

DEPARTMENT OF ENVIRONMENTAL SERVICES

Multiway Stop Analysis N Harrison St At 26th St N

Prepared For:

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Division of Transportation
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4/4/2016

I. Introduction

This report presents the study conducted to determine if an all-way stop condition is warranted at the intersection of N Harrison St and 26th St N. The analysis was performed in accordance with Arlington County Warrants for Multiway Stop Signs. The specific warrants that are applicable are based on the functional classification of all approaches to the intersection.

In cases where all approaches are classified as neighborhood streets, the neighborhood street warrants are applicable. In cases where at least one of the approaches is classified as an arterial, the arterial street warrants are applicable.

The functional classification of N Harrison St is arterial street and the functional classification of 26th St N is neighborhood street, and as such, the Arterial Street Warrants are applicable. These warrants consist of the following four specific criteria used to evaluate an intersection for a multiway stop condition:

- Traffic Signal Installation
- Traffic Accidents
- Minimum Traffic Volumes
- Combination Warrants

Field observations were made to determine intersection characteristics, operations during peak hours, and sight distance restrictions. Additionally, vehicular, pedestrian, and bicycle activity was observed to determine if improvements to the intersection are needed to ensure the safety and mobility of all users.

Transportation data obtained for the analysis includes vehicular volumes collected by Quality Traffic Data, LLC on 03/01/2016 and accident history for the five most recent years for which data is available. Appendix A presents the transportation volume data.

II. Warrants

Warrant 1- Traffic Signal Installation

Guidance

The signal installation warrant suggests that where traffic signals are warranted and urgently needed, a multiway stop sign is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.

Analysis

A traffic signal warrant analysis has been completed for this intersection.

The results of the traffic signal warrant analysis indicate that a traffic signal is not warranted.

Results

Based on the stated criteria, the traffic signal installation warrant is not met.

Warrant 2- Traffic Accidents

Guidance

The traffic accidents warrant suggests that a multiway stop may be warranted where an accident trend exists as indicated by five or more qualifying accidents in a 12-month period. Qualifying accidents include reported right-and left-turn collisions as well as right-angled collisions that are susceptible to correction by a multiway stop sign installation.

Analysis

A maximum of 2 qualifying accidents occurred within any 12-month period between 01/01/2010 and 07/09/2015. The number of accidents in a 12-month period does not meet the threshold of five.

Results

Based on the stated criteria, the traffic accidents warrant is not met.

Warrant 3- Minimum Traffic Volumes Warrant

Guidance

The minimum traffic volumes warrant is to be treated as a single warrant with two distinct parts (Parts A and B). The combination of Parts A and B are not needed to satisfy the warrant. If Part A is satisfied, then the minimum traffic volumes warrant is met; similarly if Part B is satisfied, the minimum traffic volumes warrant is met.

Part A of the minimum traffic volumes warrant suggests that a multiway stop may be warranted where all <u>three</u> of the following criteria are met:

- 1.) The vehicular volume entering an interesection for the total of both approaches of the major street averages at least 300 vehicles per hour for eight hours of an average day; **and**
- 2.) The combined pedestrian, bicycle, and motor vehicle volume from the minor street averages at least 200 units per hour for the same eight hours; and
- 3.) The average delay to minor street vehicular traffic is at least 30 seconds per vehicle during the peak hour.

Analysis

- 1.) The total vehicular volume entering the intersection from both approaches of the major street averages 690 vehicles per hour for the eight highest volume hours of an average day.
- This does meet the required average volume of 300 vehicles per hour for eight hours of an average day.
- 2.) The total vehicular, bicycle, and pedestrian volume entering the intersection from both approaches of the minor street averages 174 units per hour for the same eight hours of an average day.
- This does not meet the required combined vehicular, bicycle, and pedestrian average volume of 200 units per hour for the same eight hours of an average day.
- 3.) The average delay to minor street vehicular traffic is less than 30 seconds per vehicle during the maximum hour.

This does not meet the required minor street delay of 30 seconds or more during the maximum hour.

Results

Part A of the minimum traffic volumes warrant is not satisfied.

