



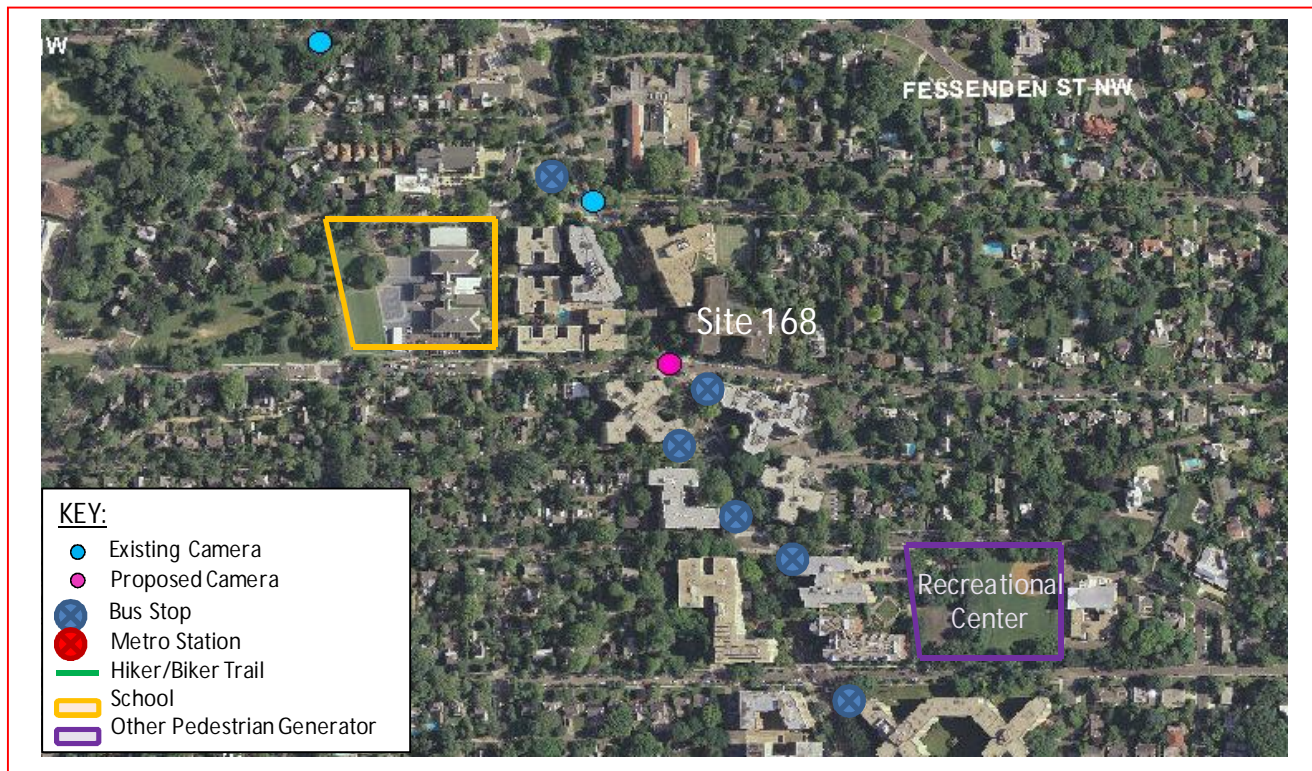
District Department of Transportation

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

4800 Block Connecticut Avenue NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	203	3	3F	Proposed	4800 Block Connecticut Avenue Northwest Northwest-bound



This *proposed* speed camera will be located in Ward 3 at the 4800 block of Connecticut Avenue Northwest in the northwest bound direction. Connecticut Avenue runs between Western Avenue Northwest to the north and H Street Northwest to the south. The posted speed limit is 30 MPH.

W3 - 357





District Department of Transportation

4800 Block Connecticut Avenue NW

Field Assessment Summary

Connecticut Avenue is assumed to run in a North-South direction, and is classified as a principal arterial. Connecticut Avenue has two travel lanes in each direction, and a reversible lane in the middle of the road. This location has the following characteristics:

- This site is located in a residential area with apartment buildings, driveways, and on-street parking on both sides of the street.
- There are sidewalks with curb and gutter on both sides of the street.
- The existing pavement is in good condition.
- There are two schools in this area: Murch Elementary School and Auguste Montessori School.



Northbound

W3 - 358



District Department of Transportation

4800 Block Connecticut Avenue NW



Southbound

Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	29
85th Percentile Speed (MPH)	35
10 MPH Pace Speed	26-35
ADT	11,424

The mean speed is 1 MPH lower than the posted speed limit, and the 85th percentile speed is 5 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 42 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 (11 crashes), Side Swiped (11 crashes), and Left Turn (9 crashes). Furthermore, the site experienced a high frequency (17 crashes) of injury-related crashes.

