



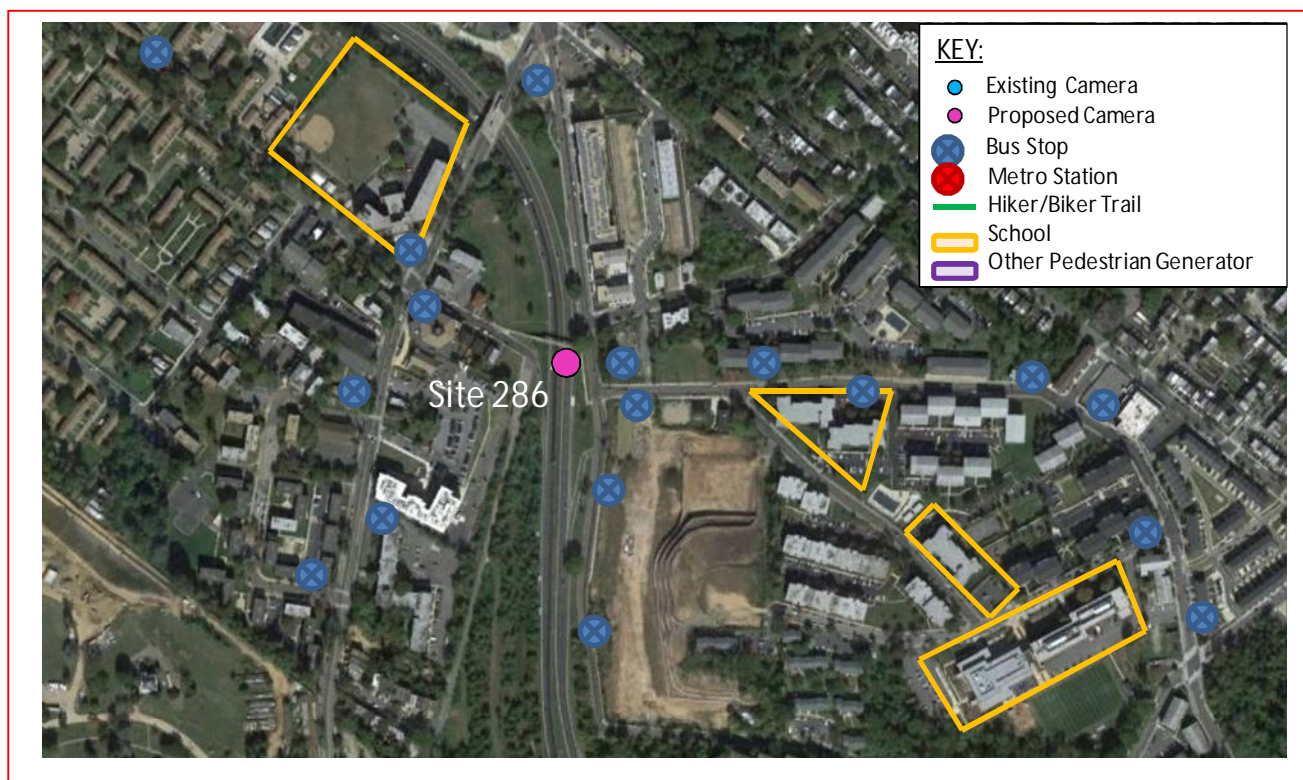
District Department of Transportation

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

Suitland Parkway Southeast 0.8 Mile North of Stanton Road SE

### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8C	Proposed	Suitland Parkway Southeast 0.8 Mile North of Stanton Road Southeast, Southbound



The *proposed* speed camera will be located in Ward 8 on Suitland Parkway Southeast 0.8 mile north of Stanton Road Southeast in the southbound direction. Suitland Parkway runs between Pennsylvania Avenue to the east and Anacostia Freeway to the west. The posted speed limit is 45 MPH.

W8 - 160





District Department of Transportation

## Suitland Parkway Southeast 0.8 Mile North of Stanton Road SE

### Field Assessment Summary

Suitland Parkway Southeast is assumed to run in a north-south direction and is classified as a freeway/expressway. Suitland Parkway Southeast has two travel lanes in each direction. This site has the following characteristics:

- There are three schools in the area: Excel Academy Public Charter School, Washington Middle School and KIPP.
- There are several bus stops nearby that generate pedestrian activity.
- There is a traffic signal with pedestrian signals at Stanton Road.
- There is a grassy median with guardrail and the pavement is like new with curb and gutter with drainage inlets. There is a slight downgrade slope in the southeast-bound direction.



