



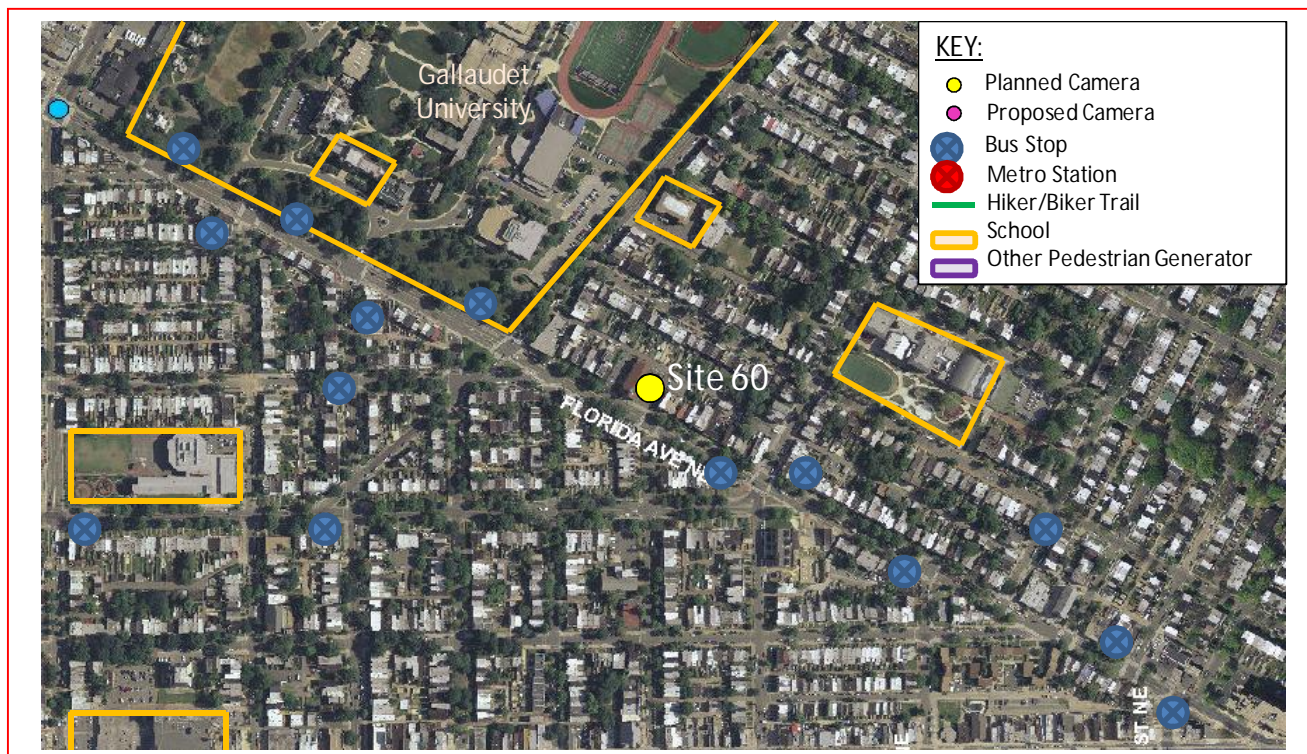
District Department of Transportation

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

1100 Block Florida Avenue NE NW/B

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
5	506	5	5B	Planned	1100 Block Florida Avenue Northeast Northwest bound



This *planned* speed camera will be located in Ward 5 at the 1100 block of Florida Avenue Northeast in the northwest-bound direction. Florida Avenue Northeast runs between North Capitol Street Northwest to the north and H Street Northeast to the south. 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

1100 Block Florida Avenue NE NW/B

Field Assessment Summary

Florida Avenue is assumed to run in the northwest-southeast direction, and is classified as Principal Arterial. Florida Avenue has two travel lanes in each direction. This site has the following characteristics:

- This is a residential area with houses and apartments.
- There are six schools in the area: Kendall Demonstration Elementary School, Gallaudet University, Wheatley Education Campus, Center City Public Charter School – Trinidad Campus, J.O. Wilson Elementary School, and Blair School
- There is sidewalk on both sides of the street and pedestrian crosswalks at 11th and 12th Streets. There is a HAWK signal for the 11th Street Crossing.
- On-street parking on both sides of the street is not allowed from 7-9:30am and 4-6:30pm.
- There is a bus stop near 12th Street, as well as others in the surrounding area.
- The pavement is in fair condition and there is curb and gutter on both sides.



