



District Department of Transportation

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

3700 Block Massachusetts Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	605	7	7B	Existing	3700 Block Massachusetts Avenue Southeast Southeast-bound



The existing speed camera is located in Ward 7 at the 3700 block of Massachusetts Avenue Southeast in the southeast-bound direction. Massachusetts Avenue Southeast runs between Southern Avenue Southeast to the east and East Capitol Street Southeast to the west. The posted speed limit is 25 MPH. This speed camera was installed on August 2012.

W7 - 130





District Department of Transportation

3700 Block Massachusetts Avenue SE

Field Assessment Summary

Massachusetts Avenue is assumed to run in a northwest-southeast direction, and is classified as a collector. Massachusetts Avenue has one travel lane in each direction. This site has the following characteristics:

- This is a residential area with houses and driveways on the southwest side of the street.
- There is a bike trail in the area.
- There are bike lanes in both directions on Massachusetts Avenue
- There is on-street parking on the southwest side of the street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.



Looking Northwest-bound



District Department of Transportation

3700 Block Massachusetts Avenue SE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	14
85th Percentile Speed (MPH)	19
10 MPH Pace Speed (MPH)	11-20
ADT	2,397

The mean speed is lower than the posted speed by 11 MPH and the 85th percentile speed is 6 MPH lower than the posted speed limit at this location.

Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012 there was a total of one crash at this location. The accident type was unspecified.

W7 - 132



Severity			Weather			Surface condition			Light Condition		
Total	1										
Fatal	0	0.0%	Clear	0	0.0%	Dry	0	0.0%	Day	0	0.0%
Injury	0	0.0%	Rain	0	0.0%	Wet	0	0.0%	Night	0	0.0%
Bus	0	0.0%	Unspecified	1	100.0%	Unspecified	1	100.0%			
Truck	0	0.0%									

The speed camera was installed on 8/1/2012. There was one crash at this location in the three years prior to the camera being installed and one crash at this location in the year after the camera was installed.

Safety Nexus

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

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 is a residential area with houses and driveways on the southwest side of the street.
 - b. There is a bike trail in the area which generates pedestrian and bicycle activity.
 - c. There are several bus stops in the area which generate pedestrian activity.
 - d. There is on-street parking on the southwest side of the street.

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit and the crash data analysis showed a low number of crashes at this location, due to the specific site characteristics, the multimodal transportation options, and the 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

3700 block of Massachusetts Ave SE SEB Speed

SEB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	15	20	25	30	35	40	45	50	55	60	65	70	75	999	
11/22/13	19	20	8	0	0	0	0	0	0	0	0	0	0	0	47
01:00	4	4	2	0	0	0	0	0	0	0	0	0	0	0	10
02:00	7	4	3	0	0	0	0	0	0	0	0	0	0	0	14
03:00	1	8	1	0	0	0	0	0	0	0	0	0	0	0	10
04:00	5	7	2	0	0	0	0	0	0	0	0	0	0	0	14
05:00	6	13	7	0	0	0	0	0	0	0	0	0	0	0	26
06:00	14	23	1	3	0	0	0	0	0	0	0	0	0	0	41
07:00	28	31	10	3	0	0	0	0	0	0	0	0	0	0	72
08:00	21	54	7	2	0	0	0	0	0	0	0	0	0	0	84
09:00	28	64	11	1	1	0	0	0	0	0	0	0	0	0	105
10:00	36	51	13	2	0	0	0	0	0	0	0	0	0	0	102
11:00	23	58	18	1	0	0	0	0	0	0	0	0	0	0	100
12 PM	32	59	16	2	0	0	0	0	0	0	0	0	0	0	109
13:00	31	80	19	5	1	0	0	0	0	0	0	0	0	0	136
14:00	41	74	21	5	0	0	0	0	0	0	0	0	0	0	141
15:00	54	96	25	5	0	0	0	0	0	0	0	0	0	0	180
16:00	64	141	32	1	0	0	0	0	0	0	0	0	0	0	238
17:00	111	124	19	2	0	0	0	0	0	0	0	0	0	0	256
18:00	90	115	19	1	0	0	0	0	0	0	0	0	0	0	225
19:00	49	84	16	2	0	0	0	0	0	0	0	0	0	0	151
20:00	23	60	13	1	0	0	0	0	0	0	0	0	0	0	97
21:00	22	56	16	0	0	0	0	0	0	0	0	0	0	0	94
22:00	25	47	5	1	0	0	0	0	0	0	0	0	0	0	78
23:00	26	36	4	1	0	0	0	0	0	0	0	0	0	0	67
Total	760	1309	288	38	2	0	0	0	0	0	0	0	0	0	2397
Grand Total	760	1309	288	38	2	0	0	0	0	0	0	0	0	0	2397

