



District Department of Transportation

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

2000 Block West Virginia Avenue NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
5	505	5	5B	Proposed	2000 Block West Virginia Avenue Northeast Southwest-bound



This *proposed* speed camera will be located in Ward 5 at the 2000 block of West Virginia Avenue Northeast in the southwest-bound direction. West Virginia Avenue Northeast starts from Montana Avenue Northeast from the north and ends at 8th Street Northeast to the south. The posted speed limit is 25 MPH.

W5 - 500





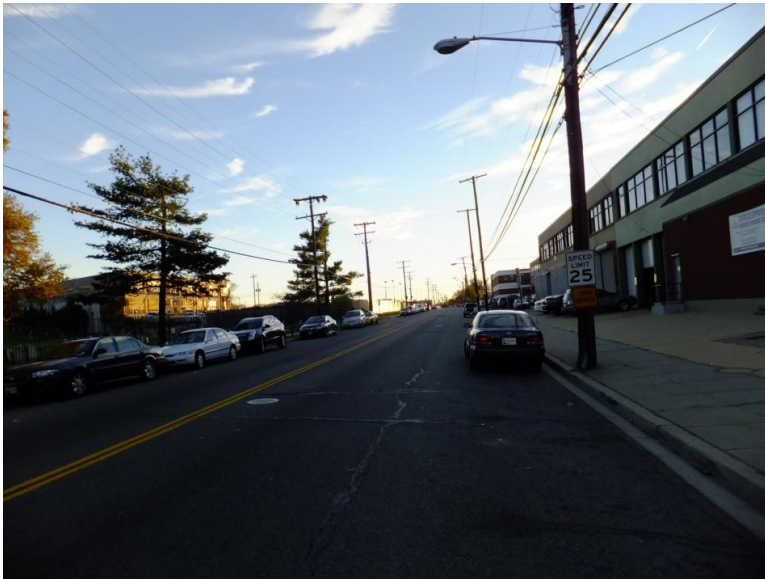
District Department of Transportation

2000 Block West Virginia Avenue NE

Field Assessment Summary

West Virginia Avenue is assumed to run in the north-south direction, and is classified as a minor arterial. West Virginia Avenue is one travel lane in each direction. This site has the following characteristics:

- The site is located in an industrial area with local businesses on the west side of the street.
- There are three schools in the area: Gallaudet University, Crummell School, and Kendall Demonstration Elementary School.
- There is on-street parking and sidewalks with curb and gutter on both sides of the street.
- An existing stop-control and crosswalks are located on both ends of the block.
- The existing pavement is in very good condition.
- There are two bus stops on the west side of the street, and several others in the surrounding area.



Looking Southwest-bound

W5 - 501



District Department of Transportation

2000 Block West Virginia Avenue NE



Looking Southwest-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	26
85th Percentile Speed (MPH)	32
10 MPH Pace Speed (MPH)	23-32
ADT	5,246

The mean speed is 1 MPH higher than the posted speed limit, and the 85th percentile speed is 7 MPH higher 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 were a total of 26 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 type of collision at this location was Rear End with six crashes.

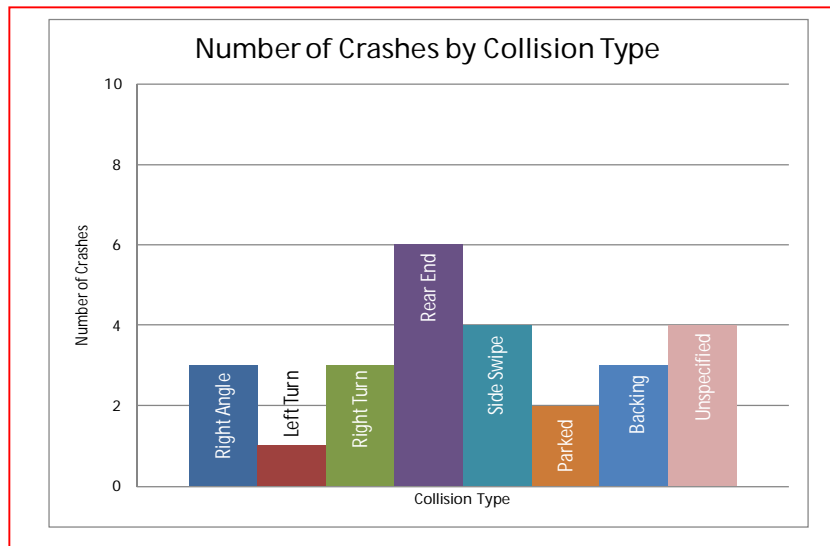
W5 - 502



District Department of Transportation

2000 Block West Virginia Avenue NE

Severity			Weather			Surface condition			Light Condition		
Total	26										
Fatal	0	0.0%	Clear	18	69.2%	Dry	19	73.1%	Day	18	69.2%
Injury	6	23.1%	Rain	1	3.8%	Wet	4	15.4%	Night	6	23.1%
Bus	3	11.5%	Snow	1	3.8%	Snow/Ice	1	3.8%			
Truck	3	11.5%									



