



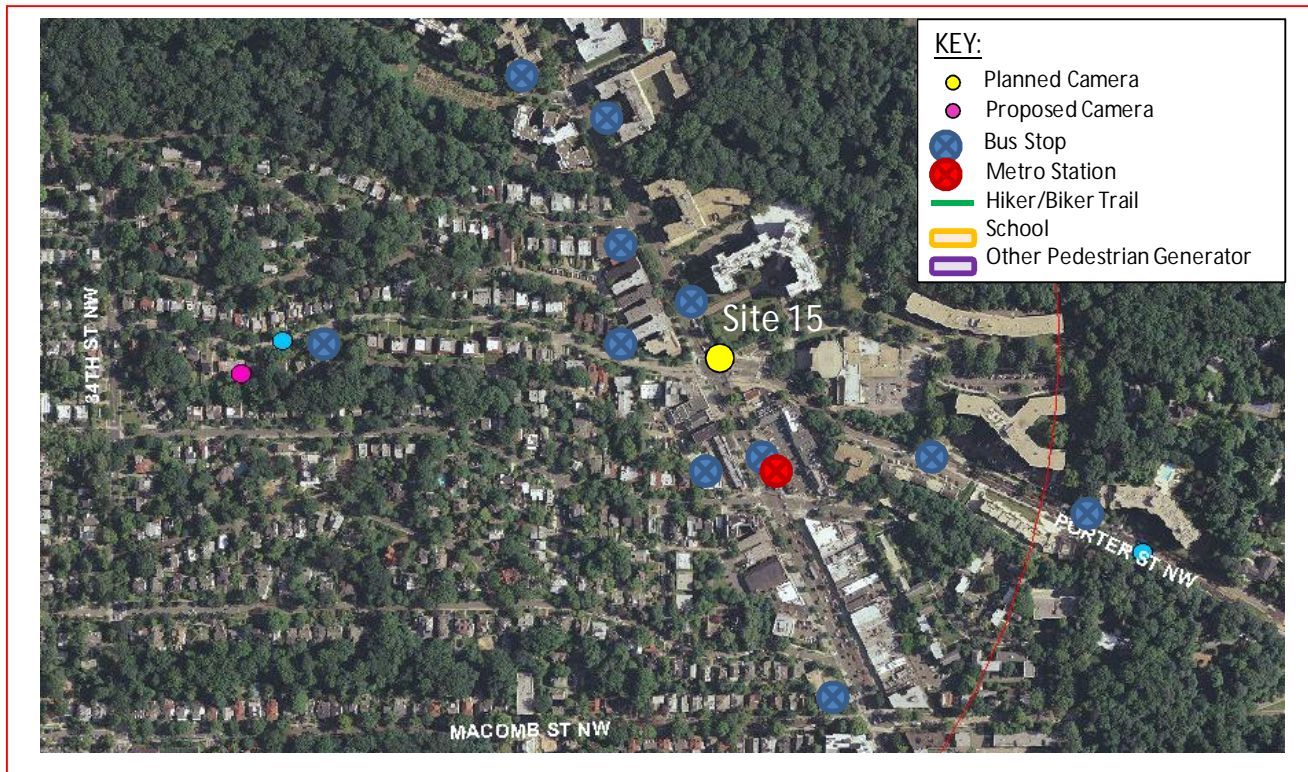
District Department of Transportation

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

Connecticut Avenue SB at Porter Street NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	203	3	3C	Planned	Connecticut Avenue Southbound at Porter Street Northwest



The *planned* speed camera will be located in Ward 3 at the intersection of Connecticut Avenue and Porter Street Northwest in the southbound direction. Connecticut Avenue runs between Western Avenue Northwest to the north and H Street Northwest to the south. Porter Street runs between Piney Branch Parkway Northwest to the east and Connecticut Avenue Northwest to the west. The posted speed limit is 30 MPH.

