



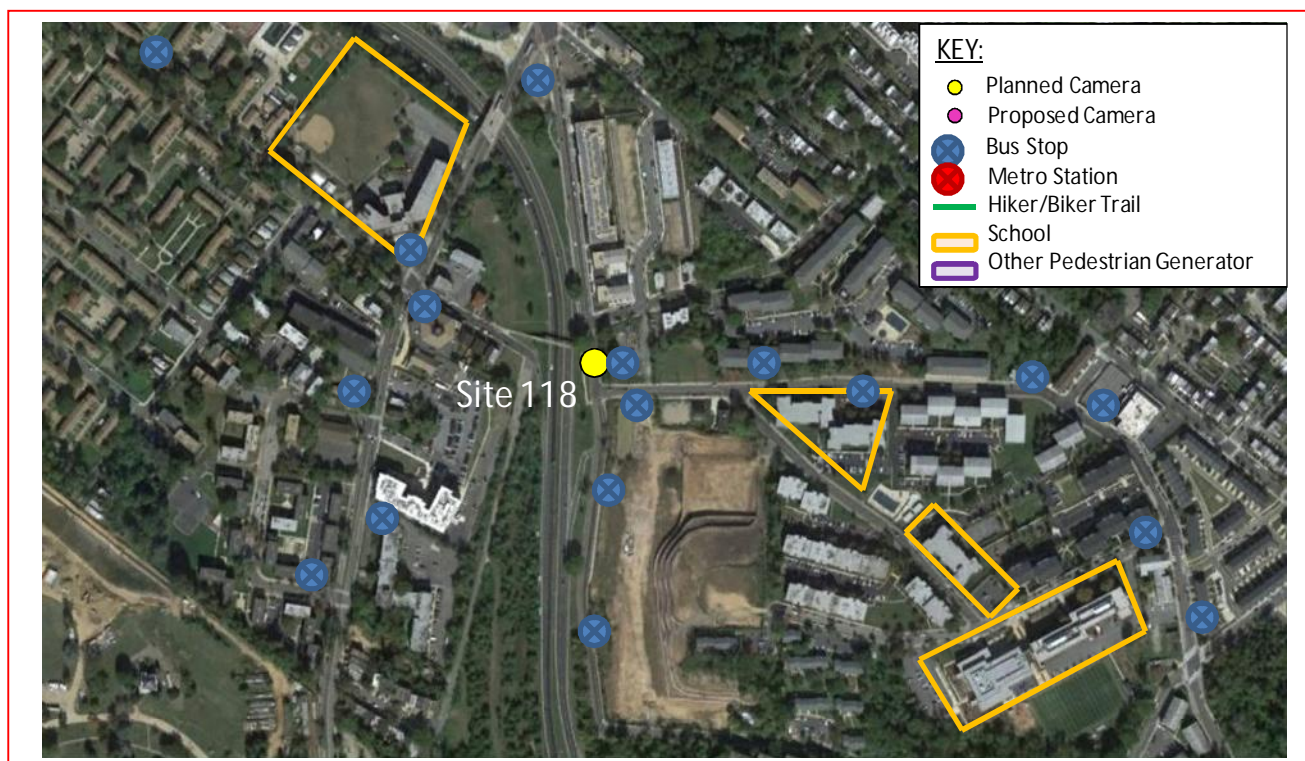
District Department of Transportation

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

### Suitland Parkway at Stanton Road SE

#### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8C	Planned	Suitland Parkway Westbound at Stanton Road Southeast



The *planned* speed camera is located in Ward 8 at the intersection of Suitland Parkway and Stanton Road Southeast in the westbound direction. Suitland Parkway runs between Pennsylvania Avenue Southeast to the east and Anacostia Freeway to the west. The posted speed limit is 45 MPH.

W8 - 91



District Department of Transportation

55 M Street, SE, Suite 400

Washington, DC 20003



District Department of Transportation

## Suitland Parkway at Stanton Road SE

### Field Assessment Summary

Suitland Parkway is assumed to run in an east-west direction, and is classified as a freeway/expressway. Suitland Parkway has two through lanes, a left turn lane, and a right turn lane in each direction. Stanton Road has a through lane and a shared through/right lane in the northbound direction and a shared through/right lane and a left turn lane in the southbound direction. This site has the following characteristics:

- This is a residential area with apartments.
- There are three schools in the area: Excel Academy Public Charter School, Washington Middle School for Girls, and KIPP DC.
- There is a deaf child in the area.
- The intersection has a traffic signal with pedestrian signals and crosswalks on the north, south, and east legs.
- There are concrete medians on the east and west legs and an island in the southwest corner.
- There are sidewalks on both sides of the north leg and the east side of the south leg.
- There is a bike path on the north side of the east and west legs.
- There is on-street parking on both sides of the north leg.
- There are bus stops on both sides of the north leg and the south leg.
- There is a slope downgrade southbound on the north leg.



