



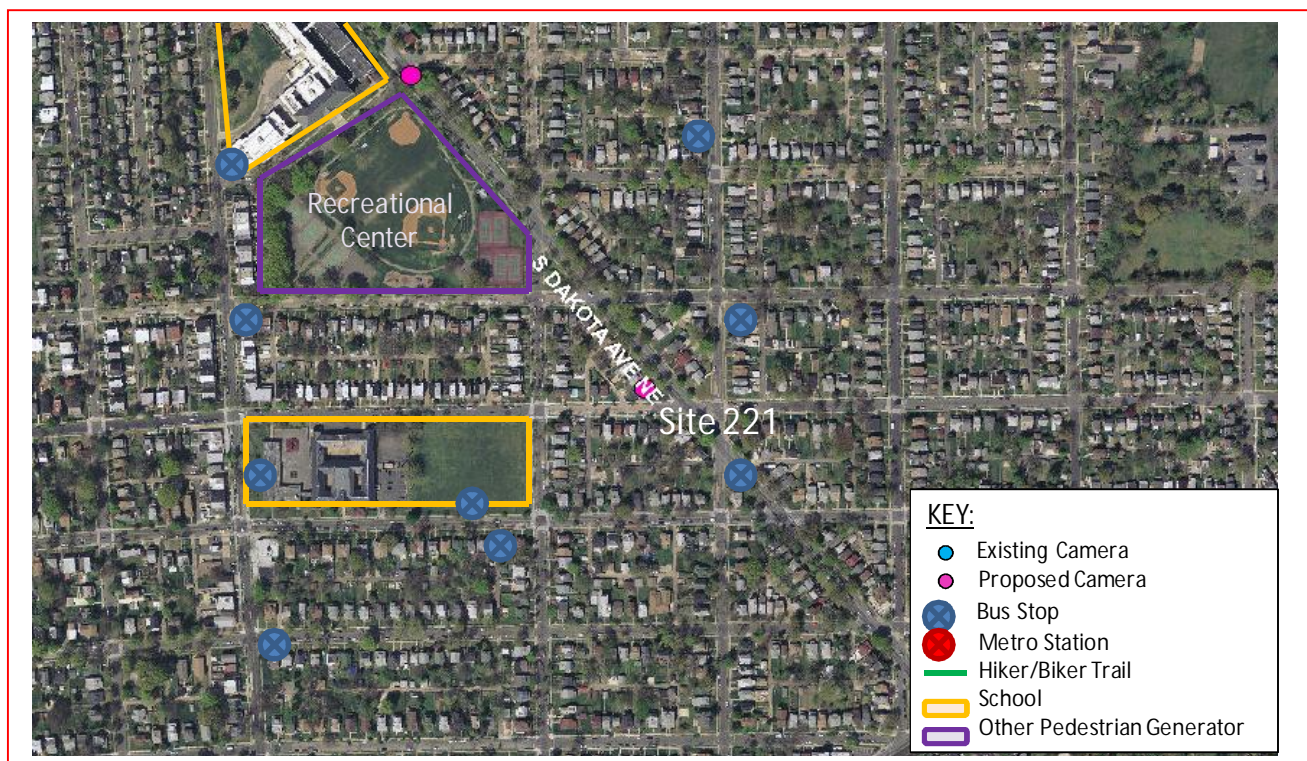
District Department of Transportation

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

3600 Block South Dakota Avenue NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
5	503	5	5A	Proposed	3600 Block South Dakota Avenue Northeast Northwest-bound



This *proposed* speed camera will be located in Ward 5 on the 3600 block of South Dakota Avenue Northeast in the northwest-bound direction. South Dakota Avenue runs between Riggs Road Northeast to the North and New York Avenue Northeast to the south. The posted speed limit 25 MPH.

W5 - 404





District Department of Transportation

3600 Block South Dakota Avenue NE

Field Assessment Summary

South Dakota Avenue is assumed to run in the northwest-southeast direction, and is classified as a principal arterial. South Dakota Avenue has two travel lanes in each direction. This site has the following characteristics:

- This is a residential area with houses.
- There are two schools in the area: Perry Street Preparatory Public Charter School and Burroughs Education Campus. Taft Recreation Center is also in the area.
- There is sidewalk and on-street parking on both sides of the street. There are crosswalks at Otis Street and Newton Street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.



Looking Northwest-bound



District Department of Transportation

3600 Block South Dakota Avenue NE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	11
85th Percentile Speed (MPH)	14
10 MPH Pace Speed	4-13
ADT	5,614

The mean speed is lower than the posted speed limit by 14 MPH and the 85th percentile speed is lower than the posted speed by 11 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 14 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 (6 crashes); Right Angle and Rear End both at two crashes. The other collision types had one crash or less each.

