



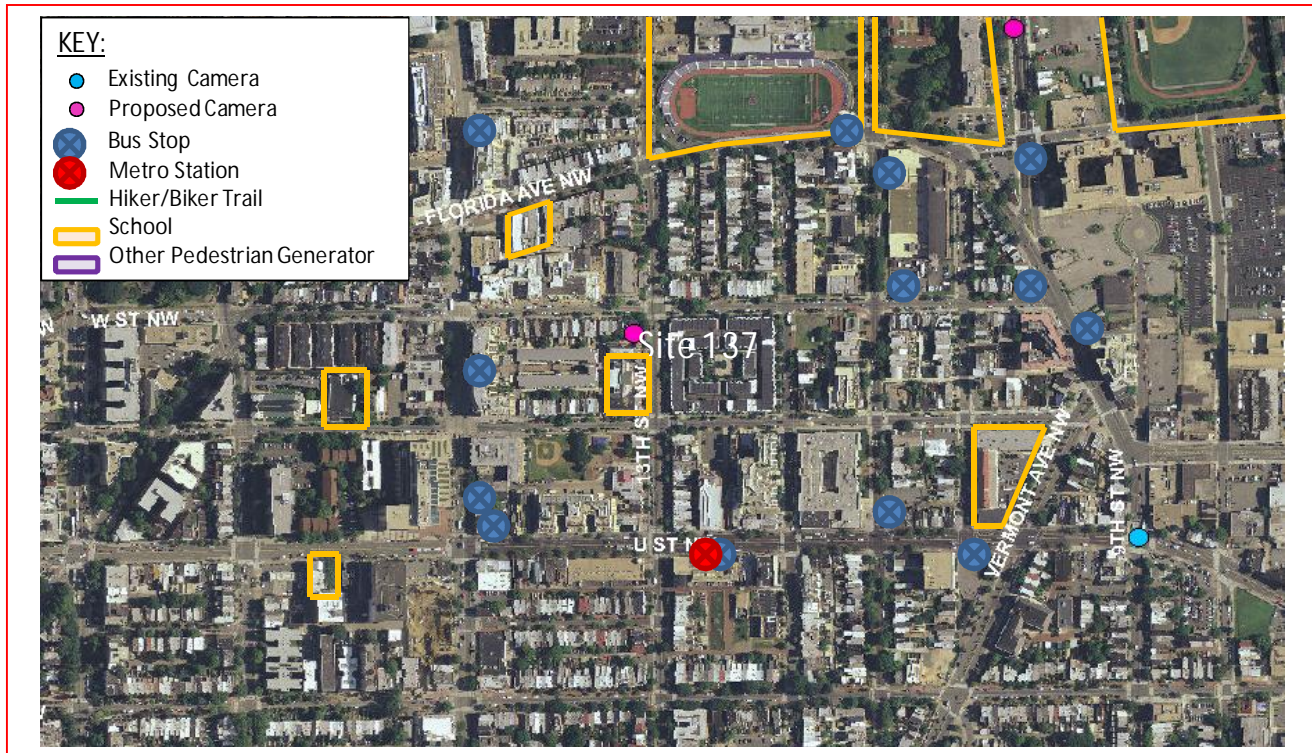
District Department of Transportation

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

### 1300 Block W Street NW

### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
3	305	1	1B	Proposed	1300 Block W Street Northwest, Eastbound



The *proposed* speed camera will be located in Ward 1 at the 1300 block of W Street Northwest in the eastbound direction. W Street runs between 16<sup>th</sup> Street Northwest to the west and Florida Avenue Northwest to the east. The posted speed limit is 15 MPH.

W1 - 90





District Department of Transportation

1300 Block W Street NW

## Field Assessment Summary

W Street is assumed to run in an East-West direction, and is classified as a local road. W Street is a one-way road, and has one travel lane eastbound. This site has the following characteristics:

- This site is located in a residential area with houses, apartments, and driveways on both sides of the street.
- There are also sidewalks with curb, gutter and drainage inlets as well as on-street parking on both sides of the street.
- There are existing traffic signals and crosswalks with pedestrian signals at 13<sup>th</sup> Street northwest and 14<sup>th</sup> Street northwest.
- There is a bicycle lane on the south side in the eastbound direction.
- The existing pavement is in good condition.
- There are nine schools in the area: Cardozo Senior High School, Benjamin Banneker Academic High School, Meyer Elementary School, Booker T Washington Public Charter School, Shining Stars Montessori Academy, St. Augustine Catholic School, Meridian Public Charter School, Center for Inspired Teaching, and Shaw at Garnet-Patterson Middle School.



