



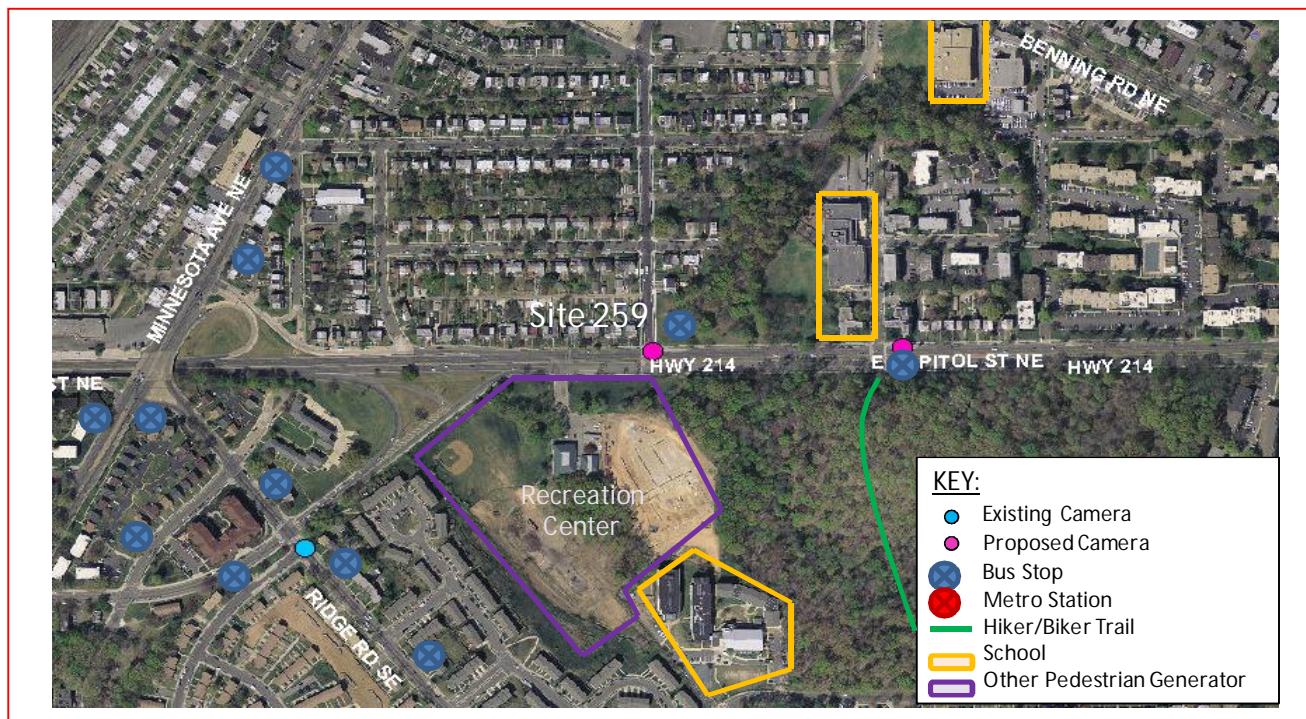
District Department of Transportation

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

4000 Block East Capitol Street NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	603	7	7A	Proposed	4000 Block East Capitol Street Northeast, Westbound



This *proposed* speed camera will be located in Ward 7 at the 4000 block of East Capitol Street Northeast in the westbound direction. East Capitol Street Northeast runs between Southern Avenue Southeast to the east and C Street Northeast to the west. The posted speed limit is 35 MPH.

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District Department of Transportation

4000 Block East Capitol Street NE

Field Assessment Summary

East Capitol Street Northeast is assumed to run in an east-west direction, and is classified as a principal arterial. East Capitol Street Northeast has three travel lanes in each direction. This site has the following characteristics:

- This is a residential area with houses and apartments on the north side of the street and Fort Chaplin Park on the south side of the street.
- There is a hiker/biker trail that runs through Fort Chaplin Park.
- There are two schools in the area: DC Prep and the Seed School. There is also the Benning Soddert Recreation Center and a Boys and Girls Club of America close to the site.
- There is a grassy median and sidewalk on both sides of the street.
- There is on-street parking on the south side of the street. The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a slope downgrade westbound.
- There are crosswalks at 40th Street and 41st Street.
- There is a bus stop in both directions at 41st Street and westbound a 40th Street.



