



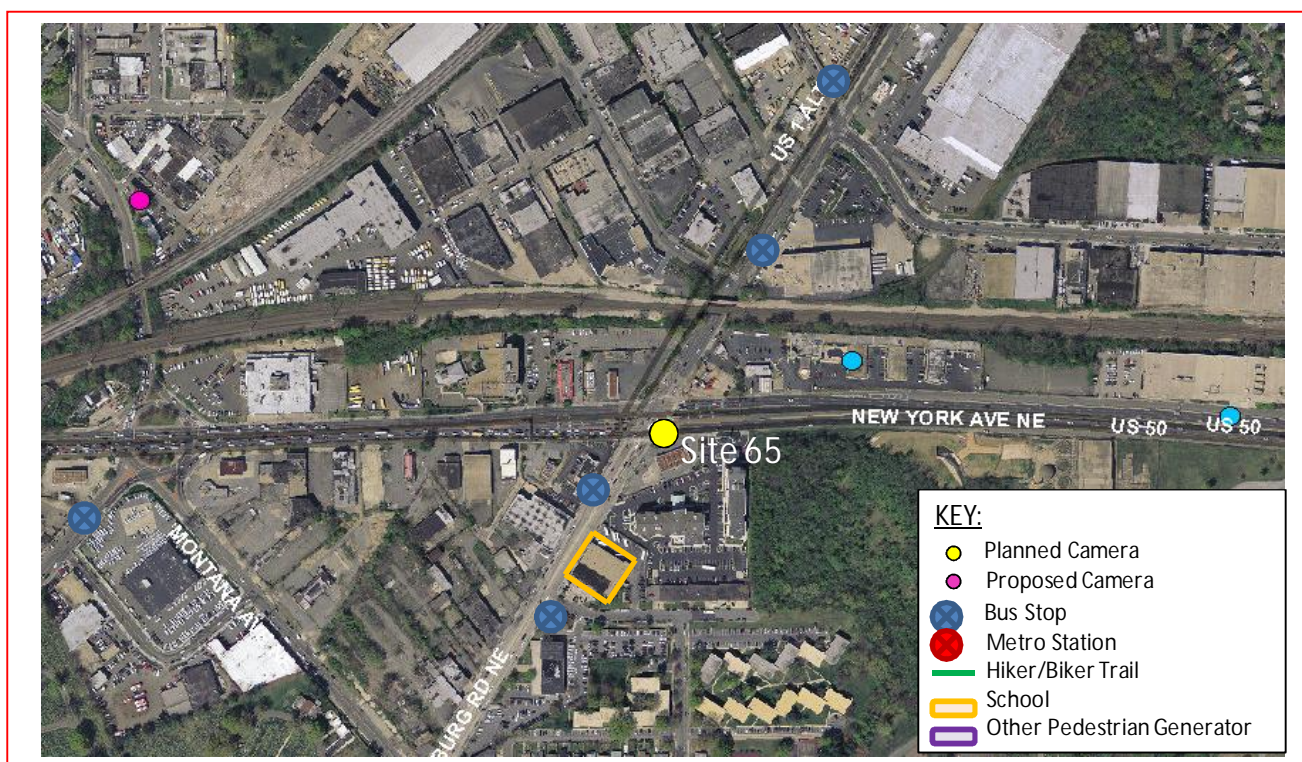
District Department of Transportation

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

### Bladensburg Road at New York Avenue NE

#### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
5	503/506	5	5B	Planned	Bladensburg Road Northeast bound at New York Avenue Northeast



This *planned* speed camera will be located in Ward 5 at the intersection of Bladensburg Road and New York Avenue Northeast. Bladensburg Road runs between Fort Lincoln Drive Northeast to the north and Benning Road Northeast to the south. The posted speed limit is 30 MPH.

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District Department of Transportation

55 M Street, SE, Suite 400

Washington, DC 20003



District Department of Transportation

## Bladensburg Road at New York Avenue NE

### Field Assessment Summary

Bladensburg Road is assumed to run in the north-south direction, and is classified as a minor arterial. Bladensburg Road has one through lane, one through and right lane, and one right turn lane in each direction. New York Avenue has one through and right lane, two through lanes, and two left turn lanes in each direction. This site has the following characteristics:

- This is a commercial area with entrances and driveways.
- There is one school in the area: Washington Mathematics Science and Technology Public Charter High School (WMST PCHS).
- There is sidewalk on both sides of the street and crosswalks on all four legs of the intersection.
- The intersection has a traffic signal and pedestrian signals.
- There are brick medians on the east and west legs separating the left turn lanes from all other traffic. There is a concrete median on the south leg.
- There is a bus stop southbound on the south leg of the intersection.