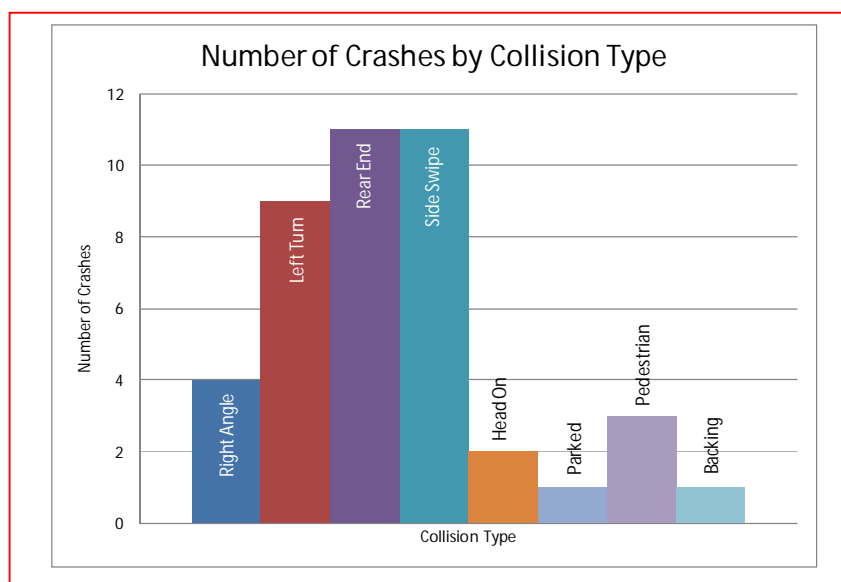
W3 - 359



District Department of Transportation

4800 Block Connecticut Avenue NW

Severity			Weather			Surface condition			Light Condition		
Total	42										
Fatal	0	0.0%	Clear	37	88.1%	Dry	36	85.7%	Day	30	71.4%
Injury	17	40.5%	Rain	4	9.5%	Wet	5	11.9%	Night	10	23.8%
Taxi	8	19.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	6	14.3%									



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.

The Connecticut Avenue 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)².

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

² DDOT, TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011), pg. 80.



District Department of Transportation

4800 Block Connecticut Avenue NW

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 higher than the posted speed limit at this location.
2. Crash Data – There were an elevated number of speed-related crashes at this location, including rear end and side swipe collisions as well as a high frequency (17 crashes) of injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. Located in a residential and commercial area with apartment buildings in the area and driveways on both sides of the street.
 - b. There are two schools in the area: Auguste Montessori School and Murch Elementary School.
 - c. There is on-street parking on both sides of the street at this site.
 - d. There are multiple 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.

W3 - 361

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4800 block of Connecticut Ave NW NWB Speed

NWB

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
11/09/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	11	3	18	64	68	23	2	0	0	0	0	0	0	0	189
02:00	3	2	10	32	53	26	4	0	0	0	0	0	0	0	130
03:00	4	2	9	43	75	19	2	0	0	0	0	0	0	0	154
04:00	3	1	2	19	25	8	1	0	0	0	0	0	0	0	59
05:00	0	4	6	11	19	3	0	1	0	0	0	0	0	0	44
06:00	6	5	9	23	60	11	1	1	0	0	0	0	0	0	116
07:00	12	3	22	69	69	35	6	0	1	0	0	0	0	0	217
08:00	20	5	40	116	104	49	7	1	0	0	0	0	0	0	342
09:00	36	14	95	192	139	50	5	4	0	0	0	0	0	0	535
10:00	30	15	69	188	219	114	49	13	2	1	0	0	0	0	700
11:00	38	15	62	190	232	114	47	10	4	0	0	0	0	0	712
12 PM	42	9	71	211	295	160	38	8	0	0	0	0	0	0	834
13:00	65	21	78	228	276	125	44	4	2	0	0	0	0	0	843
14:00	43	13	68	207	279	146	30	10	0	0	0	0	0	0	796
15:00	34	11	84	248	249	141	33	4	0	0	0	0	0	0	804
16:00	39	15	70	256	326	137	32	1	2	0	0	0	0	0	878
17:00	33	26	130	270	204	91	25	4	1	0	0	0	0	0	784
18:00	29	23	70	217	208	78	15	2	1	0	0	0	0	0	643
19:00	31	31	115	176	81	29	5	0	0	0	0	0	0	0	468
20:00	23	16	96	180	91	18	0	0	0	0	0	0	0	0	424
21:00	23	8	81	158	100	29	5	0	0	0	0	0	0	0	404
22:00	27	12	98	211	131	25	0	0	0	0	0	0	0	0	504
23:00	29	13	93	245	98	28	5	0	0	0	0	0	0	0	511
Total	581	267	1396	3554	3401	1459	356	63	13	1	0	0	0	0	11091

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4800 block of Connecticut Ave NW NWB Speed

NWB

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
11/10/13	16	7	43	111	112	38	4	2	0	0	0	0	0	0	333
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	16	7	43	111	112	38	4	2	0	0	0	0	0	0	333
Grand Total	597	274	1439	3665	3513	1497	360	65	13	1	0	0	0	0	11424

15th Percentile : 20 MPH
50th Percentile : 29 MPH
85th Percentile : 35 MPH
95th Percentile : 39 MPH

