



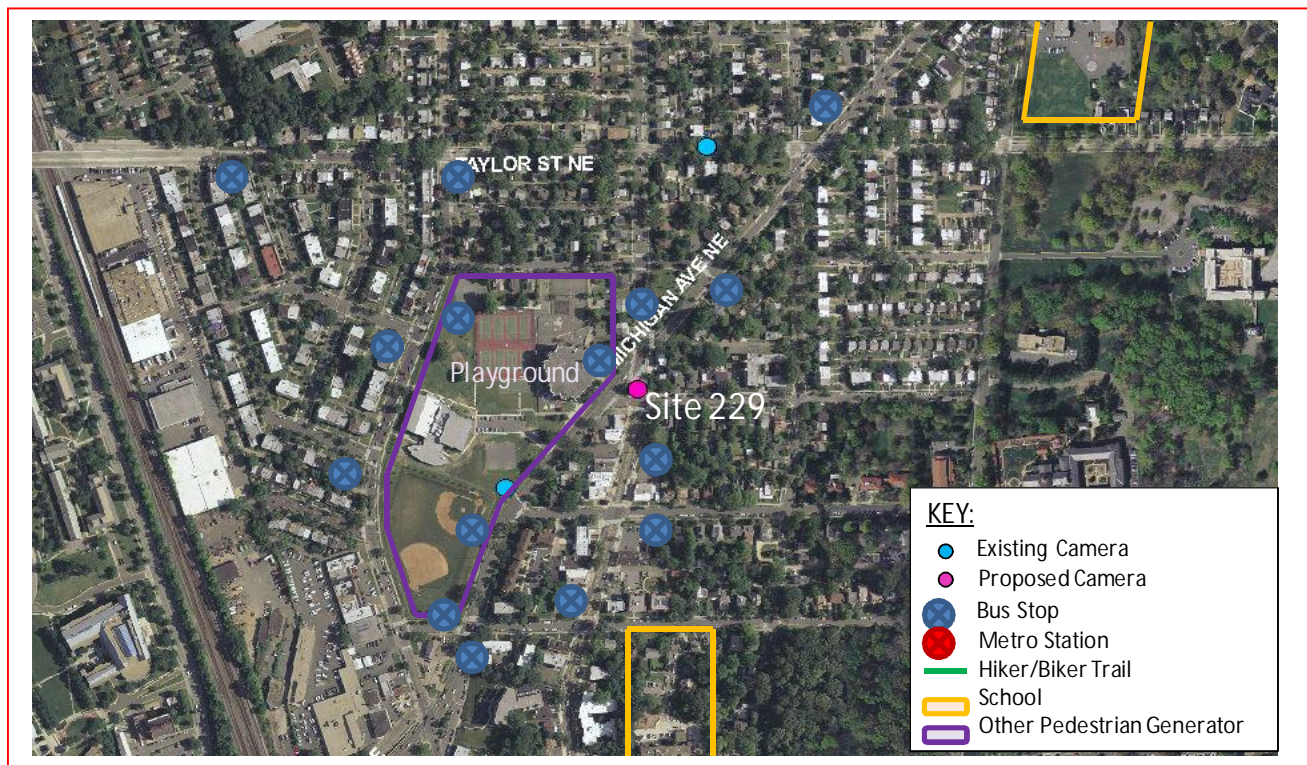
District Department of Transportation

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

4000 Block 12th Street NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	504	5	5A	Proposed	4000 Block 12 th Street Northeast Southbound



This *proposed* speed camera will be located in Ward 5 at the 4000 block of 12th Street Northeast in the southbound direction. 12th Street Northeast runs from Gallatin Street Northeast in the north to Bryant Street Northeast in the south. The posted speed limit is 25 MPH.

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District Department of Transportation

4000 Block 12th Street NE

Field Assessment Summary

12th Street Northeast is assumed to run in the north-south direction and is classified as a minor arterial. 12th Street has one travel lane in each direction. This site has the following characteristics:

- This is a residential area with houses.
- There are two schools in the area: Elsie Whitlow Stokes Public Charter School and Bunker Hill Elementary School. Turkey Thicket Playground is also in the area.
- There is a crosswalk at Shepherd Street and a traffic signal with pedestrian signals and crosswalks at Michigan Avenue.
- There is sidewalk and on-street parking on both sides of the street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a bus stop northbound midblock and a bus stop southbound at Michigan Avenue.



