	1909	1939
Adj Flow Rate, veh/h	303	1714	114	111	870	48	108	201	190	58	48	115
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	3	3	12	7	7	11	1	6	26	2	0
Cap, veh/h	616	2074	137	130	1156	64	243	271	338	90	175	713
Arrive On Green	0.35	0.62	0.62	0.08	0.35	0.35	0.08	0.14	0.14	0.03	0.09	0.09
Sat Flow, veh/h	1781	3356	221	1640	3288	181	1654	1885	1503	1475	1909	1590
Grp Volume(v), veh/h	303	893	935	111	452	466	108	201	190	58	48	115
Grp Sat Flow(s),veh/h/ln	1781	1763	1815	1640	1706	1763	1654	1885	1503	1475	1909	1590
Q Serve(g_s), s	20.7	60.7	62.8	10.3	36.1	36.1	0.0	15.8	4.8	1.1	3.6	0.0
Cycle Q Clear(g_c), s	20.7	60.7	62.8	10.3	36.1	36.1	0.0	15.8	4.8	1.1	3.6	0.0
Prop In Lane	1.00		0.12	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	616	1089	1121	130	600	620	243	271	338	90	175	713
V/C Ratio(X)	0.49	0.82	0.83	0.85	0.75	0.75	0.44	0.74	0.56	0.64	0.27	0.16
Avail Cap(c_a), veh/h	616	1140	1173	159	938	969	268	366	413	190	370	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	22.9	23.3	70.3	44.2	44.2	62.8	63.4	53.3	72.9	65.5	26.3
Incr Delay (d2), s/veh	0.2	6.9	7.3	25.7	8.5	8.2	0.5	3.2	0.5	2.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	25.8	27.6	5.2	16.5	17.0	4.0	7.9	6.6	2.3	1.8	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	29.8	30.6	96.0	52.7	52.5	63.2	66.6	53.8	75.7	65.8	26.4
LnGrp LOS	D	C	C	F	D	D	E	E	D	E	E	C
Approach Vol, veh/h		2131			1029			499			221	
Approach Delay, s/veh		31.7			57.3			61.0			47.9	
Approach LOS		C			E			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	27.3	17.3	100.6	17.7	19.1	58.5	59.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	3.1	17.8	12.3	64.8	2.0	5.6	22.7	38.1
Green Ext Time (p_c), s	0.1	0.7	0.0	30.7	0.1	0.4	0.4	16.3

Intersection Summary	
HCM 6th Ctrl Delay	43.1
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

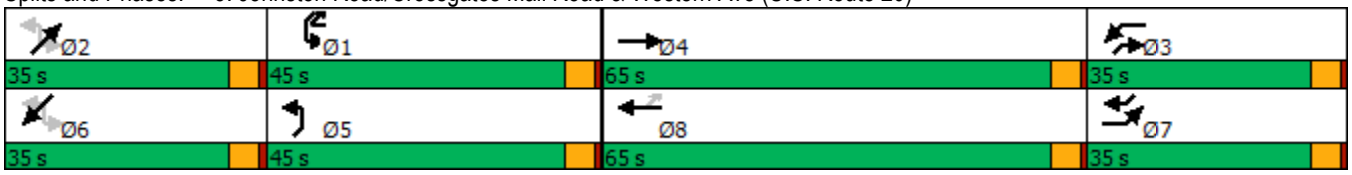
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	267	1508	100	98	766	42	95	150	186	51	42	101
Future Volume (vph)	267	1508	100	98	766	42	95	150	186	51	42	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.98		0.99	0.97	0.99		
Frt		0.991				0.850		0.975	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3452	0	1612	3374	1417	1626	1719	1447	1440	1872	1623
Flt Permitted	0.950			0.950			0.726			0.615		
Satd. Flow (perm)	1766	3452	0	1610	3374	1389	1243	1719	1404	922	1872	1623
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4				48		5	177			115
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	2%	3%	10%	12%	7%	14%	11%	1%	6%	26%	2%	0%
Adj. Flow (vph)	303	1714	114	111	870	48	108	170	211	58	48	115
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	303	1828	0	111	870	48	108	204	177	58	48	115
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template						Right						
Leading Detector (ft)	46	7		46	7	20	46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6	0	6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6	0	6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1	20	40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8	2		2	6		6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0	10.0	10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	65.0		35.0	65.0	45.0	45.0	35.0	35.0	45.0	35.0	35.0
Total Split (%)	19.4%	36.1%		19.4%	36.1%	25.0%	25.0%	19.4%	19.4%	25.0%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min	None	None	None	None	None	None	None
v/c Ratio	0.64	1.05		0.53	0.70	0.08	0.30	0.73	0.33	0.42	0.40	0.18
Control Delay	51.5	68.1		60.7	36.9	5.3	40.8	65.5	5.4	49.8	70.5	6.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	68.1		60.7	36.9	5.3	40.8	65.5	5.4	49.8	70.5	6.7
Queue Length 50th (ft)	218	~841		84	303	0	67	158	0	35	37	0
Queue Length 95th (ft)	#429	#1297		153	421	22	128	274	45	78	89	44
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	470	1739		405	1698	680	650	436	601	531	471	643
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.64	1.05		0.27	0.51	0.07	0.17	0.47	0.29	0.11	0.10	0.18

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 122.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	267	1508	100	98	766	42	95	150	186	51	42	101
Future Volume (veh/h)	267	1508	100	98	766	42	95	150	186	51	42	101
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.98		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1856	1856	1722	1796	1693	1737	1885	1811	1549	1909	1939
Adj Flow Rate, veh/h	303	1714	114	111	870	48	108	201	190	58	48	115
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	3	3	12	7	14	11	1	6	26	2	0
Cap, veh/h	450	1805	119	137	1257	580	292	305	372	122	197	580
Arrive On Green	0.25	0.54	0.54	0.08	0.37	0.37	0.10	0.16	0.16	0.04	0.10	0.10
Sat Flow, veh/h	1781	3356	221	1640	3413	1430	1654	1885	1506	1475	1909	1596
Grp Volume(v), veh/h	303	893	935	111	870	48	108	201	190	58	48	115
Grp Sat Flow(s),veh/h/ln	1781	1763	1815	1640	1706	1430	1654	1885	1506	1475	1909	1596
Q Serve(g_s), s	17.1	52.8	54.7	7.4	24.1	0.0	0.0	11.1	2.7	0.0	2.6	0.0
Cycle Q Clear(g_c), s	17.1	52.8	54.7	7.4	24.1	0.0	0.0	11.1	2.7	0.0	2.6	0.0
Prop In Lane	1.00		0.12	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	450	948	976	137	1257	580	292	305	372	122	197	580
V/C Ratio(X)	0.67	0.94	0.96	0.81	0.69	0.08	0.37	0.66	0.51	0.47	0.24	0.20
Avail Cap(c_a), veh/h	480	950	978	442	1839	824	728	508	534	597	514	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	24.1	24.5	50.2	29.8	20.3	43.3	43.8	36.2	51.6	45.9	24.8
Incr Delay (d2), s/veh	2.6	18.2	20.3	4.4	3.1	0.3	0.3	0.9	0.4	1.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	24.6	26.6	3.1	10.0	0.8	2.7	5.3	4.4	1.6	1.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	40.1	42.3	44.8	54.6	33.0	20.6	43.6	44.7	36.6	52.6	46.2	24.9
LnGrp LOS	D	D	D	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		2131			1029			499			221	
Approach Delay, s/veh		43.1			34.7			41.4			36.8	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	23.0	14.3	64.9	15.7	16.5	33.2	46.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	40.0	30.0	30.0	60.0	40.0	30.0	30.0	60.0
Max Q Clear Time (g_c+I1), s	2.0	13.1	9.4	56.7	2.0	4.6	19.1	26.1
Green Ext Time (p_c), s	0.1	0.8	0.2	3.2	0.2	0.4	0.5	15.0

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

WEEKDAY PEAK PM HOUR

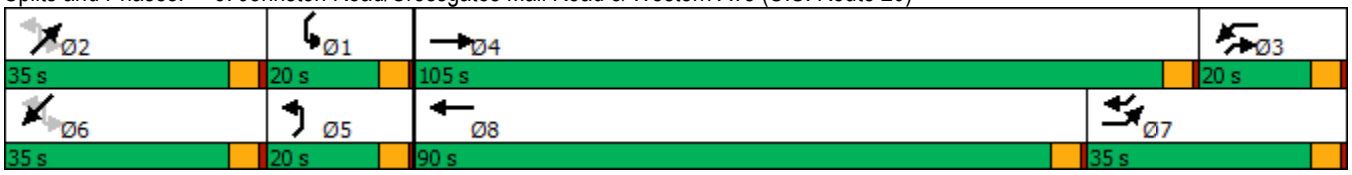
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	223	968	101	136	1536	73	133	77	97	102	203	328
Future Volume (vph)	223	968	101	136	1536	73	133	77	97	102	203	328
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			0.99	0.97	0.99		
Frt		0.986			0.993			0.974	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3517	0	1805	3493	0	1770	1749	1534	1634	1909	1607
Flt Permitted	0.950			0.950			0.229			0.558		
Satd. Flow (perm)	1768	3517	0	1800	3493	0	427	1749	1488	946	1909	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			4			5	87			43
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	1%	0%	0%	2%	14%	2%	0%	0%	11%	0%	1%
Adj. Flow (vph)	240	1041	109	146	1652	78	143	83	104	110	218	353
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	240	1150	0	146	1730	0	143	100	87	110	218	353
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.84	0.74		0.35	0.97		0.84	0.53	0.15	0.39	0.85	0.64
Control Delay	92.4	41.3		62.4	55.0		106.2	77.4	7.7	59.9	99.5	47.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	92.4	41.3		62.4	55.0		106.2	77.4	7.7	59.9	99.5	47.1
Queue Length 50th (ft)	262	567		138	~1017		134	112	0	102	244	295
Queue Length 95th (ft)	#419	581		252	#1296		203	176	47	161	348	414
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	319	2118		423	1787		204	319	573	291	344	551
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.54		0.35	0.97		0.70	0.31	0.15	0.38	0.63	0.64

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 167.2
Natural Cycle: 100
Control Type: Actuated-Uncoordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	223	968	101	136	1536	73	133	77	97	102	203	328
Future Volume (veh/h)	223	968	101	136	1536	73	133	77	97	102	203	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1870	1870	1870	1900	1900	1774	1939	1924
Adj Flow Rate, veh/h	240	1041	109	146	1652	78	143	99	94	110	218	353
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	2	2	2	0	0	11	0	1
Cap, veh/h	261	1397	146	428	1787	84	164	201	547	275	283	473
Arrive On Green	0.15	0.43	0.43	0.24	0.52	0.52	0.07	0.11	0.11	0.11	0.15	0.15
Sat Flow, veh/h	1781	3270	342	1810	3455	162	1781	1900	1565	1690	1939	1597
Grp Volume(v), veh/h	240	570	580	146	846	884	143	99	94	110	218	353
Grp Sat Flow(s),veh/h/ln	1781	1791	1822	1810	1777	1841	1781	1900	1565	1690	1939	1597
Q Serve(g_s), s	21.7	43.6	43.6	10.9	71.4	72.8	8.9	8.0	0.0	0.5	17.6	8.1
Cycle Q Clear(g_c), s	21.7	43.6	43.6	10.9	71.4	72.8	8.9	8.0	0.0	0.5	17.6	8.1
Prop In Lane	1.00		0.19	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	765	778	428	919	952	164	201	547	275	283	473
V/C Ratio(X)	0.92	0.74	0.75	0.34	0.92	0.93	0.87	0.49	0.17	0.40	0.77	0.75
Avail Cap(c_a), veh/h	328	1099	1118	428	927	960	208	350	669	275	357	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.6	39.2	39.2	51.6	36.2	36.5	73.7	68.7	37.4	63.3	66.9	52.0
Incr Delay (d2), s/veh	23.8	6.5	6.4	0.2	15.7	16.3	22.8	0.7	0.1	0.4	5.7	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	20.3	20.6	5.0	33.9	35.8	7.0	4.0	2.6	4.2	9.2	13.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.4	45.7	45.6	51.8	51.9	52.9	96.5	69.4	37.4	63.7	72.6	56.1
LnGrp LOS	F	D	D	D	D	D	F	E	D	E	E	E
Approach Vol, veh/h		1390			1876			336			681	
Approach Delay, s/veh		53.7			52.4			72.0			62.6	
Approach LOS		D			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	22.3	43.6	74.6	15.9	28.8	28.9	89.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.5	10.0	12.9	45.6	10.9	19.6	23.7	74.8
Green Ext Time (p_c), s	0.1	0.4	0.0	24.0	0.1	1.1	0.3	9.5

Intersection Summary	
HCM 6th Ctrl Delay	56.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	231	991	101	136	1571	78	133	77	97	104	203	330
Future Volume (vph)	231	991	101	136	1571	78	133	77	97	104	203	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			0.99	0.97	0.99		
Frt		0.986			0.993			0.974	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3517	0	1805	3492	0	1770	1749	1534	1634	1909	1607
Flt Permitted	0.950			0.950			0.229			0.557		
Satd. Flow (perm)	1768	3517	0	1801	3492	0	427	1749	1488	944	1909	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			4			5	87			43
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	1%	0%	0%	2%	14%	2%	0%	0%	11%	0%	1%
Adj. Flow (vph)	248	1066	109	146	1689	84	143	83	104	112	218	355
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	248	1175	0	146	1773	0	143	100	87	112	218	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

