



District Department of Transportation

Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 200-300 Blocks E Street SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
1	105	6	6D	Proposed	200-300 Blocks E Street Southeast



The *proposed* speed camera will be located in Ward 6 between the 200-300 blocks of E Street Southeast. E Street Southeast runs from I-395 to the west and 19th Street Southeast to the east. The posted speed limit is 25 MPH.

W6 - 241





District Department of Transportation

200-300 Blocks E Street SE

Field Assessment Summary

E Street SE is assumed to run in an east-west direction and is classified as a local road. E Street SE has one travel lane in each direction. This site has the following characteristics:

- This site is located in a residential area with houses and apartments on both sides of the roadway.
- Sidewalks with curb and gutter exist on both sides of the street.
- There are 6 schools in the area: Giddings School, Capitol Hill Day School, St. Peter's School, Brent Elementary School, The Hill Preschool and Hine Junior High School.
- There are several bus stops and one Metrorail Station in the area that generate pedestrian activity.
- Garfield Park, Providence Park and Marion Park are all in the vicinity of the site.



Looking Eastbound

W6 - 242



District Department of Transportation

200-300 Blocks E Street SE



Looking Westbound

Speed Data Analysis

	Westbound	Eastbound
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	16	18
85th Percentile Speed (MPH)	23	26
10 MPH Pace Speed	7-16	20-29
Sample Size	681	1,061
ADT	1,742	

The mean speed is less than the posted speed limit in both directions at this location. The 85th percentile speed is less than the posted speed by 2 MPH in the westbound direction and higher than the posted speed by 1 MPH in the eastbound direction at this location.

Crash Data Analysis

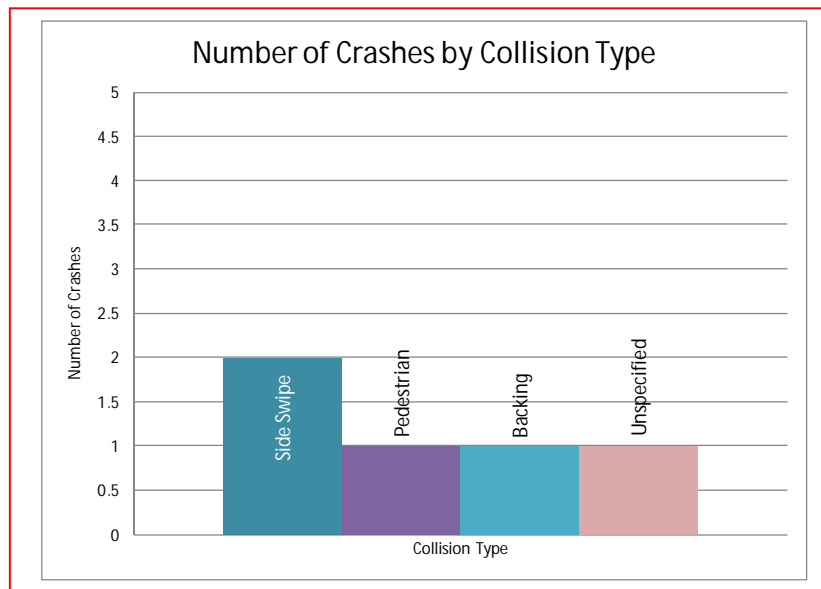
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012 there were a total of five crashes at this location. A breakdown of number of crashes by collision type can be found in the chart below. The most common types of crashes at this location were Side Swiped (2). There was one (1) crash where vehicular speeding was the contributing factor.



District Department of Transportation

200-300 Blocks E Street SE

Severity			Weather			Surface condition			Light Condition		
Total	5										
Fatal	0	0.0%	Clear	4	80.0%	Dry	4	80.0%	Day	4	80.0%
Injury	1	20.0%	Rain	0	0.0%	Wet	0	0.0%	Night	0	0.0%
Bus	2	40.0%	Snow/Ice	0	0.0%	Repairing	0	0.0%			
Truck	2	40.0%									



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 in the eastbound direction while it is lower in the westbound direction at this location.
2. Crash Data – The crash data analysis shows a low number of crashes at this location. There was one (1) 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 site is located in a residential area with many apartment buildings and houses on both sides of the street and in the surrounding area.
 - b. There are 6 schools in the area: Giddings School, Capitol Hill Day School, St. Peter’s School, Brent Elementary School, The Hill Preschool and Hine Junior High School.