Looking Southbound

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4000 Block 12th Street NE



Looking Northbound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	18
85th Percentile Speed (MPH)	25
10 MPH Pace Speed	17-26
ADT	5,965

The mean speed is lower than the posted speed limit by 7 MPH and the 85th percentile speed is the same as 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 25 crashes at this location. A breakdown of number of crashes by collisions type can be found in the chart on the next page. The most common types of crashes at this location were Rear End (10) and Right Angle (5). Furthermore, this site experienced a high frequency (12 crashes) of injury-related crashes.

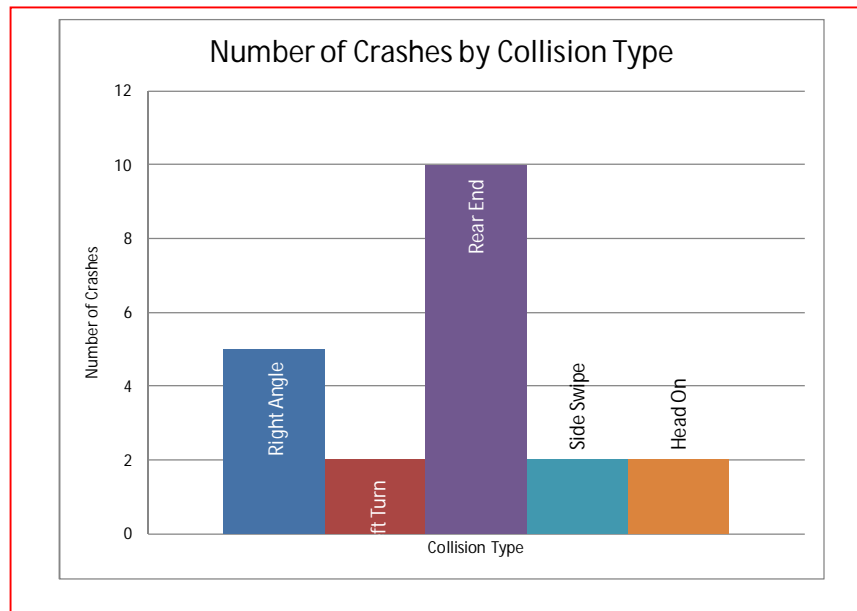
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District Department of Transportation

4000 Block 12th Street NE

Severity			Weather			Surface Condition			Light Condition		
Total	25										
Fatal	0	0.0%	Clear	20	80.0%	Dry	20	80.0%	Day	17	68.0%
Injury	12	48.0%	Rain	4	16.0%	Wet	5	20.0%	Night	5	20.0%
Truck	4	16.0%	Fog/Mist	1	4.0%	Snow/Ice	0	0.0%			
Taxi	3	12.0%									



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 speed data analysis shows travel speeds being lower than or the same as the posted speed limit.
2. Crash Data – This site experienced a high frequency (12 crashes) of injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses
 - b. There are two schools in the area: Elsie Whitlow Stokes Public Charter School and Bunker Hill Elementary School
 - c. Turkey Thicket Playground is in the area which generates pedestrian and bicycle activity
 - d. There are multiple bus stops in the area which generate pedestrian activity

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District Department of Transportation

4000 Block 12th Street NE

- e. There is on-street parking on both sides of the street

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than or the same as the posted speed limit, due to 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.