Looking Eastbound



District Department of Transportation

1300 Block W Street NW



Looking Westbound

## Speed Data Analysis

Posted Speed Limit (MPH)	15
Mean Speed (MPH)	14
85th Percentile Speed (MPH)	21
10 MPH Pace Speed	8-17
ADT	3,366

The mean speed is 1 MPH lower than the posted speed limit and the 85<sup>th</sup> percentile speed is 6 MPH higher than the posted speed limit.

## Crash Data Analysis

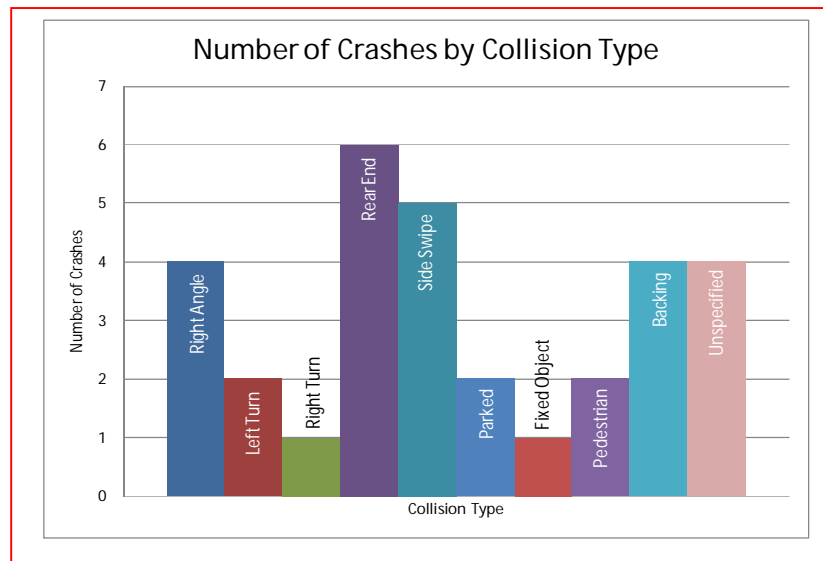
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 31 crashes at this location. A breakdown of collision type can be found in the chart on the next page. The most common types of collision at this location were Rear End (6 crashes) and Side Swipe (5 crashes). Furthermore, this location experienced a high frequency (9 crashes) of injury related crashes.



District Department of Transportation

1300 Block W Street NW

Severity		Weather			Surface condition			Light Condition		
Total	31									
Fatal	0 0.0%	Clear	26	83.9%	Dry	26	83.9%	Day	15	48.4%
Injury	9 29.0%	Rain	2	6.5%	Wet	4	12.9%	Night	14	45.2%
Taxi	7 22.6%	Snow	1	3.2%	Repairing	0	0.0%			
Bicycle	4 12.9%									



## Safety Nexus

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

1. Speed Data – The 85<sup>th</sup> Percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – This location experienced a high frequency (9 crashes) of injury related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. Located in a residential area with driveways on both sides of the road.
  - b. There are nine schools in this area: Cardozo Senior High School, Benjamin Banneker Academic High School, Meyer Elementary School, Booker T Washington Public Charter School, Shining Stars Montessori Academy, St. Augustine Catholic School, Meridian Public Charter School, Center for Inspired Teaching, and Shaw at Garnet-Patterson Middle School.
  - c. There are multiple bus stops and one Metrorail station which generate pedestrian activity.
  - d. There is an existing bike lane and on-street parking in this location.



District Department of Transportation

1300 Block W Street NW

Due to the speed data analysis, the elevated number of injury-related crashes, the specific site characteristics, the proximity of schools to the site, 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)

## 1300 block of W St NW EB Speed

EB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	20	25	30	35	40	45	50	55	60	65	70	75	999		
11/04/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	9	1	2	0	1	0	0	0	0	0	0	0	0	0	13
03:00	1	1	2	3	0	0	0	0	0	0	0	0	0	0	7
04:00	4	5	3	3	0	0	0	0	0	0	0	0	0	0	15
05:00	7	10	8	7	1	0	0	0	0	0	0	0	0	0	33
06:00	13	19	30	14	2	0	0	0	0	0	0	0	0	0	78
07:00	100	74	28	7	2	0	0	0	0	0	0	0	0	0	211
08:00	103	97	35	7	1	0	0	0	0	0	0	0	0	0	243
09:00	84	62	65	22	0	1	0	0	0	0	0	0	0	0	234
10:00	23	47	56	12	0	0	0	0	0	0	0	0	0	0	138
11:00	26	57	48	13	2	2	0	0	0	0	0	0	0	0	148
12 PM	47	53	54	14	1	0	0	0	0	0	0	0	0	0	169
13:00	65	42	42	9	1	0	0	0	0	0	0	0	0	0	159
14:00	57	58	38	11	1	0	0	0	0	0	0	0	0	0	165
15:00	81	57	41	6	0	0	0	0	0	0	0	0	0	0	185
16:00	46	40	33	8	1	0	0	0	0	0	0	0	0	0	128
17:00	136	75	35	6	2	0	0	0	0	0	0	0	0	0	254
18:00	142	68	22	7	0	0	0	0	0	0	0	0	0	0	239
19:00	126	105	45	5	0	0	0	0	0	0	0	0	0	0	281
20:00	108	95	40	5	2	0	0	0	0	0	0	0	0	0	250
21:00	52	80	30	6	0	0	0	0	0	0	0	0	0	0	168
22:00	18	35	44	11	0	0	0	0	0	0	0	0	0	0	108
23:00	9	14	28	15	2	0	0	0	0	0	0	0	0	0	68
Total	1257	1095	729	191	19	3	0	0	0	0	0	0	0	0	3294

