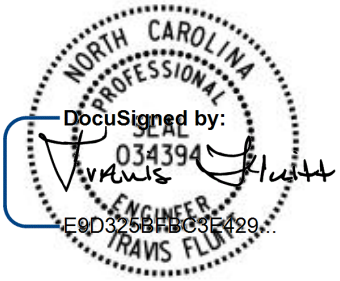
KIMLEY-HORN AND ASSOCIATES, INC
NC License #F-0102



10/29/2026

October 29, 2026

Ashley C. Lowery, P.E.
Division Traffic Engineer
NCDOT Division 5
1041 Prison Camp Road
Durham, NC 27705

RE: ***Signal Warrant Analysis for Rolesville Road at Quarry Road***
The Point (Young Street PUD) – Rolesville, North Carolina

Ms. Lowery,

This letter summarizes the traffic signal warrant analysis update performed for the intersection of Rolesville Road at Quarry Road in Rolesville, North Carolina. This analysis is conducted in association with the portion of The Point development located on the west side of Rolesville Road south of the US 401 Bypass accessed off Quarry Road and Marvel Drive. (The portion of the site located across from the Rolesville High School Entrance was not included in this analysis as it is not expected to add turning movements on/off Quarry Road and was therefore accounted for in background growth).

The portion of the development included in this analysis consists of 483 single-family homes and 251 townhomes, proposed to be constructed in multiple phases. A traffic signal was recommended at this intersection in the *Young Street PUD Traffic Impact Analysis* (Kimley-Horn, June 2019), and a signal warrant analysis was completed in June 2025. This analysis provides an update to the previously completed signal warrant analysis as numerous homes within the development have been constructed and occupied since the 2025 analysis. Data collected during a site visit on October 6, 2026 indicates that approximately 252 single-family homes and 7 townhomes are now occupied.

Guidelines for Traffic Signal Warrant Analysis
The Manual on Uniform Traffic Control Devices (MUTD) establishes nine traffic signal warrants:

- Warrant 1 – Eight-Hour Vehicular Volume
- Warrant 2 – Four-Hour Vehicular Volume
- Warrant 3 – Peak Hour Vehicular Volume
- Warrant 4 – Pedestrian Volume
- Warrant 5 – School Crossing
- Warrant 6 – Coordinated Signal System
- Warrant 7 – Crash Experience

- Warrant 8 – Road Network
- Warrant 9 – Intersection Near a Grade Crossing

Warrant 1 has three conditions: A – Minimum Vehicular Volume, B – Interruption of Continuous Traffic, and C – Combination. As there are very few pedestrians at this intersection and as it is unlikely that students will be walking to Rolesville High School given the distance and lack of pedestrian crossings on Rolesville Road, Warrants 4-6, 8, and 9 are not applicable to this location and were not reviewed for this analysis.

Existing Traffic Conditions

Rolesville Road is a two-lane undivided roadway with left and right-turn lanes and a posted speed limit of 45 mph in the vicinity of Quarry Road. However, there is a school zone along this section of Rolesville Road with a speed limit of 35 mph. The school zone signs on Rolesville Road are posted as "when flashing". Rolesville High School operates from 7:25 AM to 2:18 PM, so it is assumed that the school zone is in effect from 6:45-7:45AM and 1:45-2:45PM. The North Carolina Department of Transportation (NCDOT) annual average daily traffic (AADT) map reported a daily volume of approximately 6,200 vehicles per day (vpd) on Rolesville south of Rolesville High School in 2025.

A 14-hour (6:00 AM to 8:00 PM) turning movement count was collected at the subject intersection on September 16, 2026, while area public schools were in session, and the traffic count data is attached.

Warrant Analysis Assumptions

Based on the posted 45 mph speed limit, the 85th percentile speed on Rolesville Road is greater than 40 mph in the non-school peak hours. During the school peak hours, the 85th percentile speed on Rolesville Road is less than 40 mph based on the posted 35 mph school zone. Per the MUTCD, 70% volume thresholds may be used in locations where the 85th percentile speed on the major street is greater than 40 mph. However, based on guidance from NCDOT that the reduced volume thresholds should only apply in situations with a posted speed limit of 55 or more, this analysis was performed with no reduction to the volume thresholds.

The northbound and southbound approaches of Rolesville Road each consist of an exclusive left-turn lane, a through lane, and an exclusive right-turn lane. Eastbound Quarry Road is striped with an exclusive left turn lane and a shared through/right lane. It was modeled after field conditions with both lanes included. Westbound Quarry Road is striped as a through/left lane with an exclusive right-turn lane. This westbound approach was modeled as one through/left lane and an exclusive right-turn lane with 50% of right-turning traffic included.

Applying the above assumptions, existing, future no-build, and future build traffic volumes were then compared to the MUTCD volume thresholds.

Existing Volume Warrants

Based on this analysis, existing volumes at the intersection only satisfy thresholds for one hour of the eight-hour and four-hour vehicular volume warrants. If the non-school peak hours are modeled as high-speed, the intersection still does not meet any vehicular volume warrants.

Future No-Build Volume Warrants

While no approved developments were included in the analysis, an annual growth rate of 2% was applied to the existing volumes up to the study year 2029 to account for impacts from multiple approved developments. No-Build volumes at the intersection only satisfy thresholds for two hours of the eight-hour warrant and one hour of the four-hour volume warrant. If the non-school peak hours are modeled as high-speed, the intersection is still not expected to meet any vehicular volume warrants.

Future Build Volume Warrants

Site traffic for the unoccupied portion of the development south of US 401 Bypass off Quarry Road and Marvel Drive (Phases 1-9, and 14) was generated using data from the 12th edition of the ITE *Trip Generation Manual* and is summarized below in Table 1. As shown, these units are expected to generate 3,728 new trips on a typical weekday, 289 new trips during the AM peak hour, and 339 new trips during the PM peak hour.

Table 1
ITE Trip Generation: Phases 1-9, 14

LUC	Land Use	Intensity	Daily	AM Peak		PM Peak	
			Total	In	Out	In	Out
210	Single Family Detached Housing	231 d.u.	2,130	43	117	129	79
215	Single Family Attached Housing	244 d.u.	1,598	32	97	75	56
Total Net New External Trips			**3,728**	**75**	**214**	**204**	**135**

Site traffic distribution was assigned to the study intersection based on the June 2019 TIA and an evaluation of existing traffic entering and exiting the site:

- 80% to/from the north via Rolesville Road
- 20% to/from the south via Rolesville Road

Analysis indicates that the future build volumes are projected to satisfy the thresholds for the eight-hour combination warrant (10 hours met), the four-hour warrant (6-hours met), and the peak hour warrant at the subject intersection with no high-speed reductions applied.