W3 - 151





District Department of Transportation

Connecticut Avenue SB at Porter Street NW

Field Assessment Summary

Connecticut Avenue is assumed to run in a North-South direction, and is classified as a principal arterial. Porter Street is assumed to run in the East-west direction, and is classified as a minor arterial. Connecticut Avenue has two travel lanes in each direction. This location has the following characteristics:

- This site is located in a residential and commercial area with apartment buildings, driveways on both sides, store fronts, and a gas station.
- There is an existing traffic signal and crosswalks with pedestrian signals.
- There is a sidewalk on both sides of all legs.
- There are bus stations on the northeast and northwest corners, as well as others in the surrounding area. There is a Metrorail station south of intersection.
- There is a center concrete island on east leg and a concrete channelization island on northeast corner.



Looking Northbound

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District Department of Transportation

Connecticut Avenue SB at Porter Street NW



Looking Southbound

Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	13
85th Percentile Speed (MPH)	21
10 MPH Pace Speed	5-14 MPH
ADT	8,474

Both the mean speed and the 85th percentile speed are lower than the posted speed limit. The 85th percentile speed is 9 MPH lower than the posted speed limit.

Crash Data Analysis

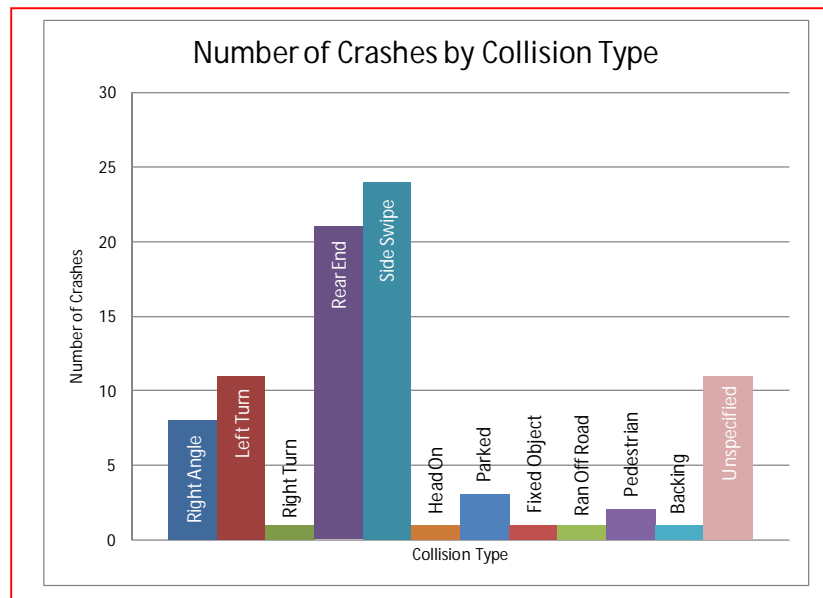
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 85 crashes at this location. A breakdown of collision type can be found in the chart on the next page.



Connecticut Avenue SB at Porter Street NW

Severity		Weather			Surface condition			Light Condition		
Total	85									
Fatal	0 0.0%	Clear	63	74.1%	Dry	64	75.3%	Day	61	71.8%
Injury	21 24.7%	Rain	13	15.3%	Wet	14	16.5%	Night	19	22.4%
Taxi	16 18.8%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Truck	15 17.6%									

There were a high number of speed-related crashes at this location, including Rear End and Side Swipes. There was also number of injury-related crashes at this location.



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)*¹.

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 speed data analysis shows travel speeds being much lower than the posted speed limit.

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



District Department of Transportation

Connecticut Avenue SB at Porter Street NW

2. Crash Data – There were a high number of speed-related crashes at this location, including Rear End and Side Swipes. There were also a number of injury-related crashes at this location. The Connecticut Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This site is located in a residential and commercial area with apartment buildings, store fronts, and driveways on both sides of the street.
 - b. There are multiple bus stops and one Metrorail station in the area which generate pedestrian activity

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 speed-related and injury-related crashes, the specific site characteristics, and the 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

