



# Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 3100 Block Bladensburg Road NE

Study	/ Area	a <mark>nd Lo</mark>	cation		
District	PSA	Ward	ANC	Phase	Description
5	503	5	5A	Proposed	3100 Block Bladensburg Road Northeast
					Northeast-bound
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	<ul><li>Existing</li><li>Propose</li></ul>	camera ed Camera	100	Se SI	AND ADD AND AND AND AND AND AND AND AND
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	Hiker/Bi	iker Trail	1		
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	-		6		Fort Lincoln
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This *proposed* speed camera will be located in Ward 5 on the 3100 block of Bladensburg Road Northeast in the northeast bound direction. Bladensburg Road runs between Fort Lincoln Drive Northeast to the northeast and Benning Road Northeast to the southwest. The posted speed limit is 30 MPH.

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District Department of Transportation 3100 Block Bladensburg Road NE

## Field Assessment Summary

Bladensburg Road is assumed to run in the northeast-southwest direction, and is classified as a minor arterial. Bladensburg Road has three travel lanes in each direction. This site has the following characteristics:

- This is a residential and commercial area with apartments and businesses.
- There is one school in the area: Lincoln Elementary School. Fort Lincoln Park is also in the area.
- There is a grassy median with two breaks for turning into entrances.
- There is sidewalk and on-street parking on both sides of the street and a midblock crosswalk.
- There is a traffic signal with pedestrian signals and crosswalks at Banneker Drive.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There are northeast-bound bus stops at Banneker Drive and 35<sup>th</sup> Street. There is one midblock bus stop in each direction.



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Looking Southwest-bound

# Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	17
85th Percentile Speed (MPH)	22
10 MPH Pace Speed (MPH)	14-23
ADT	6,633

The mean speed is lower than the posted speed limit by 13 MPH and the 85<sup>th</sup> percentile speed is lower than the posted speed by 8 MPH at this location.

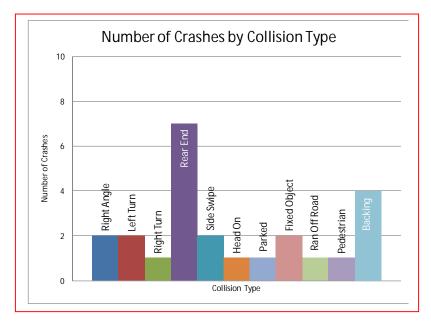
### Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 24 crashes at this location. A breakdown of 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 seven crashes. The other collision types had four crashes or less. Furthermore, this site experienced a high frequency (10 crashes) of injury-related crashes.



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District Department of Transportation
3100 Block Bladensburg Road NE

Severity			Weather			Surface	conditi	on	Light Condition			
Total	24											
Fatal	0	0.0%	Clear	19	79.2%	Dry	19	79.2%	Day	21	87.5%	
Injury	10	41.7%	Rain	4	16.7%	Wet	5	20.8%	Night	3	12.5%	
Truck	6	25.0%	Fog/Mist	1	4.2%	Snow/Ice	0	0.0%				
Bus	3	12.5%										



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>1</sup>.

# 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 speed data analysis shows travel speeds being lower than the posted speed limit.
- 2. Crash Data This site experienced a high frequency (10 crashes) of injury-related crashes. The Bladensburg Road Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011.

<sup>1</sup> DDOT, TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011), pg.80.

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- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
  - a. This is a residential and commercial area with apartments and businesses.
  - b. There is one school in the area, Lincoln Elementary School.
  - c. Fort Lincoln Park is in the area which generates pedestrian and bicycle activity.
  - d. There are multiple bus stops in the area which generate pedestrian activity.
  - e. There is on-street parking on both sides 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, 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

