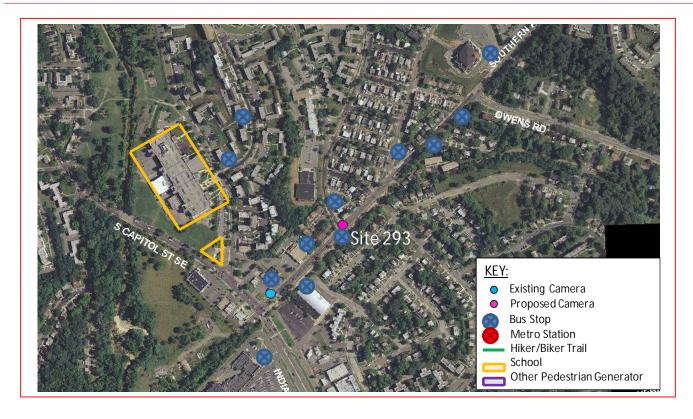


Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 600 Block Southern Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	706	8 8D Propose		Proposed	600 Block Southern Avenue Southeast,
					Southwest-bound



The *proposed* speed camera is located in Ward 8 at the 600 block of Southern Avenue Southeast in the southwest-bound direction. Southern Avenue Southeast runs between 63rd Street Northeast to the north and South Capitol Street Southwest to the south. The posted speed limit is 30 MPH.



District Department of Transportation

55 M Street, Suite 400

Washington, DC 20003



Field Assessment Summary

Southern Avenue Southeast is assumed to run in a northeast-southwest direction and is classified as a minor arterial. Southern Avenue Southeast has two travel lanes in each direction with a left turn lane at Suitland Road. This site has the following characteristics:

- This is a residential area with houses.
- There are two schools in the area: Patricia R. Harris Education Center and the University of the District of Columbia Community College P.R. Harris Educational Center.
- There are crosswalks at East Meadow Court, Barnaby Road Southeast, and Bonini Road Southeast.
- There is sidewalk on both sides of the street and on-street parking on the north side of the street.
- The pavement is in fair condition and there is curb and gutter with drainage inlets.
- There is a bus stop northeast-bound south of Bonini Road and another north of Barnaby Road Southeast. There is a bus stop southwest-bound at Barnaby Road Southeast.







Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	29
85th Percentile Speed (MPH)	34
10 MPH Pace Speed	25-34
ADT	7,580

The mean speed is 1 MPH lower than the posted speed limit, and the 85th percentile speed is 4 MPH higher than the posted speed limit at this location.

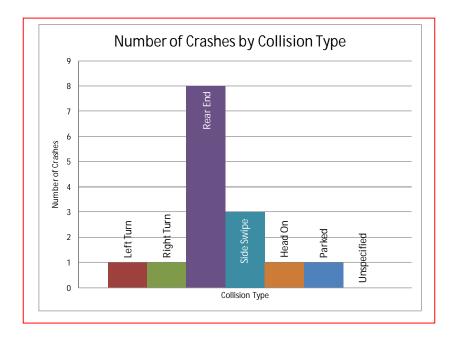
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 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 types of collision at this location were Rear End (8 crashes) and Side Swipe (3 crashes). The other collision types had 1 crash or less each. There were 2 crashes where vehicular speeding was the contributing factor. Furthermore, the site experienced 6 injury-related crashes.

W8 - 224



Seve		W€	eather		Surface	condit	ion	Light Condition			
Total	16										
Fatal	0	0.0%	Clear	13	81.3%	Dry	13	81.3%	Day	9	56.3%
Injury	6	37.5%	Rain	2	12.5%	Wet	3	18.8%	Night	6	37.5%
Emergency	1	6.3%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Truck	1	6.3%									



The Southern Avenue Corridor is listed as one of the Top 10 high frequency crash corridors from 2009 to 2011, according to the *Traffic Safety Statistics Report for the District of Columbia (2009-2011).*¹

Safety Nexus

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

- 1. Speed Data The 85th percentile speed is higher than the posted speed limit at this location.
- 2. Crash Data This site experienced 6 injury-related crashes. The Southern Avenue Corridor is listed as one of the Top 10 high frequency crash corridors from 2009 to 2011.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:

W8 - 225

¹ DDOT, Traffic Safety Statistics Report for the District of Columbia (2009-2011), page 80.



- a. This is a residential area with houses.
- b. There are two schools in the area: Patricia R. Harris Education Center and the University of the District of Columbia Community College P.R. Harris Educational Center.
- c. There are multiple bus stops in the area which generate pedestrian activity.
- d. There is on-street parking on the north side of the street.