Signal warrant calculations and summary tables are attached for reference.

Crash Experience Warrant

As part of this analysis, crash data was obtained through the NCDOT Traffic Engineering Accident Analysis System (TEEAS) at the intersection of Young Street at Quarry Road for the five-year period from September 2021 through August 2026. There were eight reported crashes during that time but no more than 4 within a 12-month period. Based on this data, the crash experience warrant is not met at this intersection.

Summary and Conclusions

Based on the data and analysis presented herein, the intersection of Rolesville Road at Quarry Road does not currently meet any of the MUTCD traffic signal warrants. The intersection is still expected to meet the vehicular volume traffic signal warrants at full build-out of the southern portion of The Point development. Therefore, the installation of a traffic signal is still recommended at this location for The Point development.

If you have questions, please feel free to contact me at (919) 653-2948 or travis.fluitt@kimley-horn.com.

Sincerely,
KIMLEY-HORN AND ASSOCIATES, INC.



Travis Fluitt, P.E.
Senior Project Manager

Cc: Michael Elabarger, Town of Rolesville
Daniel Boulware, P.E., NCDOT District Engineer

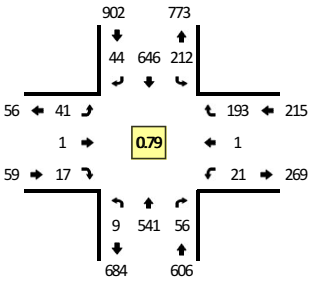
Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

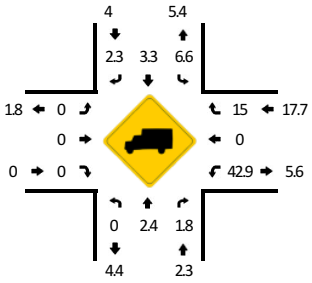
LOCATION: Rolesville Rd -- Quarry Rd
CITY/STATE: Rolesville, NC

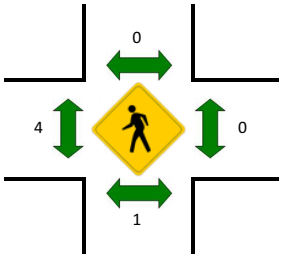
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DATE: Wed, Sep 16 2026

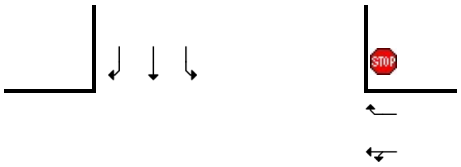
Peak-Hour: 6:45 AM -- 7:45 AM
Peak 15-Min: 7:00 AM -- 7:15 AM

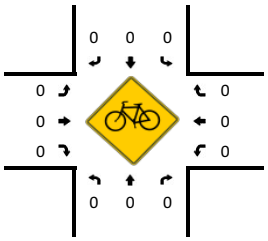


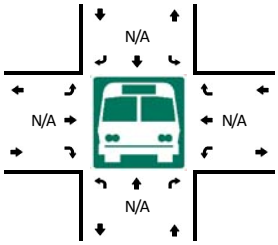


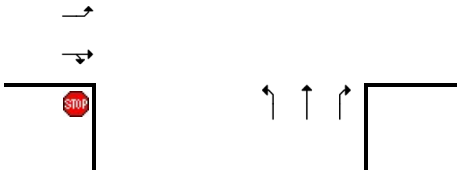


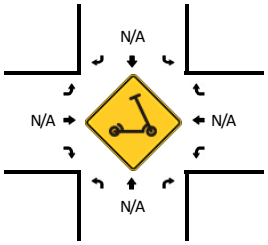












15-Min Count Period Beginning At	Rolesville Rd (Northbound)				Rolesville Rd (Southbound)				Quarry Rd (Eastbound)				Quarry Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
6:00 AM	0	24	4	0	6	41	3	0	9	0	2	0	3	0	11	0	103	
6:15 AM	2	33	2	0	18	51	6	0	9	0	1	0	0	0	12	0	134	
6:30 AM	1	54	18	0	44	106	9	0	7	0	4	0	1	0	11	0	255	
6:45 AM	2	113	16	0	47	150	12	0	12	0	4	0	7	0	34	0	397	889
7:00 AM	2	149	24	0	86	224	8	0	4	1	5	0	5	0	55	0	563	1349
7:15 AM	3	168	13	0	64	144	13	0	8	0	4	1	8	0	72	0	498	1713
7:30 AM	2	111	3	0	15	128	11	0	15	0	4	1	1	1	32	0	324	1782
7:45 AM	2	106	1	0	22	122	16	0	20	0	3	0	2	0	14	0	308	1693
8:00 AM	6	67	1	0	24	99	11	0	11	0	6	2	2	2	18	0	249	1379
8:15 AM	2	70	5	0	18	75	17	0	13	0	2	5	0	1	10	0	218	1099
8:30 AM	2	69	1	0	19	68	11	0	16	0	4	3	0	3	16	0	212	987
8:45 AM	2	68	1	0	27	68	12	0	15	0	2	0	1	0	13	0	209	888
9:00 AM	0	54	2	0	32	66	14	0	15	1	4	0	0	1	15	0	204	843
9:15 AM	1	45	1	0	22	58	8	0	8	0	3	0	2	0	7	0	155	780
9:30 AM	1	71	2	0	20	47	10	0	7	0	0	0	2	1	9	0	170	738
9:45 AM	7	46	3	0	8	47	13	0	9	0	4	0	0	0	10	0	147	676
10:00 AM	1	40	0	0	13	43	14	0	3	0	4	0	3	0	13	0	134	606
10:15 AM	5	41	0	0	8	61	9	0	5	0	3	1	1	0	12	0	146	597
10:30 AM	3	42	1	0	6	48	7	0	10	0	4	0	0	0	8	0	129	556
10:45 AM	1	92	1	0	8	40	11	0	8	2	1	0	0	0	11	0	175	584
11:00 AM	2	42	2	0	14	59	9	0	8	3	3	0	1	1	13	0	157	607
11:15 AM	1	38	2	0	18	70	12	0	6	0	4	0	1	0	16	0	168	629
11:30 AM	4	38	0	0	13	49	7	0	15	2	5	1	0	0	14	0	148	648
11:45 AM	1	34	3	0	17	47	6	0	16	1	4	0	1	0	24	0	154	627
12:00 PM	3	81	2	0	16	53	11	0	15	0	5	0	2	0	14	0	202	672
12:15 PM	3	62	1	0	22	58	22	0	13	1	2	0	2	0	12	0	198	702
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1:30 PM	0	48	1	0	8	51	8	0	13	0	6	0	2	0	15	0	152	621
1:45 PM	4	54	6	0	21	56	10	0	11	1	2	0	2	0	14	0	181	635
2:00 PM	2	41	6	0	16	68	11	0	14	0	7	0	3	0	25	0	193	674
2:15 PM	2	119	12	0	31	61	11	0	11	1	5	0	13	2	47	0	315	841
2:30 PM	3	148	12	0	20	58	12	0	12	0	7	0	4	1	50	0	327	1016
2:45 PM	3	85	2	0	23	66	10	0	13	0	3	0	12	1	22	0	240	1075
3:00 PM	2	89	3	0	18	68	15	0	18	0	5	0	5	0	23	0	246	1128
3:15 PM	4	90	2	0	17	88	12	0	10	0	1	0	4	0	27	0	255	1068

