



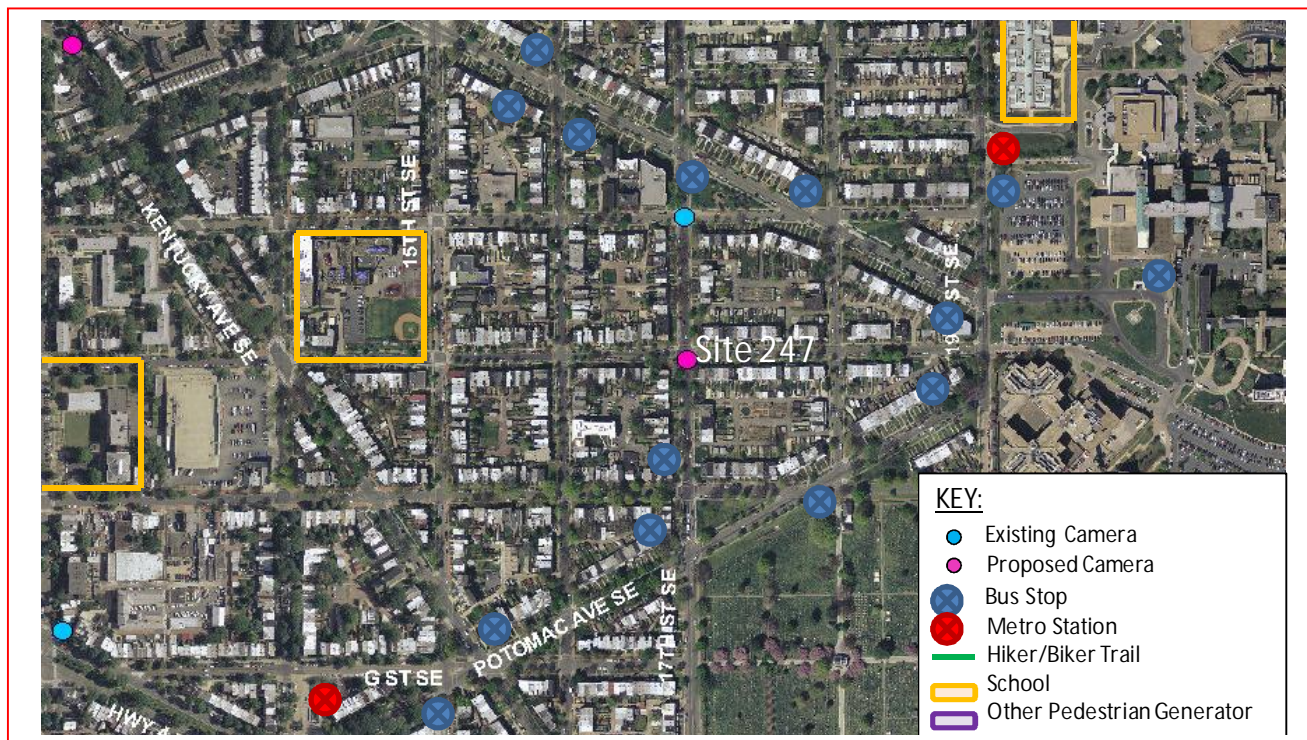
District Department of Transportation

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

400 Block 17th Street SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
1	108	6	6B	Proposed	400 Block of 17 th Street Southeast, Southbound



The *proposed* speed camera will be located in Ward 6 at the 400 block of 17th Street Southeast for the southbound traffic. 17th Street Southeast runs from Bladensburg Road NE in the north to Pennsylvania Avenue Southeast in the south. The posted speed limit is 25 MPH.

W6 - 289





District Department of Transportation

400 Block 17th Street SE

Field Assessment Summary

17th Street Southeast is assumed to run in a south direction and is classified as a minor arterial. 17th Street SE has two travel lanes in the southbound direction. This site has the following characteristics:

- This site is located in a residential area with houses on both sides of the roadway.
- There are sidewalks and on street parking on both sides of the roadway.
- The existing pavement condition is like new and has curb and gutter drainage features on both sides.
- There are 3 schools in the area: International Graduate University, Payne Elementary School and St. Coletta of Greater Washington.
- There are several bus stops and 2 Metrorail stations in the area that generate pedestrian activity.