Due to the speed data analysis, 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

600 Blk of Southern Avenue SE, SWB Speed

SWB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/12/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	2	8	98	173	70	11	0	0	0	0	0	0	0	0	362
22:00	2	7	40	99	62	9	2_	4	0	1	0	0	0	0	226
23:00	0	4	35	70	46	11	5	1	0	0	0	0	0	0	172
Total	4	19	173	342	178	31	7	5	0	1	0	0	0	0	760_

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

600 Blk of Southern Avenue SE, SWB Speed

SWB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/13/13	0	3	13	51	37	9	0	0	0	0	0	0	0	0	113
01:00	1	2	5	16	19	6	2	1	0	0	0	0	0	0	52
02:00	0	0	5	19	7	5	2	0	0	0	0	0	0	0	38
03:00	1	0	2	14	10	7	1	0	0	0	0	0	0	0	35
04:00	0	3	14	35	28	9	8	2	0	0	0	0	0	0	99
05:00	1	1	18	78	73	40	16	2	1	0	0	0	0	0	230
06:00	0	1	51	154	133	47	13	1	0	0	0	0	0	0	400
07:00	5	6	64	244	171	58	8	0	1	0	0	0	0	0	557
08:00	1	9	54	210	186	37	10	1	1	0	0	0	0	0	509
09:00	2	9	63	142	112	30	7	1	0	0	0	0	0	0	366
10:00	2	6	42	132	112	27	9	1	0	0	0	0	0	0	331
11:00	7	5	37	128	129	27	5	0	0	0	0	0	0	0	338
12 PM	6	7	40	184	119	25	8	1	0	0	0	0	0	0	390
13:00	2	6	57	180	107	36	9	0	0	0	0	0	0	0	397
14:00	2	7	64	178	126	20	3	1	0	0	0	0	0	0	401
15:00	4	18	60	167	124	26	5	0	0	0	0	0	0	0	404
16:00	4	7	68	181	143	37	6	2	0	0	0	0	0	0	448
17:00	10	18	44	203	136	44	5	1	0	0	0	0	0	0	461
18:00	0	6	115	232	115	19	3	0	0	0	0	0	0	0	490
19:00	3	8	96	190	132	31	4	1	0	0	0	0	0	0	465
20:00	6	5	48	121	91	23	2	0	0	0	0	0	0	0	296
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	57	127	960	2859	2110	563	126	15	3	0	0	0	0	0	6820
Grand Total	61	146	1133	3201	2288	594	133	20	3	1	0	0	0	0	7580

 15th Percentile:
 23 MPH

 50th Percentile:
 28 MPH

 85th Percentile:
 34 MPH

 95th Percentile:
 38 MPH

Stats

 Mean Speed(Average):
 29 MPH

 10 MPH Pace Speed:
 25-34 MPH

 Number in Pace:
 5027

 Percent in Pace:
 66.3%

 Number of Vehicles > 30 MPH:
 3099

 Percent of Vehicles > 30 MPH:
 40.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