Connecticut Ave SB at Porter St NW Speed

SB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	20	25	30	35	40	45	50	55	60	65	70	75	999		
11/05/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	5	7	10	6	1	0	0	0	0	0	0	0	0	0	29
04:00	21	34	37	4	1	1	0	0	0	0	0	0	0	0	98
05:00	87	49	52	45	27	9	0	0	0	0	0	0	0	0	269
06:00	201	56	72	57	45	15	4	1	0	0	0	0	0	0	451
07:00	250	100	101	99	63	35	4	0	0	0	0	0	0	0	652
08:00	281	121	135	111	75	33	3	1	0	0	0	0	0	0	760
09:00	231	101	100	90	55	15	2	1	0	0	0	0	0	0	595
10:00	264	47	22	7	1	2	0	0	0	0	0	0	0	0	343
11:00	289	56	31	9	3	1	0	0	0	0	0	0	0	0	389
12 PM	268	20	8	3	0	0	0	0	0	0	0	0	0	0	299
13:00	242	69	22	9	1	0	0	0	0	0	0	0	0	0	343
14:00	309	81	74	20	18	3	0	1	0	0	0	0	0	0	506
15:00	275	95	73	36	14	4	0	0	0	0	0	0	0	0	497
16:00	264	103	74	33	8	1	0	1	0	0	0	0	0	0	484
17:00	256	75	4	20	0	0	0	0	0	0	0	0	0	0	355
18:00	265	44	28	13	0	2	0	0	0	0	0	0	0	0	352
19:00	309	94	55	20	4	0	0	0	0	0	0	0	0	0	482
20:00	267	102	59	17	4	0	0	0	0	0	0	0	0	0	449
21:00	220	83	73	24	4	0	0	0	0	0	0	0	0	0	404
22:00	167	85	50	15	2	1	0	0	0	0	0	0	0	0	320
23:00	82	44	53	16	1	1	0	0	0	0	0	0	0	0	197
Total	4553	1466	1133	654	327	123	13	5	0	0	0	0	0	0	8274

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Connecticut Ave SB at Porter St NW Speed

SB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	20	25	30	35	40	45	50	55	60	65	70	75	999	76	
11/06/13	25	25	31	13	0	0	0	0	0	0	0	0	0	0	94
01:00	13	14	15	6	0	0	0	0	0	0	0	0	0	0	48
02:00	15	8	13	5	2	1	1	0	0	0	0	0	0	0	45
03:00	2	3	5	3	0	0	0	0	0	0	0	0	0	0	13
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	55	50	64	27	2	1	1	0	0	0	0	0	0	0	200
Grand Total	4608	1516	1197	681	329	124	14	5	0	0	0	0	0	0	8474

15th Percentile : 5 MPH
 50th Percentile : 10 MPH
 85th Percentile : 21 MPH
 95th Percentile : 28 MPH

Stats
 Mean Speed(Average) : 13 MPH
 10 MPH Pace Speed : 5-14 MPH
 Number in Pace : 4740
 Percent in Pace : 55.9%
 Number of Vehicles > 30 MPH : 337
 Percent of Vehicles > 30 MPH : 4.0%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Connecticut Ave SB at Porter St NW Volume