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4000 block of 12th St NE SB Speed

SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/22/13	1	1	16	18	2	0	0	0	0	0	0	0	0	0	38
01:00	0	5	5	8	7	1	0	0	0	0	0	0	0	0	26
02:00	0	0	6	3	1	0	0	0	0	0	0	0	0	0	10
03:00	0	1	5	6	3	1	0	0	0	0	0	0	0	0	16
04:00	0	6	12	10	3	1	0	0	0	0	0	0	0	0	32
05:00	3	15	31	38	11	3	1	0	0	0	0	0	0	0	102
06:00	3	24	89	66	9	1	0	0	0	0	0	0	0	0	192
07:00	39	91	221	109	16	3	0	0	0	0	0	0	0	0	479
08:00	84	140	217	74	10	1	0	0	0	0	0	0	0	0	526
09:00	14	55	212	79	12	2	0	0	0	0	0	0	0	0	374
10:00	26	89	186	47	9	0	1	0	0	0	0	0	0	0	358
11:00	18	104	181	66	6	0	0	0	0	0	0	0	0	0	375
12 PM	212	32	62	21	4	0	0	0	0	0	0	0	0	0	331
13:00	296	0	0	0	0	0	0	0	0	0	0	0	0	0	296
14:00	201	56	76	7	1	0	0	0	0	0	0	0	0	0	341
15:00	189	145	125	17	0	0	0	0	0	0	0	0	0	0	476
16:00	120	153	146	23	2	0	0	0	0	0	0	0	0	0	444
17:00	90	147	155	43	2	0	0	0	0	0	0	0	0	0	437
18:00	28	90	162	46	4	0	0	0	0	0	0	0	0	0	330
19:00	5	42	132	57	7	0	0	0	0	0	0	0	0	0	243
20:00	4	30	104	58	5	3	0	1	0	0	0	0	0	0	205
21:00	10	19	75	40	6	3	1	0	0	0	0	0	0	0	154
22:00	1	6	42	44	8	0	0	0	0	0	0	0	0	0	101
23:00	3	8	28	31	8	1	0	0	0	0	0	0	0	0	79
Total	1347	1259	2288	911	136	20	3	1	0	0	0	0	0	0	5965
Grand Total	1347	1259	2288	911	136	20	3	1	0	0	0	0	0	0	5965

15th Percentile : 7 MPH
 50th Percentile : 18 MPH
 85th Percentile : 25 MPH
 95th Percentile : 28 MPH

Stats
 Mean Speed(Average) : 18 MPH
 10 MPH Pace Speed : 17-26 MPH
 Number in Pace : 2662
 Percent in Pace : 44.6%
 Number of Vehicles > 25 MPH : 961
 Percent of Vehicles > 25 MPH : 16.1%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4000 block of 12th St NE SB Volume

Start Time	22-Nov-13		23-Nov-13		24-Nov-13		Daily Average	
	Fri A.M.	P.M.	Sat A.M.	P.M.	Sun A.M.	P.M.	A.M.	P.M.
12:00	16	97	*	*	*	*	16	97
12:15	9	84	*	*	*	*	9	84
12:30	6	76	*	*	*	*	6	76
12:45	7	74	*	*	*	*	7	74
01:00	7	67	*	*	*	*	7	67
01:15	5	79	*	*	*	*	5	79
01:30	4	75	*	*	*	*	4	75
01:45	10	75	*	*	*	*	10	75
02:00	2	80	*	*	*	*	2	80
02:15	5	82	*	*	*	*	5	82
02:30	1	87	*	*	*	*	1	87
02:45	2	92	*	*	*	*	2	92
03:00	2	112	*	*	*	*	2	112
03:15	4	128	*	*	*	*	4	128
03:30	4	126	*	*	*	*	4	126
03:45	6	110	*	*	*	*	6	110
04:00	5	108	*	*	*	*	5	108
04:15	4	108	*	*	*	*	4	108
04:30	13	110	*	*	*	*	13	110
04:45	10	118	*	*	*	*	10	118
05:00	14	110	*	*	*	*	14	110
05:15	17	115	*	*	*	*	17	115
05:30	25	102	*	*	*	*	25	102
05:45	46	110	*	*	*	*	46	110
06:00	32	101	*	*	*	*	32	101
06:15	36	72	*	*	*	*	36	72
06:30	61	69	*	*	*	*	61	69
06:45	63	88	*	*	*	*	63	88
07:00	75	74	*	*	*	*	75	74
07:15	105	58	*	*	*	*	105	58
07:30	134	59	*	*	*	*	134	59
07:45	165	52	*	*	*	*	165	52
08:00	132	56	*	*	*	*	132	56
08:15	152	44	*	*	*	*	152	44
08:30	126	55	*	*	*	*	126	55
08:45	116	50	*	*	*	*	116	50
09:00	97	46	*	*	*	*	97	46
09:15	83	32	*	*	*	*	83	32
09:30	98	39	*	*	*	*	98	39
09:45	96	37	*	*	*	*	96	37
10:00	102	27	*	*	*	*	102	27
10:15	89	24	*	*	*	*	89	24
10:30	88	26	*	*	*	*	88	26
10:45	79	24	*	*	*	*	79	24
11:00	98	21	*	*	*	*	98	21
11:15	88	15	*	*	*	*	88	15
11:30	101	30	*	*	*	*	101	30
11:45	88	13	*	*	*	*	88	13
Total	2528	3437	0	0	0	0	2528	3437
Combined Total	5965		0		0		5965	
Peak	07:30	03:00					07:30	03:00
Vol.	583	476					583	476
P.H.F.	0.883	0.930					0.883	0.930
ADT	ADT 5,965		AADT 5,965					

