



District Department of Transportation

Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia

Monroe Street NE and Rhode Island Avenue NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
4	502	5	5A	Proposed	Monroe Street Northeast Eastbound at Rhode Island Avenue



This *proposed* speed camera will be located in Ward 5 at the intersection of Monroe Street Northeast and Rhode Island Avenue in the eastbound direction. Monroe Street runs between Eastern Avenue Northeast to the east and Michigan Avenue Northeast to the west. The posted speed limit is 25 MPH.

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Monroe Street NE and Rhode Island Avenue NE

Field Assessment Summary

Monroe Street is assumed to run in the east-west direction, and is classified as a collector. Monroe Street has three travel lanes in each direction. Rhode Island Avenue has one travel lane in each direction. This site has the following characteristics:

- This site is located in a residential area with houses and driveways on both sides of the street.
- There is on-street parking on both sides of the east and south legs, the west side of the north leg, and the north side of the west leg.
- There are concrete islands on the east, west, and south legs of the intersection. The south leg of the intersection has no centerline.
- There is sidewalk on both sides of the street on all four legs of the intersection. The intersection has a traffic signal and crosswalks with pedestrian signals.
- There is one school in the area: Friendship Public Charter School- Woodridge Elementary and Middle.
- There is a bus stop on both sides of the street on the west leg, as well as others in the surrounding area.



Looking Eastbound

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Monroe Street NE and Rhode Island Avenue NE



Looking Eastbound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	17
85th Percentile Speed (MPH)	25
10 MPH Pace Speed (MPH)	8-17
ADT	2,113

The mean speed is 8 MPH lower than the posted speed limit, and the 85th percentile speed is the same as the posted speed limit.

Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of five crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The types of collision at this location were Rear End, Right Angle, Left Turn, Fixed Object, and Unspecified. Each of these collision types had one crash in the three-year period.

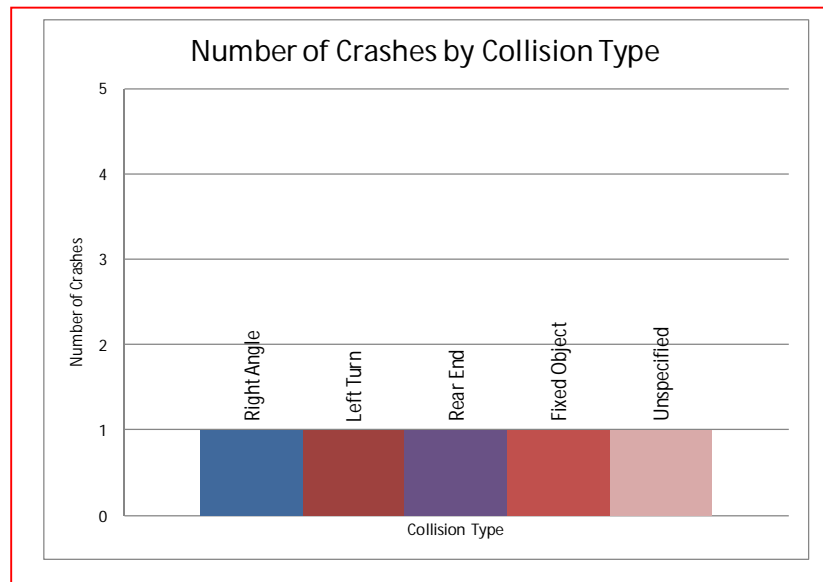
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District Department of Transportation

Monroe Street NE and Rhode Island Avenue NE

Severity			Weather			Surface condition			Light Condition		
Total	5										
Fatal	0	0.0%	Clear	4	80.0%	Dry	3	60.0%	Day	4	80.0%
Injury	2	40.0%	Rain	1	20.0%	Wet	2	40.0%	Night	0	0.0%
Truck	2	40.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Taxi	1	20.0%									



Safety Nexus

This site presents the following safety considerations which may support the nexus between the speed camera and traffic safety:

1. Speed Data – The speed data analysis shows travel speeds being lower than or the same as the posted speed limit.
2. Crash Data – The crash data analysis shows a low number of crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. Located in a residential area with houses and driveways on both sides of the street.
 - b. There is one school in the area: Friendship Public Charter School- Woodridge Elementary and Middle.
 - c. There is on-street parking at this location.
 - d. There are several bus stops in the area which generate pedestrian activity.