Warrant 3- Minimum Traffic Volumes Warrant (continued)

Guidance

Part B of the minimum traffic volumes warrant states that if the 85th percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular warrants can be reduced to 70-percent of the values in Part A. In such cases, a multiway stop may be warranted where all three of the following criteria are met:

- 1.) The vehicular volume entering an interesection for the total of both approaches of the major street averages at least 210 vehicles per hour for any eight hours of an average day; **and**
- 2.) The combined pedestrian, bicycle, and motor vehicle volume from the minor street averages at least 140 units per hour for the same eight hours; and
- 3.) The average delay to minor street vehicular traffic is at least 30 seconds per vehicle during the peak hour.

Analysis

The 85th percentile approach speed of the major-street traffic is less than 40 mph; therefore, Part B of the minimum traffic volumes warrant is not applicable.

Results

Part B of the minimum traffic volumes warrant is not satisfied.

Based on the stated criteria, the minimum traffic volumes warrant is not met.

Warrant 4- Combination Warrant

Guidance

The combination warrant suggests that a multiway stop may be warranted where no single criterion from Warrants 2 and 3 is satisfied, but where <u>all</u> of the following adjusted criterion from those warrants are satisfied:

- 1.) An accident trend exists as indicated by four or more accidents within a 12-month period susceptible to correction by a mulitway stop sign installation; and
- 2.) The vehicular volume entering an interesection for the total of both approaches of the major street averages at least 240 vehicles per hour for eight hours of an average day; **and**
- 3.) The combined pedestrian, bicycle, and motor vehicle volume from the minor street averages at least 160 units per hour for the same eight hours; and
- 4.) The average delay to minor street vehicular traffic is at least 24 seconds per vehicle during the peak hour.

Analysis

1.) A maximum of 2 qualifying accidents occurred within any 12-month period between 01/01/2010 and 07/09/2015.

The number of accidents in a 12-month period does not meet the threshold of four.

- 2.) The total vehicular volume entering the intersection from both approaches of the major street averages 690 vehicles per hour for the eight highest volume hours of an average day.
- This does meet the required average volume of 240 vehicles per hour for eight hours of an average day.
- 3.) The total vehicular, bicycle, and pedestrian volume entering the intersection from both approaches of the minor street averages 174 units per hour for the same eight hours.
- This does meet the required combined vehicular, bicycle, and pedestrian average volume of 160 units per hour for the same eight hours of an average day.
- 4.) The average delay to minor street vehicular traffic is less than 24 seconds per vehicle during the maximum hour.

This does not meet the required minor street delay of 24 seconds or more during the maximum hour.

Results

Based on the stated criteria, the combination warrant is not met.



III. Conclusion

Summary

This report contains the analysis that was completed to determine if an all-way stop condition is warranted at the intersection of N Harrison St and 26th St N. The analysis was performed in accordance with Arlington County Warrants for Mulitway Stop Signs. The specific warrants that were applied were based on the functional classification of all approaches to the intersection.

The functional classification of N Harrison St is arterial street and the functional classification of 26th St N is neighborhood street, and as such, the Arterial Street Warrants were applied.