Accident Summary Report (R-8)**Corridor:** 12TH ST,NE,SE From SHEPHERD ST,NE TO QUINCY ST,NE**Time Period Covered:** From 01/01/2010 To 12/31/2012**Prepared By:** Rahul Jain**Prepared Date:** 11/24/2012

Total Number of Accident:	25	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	5	20.0%	Fixed Object:	1	4.0%
Total Number of Injuries:	19	Left Turn:	2	8.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	1	Right Turn:	1	4.0%	Ped. Involved:	1	4.0%
Total Number of NonDisabling Injuries:	2	Rear End:	10	40.0%	Backing:	1	4.0%
Total Number of Pedestrians Involved:	1	Side Swiped:	2	8.0%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	1	Head On:	2	8.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Time of Day				Day of week			
	#ACC	%			#ACC	%	
07:30 ~ 09:30:	3	12.0%		Sunday:	5	20.0%	
09:30 ~ 11:30:	3	12.0%		Monday:	2	8.0%	
11:30 ~ 13:30:	2	8.0%		Tuesday:	2	8.0%	
13:30 ~ 16:00:	3	12.0%		Wednesday:	5	20.0%	
16:00 ~18:30:	6	24.0%		Thursday:	2	8.0%	
18:30 ~ 07:30:	8	32.0%		Friday:	4	16.0%	
Unspecified:	0	0.0%		Saturday:	5	20.0%	
Weather Condition				Surface Condition			
	#ACC	%			#ACC	%	
Clear:	20	80.0%		Dry:	20	80.0%	
Rain:	4	16.0%		Wet:	5	20.0%	
Snow:	0	0.0%		Snow/Ice:	0	0.0%	
Sleet/Hail:	0	0.0%		Slush:	0	0.0%	
Fog/Mist:	1	4.0%		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				Accident Severity Type			
	#VEH	%			#ACC	%	
Passenger Car:	41	78.8%		Fatal Collision:	0	0.0%	
Bus:	2	3.8%		Injury Collision:	12	48.0%	
Truck:	4	7.7%		PDO Collision:	13	52.0%	
Taxi:	3	5.8%		Light Condition			
Minivan:	0	0.0%			#ACC	%	
Police/Emergency Vehicle:	1	1.9%		Daylight:	17	68.0%	
Motorcycle/Moped:	0	0.0%		Dawn/Dusk:	3	12.0%	
Bicycle:	1	1.9%		Dark(Lighted):	5	20.0%	
Fixed Object:	0	0.0%		Dark(Not Lighted):	0	0.0%	
Unspecified:	0	0.0%		Dark(Unknown Lighting):	0	0.0%	
				Unspecified:	0	0.0%	
Contributing Factor				Pedestrian Actions			
	#VEH	%			#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:	1	100.0%	
Driver: Others:	7	13.5%		In Unmarked Crosswalk:	0	0.0%	
Vehicle:	0	0.0%		Not in Crosswalk:	0	0.0%	
Roadway:	2	3.8%		From Between Parked Cars:	0	0.0%	
Unspecified:	43	82.7%		Unspecified:	0	0.0%	

16 Records are not approved as of 11/24/2013 5:09:33 PM