



District Department of Transportation

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

5000 Block Massachusetts Avenue NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	205	3	3D	Proposed	5000 Block Massachusetts Avenue Northwest Southeast-Bound



The *proposed* speed camera will be located in Ward 3 at the 5000 block of Massachusetts Avenue Northwest in the southeast bound direction. Massachusetts Avenue runs from Dalecarlia Parkway Northwest and Western Avenue Northwest in the north to 19th Street Southeast in the south. The posted speed limit is 30 MPH.

W3 - 504





District Department of Transportation

5000 Block Massachusetts Avenue NW

Field Assessment Summary

Massachusetts Avenue is assumed to run in an East-West direction, and is classified as a principal arterial. Massachusetts Avenue has two lanes in each direction. This site has the following characteristics:

- This site is located in a residential area with houses, driveways, and sidewalks with a grass buffer and curb and gutter on both sides of the street.
- There is regulated (2 hour) on-street parking on both sides.
- A police officer sits at this location to provide speed enforcement of this area.
- The existing pavement is in good condition.
- There is a bus stop located on north end of block at Albemarle Street intersection.



Looking North

W3 - 505



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5000 Block Massachusetts Avenue NW



Looking South

Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	13
85th Percentile Speed (MPH)	21
10 MPH Pace Speed (MPH)	5-14
ADT	11,115

The mean speed is 17 MPH lower than posted speed limit and the 85th speed is 9 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 four crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. Two crashes were Rear End type crashes, and two were Side Swipe crashes.

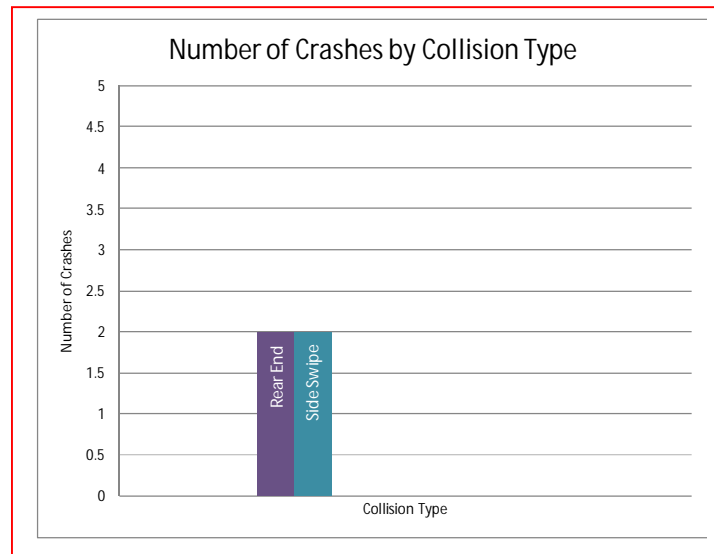
W3 - 506



District Department of Transportation

5000 Block Massachusetts Avenue NW

Severity			Weather			Surface condition			Light Condition		
Total	4										
Fatal	0	0.0%	Clear	4	100.0%	Dry	4	100.0%	Day	3	75.0%
Injury	2	50.0%	Rain	0	0.0%	Wet	0	0.0%	Night	1	25.0%
Taxi	0	0.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	1	25.0%									



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 lower than 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. This site is located in a residential area with houses and driveways on both sides of the street.
 - b. There is on-street parking at this location.
 - c. There are multiple bus stops in the area which generate pedestrian activity.
 - d. A police officer sits at this location to provide speed enforcement of this area.

The presence of the police officer suggests that speeding is a concern in this area. The low speed and crash data document reflects the presence of additional speed enforcement in the area. Thus, due to this fact,

W3 - 507



District Department of Transportation

5000 Block Massachusetts Avenue NW

along with residential nature of the area, the existence of on-street parking, and the pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

W3 - 508

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

5000 block of Massachusetts Ave NW SEB Speed

SEB																
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	
11/07/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	26	22	21	19	6	0	0	0	0	0	0	0	0	0	0	94
06:00	84	104	161	68	11	1	0	0	0	0	0	0	0	0	0	429
07:00	243	253	259	52	9	2	0	0	0	0	0	0	0	0	0	818
08:00	329	326	198	20	0	0	0	0	0	0	0	0	0	0	0	873
09:00	311	202	270	30	2	0	0	0	0	0	0	0	0	0	0	815
10:00	310	131	211	87	5	1	0	0	0	0	0	0	0	0	0	745
11:00	337	113	164	43	6	0	0	0	0	0	0	0	0	0	0	663
12 PM	323	122	170	41	2	0	0	0	0	0	0	0	0	0	0	658
13:00	343	92	143	51	2	0	0	0	0	0	0	0	0	0	0	631
14:00	410	76	127	23	3	2	0	0	0	0	0	0	0	0	0	641
15:00	366	59	133	27	0	0	0	0	0	0	0	0	0	0	0	585
16:00	388	58	124	33	1	0	0	0	0	0	0	0	0	0	0	604
17:00	404	81	132	20	2	0	0	0	0	0	0	0	0	0	0	639
18:00	373	61	139	28	4	0	0	0	0	0	0	0	0	0	0	605
19:00	370	80	139	28	1	0	0	0	0	0	0	0	0	0	0	618
20:00	297	58	75	25	3	0	0	0	0	0	0	0	0	0	0	458
21:00	269	61	62	34	4	0	0	0	0	0	0	0	0	0	0	430
22:00	206	39	55	23	1	1	0	0	0	0	0	0	0	0	0	325
23:00	124	16	28	15	2	0	0	0	0	0	0	0	0	0	0	185
Total	5513	1954	2611	667	64	7	0	0	0	0	0	0	0	0	0	10816