Looking Eastbound

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District Department of Transportation

4000 Block East Capitol Street NE



Looking Westbound

Speed Data Analysis

	Westbound
Posted Speed Limit (MPH)	35
Mean Speed (MPH)	36
85th Percentile Speed (MPH)	46
10 MPH Pace Speed	35-44
ADT	12,625

The mean speed is higher than the posted speed limit by 1 MPH, and the 85th percentile speed is higher than the posted speed limit by 11 MPH at this location.

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 22 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. There was one crash where vehicular speeding was the contributing factor. Furthermore, the site experienced eight injury-related crashes.

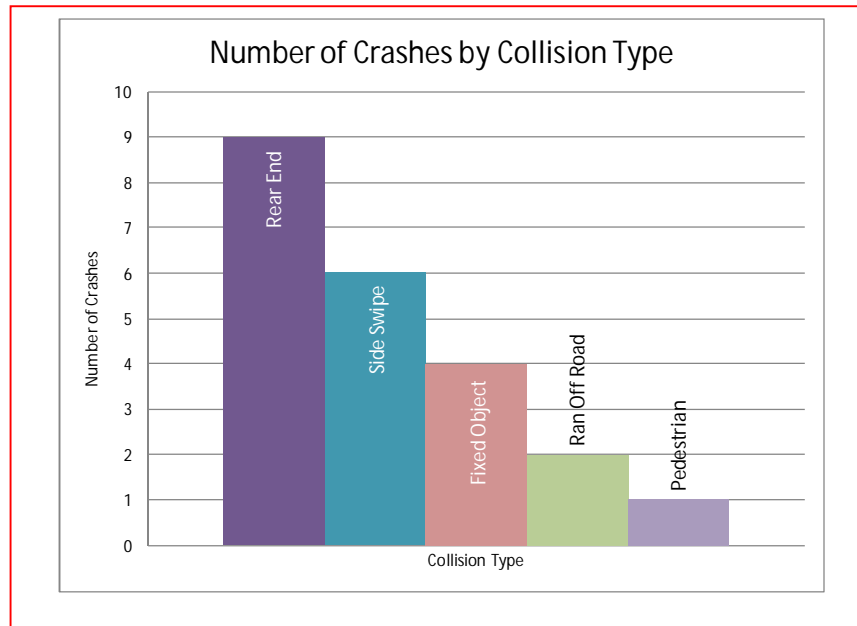
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4000 Block East Capitol Street NE

Severity			Weather			Surface condition			Light Condition		
Total	22										
Fatal	0	0.0%	Clear	19	86.4%	Dry	17	77.3%	Day	14	63.6%
Injury	8	36.4%	Rain	3	13.6%	Wet	3	13.6%	Night	6	27.3%
Bus	2	9.1%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Truck	1	4.5%									



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 – This location experienced eight injury-related crashes. There was also one crash where vehicular speeding was the contributing factor.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses and apartments.
 - b. There are two schools in the area: DC Prep and the Seed School.
 - c. There is the Benning Soddert Recreation Center and a Boys and Girls Club of America close to the site.
 - d. Fort Chaplin Park is in the area which generates pedestrian and bicycle activity.

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District Department of Transportation

4000 Block East Capitol Street NE

- e. There are several bus stops in the area which generate pedestrian activity.
- f. There is on-street parking on the south side of the street.

Due to the speed data analysis, the elevated number of 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.

