



## Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 3900 Block South Dakota Avenue NE

Study	Area	and Loo	cation		
District	PSA	Ward	ANC	Phase	Description
5	503	5	5A	Proposed	3900 Blk South Dakota Avenue Northeast, Southeastbound



This *proposed* speed camera will be located in Ward 5 on the 3900 block of South Dakota Avenue Northeast in the southeast 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 is 25 MPH.





District Department of Transportation 3900 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 is one school in the area: Perry Street Preparatory Public Charter School.
- The Taft Recreation Center is also in the area.
- There are sidewalks and on-street parking on both sides of the street.
- There is a crosswalk at 19<sup>th</sup> Street and a traffic signal with pedestrian signals and crosswalks at Perry • Street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- This area has signs designating it as a traffic calming zone.



W5 - 422







### Looking Southeast-bound

## Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	14
85th Percentile Speed (MPH)	26
10 MPH Pace Speed	4-13
ADT	10,867

The mean speed is lower than the posted speed limit by 11 MPH and the 85<sup>th</sup> percentile speed is higher than the posted speed by 1 MPH at this location.

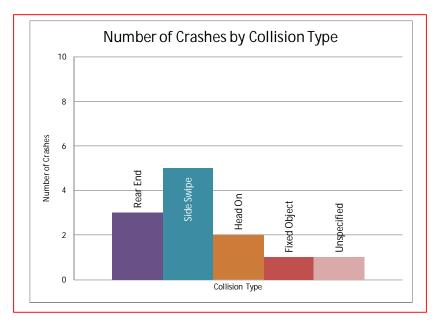
### Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 12 crashes at this location. A breakdown of collision type can be found in the chart below. The most common type of collision at this location was Side Swiped with five crashes. The other collision types had less than three crashes or less. Furthermore, this site experienced four injury-related crashes.



d.
District Department of Transportation
3900 Block South Dakota Avenue NE

Sev	verity		Weather			Surface	condit	ion	Light Condition			
Total	12											
Fatal	0	0.0%	Clear	11	91.7%	Dry	9	75.0%	Day	9	75.0%	
Injury	4	33.3%	Rain	1	8.3%	Wet	1	8.3%	Night	2	16.7%	
Truck	2	16.7%	Snow	0	0.0%	Snow/Ice	1	8.3%				
Bus	2	16.7%										



## 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 85th percentile speed is higher than the posted speed limit at this location.
- 2. Crash Data This site experienced four injury-related crashes.
- 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 is one school nearby: Perry Street Preparatory Public Charter School.
  - c. The Taft 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 which suggest a previous issue with speeding.

W5 - 424





This area has signs designating it as a traffic calming zone. f.

Due to the 85<sup>th</sup> percentile speeds, the number of injury-related crashes, the specific site characteristics of a residential area, the proximity to recreation area and schools, the presence of a traffic calming zone, and the pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

W5 - 425

## SAMMAT ENGINEERING SERVICES, LLC

#### 1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

#### www.sammateng.com

### 3900 Block of South Dakota Ave NE SEB Speed

SEB															
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
11/13/13	46	0	6	12	10	1	0	1	0	0	0	0	0	0	76
01:00	53	0	4	18	17	1	1	0	1	0	0	0	0	0	95
02:00	46	0	2	17	7	2	0	0	0	0	0	0	0	0	74
03:00	45	0	6	14	18	9	3	0	0	0	0	0	0	0	95
04:00	58	1	5	16	29	17	8	0	0	0	0	0	0	0	134
05:00	157	4	10	52	76	16	12	4	1	1	0	0	0	0	333
06:00	282	22	37	92	78	23	13	0	0	0	0	0	0	0	547
07:00	369	47	51	104	42	12	1	0	0	0	0	0	0	0	626
08:00	374	35	58	80	29	8	0	0	0	0	0	0	0	0	584
09:00	346	19	69	62	32	2	2	0	0	0	0	0	0	0	532
10:00	353	10	79	109	40	5	0	1	0	0	0	0	0	0	597
11:00	379	11	74	88	34	8	2	0	0	0	0	0	0	0	596
12 PM	344	14	81	88	36	10	2	0	0	0	0	0	0	0	575
13:00	367	12	52	89	37	9	3	1	0	0	0	0	0	0	570
14:00	383	13	50	110	32	12	7	5	1	0	0	0	0	0	613
15:00	367	6	54	108	79	18	4	0	2	0	0	0	0	0	638
16:00	369	10	53	99	60	11	5	0	0	0	0	0	0	0	607
17:00	343	8	72	110	34	14	2	0	0	0	0	0	0	0	583
18:00	363	9	74	131	32	15	1	0	0	0	0	0	0	0	625
19:00	367	14	41	91	17	11	0	1	0	0	0	0	0	0	542
20:00	331	15	31	53	21	8	1	0	0	0	0	0	0	0	460
21:00	299	8	56	91	30	18	1	1	0	1	0	0	0	0	505
22:00	223	8	25	94	42	12	4	1	0	1	0	0	0	0	410
23:00	181	3	19	35	51	24	2	2	0	0	0	0	0	0	317
Total	6445	269	1009	1763	883	266	74	17	5	3	0	0	0	0	10734

