



District Department of Transportation

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

Military Road W/B at 14th Street NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
4	402/403	4	4A	Planned	Military Road Westbound at 14 th Street Northwest



The *planned* speed camera will be located in Ward 4 at the intersection of Military Road and 14th Street Northwest in the westbound direction. Military Road runs between Wisconsin Avenue Northwest to the west and Missouri Avenue Northwest to the east. 14th Street runs from Eastern Avenue Northwest in the north to the 14th Street Bridge, where it becomes US 1 to the south. The posted speed limit is 30 MPH.

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District Department of Transportation

Military Road W/B at 14th Street NW

Field Assessment Summary

Military Road is assumed to run in an East-West direction, and is classified as a principal arterial in this section of roadway. Military Road has two travel lanes in each direction. 14th Street Northwest is assumed to run in a North-South direction, and is classified as a minor arterial in this section of roadway. 14th Street Northwest has one travel lane and one bike lane in each direction. This site has the following characteristics:

- This site is located in a residential area with houses and apartments in the surrounding area.
- There is sidewalk with curb and gutter and drainage inlets on all legs. There are concrete medians on east and west legs and a brick median on the south leg.
- There is a traffic signal and crosswalk across all legs with pedestrian signals.
- There are four schools in the area: Brightwood Elementary School, Latin American Montessori Bilingual Public Charter School, Nativity School, and Jewish Primary Day School of the Nation's Capital.
- Emery Recreation Center is located to the east.
- There is heavy volume of traffic in the northbound direction at this location.
- There is a high volume of pedestrian traffic at this location.
- There is on-street parking on the north, east and south legs.



Looking Westbound



District Department of Transportation

Military Road W/B at 14th Street NW



Looking Eastbound

Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	27
85th Percentile Speed (MPH)	33
10 MPH Pace Speed	25-34 MPH
ADT	8,573

The mean speed is 3 MPH lower than the posted speed limit, and the 85th percentile speed is 3 MPH higher than the posted speed limit.

Crash Data Analysis

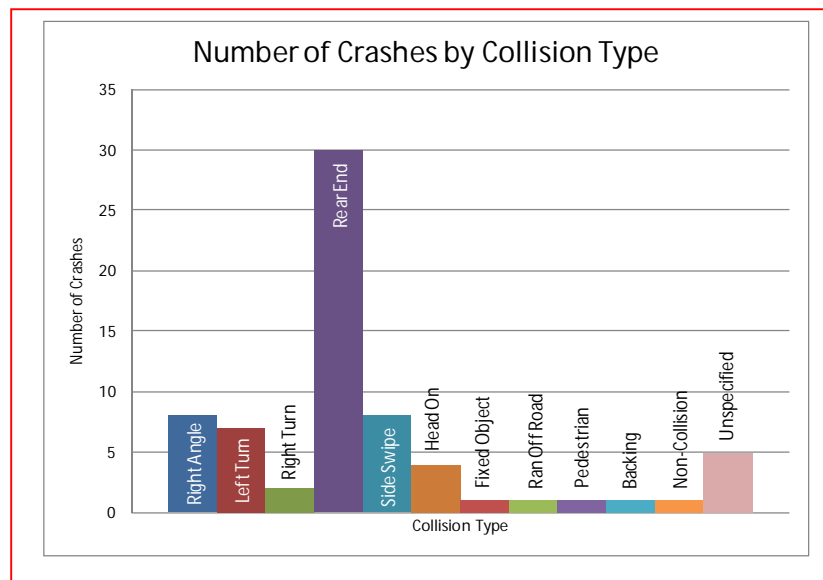
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 69 crashes at this location. A breakdown of collision type can be found in the chart on the next page. The most common type of crashes at this location were Rear End (30 crashes), Side Swiped (8 crashes), Right Angles (8 crashes), and Left Turn (7 crashes).



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Military Road W/B at 14th Street NW

Severity			Weather			Surface condition			Light Condition		
Total	69										
Fatal	0	0.0%	Clear	45	65.2%	Dry	45	65.2%	Day	50	72.5%
Injury	28	40.6%	Rain	12	17.4%	Wet	17	24.6%	Night	11	15.9%
Truck	9	13.0%	Snow	4	5.8%	Snow/Ice	6	8.7%			
Bus	5	7.2%									



Safety Nexus

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

1. Speed Data – The 85th percentile speed is higher than the posted speed at this location.
2. Crash Data – There was an elevated number of speed-related crashes at this location, including rear end collisions. There was a high frequency (28 crashes) of injury-related crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. The site is located in a residential area with on-street parking on north, east and south legs.
 - b. There are four schools in this area: Brightwood Elementary School, Latin American Montessori Bilingual Public Charter School, Nativity School, and Jewish Primary Day School of the Nation's Capital.
 - c. Emery Recreation Center is in the area which generates pedestrian and bicycle activity.
 - d. There are a high volume of pedestrians at this intersection.

