



District Department of Transportation

Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 1800 Block C Street NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
5	507	6	6A	Proposed	1800 Block C Street Northeast Eastbound



The *proposed* speed camera will be located at the 1800 block of C Street Northeast for the eastbound traffic. C Street Northeast runs from First Street NW in the west to East Capitol Street SE in the east. The posted speed limit is 25 MPH.

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District Department of Transportation

55 M Street, SE, Suite 400

Washington, DC 20003



District Department of Transportation

1800 Block C Street NE

Field Assessment Summary

C Street NE is assumed to run in an east-west direction and is classified as a minor arterial. C Street NE has two travel lanes in the eastbound direction and 3 travel lanes in the westbound direction. This site has the following characteristics:

- This site is located in a residential area with houses on both sides of the roadway as well as a school.
- There is sidewalk on both sides of the roadway.
- There is a bike lane and on street parking in both directions of travel.
- There are 3 schools in the area: Gibbs Elementary School, Eliot-Hine Middle School and Eastern Senior High School.
- There are several bus stops in the area that generate pedestrian activity.
- RFK Stadium is also close to the site and generates pedestrian activity.



Looking Westbound



District Department of Transportation

1800 Block C Street NE



Looking Eastbound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	23
85th Percentile Speed (MPH)	33
10 MPH Pace Speed	23-32
ADT	5,396

The mean speed is lower than the posted speed by 2 MPH and the 85th percentile speed is higher than the posted speed limit by 8 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 28 accidents at this location. A breakdown of the number of crashes can be found on the next page. The most common types of crashes at this location were Rear End (7 crashes), Right Angle (5 crashes), and Left Turn (4 crashes). There were five (5) crashes where vehicular speeding was the contributing factor. Furthermore, this site experienced a high frequency (15 crashes) of injury-related crashes.

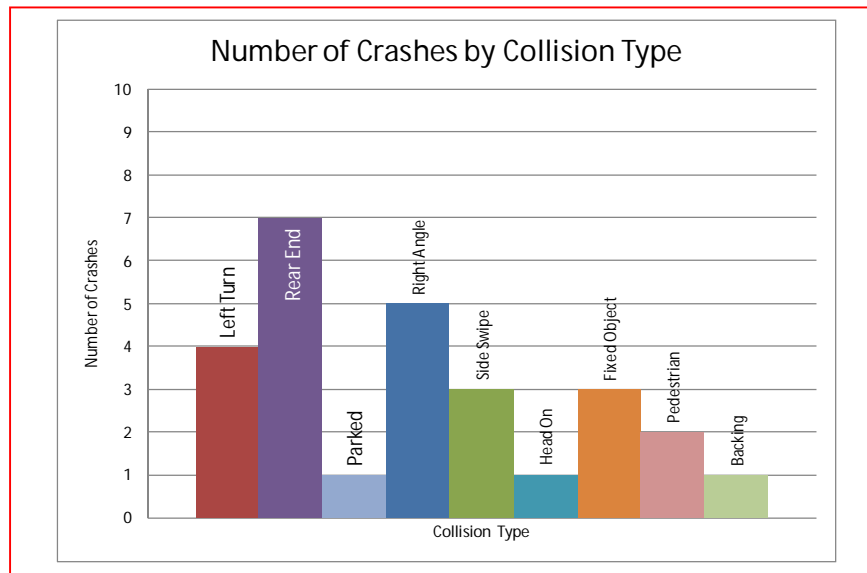
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District Department of Transportation

1800 Block C Street NE

Severity			Weather			Surface condition			Light Condition		
Total	28										
Fatal	0	0.0%	Clear	23	82.1%	Dry	24	85.7%	Day	15	53.6%
Injury	15	53.6%	Rain	3	10.7%	Wet	4	14.3%	Night	11	39.3%
Bus	2	7.1%	Fog/Mist	1	3.6%	Snow/Ice	0	0.0%			
Truck	2	7.1%									



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 85th percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – This site experienced a high frequency (15 crashes) of injury-related crashes. There were five (5) crashes where vehicular speeding was the contributing factor.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This site is located in a residential area with houses on both sides of the roadway as well as a school.
 - b. There is a bike lane and on street parking in both directions of travel.
 - c. There are 3 schools in the area: Gibbs Elementary School, Eliot-Hine Middle School and Eastern Senior High School.
 - d. There are several bus stops in the area that generate pedestrian activity.