Looking Northwest-bound

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District Department of Transportation

1100 Block Florida Avenue NE NW/B



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	35
85th Percentile Speed (MPH)	54
10 MPH Pace Speed	4- 13
ADT	9,389

Both the mean speed and the 85th percentile speed are higher than the posted speed limit. The 85th percentile speed is 29 MPH higher than the posted speed limit.

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 43 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 (12 crashes), Side Swiped (9 crashes), Left Turn (8 crashes), and Right Angle (6 crashes). The other collision types had three crashes or less each. Furthermore, this site experienced a high frequency (17 crashes) of injury-related crashes.

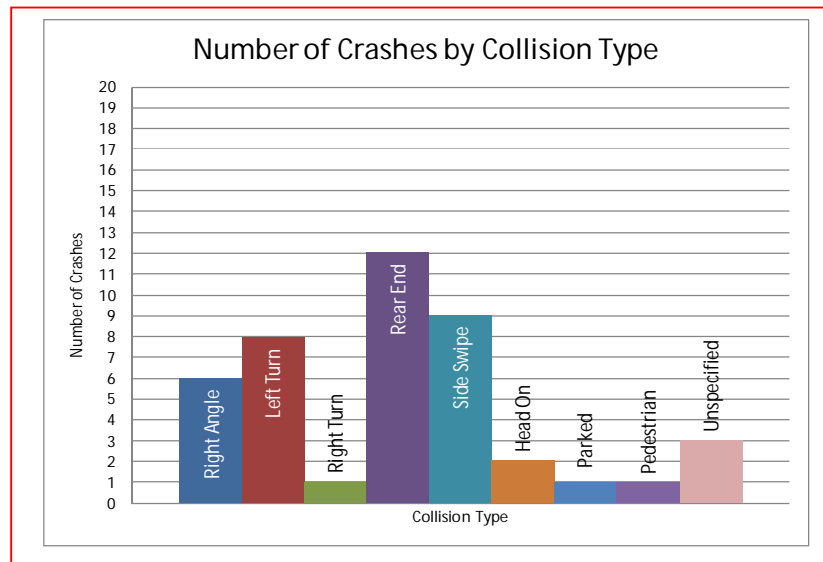
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District Department of Transportation

1100 Block Florida Avenue NE NW/B

Severity			Weather			Surface condition			Light Condition		
Total	43										
Fatal	0	0.0%	Clear	34	79.1%	Dry	35	81.4%	Day	26	60.5%
Injury	17	39.5%	Rain	4	9.3%	Wet	7	16.3%	Night	16	37.2%
Truck	10	23.3%	Crosswind	2	4.7%	Snow/Ice	1	2.3%			
Bus	3	7.0%									



There were an elevated number of speed-related crashes at this location, including rear end and side swipe crashes. The AASHTO Highway Safety Manual lists “assuming the lead driver will go through a green or yellow light, but the lead driver stops” and “changing lanes to avoid a slowing or stopped vehicle”¹ as two errors leading to rear-end and sideswipe crashes. Both of these errors can be decreased with a decrease in travel speed.

The Florida Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011, according to the report *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*².

Safety Nexus

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

¹ AASHTO *Highway Safety Manual, 1st Edition, 2010; Volume 1, page 2-13*

² DDOT, *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011), pg. 80.*



District Department of Transportation

1100 Block Florida Avenue NE NW/B

1. Speed Data – The 85th percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – This location experienced an elevated number of speed related crashes at this location, including rear end and side swipe collisions, as well as a high frequency (17 crashes) of injury related crashes. The Florida Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses and apartments.
 - b. There are six schools in the area: Kendall Demonstration Elementary School, Gallaudet University, Wheatley Education Campus, Center City Public Charter School – Trinidad Campus, J.O. Wilson Elementary School, and Blair School
 - c. The Samuel E. Wheatley Recreation Center is also in the area which generates pedestrian and bicycle activity
 - d. There are several bus stops in the area which generate pedestrian activity.
 - e. There is on-street parking on both sides of the street.