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Military Road W/B at 14th Street NW

Due to the 85th percentile speeds, the elevated number of speed-related and injury-related crashes, the specific site characteristics of a residential, and the nearby pedestrian generators, 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

Military Rd WB at 14th St NW Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/08/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	7	5	30	99	32	12	3	0	0	0	0	0	0	0	188
23:00	3	5	26	46	39	6	3	0	0	1	0	0	0	0	129
Total	10	10	56	145	71	18	6	0	0	1	0	0	0	0	317

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Military Rd WB at 14th St NW Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/09/13	3	2	12	27	18	6	1	0	0	0	0	0	0	0	69
01:00	2	0	4	20	19	5	2	0	0	0	0	0	0	0	52
02:00	3	1	7	25	13	6	2	0	0	1	0	0	0	0	58
03:00	0	1	9	10	18	10	2	0	0	0	0	0	0	0	50
04:00	4	1	12	32	25	7	1	0	0	0	0	0	0	0	82
05:00	20	12	39	97	64	22	2	0	0	0	0	0	0	0	256
06:00	26	20	69	135	106	22	5	0	0	0	0	0	0	0	383
07:00	26	22	104	201	112	30	6	0	0	0	0	0	0	0	501
08:00	24	14	120	191	140	25	8	0	0	0	0	0	0	0	522
09:00	22	22	82	198	166	60	6	1	1	0	0	0	0	0	558
10:00	30	23	78	194	178	53	15	1	0	0	0	0	0	0	572
11:00	28	17	85	196	155	88	10	2	0	0	0	0	0	0	581
12 PM	45	24	101	180	209	63	10	1	0	0	0	0	0	0	633
13:00	37	19	115	201	175	50	11	1	0	0	0	0	0	0	609
14:00	24	32	95	189	150	54	11	4	0	0	0	0	0	0	559
15:00	32	15	101	201	152	45	2	0	0	0	0	0	0	0	548
16:00	25	12	101	185	149	37	4	0	0	0	0	0	0	0	513
17:00	25	24	115	192	132	23	3	1	0	0	0	0	0	0	515
18:00	20	28	71	181	105	18	1	1	0	0	0	0	0	0	425
19:00	13	12	36	120	71	19	1	0	0	0	0	0	0	0	272
20:00	17	5	39	96	69	13	0	0	0	0	0	0	0	0	239
21:00	16	5	55	108	58	15	2	0	0	0	0	0	0	0	259
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	442	311	1450	2979	2284	671	105	12	1	1	0	0	0	0	8256
Grand Total	452	321	1506	3124	2355	689	111	12	1	2	0	0	0	0	8573

15th Percentile : 19 MPH
 50th Percentile : 27 MPH
 85th Percentile : 33 MPH
 95th Percentile : 37 MPH

Stats
 Mean Speed(Average) : 27 MPH
 10 MPH Pace Speed : 25-34 MPH
 Number in Pace : 4881
 Percent in Pace : 56.9%
 Number of Vehicles > 30 MPH : 3075
 Percent of Vehicles > 30 MPH : 35.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Military Rd WB at 14th St NW Volume

