



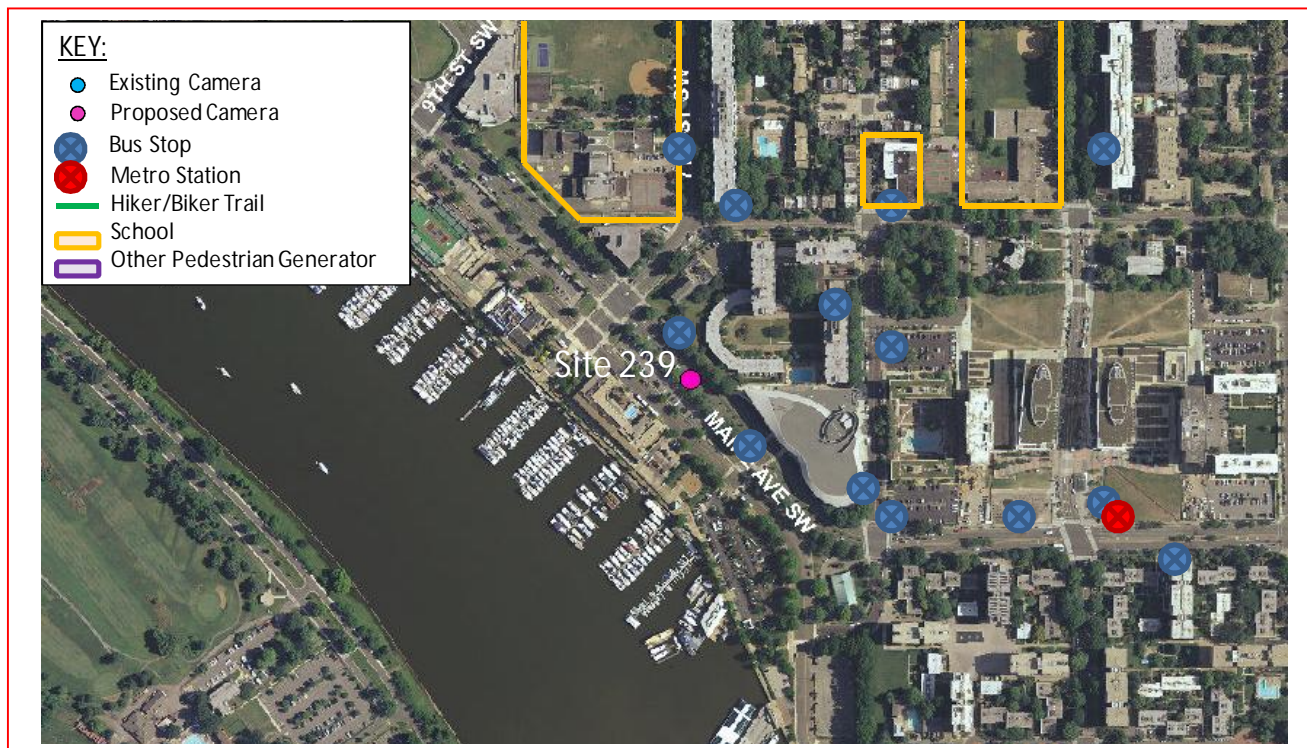
District Department of Transportation

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

### 800 Block Maine Avenue SW

#### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
1	104	6	6D	Proposed	800 Block Maine Avenue Southwest



The *proposed* speed camera will be located in Ward 6 at the 800 block of Maine Avenue Southwest in the northwest-bound direction. Maine Avenue Southwest runs between 6<sup>th</sup> Street Southwest to the east and Independence Avenue Southwest to the west. The posted speed limit is 25 MPH.

W6 - 215



District Department of Transportation

55 M Street, SE, Suite 400

Washington, DC 20003



District Department of Transportation

800 Block Maine Avenue SW

## Field Assessment Summary

Maine Avenue is assumed to run in a northwest-southeast direction, and is classified as a minor arterial. Maine Avenue has three travel lanes in each direction and left turn bays at 7<sup>th</sup> Street and 9<sup>th</sup> Street. This site has the following characteristics:

- There are office buildings and restaurants nearby.
- There are three schools in the area: Jefferson Middle School, Hawthorne High School, and Amidon-Bowen Elementary School.
- The L'Enfant Plaza and Waterfront Metrorail Stations are also in the area.
- The Arena Stage is in the area which generates pedestrian activity.
- There is a grassy median in the road and there are sidewalks on both sides of the street.
- There are traffic signals with pedestrian signals and crosswalks at 7<sup>th</sup> St and 9<sup>th</sup> St.
- There is on-street parking on the southwest side of the street and on-street parking for tour buses on the northeast side of the street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.