Looking Eastbound





District Department of Transportation

## Suitland Parkway at Stanton Road SE



Looking Westbound

### Speed Data Analysis

Posted Speed Limit (MPH)	45
Mean Speed (MPH)	40
85th Percentile Speed (MPH)	57
10 MPH Pace Speed	47-56
ADT	17,199

The mean speed is 5 MPH lower than the posted speed limit, and the 85<sup>th</sup> percentile speed is 12 MPH higher than the posted speed limit.

### Crash Data Analysis

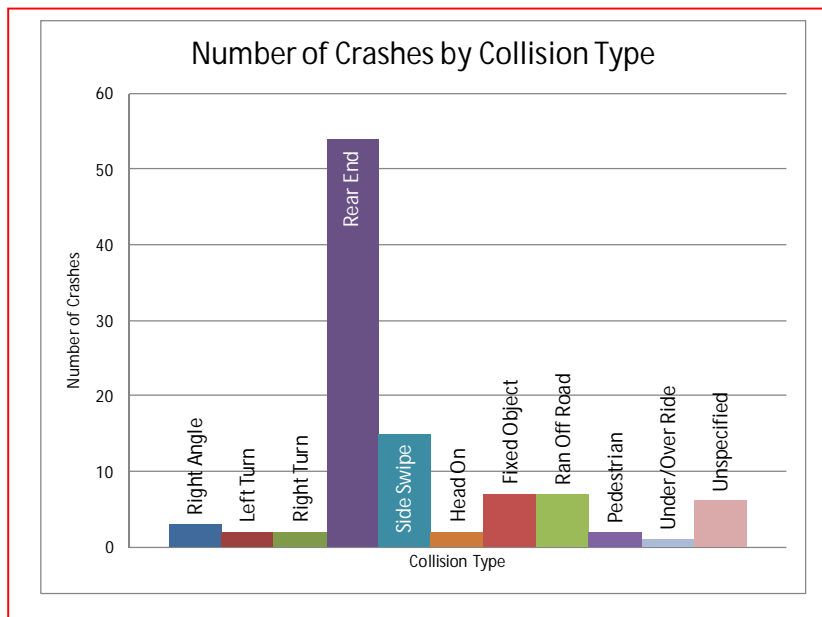
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 101 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of crashes at this location were Rear End (54 crashes), Side Swipe (15 crashes), Fixed Object (7 crashes) and Run-Off-Road (7 crashes). Furthermore, this site experienced a high frequency (43 crashes) of injury-related crashes.



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## Suitland Parkway at Stanton Road SE

Total	101										
Fatal	0	0.0%	Clear	81	80.2%	Dry	79	78.2%	Day	50	49.5%
Injury	43	42.6%	Rain	14	13.9%	Wet	14	13.9%	Night	45	44.6%
Truck	14	13.9%	Snow	3	3.0%	Snow/Ice	4	4.0%			
Bus	4	4.0%									



There were 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 listed as one of the Top 20 Hazardous Intersections by Crash Frequency from 2009 to 2011 according to the *Traffic Safety Statistics Report for the District of Columbia (2009-2011)*.<sup>2</sup> This site is also listed as one of the Top 5 percent high accident locations in the District from 2010 to 2012.<sup>3</sup>

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

<sup>2</sup> DDOT, *Traffic Safety Statistics Report for the District of Columbia (2009-2011)*, Table 5.2, Page 70.

<sup>3</sup> DDOT, *Top 5 Percent High Accident Locations Map*, 2010-2012.



District Department of Transportation

## Suitland Parkway at 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 much 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 high frequency (43 crashes) of injury-related crashes. This site is listed as one of the Top 20 Hazardous Intersections by Crash Frequency from 2009 to 2011 and is also listed as one of the Top 5 percent high accident locations in the District from 2010 to 2012.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. This is a residential area with apartments.
  - b. There are three schools in the area: Excel Academy Public Charter School, Washington Middle School for Girls, and KIPP DC.
  - c. There is a deaf child in the area, which suggests the need for a slower traffic environment.
  - d. There is a bike path along the north side of Suitland Parkway.
  - e. There are several bus stops in the area which generate pedestrian activity.
  - f. There is on-street parking on both sides of the north leg of the intersection.