### 3100 block of Bladensburg Rd NE NEB Speed

NEB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/15/13	0	15	13	1	0	0	0	0	0	0	0	0	0	0	29
01:00	3	10	18	4	0	0	0	0	0	0	0	0	0	0	35
02:00	1	15	11	2	0	1	0	0	0	0	0	0	0	0	30
03:00	1	15	12	1	1	0	0	0	0	0	0	0	0	0	30
04:00	2	16	14	6	0	0	0	0	0	0	0	0	0	0	38
05:00	3	26	42	10	2	0	0	0	0	0	0	0	0	0	83
06:00	25	55	58	10	3	0	0	0	0	0	0	0	0	0	151
07:00	22	74	117	16	2	0	0	0	0	0	0	0	0	0	231
08:00	23	109	85	19	2	0	0	0	0	0	0	0	0	0	238
09:00	41	143	92	10	0	0	0	0	0	0	0	0	0	0	286
10:00	76	173	94	9	1	0	0	0	0	0	0	0	0	0	353
11:00	90	195	103	7	0	0	0	0	0	0	0	0	0	0	395
12 PM	77	257	144	9	1	0	0	0	0	0	0	0	0	0	488
13:00	86	262	116	12	4	0	0	0	0	0	0	0	0	0	480
14:00	102	232	112	13	0	0	0	0	0	0	0	0	0	0	459
15:00	60	244	184	29	2	0	0	0	0	0	0	0	0	0	519
16:00	90	269	219	22	3	0	0	0	0	0	0	0	0	0	603
17:00	53	246	207	24	2	0	0	0	0	0	0	0	0	0	532
18:00	61	228	180	23	2	0	0	0	0	0	0	0	0	0	494
19:00	38	149	129	12	3	0	0	0	0	0	0	0	0	0	331
20:00	15	106	105	8	2	0	0	0	0	0	0	0	0	0	236
21:00	9	90	72	10	0	0	0	0	0	0	0	0	0	0	181
22:00	10	104	71	11	1	0	0	0	0	0	0	0	0	0	197
23:00	12	62	62	11	1	0	0	0	0	0	0	0	0	0	148
Total	900	3095	2260	279	32	1	0	0	0	0	0	0	0	0	6567

### SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

#### www.sammateng.com

### **3100 block of Bladensburg Rd NE NEB Speed**

NEB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/16/13	2	34	25	5	0	0	0	0	0	0	0	0	0	0000	66
01:00	0	0	0	0	Ő	0	0	Ő	Õ	Ő	0	Ő	0	Ő	0
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				*		*			*	*	*		*		*
Total	2	34	25	5	0	0	0	0	0	0	0	0	0	0	66
Grand			~~~~												
Total	902	3129	2285	284	32	1	0	0	0	0	0	0	0	0	6633
Stats		1 Number of	50th P 85th P 95th P ean Speed(/ 0 MPH Pac Number	e Speed : r in Pace : t in Pace : 30 MPH :		10 MPH 17 MPH 22 MPH 25 MPH 17 MPH 3 MPH 3946 59.5% 47 0.7%									

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

### **3100 block of Bladensburg Rd NE NEB Volume**

Start	Fri	15-Nov-13	Sat	16-Nov-13	Sun	17-Nov-13	Daily Av	erage
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	100	38	*	*	*	38	10
12:15	*	126	28	*	*	*	28	1:
12:30	15	107	*	*	*	*	15	1
12:45	14	155	*	*	*	*	14	1
01:00	13	116	*	*	*	*	13	1
01:15	7	118	*	*	*	*	7	1
01:30	7	111	*	*	*	*	7	1
01:45	8	135	*	*	*	*	8	1
02:00	8	105	*	*	*	*	8	1
02:15	7	109	*	*	*	*	7	1
02:30	6	122	*	*	*	*	6	1
02:45	9	123	*	*	*	*	9	1
03:00		129	*	*	*	*	13	1
03:15	13 9	115	*	*	*	*	13 9	1
03:30	2	144	*	*	*	*	2	1
03:45	6	131	*	*	*	*	6	1
03.45	4	151	*	*	*	*	4	1
04:00	7	158	*	*	*	*	7	1
04.15	13	139	*	*	*	*	13	1
		155	*	*	*	*	13	
04:45	14		*	*	*	*	14	1
05:00	20	152	*	*	*	*	20	1
05:15	18	133	*			*	18	1
05:30	26	121	*	*	*		26	1
05:45	19	126	*	*	*	*	19	1
06:00	24	131	*	*	*	*	24	1
06:15	43	114	*	*	*	*	43	1
06:30	37	130	*	*	*	*	37	1
06:45	47	119	*	*	*	*	47	1
07:00	54	95	*	*	*	*	54	
07:15	72	99	*	*	*	*	72	1
07:30	49	74	*	*	*	*	49	
07:45	56	63	*	*	*	*	56	
08:00	53	74	*	*	*	*	53	
08:15	53	69	*	*	*	*	53	
08:30	66	41	*	*	*	*	66	
08:45	66	52	*	*	*	*	66	
09:00	81	57	*	*	*	*	81	
09:15	60	40	*	*	*	*	60	
09:30	75	45	*	*	*	*	75	
09:45	70	39	*	*	*	*	70	
10:00	77	54	*	*	*	*	77	
10:15	86	56	*	*	*	*	86	
10:30	84	45	*	*	*	*	84	
10:45	106	42	*	*	*	*	106	
11:00	80	57	*	*	*	*	80	
11:15	114	33	*	*	*	*	114	
11.15			*	*	*	*		
11:30	100	27		*	*	*	100	
<u>11:45</u>	101	31					101	40
Total	1899	4668	66	0	0	0	1965	46
Combined Total	65	67	66	3	C	I	6633	
Peak	10:45	04:15					10:45	04:
Vol.	400	604					400	6
P.H.F.	0.877	0.956					0.877	0.9
ADT		ADT 6,633	AADT 6,633					