District Department of Transportation

200-300 Blocks E Street SE

- c. Garfield Park, Providence Park and Marion Park are all in the vicinity of the site.
- d. There are several bus stops and one Metrorail Station in the area that generate pedestrian activity.

Although the crash data analysis showed a low number of crashes at this location, due to the speed data analysis, 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.

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

200-300 blocks of E St SE Speed

WB

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
11/24/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	0	2	0	4	0	0	0	0	0	0	0	0	0	0	6
Total	0	2	0	4	0	0	0	0	0	0	0	0	0	0	6

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

200-300 blocks of E St SE Speed

WB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/25/13	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
02:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
04:00	0	1	1	2	1	0	0	0	0	0	0	0	0	0	5
05:00	0	2	0	4	0	0	0	0	0	0	0	0	0	0	6
06:00	3	3	12	4	0	0	0	0	0	0	0	0	0	0	22
07:00	11	10	11	7	0	0	0	0	0	0	0	0	0	0	39
08:00	81	23	22	6	1	0	0	0	0	0	0	0	0	0	133
09:00	2	11	19	7	0	0	0	0	0	0	0	0	0	0	39
10:00	3	5	14	8	0	0	0	0	0	0	0	0	0	0	30
11:00	5	11	10	2	2	0	0	0	0	0	0	0	0	0	30
12 PM	4	13	11	3	0	0	0	0	0	0	0	0	0	0	31
13:00	1	11	16	7	2	0	0	0	0	0	0	0	0	0	37
14:00	5	9	15	7	2	1	0	0	0	0	0	0	0	0	39
15:00	39	14	14	1	1	0	0	0	0	0	0	0	0	0	69
16:00	19	11	10	3	0	0	0	0	0	0	0	0	0	0	43
17:00	24	10	8	3	0	0	0	0	0	0	0	0	0	0	45
18:00	10	8	9	3	1	0	0	0	0	0	0	0	0	0	31
19:00	4	6	18	3	2	1	0	0	0	0	0	0	0	0	34
20:00	0	6	11	1	2	0	0	0	0	0	0	0	0	0	20
21:00	2	2	2	1	0	0	0	0	0	0	0	0	0	0	7
22:00	1	1	6	1	0	0	0	0	0	0	0	0	0	0	9
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	215	160	210	73	15	2	0	0	0	0	0	0	0	0	675
Grand Total	215	162	210	77	15	2	0	0	0	0	0	0	0	0	681

15th Percentile : 6 MPH
 50th Percentile : 15 MPH
 85th Percentile : 23 MPH
 95th Percentile : 27 MPH

Stats
 Mean Speed(Average) : 16 MPH
 10 MPH Pace Speed : 7-16 MPH
 Number in Pace : 282
 Percent in Pace : 41.4%
 Number of Vehicles > 25 MPH : 80
 Percent of Vehicles > 25 MPH : 11.8%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