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Monroe Street NE and Rhode Island Avenue NE

Although the speed data analysis showed the mean and 85th percentile speeds to be the same as or lower than the posted speed limit, and the crash data analysis showed a low number of crashes, there is still a safety concern at this location. The residential nature of the area coupled with the pedestrian generators of bus stops creates a pedestrian environment where traffic and speeds must be mitigated. Thus, due to these factors, there is a nexus between traffic safety and the speed camera at this location.

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SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Monroe St NE EB & Rhode Island Ave Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/15/13	5	3	6	5	1	0	0	0	0	0	0	0	0	0	20
01:00	1	0	3	0	1	0	0	0	0	0	0	0	0	0	5
02:00	2	0	3	0	0	0	0	0	0	0	0	0	0	0	5
03:00	3	0	0	2	0	0	0	0	0	0	0	0	0	0	5
04:00	0	1	0	2	1	0	0	0	0	0	0	0	0	0	4
05:00	5	3	3	4	2	0	0	0	0	0	0	0	0	0	17
06:00	12	7	10	2	0	0	0	0	0	0	0	0	0	0	31
07:00	30	34	23	2	1	0	0	0	0	0	0	0	0	0	90
08:00	44	29	30	23	1	1	0	0	0	0	0	0	0	0	128
09:00	22	22	19	14	2	0	0	0	0	0	0	0	0	0	79
10:00	11	17	23	20	8	0	0	0	0	0	0	0	0	0	79
11:00	5	16	26	28	6	0	0	0	0	0	0	0	0	0	81
12 PM	11	23	30	25	10	2	0	0	0	0	0	0	0	0	101
13:00	19	19	29	27	8	0	0	0	0	0	0	0	0	0	102
14:00	37	25	37	25	6	1	0	0	0	0	0	0	0	0	131
15:00	65	61	47	26	5	0	0	0	0	0	0	0	0	0	204
16:00	107	62	47	29	12	2	0	0	0	0	0	0	0	0	259
17:00	108	82	56	21	4	0	0	0	0	0	0	0	0	0	271
18:00	55	64	49	13	5	0	0	0	0	0	0	0	0	0	186
19:00	22	18	39	30	3	0	0	0	0	0	0	0	0	0	112
20:00	5	9	29	20	2	0	0	0	0	0	0	0	0	0	65
21:00	14	8	26	13	6	0	0	0	0	0	0	0	0	0	67
22:00	4	10	9	12	0	1	0	0	0	0	0	0	0	0	36
23:00	3	3	16	12	1	0	0	0	0	0	0	0	0	0	35
Total	590	516	560	355	85	7	0	0	0	0	0	0	0	0	2113
Grand Total	590	516	560	355	85	7	0	0	0	0	0	0	0	0	2113

15th Percentile : 7 MPH
 50th Percentile : 16 MPH
 85th Percentile : 25 MPH
 95th Percentile : 29 MPH

Stats
 Mean Speed(Average) : 17 MPH
 10 MPH Pace Speed : 8-17 MPH
 Number in Pace : 828
 Percent in Pace : 39.2%
 Number of Vehicles > 25 MPH : 351
 Percent of Vehicles > 25 MPH : 16.6%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Monroe St NE EB & Rhode Island Ave Volume