15-Min Count Period Beginning At	Rolesville Rd (Northbound)				Rolesville Rd (Southbound)				Quarry Rd (Eastbound)				Quarry Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
3:30 PM	0	74	7	0	19	130	21	0	15	0	4	0	3	0	36	0	309	1050
3:45 PM	2	91	1	0	11	107	18	0	15	1	2	0	2	1	23	0	274	1084
4:00 PM	2	70	1	0	28	87	21	0	9	0	4	1	2	0	18	0	243	1081
4:15 PM	3	90	2	0	24	138	13	0	6	2	2	7	3	0	35	0	325	1151
4:30 PM	1	109	5	0	17	125	14	0	12	0	1	1	4	0	27	0	316	1158
4:45 PM	3	97	6	0	21	116	21	0	14	1	4	0	4	1	27	0	315	1199
5:00 PM	4	109	2	0	25	102	13	0	16	1	4	0	4	1	24	0	305	1261
5:15 PM	5	118	4	0	27	107	17	0	23	0	2	0	4	0	17	0	324	1260
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7:30 PM	0	28	0	0	15	48	18	0	15	0	3	0	0	0	15	0	142	682
7:45 PM	1	47	2	0	5	53	14	0	8	1	2	0	5	0	16	0	154	652

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	596	96	0	344	896	32	0	16	4	20	0	20	0	220	0	2252
Heavy Trucks	0	16	4		32	20	0		0	0	0		8	0	12		92
Buses																	
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Scooters																	

Comments:

Report generated on 9/22/2026 11:25 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

EXISTING

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

TYPICAL MINOR STREET

	MAJOR ST		MINOR ST 1		MINOR ST 2		WARRANT 1, Condition A						WARRANT 1, Condition B						WARRANT 1, Combination Warrant												WARRANT 2			WARRANT 3		
																			CONDITION A							CONDITION B											
	VOLUME	LANEAGE	VOLUME	LANEAGE	VOLUME	LANEAGE	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MINOR STREET 1 THRESHOLD	MINOR STREET 2 THRESHOLD	WARRANT MET	MINOR STREET 1 THRESHOLD	MINOR STREET 2 THRESHOLD	WARRANT MET
6:00 - 7:00 AM	762	2	48	2	45	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			297	297		502	502	
6:15 - 7:15 AM	1177	2	47	2	69	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			139	139		298	298	
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7:30 - 8:30 AM	934	2	74	2	46	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			218	218		409	409	
7:45 - 8:45 AM	834	2	75	2	39	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			262	262		462	462	
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9:45 - 10:45 AM	466	2	42	2	26	2	600		200		200			900		100		100			480		160		160			720		80		80			479	479		691	691	
10:00 - 11:00 AM	495	2	40	2	26	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			458	458		670	670	
10:15 - 11:15 AM	512	2	47	2	25	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			447	447		659	659	
10:30 - 11:30 AM	529	2	49	2	27	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			435	435		647	647	
10:45 - 11:45 AM	533	2	57	2	30	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			433	433		645	645	
11:00 - 12:00 PM	488	2	67	2	38	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			463	463		675	675	
11:15 - 12:15 PM	526	2	73	2	38	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			437	437		649	649	
11:30 - 12:30 PM	553	2	79	2	37	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			419	419		631	631	
11:45 - 12:45 PM	606	2	74	2	43	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			386	386		597	597	
12:00 - 1:00 PM	631	2	69	2	41	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			371	371		581	581	
12:15 - 1:15 PM	589	2	59	2	42	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			396	396		608	608	
12:30 - 1:30 PM	535	2	59	2	44	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			431	431		643	643	
12:45 - 1:45 PM	487	2	61	2	41	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			464	464		676	676	
1:00 - 2:00 PM	505	2	59	2	39	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			451	451		664	664	
1:15 - 2:15 PM	525	2	70	2	45	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			438	438		650	650	
1:30 - 2:30 PM	647	2	71	2	73	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			361	361		571	571	
1:45 - 2:45 PM	784	2	71	2	93	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80	Y	Y	286	286		489	489	
2:00 - 3:00 PM	822	2	73	2	108	2	600	Y	200		200			900		100		100	Y		480	Y	160		160			720	Y	80		80	Y	Y	268	288		468	468	
2:15 - 3:15 PM	873	2	75	2	109	2	600	Y	200		200			900		100		100	Y		480	Y	160		160			720	Y	80		80	Y	Y	244	244		441	441	
2:30 - 3:30 PM	850	2	69	2	88	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80	Y	Y	255	255		453	453	
2:45 - 3:45 PM	848	2	69	2	79	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			256	256		454	454	
3:00 - 4:00 PM	889	2	71	2	70	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			237	237		432	432	
3:15 - 4:15 PM	903	2	61	2	64	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			231	231		425	425	
3:30 - 4:30 PM	960	2	60	2	67	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			208	208		396	396	
3:45 - 4:45 PM	980	2	54	2	64	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			201	201		386	386	
4:00 - 5:00 PM	1014	2	55	2	68	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			188	188		370	370	
4:15 - 5:15 PM	1060	2	63	2	74	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			173	173		349	349	
4:30 - 5:30 PM	1068	2	78	2	66	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			170	170		345	345	
4:45 - 5:45 PM	1100	2	84	2	65	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80	Y	80	Y		160	160		331	331	
5:00 - 6:00 PM	1103	2	82	2	62	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80	Y	80	Y		159	159		330	330	
5:15 - 6:15 PM	1038	2	78	2	50	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			180	180		359	359	
5:30 - 6:30 PM	936	2	80	2	48	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			218	218		408	408	
5:45 - 6:45 PM	837	2	79	2	34	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			261	261		460	460	
6:00 - 7:00 PM	726	2	77	2	27	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			316	316		523	523	
6:15 - 7:15 PM	721	2	73	2	25	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			319	319		526	526	
6:30 - 7:30 PM	681	2	59	2	16	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			341	341		550	550	
6:45 - 7:45 PM	586	2	59	2	21	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			398	398		610	610	
7:00 - 8:00 PM	552	2	55	2	25	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			420	420		632	632	