Looking Northwest-bound

W6 - 216



District Department of Transportation

800 Block Maine Avenue SW



Looking Southeast-bound

## Speed Data Analysis

<u>Posted Speed Limit (MPH)</u>	<u>25</u>
<u>Mean Speed (MPH)</u>	<u>14</u>
<u>85th Percentile Speed (MPH)</u>	<u>18</u>
<u>10 MPH Pace Speed</u>	<u>11-20</u>
<u>ADT</u>	<u>7,212</u>

The mean speed is lower than the posted speed limit by 11 MPH and the 85<sup>th</sup> percentile speed is lower than the posted speed by 7 MPH at this location.

## 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 20 crashes at this location. A breakdown of number of crashes by collisions type can be found in the chart below. The most common types of crashes at this location were Rear End (8), Side Swiped (3) and Fixed Object (2). There was one (1) crash where vehicular speeding was the contributing factor. Furthermore, the site experienced a high frequency (10 crashes) of injury-related crashes.

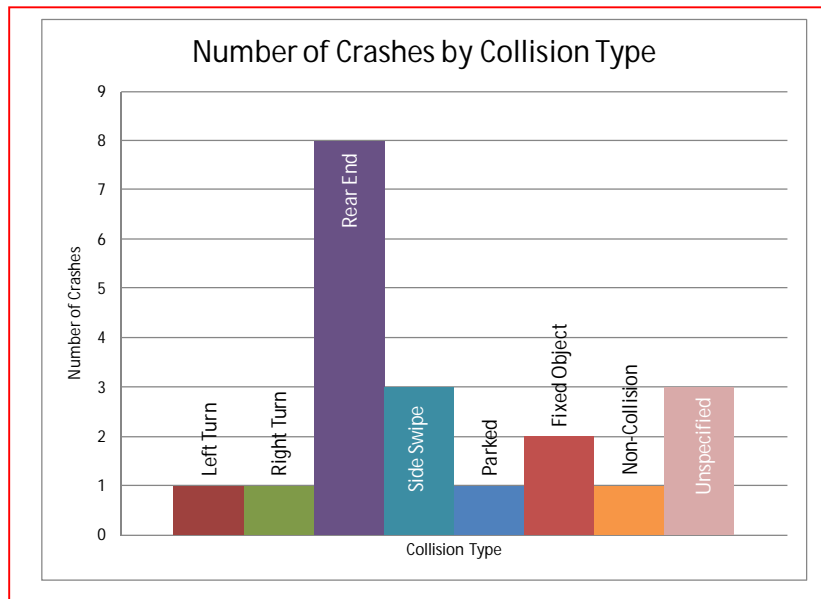
W6 - 217



District Department of Transportation

800 Block Maine Avenue SW

Severity			Weather			Surface condition			Light Condition		
Total	20										
Fatal	0	0.0%	Clear	17	85.0%	Dry	16	80.0%	Day	17	85.0%
Injury	10	50.0%	Rain	3	15.0%	Wet	3	15.0%	Night	3	15.0%
Bus	2	10.0%	Fog/Mist	0	0.0%	Snow/Ice	0	0.0%			
Truck	2	10.0%									



## Safety Nexus

This site presents the following safety considerations which may 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 – This location experienced a high frequency (10 crashes) of injury-related crashes. There was also one (1) crash where vehicular speeding was the contributing factor.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. There are three schools in the area: Jefferson Middle School, Hawthorne High School, and Amidon-Bowen Elementary School.
  - b. The Arena Stage is in the area which generates pedestrian activity.
  - c. There are multiple bus stops and two Metrorail Stations in the area which generate pedestrian activity.

W6 - 218



District Department of Transportation

800 Block Maine Avenue SW

- d. There is on-street parking on the southwest side of the street and on-street parking for tour buses on the northeast side of the street.