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SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4000 block of East Capitol St NE WB Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/19/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	2	0	1	4	13	13	10	1	2	1	0	0	0	0	47
02:00	0	1	0	2	6	13	10	2	2	0	0	1	0	0	37
03:00	0	0	0	0	10	20	9	4	3	0	0	1	0	0	47
04:00	1	1	0	3	10	37	43	31	21	1	0	0	1	0	149
05:00	9	0	1	4	31	75	144	125	76	26	14	2	0	0	507
06:00	73	21	16	36	75	263	405	257	142	50	12	2	0	1	1353
07:00	222	27	49	93	252	443	348	115	43	2	3	2	0	0	1599
08:00	207	34	71	173	220	304	191	103	43	4	2	0	0	0	1352
09:00	51	0	2	24	86	334	270	155	62	24	11	2	0	1	1022
10:00	19	5	16	31	114	153	177	87	26	6	1	0	0	0	635
11:00	7	1	3	19	75	144	123	78	22	7	2	0	0	0	481
12 PM	5	0	3	24	75	153	128	62	24	8	1	2	0	0	485
13:00	21	1	3	32	80	150	123	71	24	5	0	1	1	0	512
14:00	16	1	5	31	109	182	115	100	31	5	1	1	0	0	597
15:00	11	2	6	40	140	153	140	60	14	7	4	0	0	0	577
16:00	21	5	21	99	173	194	92	50	15	2	1	0	0	0	673
17:00	34	2	10	48	123	164	97	31	8	5	0	0	0	0	522
18:00	20	0	9	61	151	174	87	34	8	3	3	0	0	0	550
19:00	11	1	10	30	77	114	57	17	4	0	0	0	0	0	321
20:00	4	0	3	28	86	101	64	30	10	3	1	0	0	0	330
21:00	5	2	2	29	72	98	67	31	8	1	0	0	0	1	316
22:00	2	2	4	12	51	74	61	32	12	1	2	0	0	0	253
23:00	2	0	2	7	45	46	48	11	4	5	1	0	0	0	171
Total	743	106	237	830	2074	3402	2809	1487	604	166	59	14	2	3	12536

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4000 block of East Capitol St NE WB Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/20/13	0	0	1	8	15	26	22	7	6	3	0	0	0	1	89
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	0	0	1	8	15	26	22	7	6	3	0	0	0	1	89
Grand Total	743	106	238	838	2089	3428	2831	1494	610	169	59	14	2	4	12625

15th Percentile : 26 MPH
 50th Percentile : 37 MPH
 85th Percentile : 46 MPH
 95th Percentile : 51 MPH

Stats
 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 35-44 MPH
 Number in Pace : 5711
 Percent in Pace : 45.2%
 Number of Vehicles > 35 MPH : 8034
 Percent of Vehicles > 35 MPH : 63.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4000 block of East Capitol St NE WB Volume

Start Time	19-Nov-13		20-Nov-13		21-Nov-13		Daily Average	
	Tue A.M.	P.M.	Wed A.M.	P.M.	Thu A.M.	P.M.	A.M.	P.M.
12:00	*	123	28	*	*	*	28	123
12:15	*	110	23	*	*	*	23	110
12:30	*	117	26	*	*	*	26	117
12:45	*	135	12	*	*	*	12	135
01:00	14	131	*	*	*	*	14	131
01:15	10	129	*	*	*	*	10	129
01:30	12	122	*	*	*	*	12	122
01:45	11	130	*	*	*	*	11	130
02:00	5	143	*	*	*	*	5	143
02:15	7	162	*	*	*	*	7	162
02:30	11	144	*	*	*	*	11	144
02:45	14	148	*	*	*	*	14	148
03:00	7	150	*	*	*	*	7	150
03:15	12	163	*	*	*	*	12	163
03:30	14	131	*	*	*	*	14	131
03:45	14	133	*	*	*	*	14	133
04:00	14	202	*	*	*	*	14	202
04:15	38	155	*	*	*	*	38	155
04:30	45	152	*	*	*	*	45	152
04:45	52	164	*	*	*	*	52	164
05:00	80	139	*	*	*	*	80	139
05:15	95	172	*	*	*	*	95	172
05:30	163	78	*	*	*	*	163	78
05:45	169	133	*	*	*	*	169	133
06:00	239	139	*	*	*	*	239	139
06:15	301	139	*	*	*	*	301	139
06:30	405	156	*	*	*	*	405	156
06:45	408	116	*	*	*	*	408	116
07:00	483	67	*	*	*	*	483	67
07:15	494	86	*	*	*	*	494	86
07:30	363	76	*	*	*	*	363	76
07:45	259	92	*	*	*	*	259	92
08:00	221	87	*	*	*	*	221	87
08:15	365	83	*	*	*	*	365	83
08:30	348	89	*	*	*	*	348	89
08:45	418	71	*	*	*	*	418	71
09:00	327	89	*	*	*	*	327	89
09:15	276	86	*	*	*	*	276	86
09:30	232	72	*	*	*	*	232	72
09:45	187	69	*	*	*	*	187	69
10:00	173	73	*	*	*	*	173	73
10:15	162	64	*	*	*	*	162	64
10:30	150	60	*	*	*	*	150	60
10:45	150	56	*	*	*	*	150	56
11:00	122	49	*	*	*	*	122	49
11:15	115	55	*	*	*	*	115	55
11:30	117	37	*	*	*	*	117	37
11:45	127	30	*	*	*	*	127	30
Total	7229	5307	89	0	0	0	7318	5307
Combined Total	12536		89		0		12625	
Peak	06:30	04:00	12:00				06:30	04:00
Vol.	1790	673	89				1790	673
P.H.F.	0.906	0.833	0.795				0.906	0.833
ADT	ADT 12,625		AADT 12,625					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: EAST CAPITOL ST,BN From BURNS ST,BN TO FORTY FIRST ST,BN