200-300 blocks of E St SE Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/25/13	0	1	3	0	1	0	0	0	0	0	0	0	0	0	5
01:00	0	2	2	1	0	0	0	0	0	0	0	0	0	0	5
02:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
04:00	0	0	4	1	1	0	0	0	0	0	0	0	0	0	6
05:00	1	0	8	2	1	0	0	0	0	0	0	0	0	0	12
06:00	5	3	3	5	1	0	0	0	0	0	0	0	0	0	17
07:00	7	4	12	7	3	0	0	0	0	0	0	0	0	0	33
08:00	34	11	25	5	1	0	0	0	0	0	0	0	0	0	76
09:00	6	11	12	8	0	0	0	0	0	0	0	0	0	0	37
10:00	5	15	16	5	0	0	0	0	0	0	0	0	0	0	41
11:00	5	10	11	3	0	0	0	0	0	0	0	0	0	0	29
12 PM	3	3	19	12	3	1	0	0	0	0	0	0	0	0	41
13:00	4	6	22	7	1	0	0	0	0	0	0	0	0	0	40
14:00	13	8	21	30	4	0	0	0	0	0	0	0	0	0	76
15:00	33	18	33	41	7	1	0	0	0	0	0	0	0	0	133
16:00	26	21	51	40	7	0	0	0	0	0	0	0	0	0	145
17:00	57	23	46	37	1	0	0	0	0	0	0	0	0	0	164
18:00	20	6	25	31	5	0	0	0	0	0	0	0	0	0	87
19:00	11	4	20	17	0	0	0	0	0	0	0	0	0	0	52
20:00	8	5	6	5	0	0	0	0	0	0	0	0	0	0	24
21:00	4	1	3	5	1	0	0	0	0	0	0	0	0	0	14
22:00	3	3	2	5	0	0	0	0	0	0	0	0	0	0	13
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	245	157	348	268	37	2	0	0	0	0	0	0	0	0	1057
Grand Total	245	159	350	268	37	2	0	0	0	0	0	0	0	0	1061

15th Percentile : 7 MPH
 50th Percentile : 19 MPH
 85th Percentile : 26 MPH
 95th Percentile : 29 MPH

Stats
 Mean Speed(Average) : 18 MPH
 10 MPH Pace Speed : 20-29 MPH
 Number in Pace : 460
 Percent in Pace : 43.4%
 Number of Vehicles > 25 MPH : 252
 Percent of Vehicles > 25 MPH : 23.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateg.com

200-300 blocks of E St SE Volume

Start Time	24-Nov-13 Sun		WB		EB		Combined		25-Nov-Mon	WB		EB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	*	0	5	0	13	0	18	
12:15	*	*	*	*	*	*	*	*	1	12	2	6	3	18	
12:30	*	*	*	*	*	*	*	*	0	9	0	13	0	22	
12:45	*	*	*	*	*	*	*	*	0	5	3	9	3	14	
01:00	*	*	*	*	*	*	*	*	1	11	1	11	2	22	
01:15	*	*	*	*	*	*	*	*	1	7	2	12	3	19	
01:30	*	*	*	*	*	*	*	*	0	7	2	9	2	16	
01:45	*	*	*	*	*	*	*	*	0	12	0	8	0	20	
02:00	*	*	*	*	*	*	*	*	0	12	0	19	0	31	
02:15	*	*	*	*	*	*	*	*	1	13	1	18	2	31	
02:30	*	*	*	*	*	*	*	*	1	5	0	22	1	27	
02:45	*	*	*	*	*	*	*	*	0	9	2	17	2	26	
03:00	*	*	*	*	*	*	*	*	0	8	0	34	0	42	
03:15	*	*	*	*	*	*	*	*	0	36	2	38	2	74	
03:30	*	*	*	*	*	*	*	*	1	15	1	27	2	42	
03:45	*	*	*	*	*	*	*	*	0	10	1	34	1	44	
04:00	*	*	*	*	*	*	*	*	0	14	1	42	1	56	
04:15	*	*	*	*	*	*	*	*	1	6	0	25	1	31	
04:30	*	*	*	*	*	*	*	*	4	11	2	38	6	49	
04:45	*	*	*	*	*	*	*	*	0	12	3	40	3	52	
05:00	*	*	*	*	*	*	*	*	0	11	2	32	2	43	
05:15	*	*	*	*	*	*	*	*	1	16	1	35	2	51	
05:30	*	*	*	*	*	*	*	*	2	5	5	47	7	52	
05:45	*	*	*	*	*	*	*	*	3	13	4	50	7	63	
06:00	*	*	*	*	*	*	*	*	2	12	3	27	5	39	
06:15	*	*	*	*	*	*	*	*	7	5	3	19	10	24	
06:30	*	*	*	*	*	*	*	*	4	6	6	24	10	30	
06:45	*	*	*	*	*	*	*	*	9	8	5	17	14	25	
07:00	*	*	*	*	*	*	*	*	8	12	1	16	9	28	
07:15	*	*	*	*	*	*	*	*	9	10	11	13	20	23	
07:30	*	*	*	*	*	*	*	*	8	6	11	12	19	18	
07:45	*	*	*	*	*	*	*	*	14	6	10	11	24	17	
08:00	*	*	*	*	*	*	*	*	24	10	16	11	40	21	
08:15	*	*	*	*	*	*	*	*	72	1	31	4	103	5	
08:30	*	*	*	*	*	*	*	*	18	2	16	6	34	8	
08:45	*	*	*	*	*	*	*	*	19	7	13	3	32	10	
09:00	*	*	*	*	*	*	*	*	15	2	11	3	26	5	
09:15	*	*	*	*	*	*	*	*	7	2	10	5	17	7	
09:30	*	*	*	*	*	*	*	*	13	2	6	4	19	6	
09:45	*	*	*	*	*	*	*	*	4	1	10	2	14	3	
10:00	*	*	*	*	*	*	*	*	9	3	6	3	15	6	
10:15	*	*	*	*	*	*	*	*	4	2	13	6	17	8	
10:30	*	*	*	*	*	*	*	*	9	4	12	1	21	5	
10:45	*	*	*	*	*	*	*	*	8	0	10	3	18	3	
11:00	*	1	*	1	*	2	*	10	*	8	*	18	*		
11:15	*	3	*	2	*	5	*	7	*	9	*	16	*		
11:30	*	2	*	1	*	3	*	4	*	3	*	7	*		
11:45	*	0	*	0	*	0	*	9	*	9	*	18	*		