Start Time	15-Nov-13		16-Nov-13		17-Nov-13		Daily Average	
	Fri A.M.	P.M.	Sat A.M.	P.M.	Sun A.M.	P.M.	A.M.	P.M.
12:00	11	30	*	*	*	*	11	30
12:15	4	21	*	*	*	*	4	21
12:30	1	23	*	*	*	*	1	23
12:45	4	27	*	*	*	*	4	27
01:00	4	30	*	*	*	*	4	30
01:15	1	18	*	*	*	*	1	18
01:30	0	26	*	*	*	*	0	26
01:45	0	28	*	*	*	*	0	28
02:00	0	26	*	*	*	*	0	26
02:15	2	31	*	*	*	*	2	31
02:30	0	38	*	*	*	*	0	38
02:45	3	36	*	*	*	*	3	36
03:00	0	36	*	*	*	*	0	36
03:15	1	48	*	*	*	*	1	48
03:30	2	52	*	*	*	*	2	52
03:45	2	68	*	*	*	*	2	68
04:00	1	71	*	*	*	*	1	71
04:15	2	62	*	*	*	*	2	62
04:30	0	59	*	*	*	*	0	59
04:45	1	67	*	*	*	*	1	67
05:00	4	78	*	*	*	*	4	78
05:15	4	85	*	*	*	*	4	85
05:30	2	47	*	*	*	*	2	47
05:45	7	61	*	*	*	*	7	61
06:00	9	67	*	*	*	*	9	67
06:15	3	57	*	*	*	*	3	57
06:30	9	32	*	*	*	*	9	32
06:45	10	30	*	*	*	*	10	30
07:00	15	38	*	*	*	*	15	38
07:15	11	39	*	*	*	*	11	39
07:30	22	21	*	*	*	*	22	21
07:45	42	14	*	*	*	*	42	14
08:00	33	24	*	*	*	*	33	24
08:15	29	14	*	*	*	*	29	14
08:30	36	15	*	*	*	*	36	15
08:45	30	12	*	*	*	*	30	12
09:00	25	19	*	*	*	*	25	19
09:15	24	13	*	*	*	*	24	13
09:30	11	16	*	*	*	*	11	16
09:45	19	19	*	*	*	*	19	19
10:00	21	11	*	*	*	*	21	11
10:15	14	11	*	*	*	*	14	11
10:30	15	5	*	*	*	*	15	5
10:45	29	9	*	*	*	*	29	9
11:00	18	11	*	*	*	*	18	11
11:15	16	3	*	*	*	*	16	3
11:30	20	13	*	*	*	*	20	13
11:45	27	8	*	*	*	*	27	8
Total	544	1569	0	0	0	0	544	1569
Combined Total	2113		0		0		2113	
Peak	07:45	04:30					07:45	04:30
Vol.	140	289					140	289
P.H.F.	0.833	0.850					0.833	0.850
ADT	ADT 2,113		AADT 2,113					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: MONROE ST,NE From RHODE ISLAND AVE,NE TO BRENTWOOD RD,NE

Time Period Covered: From 01/01/2010 To 12/31/2012

Prepared By: Rahul Jain

Prepared Date: 9/16/2013

Total Number of Accident:	5	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	1	20.0%	Fixed Object:	1	20.0%
Total Number of Injuries:	5	Left Turn:	1	20.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	0	Rear End:	1	20.0%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	1	Parked:	0	0.0%	Unspecified:	1	20.0%
Time of Day				#ACC	%	Day of week	
07:30 ~ 09:30:				1	20.0%	Sunday:	
09:30 ~ 11:30:				2	40.0%	Monday:	
11:30 ~ 13:30:				0	0.0%	Tuesday:	
13:30 ~ 16:00:				0	0.0%	Wednesday:	
16:00 ~ 18:30:				0	0.0%	Thursday:	
18:30 ~ 07:30:				2	40.0%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				4	80.0%	Dry:	
Rain:				1	20.0%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				0	0.0%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				0	0.0%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				7	63.6%	Fatal Collision:	
Bus:				0	0.0%	Injury Collision:	
Truck:				2	18.2%	PDO Collision:	
Taxi:				1	9.1%	Light Condition	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				0	0.0%	Dawn/Dusk:	
Motorcycle/Moped:				1	9.1%	Dark(Lighted):	
Bicycle:				0	0.0%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				0	0.0%	Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				1	9.1%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				0	0.0%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				2	18.2%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				8	72.7%	Unspecified:	

2 Records are not approved as of 9/16/2013 8:29:38 AM