



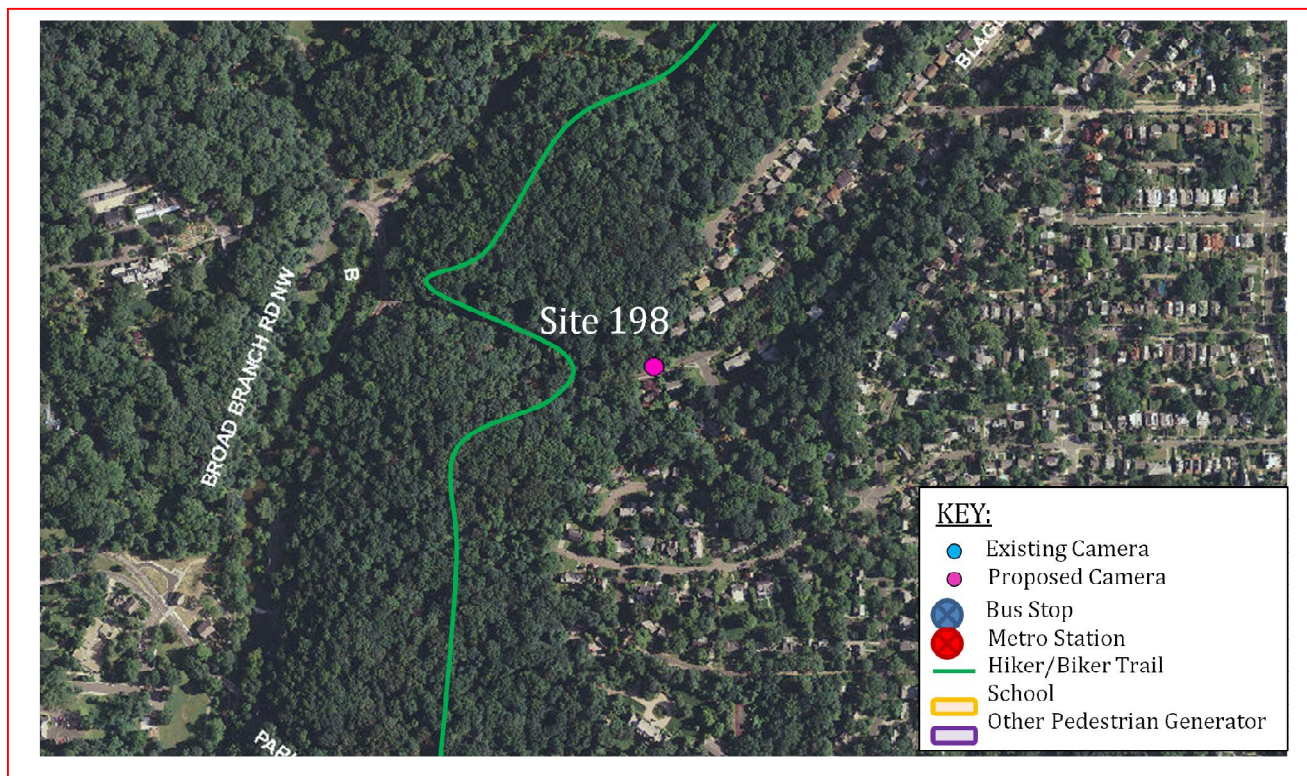
District Department of Transportation

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

### 4200-4500 Blocks Blagden Avenue NW

### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
4	404	4	4A	Proposed	4200-4500 Blocks Blagden Avenue Northwest Westbound



The *proposed* speed camera will be located in Ward 4 at the 4200-4500 block of Blagden Avenue Northwest in the westbound direction. Blagden Avenue Northwest runs between Beach Drive Northwest to the west and 16<sup>th</sup> Street Northwest to the east. The posted speed limit is 25 MPH.