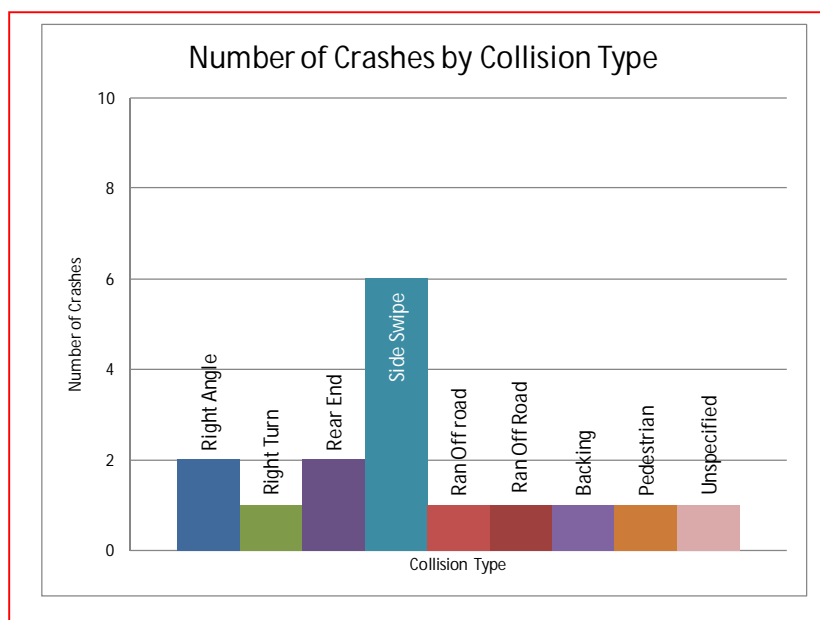
W5 - 406



District Department of Transportation

3600 Block South Dakota Avenue NE

Severity			Weather			Surface condition			Light Condition		
Total	14										
Fatal	0	0.0%	Clear	11	78.6%	Dry	11	78.6%	Day	11	78.6%
Injury	3	21.4%	Rain	3	21.4%	Wet	3	21.4%	Night	3	21.4%
Truck	3	21.4%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	2	14.3%									



Safety Nexus

This site presents the following safety considerations which may support the 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 – There were three injury-related 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.
 - b. There are two schools in the area: Perry Street Preparatory Public Charter School and Burroughs Education Campus.
 - c. Taft Recreation Center is in the area which generates pedestrian and bicycle activity.
 - d. There are multiple bus stops in the area which generate pedestrian activity.
 - e. There is on-street parking on both sides of the street.

W5 - 407



District Department of Transportation

3600 Block South Dakota Avenue NE

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, and the crash data analysis showed a low number of crashes, there is still a safety concern at this location. The residential area coupled with the proximity of the site to the recreation area and the schools provides a location with multiple pedestrian generators and multiple opportunities for vehicle-pedestrian conflicts. Due to the specific site characteristics, the proximity to recreation area and schools, and the pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

W5 - 408

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

3600 Block of South Dakota 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
11/13/13	41	0	2	3	1	0	2	1	0	0	0	1	0	0	51
01:00	44	2	2	3	4	3	4	3	0	0	0	0	0	0	65
02:00	42	0	6	3	3	1	4	0	0	0	0	0	0	0	59
03:00	32	0	3	4	3	2	2	0	0	0	0	0	0	0	46
04:00	53	1	1	6	3	1	6	2	0	0	0	0	0	0	73
05:00	106	0	4	12	14	9	20	5	0	0	0	0	0	0	170
06:00	145	0	3	13	11	8	21	12	1	0	0	0	1	0	215
07:00	167	1	2	6	7	5	8	1	0	0	0	0	0	0	197
08:00	193	1	7	5	3	2	1	0	0	0	0	0	0	0	212
09:00	193	4	10	15	1	6	1	3	0	0	0	0	0	0	233
10:00	258	3	14	23	3	2	7	0	0	0	0	0	0	0	310
11:00	270	4	15	12	3	1	4	1	0	0	0	0	0	0	310
12 PM	259	3	13	22	4	3	4	0	0	0	0	0	0	0	308
13:00	273	2	13	10	5	2	4	0	1	0	0	0	0	0	310
14:00	275	7	16	11	2	1	5	2	0	0	0	0	0	0	319
15:00	266	19	25	16	0	2	3	2	0	0	0	0	0	0	333
16:00	284	17	18	7	5	4	4	2	0	0	0	0	0	0	341
17:00	260	15	27	8	3	1	0	0	0	0	0	0	0	0	314
18:00	285	7	16	12	1	2	2	0	1	0	0	0	0	0	326
19:00	295	9	12	14	4	2	1	2	0	0	0	0	0	0	339
20:00	268	4	8	11	4	2	7	0	1	0	0	0	0	0	305
21:00	244	1	6	9	4	2	7	1	0	0	0	0	0	0	274
22:00	200	2	4	10	6	3	12	2	1	0	0	0	0	0	240
23:00	152	1	4	12	3	10	7	1	1	0	0	0	0	0	191
Total	4605	103	231	247	97	74	136	40	6	0	0	1	1	0	5541

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

3600 Block of South Dakota 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
11/14/13	69	0	0	1	3	2	4	2	1	0	0	0	0	1	83
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	69	0	0	1	3	2	4	2	1	0	0	0	0	1	83
Grand Total	4674	103	231	248	100	76	140	42	7	0	0	1	1	1	5624