Start Time	Tue	05-Nov-13	Wed	06-Nov-13	Thu	07-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	82	29	*	*	*	29	82
12:15	*	76	34	*	*	*	34	76
12:30	*	53	21	*	*	*	21	53
12:45	*	88	10	*	*	*	10	88
01:00	*	102	15	*	*	*	15	102
01:15	*	59	15	*	*	*	15	59
01:30	*	66	11	*	*	*	11	66
01:45	*	116	7	*	*	*	7	116
02:00	*	117	16	*	*	*	16	117
02:15	*	129	10	*	*	*	10	129
02:30	*	131	10	*	*	*	10	131
02:45	*	129	9	*	*	*	9	129
03:00	*	132	7	*	*	*	7	132
03:15	*	118	6	*	*	*	6	118
03:30	19	120	*	*	*	*	19	120
03:45	10	127	*	*	*	*	10	127
04:00	15	123	*	*	*	*	15	123
04:15	17	127	*	*	*	*	17	127
04:30	32	115	*	*	*	*	32	115
04:45	34	119	*	*	*	*	34	119
05:00	41	104	*	*	*	*	41	104
05:15	55	98	*	*	*	*	55	98
05:30	83	78	*	*	*	*	83	78
05:45	90	75	*	*	*	*	90	75
06:00	101	77	*	*	*	*	101	77
06:15	107	72	*	*	*	*	107	72
06:30	115	100	*	*	*	*	115	100
06:45	128	103	*	*	*	*	128	103
07:00	133	137	*	*	*	*	133	137
07:15	165	115	*	*	*	*	165	115
07:30	175	122	*	*	*	*	175	122
07:45	179	108	*	*	*	*	179	108
08:00	186	115	*	*	*	*	186	115
08:15	198	112	*	*	*	*	198	112
08:30	201	119	*	*	*	*	201	119
08:45	175	103	*	*	*	*	175	103
09:00	183	99	*	*	*	*	183	99
09:15	153	117	*	*	*	*	153	117
09:30	132	98	*	*	*	*	132	98
09:45	127	90	*	*	*	*	127	90
10:00	73	76	*	*	*	*	73	76
10:15	71	74	*	*	*	*	71	74
10:30	107	90	*	*	*	*	107	90
10:45	92	80	*	*	*	*	92	80
11:00	78	66	*	*	*	*	78	66
11:15	109	63	*	*	*	*	109	63
11:30	110	37	*	*	*	*	110	37
11:45	92	31	*	*	*	*	92	31
Total	3586	4688	200	0	0	0	3786	4688
Combined Total	8274		200		0		8474	
Peak	07:45	02:15	12:00				07:45	02:15
Vol.	764	521	94				764	521
P.H.F.	0.950	0.987	0.691				0.950	0.987
ADT	ADT 8,474		AADT 8,474					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: CONNECTICUT AVE,NW From RODMAN ST,NW TO ORDWAY ST,NW

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

Prepared Date: 10/6/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	85	Right Angle:	8	9.4%	Fixed Object:	1	1.2%
Total Number of Fatalities:	0	Left Turn:	11	12.9%	Ran Off Road:	1	1.2%
Total Number of Injuries:	28	Right Turn:	1	1.2%	Ped. Involved:	2	2.4%
Total Number of Disabling Injuries:	0	Rear End:	21	24.7%	Backing:	1	1.2%
Total Number of NonDisabling Injuries:	6	Side Swiped:	24	28.2%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	2	Head On:	1	1.2%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	4	Parked:	3	3.5%	Unspecified:	11	12.9%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	9	10.6%	Sunday:	4	4.7%
09:30 ~ 11:30:	7	8.2%	Monday:	13	15.3%
11:30 ~ 13:30:	14	16.5%	Tuesday:	12	14.1%
13:30 ~ 16:00:	11	12.9%	Wednesday:	12	14.1%
16:00 ~18:30:	25	29.4%	Thursday:	13	15.3%
18:30 ~ 07:30:	19	22.4%	Friday:	19	22.4%
Unspecified:	0	0.0%	Saturday:	12	14.1%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	63	74.1%	Dry:	64	75.3%
Rain:	13	15.3%	Wet:	14	16.5%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	1	1.2%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	1	1.2%	Repairing:	0	0.0%
Unspecified:	7	8.2%	Unspecified:	7	8.2%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	121	72.0%	Fatal Collision:	0	0.0%
Bus:	3	1.8%	Injury Collision:	21	24.7%
Truck:	15	8.9%	PDO Collision:	64	75.3%
Taxi:	16	9.5%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	5	3.0%	Daylight:	61	71.8%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	1	1.2%
Bicycle:	4	2.4%	Dark(Lighted):	19	22.4%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	4	2.4%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	4	4.7%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	0	0.0%	In Crosswalk with Signal:	1	50.0%
Driver: Alcohol/Drug:	1	0.6%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	28	16.7%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	1	50.0%
Roadway:	3	1.8%	From Between Parked Cars:	0	0.0%
Unspecified:	136	81.0%	Unspecified:	0	0.0%

49 Records are not approved as of 10/6/2013 1:03:14 PM