Looking Northbound



District Department of Transportation

400 Block 17th Street SE



Looking Southbound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	19
85th Percentile Speed (MPH)	25
10 MPH Pace Speed	16-25
ADT	7,874

The mean speed is lower than the posted speed by 6 MPH and the 85th percentile speed is equal to the posted speed 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 16 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 type of crashes at this location was Right Angle (5). The other crash types had three crashes or less each.

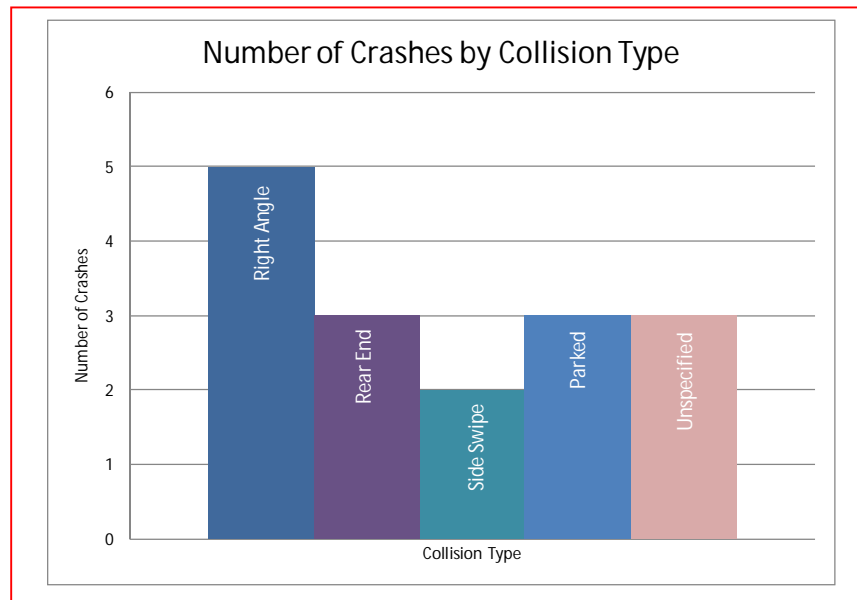
W6 - 291



District Department of Transportation

400 Block 17th Street SE

Severity			Weather			Surface condition			Light Condition		
Total	16										
Fatal	0	0.0%	Clear	16	100.0%	Dry	16	100.0%	Day	7	43.8%
Injury	4	25.0%	Rain	0	0.0%	Wet	0	0.0%	Night	7	43.8%
Bicycle	4	25.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	1	6.3%									



Safety Nexus

This site presents the following safety considerations which may establish a nexus between traffic safety and the speed camera:

1. Speed Data – The 85th percentile speed is equal to the posted speed limit at this location.
2. Crash Data – There were four injury-related crashes at this location.
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 multiple bus stops and 2 Metrorail stations in the area which generate pedestrian activity.
 - c. There are 3 schools in the area: International Graduate University, Payne Elementary School and St. Coletta of Greater Washington.



District Department of Transportation

400 Block 17th Street SE

Although the speed data analysis showed low travel speeds, there are other factors that reflect a safety concern. Due to the number of injury-related crashes, the specific site characteristics of a residential area, the proximity of school zones, and the pedestrian generators, there is a nexus between traffic safety and speed camera at this location.

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

400 block of 17th St SE SB Speed

SB

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
11/19/13	10	27	55	12	2	0	0	0	0	0	0	0	0	0	106
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	10	27	55	12	2	0	0	0	0	0	0	0	0	0	106
Grand Total	975	2340	3316	1030	195	15	3	0	0	0	0	0	0	0	7874

15th Percentile : 10 MPH
 50th Percentile : 19 MPH
 85th Percentile : 25 MPH
 95th Percentile : 28 MPH

Stats
 Mean Speed(Average) : 19 MPH
 10 MPH Pace Speed : 16-25 MPH
 Number in Pace : 4248
 Percent in Pace : 53.9%
 Number of Vehicles > 25 MPH : 1216
 Percent of Vehicles > 25 MPH : 15.4%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

