



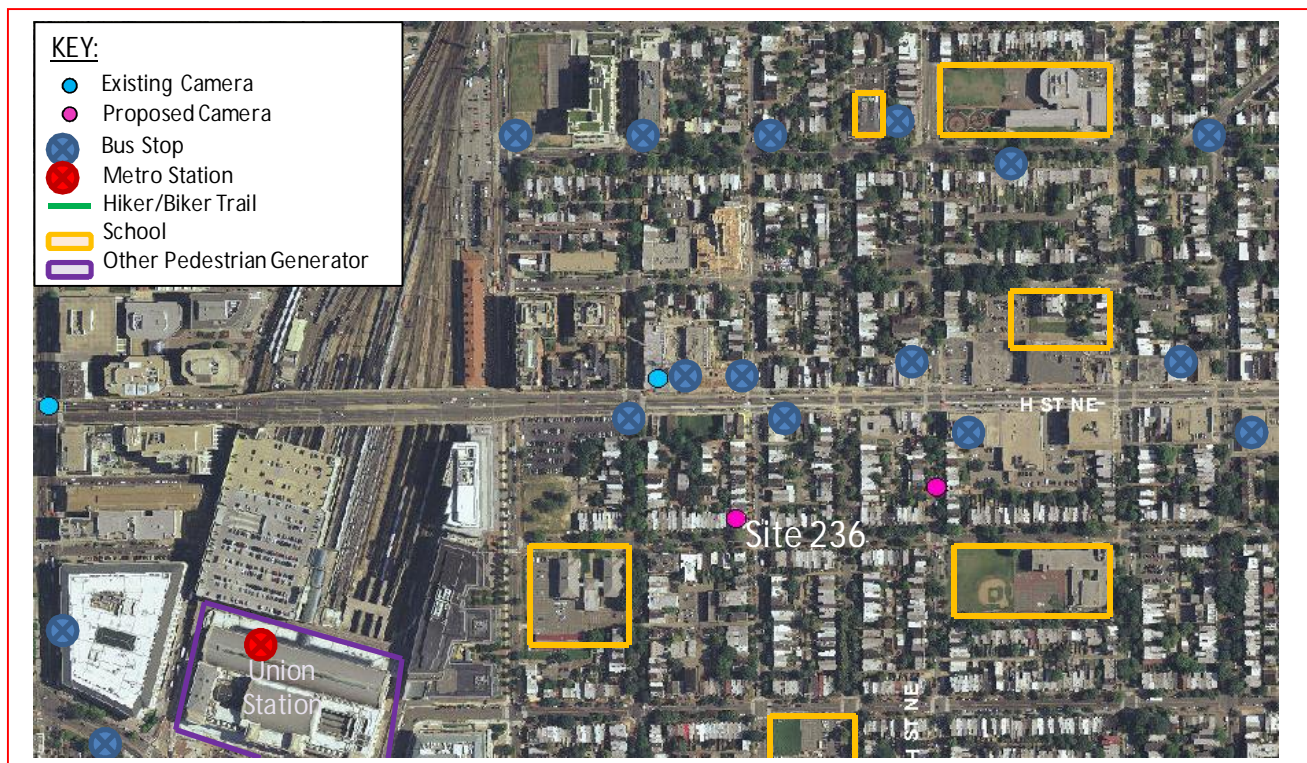
District Department of Transportation

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

700 Block 4th Street NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
1	103	6	6C	Proposed	700 Block 4 th Street Northeast



This *proposed* speed camera will be located in Ward 6 at the 700 block of 4th Street Northeast. 4th Street Northeast starts from Michigan Avenue Northeast from the north and ends at East Capitol Street Southeast to the south, where it becomes 4th Street Southeast. The posted speed limit is 25 MPH.