Looking Northbound





District Department of Transportation

## Bladensburg Road at New York Avenue NE



Looking Southbound

### Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	26
85th Percentile Speed (MPH)	44
10 MPH Pace Speed	5-14
ADT	8,938

The mean speed is 4 MPH lower than the posted speed limit. The 85<sup>th</sup> percentile speed is 14 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 111 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 (34 crashes), Side Swipe (22 crashes), Right Angle (13 crashes), Left Turn (11 crashes), Unspecified (8 crashes) and Right Turn (7 crashes). The other collision types had five crashes or less each. Furthermore, this site experienced a high frequency (25 crashes) of injury-related crashes.

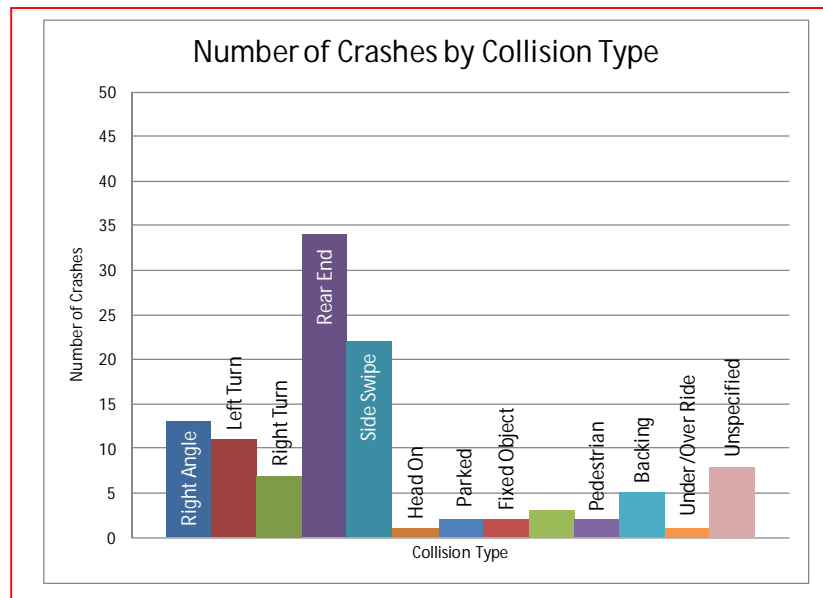
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District Department of Transportation

## Bladensburg Road at New York Avenue NE

Severity			Weather			Surface condition			Light Condition		
Total	111										
Fatal	0	0.0%	Clear	96	86.5%	Dry	93	83.8%	Day	64	57.7%
Injury	25	22.5%	Rain	12	10.8%	Wet	13	11.7%	Night	42	37.8%
Truck	25	22.5%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	10	9.0%									



New York Avenue and Bladensburg Road is listed as one of the top twenty hazardous intersections from in 2009, 2010, and 2011 as well as cumulatively from 2009 to 2011, according to the report *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*<sup>1</sup>. The Bladensburg Road Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011, according to the report *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*<sup>2</sup>. This site is listed in the top five percent high accident locations in the District from 2010 to 2012.<sup>3</sup>

<sup>1</sup> DDOT, *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*, pg. 69.

<sup>2</sup> DDOT, *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*, pg. 70.

<sup>3</sup> DDOT, *Top 5% High Accident Locations Map for 2010-2012*



District Department of Transportation

## Bladensburg Road at New York Avenue NE

### 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 85<sup>th</sup> percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – There was an elevated number of speed-related crashes at this site, including Rear End and Sideswipe collisions, as well as a high frequency (25 crashes) of injury-related crashes. New York Avenue and Bladensburg Road is listed as one of the top twenty hazardous intersections from in 2009, 2010, and 2011 as well as cumulatively from 2009 to 2011. This site is listed in the top five percent high accident locations in the District from 2010 to 2012.
3. Field assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. This is a commercial area with entrances and driveways.
  - b. There is one school in the area, Washington Mathematics Science and Technology Public Charter High School (WMST PCHS).
  - c. There are several bus stops in the area which generate pedestrian activity.