Due to the speed data analysis, the elevated number of speed-related and injury-related crashes, the designation as a high accident location, the specific site characteristics, the presence of a deaf child in the area, 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 WB at Stanton Rd SE Speed

WB

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
11/24/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	8	0	0	0	0	10	33	70	82	78	37	14	5	5	342
Total	8	0	0	0	0	10	33	70	82	78	37	14	5	5	342

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## Suitland Pkwy WB at Stanton Rd SE Speed

WB

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
11/25/13	6	0	0	0	1	4	28	39	55	33	17	10	2	3	198
01:00	2	0	0	0	0	2	6	19	33	17	18	5	1	0	103
02:00	1	0	0	0	1	2	14	22	26	23	16	4	1	2	112
03:00	2	0	0	0	3	8	18	48	52	46	28	10	8	8	231
04:00	43	9	14	28	41	57	93	108	115	81	53	24	16	8	690
05:00	243	41	44	63	80	78	91	69	81	135	45	12	9	3	994
06:00	283	28	33	46	46	62	98	141	137	121	65	10	3	2	1075
07:00	292	24	33	34	59	41	53	47	20	23	18	9	4	1	658
08:00	251	22	34	42	59	68	66	101	123	152	74	32	7	4	1035
09:00	182	26	37	33	55	63	87	110	177	173	110	38	20	5	1116
10:00	134	27	46	69	76	92	102	129	118	83	39	11	5	2	933
11:00	84	16	26	38	66	99	118	151	124	88	40	27	4	4	885
12 PM	70	13	21	36	59	75	137	168	150	111	44	33	6	3	926
13:00	95	17	34	52	70	86	138	149	112	74	50	17	11	4	909
14:00	94	19	20	30	40	64	77	111	177	165	91	53	30	15	986
15:00	56	3	9	20	31	70	117	149	185	139	98	36	12	6	931
16:00	53	8	3	25	37	84	93	133	162	155	62	45	18	11	889
17:00	42	5	9	9	25	33	94	139	226	177	90	38	9	11	907
18:00	46	5	9	35	51	64	154	136	160	115	69	24	14	5	887
19:00	33	3	4	14	42	74	140	161	114	58	35	16	2	3	699
20:00	19	0	0	0	14	38	89	136	141	77	50	17	5	1	587
21:00	19	0	0	0	12	37	73	132	125	95	46	28	5	5	577
22:00	16	0	3	3	12	43	76	118	95	84	39	17	10	13	529
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2066	266	379	577	880	1244	1962	2516	2708	2225	1197	516	202	119	16857
Grand Total	2074	266	379	577	880	1254	1995	2586	2790	2303	1234	530	207	124	17199

15th Percentile : 10 MPH  
50th Percentile : 45 MPH  
85th Percentile : 57 MPH  
95th Percentile : 63 MPH

Stats  
Mean Speed(Average) : 40 MPH  
10 MPH Pace Speed : 47-56 MPH  
Number in Pace : 4796  
Percent in Pace : 28.1%  
Number of Vehicles > 45 MPH : 8632  
Percent of Vehicles > 45 MPH : 50.6%

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## Suitland Pkwy WB at Stanton Rd SE Volume