15th Percentile : 7 MPH
 50th Percentile : 14 MPH
 85th Percentile : 19 MPH
 95th Percentile : 22 MPH

Stats
 Mean Speed(Average) : 14 MPH
 10 MPH Pace Speed : 11-20 MPH
 Number in Pace : 1433
 Percent in Pace : 59.8%
 Number of Vehicles > 25 MPH : 46
 Percent of Vehicles > 25 MPH : 1.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

3700 block of Massachusetts Ave SE SEB Volume

Start Time	22-Nov-13		23-Nov-13		24-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	15	25	*	*	*	*	15	25
12:15	10	24	*	*	*	*	10	24
12:30	14	29	*	*	*	*	14	29
12:45	8	31	*	*	*	*	8	31
01:00	2	40	*	*	*	*	2	40
01:15	3	35	*	*	*	*	3	35
01:30	3	31	*	*	*	*	3	31
01:45	2	30	*	*	*	*	2	30
02:00	4	26	*	*	*	*	4	26
02:15	6	34	*	*	*	*	6	34
02:30	2	36	*	*	*	*	2	36
02:45	2	45	*	*	*	*	2	45
03:00	1	42	*	*	*	*	1	42
03:15	4	32	*	*	*	*	4	32
03:30	4	50	*	*	*	*	4	50
03:45	1	56	*	*	*	*	1	56
04:00	4	55	*	*	*	*	4	55
04:15	3	59	*	*	*	*	3	59
04:30	3	57	*	*	*	*	3	57
04:45	4	67	*	*	*	*	4	67
05:00	5	68	*	*	*	*	5	68
05:15	6	72	*	*	*	*	6	72
05:30	6	65	*	*	*	*	6	65
05:45	9	51	*	*	*	*	9	51
06:00	4	63	*	*	*	*	4	63
06:15	12	59	*	*	*	*	12	59
06:30	14	57	*	*	*	*	14	57
06:45	11	46	*	*	*	*	11	46
07:00	18	49	*	*	*	*	18	49
07:15	17	44	*	*	*	*	17	44
07:30	17	35	*	*	*	*	17	35
07:45	20	23	*	*	*	*	20	23
08:00	17	28	*	*	*	*	17	28
08:15	21	29	*	*	*	*	21	29
08:30	17	27	*	*	*	*	17	27
08:45	29	13	*	*	*	*	29	13
09:00	26	19	*	*	*	*	26	19
09:15	22	29	*	*	*	*	22	29
09:30	29	19	*	*	*	*	29	19
09:45	28	27	*	*	*	*	28	27
10:00	27	21	*	*	*	*	27	21
10:15	29	25	*	*	*	*	29	25
10:30	25	18	*	*	*	*	25	18
10:45	21	14	*	*	*	*	21	14
11:00	13	24	*	*	*	*	13	24
11:15	33	16	*	*	*	*	33	16
11:30	29	14	*	*	*	*	29	14
11:45	25	13	*	*	*	*	25	13
Total	625	1772	0	0	0	0	625	1772
Combined Total	2397		0		0		2397	
Peak	09:30	04:45					09:30	04:45
Vol.	113	272					113	272
P.H.F.	0.974	0.944					0.974	0.944
ADT	ADT 2,397		AADT 2,397					

Accident Summary Report (R-8)**Corridor:** MASSACHUSETTS AVE,NW,NE,SE From N ST,SE To O ST,SE**Time Period Covered:** From 01/01/2010 To 12/31/2012**Prepared By:** Rahul Jain**Prepared Date:** 9/15/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	1	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	1	100.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%
09:30 ~ 11:30:	0	0.0%	Monday:	1	100.0%
11:30 ~ 13:30:	0	0.0%	Tuesday:	0	0.0%
13:30 ~ 16:00:	0	0.0%	Wednesday:	0	0.0%
16:00 ~18:30:	0	0.0%	Thursday:	0	0.0%
18:30 ~ 07:30:	1	100.0%	Friday:	0	0.0%
Unspecified:	0	0.0%	Saturday:	0	0.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	0	0.0%	Dry:	0	0.0%
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:	1	100.0%	Unspecified:	1	100.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	2	100.0%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	0	0.0%
Truck:	0	0.0%	PDO Collision:	1	100.0%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	0	0.0%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	1	100.0%

