



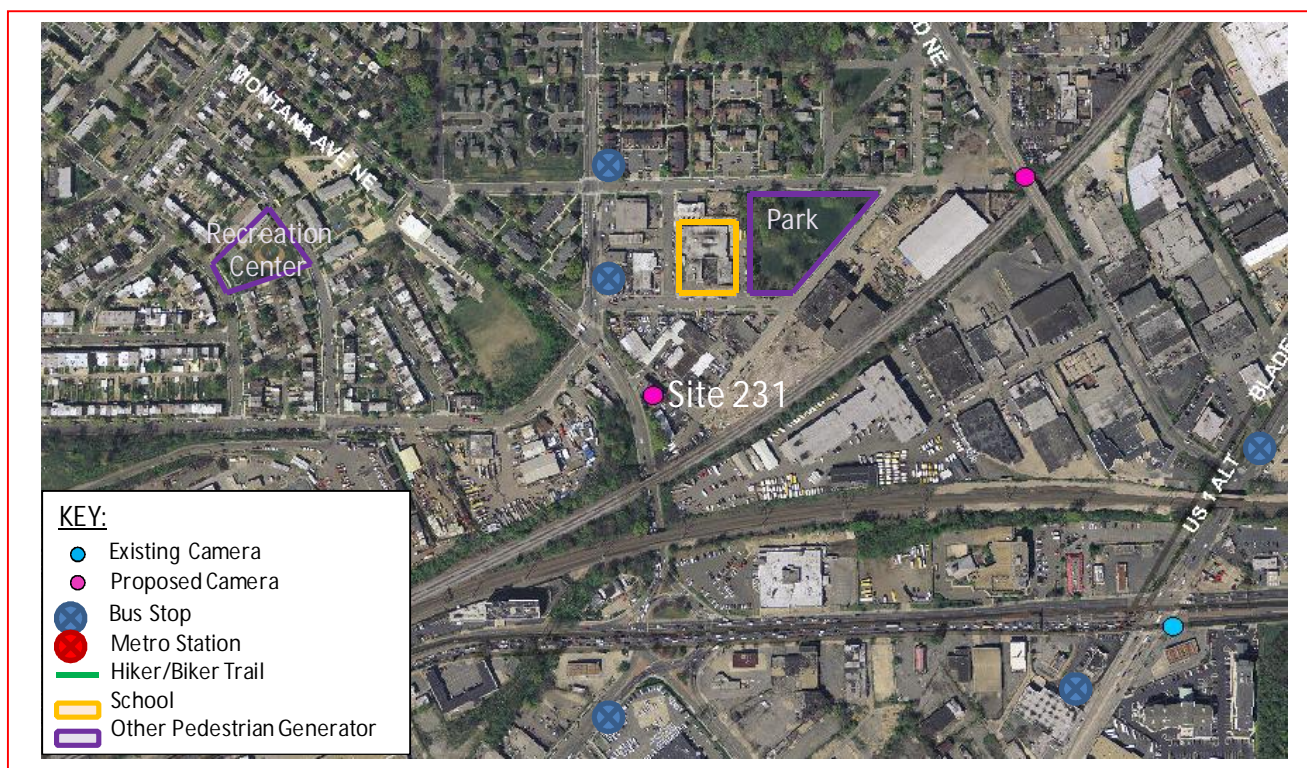
District Department of Transportation

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

1800 Block Montana Avenue NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
5	505	5	5B	Proposed	1800 Block Montana Avenue Northeast



The *proposed* speed camera will be located in Ward 5 at the 1800 block of Montana Avenue Northeast. Montana Avenue Northeast runs between Rhode Island Avenue Northeast to the east and Bladensburg Road Northeast to the south. The posted speed limit is 25 MPH.

W5 - 491





District Department of Transportation

1800 Block Montana Avenue NE

Field Assessment Summary

Montana Avenue is assumed to run in a northwest-southeast direction, and is classified as a collector road. Montana Avenue has two travel lanes in each direction. This site has the following characteristics:

- This is a residential and commercial area with apartments and restaurants.
- There is one school in the area: Tree of Life Community Public Charter School.
- Loomis Park and Brentwood Recreation Center are in the vicinity.
- There is sidewalk on both sides of the street and a traffic signal with pedestrian signals and crosswalks at W Street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a downgrade slope southbound.