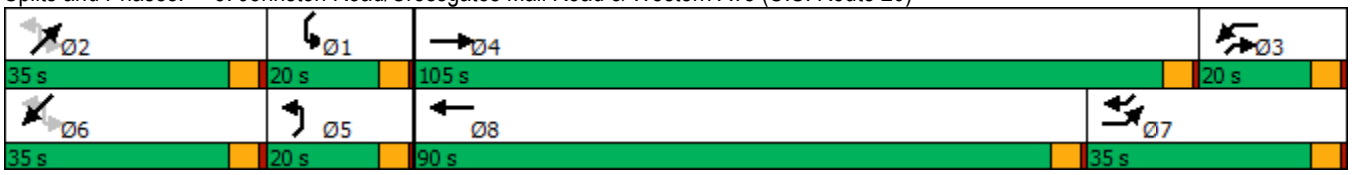
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.86	0.74		0.36	0.99		0.83	0.53	0.16	0.40	0.85	0.64
Control Delay	95.5	40.6		63.8	60.5		105.9	77.5	7.9	60.1	99.4	47.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	95.5	40.6		63.8	60.5		105.9	77.5	7.9	60.1	99.4	47.2
Queue Length 50th (ft)	273	576		141	~1120		134	112	0	104	244	298
Queue Length 95th (ft)	#441	588		255	#1352		203	176	47	164	348	418
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	318	2115		408	1783		204	319	560	291	343	551
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.56		0.36	0.99		0.70	0.31	0.16	0.38	0.64	0.64

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 167.4	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	231	991	101	136	1571	78	133	77	97	104	203	330
Future Volume (veh/h)	231	991	101	136	1571	78	133	77	97	104	203	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1870	1870	1870	1900	1900	1774	1939	1924
Adj Flow Rate, veh/h	248	1066	109	146	1689	84	143	99	94	112	218	355
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	2	2	2	0	0	11	0	1
Cap, veh/h	269	1423	145	419	1774	88	164	201	538	274	282	478
Arrive On Green	0.15	0.43	0.43	0.23	0.51	0.51	0.07	0.11	0.11	0.11	0.15	0.15
Sat Flow, veh/h	1781	3279	335	1810	3446	170	1781	1900	1564	1690	1939	1597
Grp Volume(v), veh/h	248	582	593	146	866	907	143	99	94	112	218	355
Grp Sat Flow(s),veh/h/ln	1781	1791	1823	1810	1777	1839	1781	1900	1564	1690	1939	1597
Q Serve(g_s), s	22.6	44.8	44.9	11.1	76.0	77.7	9.0	8.1	0.0	0.8	17.8	7.6
Cycle Q Clear(g_c), s	22.6	44.8	44.9	11.1	76.0	77.7	9.0	8.1	0.0	0.8	17.8	7.6
Prop In Lane	1.00		0.18	1.00		0.09	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	777	791	419	915	947	164	201	538	274	282	478
V/C Ratio(X)	0.92	0.75	0.75	0.35	0.95	0.96	0.87	0.49	0.17	0.41	0.77	0.74
Avail Cap(c_a), veh/h	325	1088	1107	419	917	949	206	346	658	274	353	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.0	39.1	39.1	52.9	37.8	38.2	74.4	69.5	38.4	64.0	67.7	52.1
Incr Delay (d2), s/veh	25.9	6.5	6.4	0.2	19.4	20.6	23.6	0.7	0.1	0.4	6.0	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	20.8	21.2	5.1	36.8	39.1	7.1	4.0	2.7	4.3	9.4	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	94.9	45.6	45.5	53.1	57.2	58.9	98.0	70.2	38.5	64.4	73.8	56.1
LnGrp LOS	F	D	D	D	E	E	F	E	D	E	E	E
Approach Vol, veh/h		1423			1919			336			685	
Approach Delay, s/veh		54.1			57.7			73.1			63.1	
Approach LOS		D			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.7	22.4	43.1	76.5	16.1	29.0	29.8	89.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.8	10.1	13.1	46.9	11.0	19.8	24.6	79.7
Green Ext Time (p_c), s	0.1	0.4	0.0	24.5	0.1	1.1	0.2	5.1

Intersection Summary	
HCM 6th Ctrl Delay	58.6
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

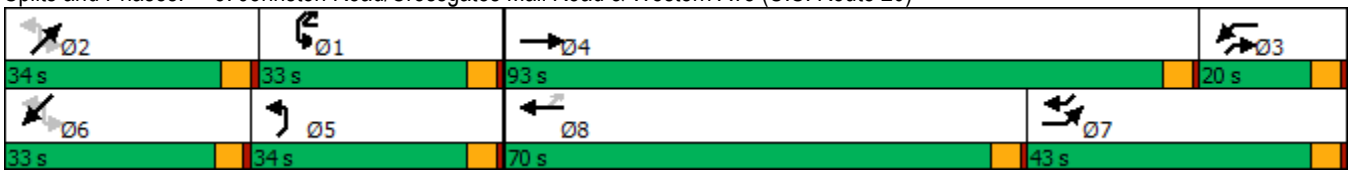
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	231	991	101	136	1571	78	133	77	97	104	203	330
Future Volume (vph)	231	991	101	136	1571	78	133	77	97	104	203	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.98		0.99	0.97	0.99		
Frt		0.986				0.850		0.974	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3517	0	1805	3539	1417	1770	1749	1534	1634	1909	1607
Flt Permitted	0.950			0.950			0.240			0.596		
Satd. Flow (perm)	1768	3517	0	1801	3539	1389	447	1749	1488	1010	1909	1607
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8				73		5	87			133
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)	4		4	4		4			10	10		
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	2%	1%	0%	0%	2%	14%	2%	0%	0%	11%	0%	1%
Adj. Flow (vph)	248	1066	109	146	1689	84	143	83	104	112	218	355
Shared Lane Traffic (%)									16%			
Lane Group Flow (vph)	248	1175	0	146	1689	84	143	100	87	112	218	355
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template						Right						
Leading Detector (ft)	46	7		46	7	20	46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6	0	6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6	0	6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1	20	40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8	2		2	6		6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0	10.0	10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	43.0	93.0		20.0	70.0	33.0	34.0	34.0	20.0	33.0	33.0	43.0
Total Split (%)	23.9%	51.7%		11.1%	38.9%	18.3%	18.9%	18.9%	11.1%	18.3%	18.3%	23.9%
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min	None	None	None	None	None	None	None
v/c Ratio	0.82	0.76		0.42	1.03	0.10	0.74	0.48	0.16	0.37	0.80	0.55
Control Delay	79.4	36.1		59.8	67.6	5.3	79.9	62.9	7.5	48.6	81.4	25.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.4	36.1		59.8	67.6	5.3	79.9	62.9	7.5	48.6	81.4	25.1
Queue Length 50th (ft)	225	474		121	~890	4	106	91	0	82	198	165
Queue Length 95th (ft)	348	564		#252	#1288	36	183	158	45	149	320	266
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	480	2213		349	1642	874	419	366	532	461	381	655
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.53		0.42	1.03	0.10	0.34	0.27	0.16	0.24	0.57	0.54

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 141.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	231	991	101	136	1571	78	133	77	97	104	203	330
Future Volume (veh/h)	231	991	101	136	1571	78	133	77	97	104	203	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.97	0.98		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1885	1885	1900	1870	1693	1870	1900	1900	1774	1939	1924
Adj Flow Rate, veh/h	248	1066	109	146	1689	84	143	99	94	112	218	355
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	1	1	0	2	14	2	0	0	11	0	1
Cap, veh/h	276	1491	152	326	1707	836	170	216	468	284	300	500
Arrive On Green	0.15	0.45	0.45	0.18	0.48	0.48	0.06	0.11	0.11	0.10	0.15	0.15
Sat Flow, veh/h	1781	3279	335	1810	3554	1431	1781	1900	1568	1690	1939	1599
Grp Volume(v), veh/h	248	582	593	146	1689	84	143	99	94	112	218	355
Grp Sat Flow(s),veh/h/ln	1781	1791	1823	1810	1777	1431	1781	1900	1568	1690	1939	1599
Q Serve(g_s), s	18.5	35.5	35.6	9.7	63.7	0.0	6.2	6.6	0.0	0.0	14.5	5.2
Cycle Q Clear(g_c), s	18.5	35.5	35.6	9.7	63.7	0.0	6.2	6.6	0.0	0.0	14.5	5.2
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	815	829	326	1707	836	170	216	468	284	300	500
V/C Ratio(X)	0.90	0.71	0.72	0.45	0.99	0.10	0.84	0.46	0.20	0.39	0.73	0.71
Avail Cap(c_a), veh/h	500	1164	1185	326	1707	836	440	407	626	458	401	583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	29.8	29.8	49.5	34.8	12.4	61.1	56.1	35.9	52.7	54.5	41.2
Incr Delay (d2), s/veh	4.3	5.3	5.2	0.4	19.5	0.2	4.3	0.6	0.1	0.3	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	16.0	16.3	4.4	30.7	1.2	5.0	3.2	2.3	3.5	7.3	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.5	35.1	35.1	49.8	54.3	12.7	65.4	56.7	36.0	53.0	56.9	43.7
LnGrp LOS	E	D	D	D	D	B	E	E	D	D	E	D
Approach Vol, veh/h		1423			1919			336			685	
Approach Delay, s/veh		39.5			52.2			54.6			49.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	20.4	29.4	66.6	13.5	26.0	25.9	70.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	28.0	29.0	15.0	88.0	29.0	28.0	38.0	65.0
Max Q Clear Time (g_c+I1), s	2.0	8.6	11.7	37.6	8.2	16.5	20.5	65.7
Green Ext Time (p_c), s	0.2	0.4	0.1	24.0	0.3	1.2	0.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.8
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.
User approved changes to right turn type.

SATURDAY PEAK HOUR

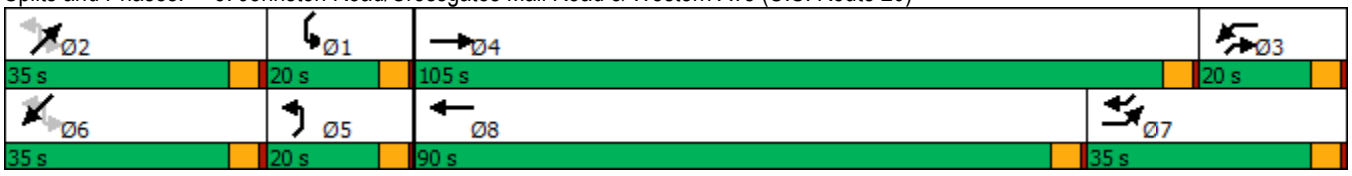
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	294	943	95	79	1012	140	136	103	78	90	83	172
Future Volume (vph)	294	943	95	79	1012	140	136	103	78	90	83	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor							1.00					0.99
Frt		0.986			0.982			0.990	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3527	0	1805	3489	0	1787	1787	1534	1680	1909	1607
Flt Permitted	0.950			0.950			0.640			0.446		
Satd. Flow (perm)	1787	3527	0	1805	3489	0	1202	1787	1534	789	1909	1585
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			11			2	73			111
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			734	
Travel Time (s)		6.4			17.4			14.9			16.7	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	1%	6%	1%	0%	0%	8%	0%	1%
Adj. Flow (vph)	306	982	99	82	1054	146	142	107	81	94	86	179
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	306	1081	0	82	1200	0	142	115	73	94	86	179
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.77	0.69		0.19	0.75		0.50	0.53	0.11	0.66	0.57	0.32
Control Delay	67.7	33.7		51.1	34.4		57.7	67.3	7.0	78.0	82.2	17.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.7	33.7		51.1	34.4		57.7	67.3	7.0	78.0	82.2	17.7
Queue Length 50th (ft)	244	366		56	417		108	98	0	70	71	39
Queue Length 95th (ft)	#567	567		137	635		203	196	37	141	159	129
Internal Link Dist (ft)		294			938			574			654	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	398	2621		430	2206		354	399	652	249	425	560
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.41		0.19	0.54		0.40	0.29	0.11	0.38	0.20	0.32