Start Time	Fri A.M.	08-Nov-13		Sat A.M.	09-Nov-13		Sun A.M.	10-Nov-13		Daily Average	
			P.M.			P.M.			P.M.	A.M.	P.M.
12:00	*	*		23	145		*	*	23	145	
12:15	*	*		13	156		*	*	13	156	
12:30	*	*		20	163		*	*	20	163	
12:45	*	*		13	169		*	*	13	169	
01:00	*	*		13	131		*	*	13	131	
01:15	*	*		18	150		*	*	18	150	
01:30	*	*		12	159		*	*	12	159	
01:45	*	*		9	169		*	*	9	169	
02:00	*	*		16	137		*	*	16	137	
02:15	*	*		20	136		*	*	20	136	
02:30	*	*		10	136		*	*	10	136	
02:45	*	*		12	150		*	*	12	150	
03:00	*	*		15	152		*	*	15	152	
03:15	*	*		10	146		*	*	10	146	
03:30	*	*		10	134		*	*	10	134	
03:45	*	*		15	116		*	*	15	116	
04:00	*	*		17	129		*	*	17	129	
04:15	*	*		12	145		*	*	12	145	
04:30	*	*		21	114		*	*	21	114	
04:45	*	*		32	125		*	*	32	125	
05:00	*	*		41	145		*	*	41	145	
05:15	*	*		46	115		*	*	46	115	
05:30	*	*		73	141		*	*	73	141	
05:45	*	*		96	114		*	*	96	114	
06:00	*	*		89	122		*	*	89	122	
06:15	*	*		77	105		*	*	77	105	
06:30	*	*		97	100		*	*	97	100	
06:45	*	*		120	98		*	*	120	98	
07:00	*	*		96	72		*	*	96	72	
07:15	*	*		122	73		*	*	122	73	
07:30	*	*		143	60		*	*	143	60	
07:45	*	*		140	67		*	*	140	67	
08:00	*	*		133	46		*	*	133	46	
08:15	*	*		125	69		*	*	125	69	
08:30	*	*		128	61		*	*	128	61	
08:45	*	*		136	63		*	*	136	63	
09:00	*	*		135	57		*	*	135	57	
09:15	*	*		121	67		*	*	121	67	
09:30	*	*		161	65		*	*	161	65	
09:45	*	*		141	70		*	*	141	70	
10:00	*	62		140	*		*	*	140	62	
10:15	*	40		144	*		*	*	144	40	
10:30	*	40		146	*		*	*	146	40	
10:45	*	46		142	*		*	*	142	46	
11:00	*	30		144	*		*	*	144	30	
11:15	*	39		141	*		*	*	141	39	
11:30	*	33		153	*		*	*	153	33	
11:45	*	27		143	*		*	*	143	27	
Total	0	317		3684	4572		0	0	3684	4889	
Combined Total		317			8256		0			8573	
Peak		10:00		09:30	12:00				09:30	12:00	
Vol.		188		586	633				586	633	
P.H.F.		0.758		0.910	0.936				0.910	0.936	
ADT		ADT 8,573		AADT 8,573							

Accident Summary Report (R-8)

Corridor: MILITARY RD,NW From FOURTEENTH ST,NW TO GLOVER RD,NW

Time Period Covered: From 01/01/2010 To 12/31/2012 **Prepared By:** Rahul Jain

Prepared Date: 10/27/2012

Total Number of Accident:	69	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	8	11.6%	Fixed Object:	1	1.4%
Total Number of Injuries:	41	Left Turn:	7	10.1%	Ran Off Road:	1	1.4%
Total Number of Disabling Injuries:	2	Right Turn:	2	2.9%	Ped. Involved:	1	1.4%
Total Number of NonDisabling Injuries:	9	Rear End:	30	43.5%	Backing:	1	1.4%
Total Number of Pedestrians Involved:	1	Side Swiped:	8	11.6%	Non Collision:	1	1.4%
Total Number of Bicycles Involved:	0	Head On:	4	5.8%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	1	Parked:	0	0.0%	Unspecified:	5	7.2%
Time of Day				#ACC	%	Day of week	
07:30 ~ 09:30:				9	13.0%	Sunday:	
09:30 ~ 11:30:				5	7.2%	Monday:	
11:30 ~ 13:30:				11	15.9%	Tuesday:	
13:30 ~ 16:00:				11	15.9%	Wednesday:	
16:00 ~ 18:30:				12	17.4%	Thursday:	
18:30 ~ 07:30:				21	30.4%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				45	65.2%	Dry:	
Rain:				12	17.4%	Wet:	
Snow:				4	5.8%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				1	1.4%	Water/Sand:	
Crosswind/Blowing Sand:				1	1.4%	Repairing:	
Unspecified:				6	8.7%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				107	83.6%	Fatal Collision:	
Bus:				5	3.9%	Injury Collision:	
Truck:				9	7.0%	PDO Collision:	
Taxi:				5	3.9%	Light Condition	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				0	0.0%	Dawn/Dusk:	
Motorcycle/Moped:				1	0.8%	Dark(Lighted):	
Bicycle:				0	0.0%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				1	0.8%	Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				7	5.5%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				0	0.0%	In Crosswalk against Signal:	
Driver: Electronic Device:				1	0.8%	In Crosswalk no Signal:	
Driver: Others:				22	17.2%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				98	76.6%	Unspecified:	

43 Records are not approved as of 10/27/2013 4:18:29 PM