## SAMMAT ENGINEERING SERVICES, LLC

#### 1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

#### www.sammateng.com

### 3900 Block of South Dakota Ave NE SEB Speed

SEB															
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
11/14/13	76	5	8	23	17	3	1	0	0	0	0	0	0	0	133
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	76	5	8	23	17	3	1	0	0	0	0	0	0	0	133
Grand Total	6521	274	1017	1786	900	269	75	17	5	3	0	0	0	0	10867
			50th 85th	Percentile : Percentile : Percentile : Percentile :		4 MPH 10 MPH 26 MPH 32 MPH									
Stats		1 Number of	0 MPH Pa Numbe Percer f Vehicles >	(Average) : ice Speed : er in Pace : nt in Pace : • 25 MPH : • 25 MPH :	4-	14 MPH 13 MPH 6390 58.8% 3055 28.1%									

## SAMMAT ENGINEERING SERVICES, LLC

#### 1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

#### www.sammateng.com

#### **3900 Block of South Dakota Ave NE SEB Volume**

Start	Wed	13-Nov-	Thu	14-Nov-	Fri	15-Nov-	Daily Av	verage
Time	А.М.	P.M.	А.М.	P.M.	A.M.	P.M.	А.М.	P.M.
12:00	*	129	64	*	*	*	64	129
12:15	*	141	69	*	*	*	69	141
12:30	35	146	*	*	*	*	35	146
12:45	41	159	*	*	*	*	41	159
01:00	31	152	*	*	*	*	31	152
01:15	25	114	*	*	*	*	25	114
01:30	12	127	*	*	*	*	12	127
01:45	27	177	*	*	*	*	27	177
02:00	28	161	*	*	*	*	28	161
02:15	18	146	*	*	*	*	18	146
02:30	11	157	*	*	*	*	11	157
02:45	17	149	*	*	*	*	17	149
03:00	19	168	*	*	*	*	19	168
03:15	22	125	*	*	*	*	22	125
03:30	32	165	*	*	*	*	32	165
03:45	32 22	180	*	*	*	*	32 22	180
04:00	33	155	*	*	*	*	33	155
04:00	26	151	*	*	*	*	26	151
04.15	26 34	161	*	*	*	*	34	
04:30	41	140	*	*	*	*	41	161
04.45	41	140	*	*	*	*	41	140
05:00	72	142	*	*	*	*	72	142
05:15	79 91	165 140	*	*	*	*	79 91	165
05:30	91	140	•	*		*	91	140
05:45	91	136	*	*	*	*	91	136
06:00	108	161	*	*		*	108	161
06:15	125	153	*	*		*	125	153
06:30	141	162	^ +	*	^ *	*	141	162
06:45	173	149	^	*	*	*	173	149
07:00	150	164	*	*	*	*	150	164
07:15	155	133			*		155	133
07:30	151	112	*	*	*	*	151	112
07:45	170	133	*		*	*	170	133
08:00	153	134	*	*	*	*	153	134
08:15	130	118	*	*	*	*	130	118
08:30	154	111	*	*	*	*	154	111
08:45	147	97 122	*	*	*	*	147	97
09:00	132	122	*	*	*	*	132	122
09:15	144	138	*	*	*	*	144	138
09:30	128	116	*	*	*	*	128	116
09:45	128	129	*	*	*	*	128	129
10:00	132	99	*	*	*	*	132	99
10:15	159	105	*	*	*	*	159	105
10:30	155	120	*	*	*	*	155	120
10:45	151	86	*	*	*	*	151	86
11:00	155	61	*	*	*	*	155	61
11:15	143	99	*	*	*	*	143	99
11:30	172	70	*	*	*	*	172	70
11:45	126	87	*	*	*	*	126	87
Total	4289	6445	133	0	0	0	4422	6445
Combined								
Total	107	'34	13	33	C	)	108	67
Peak	06:45	03:30		-		-	- 06:45	03:30
Vol.	629	651		_		-	- 629	651
P.H.F.	0.909	0.904					0.909	0.904