Looking Northbound



District Department of Transportation

## Suitland Parkway Southeast 0.8 Mile North of Stanton Road SE



Looking Southbound

### Speed Data Analysis

Posted Speed Limit (MPH)	45
Mean Speed (MPH)	39
85th Percentile Speed (MPH)	47
10 MPH Pace Speed	40-49
ADT	20,784

The mean speed is lower than the posted speed by 6 MPH and the 85<sup>th</sup> percentile speed is higher than the posted speed limit by 2 MPH in 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 204 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 (85 crashes), Left Turn (35 crashes), Side Swipe (26 crashes), Right Angle (14 crashes), Unspecified (12 crashes), and Fixed Object and Head On (9 crashes each). The other collision types had 6 crashes or less each. There were 21 crashes where vehicular speeding was the contributing factor. Furthermore, the site experienced a high frequency (111 crashes) of injury-related crashes.

W8 - 162

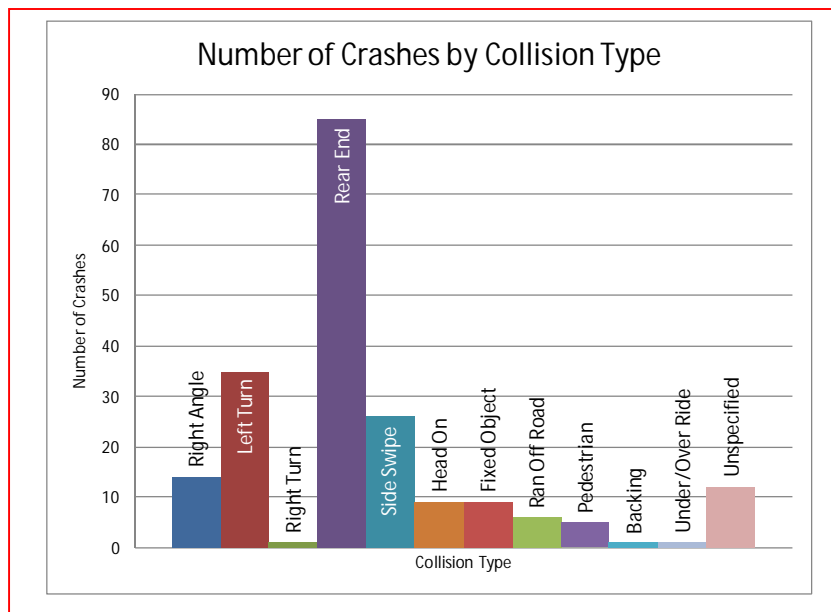




District Department of Transportation

## Suitland Parkway Southeast 0.8 Mile North of Stanton Road SE

Severity			Weather			Surface condition			Light Condition		
Total	204										
Fatal	1	0.5%	Clear	171	83.8%	Dry	165	80.9%	Day	111	54.4%
Injury	111	54.4%	Rain	22	10.8%	Wet	25	12.3%	Night	79	38.7%
Truck	27	13.2%	Snow	3	1.5%	Snow/Ice	4	2.0%			
Emergency	8	3.9%									



There was an elevated number of speed-related crashes at this location, including Rear End crashes. The *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” as two errors leading to Rear End crashes.<sup>1</sup> Both of these errors can be reduced with a decrease in travel speed.

This site is located between two of the Top 5 percent high accident locations for 2010-2012: Firth Sterling Avenue at Suitland Parkway and Stanton Road at Suitland Parkway.<sup>2</sup>

<sup>1</sup> AASHTO, *Highway Safety Manual*, 1<sup>st</sup> Edition, 2010; Volume 1, pages 2-13.

<sup>2</sup> DDOT, *Top 5 Percent High Accident Locations Map*, 2010-2012.



District Department of Transportation

## Suitland Parkway Southeast 0.8 Mile North of Stanton Road SE

### 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 85<sup>th</sup> percentile speed is higher than the posted speed limit at this location.
2. Crash Data – There was an elevated number of speed-related crashes at this location, including Rear End crashes, as well as a very high frequency (111 crashes) of injury-related crashes. This site is located between two of the Top 5 percent high accident locations for 2010-2012.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. There are three schools in the area: Excel Academy Public Charter School, Washington Middle School and KIPP.
  - b. There are several bus stops nearby that generate pedestrian activity.