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 139.2	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	294	943	95	79	1012	140	136	103	78	90	83	172
Future Volume (veh/h)	294	943	95	79	1012	140	136	103	78	90	83	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1885	1885	1885	1900	1900	1819	1939	1924
Adj Flow Rate, veh/h	306	982	99	82	1054	146	142	107	81	94	86	179
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	0	1	1	1	0	0	8	0	1
Cap, veh/h	339	1525	154	414	1592	220	193	156	500	161	141	426
Arrive On Green	0.19	0.46	0.46	0.23	0.50	0.50	0.05	0.08	0.08	0.04	0.07	0.07
Sat Flow, veh/h	1795	3285	331	1810	3160	437	1795	1900	1604	1733	1939	1624
Grp Volume(v), veh/h	306	535	546	82	597	603	142	107	81	94	86	179
Grp Sat Flow(s),veh/h/ln	1795	1791	1826	1810	1791	1806	1795	1900	1604	1733	1939	1624
Q Serve(g_s), s	18.3	25.1	25.1	4.0	27.2	27.3	2.4	6.0	0.0	0.2	4.7	0.0
Cycle Q Clear(g_c), s	18.3	25.1	25.1	4.0	27.2	27.3	2.4	6.0	0.0	0.2	4.7	0.0
Prop In Lane	1.00		0.18	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	831	847	414	902	910	193	156	500	161	141	426
V/C Ratio(X)	0.90	0.64	0.64	0.20	0.66	0.66	0.74	0.69	0.16	0.58	0.61	0.42
Avail Cap(c_a), veh/h	491	1633	1664	414	1388	1400	344	520	807	323	530	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	22.5	22.5	34.2	20.3	20.3	49.2	49.0	27.4	50.0	49.4	33.6
Incr Delay (d2), s/veh	11.8	3.8	3.8	0.1	3.8	3.8	2.0	2.0	0.1	1.3	1.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	10.8	11.0	1.7	11.5	11.6	3.9	2.9	1.5	2.5	2.3	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	26.3	26.2	34.3	24.1	24.1	51.2	51.0	27.5	51.3	50.9	33.8
LnGrp LOS	E	C	C	C	C	C	D	D	C	D	D	C
Approach Vol, veh/h		1387			1282			330			359	
Approach Delay, s/veh		32.7			24.7			45.3			42.5	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	14.0	30.1	55.9	10.8	13.0	25.7	60.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.2	8.0	6.0	27.1	4.4	6.7	20.3	29.3
Green Ext Time (p_c), s	0.1	0.4	0.1	23.8	0.2	0.6	0.4	25.9

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

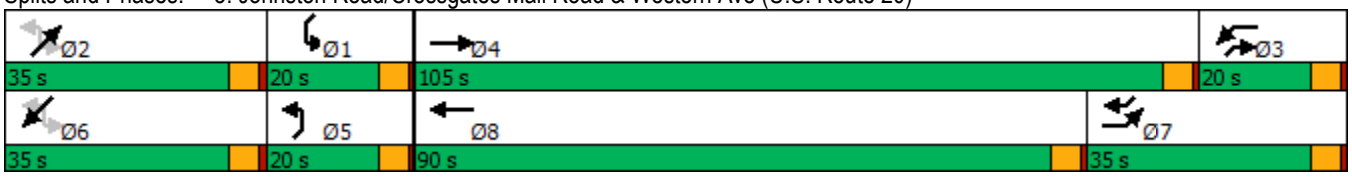
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	302	974	95	79	1041	144	136	103	78	93	83	175
Future Volume (vph)	302	974	95	79	1041	144	136	103	78	93	83	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor							1.00					0.99
Frt		0.987			0.982			0.990	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3531	0	1805	3489	0	1787	1787	1534	1680	1909	1607
Flt Permitted	0.950			0.950			0.634			0.435		
Satd. Flow (perm)	1787	3531	0	1805	3489	0	1191	1787	1534	769	1909	1585
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			11			2	73			106
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	1%	6%	1%	0%	0%	8%	0%	1%
Adj. Flow (vph)	315	1015	99	82	1084	150	142	107	81	97	86	182
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	315	1114	0	82	1234	0	142	115	73	97	86	182
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)	46	7		46	7		46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6		6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1		40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases							2		2	6		6
Detector Phase	7	4		3	8		5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0		5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0		10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	35.0	105.0		20.0	90.0		20.0	35.0	20.0	20.0	35.0	35.0
Total Split (%)	19.4%	58.3%		11.1%	50.0%		11.1%	19.4%	11.1%	11.1%	19.4%	19.4%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min		None	None	None	None	None	None
v/c Ratio	0.81	0.70		0.20	0.76		0.50	0.53	0.11	0.68	0.58	0.33
Control Delay	71.9	33.7		52.7	34.7		58.9	68.8	7.3	81.8	84.0	19.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.9	33.7		52.7	34.7		58.9	68.8	7.3	81.8	84.0	19.5
Queue Length 50th (ft)	261	384		58	440		111	101	0	74	73	46
Queue Length 95th (ft)	#592	582		139	664		203	196	38	146	160	139
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	389	2572		419	2162		349	391	641	243	416	548
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.43		0.20	0.57		0.41	0.29	0.11	0.40	0.21	0.33

Intersection Summary	
Area Type:	Other
Cycle Length: 180	
Actuated Cycle Length: 141.9	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	302	974	95	79	1041	144	136	103	78	93	83	175
Future Volume (veh/h)	302	974	95	79	1041	144	136	103	78	93	83	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1885	1885	1885	1900	1900	1819	1939	1924
Adj Flow Rate, veh/h	315	1015	99	82	1084	150	142	107	81	97	86	182
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	0	1	1	1	0	0	8	0	1
Cap, veh/h	347	1555	152	416	1607	222	187	154	500	155	139	431
Arrive On Green	0.19	0.47	0.47	0.23	0.51	0.51	0.05	0.08	0.08	0.04	0.07	0.07
Sat Flow, veh/h	1795	3297	321	1810	3161	437	1795	1900	1604	1733	1939	1624
Grp Volume(v), veh/h	315	551	563	82	613	621	142	107	81	97	86	182
Grp Sat Flow(s),veh/h/ln	1795	1791	1827	1810	1791	1807	1795	1900	1604	1733	1939	1624
Q Serve(g_s), s	19.6	26.8	26.8	4.2	29.2	29.3	2.7	6.2	0.0	0.7	4.9	0.0
Cycle Q Clear(g_c), s	19.6	26.8	26.8	4.2	29.2	29.3	2.7	6.2	0.0	0.7	4.9	0.0
Prop In Lane	1.00		0.18	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	347	845	862	416	911	919	187	154	500	155	139	431
V/C Ratio(X)	0.91	0.65	0.65	0.20	0.67	0.68	0.76	0.69	0.16	0.62	0.62	0.42
Avail Cap(c_a), veh/h	473	1571	1603	416	1336	1347	332	500	792	311	510	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	23.0	23.0	35.4	20.9	21.0	51.3	51.0	28.5	52.2	51.4	34.7
Incr Delay (d2), s/veh	14.7	3.9	3.8	0.1	4.0	4.0	2.4	2.1	0.1	1.5	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	11.6	11.8	1.8	12.4	12.6	4.1	3.1	1.6	2.7	2.5	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	26.9	26.8	35.5	24.9	25.0	53.7	53.1	28.5	53.7	53.0	34.9
LnGrp LOS	E	C	C	D	C	C	D	D	C	D	D	C
Approach Vol, veh/h		1429			1316			330			365	
Approach Delay, s/veh		34.1			25.6			47.3			44.2	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	14.3	31.2	58.8	10.8	13.2	27.0	63.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	30.0	85.0
Max Q Clear Time (g_c+I1), s	2.7	8.2	6.2	28.8	4.7	6.9	21.6	31.3
Green Ext Time (p_c), s	0.1	0.4	0.1	25.0	0.2	0.6	0.4	26.6

Intersection Summary	
HCM 6th Ctrl Delay	33.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

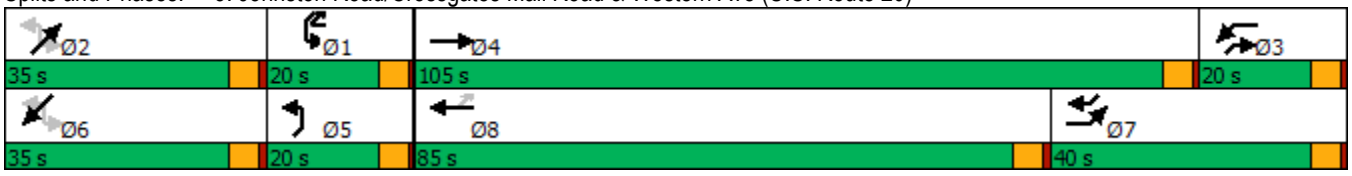
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	302	974	95	79	1041	144	136	103	78	93	83	175
Future Volume (vph)	302	974	95	79	1041	144	136	103	78	93	83	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%			0%			-1%	
Storage Length (ft)	100		0	100		0	100		110	75		0
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	86			86			86			86		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Ped Bike Factor							1.00					0.99
Frt		0.987				0.850		0.990	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1787	3531	0	1805	3574	1524	1787	1787	1534	1680	1909	1607
Flt Permitted	0.950			0.950			0.659			0.482		
Satd. Flow (perm)	1787	3531	0	1805	3574	1524	1238	1787	1534	852	1909	1585
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				130		2	73			103
Link Speed (mph)		40			40			30			30	
Link Distance (ft)		374			1018			654			346	
Travel Time (s)		6.4			17.4			14.9			7.9	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	1%	1%	0%	0%	1%	6%	1%	0%	0%	8%	0%	1%
Adj. Flow (vph)	315	1015	99	82	1084	150	142	107	81	97	86	182
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	315	1114	0	82	1084	150	142	115	73	97	86	182
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane					Yes							
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	1		1	1	1	1	1	1	1	1	1
Detector Template						Right						
Leading Detector (ft)	46	7		46	7	20	46	46	46	46	46	46
Trailing Detector (ft)	6	6		6	6	0	6	6	6	6	6	6
Detector 1 Position(ft)	6	6		6	6	0	6	6	6	6	6	6
Detector 1 Size(ft)	40	1		40	1	20	40	40	40	40	40	40
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Turn Type	Prot	NA		Prot	NA	pm+ov	pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	7
Permitted Phases						8	2		2	6		6
Detector Phase	7	4		3	8	1	5	2	3	1	6	7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Switch Phase												
Minimum Initial (s)	5.0	15.0		5.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	21.0	20.0		10.0	20.0	10.0	10.0	10.0	10.0	10.0	10.0	21.0
Total Split (s)	40.0	105.0		20.0	85.0	20.0	20.0	35.0	20.0	20.0	35.0	40.0
Total Split (%)	22.2%	58.3%		11.1%	47.2%	11.1%	11.1%	19.4%	11.1%	11.1%	19.4%	22.2%
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead		Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Min		None	Min	None	None	None	None	None	None	None
v/c Ratio	0.79	0.66		0.25	0.70	0.17	0.47	0.50	0.12	0.61	0.54	0.32
Control Delay	66.3	29.2		55.1	33.8	4.7	53.7	63.8	7.7	70.1	77.8	17.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.3	29.2		55.1	33.8	4.7	53.7	63.8	7.7	70.1	77.8	17.8
Queue Length 50th (ft)	230	341		55	360	7	100	91	0	67	67	41
Queue Length 95th (ft)	#529	561		142	583	47	202	196	40	146	159	135
Internal Link Dist (ft)		294			938			574			266	
Turn Bay Length (ft)	100			100			100		110	75		
Base Capacity (vph)	507	2781		331	2318	864	383	435	585	275	464	619
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.40		0.25	0.47	0.17	0.37	0.26	0.12	0.35	0.19	0.29

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 131
Natural Cycle: 70
Control Type: Actuated-Uncoordinated
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: Johnston Road/Crossgates Mall Road & Western Ave (U.S. Route 20)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	302	974	95	79	1041	144	136	103	78	93	83	175
Future Volume (veh/h)	302	974	95	79	1041	144	136	103	78	93	83	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1885	1811	1885	1900	1900	1819	1939	1924
Adj Flow Rate, veh/h	315	1015	99	82	1084	150	142	107	81	97	86	182
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	0	1	6	1	0	0	8	0	1
Cap, veh/h	350	1596	156	365	1758	821	197	157	458	166	142	437
Arrive On Green	0.20	0.48	0.48	0.20	0.49	0.49	0.05	0.08	0.08	0.04	0.07	0.07
Sat Flow, veh/h	1795	3297	321	1810	3582	1535	1795	1900	1604	1733	1939	1624
Grp Volume(v), veh/h	315	551	563	82	1084	150	142	107	81	97	86	182
Grp Sat Flow(s),veh/h/ln	1795	1791	1827	1810	1791	1535	1795	1900	1604	1733	1939	1624
Q Serve(g_s), s	18.3	24.5	24.5	4.0	23.6	0.7	2.1	5.8	0.0	0.2	4.6	0.0
Cycle Q Clear(g_c), s	18.3	24.5	24.5	4.0	23.6	0.7	2.1	5.8	0.0	0.2	4.6	0.0
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	867	885	365	1758	821	197	157	458	166	142	437
V/C Ratio(X)	0.90	0.64	0.64	0.22	0.62	0.18	0.72	0.68	0.18	0.59	0.60	0.42
Avail Cap(c_a), veh/h	588	1677	1711	365	2683	1218	354	534	776	332	545	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	20.5	20.5	35.6	19.9	12.8	47.7	47.6	28.8	48.6	48.0	32.2
Incr Delay (d2), s/veh	5.9	3.5	3.5	0.1	1.6	0.5	1.8	1.9	0.1	1.2	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	10.4	10.6	1.8	9.6	1.8	3.7	2.8	1.5	2.5	2.3	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	24.1	24.0	35.8	21.5	13.3	49.5	49.5	28.9	49.8	49.5	32.4
LnGrp LOS	D	C	C	D	C	B	D	D	C	D	D	C
Approach Vol, veh/h		1429			1316			330			365	
Approach Delay, s/veh		29.3			21.4			44.5			41.1	
Approach LOS		C			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	13.8	26.5	56.7	10.7	12.8	25.8	57.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	15.0	30.0	15.0	100.0	15.0	30.0	35.0	80.0
Max Q Clear Time (g_c+I1), s	2.2	7.8	6.0	26.5	4.1	6.6	20.3	25.6
Green Ext Time (p_c), s	0.1	0.4	0.1	25.2	0.2	0.6	0.5	26.8