MAJOR STREET LEFT AS MINOR STREET

	MAJOR ST 1 THROUGHS + RIGHTS		MAJOR ST 2 LEFTS		MAJOR ST 2 THROUGHS + RIGHTS		MAJOR ST 1 LEFTS		WARRANT 1, Condition A								WARRANT 1, Condition B									WARRANT 1, Combination Warrant															WARRANT 2			WARRANT 3		
																									CONDITION A									CONDITION B													
	VOLUME	LANEAGE	VOLUME	LANEAGE	VOLUME	LANEAGE	VOLUME	LANEAGE	MAJOR STREET 1 THRESHOLD	MAJOR STREET	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 THRESHOLD	MAJOR STREET	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 THRESHOLD	MAJOR STREET	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 THRESHOLD	MAJOR STREET	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 LEFTS THRESHOLD	MAJOR STREET 2 LEFTS THRESHOLD	WARRANT MET	MAJOR STREET 1 LEFTS THRESHOLD	MAJOR STREET 2 LEFTS THRESHOLD	WARRANT MET
6:00 - 7:00 AM	264	2	115	1	378	2	5	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		403	471		589	659	
6:15 - 7:15 AM	409	2	195	1	566	2	7	1	600		600		150		Y		900		900		75		Y		480		480	Y	120		Y		720		720		60		Y		305	386		484	571	
6:30 - 7:30 AM	555	2	241	1	666	2	8	1	600		600	Y	150		Y		900		900		75		Y		480	Y	480	Y	120		Y	Y	720		720		60		Y		260	310		433	490	
6:45 - 7:45 AM	597	2	212	1	690	2	9	1	600		600	Y	150		Y		900		900		75		Y		480	Y	480	Y	120		Y	Y	720		720		60		Y		250	290		421	468	
7:00 - 8:00 AM	575	2	187	1	666	2	9	1	600		600	Y	150		Y		900		900		75		Y		480	Y	480	Y	120		Y	Y	720		720		60		Y		260	301		433	479	
7:15 - 8:15 AM	470	2	125	1	544	2	13	1	600		600		150				900		900		75		Y		480		480	Y	120		Y		720		720		60		Y		315	353		496	536	
7:30 - 8:30 AM	364	2	79	1	479	2	12	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		348	411		531	598	
7:45 - 8:45 AM	320	2	83	1	419	2	12	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		380	437		565	624	
8:00 - 9:00 AM	282	2	88	1	361	2	12	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		413	460		599	648	
8:15 - 9:15 AM	270	2	96	1	331	2	6	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		430	467		617	655	
8:30 - 9:30 AM	241	2	100	1	305	2	5	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		446	485		633	674	
8:45 - 9:45 AM	244	2	101	1	283	2	4	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		459	483		647	672	
9:00 - 10:00 AM	224	2	82	1	263	2	9	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		471	496		660	685	
9:15 - 10:15 AM	208	2	63	1	240	2	10	1	600		600		150				900		900		75				480		480		120				720		720		60		Y		486	506		674	695	
9:30 - 10:30 AM	203	2	49	1	244	2	14	1	600		600		150				900		900		75				480		480		120				720		720		60				483	509		672	698	
9:45 - 10:45 AM	173	2	35	1	242	2	16	1	600		600		150				900		900		75				480		480		120				720		720		60				484	529		673	718	
10:00 - 11:00 AM	217	2	35	1	233	2	10	1	600		600		150				900		900		75				480		480		120				720		720		60				490	500		679	689	
10:15 - 11:15 AM	221	2	36	1	244	2	11	1	600		600		150				900		900		75				480		480		120				720		720		60				483	498		672	686	
10:30 - 11:30 AM	220	2	46	1	256	2	7	1	600		600		150				900		900		75				480		480		120				720		720		60				476	498		664	687	
10:45 - 11:45 AM	215	2	53	1	257	2	8	1	600		600		150				900		900		75				480		480		120				720		720		60				475	502		663	690	
11:00 - 12:00 PM	159	2	62	1	259	2	8	1	600		600		150				900		900		75				480		480		120				720		720		60		Y		474	539		662	727	
11:15 - 12:15 PM	198	2	64	1	255	2	9	1	600		600		150				900		900		75				480		480		120				720		720		60		Y		476	513		665	701	
11:30 - 12:30 PM	221	2	68	1	253	2	11	1	600		600		150				900		900		75				480		480		120				720		720		60		Y		478	498		666	686	
11:45 - 12:45 PM	226	2	77	1	295	2	8	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		452	495		640	683	
12:00 - 1:00 PM	225	2	84	1	312	2	10	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		441	495		629	684	
12:15 - 1:15 PM	187	2	86	1	308	2	8	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		444	520		632	709	
12:30 - 1:30 PM	163	2	71	1	295	2	6	1	600		600		150				900		900		75				480		480		120				720		720		60		Y		452	536		640	724	
12:45 - 1:45 PM	169	2	57	1	256	2	5	1	600		600		150				900		900		75				480		480		120				720		720		60				476	532		664	720	
1:00 - 2:00 PM	193	2	54	1	252	2	6	1	600		600		150				900		900		75				480		480		120				720		720		60				478	516		667	705	
1:15 - 2:15 PM	195	2	52	1	271	2	7	1	600		600		150				900		900		75				480		480		120				720		720		60				466	515		655	703	
1:30 - 2:30 PM	287	2	76	1	276	2	8	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		463	457		651	645	
1:45 - 2:45 PM	398	2	88	1	287	2	11	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		457	392		645	578	
2:00 - 3:00 PM	425	2	90	1	297	2	10	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		450	377		638	562	
2:15 - 3:15 PM	470	2	92	1	301	2	10	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		448	353		636	536	
2:30 - 3:30 PM	431	2	78	1	329	2	12	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		431	374		619	558	
2:45 - 3:45 PM	352	2	77	1	410	2	9	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		385	418		571	605	
3:00 - 4:00 PM	357	2	65	1	459	2	8	1	600		600		150				900		900		75				480		480		120				720		720		60		Y		359	415		542	602	
3:15 - 4:15 PM	336	2	75	1	484	2	8	1	600		600		150				900		900		75				480		480	Y	120				720		720		60		Y		346	427		528	614	
3:30 - 4:30 PM	336	2	82	1	535	2	7	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60		Y		320	427		501	614	
3:45 - 4:45 PM	369	2	80	1	523	2	8	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60		Y		326	408		507	595	
4:00 - 5:00 PM	380	2	90	1	535	2	9	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60		Y		320	402		501	588	
4:15 - 5:15 PM	420	2	87	1	542	2	11	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60		Y		316	380		497	565	
4:30 - 5:30 PM	450	2	90	1	515	2	13	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60		Y		330	363		511	548	
4:45 - 5:45 PM	478	2	103	1	501	2	18	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60		Y		337	349		519	532	
5:00 - 6:00 PM	492	2	101	1	493	2	17	1	600		600		150				900		900		75		Y		480	Y	480	Y	120				720		720		60		Y		341	341		523	524	
5:15 - 6:15 PM	455	2	90	1	480	2	13	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		348	361		531	545	
5:30 - 6:30 PM	407	2	76	1	443	2	10	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		367	387		552	572	
5:45 - 6:45 PM	358	2	59	1	416	2	4	1	600		600		150				900		900		75				480		480		120				720		720		60				382	414		567	601	
6:00 - 7:00 PM	314	2	49	1	359	2	4	1	600		600		150				900		900		75				480		480		120				720		720		60				414	440		601	628	
6:15 - 7:15 PM	323	2	50	1	343	2	5	1	600		600		150				900		900		75				480		480		120				720		720		60				423	435		610	622	
6:30 - 7:30 PM	295	2	49	1	334	2	3	1	600		600		150				900		900		75				480		480		120				720		720		60				428	452		616	640	
6:45 - 7:45 PM	230	2	51	1	302	2	3	1	600		600		150				900		900		75				480		480		120				720		720		60				447	492		635	681	
7:00 - 8:00 PM	206	2	47	1	297	2	2	1	600		600		150				900		900		75				480		480		120				720		720		60				450	508		638	696	