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 injury-related crashes, the specific site characteristics, the proximity of schools to the site, the location near tourist attractions, the presence of tour buses on the road, and other 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](http://www.sammateng.com)

## 800 block of Maine Ave SW NWB Speed

NWB

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
11/25/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	109	99	1	0	0	0	0	0	0	0	0	0	0	0	209
22:00	37	45	1	0	0	0	0	0	0	0	0	0	0	0	83
23:00	28	33	1	0	0	0	0	0	0	0	0	0	0	0	62
Total	174	177	3	0	0	0	0	0	0	0	0	0	0	0	354

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 800 block of Maine Ave SW NWB Speed

### NWB

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
11/26/13	14	23	2	0	0	0	0	0	0	0	0	0	0	0	39
01:00	11	11	0	0	0	0	0	0	0	0	0	0	0	0	22
02:00	4	7	0	0	0	0	0	0	0	0	0	0	0	0	11
03:00	2	8	1	0	0	0	0	0	0	0	0	0	0	0	11
04:00	16	32	0	0	0	0	0	0	0	0	0	0	0	0	48
05:00	37	118	8	0	0	0	0	0	0	0	0	0	0	0	163
06:00	67	307	21	0	0	0	0	0	0	0	0	0	0	0	395
07:00	106	459	20	0	0	0	0	0	0	0	0	0	0	0	585
08:00	142	441	14	0	0	0	0	0	0	0	0	0	0	0	597
09:00	121	315	16	0	0	0	0	0	0	0	0	0	0	0	452
10:00	107	237	3	0	0	0	0	0	0	0	0	0	0	0	347
11:00	112	330	9	0	0	0	0	0	0	0	0	0	0	0	451
12 PM	118	328	1	0	0	0	0	0	0	0	0	0	0	0	447
13:00	113	331	0	0	0	0	0	0	0	0	0	0	0	0	444
14:00	123	309	2	0	0	0	0	0	0	0	0	0	0	0	434
15:00	139	423	2	0	0	0	0	0	0	0	0	0	0	0	564
16:00	228	342	2	0	0	0	0	0	0	0	0	0	0	0	572
17:00	192	309	4	0	0	0	0	0	0	0	0	0	0	0	505
18:00	143	243	2	0	0	0	0	0	0	0	0	0	0	0	388
19:00	67	128	2	0	0	0	0	0	0	0	0	0	0	0	197
20:00	82	103	1	0	0	0	0	0	0	0	0	0	0	0	186
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	1944	4804	110	0	0	0	0	0	0	0	0	0	0	0	6858
Grand Total	2118	4981	113	0	0	0	0	0	0	0	0	0	0	0	7212

15th Percentile : 7 MPH  
 50th Percentile : 14 MPH  
 85th Percentile : 18 MPH  
 95th Percentile : 20 MPH

Stats  
 Mean Speed(Average) : 14 MPH  
 10 MPH Pace Speed : 11-20 MPH  
 Number in Pace : 4920  
 Percent in Pace : 68.2%  
 Number of Vehicles > 25 MPH : 9  
 Percent of Vehicles > 25 MPH : 0.1%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 800 block of Maine Ave SW NWB Volume