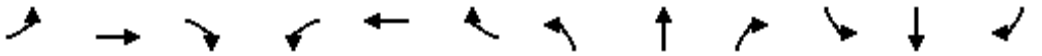
Intersection Summary	
HCM 6th Ctrl Delay	29.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

INTERSECTION #9
Washington Avenue Extension
Springsteen Road / Crossgates Commons

WEEKDAY PEAK AM HOUR



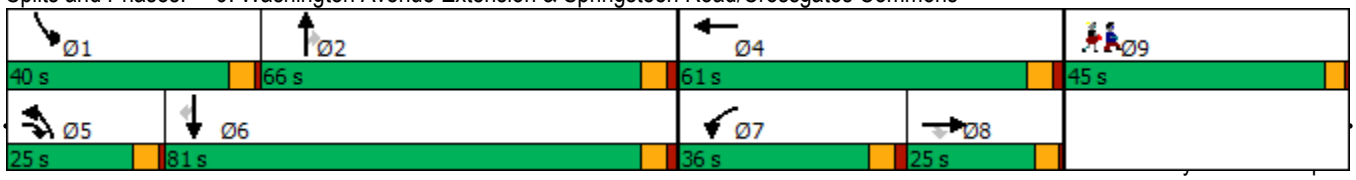
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	137	107	35	130	130	1157	135	129	1340	8
Future Volume (vph)	0	0	137	107	35	130	130	1157	135	129	1340	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.882				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1742	3240	1524	0	1761	4963	1435	1703	3505	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1715	3217	1524	0	1759	4963	1435	1703	3505	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			400		84				118			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	7%	6%	8%	2%	4%	12%	6%	3%	0%
Adj. Flow (vph)	0	0	147	115	38	140	140	1244	145	139	1441	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	147	115	178	0	140	1244	145	139	1441	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			15.5	13.2	13.2		15.5	76.2	76.2	15.1	75.8	75.8
Actuated g/C Ratio			0.12	0.10	0.10		0.12	0.59	0.59	0.12	0.59	0.59
v/c Ratio			0.26	0.35	0.77		0.66	0.42	0.16	0.69	0.70	0.01
Control Delay			1.1	58.5	52.8		72.3	19.6	6.7	75.5	25.0	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			1.1	58.5	52.8		72.3	19.6	6.7	75.5	25.0	0.0
LOS			A	E	D		E	B	A	E	C	A
Approach Delay		1.1			55.0			23.2			29.2	
Approach LOS		A			E			C			C	
Queue Length 50th (ft)			0	42	70		102	158	7	103	348	0
Queue Length 95th (ft)			0	99	201		#265	502	74	241	#1073	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			616	782	721		283	2943	899	480	2116	991
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.24	0.15	0.25		0.49	0.42	0.16	0.29	0.68	0.01

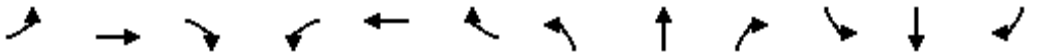
Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 128.5			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 27.6		Intersection LOS: C	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



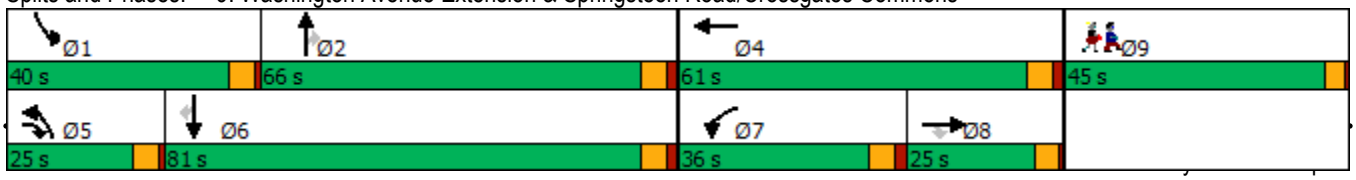
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	137	107	35	130	130	1160	135	129	1346	8
Future Volume (vph)	0	0	137	107	35	130	130	1160	135	129	1346	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.882				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1742	3240	1524	0	1761	4963	1435	1703	3505	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1715	3217	1524	0	1760	4963	1435	1703	3505	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			400		84				118			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	0%	0%	2%	7%	6%	8%	2%	4%	12%	6%	3%	0%
Adj. Flow (vph)	0	0	147	115	38	140	140	1247	145	139	1447	9
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	147	115	178	0	140	1247	145	139	1447	9
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			15.5	13.2	13.2		15.5	76.5	76.5	15.1	76.1	76.1
Actuated g/C Ratio			0.12	0.10	0.10		0.12	0.59	0.59	0.12	0.59	0.59
v/c Ratio			0.26	0.35	0.77		0.66	0.42	0.16	0.69	0.70	0.01
Control Delay			1.1	58.7	53.0		72.6	19.6	6.7	75.8	25.0	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			1.1	58.7	53.0		72.6	19.6	6.7	75.8	25.0	0.0
LOS			A	E	D		E	B	A	E	C	A
Approach Delay		1.1			55.2			23.2			29.3	
Approach LOS		A			E			C			C	
Queue Length 50th (ft)			0	43	71		103	159	7	104	351	0
Queue Length 95th (ft)			0	99	201		#265	504	74	241	#1081	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			615	780	720		282	2947	900	478	2111	989
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.24	0.15	0.25		0.50	0.42	0.16	0.29	0.69	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 128.8			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 27.6		Intersection LOS: C	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

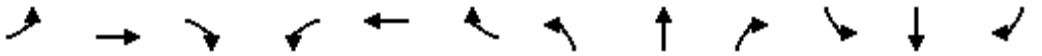
Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

WEEKDAY PEAK PM HOUR



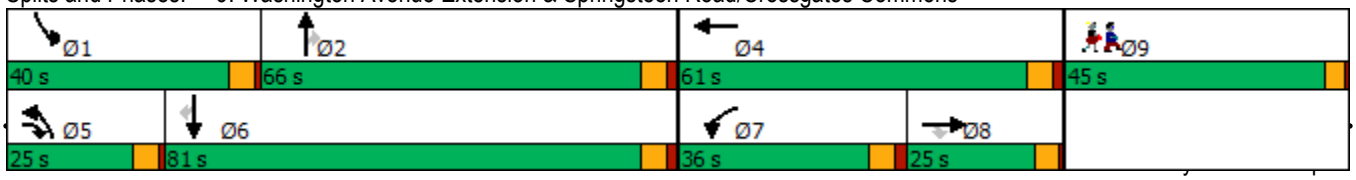
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	186	295	55	259	178	1410	353	241	1391	5
Future Volume (vph)	0	0	186	295	55	259	178	1410	353	241	1391	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.876				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1759	3333	1614	0	1796	5110	1560	1787	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1732	3310	1614	0	1795	5110	1560	1787	3574	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			331		107				178			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	0%	1%	0%	1%	3%	1%	1%	0%
Adj. Flow (vph)	0	0	198	314	59	276	189	1500	376	256	1480	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	198	314	335	0	189	1500	376	256	1480	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			20.6	26.8	26.8		20.6	72.1	72.1	25.7	77.3	77.3
Actuated g/C Ratio			0.14	0.18	0.18		0.14	0.48	0.48	0.17	0.52	0.52
v/c Ratio			0.37	0.52	0.89		0.76	0.61	0.44	0.83	0.80	0.01
Control Delay			2.0	58.7	65.7		82.2	34.0	19.3	82.9	35.7	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			2.0	58.7	65.7		82.2	34.0	19.3	82.9	35.7	0.0
LOS			A	E	E		F	C	B	F	D	A
Approach Delay		2.0			62.3			35.8			42.5	
Approach LOS		A			E			D			D	
Queue Length 50th (ft)			0	131	206		163	330	101	219	516	0
Queue Length 95th (ft)			0	240	429		#471	#863	375	#494	#1351	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			529	752	681		248	2478	848	432	1856	865
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.37	0.42	0.49		0.76	0.61	0.44	0.59	0.80	0.01

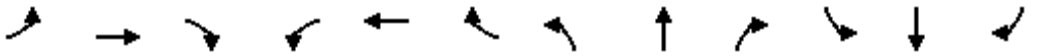
Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 148.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 40.6		Intersection LOS: D	
Intersection Capacity Utilization 81.6%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



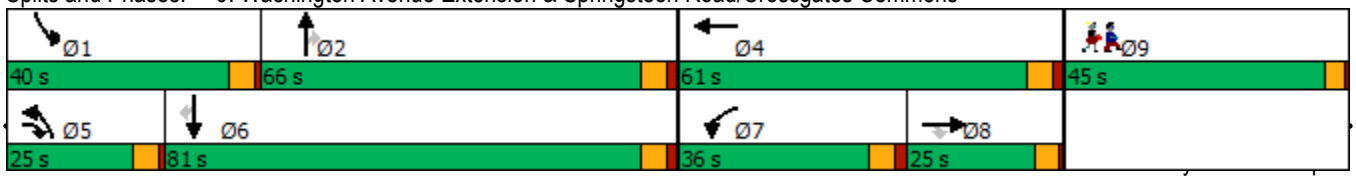
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	186	295	55	259	178	1421	353	241	1400	5
Future Volume (vph)	0	0	186	295	55	259	178	1421	353	241	1400	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99	0.99		1.00					0.98
Frt			0.850		0.876				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1759	3333	1614	0	1796	5110	1560	1787	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1732	3310	1614	0	1795	5110	1560	1787	3574	1580
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			331		107				177			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)	3		2	2		3	1					1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	1%	4%	0%	1%	0%	1%	3%	1%	1%	0%
Adj. Flow (vph)	0	0	198	314	59	276	189	1512	376	256	1489	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	198	314	335	0	189	1512	376	256	1489	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			20.6	26.8	26.8		20.6	72.1	72.1	25.7	77.3	77.3
Actuated g/C Ratio			0.14	0.18	0.18		0.14	0.48	0.48	0.17	0.52	0.52
v/c Ratio			0.37	0.52	0.89		0.76	0.61	0.44	0.83	0.80	0.01
Control Delay			2.0	58.7	65.7		82.2	34.1	19.4	82.9	35.9	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			2.0	58.7	65.7		82.2	34.1	19.4	82.9	35.9	0.0
LOS			A	E	E		F	C	B	F	D	A
Approach Delay		2.0			62.3			35.8			42.7	
Approach LOS		A			E			D			D	
Queue Length 50th (ft)			0	131	206		163	333	101	219	521	0
Queue Length 95th (ft)			0	240	429		#471	#876	376	#494	#1364	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			529	752	681		248	2478	848	432	1856	865
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.37	0.42	0.49		0.76	0.61	0.44	0.59	0.80	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 148.7			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 40.6		Intersection LOS: D	
Intersection Capacity Utilization 81.9%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

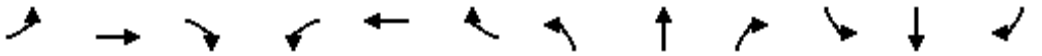
Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

SATURDAY PEAK HOUR



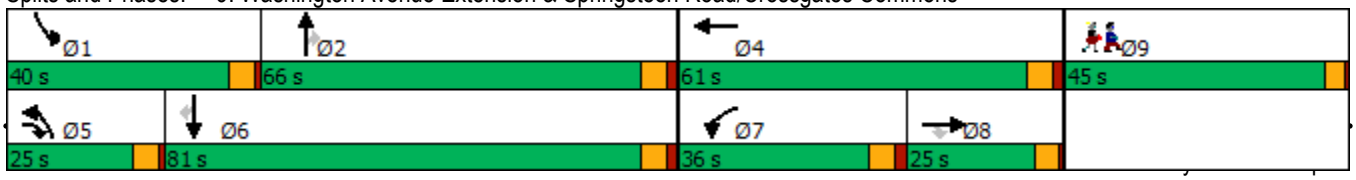
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	84	415	53	367	72	557	469	401	598	5
Future Volume (vph)	0	0	84	415	53	367	72	557	469	401	598	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99								
Frt			0.850		0.869				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1777	3432	1620	0	1796	5060	1591	1805	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1750	3408	1620	0	1796	5060	1591	1805	3574	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			375		158				484			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	2%	1%	0%	1%	0%
Adj. Flow (vph)	0	0	87	428	55	378	74	574	484	413	616	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	87	428	433	0	74	574	484	413	616	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			10.0	27.2	27.2		10.0	32.4	32.4	37.0	59.3	59.3
Actuated g/C Ratio			0.08	0.23	0.23		0.08	0.27	0.27	0.31	0.49	0.49
v/c Ratio			0.18	0.55	0.89		0.50	0.42	0.62	0.75	0.35	0.01
Control Delay			0.8	44.3	49.7		70.2	41.3	8.1	49.3	25.7	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			0.8	44.3	49.7		70.2	41.3	8.1	49.3	25.7	0.0
LOS			A	D	D		E	D	A	D	C	A
Approach Delay		0.8			47.0			29.0			35.0	
Approach LOS		A			D			C			D	
Queue Length 50th (ft)			0	132	189		49	115	0	243	121	0
Queue Length 95th (ft)			0	277	468		148	283	119	#840	409	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			620	987	863		315	2663	1066	554	2351	1094
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.14	0.43	0.50		0.23	0.22	0.45	0.75	0.26	0.00