EXISTING
TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

	WARRANT 1, Condition A	WARRANT 1, Condition B	WARRANT 1, Combination, Condition A	WARRANT 1, Combination, Condition B	WARRANT 2	WARRANT 3
6:00 - 7:00 AM						
6:15 - 7:15 AM						
6:30 - 7:30 AM		Y	Y	Y		
6:45 - 7:45 AM					Y	
7:00 - 8:00 AM						
7:15 - 8:15 AM						
7:30 - 8:30 AM						
7:45 - 8:45 AM						
8:00 - 9:00 AM						
8:15 - 9:15 AM						
8:30 - 9:30 AM						
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1:00 - 2:00 PM						
1:15 - 2:15 PM						
1:30 - 2:30 PM						
1:45 - 2:45 PM				Y		
2:00 - 3:00 PM						
2:15 - 3:15 PM						
2:30 - 3:30 PM						
2:45 - 3:45 PM						
3:00 - 4:00 PM						
3:15 - 4:15 PM						
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3:45 - 4:45 PM						
4:00 - 5:00 PM						
4:15 - 5:15 PM						
4:30 - 5:30 PM						
4:45 - 5:45 PM				Y		
5:00 - 6:00 PM						
5:15 - 6:15 PM						
5:30 - 6:30 PM						
5:45 - 6:45 PM						
6:00 - 7:00 PM						
6:15 - 7:15 PM						
6:30 - 7:30 PM						
6:45 - 7:45 PM						
7:00 - 8:00 PM						
	0	1	1	3	1	0
	NOT SATISFIED	NOT SATISFIED	NOT SATISFIED		NOT SATISFIED	NOT SATISFIED