Start Time	Mon	25-Nov-13	Tue	26-Nov-13	Wed	27-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	14	138	*	*	14	138
12:15	*	*	4	91	*	*	4	91
12:30	*	*	10	114	*	*	10	114
12:45	*	*	11	104	*	*	11	104
01:00	*	*	10	119	*	*	10	119
01:15	*	*	4	111	*	*	4	111
01:30	*	*	2	114	*	*	2	114
01:45	*	*	6	100	*	*	6	100
02:00	*	*	2	116	*	*	2	116
02:15	*	*	5	101	*	*	5	101
02:30	*	*	3	108	*	*	3	108
02:45	*	*	1	109	*	*	1	109
03:00	*	*	1	122	*	*	1	122
03:15	*	*	4	126	*	*	4	126
03:30	*	*	4	159	*	*	4	159
03:45	*	*	2	157	*	*	2	157
04:00	*	*	7	136	*	*	7	136
04:15	*	*	11	139	*	*	11	139
04:30	*	*	15	165	*	*	15	165
04:45	*	*	15	132	*	*	15	132
05:00	*	*	19	136	*	*	19	136
05:15	*	*	30	134	*	*	30	134
05:30	*	*	41	115	*	*	41	115
05:45	*	*	73	120	*	*	73	120
06:00	*	*	94	116	*	*	94	116
06:15	*	*	105	98	*	*	105	98
06:30	*	*	96	100	*	*	96	100
06:45	*	*	100	74	*	*	100	74
07:00	*	*	147	57	*	*	147	57
07:15	*	*	141	51	*	*	141	51
07:30	*	*	129	46	*	*	129	46
07:45	*	*	168	43	*	*	168	43
08:00	*	*	152	46	*	*	152	46
08:15	*	*	156	50	*	*	156	50
08:30	*	*	169	45	*	*	169	45
08:45	*	*	120	45	*	*	120	45
09:00	*	92	110	*	*	*	110	92
09:15	*	56	111	*	*	*	111	56
09:30	*	37	127	*	*	*	127	37
09:45	*	24	104	*	*	*	104	24
10:00	*	23	84	*	*	*	84	23
10:15	*	20	104	*	*	*	104	20
10:30	*	23	78	*	*	*	78	23
10:45	*	17	81	*	*	*	81	17
11:00	*	20	97	*	*	*	97	20
11:15	*	18	83	*	*	*	83	18
11:30	*	11	130	*	*	*	130	11
11:45	*	13	141	*	*	*	141	13
Total	0	354	3121	3737	0	0	3121	4091
Combined Total	354		6858		0		7212	
Peak	09:00		07:45	03:45			07:45	03:45
Vol.	209		645	597			645	597
P.H.F.	0.568		0.954	0.905			0.954	0.905
ADT	ADT 7,212		AADT 7,212					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** MAINE AVE,SW From M ST,SW TO SEVENTH ST,SW

**Time Period Covered:** From 1/1/2010 To 12/31/2012

**Prepared By:** Rahul Jain

**Prepared Date:** 9/15/2013

		<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Accident:	20	Right Angle:	0	0.0%	Fixed Object:	2	10.0%
Total Number of Fatalities:	0	Left Turn:	1	5.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	18	Right Turn:	1	5.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	8	40.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	4	Side Swiped:	3	15.0%	Non Collision:	1	5.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	1	5.0%	Unspecified:	3	15.0%
Total Number of Motorcycles Involved:	2						

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	1	5.0%
09:30 ~ 11:30:	1	5.0%
11:30 ~ 13:30:	3	15.0%
13:30 ~ 16:00:	3	15.0%
16:00 ~18:30:	5	25.0%
18:30 ~ 07:30:	7	35.0%
Unspecified:	0	0.0%

<b>Day o fweek</b>	<b>#ACC</b>	<b>%</b>
Sunday:	1	5.0%
Monday:	2	10.0%
Tuesday:	5	25.0%
Wednesday:	3	15.0%
Thursday:	4	20.0%
Friday:	2	10.0%
Saturday:	3	15.0%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	17	85.0%
Rain:	3	15.0%
Snow:	0	0.0%
Sleet/Hail:	0	0.0%
Fog/Mist:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	0	0.0%

<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Dry:	16	80.0%
Wet:	3	15.0%
Snow/Ice:	0	0.0%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	1	5.0%
Unspecified:	0	0.0%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>
Passenger Car:	30	78.9%
Bus:	2	5.3%
Truck:	2	5.3%
Taxi:	1	2.6%
Minivan:	0	0.0%
Police/Emergency Vehicle:	1	2.6%
Motorcycle/Moped:	2	5.3%
Bicycle:	0	0.0%
Fixed Object:	0	0.0%
Unspecified:	0	0.0%

<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Fatal Collision:	0	0.0%
Injury Collision:	10	50.0%
PDO Collision:	10	50.0%

<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Daylight:	17	85.0%
Dawn/Dusk:	0	0.0%
Dark(Lighted):	3	15.0%
Dark(Not Lighted):	0	0.0%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	0	0.0%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>
Driver: Speed:	1	2.6%
Driver: Alcohol/Drug:	0	0.0%
Driver: Electronic Device:	0	0.0%
Driver: Others:	11	28.9%
Vehicle:	0	0.0%
Roadway:	1	2.6%
Unspecified:	25	65.8%

<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
In Crosswalk with Signal:	0	0.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	0	0.0%

11 Records are not approved as of 9/15/2013 8:23:56 PM