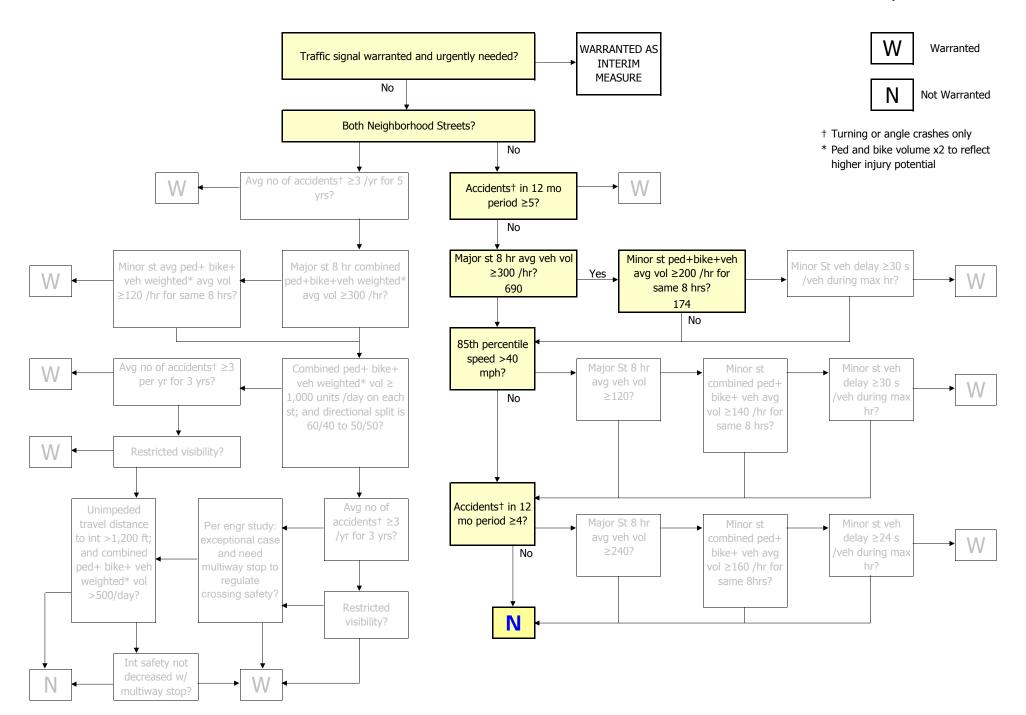
Following are the results of each of the multiway stop warrants:

- The Traffic Signal Installation Warrant is not met.
- The Traffic Accidents Warrant is not met.
- The Minimum Traffic Volumes Warrant is not met.
- The Combination Warrant is not met.

Recommendation

The results of the analysis presented in this report indicate that none of the warrants are met for the installation of a multiway stop condition. Based on this finding and engineering judgement, it is recommended that the intersection should continue to operate as it currently does.

Analyst: S. Viricochea





APPENDIX ATransportation Count Raw Data

SUMMARY PAGE

#003 N Harrison St - MAJOR & 26th St - MINOR

LOCATION#:	003	QTD PROJ#:	2016127	AM PEAK HOUR:	730 AM - 830 AM
NORTH / SOUTH:	N Harrison St - MAJOR	COUNT DATE:	Tuesday, March 01, 2016	MD PEAK HOUR:	1200 PM - 1300 PM
EAST / WEST:	26th St - MINOR	VICINITY:	VA	PM PEAK HOUR:	530 PM - 630 PM
WEATHER:	NORMAL / CLEAR	AM TOTAL PHF:	0.844	AM PEAK 15-Min:	800 AM - 815 AM
		MD TOTAL PHF:	0.981	MD PEAK 15-Min:	1215 PM - 1230 PM
		PM TOTAL PHF:	0.932	PM PEAK 15-Min:	530 PM - 545 PM
PM 114 ← MD 52 ← AM 73 ← MB L	SB LANES AM 279 445 11 402 32 7 267 5 21 444 17 46 52 47 294 72 24 240 51 NB LANES AM MD 250 AM 46 52 AM MD AM	2 20 00 00 00 00 00 00 00 00 00 00 00 00	EB 2 0 0 0 D D D D D D D D D D D D D D D D	SB LANES 1 9 2 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 NB LANES	0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
AM MD	SB LANES AM	CAMERA POSITION MD AM 23 11 Saw Y Bay	EB LANES	SB LANES 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0

COMMENTS:

