



District Department of Transportation

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

5400 Block Central Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	604	7	7E	Proposed	5400 Block Central Avenue Southeast, Northwest-bound



The *proposed* speed camera will be located in Ward 7 at the 5400 block of Central Avenue Southeast in the northwest-bound direction. Central Avenue Southeast runs between Southern Avenue Southeast to the east and Benning Road Northeast to the west. The posted speed limit is 25 MPH.

W7 - 416





District Department of Transportation

5400 Block Central Avenue SE

Field Assessment Summary

Central Avenue Southeast is assumed to run in a northwest-southeast direction, and is classified as a minor arterial. Alabama Avenue has one travel lane in each direction. This site has the following characteristics:

- This is a residential area with houses and driveways.
- There are three schools in the area: C.W. Harris Elementary School, Shadd Elementary School and Maya Angelou Public Charter School/Evans Middle School.
- There are several bus stops in the area that generate pedestrian activity.
- There is sidewalk and on-street parking on both sides of the street.
- There are signs directing to a bike route.
- The pavement is in good condition and there is curb and gutter with drainage inlets.



Looking Northwest-bound

W7 - 417



District Department of Transportation

5400 Block Central Avenue SE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	26
85th Percentile Speed (MPH)	33
10 MPH Pace Speed	24-33
ADT	3,810

The mean speed is higher than the posted speed limit, and the 85th percentile speed is higher than the posted speed limit 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 9 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 Side Swipe (4 crashes) and Rear End (2 crashes). The other collision types had 1 crash or less each. There were 2 crashes where vehicular speeding was the contributing factor.

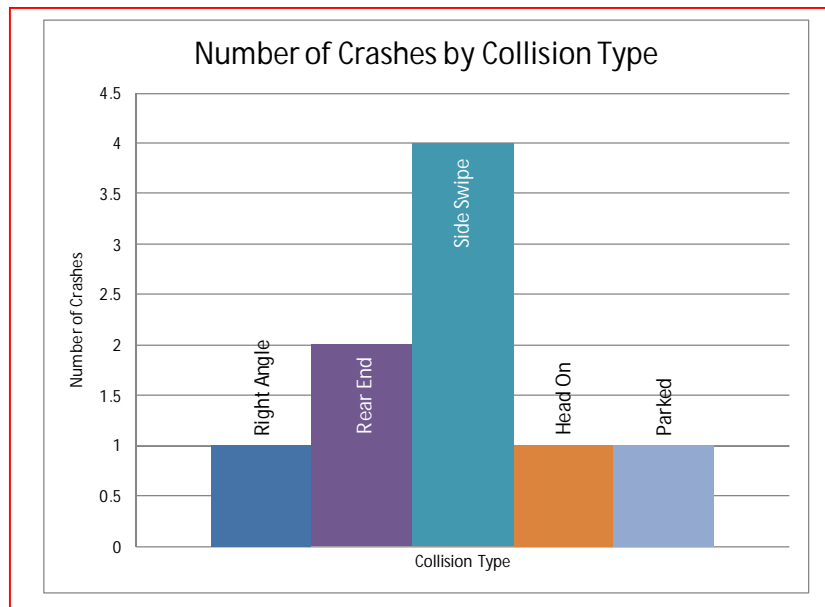
W7 - 418



District Department of Transportation

5400 Block Central Avenue SE

Severity			Weather			Surface condition			Light Condition		
Total	9										
Fatal	0	0.0%	Clear	7	77.8%	Dry	7	77.8%	Day	6	66.7%
Injury	3	33.3%	Rain	2	22.2%	Wet	2	22.2%	Night	3	33.3%
Truck	1	11.1%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	0	0.0%									



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 85th percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – The crash data analysis shows a low number of crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses and driveways.
 - b. There are three schools in the area: C.W. Harris Elementary School, Shadd Elementary School and Maya Angelou Public Charter School/Evans Middle School.
 - c. There are several bus stops in the area which generate pedestrian activity.
 - d. There is on-street parking on both sides of the street.

W7 - 419



District Department of Transportation

5400 Block Central Avenue SE

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.