Safety Nexus

This site presents the following safety considerations which may support the nexus between traffic safety and the speed camera:

1. Speed Data – The 85th percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – The crash data analysis six injury-related crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. There are three schools in the area: Gallaudet University, Crummell School, and Kendall Demonstration Elementary School.
 - b. There are several bus stops in the area which generate pedestrian activity.
 - c. There is on-street parking on both sides of the street.

Due to the number of injury-related crashes, the speed data analysis, 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

2000 block of West Virginia Ave NE SWB Speed

SWB

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
11/13/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	6	0	1	7	4	0	0	1	0	0	0	0	0	0	19
02:00	0	0	2	3	8	4	0	0	0	0	0	0	0	0	17
03:00	0	0	4	11	9	3	1	1	0	0	0	0	0	0	29
04:00	0	1	3	14	15	9	2	0	0	0	0	0	0	0	44
05:00	5	2	15	55	53	18	3	1	0	0	0	0	0	0	152
06:00	19	25	73	119	78	18	9	2	1	0	0	1	0	0	345
07:00	36	43	129	198	111	39	3	1	0	0	0	0	0	0	560
08:00	48	49	149	198	136	26	6	0	0	0	0	0	0	0	612
09:00	17	18	102	176	88	15	2	0	0	0	0	0	0	0	418
10:00	12	24	71	96	56	6	2	0	0	0	0	0	0	0	267
11:00	10	20	66	112	31	7	1	0	0	0	0	0	0	0	247
12 PM	16	23	72	115	33	5	0	1	0	0	0	0	0	0	265
13:00	14	12	105	98	49	7	1	0	0	0	0	0	0	0	286
14:00	15	22	74	146	50	8	2	0	0	0	0	0	0	0	317
15:00	11	28	95	102	51	7	0	0	0	0	0	0	0	0	294
16:00	13	13	87	125	30	5	0	0	0	0	0	0	0	0	273
17:00	4	16	88	97	39	8	1	0	0	0	0	0	0	0	253
18:00	6	6	58	86	37	3	1	0	0	0	0	0	0	0	197
19:00	2	9	56	79	34	10	1	1	0	0	0	0	0	0	192
20:00	0	4	26	48	31	7	0	0	0	0	0	0	0	0	116
21:00	2	0	20	56	32	10	1	0	0	0	0	0	0	0	121
22:00	2	3	12	37	39	6	2	0	1	0	0	0	0	0	102
23:00	0	0	18	18	32	3	1	2	0	0	0	0	0	0	74
Total	238	318	1326	1996	1046	224	39	10	2	0	0	1	0	0	5200

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

2000 block of West Virginia Ave NE SWB Speed

SWB

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
11/14/13	3	1	3	16	13	1	0	0	0	0	0	0	0	0	37
01:00	1	0	2	4	1	1	0	0	0	0	0	0	0	0	9
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	4	1	5	20	14	2	0	0	0	0	0	0	0	0	46
Grand Total	242	319	1331	2016	1060	226	39	10	2	0	0	1	0	0	5246

15th Percentile : 18 MPH
 50th Percentile : 26 MPH
 85th Percentile : 32 MPH
 95th Percentile : 35 MPH

Stats
 Mean Speed(Average) : 26 MPH
 10 MPH Pace Speed : 23-32 MPH
 Number in Pace : 3034
 Percent in Pace : 57.8%
 Number of Vehicles > 25 MPH : 3065
 Percent of Vehicles > 25 MPH : 58.4%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