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

5000 block of Massachusetts Ave NW SEB Speed

SEB															
Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
11/08/13	66	5	10	2	1	0	0	0	0	0	0	0	0	0	84
01:00	35	2	6	3	0	0	0	0	0	0	0	0	0	0	46
02:00	25	4	5	1	1	1	0	0	0	0	0	0	0	0	37
03:00	14	4	5	3	1	0	0	0	0	0	0	0	0	0	27
04:00	23	8	17	12	1	0	0	0	0	0	0	0	0	0	61
05:00	19	7	15	3	0	0	0	0	0	0	0	0	0	0	44
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	182	30	58	24	4	1	0	0	0	0	0	0	0	0	299
Grand Total	5695	1984	2669	691	68	8	0	0	0	0	0	0	0	0	11115

15th Percentile : 5 MPH
50th Percentile : 11 MPH
85th Percentile : 21 MPH
95th Percentile : 25 MPH

Stats
Mean Speed(Average) : 13 MPH
10 MPH Pace Speed : 5-14 MPH
Number in Pace : 5988
Percent in Pace : 53.9%
Number of Vehicles > 30 MPH : 101
Percent of Vehicles > 30 MPH : 0.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

5000 block of Massachusetts Ave NW SEB Volume

Start Time	Thu A.M.	07-Nov-13 P.M.	Fri A.M.	08-Nov-13 P.M.	Sat A.M.	09-Nov-13 P.M.	Daily Average	
							A.M.	P.M.
12:00	*	175	28	*	*	*	28	175
12:15	*	154	22	*	*	*	22	154
12:30	*	159	24	*	*	*	24	159
12:45	*	170	10	*	*	*	10	170
01:00	*	153	11	*	*	*	11	153
01:15	*	151	17	*	*	*	17	151
01:30	*	169	6	*	*	*	6	169
01:45	*	158	12	*	*	*	12	158
02:00	*	161	11	*	*	*	11	161
02:15	*	162	13	*	*	*	13	162
02:30	*	160	7	*	*	*	7	160
02:45	*	158	6	*	*	*	6	158
03:00	*	145	8	*	*	*	8	145
03:15	*	146	5	*	*	*	5	146
03:30	*	139	5	*	*	*	5	139
03:45	*	155	9	*	*	*	9	155
04:00	*	144	3	*	*	*	3	144
04:15	*	149	8	*	*	*	8	149
04:30	*	146	25	*	*	*	25	146
04:45	*	165	25	*	*	*	25	165
05:00	*	150	24	*	*	*	24	150
05:15	*	165	20	*	*	*	20	165
05:30	33	149	*	*	*	*	33	149
05:45	61	175	*	*	*	*	61	175
06:00	70	131	*	*	*	*	70	131
06:15	78	166	*	*	*	*	78	166
06:30	121	157	*	*	*	*	121	157
06:45	160	151	*	*	*	*	160	151
07:00	196	173	*	*	*	*	196	173
07:15	180	151	*	*	*	*	180	151
07:30	195	149	*	*	*	*	195	149
07:45	247	145	*	*	*	*	247	145
08:00	207	117	*	*	*	*	207	117
08:15	182	119	*	*	*	*	182	119
08:30	230	104	*	*	*	*	230	104
08:45	254	118	*	*	*	*	254	118
09:00	182	108	*	*	*	*	182	108
09:15	212	109	*	*	*	*	212	109
09:30	218	105	*	*	*	*	218	105
09:45	203	108	*	*	*	*	203	108
10:00	204	92	*	*	*	*	204	92
10:15	201	91	*	*	*	*	201	91
10:30	186	88	*	*	*	*	186	88
10:45	154	54	*	*	*	*	154	54
11:00	165	58	*	*	*	*	165	58
11:15	160	36	*	*	*	*	160	36
11:30	179	42	*	*	*	*	179	42
11:45	159	49	*	*	*	*	159	49
Total	4437	6379	299	0	0	0	4736	6379
Combined Total	10816		299		0		11115	
Peak	08:30	12:00	04:30				08:30	12:00
Vol.	878	658	94				878	658
P.H.F.	0.864	0.940	0.940				0.864	0.940
ADT	ADT 11,115		AADT 11,115					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: MASSACHUSETTS AVE,NW,NE,SE From ALBEMARLE ST,NW TO FIFTIETH ST,NW

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

Prepared By: Rahul Jain

Prepared Date: 9/15/2013

Total Number of Accident:	4	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Injuries:	2	Left Turn:	0	0.0%	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:	2	50.0%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	0	Side Swiped:	2	50.0%	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:	0	Parked:	0	0.0%	Unspecified:	0	0.0%

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	1	25.0%	Sunday:	0	0.0%
09:30 ~ 11:30:	0	0.0%	Monday:	0	0.0%
11:30 ~ 13:30:	0	0.0%	Tuesday:	1	25.0%
13:30 ~ 16:00:	1	25.0%	Wednesday:	0	0.0%
16:00 ~18:30:	1	25.0%	Thursday:	2	50.0%
18:30 ~ 07:30:	1	25.0%	Friday:	1	25.0%
Unspecified:	0	0.0%	Saturday:	0	0.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	4	100.0%	Dry:	4	100.0%
Rain:	0	0.0%	Wet:	0	0.0%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	0	0.0%	Unspecified:	0	0.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	7	77.8%	Fatal Collision:	0	0.0%
Bus:	1	11.1%	Injury Collision:	2	50.0%
Truck:	1	11.1%	PDO Collision:	2	50.0%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	3	75.0%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	1	25.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	0	0.0%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	1	11.1%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%
Unspecified:	8	88.9%	Unspecified:	0	0.0%

3 Records are not approved as of 9/15/2013 9:52:39 PM