Due to the speed data analysis, the elevated number of speed-related crashes and 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.

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# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

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

## Bladensburg Rd NEB at New York Ave NE Speed

NEB															
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
11/18/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	13	4	7	22	35	30	32	23	16	14	12	9	3	6	226
Total	13	4	7	22	35	30	32	23	16	14	12	9	3	6	226

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## Bladensburg Rd NEB at New York Ave NE Speed

NEB															
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
11/19/13	8	2	5	10	10	17	15	18	9	10	5	2	2	4	117
01:00	2	2	2	5	8	10	14	17	8	5	4	0	4	0	81
02:00	2	0	4	3	6	16	9	11	7	2	0	2	0	3	65
03:00	1	1	0	0	4	7	8	2	2	1	3	2	0	2	33
04:00	1	0	1	2	5	7	12	11	5	1	7	2	1	3	58
05:00	6	3	8	9	16	27	33	27	23	11	9	5	3	3	183
06:00	21	5	16	25	35	38	47	36	29	29	11	3	2	4	301
07:00	34	12	38	54	90	91	78	56	57	20	14	5	2	4	555
08:00	75	20	44	61	95	81	74	60	24	25	10	0	2	3	574
09:00	54	22	42	56	91	81	57	47	31	21	12	6	1	3	524
10:00	63	29	51	68	74	78	60	38	24	17	6	3	0	0	511
11:00	74	20	45	78	86	70	68	43	23	10	2	2	1	2	524
12 PM	96	33	63	63	100	83	59	34	32	6	11	2	1	4	587
13:00	156	50	73	81	86	65	52	33	21	10	7	5	5	7	651
14:00	261	81	63	57	57	56	33	26	16	12	8	2	2	6	680
15:00	322	67	52	23	11	13	10	7	3	1	3	0	1	0	513
16:00	283	41	38	14	13	7	0	0	1	0	0	0	0	0	397
17:00	250	46	24	1	0	0	0	0	0	0	0	0	0	0	321
18:00	255	39	38	19	13	5	0	0	3	0	0	0	0	0	372
19:00	151	46	64	64	61	62	42	27	17	8	8	4	2	1	557
20:00	39	16	38	44	72	63	43	33	19	12	7	3	3	4	396
21:00	61	14	22	37	57	61	41	35	31	13	8	8	1	2	391
22:00	29	9	19	25	44	40	56	27	22	18	19	5	3	5	321
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2244	558	750	799	1034	978	811	588	407	232	154	61	36	60	8712
Grand Total	2257	562	757	821	1069	1008	843	611	423	246	166	70	39	66	8938

15th Percentile : 7 MPH  
 50th Percentile : 23 MPH  
 85th Percentile : 44 MPH  
 95th Percentile : 54 MPH

Stats  
 Mean Speed(Average) : 26 MPH  
 10 MPH Pace Speed : 5-14 MPH  
 Number in Pace : 2808  
 Percent in Pace : 31.7%  
 Number of Vehicles > 30 MPH : 3591  
 Percent of Vehicles > 30 MPH : 40.5%

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## Bladensburg Rd NEB at New York Ave NE Volume