W6-189





District Department of Transportation

700 Block 4th Street NE

Field Assessment Summary

4th Street is assumed to run in the north-south direction, and is classified as a collector roadway. 4th Street is a one-way street in the southbound direction with one travel lane and one bike lane. This site has the following characteristics:

- This site is located in a residential area with single family homes on both sides of the street. There are local businesses and restaurants on the north end of the block.
- There are four schools in the area: Stuart-Hobson Middle School, Logan School, Capitol Hill Montessori, and Ludlow-Taylor Elementary School. Holy Trinity church is also located along the block.
- There are on-street parking and brick sidewalks with curb and gutter on both sides of the street.
- There is a bicycle lane on the west side of the street.
- An existing traffic signal and crosswalks with pedestrian indications is located on the north end of the block. The south end of the block is a stop controlled intersection.
- There is a posted warning sign for "Deaf Pedestrians," along the block.
- The existing pavement is in fair condition.
- An existing bus stop is located on the north end of the block, and there are several others in the surrounding area. The Union Station Metrorail Station is also in the vicinity.



Looking Northbound



District Department of Transportation

700 Block 4th Street NE



Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	17
85th Percentile Speed (MPH)	23
10 MPH Pace Speed (MPH)	15-24
ADT	2,813

The mean speed is lower than the posted speed limit by 8 MPH and the 85th percentile speed is lower than the posted speed limit by 2 MPH at this location.

Crash Data Analysis

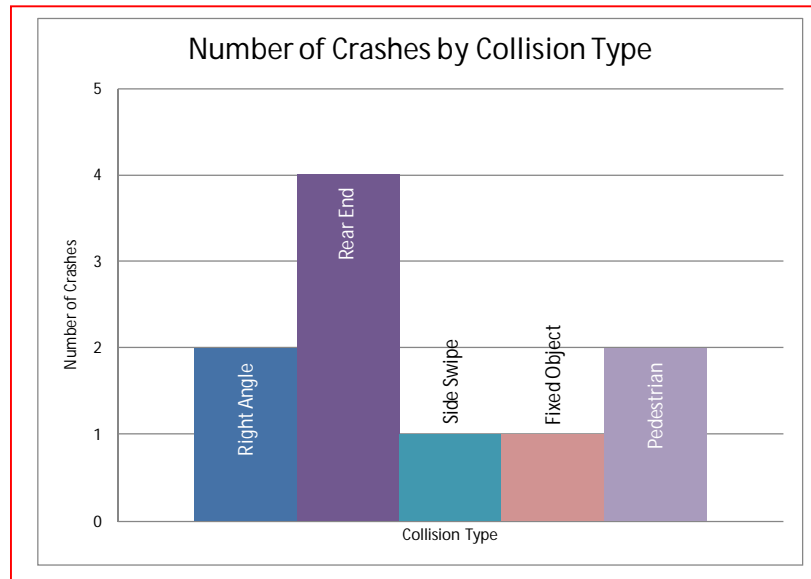
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 10 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location were Rear End with four crashes. Furthermore, the site experienced five injury-related crashes.



District Department of Transportation

700 Block 4th Street NE

Severity			Weather			Surface condition			Light Condition		
Total	10										
Fatal	0	0.0%	Clear	8	80.0%	Dry	8	80.0%	Day	8	80.0%
Injury	5	50.0%	Rain	1	10.0%	Wet	2	20.0%	Night	2	20.0%
Truck	5	50.0%	Fog/Mist	1	10.0%	Snow/Ice	0	0.0%			
Bus	1	10.0%									



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 the posted speed limit.
2. Crash Data – This site experienced five injury-related crashes.
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 single family homes and businesses on both sides of the street.
 - b. There are four schools in the area: Stuart-Hobson Middle School, Logan School, Capitol Hill Montessori, and Ludlow-Taylor Elementary School.
 - c. There is on-street parking at this location.
 - d. There is a bicycle lane in the southbound direction.
 - e. There are multiple bus stops and the Union Station Metrorail Station in the area which generate pedestrian activity.