W7 - 420

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

5400 block of Central Ave SE 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
11/23/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	12	0	3	3	5	1	1	0	0	0	0	0	0	0	25
03:00	12	2	8	4	10	5	0	0	0	0	0	0	0	0	41
04:00	8	2	12	7	6	3	0	0	0	0	0	0	0	0	38
05:00	9	0	4	16	12	8	4	1	0	0	0	0	0	0	54
06:00	4	4	11	15	22	12	2	1	0	0	0	0	0	0	71
07:00	6	1	15	24	35	12	3	0	0	0	0	0	0	0	96
08:00	9	3	18	56	51	22	1	1	0	0	0	0	0	0	161
09:00	9	6	34	70	69	24	4	1	0	0	0	0	0	0	217
10:00	7	6	49	111	72	21	1	0	0	0	0	0	0	0	267
11:00	15	8	27	122	67	13	4	0	0	0	0	0	0	0	256
12 PM	6	5	44	118	62	16	3	0	0	0	0	0	0	0	254
13:00	19	14	35	88	78	12	4	0	0	0	0	0	0	0	250
14:00	11	11	57	87	56	11	3	0	0	0	0	0	0	0	236
15:00	8	13	44	90	69	10	1	0	0	0	0	0	0	0	235
16:00	12	12	54	92	44	9	1	0	0	0	0	0	0	0	224
17:00	15	12	46	74	37	8	1	0	0	0	0	0	0	0	193
18:00	18	6	40	79	35	9	2	0	0	0	0	0	0	0	189
19:00	22	10	59	80	43	13	0	0	0	0	0	0	0	0	227
20:00	24	8	35	69	37	5	1	0	0	0	0	0	0	0	179
21:00	15	8	43	55	31	6	2	0	0	0	0	0	0	0	160
22:00	23	3	34	36	35	10	2	0	0	0	0	0	0	0	143
23:00	29	2	29	44	31	4	1	0	0	0	0	0	0	0	140
Total	293	136	701	1340	907	234	41	4	0	0	0	0	0	0	3656

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

5400 block of Central Ave SE NWB Speed

NWB															
Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	15	20	25	30	35	40	45	50	55	60	65	70	75	999	
11/24/13	12	3	21	29	13	3	2	0	0	0	0	0	0	0	83
01:00	10	2	5	12	9	3	2	0	0	0	0	0	0	0	43
02:00	8	2	6	6	3	3	0	0	0	0	0	0	0	0	28
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	30	7	32	47	25	9	4	0	0	0	0	0	0	0	154
Grand Total	323	143	733	1387	932	243	45	4	0	0	0	0	0	0	3810

15th Percentile : 14 MPH
 50th Percentile : 26 MPH
 85th Percentile : 33 MPH
 95th Percentile : 36 MPH

Stats
 Mean Speed(Average) : 26 MPH
 10 MPH Pace Speed : 24-33 MPH
 Number in Pace : 2061
 Percent in Pace : 54.1%
 Number of Vehicles > 25 MPH : 2331
 Percent of Vehicles > 25 MPH : 61.2%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