Due to the speed data analysis, the elevated number of speed-related crashes and injury-related crashes, the designation as a high accident location, 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](http://www.sammateng.com)

## Suitland Pkwy .8 mi No. Stanton SE SB Speed

SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/02/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	2	0	0	0	1	4	24	9	3	1	1	0	0	0	45
04:00	4	0	0	0	3	15	43	40	16	1	1	0	0	0	123
05:00	11	0	0	0	7	22	101	134	39	6	0	0	0	0	320
06:00	31	0	0	0	8	57	249	253	63	12	1	1	0	0	675
07:00	33	0	0	0	9	92	390	343	76	11	2	1	0	0	957
08:00	30	0	1	1	10	126	357	229	83	9	1	0	0	0	847
09:00	18	0	0	0	11	112	367	224	49	3	2	0	0	0	786
10:00	19	0	0	1	14	82	316	275	60	4	2	0	0	0	773
11:00	27	0	0	0	9	112	375	310	83	7	0	0	0	0	923
12 PM	40	1	0	3	2	133	421	356	62	12	0	1	0	0	1031
13:00	29	0	1	1	3	108	609	357	88	12	1	0	0	0	1209
14:00	55	0	0	0	11	105	724	538	100	15	2	0	0	0	1550
15:00	105	12	28	23	56	294	948	380	40	6	0	2	0	0	1894
16:00	460	138	186	200	79	45	10	2	0	0	0	0	0	0	1120
17:00	410	151	254	107	76	94	145	43	1	2	0	0	0	0	1283
18:00	59	0	0	6	47	577	855	178	22	4	0	0	0	0	1748
19:00	41	0	0	0	29	314	637	235	29	4	2	0	0	0	1291
20:00	18	0	0	2	13	158	575	201	42	2	1	0	0	0	1012
21:00	26	0	0	2	17	172	495	207	38	7	1	0	0	0	965
22:00	30	0	0	2	10	127	365	232	53	7	0	1	0	0	827
23:00	19	0	0	2	14	95	273	206	39	4	1	0	1	0	654
Total	1467	302	470	350	429	2844	8279	4752	986	129	18	6	1	0	20033

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## Suitland Pkwy .8 mi No. Stanton SE SB Speed

SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/03/13	6	0	0	0	9	55	171	134	20	2	1	0	0	0	398
01:00	0	0	0	1	6	18	70	46	13	4	0	2	0	0	160
02:00	3	0	0	1	3	29	58	37	18	3	0	0	0	0	152
03:00	0	0	0	0	1	8	16	14	2	0	0	0	0	0	41
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	9	0	0	2	19	110	315	231	53	9	1	2	0	0	751
Grand Total	1476	302	470	352	448	2954	8594	4983	1039	138	19	8	1	0	20784

15th Percentile : 22 MPH  
 50th Percentile : 42 MPH  
 85th Percentile : 47 MPH  
 95th Percentile : 51 MPH

Stats  
 Mean Speed(Average) : 39 MPH  
 10 MPH Pace Speed : 40-49 MPH  
 Number in Pace : 12018  
 Percent in Pace : 57.8%  
 Number of Vehicles > 45 MPH : 6222  
 Percent of Vehicles > 45 MPH : 29.9%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## Suitland Pkwy .8 mi No. Stanton SE SB Volume