Due to the speed data analysis, the elevated number of speed-related crashes and 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

1100 block of Florida Ave NE NWB Speed

NWB

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
11/12/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	12	0	0	1	3	2	9	5	6	1	3	2	2	5	51
02:00	3	0	0	0	2	1	4	2	2	1	2	2	2	4	25
03:00	10	0	0	2	2	4	6	1	1	2	1	2	3	1	35
04:00	7	0	0	1	0	3	6	4	8	10	6	1	6	11	63
05:00	47	0	0	1	7	11	6	26	25	36	27	17	13	36	252
06:00	76	0	1	3	6	22	32	39	66	65	48	34	30	83	505
07:00	145	2	7	24	41	86	118	122	67	68	49	28	13	43	813
08:00	175	7	10	38	58	95	135	144	81	54	26	19	11	17	870
09:00	91	0	11	32	40	55	85	93	46	53	28	16	13	19	582
10:00	113	2	7	15	26	59	70	74	63	39	27	13	10	13	531
11:00	112	2	20	26	65	66	88	64	44	31	14	15	8	9	564
12 PM	98	9	15	34	53	72	76	70	48	31	16	11	2	8	543
13:00	85	2	10	33	59	78	67	64	52	33	14	8	6	11	522
14:00	92	7	10	24	53	78	62	71	42	32	26	10	9	17	533
15:00	98	8	26	34	51	60	77	85	51	48	16	12	8	9	583
16:00	93	6	16	26	50	56	87	78	56	25	19	14	4	12	542
17:00	94	2	8	29	52	75	68	61	54	26	15	7	6	8	505
18:00	76	2	5	19	48	66	72	61	36	22	19	9	10	11	456
19:00	82	0	6	16	35	40	53	56	35	24	12	8	2	8	377
20:00	64	0	8	10	24	38	43	45	21	18	9	5	2	5	292
21:00	53	1	6	10	11	23	37	31	29	19	14	7	2	12	255
22:00	38	1	0	2	10	18	21	24	25	23	16	10	10	11	209
23:00	35	0	1	1	12	20	19	24	19	23	14	9	6	12	195
Total	1699	51	167	381	708	1028	1241	1244	877	684	421	259	178	365	9303

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1100 block of Florida Ave NE NWB Speed

NWB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/13/13	16	0	1	0	3	3	8	16	9	15	6	3	2	4	86
01:00	5	0	0	0	0	2	1	2	2	2	3	2	0	1	20
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	21	0	1	0	3	5	9	18	11	17	9	5	2	5	106
Grand Total	1720	51	168	381	711	1033	1250	1262	888	701	430	264	180	370	9409

15th Percentile : 8 MPH
 50th Percentile : 38 MPH
 85th Percentile : 54 MPH
 95th Percentile : 63 MPH

Stats
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 4-13 MPH
 Number in Pace : 2188
 Percent in Pace : 24.2%
 Number of Vehicles > 25 MPH : 6105
 Percent of Vehicles > 25 MPH : 67.5%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1100 block of Florida Ave NE NWB Volume