NO-BUILD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

TYPICAL MINOR STREET

	MAJOR ST		MINOR ST 1		MINOR ST 2		WARRANT 1, Condition A							WARRANT 1, Condition B							WARRANT 1, Combination Warrant														WARRANT 2			WARRANT 3		
																					CONDITION A								CONDITION B												
	VOLUME	LANEAGE	VOLUME	LANEAGE	VOLUME	LANEAGE	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET	MINOR STREET 1 THRESHOLD	MINOR STREET 2 THRESHOLD	WARRANT MET	MINOR STREET 1 THRESHOLD	MINOR STREET 2 THRESHOLD	WARRANT MET
6:00 - 7:00 AM	797	2	48	2	45	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			280	280		482	482	
6:15 - 7:15 AM	1231	2	47	2	69	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			127	127		277	277	
6:30 - 7:30 AM	1538	2	49	2	107	2	600	Y	200		200			900	Y	100		100	Y	Y	480	Y	160		160			720	Y	80		80	Y	Y	115	115		179	179	
6:45 - 7:45 AM	1581	2	57	2	119	2	600	Y	200		200			900	Y	100		100	Y	Y	480	Y	160		160			720	Y	80		80	Y	Y	115	115	Y	168	168	
7:00 - 8:00 AM	1508	2	64	2	104	2	600	Y	200		200			900	Y	100		100	Y	Y	480	Y	160		160			720	Y	80		80	Y	Y	115	115		187	187	
7:15 - 8:15 AM	1210	2	71	2	84	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80	Y	Y	132	132		285	285	
7:30 - 8:30 AM	982	2	74	2	46	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			200	200		385	385	
7:45 - 8:45 AM	875	2	75	2	39	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			243	243		440	440	
8:00 - 9:00 AM	779	2	69	2	38	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			289	289		492	492	
8:15 - 9:15 AM	736	2	72	2	33	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			311	311		517	517	
8:30 - 9:30 AM	681	2	68	2	33	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			341	341		550	550	
8:45 - 9:45 AM	662	2	55	2	29	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			352	352		562	562	
9:00 - 10:00 AM	604	2	51	2	27	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			387	387		598	598	
9:15 - 10:15 AM	545	2	38	2	28	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			425	425		637	637	
9:30 - 10:30 AM	534	2	35	2	29	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			432	432		644	644	
9:45 - 10:45 AM	488	2	42	2	26	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			463	463		675	675	
10:00 - 11:00 AM	520	2	40	2	26	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			441	441		653	653	
10:15 - 11:15 AM	538	2	47	2	25	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			429	429		641	641	
10:30 - 11:30 AM	555	2	49	2	27	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			418	418		630	630	
10:45 - 11:45 AM	559	2	57	2	30	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			416	416		627	627	
11:00 - 12:00 PM	511	2	67	2	38	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			447	447		660	660	
11:15 - 12:15 PM	551	2	73	2	38	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			421	421		633	633	
11:30 - 12:30 PM	579	2	79	2	37	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			403	403		614	614	
11:45 - 12:45 PM	634	2	74	2	43	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			369	369		579	579	
12:00 - 1:00 PM	659	2	69	2	41	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			354	354		564	564	
12:15 - 1:15 PM	615	2	59	2	42	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			380	380		591	591	
12:30 - 1:30 PM	560	2	59	2	44	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			415	415		627	627	
12:45 - 1:45 PM	510	2	61	2	41	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			448	448		660	660	
1:00 - 2:00 PM	529	2	59	2	39	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			435	435		647	647	
1:15 - 2:15 PM	550	2	70	2	45	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			421	421		633	633	
1:30 - 2:30 PM	677	2	71	2	73	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			344	344		552	552	
1:45 - 2:45 PM	821	2	71	2	93	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80	Y	Y	268	268		469	469	
2:00 - 3:00 PM	861	2	73	2	108	2	600	Y	200		200			900		100		100	Y		480	Y	160		160			720	Y	80		80	Y	Y	250	250		447	447	
2:15 - 3:15 PM	915	2	75	2	109	2	600	Y	200		200			900	Y	100		100	Y	Y	480	Y	160		160			720	Y	80		80	Y	Y	226	226		419	419	
2:30 - 3:30 PM	892	2	69	2	88	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80	Y	Y	236	236		431	431	
2:45 - 3:45 PM	891	2	69	2	79	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			236	236		431	431	
3:00 - 4:00 PM	934	2	71	2	70	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			218	218		409	409	
3:15 - 4:15 PM	948	2	61	2	64	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			213	213		402	402	
3:30 - 4:30 PM	1008	2	60	2	67	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			190	190		373	373	
3:45 - 4:45 PM	1030	2	54	2	64	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			183	183		362	362	
4:00 - 5:00 PM	1065	2	55	2	68	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			171	171		346	346	
4:15 - 5:15 PM	1114	2	63	2	74	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			156	156		325	325	
4:30 - 5:30 PM	1123	2	78	2	66	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			154	154		321	321	
4:45 - 5:45 PM	1154	2	84	2	65	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80	Y	80		Y	145	145		308	308	
5:00 - 6:00 PM	1158	2	82	2	62	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80	Y	80		Y	144	144		306	306	
5:15 - 6:15 PM	1089	2	78	2	50	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			164	164		336	336	
5:30 - 6:30 PM	982	2	80	2	48	2	600	Y	200		200			900	Y	100		100			480	Y	160		160			720	Y	80		80			200	200		385	385	
5:45 - 6:45 PM	878	2	79	2	34	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			242	242		438	438	
6:00 - 7:00 PM	761	2	77	2	27	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			298	298		503	503	
6:15 - 7:15 PM	756	2	73	2	25	2	600	Y	200		200			900		100		100			480	Y	160		160			720	Y	80		80			301	301		505	505	
6:30 - 7:30 PM	713	2	59	2	16	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			323	323		531	531	
6:45 - 7:45 PM	614	2	59	2	21	2	600	Y	200		200			900		100		100			480	Y	160		160			720		80		80			381	381		592	592	
7:00 - 8:00 PM	578	2	55	2	25	2	600		200		200			900		100		100			480	Y	160		160			720		80		80			403	403		615	615	