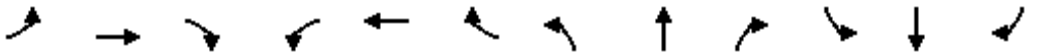
Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 120.4			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 35.2		Intersection LOS: D	
Intersection Capacity Utilization 86.8%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary



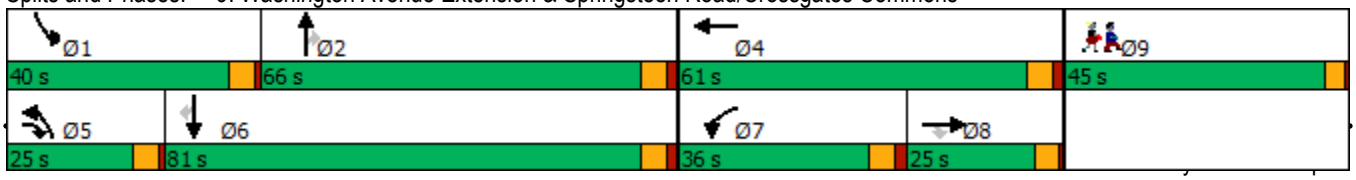
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	84	415	53	367	72	567	469	401	610	5
Future Volume (vph)	0	0	84	415	53	367	72	567	469	401	610	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	15	12	12	12	12	12	12	12	12	12
Grade (%)		0%			2%			1%			0%	
Storage Length (ft)	0		0	155		130	170		250	380		250
Storage Lanes	0		1	2		0	1		1	1		1
Taper Length (ft)	25			86			86			86		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.91	1.00	1.00	0.95	1.00
Ped Bike Factor			0.98	0.99								
Frt			0.850		0.869				0.850			0.850
Flt Protected				0.950			0.950			0.950		
Satd. Flow (prot)	0	2090	1777	3432	1620	0	1796	5060	1591	1805	3574	1615
Flt Permitted				0.950			0.950			0.950		
Satd. Flow (perm)	0	2090	1750	3408	1620	0	1796	5060	1591	1805	3574	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			372		158				484			93
Link Speed (mph)		30			30			45			45	
Link Distance (ft)		124			869			1287			1236	
Travel Time (s)		2.8			19.8			19.5			18.7	
Confl. Peds. (#/hr)			2	2								
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	2%	1%	0%	1%	0%
Adj. Flow (vph)	0	0	87	428	55	378	74	585	484	413	629	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	87	428	433	0	74	585	484	413	629	5
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	0.88	0.88	0.88	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors		1	1	1	1		1	1	1	1	1	1
Detector Template												
Leading Detector (ft)		1	40	40	40		40	1	1	40	1	1
Trailing Detector (ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)		0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)		1	40	40	40		40	1	1	40	1	1
Detector 1 Type		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Turn Type			pm+ov	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8	5	7	4		5	2		1	6	
Permitted Phases			8						2			6

Lane Group	Ø9
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Lane Width (ft)	
Grade (%)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Enter Blocked Intersection	
Lane Alignment	
Median Width(ft)	
Link Offset(ft)	
Crosswalk Width(ft)	
Two way Left Turn Lane	
Headway Factor	
Turning Speed (mph)	
Number of Detectors	
Detector Template	
Leading Detector (ft)	
Trailing Detector (ft)	
Detector 1 Position(ft)	
Detector 1 Size(ft)	
Detector 1 Type	
Detector 1 Channel	
Detector 1 Extend (s)	
Detector 1 Queue (s)	
Detector 1 Delay (s)	
Turn Type	
Protected Phases	9
Permitted Phases	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase		8	5	7	4		5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)		5.0	5.0	5.0	5.0		5.0	30.0	30.0	5.0	30.0	30.0
Minimum Split (s)		10.0	10.0	11.0	11.0		10.0	36.0	36.0	10.0	36.0	36.0
Total Split (s)		25.0	25.0	36.0	61.0		25.0	66.0	66.0	40.0	81.0	81.0
Total Split (%)		11.8%	11.8%	17.0%	28.8%		11.8%	31.1%	31.1%	18.9%	38.2%	38.2%
Yellow Time (s)		4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)		1.0	1.0	2.0	2.0		1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	6.0	6.0		5.0	6.0	6.0	5.0	6.0	6.0
Lead/Lag		Lag	Lead	Lead			Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?		Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode		None	None	None	None		None	Min	Min	None	Min	Min
Act Effct Green (s)			10.0	27.3	27.3		10.0	32.4	32.4	37.0	59.4	59.4
Actuated g/C Ratio			0.08	0.23	0.23		0.08	0.27	0.27	0.31	0.49	0.49
v/c Ratio			0.18	0.55	0.89		0.50	0.43	0.62	0.75	0.36	0.01
Control Delay			0.8	44.3	49.7		70.4	41.3	8.1	49.4	25.8	0.0
Queue Delay			0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay			0.8	44.3	49.7		70.4	41.3	8.1	49.4	25.8	0.0
LOS			A	D	D		E	D	A	D	C	A
Approach Delay		0.8			47.0			29.1			35.0	
Approach LOS		A			D			C			D	
Queue Length 50th (ft)			0	132	189		49	118	0	243	124	0
Queue Length 95th (ft)			0	278	470		148	289	118	#842	421	0
Internal Link Dist (ft)		44			789			1207			1156	
Turn Bay Length (ft)				155			170		250	380		250
Base Capacity (vph)			618	987	863		314	2661	1066	553	2350	1093
Starvation Cap Reductn			0	0	0		0	0	0	0	0	0
Spillback Cap Reductn			0	0	0		0	0	0	0	0	0
Storage Cap Reductn			0	0	0		0	0	0	0	0	0
Reduced v/c Ratio			0.14	0.43	0.50		0.24	0.22	0.45	0.75	0.27	0.00

Intersection Summary			
Area Type:	Other		
Cycle Length: 212			
Actuated Cycle Length: 120.5			
Natural Cycle: 145			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 35.2		Intersection LOS: D	
Intersection Capacity Utilization 86.8%		ICU Level of Service E	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 9: Washington Avenue Extension & Springsteen Road/Crossgates Commons



Lane Group	Ø9
Detector Phase	
Switch Phase	
Minimum Initial (s)	1.0
Minimum Split (s)	45.0
Total Split (s)	45.0
Total Split (%)	21%
Yellow Time (s)	3.0
All-Red Time (s)	1.0
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	None
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	
Queue Length 95th (ft)	
Internal Link Dist (ft)	
Turn Bay Length (ft)	
Base Capacity (vph)	
Starvation Cap Reductn	
Spillback Cap Reductn	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

LEVEL OF SERVICE STANDARDS

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of Service (LOS) can be characterized for the entire intersection, each intersection approach, and each lane group. Control delay alone is used to characterize LOS for the entire intersection or an approach. Control delay and volume-to-capacity (v/c) ratio are used to characterize LOS for a lane group. Delay quantifies the increase in travel time due to traffic signal control. It is also a measure of driver discomfort and fuel consumption. The volume-to-capacity ratio quantifies the degree to which a phase's capacity is utilized by a lane group.

LOS A describes operations with a control delay of 10 s/veh or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.

LOS B describes operations with control delay between 10 and 20 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.

LOS C describes operations with control delay between 20 and 35 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable or the cycle length is moderate.

LOS D describes operations with control delay between 35 and 55 s/veh and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long.

LEVEL OF SERVICE CRITERIA
FOR ALL-WAY STOP-CONTROLLED (AWSC) UNSIGNALIZED INTERSECTIONS

The Levels of Service (LOS) for all-way stop-controlled (AWSC) intersections are given in Exhibit 20-2. As the exhibit notes, LOS F is assigned if the volume-to-capacity (v/c) ratio of a lane exceeds 1.0, regardless of the control delay. For assessment of LOS at the approach and intersection levels, LOS is based solely on control delay.

The Level of Service Criteria for AWSC unsignalized intersections are given in Exhibit 20-2 from the *2010 Highway Capacity Manual* published by the Transportation Research Board.

Exhibit 20-2

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersection wide assessment, LOS is defined solely by control delay.

RAPP ROAD RESIDENTIAL
COSTCO
WESTERN AVENUE MIXED-USE DEVELOPMENT

ATTACHMENT C

INTERSECTION #10

CROSSGATES MALL ROAD
FULLER ROAD ALTERNATE (I-87/I-90 RAMPS)

W/ ROUNDABOUT

TABLE NO. 3R

LEVEL OF SERVICE SUMMARY TABLE

WITH ROUNDABOUT

	LOCATION		YEAR 2022 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
10	CROSSGATES MALL ROAD FULLER ROAD ALTERNATE (I-87 / I-90 RAMPS)										
	W/ ROUNDABOUT										
	I-87 OFF RAMP	WB L	A	4.3	0.177	A	7.9	0.468	B	11.4	0.620
		WB R	A	0.0	0.285	A	0.0	0.284	A	0.0	0.372
		WB APPROACH	**A**	**1.3**	**----**	**A**	**4.1**	**----**	**A**	**5.7**	**----**
	CROSSGATES MALL ROAD	NB T	A	3.6	0.065	A	6,6	0.198	A	7.5	0.316
		NB R	B	10.9	0.609	D	26.4	0.912	D	28.2	0.859
		NB APPROACH	**B**	**10.2**	**----**	**C**	**22.0**	**----**	**C**	**22.4**	**----**
	CROSSGATES MALL ROAD	SB L-T	A	5.2	0.153	D	30.7	0.925	C	23.5	0.768
		SB T	A	4.1	0.055	A	7.9	0.320	A	9.3	0.374
		SB APPROACH	**A**	**4.9**	**----**	**C**	**24.7**	**----**	**C**	**18.6**	**----**
	OVERALL INTERSECTION		**A**	**5.7**	**----**	**C**	**15.6**	**----**	**B**	**14.2**	**----**

THE ABOVE REPRESENTS THE LEVELS OF SERVICE, VEHICLE DELAY IN SECONDS AND VOLUME-TO-CAPACITY (V/C) RATIO FOR THE ABOVE INTERSECTION.

TABLE NO. 6R

LEVEL OF SERVICE SUMMARY TABLE

WITH ROUNDABOUT

	LOCATION		YEAR 2025 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
10	CROSSGATES MALL ROAD FULLER ROAD ALTERNATE (I-87 / I-90 RAMPS) <u>W/ ROUNDABOUT</u>										
	I-87 OFF RAMP	WB L	A	4.8	0.223	A	9.1	0.545	B	14.5	0.715
		WB R	A	0.0	0.289	A	0.0	0.288	A	0.0	0.378
		WB APPROACH	**A**	**1.6**	**----**	**A**	**5.0**	**----**	**A**	**7.6**	**----**
	CROSSGATES MALL ROAD	NB T	A	3.6	0.066	A	6.7	0.202	A	7.6	0.323
		NB R	B	12.1	0.653	E	47.2	0.949	E	45.3	0.967
		NB APPROACH	**B**	**11.3**	**----**	**E**	**39.2**	**----**	**E**	**35.6**	**----**
	CROSSGATES MALL ROAD	SB L-T	A	5.5	0.163	E	44.9	0.945	D	34.0	0.857
		SB T	A	4.4	0.058	A	8.8	0.327	B	10.7	0.414
		SB APPROACH	**A**	**5.2**	**----**	**E**	**35.4**	**----**	**D**	**25.9**	**----**
	OVERALL INTERSECTION		**A**	**6.3**	**----**	**C**	**23.9**	**----**	**C**	**21.0**	**----**

THE ABOVE REPRESENTS THE LEVELS OF SERVICE, VEHICLE DELAY IN SECONDS AND VOLUME-TO-CAPACITY (V/C) RATIO FOR THE ABOVE INTERSECTION.

