



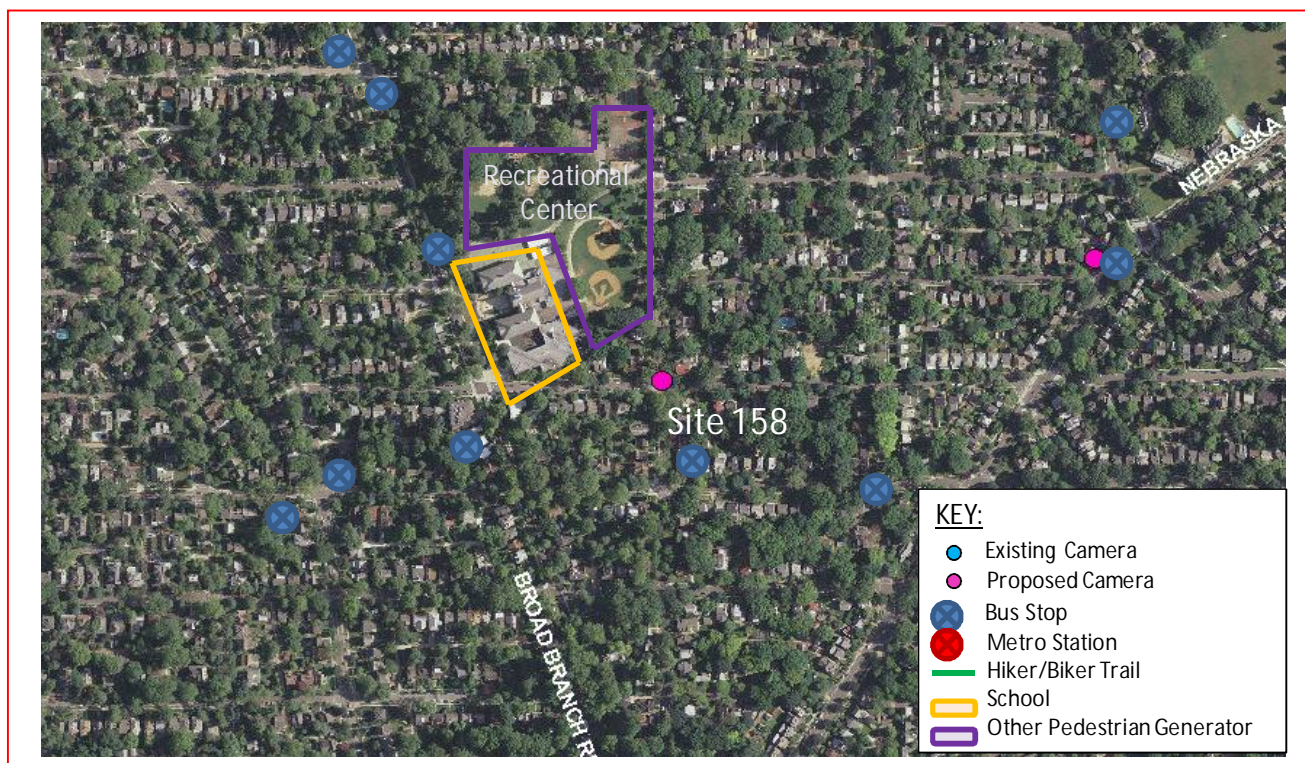
District Department of Transportation

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

33rd Street at Northampton Street NW

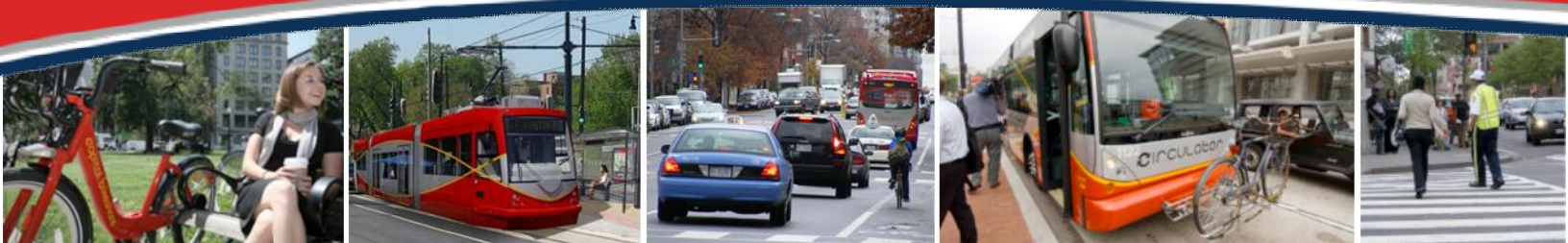
Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	201	3	3G	Proposed	33 rd Street at Northampton Street Northwest



The *proposed* speed camera will be located in Ward 3 at the intersection of 33rd Street and Northampton Street Northwest. 33rd Street Northwest runs between Pinehurst Circle Northwest to the north and Broad Branch Road Northwest to the south. The posted speed limit is 25 MPH.