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

Prepared Date: 9/15/2013

Total Number of Accident:	22	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	0	0.0%	Fixed Object:	4	18.2%
Total Number of Injuries:	17	Left Turn:	0	0.0%	Ran Off Road:	2	9.1%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	1	4.5%
Total Number of NonDisabling Injuries:	4	Rear End:	9	40.9%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	1	Side Swiped:	6	27.3%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Time of Day				Day o fweek			
	#ACC	%			#ACC	%	
07:30 ~ 09:30:	4	18.2%		Sunday:	2	9.1%	
09:30 ~ 11:30:	3	13.6%		Monday:	2	9.1%	
11:30 ~ 13:30:	2	9.1%		Tuesday:	5	22.7%	
13:30 ~ 16:00:	1	4.5%		Wednesday:	1	4.5%	
16:00 ~18:30:	2	9.1%		Thursday:	6	27.3%	
18:30 ~ 07:30:	10	45.5%		Friday:	2	9.1%	
Unspecified:	0	0.0%		Saturday:	4	18.2%	
Weather Condition				Surface Condition			
	#ACC	%			#ACC	%	
Clear:	19	86.4%		Dry:	17	77.3%	
Rain:	3	13.6%		Wet:	3	13.6%	
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:	0	0.0%		Unspecified:	2	9.1%	
Type of Vehicle				Accident Severity Type			
	#VEH	%			#ACC	%	
Passenger Car:	37	92.5%		Fatal Collision:	0	0.0%	
Bus:	2	5.0%		Injury Collision:	8	36.4%	
Truck:	1	2.5%		PDO Collision:	14	63.6%	
Taxi:	0	0.0%		Light Condition			
Minivan:	0	0.0%			#ACC	%	
Police/Emergency Vehicle:	0	0.0%		Daylight:	14	63.6%	
Motorcycle/Moped:	0	0.0%		Dawn/Dusk:	1	4.5%	
Bicycle:	0	0.0%		Dark(Lighted):	5	22.7%	
Fixed Object:	0	0.0%		Dark(Not Lighted):	1	4.5%	
Unspecified:	0	0.0%		Dark(Unknown Lighting):	0	0.0%	
				Unspecified:	1	4.5%	
Contributing Factor				Pedestrian Actions			
	#VEH	%			#ACC	%	
Driver: Speed:	1	2.5%		In Crosswalk with Signal:	0	0.0%	
Driver: Alcohol/Drug:	2	5.0%		In Crosswalk against Signal:	1	100.0%	
Driver: Electronic Device:	0	0.0%		In Crosswalk no Signal:	0	0.0%	
Driver: Others:	5	12.5%		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:	32	80.0%		Unspecified:	0	0.0%	

16 Records are not approved as of 9/15/2013 2:22:04 PM