 AM COUNT
 7:00 AM
 TO
 10:00 AM

 MD COUNT
 11:00 AM
 TO
 1:00 PM

 PM COUNT
 4:00 PM
 TO
 7:00 PM

VEHICLE TURNING MOVEMENT COUNT

#003 N Harrison St - MAJOR & 26th St - MINOR - AM PEAK

LOCATION#: NORTH / SOUTH: EAST / WEST:	003 N Harriso 26th St - I		IOR						DA	PROJ#: ITE: NITY:	2016127 Tuesday, VA	March 01,	2016				
DIRECTION:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTALS
LANES:	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	TOTALS
7:00 AM	5	44	7	0	2	44	2	0	0	3	9	0	9	3	3	0	131
7:15 AM	4	65	25	0	4	74	1	1	7	8	12	0	8	2	7	0	218
7:30 AM	4	54	26	0	9	86	1	0	9	12	14	0	12	8	5	0	240
7:45 AM	12	56	27	0	8	103	5	0	3	18	15	0	6	3	7	0	263
8:00 AM	4	85	46	0	9	101	1	0	6	21	10	0	17	12	7	0	319
8:15 AM	6	66	20	0	4	103	3	0	1	10	14	0	15	12	1	0	255
8:30 AM	4	65	7	0	8	68	1	0	2	9	7	0	9	6	6	0	192
8:45 AM	3	59	8	0	2	94	5	0	3	8	16	0	9	5	3	0	215
9:00 AM	5	42	13	0	6	100	5	0	4	4	12	0	7	1	2	0	201
9:15 AM	7	49	10	0	2	68	1	0	4	9	11	0	3	3	0	0	167
9:30 AM	1	37	10	0	0	58	3	0	1	4	7	0	7	4	1	0	133
9:45 AM	5	41	10	0	3	65	2	0	3	6	7	0	7	4	0	0	153
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	60	663	209	0	57	964	30	1	43	112	134	0	109	63	42	0	2487
P.H.V:	1 26	261	119	0	30	393	10	0	19	61	53	0	50	35	20	0	1077
P.H.F:	2	_ 0.	752 _			. 0.9	33 _			_ 0.	.899	_		. 0.7	729		0.844

⁽¹⁾ Peak Hour Volume (Peak Hour - 730 AM - 830 AM)

VEHICLE TURNING MOVEMENT COUNT

#003 N Harrison St - MAJOR & 26th St - MINOR - MD PEAK

LOCATION#: NORTH / SOUTH: EAST / WEST:		rrison St - MAJOR St - MINOR							QTD PROJ#: 2016127 DATE: Tuesday, March VICINITY: VA				2016				
DIRECTION: LANES:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTALS
11:00 AM	0	49	0	0	0	1 56	1 4	0	0	<u>1</u> 8	<u>0</u> 11	0	8	1	0	0	156
11:00 AM	3	47	6 11	0	1	59	2	0		5	2	0	<u> </u>	<u> </u>	<u> </u>	0	154
11:30 AM	7	49	9	0	1	54	1	0	2	9	6	0	4	3	1	0	146
11:45 AM	7	62	8	0	0	60	0	0	2	2	3	0	7	8	1	0	160
12:00 PM	8	63	11	0	1	68	1	0	3	2	11	0	8	5	0	0	181
12:15 PM	7	54	18	0	3	65	2	0	3	6	11	0	6	6	1	0	182
12:30 PM	6	59	9	0	0	62	1	0	1	5	11	0	15	7	1	0	177
12:45 PM	3	64	13	0	1	72	3	0	1	4	4	0	6	3	0	0	174
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	44	447	85	0	8	496	14	0	18	41	59	0	63	46	9	0	1330
P.H.V:	1 24	240	51	0	5	267	7	0	8	17	37	0	35	21	2	0	714
P.H.F:	,	_ 0.9	960 _			_ 0.9	918 _			_ 0	.775	_ 1		_ 0.6	30		0.981

⁽¹⁾ Peak Hour Volume (Peak Hour - 1200 PM - 1300 PM) (2) Peak Hour Factor (directional aggregate) (3) Peak 15m: 1215 PM - 1230 PM