W4 - 249





District Department of Transportation

4200-4500 Blocks Blagden Avenue NW

## Field Assessment Summary

Blagden Avenue Northwest is assumed to run in a northeast-southwest direction, and is classified as a collector. Blagden Avenue Northwest has one travel lane in each direction. This site has the following characteristics:

- This is a residential area with houses on both sides of the street.
- There are three hiking trails in area: Valley Trail, Theodore Roosevelt Side Trail and Western Ridge Trail.
- There are sidewalks on both sides of the street for the majority of this section of Blagden Avenue.
- There are rumble strips approaching 18<sup>th</sup> Street and Beach Road Northwest.
- The pavement is in fair condition and there is curb and gutter with drainage inlets.
- There is on-street parking in each direction.



Looking Westbound

W4 - 250



District Department of Transportation

## 4200-4500 Blocks Blagden Avenue NW



Looking Eastbound

### Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	31
85th Percentile Speed (MPH)	37
10 MPH Pace Speed	29-38
ADT	2,869

The mean speed is 6 MPH higher than the posted speed limit and the 85th percentile speed is 12 MPH higher than the posted speed limit. This location may benefit from additional speed enforcement.

### 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 six 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 types of collision at this location were Rear End, Side Swipe, Left Turn, Right Angle, Parked and Unspecified with one crash each. The other collision types had no crashes reported.

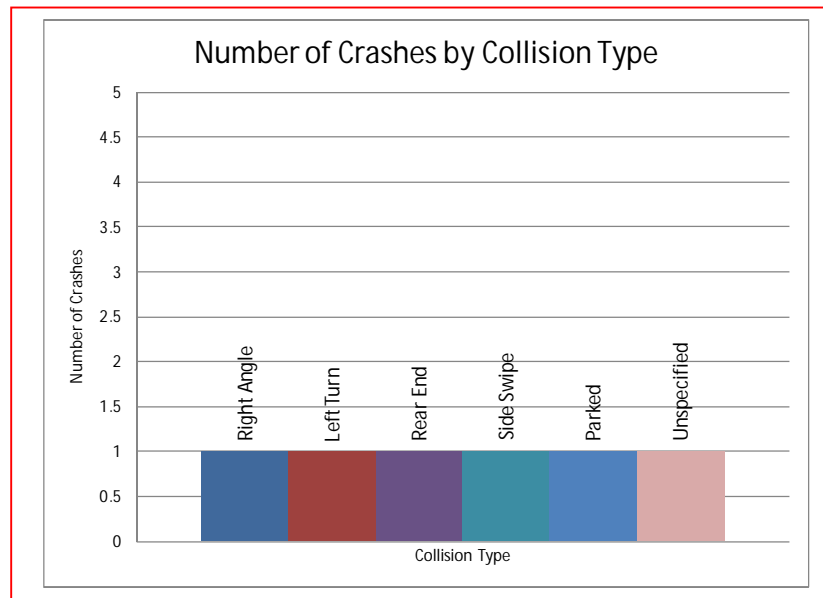
W4 - 251



District Department of Transportation

## 4200-4500 Blocks Blagden Avenue NW

Severity			Weather			Surface condition			Light Condition		
Total	6										
Fatal	0	0.0%	Clear	5	83.3%	Dry	6	100.0%	Day	6	100.0%
Injury	2	33.3%	Rain	0	0.0%	Wet	0	0.0%	Night	0	0.0%
Taxi	0	0.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	0	0.0%									



### Safety Nexus

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

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 shows a low number of crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. This is a residential area with houses on both sides of the street.
  - b. There are three hiking trails in area: Valley Trail, Theodore Roosevelt Side Trail and Western Ridge Trail.
  - c. There are rumble strips approaching 18th Street and Beach Road Northwest, which suggest a speeding issue.