15th Percentile : 4 MPH
 50th Percentile : 8 MPH
 85th Percentile : 14 MPH
 95th Percentile : 27 MPH

Stats
 Mean Speed(Average) : 11 MPH
 10 MPH Pace Speed : 4-13 MPH
 Number in Pace : 4067
 Percent in Pace : 72.3%
 Number of Vehicles > 25 MPH : 616
 Percent of Vehicles > 25 MPH : 11.0%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

3600 Block of South Dakota Ave. NE NWB Volume

Start Time	Wed	13-Nov-	Thu	14-Nov-	Fri	15-Nov-	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	80	45	*	*	*	45	80
12:15	*	69	38	*	*	*	38	69
12:30	20	81	0	*	*	*	10	81
12:45	31	78	*	*	*	*	31	78
01:00	18	68	*	*	*	*	18	68
01:15	17	75	*	*	*	*	17	75
01:30	11	74	*	*	*	*	11	74
01:45	19	93	*	*	*	*	19	93
02:00	20	85	*	*	*	*	20	85
02:15	17	72	*	*	*	*	17	72
02:30	8	88	*	*	*	*	8	88
02:45	14	74	*	*	*	*	14	74
03:00	9	84	*	*	*	*	9	84
03:15	9	71	*	*	*	*	9	71
03:30	19	84	*	*	*	*	19	84
03:45	9	94	*	*	*	*	9	94
04:00	18	81	*	*	*	*	18	81
04:15	15	94	*	*	*	*	15	94
04:30	14	84	*	*	*	*	14	84
04:45	26	82	*	*	*	*	26	82
05:00	37	76	*	*	*	*	37	76
05:15	43	87	*	*	*	*	43	87
05:30	51	77	*	*	*	*	51	77
05:45	39	74	*	*	*	*	39	74
06:00	43	90	*	*	*	*	43	90
06:15	50	89	*	*	*	*	50	89
06:30	50	69	*	*	*	*	50	69
06:45	72	78	*	*	*	*	72	78
07:00	43	95	*	*	*	*	43	95
07:15	50	85	*	*	*	*	50	85
07:30	56	74	*	*	*	*	56	74
07:45	48	85	*	*	*	*	48	85
08:00	51	92	*	*	*	*	51	92
08:15	57	81	*	*	*	*	57	81
08:30	52	66	*	*	*	*	52	66
08:45	52	66	*	*	*	*	52	66
09:00	51	65	*	*	*	*	51	65
09:15	68	69	*	*	*	*	68	69
09:30	60	73	*	*	*	*	60	73
09:45	54	67	*	*	*	*	54	67
10:00	68	53	*	*	*	*	68	53
10:15	81	60	*	*	*	*	81	60
10:30	77	72	*	*	*	*	77	72
10:45	84	55	*	*	*	*	84	55
11:00	79	40	*	*	*	*	79	40
11:15	84	54	*	*	*	*	84	54
11:30	75	50	*	*	*	*	75	50
11:45	72	47	*	*	*	*	72	47
Total	1941	3600	83	0	0	0	2014	3600
Combined Total	5541		83		0		5614	
Peak	10:30	03:30	-	-	-	-	10:30	03:30
Vol.	324	353	-	-	-	-	324	353
P.H.F.	0.964	0.939					0.964	0.939
ADT	ADT 5,614		AADT 5,614					

Accident Summary Report (R-8)

Corridor: SOUTH DAKOTA AVE,NE From OTIS ST,NE TO NEWTON ST,NE

Time Period Covered: From 01/01/2010 To 12/31/2012 **Prepared By:** Rahul Jain

Prepared Date: 9/16/2013

Total Number of Accident:	14	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	2	14.3%	Fixed Object:	0	0.0%
Total Number of Injuries:	3	Left Turn:	0	0.0%	Ran Off Road:	1	7.1%
Total Number of Disabling Injuries:	0	Right Turn:	1	7.1%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	1	Rear End:	2	14.3%	Backing:	1	7.1%
Total Number of Pedestrians Involved:	1	Side Swiped:	6	42.9%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	0	0.0%	Unspecified:	1	7.1%
Time of Day				#ACC	%	Day o fweek	
07:30 ~ 09:30:				2	14.3%	Sunday:	
09:30 ~ 11:30:				3	21.4%	Monday:	
11:30 ~ 13:30:				2	14.3%	Tuesday:	
13:30 ~ 16:00:				1	7.1%	Wednesday:	
16:00 ~18:30:				3	21.4%	Thursday:	
18:30 ~ 07:30:				3	21.4%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				11	78.6%	Dry:	
Rain:				3	21.4%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				0	0.0%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				0	0.0%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				19	67.9%	Fatal Collision:	
Bus:				2	7.1%	Injury Collision:	
Truck:				3	10.7%	PDO Collision:	
Taxi:				0	0.0%	Light Condition	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				0	0.0%	Dawn/Dusk:	
Motorcycle/Moped:				0	0.0%	Dark(Lighted):	
Bicycle:				0	0.0%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				4	14.3%	Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				1	3.6%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				0	0.0%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				5	17.9%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				22	78.6%	Unspecified:	

9 Records are not approved as of 9/16/2013 9:06:02 AM