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	50.0%	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:	1	50.0%	Unspecified:	0	0.0%

1 Records are not approved as of 9/15/2013 2:40:46 PM

Accident Summary Report (R-8)**Corridor:** MASSACHUSETTS AVE,NW,NE,SE From N ST,SE TO O ST,SE**Time Period Covered:** From 07/31/2011 To 07/31/2012**Prepared By:** Rahul Jain**Prepared Date:** 11/18/2012

Total Number of Accident:	1	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:	0	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:	0	0.0%	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:	0	Parked:	0	0.0%	Unspecified:	1	100.0%
Time of Day	#ACC	%	Day o fweek	#ACC	%		
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%		
09:30 ~ 11:30:	0	0.0%	Monday:	1	100.0%		
11:30 ~ 13:30:	0	0.0%	Tuesday:	0	0.0%		
13:30 ~ 16:00:	0	0.0%	Wednesday:	0	0.0%		
16:00 ~18:30:	0	0.0%	Thursday:	0	0.0%		
18:30 ~ 07:30:	1	100.0%	Friday:	0	0.0%		
Unspecified:	0	0.0%	Saturday:	0	0.0%		
Weather Condition	#ACC	%	Surface Condition	#ACC	%		
Clear:	0	0.0%	Dry:	0	0.0%		
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:	1	100.0%	Unspecified:	1	100.0%		
Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%		
Passenger Car:	2	100.0%	Fatal Collision:	0	0.0%		
Bus:	0	0.0%	Injury Collision:	0	0.0%		
Truck:	0	0.0%	PDO Collision:	1	100.0%		
Taxi:	0	0.0%	Light Condition	#ACC	%		
Minivan:	0	0.0%	Daylight:	0	0.0%		
Police/Emergency Vehicle:	0	0.0%	Dawn/Dusk:	0	0.0%		
Motorcycle/Moped:	0	0.0%	Dark(Lighted):	0	0.0%		
Bicycle:	0	0.0%	Dark(Not Lighted):	0	0.0%		
Fixed Object:	0	0.0%	Dark(Unknown Lighting):	0	0.0%		
Unspecified:	0	0.0%	Unspecified:	1	100.0%		
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	50.0%	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:	1	50.0%	Unspecified:	0	0.0%		

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Accident Summary Report (R-8)

Corridor: MASSACHUSETTS AVE,NW,NE,SE From N ST,SE TO O ST,SE

Time Period Covered: From 08/01/2012 To 08/01/2013

Prepared By: Rahul Jain

Prepared Date: 11/18/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	1	Right Angle:	0	0.0%	Fixed Object:	1	100.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	1	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	1	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%
09:30 ~ 11:30:	0	0.0%	Monday:	0	0.0%
11:30 ~ 13:30:	1	100.0%	Tuesday:	0	0.0%
13:30 ~ 16:00:	0	0.0%	Wednesday:	1	100.0%
16:00 ~ 18:30:	0	0.0%	Thursday:	0	0.0%
18:30 ~ 07:30:	0	0.0%	Friday:	0	0.0%
Unspecified:	0	0.0%	Saturday:	0	0.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	1	100.0%	Dry:	1	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:	0	0.0%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	1	100.0%
Truck:	1	100.0%	PDO Collision:	0	0.0%
Taxi:	0	0.0%	Light Condition	#ACC	%
Minivan:	0	0.0%	Daylight:	1	100.0%
Police/Emergency Vehicle:	0	0.0%	Dawn/Dusk:	0	0.0%
Motorcycle/Moped:	0	0.0%	Dark(Lighted):	0	0.0%
Bicycle:	0	0.0%	Dark(Not Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
Unspecified:	0	0.0%	Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	1	100.0%	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:	0	0.0%	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:	0	0.0%	Unspecified:	0	0.0%

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