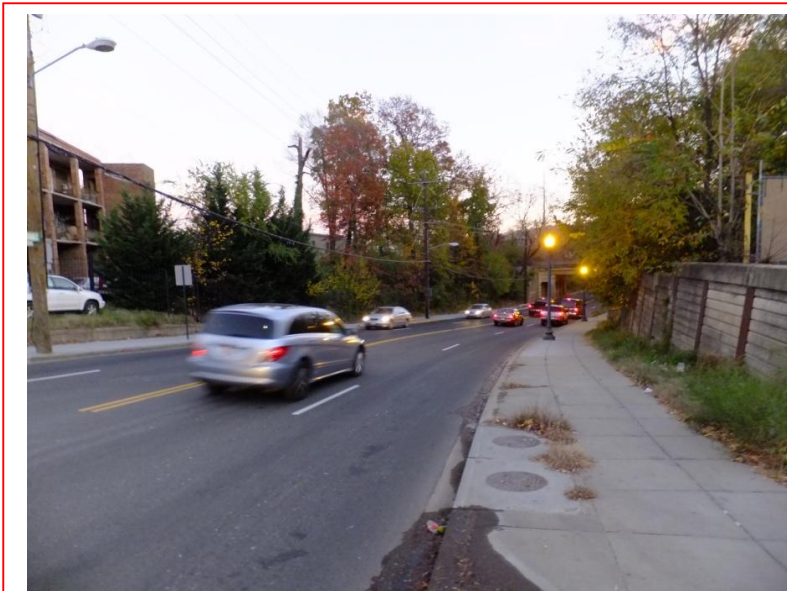
Looking Northwest-bound

W5 - 492



District Department of Transportation

1800 Block Montana Avenue NE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	23
85th Percentile Speed (MPH)	42
10 MPH Pace Speed	4-13
ADT	6,778

The mean speed is lower than the posted speed limit by 2 MPH and the 85th percentile speed is higher than the posted speed by 17 MPH at this location.

Crash Data Analysis

From the Accident Summary report provided for the dates between January 1, 2010 and December 31, 2013 there were a total of 102 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 crashes at this location were Side Swiped (41), Rear End (19), Right Angle (12) and Left Turn (11). Furthermore, this site experienced a high frequency (31 crashes) of injury-related crashes.

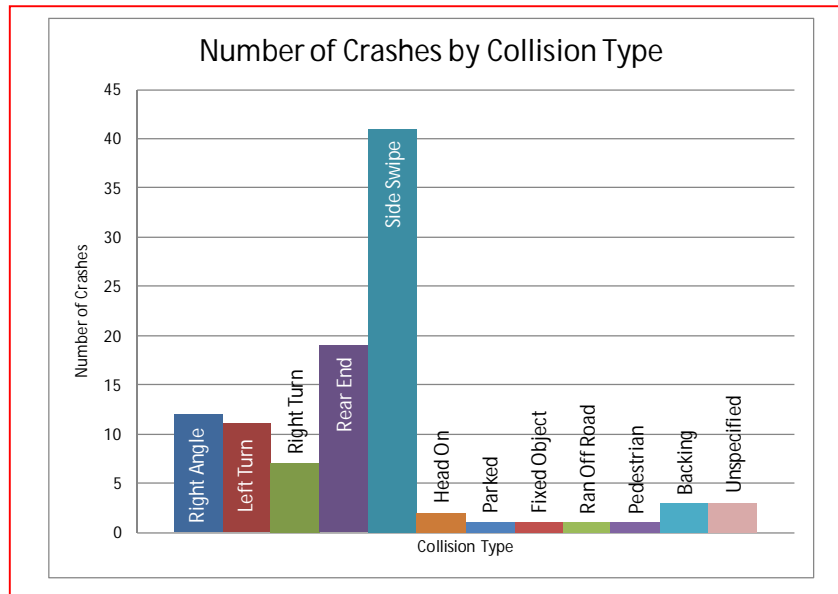
W5 - 493



District Department of Transportation

1800 Block Montana Avenue NE

Severity			Weather			Surface condition			Light Condition		
Total	102										
Fatal	0	0.0%	Clear	82	80.4%	Dry	84	82.4%	Day	63	61.8%
Injury	31	30.4%	Rain	12	11.8%	Wet	13	12.7%	Night	33	32.4%
Truck	23	22.5%	Snow	1	1.0%	Snow/Ice	1	1.0%			
Bus	9	8.8%									



There were an elevated number of speed-related crashes at this location, including rear end and side swipe crashes. The AASHTO Highway Safety Manual lists “assuming the lead driver will go through a green or yellow light, but the lead driver stops” and “changing lanes to avoid a slowing or stopped vehicle”¹ as two errors leading to rear-end and sideswipe crashes. Both of these errors can be decreased with a decrease in travel speed.