#### DC Department of Transportation - Traffic Accident Reporting and Analysis System

# Accident Summary Report (R-8)

	rom 01/01/20		INCY ST,NE TO 1		Rahul Jain	Prepared Da	ite:	9/16/2013
Total Number of Accident:	011101720	12	Collision Type	#ACC		Collision Type	#AC	
Total Number of Fatalities:		0	Right Angle:	<del>л</del> доо 0	0.0%	Fixed Object:	1	8.3%
Total Number of Injuries:		8	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling In	iurioe.	1	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisablir		1	Rear End:	3	25.0%	Backing:	0	0.0%
Total Number of Pedestrians		0	Side Swiped:	5	41.7%	Non Collision:	0	0.0%
Total Number of Bicycles Inv		0	Head On:	2	16.7%	Under/Over Ride	-	0.0%
Total Number of Motorcycles		0	Parked:	0	0.0%	Unspecified:	1	8.3%
Time of Day	#ACC	%			Day o fweek	#AC	c	%
07:30 ~ 09:30:	4	33.3%			Sunday:	0	-	0.0%
09:30 ~ 11:30:	0	0.0%			Monday:	3		25.0%
11:30 ~ 13:30:	2	16.7%			Tuesday:	1		8.3%
13:30 ~ 16:00:	2	16.7%			Wednesday:	2		16.7%
16:00 ~18:30:	1	8.3%			Thursday:	0		0.0%
18:30 ~ 07:30:	3	25.0%			Friday:	5		41.7%
Unspecified:	0	0.0%			Saturday:	1		8.3%
Weather Condition	#ACC	%			Surface Conditio	n #AC	c	%
Clear:	11	91.7%			Dry:	9		75.0%
Rain:	1	8.3%			Wet:	1		8.3%
Snow:	0	0.0%			Snow/Ice:	1		8.3%
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:	1		8.3%
Type of Vehicle	#VEH	%			Accident Severity	y Type #AC	c	%
Passenger Car:	17	70.8%			Fatal Collision:	0		0.0%
Bus:	2	8.3%			Injury Collision:	4		33.3%
Truck:	2	8.3%			PDO Collision:	8		66.7%
Taxi:	0	0.0%			Light Condition	#AC	~	%
Minivan:	0	0.0%			Daylight:	9		75.0%
Police/Emergency Vehicle:	0	0.0%			Daynghi. Dawn/Dusk:	9		8.3%
Motorcycle/Moped:	0	0.0%			Dark(Lighted):	2		16.7%
Bicycle:	0	0.0%			Dark(Not Lighted):			0.0%
Fixed Object:	0	0.0%			Dark(Unknown Lig			0.0%
Unspecified:	3	12.5%			Unspecified:	0 (internet).		0.0%
Contributing Factor	#VEH	%			Pedestrian Action	ns #AC	:c	%
Driver: Speed:	0	0.0%			In Crosswalk with		-	0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk again	0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no S	•		0.0%
Driver: Others:	1	4.2%			In Unmarked Cros	-		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0 0		0.0%
Roadway:	1	4.2%			From Between Pa			0.0%
Unspecified:	22	91.7%			Unspecified:	0		0.0%

10 Records are not approved as of 9/16/2013 9:08:20 AM