Total	0	6	6	0	4	4	0	10	10	310	365	268	789	578	1732	1154
Day Total		6	6	4	4	10		10		675	675	1057	1057	1732		
% Total	0.0%	60.0%	60.0%	0.0%	40.0%	40.0%		10		17.9%	21.1%	15.5%	45.6%	45.6%		
Peak Vol.		11:00	6	11:00	4	11:00	10	10		08:00	03:15	08:00	05:00	08:00	03:15	216
P.H.F.		0.500	0.500	0.500	0.500	0.500		0.500		0.462	0.521	0.613	0.820	0.507	0.730	

ADT ADT 1,742 AADT 1,742

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: E ST,SE,SW From SECOND ST,SE TO THIRD ST,SE

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:	5	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	1	Right Turn:	0	0.0%	Ped. Involved:	1	20.0%
Total Number of Disabling Injuries:	0	Rear End:	0	0.0%	Backing:	1	20.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	2	40.0%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	1	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	1	20.0%
Total Number of Motorcycles Involved:	1						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%
09:30 ~ 11:30:	0	0.0%	Monday:	1	20.0%
11:30 ~ 13:30:	2	40.0%	Tuesday:	0	0.0%
13:30 ~ 16:00:	1	20.0%	Wednesday:	3	60.0%
16:00 ~ 18:30:	1	20.0%	Thursday:	0	0.0%
18:30 ~ 07:30:	1	20.0%	Friday:	1	20.0%
Unspecified:	0	0.0%	Saturday:	0	0.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	4	80.0%	Dry:	4	80.0%
Rain:	0	0.0%	Wet:	0	0.0%
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	20.0%	Unspecified:	1	20.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	3	33.3%	Fatal Collision:	0	0.0%
Bus:	2	22.2%	Injury Collision:	1	20.0%
Truck:	2	22.2%	PDO Collision:	4	80.0%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	4	80.0%
Motorcycle/Moped:	1	11.1%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	1	11.1%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	1	20.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	1	11.1%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	1	100.0%
Driver: Others:	1	11.1%	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:	7	77.8%	Unspecified:	0	0.0%

3 Records are not approved as of 9/15/2013 8:32:11 PM