VEHICLE TURNING MOVEMENT COUNT

LOCATION#: NORTH / SOUTH: EAST / WEST:	003 N Harriso 26th St - I		JOR						DA	PROJ#: .TE: NITY:	2016127 Tuesday, VA	March 01	, 2016				
DIRECTION:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTALS
LANES:	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	TOTALS
4:00 PM	6	78	15	0	2	98	5	0	5	6	11	0	12	9	12	0	259
4:15 PM	9	71	22	0	4	82	4	0	3	3	10	0	7	7	4	0	226
4:30 PM	10	74	22	0	7	88	6	0	1	6	14	0	11	11	5	0	255
4:45 PM	11	64	9	0	3	80	3	0	2	9	9	0	11	11	5	0	217
5:00 PM	13	88	14	0	4	83	3	0	0	5	10	0	22	10	7	0	259
5:15 PM	11	69	27	0	11	88	2	0	4	8	12	0	11	9	7	0	259
5:30 PM	13	78	22	0	6	118	7	0	3	4	15	0	16	11	3	0	296
5:45 PM	14	62	17	0	4	132	4	0	1	10	23	0	9	10	3	0	289
6:00 PM	9	66	12	0	4	97	7	0	4	6	12	0	17	14	2	0	250
6:15 PM	11	88	21	0	3	95	3	0	5	12	4	0	10	10	6	0	268
6:30 PM	8	68	14	0	1	82	3	0	2	2	16	0	9	6	7	0	218
6:45 PM	13	81	20	0	5	67	2	0	5	4	14	0	9	5	2	0	227
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	128	887	215	0	54	1110	49	0	35	75	150	0	144	113	63	0	3023
P.H.V:	1 47	294	72	0	17	442	21	0	13	32	54	0	52	45	14	0	1103
P.H.F:	2	_ 0.	860 _			3.0	57 _			_ 0	.728	_ 1		_ 0.8	341		0.932

⁽¹⁾ Peak Hour Volume (Peak Hour - 530 PM - 630 PM) (2) Peak Hour Factor (directional aggregate) (3) Peak 15m: 530 PM - 545 PM

⁽²⁾ Peak Hour Factor (directional aggregate) (3) Peak 15m: 800 AM - 815 AM

HEAVY TRUCKS & BUSES TURNING MOVEMENT COUNT

#003 N Harrison St - MAJOR & 26th St - MINOR - AM PEAK

LOCATION#:	003								QTD P	ROJ#:	2016127						
NORTH / SOUTH:	N Harrison	St - MAJOR	₹						DAT	ΓE:	Tuesday, M	arch 01, 20	16				
EAST / WEST:	26th St - Mi	INOR							VICIN	IITY:	VA						
DIRECTION:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTALS
LANES:	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	TOTALS
7:00 AM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	4
7:15 AM	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5
7:30 AM	0	2	0	0	0	3	0	0	0	1	0	0	0	0	0	0	6
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	1	0	0	2	3	1	0	0	0	0	0	0	0	0	0	7
8:15 AM	0	0	1	0	0	2	0	0	0	1	0	0	0	1	0	0	5
8:30 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	4
9:00 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	1	0	0	4
9:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
9:30 AM	1	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	5
9:45 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	1	12	1	0	5	21	1	0	0	3	1	0	0	3	0	0	48
P.H.V:	1 0	3	1	0	2	9	1	0	0	2	0	0	0	1	0	0	19
P.H.F:	2	_ 0.!	500			0.	500		Ī	0.	.500	_ 1		_ 0.:	250		0.679

⁽¹⁾ Peak Hour Volume (Peak Hour - 730 AM - 830 AM) (2) Peak Hour Factor (directional aggregate) (3) Peak 15m: 800 AM - 815 AM

HEAVY TRUCKS & BUSES TURNING MOVEMENT COUNT

#003 N Harrison St - MAJOR & 26th St - MINOR - MD PEAK

LOCATION#:	003								OTD F	PROJ#:	2016127						
NORTH / SOUTH:	N Harrison	St - MAJOR	,						DA		Tuesday, M	arch 01 20	16				
EAST / WEST:	26th St - MI		•							NITY:	VA	u. o., 20					
2/1017112011	Zotii Ot III								*****		U.A.						
DIRECTION:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTALS
LANES:	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	TOTALS
11:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11:30 AM	0	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	4
11:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	0	3	1	0	0	2	0	0	0	0	0	0	0	0	1	0	7
P.H.V:	1 0	3	1	0	0	2	0	0	0	0	0	0	0	0	1	0	7
P.H.F:	2	_ 0.!	500 _			. 0.	500			. 0	.000			_ 0.2	250		0.438

⁽¹⁾ Peak Hour Volume (Peak Hour - 1200 PM - 1300 PM) (2) Peak Hour Factor (directional aggregate) (3) Peak 15m: 1215 PM - 1230 PM