5400 block of Central Ave SE NWB Volume

Start Time	Sat	23-Nov-13	Sun	24-Nov-13	Mon	25-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	67	18	*	*	*	18	67
12:15	*	55	16	*	*	*	16	55
12:30	*	68	23	*	*	*	23	68
12:45	*	64	26	*	*	*	26	64
01:00	*	66	11	*	*	*	11	66
01:15	*	60	18	*	*	*	18	60
01:30	*	66	8	*	*	*	8	66
01:45	*	58	6	*	*	*	6	58
02:00	*	60	13	*	*	*	13	60
02:15	*	60	15	*	*	*	15	60
02:30	18	58	*	*	*	*	18	58
02:45	7	58	*	*	*	*	7	58
03:00	14	60	*	*	*	*	14	60
03:15	10	59	*	*	*	*	10	59
03:30	10	55	*	*	*	*	10	55
03:45	7	61	*	*	*	*	7	61
04:00	11	64	*	*	*	*	11	64
04:15	6	44	*	*	*	*	6	44
04:30	11	51	*	*	*	*	11	51
04:45	10	65	*	*	*	*	10	65
05:00	10	37	*	*	*	*	10	37
05:15	13	49	*	*	*	*	13	49
05:30	14	59	*	*	*	*	14	59
05:45	17	48	*	*	*	*	17	48
06:00	18	49	*	*	*	*	18	49
06:15	16	37	*	*	*	*	16	37
06:30	20	49	*	*	*	*	20	49
06:45	17	54	*	*	*	*	17	54
07:00	22	58	*	*	*	*	22	58
07:15	19	59	*	*	*	*	19	59
07:30	30	50	*	*	*	*	30	50
07:45	25	60	*	*	*	*	25	60
08:00	40	53	*	*	*	*	40	53
08:15	28	50	*	*	*	*	28	50
08:30	46	38	*	*	*	*	46	38
08:45	47	38	*	*	*	*	47	38
09:00	46	39	*	*	*	*	46	39
09:15	48	36	*	*	*	*	48	36
09:30	62	43	*	*	*	*	62	43
09:45	61	42	*	*	*	*	61	42
10:00	73	34	*	*	*	*	73	34
10:15	61	35	*	*	*	*	61	35
10:30	73	42	*	*	*	*	73	42
10:45	60	32	*	*	*	*	60	32
11:00	55	52	*	*	*	*	55	52
11:15	55	28	*	*	*	*	55	28
11:30	64	32	*	*	*	*	64	32
11:45	82	28	*	*	*	*	82	28
Total	1226	2430	154	0	0	0	1380	2430
Combined Total	3656		154		0		3810	
Peak	09:45	00:30	12:00				09:45	00:30
Vol.	268	258	83				268	258
P.H.F.	0.918	0.949	0.798				0.918	0.949
ADT	ADT 3,810		AADT 3,810					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: CENTRAL AVE,SE From ASTOR PL,SE TO FIFTY FIFTH ST,SE

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

Prepared By: Rahul Jain

Prepared Date: 9/16/2013

Total Number of Accident:	9	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	1	11.1%	Fixed Object:	0	0.0%
Total Number of Injuries:	5	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	2	Rear End:	2	22.2%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	0	Side Swiped:	4	44.4%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	1	11.1%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	1	11.1%	Unspecified:	0	0.0%
Time of Day				Day of week			
	#ACC	%			#ACC	%	
07:30 ~ 09:30:	1	11.1%		Sunday:	2	22.2%	
09:30 ~ 11:30:	1	11.1%		Monday:	3	33.3%	
11:30 ~ 13:30:	1	11.1%		Tuesday:	0	0.0%	
13:30 ~ 16:00:	1	11.1%		Wednesday:	1	11.1%	
16:00 ~ 18:30:	0	0.0%		Thursday:	1	11.1%	
18:30 ~ 07:30:	5	55.6%		Friday:	0	0.0%	
Unspecified:	0	0.0%		Saturday:	2	22.2%	
Weather Condition				Surface Condition			
	#ACC	%			#ACC	%	
Clear:	7	77.8%		Dry:	7	77.8%	
Rain:	2	22.2%		Wet:	2	22.2%	
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				Accident Severity Type			
	#VEH	%			#ACC	%	
Passenger Car:	18	90.0%		Fatal Collision:	0	0.0%	
Bus:	0	0.0%		Injury Collision:	3	33.3%	
Truck:	1	5.0%		PDO Collision:	6	66.7%	
Taxi:	0	0.0%		Light Condition			
Minivan:	0	0.0%			#ACC	%	
Police/Emergency Vehicle:	0	0.0%		Daylight:	6	66.7%	
Motorcycle/Moped:	0	0.0%		Dawn/Dusk:	0	0.0%	
Bicycle:	0	0.0%		Dark(Lighted):	3	33.3%	
Fixed Object:	0	0.0%		Dark(Not Lighted):	0	0.0%	
Unspecified:	1	5.0%		Dark(Unknown Lighting):	0	0.0%	
				Unspecified:	0	0.0%	
Contributing Factor				Pedestrian Actions			
	#VEH	%			#ACC	%	
Driver: Speed:	2	10.0%		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:	2	10.0%		In Unmarked Crosswalk:	0	0.0%	
Vehicle:	0	0.0%		Not in Crosswalk:	0	0.0%	
Roadway:	1	5.0%		From Between Parked Cars:	0	0.0%	
Unspecified:	15	75.0%		Unspecified:	0	0.0%	

3 Records are not approved as of 9/16/2013 10:37:06 AM