W3 - 261





District Department of Transportation

33rd St at Northampton St NW

Field Assessment Summary

33rd Street is assumed to run in a north-south direction, and is classified as a local road. 33rd Street and Northampton Street both have one travel lane each direction. Neither 33rd Street nor Northampton Street has centerline pavement markings. This site has the following characteristics:

- This is a residential area with houses.
- There is one school in the area: Lafayette Elementary School.
- The Lafayette Recreation Center is also in the area.
- This intersection is a four-way stop with crosswalks on all four legs.
- There is sidewalk and on-street parking on both sides of all four legs.



Looking Northbound

W3 - 262



District Department of Transportation

33rd St at Northampton St NW



Looking Southbound

Speed Data Analysis

Direction	Northbound	Southbound
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	15	14
85th Percentile Speed (MPH)	20	19
10 MPH Pace Speed (MPH)	12-21	11-20
Sample Size	420	369
ADT	789	

The mean speed is lower than the posted speed limit by 10 MPH in the northbound direction and 11 MPH in the southbound direction. The 85th percentile speed is lower than the posted speed by 5 MPH in the northbound direction and 6 MPH in the southbound direction at this location.

Crash Data Analysis

There have been no crashes reported at this location in the past three years (2010-2012).

W3 - 263



District Department of Transportation

33rd St at Northampton St NW

Safety Nexus

This site presents the following safety considerations which may establish a 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 – The crash data analysis shows no recent crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This site is located within a residential area.
 - b. There is one school in the area: Lafayette Elementary School.
 - c. Lafayette Recreation Center is in the area which generate 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 all four legs of the intersection.

Although the speed data analysis showed travel speeds being lower than or equal to the posted speed limit, at this location, there is still a safety concern at this location. The proposed location is nearby Lafayette Elementary School and Lafayette Recreation Center, both of which generate not only pedestrian and bicycle activity, but children as pedestrian generators. Thus, because of the nearness of the site to a school zone, and the specific site characteristics of a residential area, there is a nexus between traffic safety and the speed camera at this location

W3 - 264

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

33rd Street at NorthamptonStreet NW Speed

NB

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
11/06/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	2	1	0	0	0	0	0	0	0	0	0	3
07:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
08:00	7	8	6	0	0	0	0	0	0	0	0	0	0	0	21
09:00	16	22	5	0	0	0	0	0	0	0	0	0	0	0	43
10:00	6	10	4	0	0	0	0	0	0	0	0	0	0	0	20
11:00	11	15	3	0	0	0	0	0	0	0	0	0	0	0	29
12 PM	8	12	4	0	0	0	0	0	0	0	0	0	0	0	24
13:00	8	12	1	0	0	0	0	0	0	0	0	0	0	0	21
14:00	3	8	10	0	0	0	0	0	0	0	0	0	0	0	21
15:00	7	10	6	0	0	0	0	0	0	0	0	0	0	0	23
16:00	10	24	11	0	0	0	0	0	0	0	0	0	0	0	45
17:00	10	18	17	0	0	0	0	0	0	0	0	0	0	0	45
18:00	9	22	10	0	0	0	0	0	0	0	0	0	0	0	41
19:00	4	16	6	0	0	0	0	0	0	0	0	0	0	0	26
20:00	2	7	5	1	0	0	0	0	0	0	0	0	0	0	15
21:00	2	11	6	0	0	0	0	0	0	0	0	0	0	0	19
22:00	4	7	4	1	0	0	0	0	0	0	0	0	0	0	16
23:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Total	108	205	101	4	1	0	0	0	0	0	0	0	0	0	419

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

33rd Street at NorthamptonStreet NW Speed

NB

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
11/07/13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	109	205	101	4	1	0	0	0	0	0	0	0	0	0	420

15th Percentile : 7 MPH
50th Percentile : 15 MPH
85th Percentile : 20 MPH
95th Percentile : 23 MPH

Stats
Mean Speed(Average) : 15 MPH
10 MPH Pace Speed : 12-21 MPH
Number in Pace : 237
Percent in Pace : 56.4%
Number of Vehicles > 25 MPH : 11
Percent of Vehicles > 25 MPH : 2.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

33rd Street at NorthamptonStreet NW Speed

SB

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
11/06/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	2	1	1	1	0	0	0	0	0	0	0	0	0	0	5
07:00	2	9	2	0	0	0	0	0	0	0	0	0	0	0	13
08:00	6	11	6	1	0	0	0	0	0	0	0	0	0	0	24
09:00	33	40	2	0	0	0	0	0	0	0	0	0	0	0	75
10:00	7	16	1	0	0	0	0	0	0	0	0	0	0	0	24
11:00	6	7	0	0	0	0	0	0	0	0	0	0	0	0	13
12 PM	8	11	1	0	0	0	0	0	0	0	0	0	0	0	20
13:00	3	12	2	0	0	0	0	0	0	0	0	0	0	0	17
14:00	8	13	2	0	0	0	0	0	0	0	0	0	0	0	23
15:00	12	12	3	0	0	0	0	0	0	0	0	0	0	0	27
16:00	7	19	4	0	0	0	0	0	0	0	0	0	0	0	30
17:00	9	14	3	0	0	0	0	0	0	0	0	0	0	0	26
18:00	5	10	2	0	0	0	0	0	0	0	0	0	0	0	17
19:00	10	15	5	0	0	0	0	0	0	0	0	0	0	0	30
20:00	2	9	2	0	0	0	0	0	0	0	0	0	0	0	13
21:00	1	4	3	0	0	0	0	0	0	0	0	0	0	0	8
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	121	206	39	2	0	0	0	0	0	0	0	0	0	0	368