Daily

15th Percentile : 6 MPH  
 50th Percentile : 13 MPH  
 85th Percentile : 21 MPH  
 95th Percentile : 25 MPH

Mean Speed(Average) : 14 MPH  
 10 MPH Pace Speed : 8-17 MPH  
 Number in Pace : 1609  
 Percent in Pace : 48.8%  
 Number of Vehicles > 15 MPH : 1391  
 Percent of Vehicles > 15 MPH : 42.2%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

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

## 1300 block of W St NW EB Speed

EB

Start Time	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
11/05/13	6	7	20	9	0	2	0	0	0	0	0	0	0	0	44
01:00	7	2	5	5	0	0	0	0	0	0	0	0	0	0	19
02:00	4	3	2	0	0	0	0	0	0	0	0	0	0	0	9
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<b>Total</b>	<b>17</b>	<b>12</b>	<b>27</b>	<b>14</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72</b>

Daily

15th Percentile : 7 MPH  
 50th Percentile : 18 MPH  
 85th Percentile : 25 MPH  
 95th Percentile : 28 MPH

Mean Speed(Average) : 18 MPH  
 10 MPH Pace Speed : 19-28 MPH  
 Number in Pace : 32  
 Percent in Pace : 44.4%  
 Number of Vehicles > 15 MPH : 43  
 Percent of Vehicles > 15 MPH : 60.4%

Grand Total	1274	1107	756	205	19	5	0	0	0	0	0	0	0	0	3366
-------------	------	------	-----	-----	----	---	---	---	---	---	---	---	---	---	------

Overall

15th Percentile : 6 MPH  
 50th Percentile : 13 MPH  
 85th Percentile : 21 MPH  
 95th Percentile : 25 MPH

Mean Speed(Average) : 14 MPH  
 10 MPH Pace Speed : 8-17 MPH  
 Number in Pace : 1634  
 Percent in Pace : 48.5%  
 Number of Vehicles > 15 MPH : 1433  
 Percent of Vehicles > 15 MPH : 42.6%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

