



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

Connecticut Avenue at Military Road NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	201	3	3G	Planned	Connecticut Avenue Northbound at Military
					Road Northwest



The *planned* speed camera will be located in Ward 3 at the intersection of Connecticut Avenue and Military Road Northwest in the northbound direction. Connecticut Avenue runs between Western Avenue Northwest to the north and H Street Northwest to the south. The posted speed limit is 30 MPH.





Field Assessment Summary

Connecticut Avenue is assumed to run in a North-South direction, and is classified as a principal arterial. Connecticut Avenue has two through lanes and one left turn lane in each direction. Military Road has one left turn lane and one shared through-right lane in each direction. This site has the following characteristics:

- This site is located in a residential area with apartments, driveways, on-street parking and sidewalks with curb and gutter on all sides of the intersection.
- There is an existing traffic signal and crosswalks with pedestrian signals across all legs.
- The existing pavement is in good condition and there is a downhill slope in the northbound direction.
- In the northbound direction after the intersection, there is a bus lane on Connecticut Ave.
- There is one school in the area: Montessori School of Chevy Chase.
- There is one bus stop on the northwest corner of the intersection, and other bus stops in the surrounding area.







Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	15
85th Percentile Speed (MPH)	25
10 MPH Pace Speed	5-14 MPH
Sample Size	8,767
ADT	9,199

Both the mean speed and the 85th percentile speed are much lower than the posted speed limit. The 85th percentile is 5 MPH lower 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 45 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of crashes were Right Angle (11 crashes) and Rear End (11 crashes). The other collision types had less than six crashes or less each. There was one pedestrian crash involved in a crash at this location. The pedestrian was in the crosswalk with a signal. One

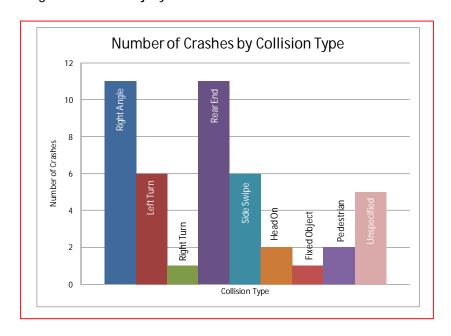
W3 - 123



crash involved a contributing factor of the driver using an electronic device. There was one bus involved in a crash at this location.

Sev	verity		W€	eather		Surface	condit	ion	Light Condition		
Total	45										
Fatal	0	0.0%	Clear	32	71.1%	Dry	34	75.6%	Day	33	73.3%
Injury	17	37.8%	Rain	10	22.2%	Wet	10	22.2%	Night	10	22.2%
Truck	6	13.3%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Taxi	6	13.3%									

There was an elevated number of speed related crashes at this location, including right angle and rear end collisions. There were a high number of injury-related crashes at this location as well.



The Connecticut Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011, according to the report *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA* (2009-2011)¹.

1.

¹ DDOT, TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011), pg.80.





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 speed data analysis shows travel speeds being much lower than the posted speed limit.
- 2. Crash Data There was an elevated number of speed-related crashes at this location, including right angle and rear end collisions. There were a high number of injury-related crashes at this location, and the Connecticut Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
 - a. Located in a residential area with apartments and driveways on both sides of the street.
 - b. There is one school in this area: Montessori School of Chevy Chase.
 - c. There are multiple bus stops in the area which generate pedestrian activity.
 - d. There is on-street parking in this area.

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, due to the elevated number of speed-related crashes, including injury-related crashes, and the specific site characteristics and pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

Connecticut Ave NB at Military Rd NW Speed

NB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/09/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	21	10	6	4	3	0	0	0	0	0	0	0	0	0	44
02:00	41	33	23	17	10	2	1	0	0	0	0	0	0	0	127
03:00	51	36	20	21	11	5	0	2	0	0	0	0	0	0	146
04:00	13	15	15	4	5	5	2	2	0	0	0	0	0	0	61
05:00	12	17	7	4	2	3	1	2	0	0	0	0	0	0	48
06:00	38	28	21	14	5	3	1	0	0	0	0	0	0	0	110
07:00	133	44	23	18	5	1	3	0	0	0	0	0	0	0	227
08:00	182	83	35	15	7	4	4	0	0	0	0	0	0	0	330
09:00	240	74	37	21	15	6	3	0	0	0	0	0	0	0	396
10:00	217	108	57	78	100	36	9	2	0	0	0	0	0	0	607
11:00	249	108	67	51	65	61	10	2	0	0	0	0	0	0	613
12 PM	260	135	72	65	74	40	4	2	0	1	0	0	0	0	653
13:00	256	126	78	60	52	23	2	1	0	0	0	0	0	0	598
14:00	248	111	82	78	68	37	11	1	0	0	0	0	0	0	636
15:00	246	107	78	68	67	45	10	3	0	0	0	0	0	0	624
16:00	267	114	96	48	58	34	3	0	0	0	0	0	0	0	620
17:00	275	109	96	61	61	11	2	0	0	0	0	0	0	0	615
18:00	245	97	50	38	59	44	8	1	0	0	0	0	0	0	542
19:00	231	78	54	13	4	7	0	0	0	0	0	0	0	0	387
20:00	184	73	41	14	3	1	0	0	0	0	0	0	0	0	316
21:00	198	68	34	17	11	4	6	1	0	0	0	0	0	0	339
22:00	214	84	37	9	4	5	1	0	0	0	0	0	0	0	354
23:00	200	91	51	14	8	7	2	1_	0	0	0	0	0	0	374
Total	4021	1749	1080	732	697	384	83	20	0	1	0	0	0	0	8767