District Department of Transportation

## 4200-4500 Blocks Blagden Avenue NW

Although the crash data analysis showed a low number of crashes at this location, the elevated mean and 85<sup>th</sup> percentile speeds and the presence of rumble strips reveals speeding to be an issue at this location. Due to the speed data analysis along with the specific site characteristics of a residential area, the presence of rumble strips, and the pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

W4 - 253

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

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

## 4200 to 4500 blocks Blagden Ave NW WB Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/11/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	3	0	0	3	3	0	0	0	0	0	0	0	0	0	9
02:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
03:00	1	1	0	3	1	3	0	0	0	0	0	0	0	0	9
04:00	1	0	0	1	4	9	3	1	0	0	0	0	0	0	19
05:00	0	0	0	7	22	27	11	2	0	0	0	0	0	0	69
06:00	0	0	0	14	64	69	19	2	2	0	0	0	0	0	170
07:00	1	1	4	50	161	95	11	1	0	0	0	0	0	0	324
08:00	5	1	1	51	148	72	12	2	0	0	0	0	0	0	292
09:00	15	1	13	31	112	59	7	1	0	0	0	0	0	0	239
10:00	17	1	5	39	72	51	13	0	0	0	0	0	0	0	198
11:00	5	1	5	43	66	29	12	1	0	0	0	0	0	0	162
12 PM	20	1	2	20	66	42	10	0	0	0	0	0	0	0	161
13:00	13	0	2	35	72	30	11	1	1	0	0	0	0	0	165
14:00	7	0	3	26	68	49	5	2	0	0	0	0	0	0	160
15:00	11	1	2	25	79	42	8	0	0	0	0	0	0	0	168
16:00	21	0	2	18	48	29	5	0	0	0	0	0	0	0	123
17:00	20	0	2	44	63	25	2	0	0	0	0	0	0	0	156
18:00	15	0	3	39	57	22	2	0	0	0	0	0	0	0	138
19:00	9	0	3	15	29	20	3	0	0	0	0	0	0	0	79
20:00	9	0	2	23	28	11	4	0	0	0	0	0	0	0	77
21:00	5	0	1	9	20	16	1	1	1	0	0	0	0	0	54
22:00	10	0	1	6	15	5	2	0	0	0	0	0	0	0	39
23:00	20	0	0	1	12	4	1	0	0	0	0	0	0	0	38
Total	209	8	51	503	1211	709	142	14	4	0	0	0	0	0	2851

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

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

## 4200 to 4500 blocks Blagden Ave NW WB Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/12/13	7	0	1	2	5	2	1	0	0	0	0	0	0	0	18
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	7	0	1	2	5	2	1	0	0	0	0	0	0	0	18
Grand Total	216	8	52	505	1216	711	143	14	4	0	0	0	0	0	2869

15th Percentile : 23 MPH  
 50th Percentile : 32 MPH  
 85th Percentile : 37 MPH  
 95th Percentile : 41 MPH

Stats  
 Mean Speed(Average) : 31 MPH  
 10 MPH Pace Speed : 29-38 MPH  
 Number in Pace : 1738  
 Percent in Pace : 60.6%  
 Number of Vehicles > 25 MPH : 2391  
 Percent of Vehicles > 25 MPH : 83.3%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