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1800 Block C Street NE

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

1800 block of C St NE EB Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/18/13	4	4	16	14	4	1	0	0	0	0	0	0	0	0	43
01:00	0	0	7	7	2	0	0	0	0	0	0	0	0	0	16
02:00	0	1	6	7	1	0	0	0	0	0	0	0	0	0	15
03:00	0	1	0	4	0	0	0	1	0	0	0	0	0	0	6
04:00	1	1	5	3	0	0	0	0	0	0	0	0	0	0	10
05:00	4	2	8	11	8	3	3	0	1	0	0	0	0	0	40
06:00	4	1	6	22	26	13	5	3	1	0	0	0	0	0	81
07:00	10	2	14	59	41	28	5	5	0	0	0	0	0	0	164
08:00	8	1	14	74	69	48	11	3	1	0	0	0	0	0	229
09:00	11	0	8	59	64	35	12	1	0	2	0	0	0	0	192
10:00	7	2	7	67	53	26	4	5	1	0	0	0	0	0	172
11:00	4	0	28	67	53	18	6	0	0	0	0	0	0	0	176
12 PM	13	1	29	82	61	36	6	0	0	0	0	0	0	0	228
13:00	16	3	16	76	62	23	10	5	0	0	1	0	0	0	212
14:00	32	15	56	86	94	49	17	8	2	1	1	0	0	0	361
15:00	142	76	92	116	88	53	25	6	3	1	0	0	0	0	602
16:00	216	110	122	107	95	57	20	6	3	4	0	0	0	0	740
17:00	237	95	126	133	107	32	21	4	0	1	1	0	0	0	757
18:00	137	98	107	106	75	38	10	2	0	1	0	0	0	0	574
19:00	13	44	99	89	15	2	0	0	0	0	0	0	0	0	262
20:00	10	24	70	50	15	3	1	0	0	0	0	0	0	0	173
21:00	5	9	66	38	6	2	1	0	0	0	0	0	0	0	127
22:00	6	11	42	48	17	1	2	0	0	0	0	0	0	0	127
23:00	6	8	46	23	6	0	0	0	0	0	0	0	0	0	89
Total	886	509	990	1348	962	468	159	49	12	10	3	0	0	0	5396
Grand Total	886	509	990	1348	962	468	159	49	12	10	3	0	0	0	5396

15th Percentile : 8 MPH
 50th Percentile : 24 MPH
 85th Percentile : 33 MPH
 95th Percentile : 39 MPH