MAJOR STREET LEFT AS MINOR STREET

	MAJOR ST 1 THROUGHS + RIGHTS		MAJOR ST 2 LEFTS		MAJOR ST 2 THROUGHS + RIGHTS		MAJOR ST 1 LEFTS		WARRANT 1, Condition A									WARRANT 1, Condition B									WARRANT 1, Combination Warrant																			WARRANT 2			WARRANT 3		
																					CONDITION A									CONDITION B																								
	VOLUME	LANEAGE	VOLUME	LANEAGE	VOLUME	LANEAGE	VOLUME	LANEAGE	MAJOR STREET 1 THRESHOLD	MAJOR STREET 1	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 THRESHOLD	MAJOR STREET 1	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 THRESHOLD	MAJOR STREET 1	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 THRESHOLD	MAJOR STREET 1	MAJOR STREET 2 THRESHOLD	MAJOR STREET 2	LEFTS THRESHOLD	MAJOR STREET 1 LEFTS	MAJOR STREET 2 LEFTS	WARRANT MET	MAJOR STREET 1 LEFTS THRESHOLD	MAJOR STREET 2 LEFTS THRESHOLD	WARRANT MET	MAJOR STREET 1 LEFTS THRESHOLD	MAJOR STREET 2 LEFTS THRESHOLD	WARRANT MET
6:00 - 7:00 AM	278	2	115	1	399	2	5	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		391	462		577	650	
6:15 - 7:15 AM	430	2	195	1	599	2	7	1	600		600		150	Y			900		900		75		Y		480		480	Y	120		Y		720		720		60		Y		289	374		467	559	
6:30 - 7:30 AM	585	2	241	1	704	2	8	1	600		600	Y	150	Y			900		900		75		Y		480	Y	480	Y	120		Y	Y	720		720		60		Y		244	296		415	474	
6:45 - 7:45 AM	630	2	212	1	730	2	9	1	600	Y	600	Y	150	Y	Y		900		900		75		Y		480	Y	480	Y	120		Y	Y	720		720	Y	60		Y		233	275		402	451	
7:00 - 8:00 AM	608	2	187	1	704	2	9	1	600	Y	600	Y	150	Y	Y		900		900		75		Y		480	Y	480	Y	120		Y	Y	720		720		60		Y		244	285		415	462	
7:15 - 8:15 AM	498	2	125	1	574	2	13	1	600		600		150				900		900		75		Y		480	Y	480	Y	120		Y	Y	720		720		60		Y		301	338		480	521	
7:30 - 8:30 AM	386	2	79	1	505	2	12	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60		Y		335	398		517	585	
7:45 - 8:45 AM	339	2	83	1	441	2	12	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		368	425		553	613	
8:00 - 9:00 AM	299	2	88	1	380	2	12	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		402	449		588	637	
8:15 - 9:15 AM	286	2	96	1	348	2	6	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		420	457		607	645	
8:30 - 9:30 AM	255	2	100	1	321	2	5	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		436	476		624	665	
8:45 - 9:45 AM	259	2	101	1	298	2	4	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		450	474		638	662	
9:00 - 10:00 AM	237	2	82	1	276	2	9	1	600		600		150				900		900		75		Y		480		480		120				720		720		60		Y		463	488		651	676	
9:15 - 10:15 AM	220	2	63	1	252	2	10	1	600		600		150				900		900		75				480		480		120				720		720		60		Y		478	498		667	687	
9:30 - 10:30 AM	215	2	49	1	256	2	14	1	600		600		150				900		900		75				480		480		120				720		720		60				476	502		664	690	
9:45 - 10:45 AM	183	2	35	1	254	2	16	1	600		600		150				900		900		75				480		480		120				720		720		60				477	523		665	711	
10:00 - 11:00 AM	230	2	35	1	245	2	10	1	600		600		150				900		900		75				480		480		120				720		720		60				483	492		671	681	
10:15 - 11:15 AM	234	2	36	1	257	2	11	1	600		600		150				900		900		75				480		480		120				720		720		60				475	490		663	678	
10:30 - 11:30 AM	233	2	46	1	269	2	7	1	600		600		150				900		900		75				480		480		120				720		720		60				468	490		656	679	
10:45 - 11:45 AM	228	2	53	1	270	2	8	1	600		600		150				900		900		75				480		480		120				720		720		60				467	493		655	682	
11:00 - 12:00 PM	168	2	62	1	273	2	8	1	600		600		150				900		900		75				480		480		120				720		720		60	Y			465	533		653	721	
11:15 - 12:15 PM	210	2	64	1	268	2	9	1	600		600		150				900		900		75				480		480		120				720		720		60	Y			468	505		656	694	
11:30 - 12:30 PM	234	2	68	1	266	2	11	1	600		600		150				900		900		75				480		480		120				720		720		60	Y			469	490		658	678	
11:45 - 12:45 PM	239	2	77	1	310	2	8	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			443	486		630	675	
12:00 - 1:00 PM	238	2	84	1	327	2	10	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			432	487		620	676	
12:15 - 1:15 PM	198	2	86	1	323	2	8	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			435	513		622	701	
12:30 - 1:30 PM	173	2	71	1	310	2	6	1	600		600		150				900		900		75				480		480		120				720		720		60	Y			443	529		630	718	
12:45 - 1:45 PM	179	2	57	1	269	2	5	1	600		600		150				900		900		75				480		480		120				720		720		60				468	525		656	714	
1:00 - 2:00 PM	204	2	54	1	265	2	6	1	600		600		150				900		900		75				480		480		120				720		720		60				470	509		658	697	
1:15 - 2:15 PM	206	2	52	1	285	2	7	1	600		600		150				900		900		75				480		480		120				720		720		60				458	508		646	696	
1:30 - 2:30 PM	303	2	76	1	290	2	8	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			455	447		643	635	
1:45 - 2:45 PM	420	2	88	1	302	2	11	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			447	380		635	565	
2:00 - 3:00 PM	449	2	90	1	312	2	10	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			441	364		629	548	
2:15 - 3:15 PM	497	2	92	1	316	2	10	1	600		600		150				900		900		75		Y		480	Y	480		120				720		720		60	Y			439	339		627	521	
2:30 - 3:30 PM	456	2	78	1	346	2	12	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			421	360		608	544	
2:45 - 3:45 PM	373	2	77	1	432	2	9	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			373	406		558	592	
3:00 - 4:00 PM	378	2	65	1	483	2	8	1	600		600		150				900		900		75				480		480	Y	120				720		720		60	Y			346	403		529	589	
3:15 - 4:15 PM	356	2	75	1	509	2	8	1	600		600		150				900		900		75				480		480	Y	120				720		720		60	Y			333	416		515	602	
3:30 - 4:30 PM	356	2	82	1	563	2	7	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60	Y			306	416		486	602	
3:45 - 4:45 PM	391	2	80	1	551	2	8	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60	Y			312	396		492	582	
4:00 - 5:00 PM	402	2	90	1	564	2	9	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60	Y			306	389		485	575	
4:15 - 5:15 PM	445	2	87	1	571	2	11	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60	Y			303	366		481	550	
4:30 - 5:30 PM	477	2	90	1	543	2	13	1	600		600		150				900		900		75		Y		480		480	Y	120				720		720		60	Y			316	349		496	532	
4:45 - 5:45 PM	506	2	103	1	527	2	18	1	600		600		150				900		900		75		Y		480	Y	480	Y	120				720		720		60	Y			324	334		505	516	
5:00 - 6:00 PM	521	2	101	1	519	2	17	1	600		600		150				900		900		75		Y		480	Y	480	Y	120				720		720		60	Y			328	327		509	508	
5:15 - 6:15 PM	482	2	90	1	504	2	13	1	600		600		150				900		900		75		Y		480	Y	480	Y	120				720		720		60	Y			335	347		517	530	
5:30 - 6:30 PM	431	2	76	1	465	2	10	1	600		600		150				900		900		75		Y		480		480		120				720		720		60	Y			355	374		539	558	
5:45 - 6:45 PM	379	2	59	1	436	2	4	1	600		600		150				900		900		75				480		480		120				720		720		60				371	402		556	589	
6:00 - 7:00 PM	332	2	49	1	376	2	4	1	600		600		150				900		900		75				480		480		120				720		720		60				404	430		590	617	
6:15 - 7:15 PM	342	2	50	1	359	2	5	1	600		600		150				900		900		75				480		480		120				720		720		60				414	424		601	611	
6:30 - 7:30 PM	312	2	49	1	349	2	3	1	600		600		150				900		900		75				480		480		120				720		720		60				420	441		607	629	
6:45 - 7:45 PM	244	2	51	1	316	2	3	1	600		600		150				900		900		75				480		480		120				720		720		60				439	483		627	672	
7:00 - 8:00 PM	218	2	47	1	311	2	2	1	600		600		150				900		900		75				480		480		120				720		720		60				442	500		630	688	