### DC Department of Transportation - Traffic Accident Reporting and Analysis System

# Accident Summary Report (R-8)

			RTY FIFTH ST,NE			Bronored De	<b>.</b>	16/2012
Time Period Covered: F	rom 01/01/20			-	Rahul Jain	Prepared Da		)/16/2013
Total Number of Accident:		24	Collision Type	#ACC		Collision Type	#ACC	
Total Number of Fatalities:		0	Right Angle:	2		ixed Object:	2	8.3%
Total Number of Injuries:		13	Left Turn:	2		Ran Off Road:	1	4.2%
Total Number of Disabling Ir	,	0	Right Turn:	1		Ped. Involved:	1	4.2%
Total Number of NonDisabli		1	Rear End:	7		Backing:	4	16.7%
Total Number of Pedestrians		1	Side Swiped:	2		Ion Collision:	0	0.0%
Total Number of Bicycles Inv		0	Head On:	1		Inder/Over Ride:	-	0.0%
Total Number of Motorcycles	s Involved:	0	Parked:	1	4.2% L	Inspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	с	%
07:30 ~ 09:30:	3	12.5%			Sunday:	0		0.0%
09:30 ~ 11:30:	2	8.3%			Monday:	3		12.5%
11:30 ~ 13:30:	2	8.3%			Tuesday:	6		25.0%
13:30 ~ 16:00:	6	25.0%			Wednesday:	2		8.3%
16:00 ~18:30:	5	20.8%			Thursday:	1		4.2%
18:30 ~ 07:30:	6	25.0%			Friday:	7		29.2%
Unspecified:	0	0.0%			Saturday:	5		20.8%
Weather Condition	#ACC	%			Surface Condition	#AC	с	%
Clear:	19	79.2%			Dry:	19		79.2%
Rain:	4	16.7%			Wet:	5		20.8%
Snow:	0	0.0%			Snow/Ice:	0		0.0%
Sleet/Hail:	0	0.0%			Slush:	0		0.0%
Fog/Mist:	1	4.2%			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	Гуре #АС	с	%
Passenger Car:	34	70.8%			Fatal Collision:	0		0.0%
Bus:	3	6.3%			Injury Collision:	10		41.7%
Truck:	6	12.5%			PDO Collision:	14		58.3%
Taxi:	0	0.0%				••		
Minivan:	0	0.0%			Light Condition	#AC	С	%
Police/Emergency Vehicle:	1	2.1%			Daylight:	21		87.5%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	3		12.5%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	4	8.3%			Dark(Unknown Light	ting): 0		0.0%
	·	0.070			Unspecified:	0		0.0%
Contributing Factor	#VEH	%			Pedestrian Actions	#AC	с	%
Driver: Speed:	1	2.1%			In Crosswalk with Si	gnal: 0		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk agains	t Signal: 0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	-		0.0%
Driver: Others:	6	12.5%			In Unmarked Crossv			0.0%
Vehicle:	3	6.3%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Park	ed Cars: 1		100.0%
Unspecified:	38	79.2%			Unspecified:	0		0.0%

17 Records are not approved as of 9/16/2013 9:04:13 AM