Start Time	Mon	18-Nov-13	Tue	19-Nov-13	Wed	20-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	48	135	*	*	48	135
12:15	*	*	25	144	*	*	25	144
12:30	*	*	27	155	*	*	27	155
12:45	*	*	17	153	*	*	17	153
01:00	*	*	24	157	*	*	24	157
01:15	*	*	25	165	*	*	25	165
01:30	*	*	20	151	*	*	20	151
01:45	*	*	12	178	*	*	12	178
02:00	*	*	16	190	*	*	16	190
02:15	*	*	22	213	*	*	22	213
02:30	*	*	16	131	*	*	16	131
02:45	*	*	11	146	*	*	11	146
03:00	*	*	8	180	*	*	8	180
03:15	*	*	9	136	*	*	9	136
03:30	*	*	9	102	*	*	9	102
03:45	*	*	7	95	*	*	7	95
04:00	*	*	16	102	*	*	16	102
04:15	*	*	14	129	*	*	14	129
04:30	*	*	16	99	*	*	16	99
04:45	*	*	12	67	*	*	12	67
05:00	*	*	27	68	*	*	27	68
05:15	*	*	52	94	*	*	52	94
05:30	*	*	52	84	*	*	52	84
05:45	*	*	52	75	*	*	52	75
06:00	*	*	55	71	*	*	55	71
06:15	*	*	57	64	*	*	57	64
06:30	*	*	94	81	*	*	94	81
06:45	*	*	95	156	*	*	95	156
07:00	*	*	125	172	*	*	125	172
07:15	*	*	148	139	*	*	148	139
07:30	*	*	131	132	*	*	131	132
07:45	*	*	151	114	*	*	151	114
08:00	*	*	141	109	*	*	141	109
08:15	*	*	136	113	*	*	136	113
08:30	*	*	154	88	*	*	154	88
08:45	*	*	143	86	*	*	143	86
09:00	*	*	148	108	*	*	148	108
09:15	*	*	126	99	*	*	126	99
09:30	*	*	114	99	*	*	114	99
09:45	*	*	136	85	*	*	136	85
10:00	*	*	131	94	*	*	131	94
10:15	*	*	119	87	*	*	119	87
10:30	*	*	141	78	*	*	141	78
10:45	*	*	120	62	*	*	120	62
11:00	*	74	125	*	*	*	125	74
11:15	*	59	111	*	*	*	111	59
11:30	*	38	143	*	*	*	143	38
11:45	*	55	145	*	*	*	145	55
Total	0	226	3526	5186	0	0	3526	5412
Combined Total	226		8712		0		8938	
Peak	11:00		07:45	01:30			07:45	01:30
Vol.	226		582	732			582	732
P.H.F.	0.764		0.945	0.859			0.945	0.859
ADT	ADT 8,938		AADT 8,938					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** BLADENSBURG RD,NE From T ST,NE TO QUEENS CHAPEL RD,NE

**Time Period Covered:** From 01/01/2010 To 12/31/2012 **Prepared By:** Rahul Jain

**Prepared Date:** 10/6/2013

		<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Accident:	111	Right Angle:	13	11.7%	Fixed Object:	2	1.8%
Total Number of Fatalities:	0	Left Turn:	11	9.9%	Ran Off Road:	3	2.7%
Total Number of Injuries:	35	Right Turn:	7	6.3%	Ped. Involved:	2	1.8%
Total Number of Disabling Injuries:	1	Rear End:	34	30.6%	Backing:	5	4.5%
Total Number of NonDisabling Injuries:	6	Side Swiped:	22	19.8%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	2	Head On:	1	0.9%	Under/Over Ride:	1	0.9%
Total Number of Bicycles Involved:	2	Parked:	2	1.8%	Unspecified:	8	7.2%
Total Number of Motorcycles Involved:	2						

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>	<b>Day o fweek</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	9	8.1%	Sunday:	14	12.6%
09:30 ~ 11:30:	12	10.8%	Monday:	12	10.8%
11:30 ~ 13:30:	8	7.2%	Tuesday:	11	9.9%
13:30 ~ 16:00:	20	18.0%	Wednesday:	9	8.1%
16:00 ~18:30:	11	9.9%	Thursday:	25	22.5%
18:30 ~ 07:30:	51	45.9%	Friday:	20	18.0%
Unspecified:	0	0.0%	Saturday:	20	18.0%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	96	86.5%	Dry:	93	83.8%
Rain:	12	10.8%	Wet:	13	11.7%
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:	3	2.7%	Unspecified:	5	4.5%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Passenger Car:	155	71.1%	Fatal Collision:	0	0.0%
Bus:	10	4.6%	Injury Collision:	25	22.5%
Truck:	25	11.5%	PDO Collision:	86	77.5%
Taxi:	2	0.9%			
Minivan:	0	0.0%	<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Police/Emergency Vehicle:	6	2.8%	Daylight:	64	57.7%
Motorcycle/Moped:	2	0.9%	Dawn/Dusk:	1	0.9%
Bicycle:	2	0.9%	Dark(Lighted):	41	36.9%
Fixed Object:	0	0.0%	Dark(Not Lighted):	1	0.9%
Unspecified:	16	7.3%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	4	3.6%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
Driver: Speed:	6	2.8%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	5	2.3%	In Crosswalk against Signal:	1	50.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	43	19.7%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	1	0.5%	Not in Crosswalk:	0	0.0%
Roadway:	1	0.5%	From Between Parked Cars:	1	50.0%
Unspecified:	162	74.3%	Unspecified:	0	0.0%

82 Records are not approved as of 10/6/2013 5:09:47 PM