Start Time	Sun A.M.	24-Nov-13 P.M.	Mon A.M.	25-Nov-13 P.M.	Tue A.M.	26-Nov-13 P.M.	Daily Average	
							A.M.	P.M.
12:00	*	*	72	225	*	*	72	225
12:15	*	*	55	236	*	*	55	236
12:30	*	*	40	239	*	*	40	239
12:45	*	*	31	226	*	*	31	226
01:00	*	*	29	195	*	*	29	195
01:15	*	*	28	246	*	*	28	246
01:30	*	*	22	246	*	*	22	246
01:45	*	*	24	222	*	*	24	222
02:00	*	*	23	229	*	*	23	229
02:15	*	*	27	235	*	*	27	235
02:30	*	*	28	256	*	*	28	256
02:45	*	*	34	266	*	*	34	266
03:00	*	*	46	213	*	*	46	213
03:15	*	*	38	258	*	*	38	258
03:30	*	*	73	232	*	*	73	232
03:45	*	*	74	228	*	*	74	228
04:00	*	*	130	225	*	*	130	225
04:15	*	*	160	205	*	*	160	205
04:30	*	*	199	230	*	*	199	230
04:45	*	*	201	229	*	*	201	229
05:00	*	*	211	217	*	*	211	217
05:15	*	*	237	229	*	*	237	229
05:30	*	*	323	227	*	*	323	227
05:45	*	*	223	234	*	*	223	234
06:00	*	*	226	233	*	*	226	233
06:15	*	*	245	209	*	*	245	209
06:30	*	*	286	227	*	*	286	227
06:45	*	*	318	218	*	*	318	218
07:00	*	*	163	182	*	*	163	182
07:15	*	*	164	189	*	*	164	189
07:30	*	*	88	178	*	*	88	178
07:45	*	*	243	150	*	*	243	150
08:00	*	*	214	150	*	*	214	150
08:15	*	*	274	164	*	*	274	164
08:30	*	*	278	131	*	*	278	131
08:45	*	*	269	142	*	*	269	142
09:00	*	*	315	140	*	*	315	140
09:15	*	*	246	146	*	*	246	146
09:30	*	*	342	160	*	*	342	160
09:45	*	*	213	131	*	*	213	131
10:00	*	*	248	142	*	*	248	142
10:15	*	*	223	128	*	*	223	128
10:30	*	*	240	148	*	*	240	148
10:45	*	*	222	111	*	*	222	111
11:00	*	93	217	*	*	*	217	93
11:15	*	84	220	*	*	*	220	84
11:30	*	97	228	*	*	*	228	97
11:45	*	68	220	*	*	*	220	68
Total	0	342	8030	8827	0	0	8030	9169
Combined Total	342		16857		0		17199	
Peak		11:00	08:45	02:30			08:45	02:30
Vol.		342	1172	993			1172	993
P.H.F.		0.881	0.857	0.933			0.857	0.933
ADT		ADT 17,199	AADT 17,199					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** SUITLAND PKWY,SE From STANTON RD,SE TO IRVING ST,SE

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

**Prepared By:** Rahul Jain

**Prepared Date:** 11/25/2013

Total Number of Accident:	101	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Fatalities:	0	Right Angle:	3	3.0%	Fixed Object:	7	6.9%
Total Number of Injuries:	73	Left Turn:	2	2.0%	Ran Off Road:	7	6.9%
Total Number of Disabling Injuries:	5	Right Turn:	2	2.0%	Ped. Involved:	2	2.0%
Total Number of NonDisabling Injuries:	10	Rear End:	54	53.5%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	1	Side Swiped:	15	14.9%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	2	2.0%	Under/Over Ride:	1	1.0%
Total Number of Motorcycles Involved:	2	Parked:	0	0.0%	Unspecified:	6	5.9%

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>	<b>Day of week</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	10	9.9%	Sunday:	14	13.9%
09:30 ~ 11:30:	4	4.0%	Monday:	13	12.9%
11:30 ~ 13:30:	5	5.0%	Tuesday:	18	17.8%
13:30 ~ 16:00:	18	17.8%	Wednesday:	14	13.9%
16:00 ~ 18:30:	10	9.9%	Thursday:	9	8.9%
18:30 ~ 07:30:	54	53.5%	Friday:	22	21.8%
Unspecified:	0	0.0%	Saturday:	11	10.9%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	81	80.2%	Dry:	79	78.2%
Rain:	14	13.9%	Wet:	14	13.9%
Snow:	3	3.0%	Snow/Ice:	4	4.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	1	1.0%	Water/Sand:	1	1.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	2	2.0%	Unspecified:	3	3.0%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Passenger Car:	164	79.6%	Fatal Collision:	0	0.0%
Bus:	4	1.9%	Injury Collision:	43	42.6%
Truck:	14	6.8%	PDO Collision:	58	57.4%
Taxi:	4	1.9%	<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Minivan:	0	0.0%	Daylight:	50	49.5%
Police/Emergency Vehicle:	4	1.9%	Dawn/Dusk:	5	5.0%
Motorcycle/Moped:	3	1.5%	Dark(Lighted):	33	32.7%
Bicycle:	0	0.0%	Dark(Not Lighted):	12	11.9%
Fixed Object:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
Unspecified:	13	6.3%	Unspecified:	1	1.0%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
Driver: Speed:	12	5.8%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	4	1.9%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	1	0.5%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	22	10.7%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	2	1.0%	Not in Crosswalk:	1	100.0%
Roadway:	2	1.0%	From Between Parked Cars:	0	0.0%
Unspecified:	163	79.1%	Unspecified:	0	0.0%

62 Records are not approved as of 11/25/2013 6:31:29 PM