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

Connecticut Ave NB at Military Rd NW Speed

NB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/10/13	129	54	42	32	10	6	1	2	0	0	0	0	0	0	276
01:00	59	25	26	29	9	6	1	1	0	0	0	0	0	0	156
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	188	79	68	61	19	12	2	3	0	0	0	0	0	0	432
Grand Total	4209	1828	1148	793	716	396	85	23	0	1	0	0	0	0	9199

 15th Percentile:
 5 MPH

 50th Percentile:
 12 MPH

 85th Percentile:
 25 MPH

 95th Percentile:
 33 MPH

 Stats
 Mean Speed(Average) :
 15 MPH

 10 MPH Pace Speed :
 5-14 MPH

Percent of Vehicles > 30 MPH :

9.1%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

Connecticut Ave NB at Military Rd NW Volume

Start	Sat	09-Nov-13	Sun	10-Nov-13	Mon	11-Nov-13	Daily Av	erage
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	176	84	*	*	*	84	176
12:15	*	164	77	*	*	*	77	164
12:30	*	156	67	*	*	*	67	156
12:45	*	157	48	*	*	*	48	157
01:00	*	140	52	*	*	*	52	140
01:15	*	164	52	*	*	*	52	164
01:30	*	147	52	*	*	*	52	147
01:45	44	147	52 *	*	*	*	44	147
02:00	31	141	*	*	*	*	31	141
02:15	26	160	*	*	*	*	26	160
02:30	36	173	*	*	*	*	36	173
02:45	34	162	*	*	*	*	34	162
03:00	45	157	*	*	*	*	45	157
03:00		170	*	*	*	*	38	170
03.15	38	140	*	*	*	*	30	
03:30	30		*	*	*	*	30	140
03:45	33	157	*	*	*	*	33	157
04:00	26	140			*	*	26	140
04:15	18	156	*	*	*	*	18	156
04:30	8	162	*	*	*	*	8 9	162
04:45	9	162	*	*	*		9	162
05:00	13	148	*	*	*	*	13 7	148
05:15	7	172	*	*			/	172
05:30	17	138	*	*	*	*	17	138
05:45	11	157	*	*		*	11	157
06:00	21	135	*	*	*	*	21	135
06:15	17	147	*	*	*	*	17	147
06:30	31	142	*	*	*	*	31	142
06:45	41	118	*	*	*	*	41	118
07:00	48	95	*	*	*	*	48	95
07:15	58	97	*	*	*	*	58	97
07:30	61	103	*	*	*	*	61	103
07:45	60	92	*	*	*	*	60	92
08:00	79	80	*	*	*	*	79	80
08:15	81	87	*	*	*	*	81	87
08:30	74	74	*	*	*	*	74	74
08:45	96	75	*	*	*	*	96	75
09:00	86	84	*	*	*	*	86	84
09:15	93	73	*	*	*	*	93	73
09:30	126	82	*	*	*	*	126	82
09:45	91	100	*	*	*	*	91	100
10:00	159	89	*	*	*	*	159	89
10:15	149	77	*	*	*	*	149	77
10:30	142	101	*	*	*	*	142	101
10:45	157	87	*	*	*	*	157	87
11:00	150	92	*	*	*	*	150	92
11:15	152	88	*	*	*	*	152	88
11:30	155	102	*	*	*	*	155	102
11:45	156	92	*	*	*	*	156	92
Total	2709	6058	432	0	0	0	3141	6058
						U		0036
Combined Total	87	67	43	32	0		9199	
Peak	10:45	02:30	12:00	·			10:45	02:30
Vol.	614	662	276				614	662
	0.978	0.957	0.004				0.070	
P.H.F.	0.970	0.937	0.821				0.978	0.957