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

## 4200 to 4500 blocks Blagden Ave NW WB Volume

Start Time	Mon	11-Nov-13	Tue	12-Nov-13	Wed	13-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	37	5	*	*	*	5	37
12:15	*	36	6	*	*	*	6	36
12:30	*	45	3	*	*	*	3	45
12:45	*	43	4	*	*	*	4	43
01:00	5	37	*	*	*	*	5	37
01:15	1	48	*	*	*	*	1	48
01:30	2	32	*	*	*	*	2	32
01:45	1	48	*	*	*	*	1	48
02:00	1	33	*	*	*	*	1	33
02:15	0	38	*	*	*	*	0	38
02:30	1	55	*	*	*	*	1	55
02:45	0	34	*	*	*	*	0	34
03:00	4	34	*	*	*	*	4	34
03:15	2	51	*	*	*	*	2	51
03:30	1	39	*	*	*	*	1	39
03:45	2	44	*	*	*	*	2	44
04:00	2	29	*	*	*	*	2	29
04:15	4	33	*	*	*	*	4	33
04:30	9	34	*	*	*	*	9	34
04:45	4	27	*	*	*	*	4	27
05:00	11	41	*	*	*	*	11	41
05:15	23	36	*	*	*	*	23	36
05:30	18	41	*	*	*	*	18	41
05:45	17	38	*	*	*	*	17	38
06:00	26	41	*	*	*	*	26	41
06:15	35	39	*	*	*	*	35	39
06:30	49	31	*	*	*	*	49	31
06:45	60	27	*	*	*	*	60	27
07:00	65	23	*	*	*	*	65	23
07:15	99	23	*	*	*	*	99	23
07:30	77	16	*	*	*	*	77	16
07:45	83	17	*	*	*	*	83	17
08:00	75	21	*	*	*	*	75	21
08:15	91	18	*	*	*	*	91	18
08:30	70	25	*	*	*	*	70	25
08:45	56	13	*	*	*	*	56	13
09:00	49	26	*	*	*	*	49	26
09:15	68	10	*	*	*	*	68	10
09:30	69	12	*	*	*	*	69	12
09:45	53	6	*	*	*	*	53	6
10:00	51	5	*	*	*	*	51	5
10:15	60	13	*	*	*	*	60	13
10:30	47	10	*	*	*	*	47	10
10:45	40	11	*	*	*	*	40	11
11:00	54	9	*	*	*	*	54	9
11:15	40	12	*	*	*	*	40	12
11:30	34	8	*	*	*	*	34	8
11:45	34	9	*	*	*	*	34	9
<b>Total</b>	1493	1358	18	0	0	0	1511	1358
<b>Combined Total</b>	2851		18		0		2869	
Peak	07:15	01:45	12:00				07:15	01:45
Vol.	334	174	18				334	174
P.H.F.	0.843	0.791	0.750				0.843	0.791
ADT	ADT 2,869		AADT 2,869					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** BLAGDEN AVE,NW From DECATUR ST,NW TO MATHEWSON DR,NW

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

**Prepared Date:** 9/16/2013

		<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Accident:	6	Right Angle:	1	16.7%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	1	16.7%	Ran Off Road:	0	0.0%
Total Number of Injuries:	3	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	1	Rear End:	1	16.7%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	1	16.7%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	1	Parked:	1	16.7%	Unspecified:	1	16.7%
Total Number of Motorcycles Involved:	0						

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>	<b>Day o fweek</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	0	0.0%	Sunday:	2	33.3%
09:30 ~ 11:30:	1	16.7%	Monday:	0	0.0%
11:30 ~ 13:30:	1	16.7%	Tuesday:	0	0.0%
13:30 ~ 16:00:	1	16.7%	Wednesday:	3	50.0%
16:00 ~18:30:	2	33.3%	Thursday:	0	0.0%
18:30 ~ 07:30:	1	16.7%	Friday:	1	16.7%
Unspecified:	0	0.0%	Saturday:	0	0.0%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	5	83.3%	Dry:	6	100.0%
Rain:	0	0.0%	Wet:	0	0.0%
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:	1	16.7%	Unspecified:	0	0.0%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Passenger Car:	10	90.9%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	2	33.3%
Truck:	0	0.0%	PDO Collision:	4	66.7%
Taxi:	0	0.0%			
Minivan:	0	0.0%	<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Police/Emergency Vehicle:	0	0.0%	Daylight:	6	100.0%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	1	9.1%	Dark(Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
Driver: Speed:	0	0.0%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	3	27.3%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%
Unspecified:	8	72.7%	Unspecified:	0	0.0%

3 Records are not approved as of 9/16/2013 7:48:16 AM