2000 block of West Virginia Ave NE SWB Volume

Start Time	Wed 13-Nov-13		Thu 14-Nov-13		Fri 15-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	*	61	11	*	*	*	11	61
12:30	*	72	6	*	*	*	6	72
12:45	*	78	10	*	*	*	10	78
01:00	*	77	9	*	*	*	9	77
01:15	6	65	*	*	*	*	6	65
01:30	10	63	*	*	*	*	10	63
01:45	3	81	*	*	*	*	3	81
02:00	4	69	*	*	*	*	4	69
02:15	4	70	*	*	*	*	4	70
02:30	4	93	*	*	*	*	4	93
02:45	5	85	*	*	*	*	5	85
03:00	6	86	*	*	*	*	6	86
03:15	6	65	*	*	*	*	6	65
03:30	9	70	*	*	*	*	9	70
03:45	8	73	*	*	*	*	8	73
04:00	9	72	*	*	*	*	9	72
04:15	11	71	*	*	*	*	11	71
04:30	13	71	*	*	*	*	13	71
04:45	11	59	*	*	*	*	11	59
05:00	19	69	*	*	*	*	19	69
05:15	25	70	*	*	*	*	25	70
05:30	38	51	*	*	*	*	38	51
05:45	70	63	*	*	*	*	70	63
06:00	77	48	*	*	*	*	77	48
06:15	81	58	*	*	*	*	81	58
06:30	93	37	*	*	*	*	93	37
06:45	94	54	*	*	*	*	94	54
07:00	120	58	*	*	*	*	120	58
07:15	140	59	*	*	*	*	140	59
07:30	142	41	*	*	*	*	142	41
07:45	158	34	*	*	*	*	158	34
08:00	183	30	*	*	*	*	183	30
08:15	136	28	*	*	*	*	136	28
08:30	138	31	*	*	*	*	138	31
08:45	155	27	*	*	*	*	155	27
09:00	137	26	*	*	*	*	137	26
09:15	103	31	*	*	*	*	103	31
09:30	92	27	*	*	*	*	92	27
09:45	86	37	*	*	*	*	86	37
10:00	77	25	*	*	*	*	77	25
10:15	65	26	*	*	*	*	65	26
10:30	62	33	*	*	*	*	62	33
10:45	63	18	*	*	*	*	63	18
11:00	73	23	*	*	*	*	73	23
11:15	61	18	*	*	*	*	61	18
11:30	50	18	*	*	*	*	50	18
11:45	63	15	*	*	*	*	63	15
Total	2710	2490	46	0	0	0	2756	2490
Combined Total	5200		46		0		5246	
Peak	07:15	02:15	12:00				07:15	02:15
Vol.	623	334	37				623	334
P.H.F.	0.851	0.898	0.841				0.851	0.898
ADT	ADT 5,246		AADT 5,246					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: WEST VIRGINIA AVE,NE From FIFTEENTH ST,NE TO CENTRAL PL,NE

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:	26	Right Angle:	3	11.5%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	1	3.8%	Ran Off Road:	0	0.0%
Total Number of Injuries:	12	Right Turn:	3	11.5%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	1	Rear End:	6	23.1%	Backing:	3	11.5%
Total Number of NonDisabling Injuries:	0	Side Swiped:	4	15.4%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	1	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	2	7.7%	Unspecified:	4	15.4%
Total Number of Motorcycles Involved:	1						

Time of Day	#ACC	%
07:30 ~ 09:30:	2	7.7%
09:30 ~ 11:30:	5	19.2%
11:30 ~ 13:30:	1	3.8%
13:30 ~ 16:00:	9	34.6%
16:00 ~18:30:	0	0.0%
18:30 ~ 07:30:	9	34.6%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	4	15.4%
Monday:	4	15.4%
Tuesday:	5	19.2%
Wednesday:	4	15.4%
Thursday:	4	15.4%
Friday:	3	11.5%
Saturday:	2	7.7%

Weather Condition	#ACC	%
Clear:	18	69.2%
Rain:	1	3.8%
Snow:	1	3.8%
Sleet/Hail:	0	0.0%
Fog/Mist:	1	3.8%
Crosswind/Blowing Sand:	1	3.8%
Unspecified:	4	15.4%

Surface Condition	#ACC	%
Dry:	19	73.1%
Wet:	4	15.4%
Snow/Ice:	1	3.8%
Slush:	1	3.8%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	1	3.8%

Type of Vehicle	#VEH	%
Passenger Car:	34	63.0%
Bus:	3	5.6%
Truck:	3	5.6%
Taxi:	1	1.9%
Minivan:	0	0.0%
Police/Emergency Vehicle:	1	1.9%
Motorcycle/Moped:	1	1.9%
Bicycle:	0	0.0%
Fixed Object:	0	0.0%
Unspecified:	11	20.4%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	6	23.1%
PDO Collision:	20	76.9%

Light Condition	#ACC	%
Daylight:	18	69.2%
Dawn/Dusk:	0	0.0%
Dark(Lighted):	6	23.1%
Dark(Not Lighted):	0	0.0%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	2	7.7%

Contributing Factor	#VEH	%
Driver: Speed:	2	3.7%
Driver: Alcohol/Drug:	0	0.0%
Driver: Electronic Device:	0	0.0%
Driver: Others:	11	20.4%
Vehicle:	0	0.0%
Roadway:	1	1.9%
Unspecified:	40	74.1%

Pedestrian Actions	#ACC	%
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:	1	100.0%
From Between Parked Cars:	0	0.0%
Unspecified:	0	0.0%

18 Records are not approved as of 9/15/2013 2:11:19 PM