HEAVY TRUCKS & BUSES TURNING MOVEMENT COUNT

LOCATION#: NORTH / SOUTH: EAST / WEST:	003 N Harrison 26th St - Mi		l						DA	PROJ#: TE: NITY:	2016127 Tuesday, M VA	arch 01, 20	16				
DIRECTION: LANES:	NL 0	NT	NR 0	U	SL 0	ST	SR	U	EL 0	ET	ER	U	WL 0	WT	WR	U	TOTALS
4:00 PM	0	2	0	0	0	2	0	0	0	0	0	0	0		0	0	5
4:00 PM	0	2	0	0	0	1	0	0	0	0	0	0	1	0	1	0	5
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	C	WL	WT	WR	U	
TOTAL:	0	7	0	0	2	5	0	0	0	0	0	0	1	2	1	0	18
P.H.V:	1 0	5	0	0	2	3	0	0	0	0	0	0	1	1	1	0	13
P.H.F:	2	_ 0.0	625 _			_ 0.	625			. 0	.000	_ 1		_ 0.3	375		0.650

⁽¹⁾ Peak Hour Volume (Peak Hour - 530 PM - 630 PM)



⁽²⁾ Peak Hour Factor (directional aggregate) (3) Peak 15m: 530 PM - 545 PM

PEDESTRIAN CROSSWALK COUNTS

#003 N Harrison St - MAJOR & 26th St - MINOR - AM PEAK

LOCATION#:	003	QTD PROJ#:	2016127
NORTH / SOUTH:	N Harrison St - MAJOR	DATE:	Tuesday, March 01, 2016
EAST / WEST:	26th St - MINOR	VICINITY:	VA

DIRECTION:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
7:00 AM	0	1	0	3	4
7:15 AM	0	1	3	1	5
7:30 AM	2	0	0	2	4
7:45 AM	6	2	1	1	10
8:00 AM	1	4	1	0	6
8:15 AM	2	0	0	0	2
8:30 AM	4	0	0	2	6
8:45 AM	4	0	2	0	6
9:00 AM	3	0	0	0	3
9:15 AM	1	0	0	0	1
9:30 AM	7	0	0	1	8
9:45 AM	2	0	0	0	2

VOLUME STATS:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	
TOTAL:	32	8	7	10	57
P.H.V: 1	9	7	5	4	25
P.H.F: 2	0.375	0.438	0.417	0.500	0.625

- (1) Peak Hour Volume (Peak Hour 730 AM 830 AM) (2) Peak Hour Factor
- (3) Peak 15m: 800 AM 815 AM

PEDESTRIAN CROSSWALK COUNTS

#003 N Harrison St - MAJOR & 26th St - MINOR - MD PEAK

LOCATION#:	003	QTD PROJ#:	2016127
NORTH / SOUTH:	N Harrison St - MAJOR	DATE:	Tuesday, March 01, 2016
EAST / WEST:	26th St - MINOR	VICINITY:	VA

DIDECTION	FACTEDNI ODOCCIMALIA	WESTERN OROSSWALK	COUTUEDN ODOCCMANK	NORTHERN OROCCIMALK	T07410
DIRECTION:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
11:00 AM	1	0	2	0	3
11:15 AM	9	0	1	0	10
11:30 AM	1	0	0	0	1
11:45 AM	7	0	0	0	7
12:00 PM	1	0	0	1	2
12:15 PM	5	0	4	0	9
12:30 PM	7	1	4	0	12
12:45 PM	10	1	1	0	12

VOLUME STATS:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	
TOTAL:	41	2	12	1	56
P.H.V: 1	23	2	9	1	35
P.H.F: 2	0.575	0.500	0.563	0.250	0.729

- (1) Peak Hour Volume (Peak Hour 1200 PM 1300 PM)
- (2) Peak Hour Factor (3) Peak 15m: 1215 PM 1230 PM

PEDESTRIAN CROSSWALK COUNTS

LOCATION#:	003	QTD PROJ#:	2016127
NORTH / SOUTH:	N Harrison St - MAJOR	DATE:	Tuesday, March 01, 2016
EAST / WEST:	26th St - MINOR	VICINITY:	VA