Start Time	Tue 12-Nov-13		Wed 13-Nov-13		Thu 14-Nov-13		Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	147	31	*	*	*	31	147
12:15	*	140	19	*	*	*	19	140
12:30	*	114	22	*	*	*	22	114
12:45	*	142	14	*	*	*	14	142
01:00	17	112	*	*	*	*	17	112
01:15	15	143	*	*	*	*	15	143
01:30	12	126	*	*	*	*	12	126
01:45	7	141	*	*	*	*	7	141
02:00	5	124	*	*	*	*	5	124
02:15	2	161	*	*	*	*	2	161
02:30	10	128	*	*	*	*	10	128
02:45	8	120	*	*	*	*	8	120
03:00	5	119	*	*	*	*	5	119
03:15	9	173	*	*	*	*	9	173
03:30	11	141	*	*	*	*	11	141
03:45	10	150	*	*	*	*	10	150
04:00	5	140	*	*	*	*	5	140
04:15	16	153	*	*	*	*	16	153
04:30	18	128	*	*	*	*	18	128
04:45	24	121	*	*	*	*	24	121
05:00	24	114	*	*	*	*	24	114
05:15	54	126	*	*	*	*	54	126
05:30	69	129	*	*	*	*	69	129
05:45	105	136	*	*	*	*	105	136
06:00	81	127	*	*	*	*	81	127
06:15	117	136	*	*	*	*	117	136
06:30	142	76	*	*	*	*	142	76
06:45	165	117	*	*	*	*	165	117
07:00	165	103	*	*	*	*	165	103
07:15	224	98	*	*	*	*	224	98
07:30	207	96	*	*	*	*	207	96
07:45	217	80	*	*	*	*	217	80
08:00	233	72	*	*	*	*	233	72
08:15	232	75	*	*	*	*	232	75
08:30	214	85	*	*	*	*	214	85
08:45	191	60	*	*	*	*	191	60
09:00	174	53	*	*	*	*	174	53
09:15	136	79	*	*	*	*	136	79
09:30	134	69	*	*	*	*	134	69
09:45	138	54	*	*	*	*	138	54
10:00	135	44	*	*	*	*	135	44
10:15	137	53	*	*	*	*	137	53
10:30	145	53	*	*	*	*	145	53
10:45	114	59	*	*	*	*	114	59
11:00	139	63	*	*	*	*	139	63
11:15	126	54	*	*	*	*	126	54
11:30	162	45	*	*	*	*	162	45
11:45	137	33	*	*	*	*	137	33
Total	4291	5012	86	0	0	0	4377	5012
Combined Total	9303		86		0		9389	
Peak	07:45	03:15	12:00				07:45	03:15
Vol.	896	604	86				896	604
P.H.F.	0.961	0.873	0.694				0.961	0.873
ADT	ADT 9,389		AADT 9,389					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: FLORIDA AVE,NW,NE From WEST VIRGINIA AVE,NE TO MONTELLO AVE,NE

Time Period Covered: From 01/01/2010 To 12/31/2012

Prepared By: Rahul Jain

Prepared Date: 10/6/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	43	Right Angle:	6	14.0%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	8	18.6%	Ran Off Road:	0	0.0%
Total Number of Injuries:	26	Right Turn:	1	2.3%	Ped. Involved:	1	2.3%
Total Number of Disabling Injuries:	1	Rear End:	12	27.9%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	4	Side Swiped:	9	20.9%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	1	Head On:	2	4.7%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	3	Parked:	1	2.3%	Unspecified:	3	7.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%
07:30 ~ 09:30:	5	11.6%
09:30 ~ 11:30:	3	7.0%
11:30 ~ 13:30:	5	11.6%
13:30 ~ 16:00:	8	18.6%
16:00 ~18:30:	6	14.0%
18:30 ~ 07:30:	16	37.2%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	5	11.6%
Monday:	6	14.0%
Tuesday:	6	14.0%
Wednesday:	4	9.3%
Thursday:	11	25.6%
Friday:	8	18.6%
Saturday:	3	7.0%

Weather Condition	#ACC	%
Clear:	34	79.1%
Rain:	4	9.3%
Snow:	0	0.0%
Sleet/Hail:	1	2.3%
Fog/Mist:	1	2.3%
Crosswind/Blowing Sand:	2	4.7%
Unspecified:	1	2.3%

Surface Condition	#ACC	%
Dry:	35	81.4%
Wet:	7	16.3%
Snow/Ice:	1	2.3%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	0	0.0%

Type of Vehicle	#VEH	%
Passenger Car:	64	74.4%
Bus:	3	3.5%
Truck:	10	11.6%
Taxi:	2	2.3%
Minivan:	0	0.0%
Police/Emergency Vehicle:	0	0.0%
Motorcycle/Moped:	0	0.0%
Bicycle:	3	3.5%
Fixed Object:	0	0.0%
Unspecified:	4	4.7%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	17	39.5%
PDO Collision:	26	60.5%

Light Condition	#ACC	%
Daylight:	26	60.5%
Dawn/Dusk:	1	2.3%
Dark(Lighted):	16	37.2%
Dark(Not Lighted):	0	0.0%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	0	0.0%

Contributing Factor	#VEH	%
Driver: Speed:	0	0.0%
Driver: Alcohol/Drug:	1	1.2%
Driver: Electronic Device:	0	0.0%
Driver: Others:	13	15.1%
Vehicle:	1	1.2%
Roadway:	1	1.2%
Unspecified:	70	81.4%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	1	100.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	0	0.0%

22 Records are not approved as of 10/6/2013 5:05:10 PM