District Department of Transportation

700 Block 4th Street NE

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

700 block of 4th St NE 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
11/16/13	22	7	20	3	0	0	0	0	0	0	0	0	0	0	52
01:00	9	15	15	8	0	0	0	0	0	0	0	0	0	0	47
02:00	3	5	15	4	0	0	0	0	0	0	0	0	0	0	27
03:00	1	3	9	6	1	0	0	0	0	0	0	0	0	0	20
04:00	2	1	9	1	1	0	0	0	0	0	0	0	0	0	14
05:00	1	3	11	6	1	0	0	0	0	0	0	0	0	0	22
06:00	4	8	10	6	0	0	0	0	0	0	0	0	0	0	28
07:00	15	23	32	14	0	0	0	0	0	0	0	0	0	0	84
08:00	16	40	70	15	0	0	0	0	0	0	0	0	0	0	141
09:00	22	56	70	9	1	1	0	0	0	0	0	0	0	0	159
10:00	64	62	37	3	0	0	0	0	0	0	0	0	0	0	166
11:00	32	56	58	9	1	1	0	0	0	0	0	0	0	0	157
12 PM	70	71	72	8	1	0	0	0	0	0	0	0	0	0	222
13:00	32	84	86	10	1	0	0	0	0	0	0	0	0	0	213
14:00	52	78	63	6	0	0	0	0	0	0	0	0	0	0	199
15:00	22	92	79	9	2	0	0	0	0	0	0	0	0	0	204
16:00	52	75	60	9	1	0	0	0	0	0	0	0	0	0	197
17:00	32	77	64	14	1	0	0	0	0	0	0	0	0	0	188
18:00	29	56	59	14	1	0	0	0	0	0	0	0	0	0	159
19:00	19	40	60	18	2	0	0	0	0	0	0	0	0	0	139
20:00	31	28	34	9	1	0	0	0	0	0	0	0	0	0	103
21:00	17	31	39	6	1	0	0	0	0	0	0	0	0	0	94
22:00	14	28	45	4	0	0	0	0	0	0	0	0	0	0	91
23:00	8	20	38	6	1	0	0	0	0	0	0	0	0	0	73
Total	569	959	1055	197	17	2	0	0	0	0	0	0	0	0	2799

SAMMAT ENGINEERING SERVICES, LLC

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MOUNT AIRY, MD 21771

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700 block of 4th St NE 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
11/17/13	3	2	8	1	0	0	0	0	0	0	0	0	0	0	14
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	3	2	8	1	0	0	0	0	0	0	0	0	0	0	14
Grand Total	572	961	1063	198	17	2	0	0	0	0	0	0	0	0	2813

15th Percentile : 8 MPH
 50th Percentile : 16 MPH
 85th Percentile : 23 MPH
 95th Percentile : 26 MPH

Stats
 Mean Speed(Average) : 17 MPH
 10 MPH Pace Speed : 15-24 MPH
 Number in Pace : 1442
 Percent in Pace : 51.3%
 Number of Vehicles > 25 MPH : 241
 Percent of Vehicles > 25 MPH : 8.6%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