NO-BUILD
TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

	WARRANT 1, Condition A	WARRANT 1, Condition B	WARRANT 1, Combination, Condition A	WARRANT 1, Combination, Condition B	WARRANT 2	WARRANT 3
6:00 - 7:00 AM						
6:15 - 7:15 AM						
6:30 - 7:30 AM		Y	Y	Y		
6:45 - 7:45 AM	Y				Y	
7:00 - 8:00 AM						
7:15 - 8:15 AM						
7:30 - 8:30 AM						
7:45 - 8:45 AM						
8:00 - 9:00 AM						
8:15 - 9:15 AM						
8:30 - 9:30 AM						
8:45 - 9:45 AM						
9:00 - 10:00 AM						
9:15 - 10:15 AM						
9:30 - 10:30 AM						
9:45 - 10:45 AM						
10:00 - 11:00 AM						
10:15 - 11:15 AM						
10:30 - 11:30 AM						
10:45 - 11:45 AM						
11:00 - 12:00 PM						
11:15 - 12:15 PM						
11:30 - 12:30 PM						
11:45 - 12:45 PM						
12:00 - 1:00 PM						
12:15 - 1:15 PM						
12:30 - 1:30 PM						
12:45 - 1:45 PM						
1:00 - 2:00 PM						
1:15 - 2:15 PM						
1:30 - 2:30 PM						
1:45 - 2:45 PM				Y		
2:00 - 3:00 PM						
2:15 - 3:15 PM		Y				
2:30 - 3:30 PM						
2:45 - 3:45 PM						
3:00 - 4:00 PM						
3:15 - 4:15 PM						
3:30 - 4:30 PM						
3:45 - 4:45 PM						
4:00 - 5:00 PM						
4:15 - 5:15 PM						
4:30 - 5:30 PM						
4:45 - 5:45 PM				Y		
5:00 - 6:00 PM						
5:15 - 6:15 PM						
5:30 - 6:30 PM						
5:45 - 6:45 PM						
6:00 - 7:00 PM						
6:15 - 7:15 PM						
6:30 - 7:30 PM						
6:45 - 7:45 PM						
7:00 - 8:00 PM						
	1	2	1	3	1	0
	NOT SATISFIED	NOT SATISFIED	NOT SATISFIED		NOT SATISFIED	NOT SATISFIED

BUILD

TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

TYPICAL MINOR STREET

	MAJOR ST		MINOR ST 1		MINOR ST 2		WARRANT 1, Condition A							WARRANT 1, Condition B							WARRANT 1, Combination Warrant												WARRANT 2			WARRANT 3		
																					CONDITION A							CONDITION B											
	VOLUME	LANEAGE	VOLUME	LANEAGE	VOLUME	LANEAGE	MAJOR STREET THRESHOLD	MAJOR STREET	MINOR STREET 1 THRESHOLD	MINOR STREET 1	MINOR STREET 2 THRESHOLD	MINOR STREET 2	WARRANT MET

BUILD
TRAFFIC SIGNAL VOLUME WARRANT ANALYSIS

	WARRANT 1, Condition A	WARRANT 1, Condition B	WARRANT 1, Combination, Condition A	WARRANT 1, Combination, Condition B	WARRANT 2	WARRANT 3
6:00 - 7:00 AM				Y		
6:15 - 7:15 AM		Y	Y		Y	
6:30 - 7:30 AM	Y					Y
6:45 - 7:45 AM						
7:00 - 8:00 AM				Y		
7:15 - 8:15 AM		Y	Y		Y	
7:30 - 8:30 AM	Y					
7:45 - 8:45 AM						
8:00 - 9:00 AM				Y		
8:15 - 9:15 AM			Y			
8:30 - 9:30 AM	Y					
8:45 - 9:45 AM						
9:00 - 10:00 AM						
9:15 - 10:15 AM						
9:30 - 10:30 AM						
9:45 - 10:45 AM						
10:00 - 11:00 AM						
10:15 - 11:15 AM						
10:30 - 11:30 AM						
10:45 - 11:45 AM			Y			
11:00 - 12:00 PM						
11:15 - 12:15 PM						
11:30 - 12:30 PM						
11:45 - 12:45 PM			Y	Y		
12:00 - 1:00 PM						
12:15 - 1:15 PM						
12:30 - 1:30 PM						
12:45 - 1:45 PM			Y			
1:00 - 2:00 PM						
1:15 - 2:15 PM						
1:30 - 2:30 PM				Y		
1:45 - 2:45 PM		Y	Y			
2:00 - 3:00 PM						
2:15 - 3:15 PM					Y	
2:30 - 3:30 PM				Y		
2:45 - 3:45 PM		Y	Y			
3:00 - 4:00 PM						
3:15 - 4:15 PM					Y	
3:30 - 4:30 PM				Y		
3:45 - 4:45 PM		Y	Y			
4:00 - 5:00 PM						
4:15 - 5:15 PM					Y	
4:30 - 5:30 PM	Y			Y		
4:45 - 5:45 PM		Y	Y			
5:00 - 6:00 PM						
5:15 - 6:15 PM					Y	
5:30 - 6:30 PM	Y			Y		
5:45 - 6:45 PM		Y	Y			
6:00 - 7:00 PM						
6:15 - 7:15 PM						
6:30 - 7:30 PM				Y		
6:45 - 7:45 PM						
7:00 - 8:00 PM						
	5	7	**11**	**10**	**6**	**1**
	NOT SATISFIED	NOT SATISFIED	**SATISFIED**		**SATISFIED**	**SATISFIED**