Stats
 Mean Speed(Average) : 23 MPH
 10 MPH Pace Speed : 23-32 MPH
 Number in Pace : 1974
 Percent in Pace : 36.6%
 Number of Vehicles > 25 MPH : 2518
 Percent of Vehicles > 25 MPH : 46.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1800 block of C St NE EB 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	12	40	*	*	*	*	12	40
12:15	15	66	*	*	*	*	15	66
12:30	9	63	*	*	*	*	9	63
12:45	7	59	*	*	*	*	7	59
01:00	6	40	*	*	*	*	6	40
01:15	3	58	*	*	*	*	3	58
01:30	5	65	*	*	*	*	5	65
01:45	2	49	*	*	*	*	2	49
02:00	5	73	*	*	*	*	5	73
02:15	4	79	*	*	*	*	4	79
02:30	4	98	*	*	*	*	4	98
02:45	2	111	*	*	*	*	2	111
03:00	1	134	*	*	*	*	1	134
03:15	1	136	*	*	*	*	1	136
03:30	2	156	*	*	*	*	2	156
03:45	2	176	*	*	*	*	2	176
04:00	2	175	*	*	*	*	2	175
04:15	4	180	*	*	*	*	4	180
04:30	2	188	*	*	*	*	2	188
04:45	2	197	*	*	*	*	2	197
05:00	5	182	*	*	*	*	5	182
05:15	8	204	*	*	*	*	8	204
05:30	10	201	*	*	*	*	10	201
05:45	17	170	*	*	*	*	17	170
06:00	17	170	*	*	*	*	17	170
06:15	9	165	*	*	*	*	9	165
06:30	28	135	*	*	*	*	28	135
06:45	27	104	*	*	*	*	27	104
07:00	37	72	*	*	*	*	37	72
07:15	36	66	*	*	*	*	36	66
07:30	43	62	*	*	*	*	43	62
07:45	48	62	*	*	*	*	48	62
08:00	64	45	*	*	*	*	64	45
08:15	55	45	*	*	*	*	55	45
08:30	56	41	*	*	*	*	56	41
08:45	54	42	*	*	*	*	54	42
09:00	62	41	*	*	*	*	62	41
09:15	32	32	*	*	*	*	32	32
09:30	54	23	*	*	*	*	54	23
09:45	44	31	*	*	*	*	44	31
10:00	48	43	*	*	*	*	48	43
10:15	44	33	*	*	*	*	44	33
10:30	44	27	*	*	*	*	44	27
10:45	36	24	*	*	*	*	36	24
11:00	49	24	*	*	*	*	49	24
11:15	39	26	*	*	*	*	39	26
11:30	52	21	*	*	*	*	52	21
11:45	36	18	*	*	*	*	36	18
Total	1144	4252	0	0	0	0	1144	4252
Combined Total	5396		0		0		5396	
Peak	08:00	04:45					08:00	04:45
Vol.	229	784					229	784
P.H.F.	0.895	0.961					0.895	0.961
ADT	ADT 5,396		AADT 5,396					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: C ST,NE From SEVENTEENTH ST,NE TO NINETEENTH ST,NE
Time Period Covered: From 01/01/2010 To 12/31/2012 **Prepared By:** Rahul Jain **Prepared Date:** 11/24/2012

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	28	Right Angle:	5	17.9%	Fixed Object:	3	10.7%
Total Number of Fatalities:	0	Left Turn:	4	14.3%	Ran Off Road:	0	0.0%
Total Number of Injuries:	21	Right Turn:	0	0.0%	Ped. Involved:	2	7.1%
Total Number of Disabling Injuries:	1	Rear End:	7	25.0%	Backing:	1	3.6%
Total Number of NonDisabling Injuries:	1	Side Swiped:	3	10.7%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	2	Head On:	1	3.6%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	1	3.6%	Unspecified:	1	3.6%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	2	7.1%	Sunday:	3	10.7%
09:30 ~ 11:30:	4	14.3%	Monday:	3	10.7%
11:30 ~ 13:30:	0	0.0%	Tuesday:	2	7.1%
13:30 ~ 16:00:	4	14.3%	Wednesday:	6	21.4%
16:00 ~18:30:	5	17.9%	Thursday:	2	7.1%
18:30 ~ 07:30:	13	46.4%	Friday:	7	25.0%
Unspecified:	0	0.0%	Saturday:	5	17.9%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	23	82.1%	Dry:	24	85.7%
Rain:	3	10.7%	Wet:	4	14.3%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	1	3.6%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	1	3.6%	Unspecified:	0	0.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	44	83.0%	Fatal Collision:	0	0.0%
Bus:	2	3.8%	Injury Collision:	15	53.6%
Truck:	2	3.8%	PDO Collision:	13	46.4%
Taxi:	1	1.9%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	1	1.9%	Daylight:	15	53.6%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	2	7.1%
Bicycle:	0	0.0%	Dark(Lighted):	11	39.3%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	3	5.7%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	5	9.4%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	1	1.9%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	10	18.9%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	1	50.0%
Roadway:	1	1.9%	From Between Parked Cars:	0	0.0%
Unspecified:	36	67.9%	Unspecified:	1	50.0%

17 Records are not approved as of 11/24/2013 6:17:56 PM