700 block of 4th St NE Volume

Start Time	Sat	16-Nov-13	Sun	17-Nov-13	Mon	18-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	53	14	*	*	*	14	53
12:15	27	59	*	*	*	*	27	59
12:30	15	63	*	*	*	*	15	63
12:45	10	47	*	*	*	*	10	47
01:00	10	55	*	*	*	*	10	55
01:15	11	46	*	*	*	*	11	46
01:30	15	62	*	*	*	*	15	62
01:45	11	50	*	*	*	*	11	50
02:00	9	43	*	*	*	*	9	43
02:15	4	52	*	*	*	*	4	52
02:30	6	48	*	*	*	*	6	48
02:45	8	56	*	*	*	*	8	56
03:00	5	44	*	*	*	*	5	44
03:15	5	51	*	*	*	*	5	51
03:30	5	55	*	*	*	*	5	55
03:45	5	54	*	*	*	*	5	54
04:00	4	52	*	*	*	*	4	52
04:15	3	43	*	*	*	*	3	43
04:30	4	52	*	*	*	*	4	52
04:45	3	50	*	*	*	*	3	50
05:00	1	44	*	*	*	*	1	44
05:15	4	49	*	*	*	*	4	49
05:30	6	52	*	*	*	*	6	52
05:45	11	43	*	*	*	*	11	43
06:00	7	47	*	*	*	*	7	47
06:15	8	34	*	*	*	*	8	34
06:30	7	39	*	*	*	*	7	39
06:45	6	39	*	*	*	*	6	39
07:00	15	28	*	*	*	*	15	28
07:15	18	37	*	*	*	*	18	37
07:30	22	30	*	*	*	*	22	30
07:45	29	44	*	*	*	*	29	44
08:00	31	34	*	*	*	*	31	34
08:15	36	21	*	*	*	*	36	21
08:30	30	25	*	*	*	*	30	25
08:45	44	23	*	*	*	*	44	23
09:00	37	21	*	*	*	*	37	21
09:15	37	24	*	*	*	*	37	24
09:30	44	19	*	*	*	*	44	19
09:45	41	30	*	*	*	*	41	30
10:00	47	29	*	*	*	*	47	29
10:15	38	21	*	*	*	*	38	21
10:30	56	20	*	*	*	*	56	20
10:45	25	21	*	*	*	*	25	21
11:00	6	14	*	*	*	*	6	14
11:15	44	25	*	*	*	*	44	25
11:30	50	16	*	*	*	*	50	16
11:45	57	18	*	*	*	*	57	18
Total	917	1882	14	0	0	0	931	1882
Combined Total	2799		14		0		2813	
Peak	09:45	00:15					09:45	00:15
Vol.	182	224					182	224
P.H.F.	0.813	0.889					0.813	0.889
ADT	ADT 2,813		AADT 2,813					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: 4TH ST,NE,SE From G ST,NE TO H ST,NE

Time Period Covered: From 1/1/2010 To 12/31/2012

Prepared By: Rahul Jain

Prepared Date: 9/15/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	10	Right Angle:	2	20.0%	Fixed Object:	1	10.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	5	Right Turn:	0	0.0%	Ped. Involved:	2	20.0%
Total Number of Disabling Injuries:	0	Rear End:	4	40.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	1	Side Swiped:	1	10.0%	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:	0	0.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	0	0.0%	Sunday:	2	20.0%
09:30 ~ 11:30:	4	40.0%	Monday:	0	0.0%
11:30 ~ 13:30:	0	0.0%	Tuesday:	2	20.0%
13:30 ~ 16:00:	0	0.0%	Wednesday:	2	20.0%
16:00 ~ 18:30:	3	30.0%	Thursday:	1	10.0%
18:30 ~ 07:30:	3	30.0%	Friday:	3	30.0%
Unspecified:	0	0.0%	Saturday:	0	0.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	8	80.0%	Dry:	8	80.0%
Rain:	1	10.0%	Wet:	2	20.0%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	1	10.0%	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:	9	52.9%	Fatal Collision:	0	0.0%
Bus:	1	5.9%	Injury Collision:	5	50.0%
Truck:	5	29.4%	PDO Collision:	5	50.0%
Taxi:	1	5.9%	Light Condition	#ACC	%
Minivan:	0	0.0%	Daylight:	8	80.0%
Police/Emergency Vehicle:	0	0.0%	Dawn/Dusk:	0	0.0%
Motorcycle/Moped:	0	0.0%	Dark(Lighted):	2	20.0%
Bicycle:	0	0.0%	Dark(Not Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
Unspecified:	1	5.9%	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:	1	100.0%
Driver: Others:	6	35.3%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	1	5.9%	From Between Parked Cars:	0	0.0%
Unspecified:	10	58.8%	Unspecified:	0	0.0%

5 Records are not approved as of 9/15/2013 8:20:52 PM