Start Time	02-Dec-13		03-Dec-13		04-Dec-13		Daily Average	
	Mon A.M.	P.M.	Tue A.M.	P.M.	Wed A.M.	P.M.	A.M.	P.M.
12:00	*	232	119	*	*	*	119	232
12:15	*	269	123	*	*	*	123	269
12:30	*	265	98	*	*	*	98	265
12:45	*	265	58	*	*	*	58	265
01:00	*	262	47	*	*	*	47	262
01:15	*	299	38	*	*	*	38	299
01:30	*	339	42	*	*	*	42	339
01:45	*	309	33	*	*	*	33	309
02:00	*	332	46	*	*	*	46	332
02:15	*	391	38	*	*	*	38	391
02:30	*	423	38	*	*	*	38	423
02:45	*	404	30	*	*	*	30	404
03:00	*	458	19	*	*	*	19	458
03:15	*	500	22	*	*	*	22	500
03:30	20	552	*	*	*	*	20	552
03:45	25	384	*	*	*	*	25	384
04:00	24	317	*	*	*	*	24	317
04:15	21	304	*	*	*	*	21	304
04:30	32	225	*	*	*	*	32	225
04:45	46	274	*	*	*	*	46	274
05:00	61	301	*	*	*	*	61	301
05:15	84	286	*	*	*	*	84	286
05:30	80	277	*	*	*	*	80	277
05:45	95	419	*	*	*	*	95	419
06:00	121	482	*	*	*	*	121	482
06:15	164	439	*	*	*	*	164	439
06:30	158	420	*	*	*	*	158	420
06:45	232	407	*	*	*	*	232	407
07:00	233	351	*	*	*	*	233	351
07:15	269	367	*	*	*	*	269	367
07:30	214	294	*	*	*	*	214	294
07:45	241	279	*	*	*	*	241	279
08:00	222	262	*	*	*	*	222	262
08:15	218	268	*	*	*	*	218	268
08:30	206	251	*	*	*	*	206	251
08:45	201	231	*	*	*	*	201	231
09:00	198	230	*	*	*	*	198	230
09:15	196	247	*	*	*	*	196	247
09:30	187	266	*	*	*	*	187	266
09:45	205	222	*	*	*	*	205	222
10:00	200	243	*	*	*	*	200	243
10:15	203	195	*	*	*	*	203	195
10:30	180	209	*	*	*	*	180	209
10:45	190	180	*	*	*	*	190	180
11:00	211	186	*	*	*	*	211	186
11:15	229	196	*	*	*	*	229	196
11:30	233	153	*	*	*	*	233	153
11:45	250	119	*	*	*	*	250	119
Total	5449	14584	751	0	0	0	6200	14584
Combined Total	20033		751		0		20784	
Peak	07:00	02:45	12:00				07:00	02:45
Vol.	957	1914	398				957	1914
P.H.F.	0.889	0.867	0.809				0.889	0.867
ADT	ADT 20,784		AADT 20,784					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** SUITLAND PKWY,SE From FIRTH STERLING AVE,SE TO STANTON RD,SE

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

**Prepared By:** Rahul Jain

**Prepared Date:** 9/17/2013

Total Number of Accident:	204	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Fatalities:	1	Right Angle:	14	6.9%	Fixed Object:	9	4.4%
Total Number of Injuries:	192	Left Turn:	35	17.2%	Ran Off Road:	6	2.9%
Total Number of Disabling Injuries:	8	Right Turn:	1	0.5%	Ped. Involved:	5	2.5%
Total Number of NonDisabling Injuries:	34	Rear End:	85	41.7%	Backing:	1	0.5%
Total Number of Pedestrians Involved:	4	Side Swiped:	26	12.7%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	1	Head On:	9	4.4%	Under/Over Ride:	1	0.5%
Total Number of Motorcycles Involved:	4	Parked:	0	0.0%	Unspecified:	12	5.9%
<b>Time of Day</b>				<b>#ACC</b>	<b>%</b>	<b>Day of week</b>	
07:30 ~ 09:30:				17	8.3%	Sunday:	
09:30 ~ 11:30:				12	5.9%	Monday:	
11:30 ~ 13:30:				11	5.4%	Tuesday:	
13:30 ~ 16:00:				36	17.6%	Wednesday:	
16:00 ~ 18:30:				26	12.7%	Thursday:	
18:30 ~ 07:30:				102	50.0%	Friday:	
Unspecified:				0	0.0%	Saturday:	
<b>Weather Condition</b>				<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	
Clear:				171	83.8%	Dry:	
Rain:				22	10.8%	Wet:	
Snow:				3	1.5%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				1	0.5%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				7	3.4%	Unspecified:	
<b>Type of Vehicle</b>				<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	
Passenger Car:				343	82.5%	Fatal Collision:	
Bus:				5	1.2%	Injury Collision:	
Truck:				27	6.5%	PDO Collision:	
Taxi:				6	1.4%	<b>Light Condition</b>	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				8	1.9%	Dawn/Dusk:	
Motorcycle/Moped:				6	1.4%	Dark(Lighted):	
Bicycle:				1	0.2%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				20	4.8%	Unspecified:	
<b>Contributing Factor</b>				<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	
Driver: Speed:				21	5.0%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				6	1.4%	In Crosswalk against Signal:	
Driver: Electronic Device:				1	0.2%	In Crosswalk no Signal:	
Driver: Others:				71	17.1%	In Unmarked Crosswalk:	
Vehicle:				2	0.5%	Not in Crosswalk:	
Roadway:				3	0.7%	From Between Parked Cars:	
Unspecified:				312	75.0%	Unspecified:	

128 Records are not approved as of 9/17/2013 2:14:10 PM