This site is located within a half mile of one of the top five percent high accident locations in the District from 2010 to 2012: New York Avenue and Montana Avenue.² This site is adjacent to one of the top seventy high accident locations in the District in 2011: Montana Avenue and Edwin Street.³

¹ AASHTO Highway Safety Manual, 1st Edition, 2010; Volume 1, page 2-13

² DDOT, Top 5% High Accident Locations Map for 2010-2012

³ DDOT, Top 5% High Accident Locations Map for 2010-2012



District Department of Transportation

1800 Block Montana Avenue NE

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 85th 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 location, including side swipe and rear end collisions, as well as a high frequency (31 crashes) of injury-related crashes. This site is located within a half mile of one of the top five percent high accident locations in the District from 2010 to 2012: New York Avenue and Montana Avenue This site is adjacent to one of the top seventy high accident locations in the District in 2011: Montana Avenue and Edwin Street.
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 restaurants.
 - b. There is one school in the area: Tree of Life Community Public Charter School.
 - c. Loomis Park and Brentwood Recreation Center are in the area which generate pedestrian and bicycle activity.
 - d. 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, and pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

W5 - 495

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1800 block of Montana Ave NE SEB Speed

SEB															
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	5	1	2	7	11	32	51	29	10	5	1	0	0	0	154
23:00	0	4	1	4	9	34	52	26	5	2	1	0	0	0	138
Total	5	5	3	11	20	66	103	55	15	7	2	0	0	0	292

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1800 block of Montana Ave NE SEB Speed

SEB	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	
11/19/13	0	1	1	0	9	19	17	9	9	2	1	0	0	0	68
01:00	1	0	1	0	3	11	20	9	6	0	0	0	0	0	51
02:00	1	0	0	0	1	9	10	6	6	2	0	0	0	1	36
03:00	2	0	0	3	6	10	9	12	2	4	1	0	0	0	49
04:00	8	0	2	3	14	45	59	20	13	4	1	2	0	0	171
05:00	25	1	1	9	20	62	78	50	24	9	1	0	0	0	280
06:00	42	7	9	24	54	154	148	83	16	5	2	0	0	0	544
07:00	184	31	24	28	58	42	28	8	2	0	0	0	0	0	405
08:00	134	8	3	20	26	55	36	13	1	0	1	0	0	0	297
09:00	208	6	0	0	0	0	0	0	0	0	0	0	0	0	214
10:00	234	17	1	0	1	0	0	0	0	0	0	0	0	0	253
11:00	230	34	14	7	2	0	0	0	0	0	0	0	0	0	287
12 PM	215	6	5	2	0	0	0	0	0	0	0	0	0	0	228
13:00	245	17	11	5	0	1	0	0	0	0	0	0	0	0	279
14:00	64	14	44	56	136	179	103	33	12	0	0	0	0	0	641
15:00	181	59	80	81	105	79	41	9	2	0	0	0	0	0	637
16:00	274	24	8	9	1	0	0	0	0	0	0	0	0	0	316
17:00	255	19	8	6	4	1	0	0	0	0	0	0	0	0	293
18:00	53	5	12	25	54	128	121	42	13	3	3	0	0	0	459
19:00	7	1	3	12	53	138	134	51	8	4	0	0	1	1	413
20:00	9	0	2	9	34	101	116	37	15	5	1	0	0	0	329
21:00	6	0	0	2	13	65	98	33	14	4	1	0	0	0	236
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2378	250	229	301	594	1099	1018	415	143	42	12	2	1	2	6486
Grand Total	2383	255	232	312	614	1165	1121	470	158	49	14	2	1	2	6778

15th Percentile : 6 MPH
 50th Percentile : 15 MPH
 85th Percentile : 42 MPH
 95th Percentile : 47 MPH