Lane Group	WBL	WBR	NBT	NBR	NBR2	SBL	SBT	NWL	NWR
Lane Configurations									
Traffic Volume (vph)	208	503	72	0	654	137	50	0	0
Future Volume (vph)	208	503	72	0	654	137	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	13	11	11	12	12
Grade (%)	-1%		1%				2%	0%	
Storage Length (ft)	0	100		0		0		0	0
Storage Lanes	1	1		1		0		1	0
Taper Length (ft)	25					25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850			0.850				
Flt Protected	0.950						0.965		
Satd. Flow (prot)	1728	1697	1818	0	1644	0	2916	1900	0
Flt Permitted	0.950						0.965		
Satd. Flow (perm)	1728	1697	1818	0	1644	0	2916	1900	0
Link Speed (mph)	30		30				30	30	
Link Distance (ft)	707		1590				534	441	
Travel Time (s)	16.1		36.1				12.1	10.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	2%	4%	0%	1%	13%	18%	0%	0%
Adj. Flow (vph)	224	541	77	0	703	147	54	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	224	541	77	0	703	0	201	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Left	Left	Left	Right
Median Width(ft)	12		0				0	12	
Link Offset(ft)	0		0				0	0	
Crosswalk Width(ft)	16		16				16	16	
Two way Left Turn Lane									
Headway Factor	0.99	0.91	1.01	1.01	0.96	1.06	1.06	1.00	1.00
Turning Speed (mph)	15	9		9	9	15		15	9
Sign Control	Yield		Yield				Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	5.7
Intersection LOS	A

Approach	WB	NB	SB	NW
Entry Lanes	1	1	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	765	780	201	0
Demand Flow Rate, veh/h	787	790	230	0
Vehicles Circulating, veh/h	80	166	235	80
Vehicles Exiting, veh/h	0	299	80	166
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	1.3	10.2	4.9	0.0
Approach LOS	A	B	A	-

Lane	Left	Bypass	Left	Bypass	Left	Right	Left
Designated Moves	L	R	T	R	LT	TR	LR
Assumed Moves	L	R	T	R	L	TR	LR
RT Channelized		Free		Yield			
Lane Util	1.000		1.000		0.722	0.278	1.000
Follow-Up Headway, s	2.535		2.535		2.667	2.535	2.535
Critical Headway, s	4.328	552	4.328	710	4.645	4.328	4.328
Entry Flow, veh/h	235	1938	80	1165	166	64	0
Cap Entry Lane, veh/h	1327	0.980	1233	0.990	1087	1163	1327
Entry HV Adj Factor	0.953	541	0.962	703	0.886	0.847	1.000
Flow Entry, veh/h	224	1900	77	1153	147	54	0
Cap Entry, veh/h	1265	0.285	1186	0.609	963	986	1327
V/C Ratio	0.177	0.0	0.065	10.9	0.153	0.055	0.000
Control Delay, s/veh	4.3	A	3.6	B	5.2	4.1	2.7
LOS	A	1	A	4	A	A	A
95th %tile Queue, veh	1		0		1	0	0

Lane Group	WBL	WBR	NBT	NBR	NBR2	SBL	SBT	NWL	NWR
Lane Configurations									
Traffic Volume (vph)	564	513	150	0	524	642	228	0	0
Future Volume (vph)	564	513	150	0	524	642	228	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	13	11	11	12	12
Grade (%)	-1%		1%				2%	0%	
Storage Length (ft)	0	100		0		0		0	0
Storage Lanes	1	1		1		0		1	0
Taper Length (ft)	25					25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850			0.850				
Flt Protected	0.950						0.964		
Satd. Flow (prot)	1814	1714	1890	0	1660	0	3270	1900	0
Flt Permitted	0.950						0.964		
Satd. Flow (perm)	1814	1714	1890	0	1660	0	3270	1900	0
Link Speed (mph)	30		30				30	30	
Link Distance (ft)	707		1590				534	441	
Travel Time (s)	16.1		36.1				12.1	10.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	7%	0%	0%
Adj. Flow (vph)	594	540	158	0	552	676	240	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	594	540	158	0	552	0	916	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Left	Left	Left	Right
Median Width(ft)	12		0				0	12	
Link Offset(ft)	0		0				0	0	
Crosswalk Width(ft)	16		16				16	16	
Two way Left Turn Lane									
Headway Factor	0.99	0.91	1.01	1.01	0.96	1.06	1.06	1.00	1.00
Turning Speed (mph)	15	9		9	9	15		15	9
Sign Control	Yield		Yield				Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	15.6
Intersection LOS	C

Approach	WB	NB	SB	NW
Entry Lanes	1	1	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1134	710	916	0
Demand Flow Rate, veh/h	1139	710	933	0
Vehicles Circulating, veh/h	158	676	594	158
Vehicles Exiting, veh/h	0	851	158	676
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.1	22.0	24.7	0.0
Approach LOS	A	C	C	-

Lane	Left	Bypass	Left	Bypass	Left	Right	Left
Designated Moves	L	R	T	R	LT	TR	LR
Assumed Moves	L	R	T	R	L	TR	LR
RT Channelized		Free		Yield			
Lane Util	1.000		1.000		0.725	0.275	1.000
Follow-Up Headway, s	2.535		2.535		2.667	2.535	2.535
Critical Headway, s	4.328	545	4.328	552	4.645	4.328	4.328
Entry Flow, veh/h	594	1919	158	692	676	257	0
Cap Entry Lane, veh/h	1242	0.990	799	1.000	782	857	1242
Entry HV Adj Factor	1.000	540	1.000	552	1.000	0.935	1.000
Flow Entry, veh/h	594	1900	158	692	676	240	0
Cap Entry, veh/h	1242	0.284	799	0.797	782	801	1242
V/C Ratio	0.478	0.0	0.198	26.4	0.865	0.300	0.000
Control Delay, s/veh	7.9	A	6.6	D	30.7	7.9	2.9
LOS	A	1	A	8	D	A	A
95th %tile Queue, veh	3		1		11	1	0

Lane Group	WBL	WBR	NBT	NBR	NBR2	SBL	SBT	NWL	NWR
Lane Configurations									
Traffic Volume (vph)	665	679	271	0	704	526	277	0	0
Future Volume (vph)	665	679	271	0	704	526	277	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	13	11	11	12	12
Grade (%)	-1%		1%				2%	0%	
Storage Length (ft)	0	100		0		0		0	0
Storage Lanes	1	1		1		0		1	0
Taper Length (ft)	25					25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850			0.850				
Flt Protected	0.950						0.968		
Satd. Flow (prot)	1814	1714	1890	0	1644	0	3321	1900	0
Flt Permitted	0.950						0.968		
Satd. Flow (perm)	1814	1714	1890	0	1644	0	3321	1900	0
Link Speed (mph)	30		30				30	30	
Link Distance (ft)	707		1590				534	441	
Travel Time (s)	16.1		36.1				12.1	10.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	2%	0%	0%
Adj. Flow (vph)	693	707	282	0	733	548	289	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	693	707	282	0	733	0	837	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Left	Left	Left	Right
Median Width(ft)	12		0				0	12	
Link Offset(ft)	0		0				0	0	
Crosswalk Width(ft)	16		16				16	16	
Two way Left Turn Lane									
Headway Factor	0.99	0.91	1.01	1.01	0.96	1.06	1.06	1.00	1.00
Turning Speed (mph)	15	9		9	9	15		15	9
Sign Control	Yield		Yield				Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	14.2
Intersection LOS	B

Approach	WB	NB	SB	NW
Entry Lanes	1	1	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1400	1015	837	0
Demand Flow Rate, veh/h	1407	1022	843	0
Vehicles Circulating, veh/h	282	548	693	282
Vehicles Exiting, veh/h	0	988	282	548
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.7	22.4	18.6	0.0
Approach LOS	A	C	C	-

Lane	Left	Bypass	Left	Bypass	Left	Right	Left
Designated Moves	L	R	T	R	LT	TR	LR
Assumed Moves	L	R	T	R	L	TR	LR
RT Channelized		Free		Yield			
Lane Util	1.000		1.000		0.650	0.350	1.000
Follow-Up Headway, s	2.535		2.535		2.667	2.535	2.535
Critical Headway, s	4.328	714	4.328	740	4.645	4.328	4.328
Entry Flow, veh/h	693	1919	282	862	548	295	0
Cap Entry Lane, veh/h	1117	0.990	891	0.990	714	788	1117
Entry HV Adj Factor	1.000	707	1.000	733	1.000	0.980	1.000
Flow Entry, veh/h	693	1900	282	853	548	289	0
Cap Entry, veh/h	1117	0.372	891	0.859	714	772	1117
V/C Ratio	0.620	0.0	0.316	28.2	0.768	0.374	0.000
Control Delay, s/veh	11.4	A	7.5	D	23.5	9.3	3.2
LOS	B	2	A	11	C	A	A
95th %tile Queue, veh	5		1		7	2	0

Lane Group	WBL	WBR	NBT	NBR	NBR2	SBL	SBT	NWL	NWR
Lane Configurations									
Traffic Volume (vph)	261	511	73	0	699	139	50	0	0
Future Volume (vph)	261	511	73	0	699	139	50	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	13	11	11	12	12
Grade (%)	-1%		1%				2%	0%	
Storage Length (ft)	0	100		0		0		0	0
Storage Lanes	1	1		1		0		1	0
Taper Length (ft)	25					25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850			0.850				
Flt Protected	0.950						0.965		
Satd. Flow (prot)	1728	1697	1818	0	1644	0	2916	1900	0
Flt Permitted	0.950						0.965		
Satd. Flow (perm)	1728	1697	1818	0	1644	0	2916	1900	0
Link Speed (mph)	30		30				30	30	
Link Distance (ft)	707		1590				534	441	
Travel Time (s)	16.1		36.1				12.1	10.0	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles (%)	5%	2%	4%	0%	1%	13%	18%	0%	0%
Adj. Flow (vph)	281	549	78	0	752	149	54	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	281	549	78	0	752	0	203	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Left	Left	Left	Right
Median Width(ft)	12		0				0	12	
Link Offset(ft)	0		0				0	0	
Crosswalk Width(ft)	16		16				16	16	
Two way Left Turn Lane									
Headway Factor	0.99	0.91	1.01	1.01	0.96	1.06	1.06	1.00	1.00
Turning Speed (mph)	15	9		9	9	15		15	9
Sign Control	Yield		Yield				Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	6.3
Intersection LOS	A

Approach	WB	NB	SB	NW
Entry Lanes	1	1	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	830	830	203	0
Demand Flow Rate, veh/h	855	841	232	0
Vehicles Circulating, veh/h	81	168	295	81
Vehicles Exiting, veh/h	0	359	81	168
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	1.6	11.3	5.2	0.0
Approach LOS	A	B	A	-

Lane	Left	Bypass	Left	Bypass	Left	Right	Left
Designated Moves	L	R	T	R	LT	TR	LR
Assumed Moves	L	R	T	R	L	TR	LR
RT Channelized		Free		Yield			
Lane Util	1.000		1.000		0.724	0.276	1.000
Follow-Up Headway, s	2.535		2.535		2.667	2.535	2.535
Critical Headway, s	4.328	560	4.328	760	4.645	4.328	4.328
Entry Flow, veh/h	295	1938	81	1163	168	64	0
Cap Entry Lane, veh/h	1326	0.980	1231	0.990	1029	1105	1326
Entry HV Adj Factor	0.953	549	0.962	752	0.887	0.847	1.000
Flow Entry, veh/h	281	1900	78	1151	149	54	0
Cap Entry, veh/h	1263	0.289	1184	0.653	913	937	1326
V/C Ratio	0.223	0.0	0.066	12.1	0.163	0.058	0.000
Control Delay, s/veh	4.8	A	3.6	B	5.5	4.4	2.7
LOS	A	1	A	5	A	A	A
95th %tile Queue, veh	1		0		1	0	0

Lane Group	WBL	WBR	NBT	NBR	NBR2	SBL	SBT	NWL	NWR
Lane Configurations									
Traffic Volume (vph)	642	520	152	0	618	651	232	0	0
Future Volume (vph)	642	520	152	0	618	651	232	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	13	11	11	12	12
Grade (%)	-1%		1%				2%	0%	
Storage Length (ft)	0	100		0		0		0	0
Storage Lanes	1	1		1		0		1	0
Taper Length (ft)	25					25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850			0.850				
Flt Protected	0.950						0.964		
Satd. Flow (prot)	1814	1714	1890	0	1660	0	3270	1900	0
Flt Permitted	0.950						0.964		
Satd. Flow (perm)	1814	1714	1890	0	1660	0	3270	1900	0
Link Speed (mph)	30		30				30	30	
Link Distance (ft)	707		1590				534	441	
Travel Time (s)	16.1		36.1				12.1	10.0	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	7%	0%	0%
Adj. Flow (vph)	676	547	160	0	651	685	244	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	676	547	160	0	651	0	929	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Left	Left	Left	Right
Median Width(ft)	12		0				0	12	
Link Offset(ft)	0		0				0	0	
Crosswalk Width(ft)	16		16				16	16	
Two way Left Turn Lane									
Headway Factor	0.99	0.91	1.01	1.01	0.96	1.06	1.06	1.00	1.00
Turning Speed (mph)	15	9		9	9	15		15	9
Sign Control	Yield		Yield				Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	23.9
Intersection LOS	C

Approach	WB	NB	SB	NW
Entry Lanes	1	1	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1223	811	929	0
Demand Flow Rate, veh/h	1228	811	946	0
Vehicles Circulating, veh/h	160	685	676	160
Vehicles Exiting, veh/h	0	937	160	685
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.0	39.2	35.4	0.0
Approach LOS	A	E	E	-