400 block of 17th St SE SB Volume

Start Time	18-Nov-13		19-Nov-13		20-Nov-13		Daily Average	
	Mon A.M.	P.M.	Tue A.M.	P.M.	Wed A.M.	P.M.	A.M.	P.M.
12:00	*	118	29	*	*	*	29	118
12:15	*	124	33	*	*	*	33	124
12:30	*	119	24	*	*	*	24	119
12:45	*	120	20	*	*	*	20	120
01:00	15	113	*	*	*	*	15	113
01:15	22	115	*	*	*	*	22	115
01:30	8	130	*	*	*	*	8	130
01:45	7	122	*	*	*	*	7	122
02:00	9	124	*	*	*	*	9	124
02:15	9	129	*	*	*	*	9	129
02:30	5	119	*	*	*	*	5	119
02:45	4	121	*	*	*	*	4	121
03:00	6	140	*	*	*	*	6	140
03:15	2	115	*	*	*	*	2	115
03:30	2	131	*	*	*	*	2	131
03:45	3	92	*	*	*	*	3	92
04:00	4	90	*	*	*	*	4	90
04:15	4	117	*	*	*	*	4	117
04:30	9	150	*	*	*	*	9	150
04:45	8	125	*	*	*	*	8	125
05:00	8	115	*	*	*	*	8	115
05:15	10	115	*	*	*	*	10	115
05:30	10	123	*	*	*	*	10	123
05:45	11	129	*	*	*	*	11	129
06:00	20	127	*	*	*	*	20	127
06:15	30	142	*	*	*	*	30	142
06:30	55	116	*	*	*	*	55	116
06:45	69	136	*	*	*	*	69	136
07:00	88	119	*	*	*	*	88	119
07:15	121	100	*	*	*	*	121	100
07:30	141	92	*	*	*	*	141	92
07:45	156	83	*	*	*	*	156	83
08:00	162	103	*	*	*	*	162	103
08:15	160	78	*	*	*	*	160	78
08:30	188	72	*	*	*	*	188	72
08:45	177	64	*	*	*	*	177	64
09:00	176	66	*	*	*	*	176	66
09:15	195	62	*	*	*	*	195	62
09:30	196	58	*	*	*	*	196	58
09:45	149	48	*	*	*	*	149	48
10:00	153	45	*	*	*	*	153	45
10:15	147	57	*	*	*	*	147	57
10:30	108	43	*	*	*	*	108	43
10:45	82	30	*	*	*	*	82	30
11:00	77	38	*	*	*	*	77	38
11:15	80	29	*	*	*	*	80	29
11:30	96	40	*	*	*	*	96	40
11:45	115	27	*	*	*	*	115	27
Total	3097	4671	106	0	0	0	3203	4671
Combined Total	7768		106		0		7874	
Peak	08:45	05:30	12:00				08:45	05:30
Vol.	744	521	106				744	521
P.H.F.	0.949	0.868	0.803				0.949	0.868
ADT	ADT 7,874		AADT 7,874					

Accident Summary Report (R-8)**Corridor:** 17TH ST,NE,SE From C ST,SE TO E 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:	16	Right Angle:	5	31.3%	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:	7	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	3	18.8%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	2	12.5%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	4	Parked:	3	18.8%	Unspecified:	3	18.8%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	2	12.5%	Sunday:	1	6.3%
09:30 ~ 11:30:	1	6.3%	Monday:	2	12.5%
11:30 ~ 13:30:	0	0.0%	Tuesday:	3	18.8%
13:30 ~ 16:00:	3	18.8%	Wednesday:	2	12.5%
16:00 ~18:30:	2	12.5%	Thursday:	1	6.3%
18:30 ~ 07:30:	8	50.0%	Friday:	4	25.0%
Unspecified:	0	0.0%	Saturday:	3	18.8%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	16	100.0%	Dry:	16	100.0%
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:	0	0.0%	Unspecified:	0	0.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	31	81.6%	Fatal Collision:	0	0.0%
Bus:	1	2.6%	Injury Collision:	4	25.0%
Truck:	1	2.6%	PDO Collision:	12	75.0%
Taxi:	1	2.6%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	7	43.8%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	2	12.5%
Bicycle:	4	10.5%	Dark(Lighted):	6	37.5%
Fixed Object:	0	0.0%	Dark(Not Lighted):	1	6.3%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	0	0.0%	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:	0	0.0%
Driver: Others:	6	15.8%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	2	5.3%	From Between Parked Cars:	0	0.0%
Unspecified:	30	78.9%	Unspecified:	0	0.0%

14 Records are not approved as of 9/15/2013 8:43:43 PM