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

## 1300 block of W St NW EB Volume

Start Time	Mon	04-Nov-13	Tue	05-Nov-13	Wed	06-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	54	10	*	*	*	10	54
12:15	*	49	12	*	*	*	12	49
12:30	*	35	10	*	*	*	10	35
12:45	*	31	12	*	*	*	12	31
01:00	*	40	6	*	*	*	6	40
01:15	*	32	4	*	*	*	4	32
01:30	*	42	4	*	*	*	4	42
01:45	*	45	5	*	*	*	5	45
02:00	*	51	3	*	*	*	3	51
02:15	*	41	6	*	*	*	6	41
02:30	2	35	*	*	*	*	2	35
02:45	11	38	*	*	*	*	11	38
03:00	1	47	*	*	*	*	1	47
03:15	4	47	*	*	*	*	4	47
03:30	1	42	*	*	*	*	1	42
03:45	1	49	*	*	*	*	1	49
04:00	3	26	*	*	*	*	3	26
04:15	2	34	*	*	*	*	2	34
04:30	7	31	*	*	*	*	7	31
04:45	3	37	*	*	*	*	3	37
05:00	6	53	*	*	*	*	6	53
05:15	2	81	*	*	*	*	2	81
05:30	14	61	*	*	*	*	14	61
05:45	11	59	*	*	*	*	11	59
06:00	11	69	*	*	*	*	11	69
06:15	15	59	*	*	*	*	15	59
06:30	26	46	*	*	*	*	26	46
06:45	26	65	*	*	*	*	26	65
07:00	45	67	*	*	*	*	45	67
07:15	44	74	*	*	*	*	44	74
07:30	60	60	*	*	*	*	60	60
07:45	62	80	*	*	*	*	62	80
08:00	57	67	*	*	*	*	57	67
08:15	61	62	*	*	*	*	61	62
08:30	63	57	*	*	*	*	63	57
08:45	62	64	*	*	*	*	62	64
09:00	57	44	*	*	*	*	57	44
09:15	66	43	*	*	*	*	66	43
09:30	57	38	*	*	*	*	57	38
09:45	54	43	*	*	*	*	54	43
10:00	43	39	*	*	*	*	43	39
10:15	31	21	*	*	*	*	31	21
10:30	33	23	*	*	*	*	33	23
10:45	31	25	*	*	*	*	31	25
11:00	21	20	*	*	*	*	21	20
11:15	37	12	*	*	*	*	37	12
11:30	44	13	*	*	*	*	44	13
11:45	46	23	*	*	*	*	46	23
Total	1120	2174	72	0	0	0	1192	2174
Combined Total	3294		72		0		3366	
Peak	08:30	07:00	12:00				08:30	07:00
Vol.	248	281	44				248	281
P.H.F.	0.939	0.878	0.917				0.939	0.878
ADT	ADT 3,366		AADT 3,366					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** W ST,NW From THIRTEENTH ST,NW TO FOURTEENTH 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:	31	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Fatalities:	0	Right Angle:	4	12.9%	Fixed Object:	1	3.2%
Total Number of Injuries:	11	Left Turn:	2	6.5%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	1	3.2%	Ped. Involved:	2	6.5%
Total Number of NonDisabling Injuries:	3	Rear End:	6	19.4%	Backing:	4	12.9%
Total Number of Pedestrians Involved:	0	Side Swiped:	5	16.1%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	4	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	2	Parked:	2	6.5%	Unspecified:	4	12.9%
<b>Time of Day</b>				<b>#ACC</b>	<b>%</b>	<b>Day of week</b>	
07:30 ~ 09:30:				1	3.2%	Sunday:	
09:30 ~ 11:30:				4	12.9%	Monday:	
11:30 ~ 13:30:				0	0.0%	Tuesday:	
13:30 ~ 16:00:				6	19.4%	Wednesday:	
16:00 ~ 18:30:				6	19.4%	Thursday:	
18:30 ~ 07:30:				14	45.2%	Friday:	
Unspecified:				0	0.0%	Saturday:	
07:30 ~ 09:30:				1	3.2%	Sunday:	
09:30 ~ 11:30:				4	12.9%	Monday:	
11:30 ~ 13:30:				0	0.0%	Tuesday:	
13:30 ~ 16:00:				6	19.4%	Wednesday:	
16:00 ~ 18:30:				6	19.4%	Thursday:	
18:30 ~ 07:30:				14	45.2%	Friday:	
Unspecified:				0	0.0%	Saturday:	
<b>Weather Condition</b>				<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	
Clear:				26	83.9%	Dry:	
Rain:				2	6.5%	Wet:	
Snow:				1	3.2%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				0	0.0%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				2	6.5%	Unspecified:	
Clear:				26	83.9%	Dry:	
Rain:				2	6.5%	Wet:	
Snow:				1	3.2%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				0	0.0%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				2	6.5%	Unspecified:	
<b>Type of Vehicle</b>				<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	
Passenger Car:				37	63.8%	Fatal Collision:	
Bus:				1	1.7%	Injury Collision:	
Truck:				0	0.0%	PDO Collision:	
Taxi:				7	12.1%		
Minivan:				0	0.0%	<b>Light Condition</b>	
Police/Emergency Vehicle:				2	3.4%	Daylight:	
Motorcycle/Moped:				2	3.4%	Dawn/Dusk:	
Bicycle:				4	6.9%	Dark(Lighted):	
Fixed Object:				0	0.0%	Dark(Not Lighted):	
Unspecified:				5	8.6%	Dark(Unknown Lighting):	
Passenger Car:				37	63.8%	Unspecified:	
Bus:				1	1.7%		
Truck:				0	0.0%		
Taxi:				7	12.1%		
Minivan:				0	0.0%		
Police/Emergency Vehicle:				2	3.4%		
Motorcycle/Moped:				2	3.4%		
Bicycle:				4	6.9%		
Fixed Object:				0	0.0%		
Unspecified:				5	8.6%		
<b>Contributing Factor</b>				<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	
Driver: Speed:				0	0.0%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				3	5.2%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				14	24.1%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				1	1.7%	From Between Parked Cars:	
Unspecified:				40	69.0%	Unspecified:	
Driver: Speed:				0	0.0%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				3	5.2%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				14	24.1%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				1	1.7%	From Between Parked Cars:	
Unspecified:				40	69.0%	Unspecified:	

14 Records are not approved as of 9/15/2013 10:26:15 PM