600 Blk of Southern Avenue SE, SWB Volume

Start	Thu	12-Dec-13	Fri	13-Dec-13	Sat	14-Dec-13	Daily Av	erage
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	41	98	*	*	41	98
12:15	*	*	39	102	*	*	39	102
12:30	*	*	21	96	*	*	21	96
12:45	*	*	12	94	*	*	12	94
01:00	*	*	13	83	*	*	13	83
01:15	*	*	12	97	*	*	12	97
01:30	*	*	13	96	*	*	13	96
01:45	*	*	13 14	121	*	*	13 14	121
02:00	*	*	11	98	*	*	11	98
02:15	*	*	7	96	*	*	7	96
02:30	*	*	7	106	*	*	7	106
02:45	*	*	13	101	*	*	13	101
03:00	*	*	13	122	*	*	13	122
03:15	*	*	11	83	*	*	11	83
03:30	*	*	2	108	*	*	2	108
03:45	*	*	9	91	*	*	2 9	91
04:00	*	*	20	108	*	*	20	108
04:15	*	*	19	105	*	*	19	105
	*	*	19	103	*	*	19	
04:30	*	*	29 31	112 123	*	*	29 31	112
04:45	*	*	31	123	*	*	31	123
05:00	*	*	37	130	*	*	37	130
05:15	*	*	47	107	*	*	47	107
05:30	*	*	77	122	*	*	77	122
05:45	*	*	69	102	*	*	69	102
06:00	*	*	80	135	*	*	80	135
06:15			84	110			84	110
06:30	*	*	124	126	*	*	124	126
06:45	*	*	112	119	*	*	112	119
07:00	*	*	121	124	*	*	121	124
07:15	*	*	136	131	*	*	136	131
07:30	*	*	155	96	*	*	155	96
07:45	*	*	145	114	*	*	145	114
08:00	*	*	141	100	*	*	141	100
08:15	*	*	125	93	*	*	125	93
08:30	*	*	123	78	*	*	123	78
08:45	*	*	120	25	*	*	120	25
09:00	*	78	107	*	*	*	107	78
09:15	*	141	97	*	*	*	97	141
09:30	*	83	83	*	*	*	83	83
09:45	*	60	79	*	*	*	79	60
10:00	*	57	89	*	*	*	89	57
10:15	*	61	88	*	*	*	88	61
10:30	*	55	83	*	*	*	83	55
10:45	*	53	71	*	*	*	71	53
11:00	*	58	86	*	*	*	86	58
11:15	*	42	84	*	*	*	84	42
11:30	*	41	80	*	*	*	80	41
11:45	*	31	88	*	*	*	88	31
Total	0	760	3068	3752	0	0	3068	4512
Combined								
Total	76		68.		C	<u> </u>	7580	
Peak		09:00	07:15	06:30			07:15	06:30
Vol.		362	577	500			577	500
P.H.F.		0.642	0.931	0.954			0.931	0.954
ADT		ADT 7,580	AADT 7,580					

Accident Summary Report (R-8)

Time Period Covered: From	om 01/01/20	10 To 12/31	2012 Prepare	ed By:	Rahul Jain	Prepared Da	te: 1	0/31/20
Total Number of Accident:		16	Collision Type	#ACC	%	Collision Type	#ACC	9/
Total Number of Fatalities:		0	Right Angle:	0	0.0%	Fixed Object:	1	6.3%
Total Number of Injuries:		12	Left Turn:	1	6.3%	Ran Off Road:	0	0.0%
Total Number of Disabling Inj	juries:	0	Right Turn:	1	6.3%	Ped. Involved:	0	0.0%
Total Number of NonDisablin	g Injuries:	3	Rear End:	8	50.0%	Backing:	0	0.0%
Total Number of Pedestrians	Involved:	0	Side Swiped:	3	18.8%	Non Collision:	0	0.0%
Total Number of Bicycles Inv	olved:	0	Head On:	1	6.3%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles	Involved:	0	Parked:	1	6.3% l	Jnspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	c	9/
07:30 ~ 09:30:	0	0.0%			Sunday:	2		12.5%
09:30 ~ 11:30:	1	6.3%			Monday:	2		12.5%
11:30 ~ 13:30:	1	6.3%			Tuesday:	0		0.0%
13:30 ~ 16:00:	2	12.5%			Wednesday:	1		6.3%
16:00 ~18:30:	5	31.3%			Thursday:	4		25.0%
18:30 ~ 07:30:	7	43.8%			Friday:	5		31.3%
Unspecified:	0	0.0%			Saturday:	2		12.5%
Weather Condition	#ACC	%			Surface Condition	#AC	C	%
Clear:	13	81.3%			Dry:	13		81.3%
Rain:	2	12.5%			Wet:	3		18.8%
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:	1	6.3%			Unspecified:	0		0.0%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	c	%
Passenger Car:	28	87.5%			Fatal Collision:	0		0.0%
Bus:	0	0.0%			Injury Collision:	6		37.5%
Truck:	1	3.1%			PDO Collision:	10		62.5%
Taxi:	0	0.0%						
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle:	1	3.1%			Daylight:	9		56.3%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	6		37.5%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	2	6.3%			Dark(Unknown Ligh	ting): 0		0.0%
					Unspecified:	1		6.3%
Contributing Factor	#VEH	%			Pedestrian Actions	s #AC	С	%
Driver: Speed:	2	6.3%			In Crosswalk with S	ignal: 0		0.0%
Driver: Alcohol/Drug:	2	6.3%			In Crosswalk agains	st Signal: 0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	ınal: 0		0.0%
Driver: Others:	6	18.8%			In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	1	3.1%			From Between Park	ced Cars: 0		0.0%
Unspecified:	21	65.6%			Unspecified:	0		0.0%

¹¹ Records are not approved as of 10/31/2013 9:23:33 AM