Stats
 Mean Speed(Average) : 23 MPH
 10 MPH Pace Speed : 4-13 MPH
 Number in Pace : 2717
 Percent in Pace : 40.1%
 Number of Vehicles > 25 MPH : 2997
 Percent of Vehicles > 25 MPH : 44.2%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1800 block of Montana Ave NE SEB 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	*	*	21	51	*	*	21	51
12:15	*	*	21	66	*	*	21	66
12:30	*	*	10	58	*	*	10	58
12:45	*	*	16	53	*	*	16	53
01:00	*	*	15	58	*	*	15	58
01:15	*	*	11	61	*	*	11	61
01:30	*	*	12	77	*	*	12	77
01:45	*	*	13	83	*	*	13	83
02:00	*	*	12	139	*	*	12	139
02:15	*	*	9	165	*	*	9	165
02:30	*	*	8	173	*	*	8	173
02:45	*	*	7	164	*	*	7	164
03:00	*	*	11	187	*	*	11	187
03:15	*	*	12	199	*	*	12	199
03:30	*	*	10	139	*	*	10	139
03:45	*	*	16	112	*	*	16	112
04:00	*	*	37	93	*	*	37	93
04:15	*	*	27	75	*	*	27	75
04:30	*	*	53	83	*	*	53	83
04:45	*	*	54	65	*	*	54	65
05:00	*	*	56	61	*	*	56	61
05:15	*	*	63	58	*	*	63	58
05:30	*	*	76	77	*	*	76	77
05:45	*	*	85	97	*	*	85	97
06:00	*	*	100	115	*	*	100	115
06:15	*	*	116	124	*	*	116	124
06:30	*	*	144	101	*	*	144	101
06:45	*	*	184	119	*	*	184	119
07:00	*	*	97	112	*	*	97	112
07:15	*	*	66	92	*	*	66	92
07:30	*	*	118	100	*	*	118	100
07:45	*	*	124	109	*	*	124	109
08:00	*	*	138	106	*	*	138	106
08:15	*	*	78	99	*	*	78	99
08:30	*	*	33	79	*	*	33	79
08:45	*	*	48	45	*	*	48	45
09:00	*	*	47	70	*	*	47	70
09:15	*	*	53	59	*	*	53	59
09:30	*	*	52	55	*	*	52	55
09:45	*	*	62	52	*	*	62	52
10:00	*	27	63	*	*	*	63	27
10:15	*	46	67	*	*	*	67	46
10:30	*	38	58	*	*	*	58	38
10:45	*	43	65	*	*	*	65	43
11:00	*	50	81	*	*	*	81	50
11:15	*	39	79	*	*	*	79	39
11:30	*	23	72	*	*	*	72	23
11:45	*	26	55	*	*	*	55	26
Total	0	292	2655	3831	0	0	2655	4123
Combined Total	292		6486		0		6778	
Peak	10:15		06:00	02:30			06:00	02:30
Vol.	177		544	723			544	723
P.H.F.	0.885		0.739	0.908			0.739	0.908
ADT	ADT 6,778		AADT 6,778					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: MONTANA AVE,NE From EDWIN ST,NE TO NEW YORK AVE,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:	102	Right Angle:	12	11.8%	Fixed Object:	1	1.0%
Total Number of Fatalities:	0	Left Turn:	11	10.8%	Ran Off Road:	1	1.0%
Total Number of Injuries:	72	Right Turn:	7	6.9%	Ped. Involved:	1	1.0%
Total Number of Disabling Injuries:	0	Rear End:	19	18.6%	Backing:	3	2.9%
Total Number of NonDisabling Injuries:	3	Side Swiped:	41	40.2%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	1	Head On:	2	2.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	1	1.0%	Unspecified:	3	2.9%
Total Number of Motorcycles Involved:	1						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	14	13.7%	Sunday:	8	7.8%
09:30 ~ 11:30:	8	7.8%	Monday:	18	17.6%
11:30 ~ 13:30:	16	15.7%	Tuesday:	12	11.8%
13:30 ~ 16:00:	17	16.7%	Wednesday:	24	23.5%
16:00 ~18:30:	13	12.7%	Thursday:	9	8.8%
18:30 ~ 07:30:	34	33.3%	Friday:	21	20.6%
Unspecified:	0	0.0%	Saturday:	10	9.8%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	82	80.4%	Dry:	84	82.4%
Rain:	12	11.8%	Wet:	13	12.7%
Snow:	1	1.0%	Snow/Ice:	1	1.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	1	1.0%	Repairing:	1	1.0%
Unspecified:	6	5.9%	Unspecified:	3	2.9%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	141	69.1%	Fatal Collision:	0	0.0%
Bus:	9	4.4%	Injury Collision:	31	30.4%
Truck:	23	11.3%	PDO Collision:	71	69.6%
Taxi:	3	1.5%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	6	2.9%	Daylight:	63	61.8%
Motorcycle/Moped:	1	0.5%	Dawn/Dusk:	3	2.9%
Bicycle:	0	0.0%	Dark(Lighted):	33	32.4%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	21	10.3%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	3	2.9%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	2	1.0%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	2	1.0%	In Crosswalk against Signal:	1	100.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	41	20.1%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	1	0.5%	Not in Crosswalk:	0	0.0%
Roadway:	3	1.5%	From Between Parked Cars:	0	0.0%
Unspecified:	155	76.0%	Unspecified:	0	0.0%

57 Records are not approved as of 9/15/2013 1:15:16 PM