Lane	Left	Bypass	Left	Bypass	Left	Right	Left
Designated Moves	L	R	T	R	LT	TR	LR
Assumed Moves	L	R	T	R	L	TR	LR
RT Channelized		Free		Yield			
Lane Util	1.000		1.000		0.724	0.276	1.000
Follow-Up Headway, s	2.535		2.535		2.667	2.535	2.535
Critical Headway, s	4.328	552	4.328	651	4.645	4.328	4.328
Entry Flow, veh/h	676	1919	160	686	685	261	0
Cap Entry Lane, veh/h	1240	0.990	793	1.000	725	799	1240
Entry HV Adj Factor	1.000	547	1.000	651	1.000	0.935	1.000
Flow Entry, veh/h	676	1900	160	686	685	244	0
Cap Entry, veh/h	1240	0.288	793	0.949	725	747	1240
V/C Ratio	0.545	0.0	0.202	47.2	0.945	0.327	0.000
Control Delay, s/veh	9.1	A	6.7	E	44.9	8.8	2.9
LOS	A	1	A	14	E	A	A
95th %tile Queue, veh	3		1		14	1	0

Lane Group	WBL	WBR	NBT	NBR	NBR2	SBL	SBT	NWL	NWR
Lane Configurations									
Traffic Volume (vph)	764	689	275	0	786	534	281	0	0
Future Volume (vph)	764	689	275	0	786	534	281	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	14	12	12	13	11	11	12	12
Grade (%)	-1%		1%				2%	0%	
Storage Length (ft)	0	100		0		0		0	0
Storage Lanes	1	1		1		0		1	0
Taper Length (ft)	25					25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850			0.850				
Flt Protected	0.950						0.968		
Satd. Flow (prot)	1814	1714	1890	0	1644	0	3321	1900	0
Flt Permitted	0.950						0.968		
Satd. Flow (perm)	1814	1714	1890	0	1644	0	3321	1900	0
Link Speed (mph)	30		30				30	30	
Link Distance (ft)	707		1590				534	441	
Travel Time (s)	16.1		36.1				12.1	10.0	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles (%)	0%	1%	0%	0%	1%	0%	2%	0%	0%
Adj. Flow (vph)	796	718	286	0	819	556	293	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	796	718	286	0	819	0	849	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Right	Left	Left	Left	Right
Median Width(ft)	12		0				0	12	
Link Offset(ft)	0		0				0	0	
Crosswalk Width(ft)	16		16				16	16	
Two way Left Turn Lane									
Headway Factor	0.99	0.91	1.01	1.01	0.96	1.06	1.06	1.00	1.00
Turning Speed (mph)	15	9		9	9	15		15	9
Sign Control	Yield		Yield				Yield	Yield	

Intersection Summary	
Area Type:	Other
Control Type: Roundabout	

Intersection	
Intersection Delay, s/veh	21.0
Intersection LOS	C

Approach	WB	NB	SB	NW
Entry Lanes	1	1	2	1
Conflicting Circle Lanes	2	2	2	2
Adj Approach Flow, veh/h	1514	1105	849	0
Demand Flow Rate, veh/h	1521	1113	855	0
Vehicles Circulating, veh/h	286	556	796	286
Vehicles Exiting, veh/h	0	1095	286	556
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.6	35.6	25.9	0.0
Approach LOS	A	E	D	-

Lane	Left	Bypass	Left	Bypass	Left	Right	Left
Designated Moves	L	R	T	R	LT	TR	LR
Assumed Moves	L	R	T	R	L	TR	LR
RT Channelized		Free		Yield			
Lane Util	1.000		1.000		0.650	0.350	1.000
Follow-Up Headway, s	2.535		2.535		2.667	2.535	2.535
Critical Headway, s	4.328	725	4.328	827	4.645	4.328	4.328
Entry Flow, veh/h	796	1919	286	855	556	299	0
Cap Entry Lane, veh/h	1114	0.990	885	0.990	649	722	1114
Entry HV Adj Factor	1.000	718	1.000	819	1.000	0.980	1.000
Flow Entry, veh/h	796	1900	286	847	556	293	0
Cap Entry, veh/h	1114	0.378	885	0.967	649	708	1114
V/C Ratio	0.715	0.0	0.323	45.3	0.857	0.414	0.000
Control Delay, s/veh	14.5	A	7.6	E	34.0	10.7	3.2
LOS	B	2	A	16	D	B	A
95th %tile Queue, veh	6		1		10	2	0

LEVEL OF SERVICE CRITERIA
FOR ROUNDABOUTS

Roundabouts share the same basic control delay with two-way and all-way stop-controlled intersections, adjusting for the effect of yield control.

The Level of Service Criteria for Roundabouts are given in Exhibit 21-1 from the *Highway Capacity Manual*, 6th Edition, published by the Transportation Research Board.

Exhibit 21-1

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

For approaches and intersectionwide assessment, LOS is defined by control delay

As Exhibit 21-1 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

RAPP ROAD RESIDENTIAL
COSTCO
WESTERN AVENUE MIXED-USE DEVELOPMENT

ATTACHMENT D

INTERSECTION #11

CROSSGATES MALL ROAD
MALL DRIVEWAY #1

INTERSECTION #111

CROSSGATES MALL ROAD
GABRIEL TERRACE CONNECTOR ROAD

TABLE NO. 3A

LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2022 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
11	CROSSGATES MALL ROAD & MALL DRIVEWAY #1										
	UNSIGNALIZED										
	CROSSGATES MALL ROAD	EB L	A	7.5	0.009	A	8.4	0.026	A	8.6	0.089
	MALL DRIVEWAY #1	SB L-R	B	10.1	0.038	C	17.1	0.349	C	24.9	0.578
111	CROSSGATES MALL ROAD GABRIEL TERRACE CONNECTOR ROAD										
	UNSIGNALIZED										
	CROSSGATES MALL ROAD	WB L	A	8.2	0.052	A	8.7	0.143	A	9.5	0.208
	GABRIEL TERRACE CONNECTOR ROAD	NB L-R	B	10.9	0.100	C	17.2	0.483	D	33.7	0.781

THE ABOVE REPRESENTS THE LEVELS OF SERVICE, VEHICLE DELAY IN SECONDS AND VOLUME-TO-CAPACITY (V/C) RATIO FOR THE ABOVE INTERSECTIONS.

TABLE NO. 6A

LEVEL OF SERVICE SUMMARY TABLE

	LOCATION		YEAR 2025 BUILD								
			WEEKDAY AM			WEEKDAY PM			SATURDAY		
			LOS	DELAY	V/C	LOS	DELAY	V/C	LOS	DELAY	V/C
11	CROSSGATES MALL ROAD & MALL DRIVEWAY #1										
	UNSIGNALIZED										
	CROSSGATES MALL ROAD	EB L	A	7.6	0.009	A	8.8	0.030	A	9.0	0.098
	MALL DRIVEWAY #1	SB L-R	B	10.4	0.042	C	21.4	0.437	E	37.4	0.716
111	CROSSGATES MALL ROAD GABRIEL TERRACE CONNECTOR ROAD										
	UNSIGNALIZED										
	CROSSGATES MALL ROAD	WB L	A	8.4	0.066	A	9.1	0.169	B	10.2	0.252
	GABRIEL TERRACE CONNECTOR ROAD	NB L-R	B	12.0	0.153	D	42.9	0.845	F	151.1	1.224

THE ABOVE REPRESENTS THE LEVELS OF SERVICE, VEHICLE DELAY IN SECONDS AND VOLUME-TO-CAPACITY (V/C) RATIO FOR THE ABOVE INTERSECTIONS.

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	12	349	125	5	8	19
Future Volume (vph)	12	349	125	5	8	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	15
Grade (%)		-2%	2%		4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.995		0.904	
Flt Protected	0.950				0.986	
Satd. Flow (prot)	1787	1881	1835	0	1790	0
Flt Permitted	0.950				0.986	
Satd. Flow (perm)	1787	1881	1835	0	1790	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		785	261		287	
Travel Time (s)		17.8	5.9		6.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	367	132	5	8	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	367	137	0	28	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	1.01	1.01	0.91	0.91
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.7

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	12	349	125	5	8	19
Future Vol, veh/h	12	349	125	5	8	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	4	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	367	132	5	8	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	137	0	-	0	528	135
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	393	-
Critical Hdwy	4.12	-	-	-	7.22	6.62
Critical Hdwy Stg 1	-	-	-	-	6.22	-
Critical Hdwy Stg 2	-	-	-	-	6.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1447	-	-	-	454	900
Stage 1	-	-	-	-	865	-
Stage 2	-	-	-	-	625	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1447	-	-	-	450	900
Mov Cap-2 Maneuver	-	-	-	-	522	-
Stage 1	-	-	-	-	857	-
Stage 2	-	-	-	-	625	-

Approach	SE	NW	SW
HCM Control Delay, s	0.2	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1447	-	741
HCM Lane V/C Ratio	-	-	0.009	-	0.038
HCM Control Delay (s)	-	-	7.5	-	10.1
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	6	58	306	51	58	124
Future Volume (vph)	6	58	306	51	58	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	12	12	12	12
Grade (%)	0%		-2%			2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.877		0.981			
Flt Protected	0.996				0.950	
Satd. Flow (prot)	1790	0	1846	0	1752	1844
Flt Permitted	0.996				0.950	
Satd. Flow (perm)	1790	0	1846	0	1752	1844
Link Speed (mph)	30		30			30
Link Distance (ft)	299		261			345
Travel Time (s)	6.8		5.9			7.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	6	61	322	54	61	131
Shared Lane Traffic (%)						
Lane Group Flow (vph)	67	0	376	0	61	131
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	15		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.88	0.88	0.99	0.99	1.01	1.01
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	1.9

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	6	58	306	51	58	124
Future Vol, veh/h	6	58	306	51	58	124
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	-2	-	-	2
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	61	322	54	61	131

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	602	349	0	0	376	0
Stage 1	349	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	463	694	-	-	1182	-
Stage 1	714	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	439	694	-	-	1182	-
Mov Cap-2 Maneuver	534	-	-	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	748	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	10.9	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	675	1182	-	-	-
HCM Lane V/C Ratio	0.1	0.052	-	-	-
HCM Control Delay (s)	10.9	8.2	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.3	0.2	-	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	27	316	388	76	89	62
Future Volume (vph)	27	316	388	76	89	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	15
Grade (%)		-2%	2%		4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.978		0.945	
Flt Protected	0.950				0.971	
Satd. Flow (prot)	1787	1881	1804	0	1843	0
Flt Permitted	0.950				0.971	
Satd. Flow (perm)	1787	1881	1804	0	1843	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		785	261		287	
Travel Time (s)		17.8	5.9		6.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	28	333	408	80	94	65
Shared Lane Traffic (%)						
Lane Group Flow (vph)	28	333	488	0	159	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	1.01	1.01	0.91	0.91
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.9

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	27	316	388	76	89	62
Future Vol, veh/h	27	316	388	76	89	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	4	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	333	408	80	94	65

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	488	0	-	0	837	448
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	389	-
Critical Hdwy	4.12	-	-	-	7.22	6.62
Critical Hdwy Stg 1	-	-	-	-	6.22	-
Critical Hdwy Stg 2	-	-	-	-	6.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1075	-	-	-	280	581
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	628	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1075	-	-	-	273	581
Mov Cap-2 Maneuver	-	-	-	-	396	-
Stage 1	-	-	-	-	568	-
Stage 2	-	-	-	-	628	-

Approach	SE	NW	SW
HCM Control Delay, s	0.7	0	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1075	-	456
HCM Lane V/C Ratio	-	-	0.026	-	0.349
HCM Control Delay (s)	-	-	8.4	-	17.1
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	1.5

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	49	210	254	151	154	415
Future Volume (vph)	49	210	254	151	154	415
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	12	12	12	12
Grade (%)	0%		-2%			2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.891		0.950			
Flt Protected	0.991				0.950	
Satd. Flow (prot)	1809	0	1787	0	1752	1844
Flt Permitted	0.991				0.950	
Satd. Flow (perm)	1809	0	1787	0	1752	1844
Link Speed (mph)	30		30			30
Link Distance (ft)	299		261			345
Travel Time (s)	6.8		5.9			7.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	221	267	159	162	437
Shared Lane Traffic (%)						
Lane Group Flow (vph)	273	0	426	0	162	437
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	15		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.88	0.88	0.99	0.99	1.01	1.01
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	4.7

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	49	210	254	151	154	415
Future Vol, veh/h	49	210	254	151	154	415
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	-2	-	-	2
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	221	267	159	162	437

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1108	347	0	0	426	0
Stage 1	347	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	232	696	-	-	1133	-
Stage 1	716	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	199	696	-	-	1133	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	17.2	0	2.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	564	1133	-	-	-
HCM Lane V/C Ratio	0.483	0.143	-	-	-
HCM Control Delay (s)	17.2	8.7	-	-	-
HCM Lane LOS	C	A	-	-	-
HCM 95th %tile Q(veh)	2.6	0.5	-	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	92	397	259	184	132	96
Future Volume (vph)	92	397	259	184	132	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	15
Grade (%)		-2%	2%		4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.944		0.943	
Flt Protected	0.950				0.972	
Satd. Flow (prot)	1787	1881	1741	0	1841	0
Flt Permitted	0.950				0.972	
Satd. Flow (perm)	1787	1881	1741	0	1841	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		785	261		287	
Travel Time (s)		17.8	5.9		6.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	97	418	273	194	139	101
Shared Lane Traffic (%)						
Lane Group Flow (vph)	97	418	467	0	240	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	1.01	1.01	0.91	0.91
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	5.6