DIRECTION:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	TOTALS
4:00 PM	5	4	3	1	13
4:15 PM	4	0	0	2	6
4:30 PM	9	1	1	4	15
4:45 PM	14	0	2	1	17
5:00 PM	7	0	1	0	8
5:15 PM	8	3	2	0	13
5:30 PM	1	2	3	5	11
5:45 PM	2	0	2	0	4
6:00 PM	4	0	2	0	6
6:15 PM	4	1	0	1	6
6:30 PM	8	1	3	0	12
6:45 PM	4	3	1	0	8

VOLUME STATS:	EASTERN CROSSWALK	WESTERN CROSSWALK	SOUTHERN CROSSWALK	NORTHERN CROSSWALK	
TOTAL:	70	15	20	14	119
P.H.V: 1	15	5	9	5	34
P.H.F: 2	0.469	0.417	0.750	0.250	1.154

- (1) Peak Hour Volume (Peak Hour 530 PM 630 PM) (2) Peak Hour Factor (3) Peak 15m: 530 PM 545 PM



BICYCLE TURNING MOVEMENT COUNT

#003 N Harrison St - MAJOR & 26th St - MINOR - AM PEAK

LOCATION#: NORTH / SOUTH: EAST / WEST:	003 N Harriso 26th St - I		JOR						DA	PROJ#: .TE: NITY:	2016127 Tuesday, VA	March 01,	2016				
DIRECTION:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTALS
LANES:	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	TOTALS
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
9:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
VOLUME CTATE			NID		- 01								100	11.77	11/5		
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	0	0	0	0	1	2	0	0		0	1	0	1	0	0	0	6
P.H.V:	1 0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
P.H.F:	2	_ 0.0	000 _			. 0.5	500 _			_ 0	.000			_ 0.2	250 —		0.375

⁽¹⁾ Peak Hour Volume (Peak Hour - 730 AM - 830 AM) (2) Peak Hour Factor (directional aggregate) (3) Peak 15m: 800 AM - 815 AM

BICYCLE TURNING MOVEMENT COUNT

#003 N Harrison St - MAJOR & 26th St - MINOR - MD PEAK

	_										_						
LOCATION#:	003									ROJ#:	2016127						
NORTH / SOUTH:	N Harriso	n St - MA.	JOR						DA	TE:	Tuesday,	March 01,	2016				
EAST / WEST:	26th St - I	MINOR							VICI	NITY:	VA						
	_																
DIRECTION:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTAL:
LANES:	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	TOTAL
11:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
P.H.V:	1 0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
PHF.	. 1	0	500 _		1	0.3	250 _		1	0	.000	1	1	0.0	000	$\overline{}$	0.375

⁽¹⁾ Peak Hour Volume (Peak Hour - 1200 PM - 1300 PM)

BICYCLE TURNING MOVEMENT COUNT

LOCATION#: NORTH / SOUTH: EAST / WEST:	003 N Harriso 26th St - M		JOR						DA	ROJ#: TE: NITY:	2016127 Tuesday, VA	March 01,	2016				
DIRECTION:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	TOTALS
LANES:	0	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	TOTALS
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	3
5:00 PM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	3
6:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
6:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
VOLUME STATS:	NL	NT	NR	U	SL	ST	SR	U	EL	ET	ER	U	WL	WT	WR	U	
TOTAL:	1	6	3	0	0	3	0	0	0	2	1	0	1	0	0	0	17
P.H.V:	1 0	3	3	0	0	1	0	0	0	0	0	0	- 1	0	0	0	8
P.H.F:	2	_ 0.	750 _			0.2	250			. 0	.000	_ 1		_ 0.2	250		0.667

⁽¹⁾ Peak Hour Volume (Peak Hour - 530 PM - 630 PM) (2) Peak Hour Factor (directional aggregate) (3) Peak 15m: 530 PM - 545 PM

⁽²⁾ Peak Hour Factor (directional aggregate) (3) Peak 15m: 1215 PM - 1230 PM