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

33rd Street at NorthamptonStreet NW Speed

SB

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
11/07/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
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	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	121	207	39	2	0	0	0	0	0	0	0	0	0	0	369

15th Percentile : 6 MPH
50th Percentile : 13 MPH
85th Percentile : 19 MPH
95th Percentile : 21 MPH

Stats
Mean Speed(Average) : 14 MPH
10 MPH Pace Speed : 11-20 MPH
Number in Pace : 224
Percent in Pace : 60.7%
Number of Vehicles > 25 MPH : 4
Percent of Vehicles > 25 MPH : 1.1%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

33rd Street at NorthamptonStreet NW Volume

Start Time	06-Nov-13 Wed	NB		SB		Combined		07-Nov-Thu	NB		SB		Combined	
		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	2	*	3	*	5		1	*	0	*	1	*
12:15		*	7	*	2	*	9		0	*	0	*	0	*
12:30		*	6	*	7	*	13		0	*	0	*	0	*
12:45		*	9	*	8	*	17		0	*	0	*	0	*
01:00		*	6	*	4	*	10		0	*	1	*	1	*
01:15		*	6	*	3	*	9		0	*	0	*	0	*
01:30		*	3	*	4	*	7		0	*	0	*	0	*
01:45		*	6	*	6	*	12		0	*	0	*	0	*
02:00		*	4	*	4	*	8		2	*	2	*	4	*
02:15		*	2	*	4	*	6		0	*	0	*	0	*
02:30		1	10	0	8	1	18		0	*	0	*	0	*
02:45		0	5	0	7	0	12		*	*	*	*	*	*
03:00		0	9	0	6	0	15		*	*	*	*	*	*
03:15		0	6	0	5	0	11		*	*	*	*	*	*
03:30		0	5	0	15	0	20		*	*	*	*	*	*
03:45		0	3	0	1	0	4		*	*	*	*	*	*
04:00		0	19	0	8	0	27		*	*	*	*	*	*
04:15		0	10	0	7	0	17		*	*	*	*	*	*
04:30		0	7	0	8	0	15		*	*	*	*	*	*
04:45		0	9	0	7	0	16		*	*	*	*	*	*
05:00		0	8	0	9	0	17		*	*	*	*	*	*
05:15		0	14	0	5	0	19		*	*	*	*	*	*
05:30		0	8	0	6	0	14		*	*	*	*	*	*
05:45		0	15	0	6	0	21		*	*	*	*	*	*
06:00		1	6	1	6	2	12		*	*	*	*	*	*
06:15		1	13	2	5	3	18		*	*	*	*	*	*
06:30		0	10	0	3	0	13		*	*	*	*	*	*
06:45		1	12	2	3	3	15		*	*	*	*	*	*
07:00		0	8	0	9	0	17		*	*	*	*	*	*
07:15		3	6	1	8	4	14		*	*	*	*	*	*
07:30		0	7	7	8	7	15		*	*	*	*	*	*
07:45		1	5	5	5	6	10		*	*	*	*	*	*
08:00		4	6	3	5	7	11		*	*	*	*	*	*
08:15		3	3	5	4	8	7		*	*	*	*	*	*
08:30		5	3	7	2	12	5		*	*	*	*	*	*
08:45		9	3	9	2	18	5		*	*	*	*	*	*
09:00		10	6	13	4	23	10		*	*	*	*	*	*
09:15		4	6	16	1	20	7		*	*	*	*	*	*
09:30		17	5	31	0	48	5		*	*	*	*	*	*
09:45		12	2	15	3	27	5		*	*	*	*	*	*
10:00		9	8	7	0	16	8		*	*	*	*	*	*
10:15		5	3	8	0	13	3		*	*	*	*	*	*
10:30		0	3	3	0	3	3		*	*	*	*	*	*
10:45		6	2	6	2	12	4		*	*	*	*	*	*
11:00		7	2	3	1	10	3		*	*	*	*	*	*
11:15		6	0	2	0	8	0		*	*	*	*	*	*
11:30		11	0	7	0	18	0		*	*	*	*	*	*
11:45		5	1	1	0	6	1		*	*	*	*	*	*
Total		121	299	154	214	275	513		3	0	3	0	6	0
Day Total		420		368		788			3		3		6	
% Total		15.4%	37.9%	19.5%	27.2%				50.0%	0.0%	50.0%	0.0%		
Peak Vol.		09:00 43	04:00 45	09:00 75	02:45 33	09:00 118	04:00 75		01:15 2		01:15 2		01:15 4	
P.H.F.		0.632	0.592	0.605	0.550	0.615	0.694		0.250		0.250		0.250	
ADT		ADT 794		AADT 794										