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	92	397	259	184	132	96
Future Vol, veh/h	92	397	259	184	132	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	4	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	97	418	273	194	139	101

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	467	0	-	0	982	370
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	612	-
Critical Hdwy	4.12	-	-	-	7.22	6.62
Critical Hdwy Stg 1	-	-	-	-	6.22	-
Critical Hdwy Stg 2	-	-	-	-	6.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1094	-	-	-	222	648
Stage 1	-	-	-	-	643	-
Stage 2	-	-	-	-	472	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1094	-	-	-	202	648
Mov Cap-2 Maneuver	-	-	-	-	329	-
Stage 1	-	-	-	-	586	-
Stage 2	-	-	-	-	472	-

Approach	SE	NW	SW
HCM Control Delay, s	1.6	0	24.9
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1094	-	415
HCM Lane V/C Ratio	-	-	0.089	-	0.578
HCM Control Delay (s)	-	-	8.6	-	24.9
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.3	-	3.5

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	64	302	332	197	201	379
Future Volume (vph)	64	302	332	197	201	379
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	12	12	12	12
Grade (%)	0%		-2%			2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.888		0.950			
Flt Protected	0.991				0.950	
Satd. Flow (prot)	1803	0	1787	0	1752	1844
Flt Permitted	0.991				0.950	
Satd. Flow (perm)	1803	0	1787	0	1752	1844
Link Speed (mph)	30		30			30
Link Distance (ft)	299		261			345
Travel Time (s)	6.8		5.9			7.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	318	349	207	212	399
Shared Lane Traffic (%)						
Lane Group Flow (vph)	385	0	556	0	212	399
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	15		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.88	0.88	0.99	0.99	1.01	1.01
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	9.7

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	64	302	332	197	201	379
Future Vol, veh/h	64	302	332	197	201	379
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	-2	-	-	2
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	318	349	207	212	399

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1276	453	0	0	556	0
Stage 1	453	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	184	607	-	-	1015	-
Stage 1	640	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	146	607	-	-	1015	-
Mov Cap-2 Maneuver	261	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	341	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	33.7	0	3.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	493	1015	-	-	-
HCM Lane V/C Ratio	0.781	0.208	-	-	-
HCM Control Delay (s)	33.7	9.5	-	-	-
HCM Lane LOS	D	A	-	-	-
HCM 95th %tile Q(veh)	7	0.8	-	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	12	406	153	5	8	20
Future Volume (vph)	12	406	153	5	8	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	15
Grade (%)		-2%	2%		4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.996		0.902	
Flt Protected	0.950				0.986	
Satd. Flow (prot)	1787	1881	1837	0	1786	0
Flt Permitted	0.950				0.986	
Satd. Flow (perm)	1787	1881	1837	0	1786	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		785	261		287	
Travel Time (s)		17.8	5.9		6.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	427	161	5	8	21
Shared Lane Traffic (%)						
Lane Group Flow (vph)	13	427	166	0	29	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	1.01	1.01	0.91	0.91
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	0.6

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	12	406	153	5	8	20
Future Vol, veh/h	12	406	153	5	8	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	4	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	427	161	5	8	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	166	0	-	0	617	164
Stage 1	-	-	-	-	164	-
Stage 2	-	-	-	-	453	-
Critical Hdwy	4.12	-	-	-	7.22	6.62
Critical Hdwy Stg 1	-	-	-	-	6.22	-
Critical Hdwy Stg 2	-	-	-	-	6.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1412	-	-	-	395	865
Stage 1	-	-	-	-	834	-
Stage 2	-	-	-	-	579	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	1412	-	-	-	391	865
Mov Cap-2 Maneuver	-	-	-	-	477	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	579	-

Approach	SE	NW	SW
HCM Control Delay, s	0.2	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1412	-	702
HCM Lane V/C Ratio	-	-	0.009	-	0.042
HCM Control Delay (s)	-	-	7.6	-	10.4
HCM Lane LOS	-	-	A	-	B
HCM 95th %tile Q(veh)	-	-	0	-	0.1

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	23	65	332	82	71	135
Future Volume (vph)	23	65	332	82	71	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	12	12	12	12
Grade (%)	0%		-2%			2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.900		0.973			
Flt Protected	0.987				0.950	
Satd. Flow (prot)	1820	0	1831	0	1752	1844
Flt Permitted	0.987				0.950	
Satd. Flow (perm)	1820	0	1831	0	1752	1844
Link Speed (mph)	30		30			30
Link Distance (ft)	299		261			345
Travel Time (s)	6.8		5.9			7.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	24	68	349	86	75	142
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	435	0	75	142
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	15		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.88	0.88	0.99	0.99	1.01	1.01
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	2.3

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	23	65	332	82	71	135
Future Vol, veh/h	23	65	332	82	71	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	-2	-	-	2
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	24	68	349	86	75	142

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	684	392	0	0	435	0
Stage 1	392	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	414	657	-	-	1125	-
Stage 1	683	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	386	657	-	-	1125	-
Mov Cap-2 Maneuver	493	-	-	-	-	-
Stage 1	683	-	-	-	-	-
Stage 2	707	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	12	0	2.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	604	1125	-	-	-
HCM Lane V/C Ratio	0.153	0.066	-	-	-
HCM Control Delay (s)	12	8.4	-	-	-
HCM Lane LOS	B	A	-	-	-
HCM 95th %tile Q(veh)	0.5	0.2	-	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	28	386	482	84	97	63
Future Volume (vph)	28	386	482	84	97	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	15
Grade (%)		-2%	2%		4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.980		0.947	
Flt Protected	0.950				0.971	
Satd. Flow (prot)	1787	1881	1807	0	1846	0
Flt Permitted	0.950				0.971	
Satd. Flow (perm)	1787	1881	1807	0	1846	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		785	261		287	
Travel Time (s)		17.8	5.9		6.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	29	406	507	88	102	66
Shared Lane Traffic (%)						
Lane Group Flow (vph)	29	406	595	0	168	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	1.01	1.01	0.91	0.91
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	3.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	28	386	482	84	97	63
Future Vol, veh/h	28	386	482	84	97	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	4	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	406	507	88	102	66

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	595	0	-	0	1015	551
Stage 1	-	-	-	-	551	-
Stage 2	-	-	-	-	464	-
Critical Hdwy	4.12	-	-	-	7.22	6.62
Critical Hdwy Stg 1	-	-	-	-	6.22	-
Critical Hdwy Stg 2	-	-	-	-	6.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	981	-	-	-	211	502
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	571	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	981	-	-	-	205	502
Mov Cap-2 Maneuver	-	-	-	-	335	-
Stage 1	-	-	-	-	496	-
Stage 2	-	-	-	-	571	-

Approach	SE	NW	SW
HCM Control Delay, s	0.6	0	21.4
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	981	-	385
HCM Lane V/C Ratio	-	-	0.03	-	0.437
HCM Control Delay (s)	-	-	8.8	-	21.4
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	2.2

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	115	252	275	208	170	451
Future Volume (vph)	115	252	275	208	170	451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	12	12	12	12
Grade (%)	0%		-2%			2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.907		0.942			
Flt Protected	0.985				0.950	
Satd. Flow (prot)	1831	0	1772	0	1752	1844
Flt Permitted	0.985				0.950	
Satd. Flow (perm)	1831	0	1772	0	1752	1844
Link Speed (mph)	30		30			30
Link Distance (ft)	299		261			345
Travel Time (s)	6.8		5.9			7.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	121	265	289	219	179	475
Shared Lane Traffic (%)						
Lane Group Flow (vph)	386	0	508	0	179	475
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	15		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.88	0.88	0.99	0.99	1.01	1.01
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	11.8

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	115	252	275	208	170	451
Future Vol, veh/h	115	252	275	208	170	451
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	-2	-	-	2
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	265	289	219	179	475

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1232	399	0	0	508	0
Stage 1	399	-	-	-	-	-
Stage 2	833	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	196	651	-	-	1057	-
Stage 1	678	-	-	-	-	-
Stage 2	427	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	163	651	-	-	1057	-
Mov Cap-2 Maneuver	276	-	-	-	-	-
Stage 1	678	-	-	-	-	-
Stage 2	355	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	42.9	0	2.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	457	1057	-	-	-
HCM Lane V/C Ratio	0.845	0.169	-	-	-
HCM Control Delay (s)	42.9	9.1	-	-	-
HCM Lane LOS	E	A	-	-	-
HCM 95th %tile Q(veh)	8.4	0.6	-	-	-

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	94	490	342	193	140	98
Future Volume (vph)	94	490	342	193	140	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	15	15
Grade (%)		-2%	2%		4%	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.951		0.944	
Flt Protected	0.950				0.971	
Satd. Flow (prot)	1787	1881	1754	0	1841	0
Flt Permitted	0.950				0.971	
Satd. Flow (perm)	1787	1881	1754	0	1841	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		785	261		287	
Travel Time (s)		17.8	5.9		6.5	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	99	516	360	203	147	103
Shared Lane Traffic (%)						
Lane Group Flow (vph)	99	516	563	0	250	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		12	12		15	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane		Yes	Yes			
Headway Factor	0.99	0.99	1.01	1.01	0.91	0.91
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	7.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	94	490	342	193	140	98
Future Vol, veh/h	94	490	342	193	140	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	-2	2	-	4	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	516	360	203	147	103

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	563	0	-	0	1176	462
Stage 1	-	-	-	-	462	-
Stage 2	-	-	-	-	714	-
Critical Hdwy	4.12	-	-	-	7.22	6.62
Critical Hdwy Stg 1	-	-	-	-	6.22	-
Critical Hdwy Stg 2	-	-	-	-	6.22	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1008	-	-	-	163	570
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	414	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1008	-	-	-	~ 147	570
Mov Cap-2 Maneuver	-	-	-	-	276	-
Stage 1	-	-	-	-	516	-
Stage 2	-	-	-	-	414	-

Approach	SE	NW	SW
HCM Control Delay, s	1.4	0	37.4
HCM LOS			E

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	-	-	1008	-	350
HCM Lane V/C Ratio	-	-	0.098	-	0.716
HCM Control Delay (s)	-	-	9	-	37.4
HCM Lane LOS	-	-	A	-	E
HCM 95th %tile Q(veh)	-	-	0.3	-	5.3

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	123	341	361	269	222	412
Future Volume (vph)	123	341	361	269	222	412
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	15	15	12	12	12	12
Grade (%)	0%		-2%			2%
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.901		0.942			
Flt Protected	0.987				0.950	
Satd. Flow (prot)	1822	0	1772	0	1752	1844
Flt Permitted	0.987				0.950	
Satd. Flow (perm)	1822	0	1772	0	1752	1844
Link Speed (mph)	30		30			30
Link Distance (ft)	299		261			345
Travel Time (s)	6.8		5.9			7.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	129	359	380	283	234	434
Shared Lane Traffic (%)						
Lane Group Flow (vph)	488	0	663	0	234	434
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	15		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.88	0.88	0.99	0.99	1.01	1.01
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary	
Area Type:	Other

Control Type: Unsignalized

Intersection	
Int Delay, s/veh	41.9

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	123	341	361	269	222	412
Future Vol, veh/h	123	341	361	269	222	412
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	-2	-	-	2
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	359	380	283	234	434

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1424	522	0	0	663	0
Stage 1	522	-	-	-	-	-
Stage 2	902	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	150	555	-	-	926	-
Stage 1	595	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 112	555	-	-	926	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	296	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s	151.1	0	3.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBLn1	NWL	NWT	SET	SER
Capacity (veh/h)	399	926	-	-	-
HCM Lane V/C Ratio	1.224	0.252	-	-	-
HCM Control Delay (s)	151.1	10.2	-	-	-
HCM Lane LOS	F	B	-	-	-
HCM 95th %tile Q(veh)	20.2	1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

LEVEL OF SERVICE CRITERIA
FOR TWO-WAY STOP-CONTROLLED (TWSC) UNSIGNALIZED INTERSECTIONS

Level of Service (LOS) for a two-way stop-controlled (TWSC) intersection is determined by the computed or measured control delay. For motor vehicles, LOS is determined for each minor-street movement (or shared movement) as well as major-street left turns. LOS is not defined for the intersection as a whole or for major-street approaches.

The Level of Service Criteria for TWSC unsignalized intersections are given in Exhibit 19-1 from the *2010 Highway Capacity Manual* published by the Transportation Research Board.

Exhibit 19-1

	LOS by Volume-to-Capacity Ratio	
Control Delay (s/veh)	**v/c ≤1.0**	**v/c >1.0**
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

The LOS criteria apply to each lane on a given approach and to each approach on the minor street.
LOS is not calculated for major-street approaches or for the intersection as a whole.

As Exhibit 19-1 notes, LOS F is assigned to the movement if the volume-to-capacity ratio for the movement exceeds 1.0, regardless of the control delay.

The Level of Service Criteria for unsignalized intersections are somewhat different from the criteria for signalized intersections.