Stats
Mean Speed(Average) : 29 MPH
10 MPH Pace Speed : 26-35 MPH
Number in Pace : 6328
Percent in Pace : 55.4%
Number of Vehicles > 30 MPH : 5188
Percent of Vehicles > 30 MPH : 45.4%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4800 block of Connecticut Ave NW NWB Volume

Start Time	Sat A.M.	09-Nov-13 P.M.	Sun A.M.	10-Nov-13 P.M.	Mon A.M.	11-Nov-13 P.M.	Daily Average	
							A.M.	P.M.
12:00	*	201	120	*	*	*	120	201
12:15	*	212	83	*	*	*	83	212
12:30	*	207	69	*	*	*	69	207
12:45	*	214	61	*	*	*	61	214
01:00	46	216	*	*	*	*	46	216
01:15	41	196	*	*	*	*	41	196
01:30	42	216	*	*	*	*	42	216
01:45	60	215	*	*	*	*	60	215
02:00	27	186	*	*	*	*	27	186
02:15	30	211	*	*	*	*	30	211
02:30	32	180	*	*	*	*	32	180
02:45	41	219	*	*	*	*	41	219
03:00	54	221	*	*	*	*	54	221
03:15	33	189	*	*	*	*	33	189
03:30	33	215	*	*	*	*	33	215
03:45	34	179	*	*	*	*	34	179
04:00	22	213	*	*	*	*	22	213
04:15	17	215	*	*	*	*	17	215
04:30	7	229	*	*	*	*	7	229
04:45	13	221	*	*	*	*	13	221
05:00	9	177	*	*	*	*	9	177
05:15	9	197	*	*	*	*	9	197
05:30	16	206	*	*	*	*	16	206
05:45	10	204	*	*	*	*	10	204
06:00	17	185	*	*	*	*	17	185
06:15	25	149	*	*	*	*	25	149
06:30	37	172	*	*	*	*	37	172
06:45	37	137	*	*	*	*	37	137
07:00	41	134	*	*	*	*	41	134
07:15	47	100	*	*	*	*	47	100
07:30	51	110	*	*	*	*	51	110
07:45	78	124	*	*	*	*	78	124
08:00	76	118	*	*	*	*	76	118
08:15	81	107	*	*	*	*	81	107
08:30	82	84	*	*	*	*	82	84
08:45	103	115	*	*	*	*	103	115
09:00	118	97	*	*	*	*	118	97
09:15	124	81	*	*	*	*	124	81
09:30	138	106	*	*	*	*	138	106
09:45	155	120	*	*	*	*	155	120
10:00	175	115	*	*	*	*	175	115
10:15	173	118	*	*	*	*	173	118
10:30	179	146	*	*	*	*	179	146
10:45	173	125	*	*	*	*	173	125
11:00	143	144	*	*	*	*	143	144
11:15	182	116	*	*	*	*	182	116
11:30	198	130	*	*	*	*	198	130
11:45	189	121	*	*	*	*	189	121
Total	3198	7893	333	0	0	0	3531	7893
Combined Total	11091		333		0		11424	
Peak	11:00	04:00	12:00				11:00	04:00
Vol.	712	878	333				712	878
P.H.F.	0.899	0.959	0.694				0.899	0.959
ADT	ADT 11,424		AADT 11,424					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: CONNECTICUT AVE,NW From CUMBERLAND ST,NW TO ELLICOTT ST,NW

Time Period Covered: From 01/01/2010 To 12/31/2012

Prepared By: Rahul Jain

Prepared Date: 9/16/2013

Total Number of Accident:	42	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	4	9.5%	Fixed Object:	0	0.0%
Total Number of Injuries:	27	Left Turn:	9	21.4%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	3	7.1%
Total Number of NonDisabling Injuries:	7	Rear End:	11	26.2%	Backing:	1	2.4%
Total Number of Pedestrians Involved:	3	Side Swiped:	11	26.2%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	2	4.8%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	1	2.4%	Unspecified:	0	0.0%

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	9	21.4%	Sunday:	3	7.1%
09:30 ~ 11:30:	4	9.5%	Monday:	6	14.3%
11:30 ~ 13:30:	2	4.8%	Tuesday:	6	14.3%
13:30 ~ 16:00:	6	14.3%	Wednesday:	4	9.5%
16:00 ~18:30:	9	21.4%	Thursday:	8	19.0%
18:30 ~ 07:30:	12	28.6%	Friday:	11	26.2%
Unspecified:	0	0.0%	Saturday:	4	9.5%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	37	88.1%	Dry:	36	85.7%
Rain:	4	9.5%	Wet:	5	11.9%
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	2.4%	Unspecified:	1	2.4%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	67	74.4%	Fatal Collision:	0	0.0%
Bus:	6	6.7%	Injury Collision:	17	40.5%
Truck:	5	5.6%	PDO Collision:	25	59.5%
Taxi:	8	8.9%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	30	71.4%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	10	23.8%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	4	4.4%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	2	4.8%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	3	3.3%	In Crosswalk with Signal:	1	33.3%
Driver: Alcohol/Drug:	1	1.1%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	1	33.3%
Driver: Others:	24	26.7%	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:	62	68.9%	Unspecified:	1	33.3%

27 Records are not approved as of 9/16/2013 3:56:11 PM