



District Department of Transportation

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

Suitland Parkway SE 0.9 Miles South of Stanton Road SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8A/8B/8E	Proposed	Suitland Parkway Southeast 0.9 Miles South of Stanton Road Southeast, Southeastbound



The *proposed* speed camera is located in Ward 8 on Suitland Parkway Southeast 0.9 miles south of Stanton Road Southeast in the southeast-bound direction. Suitland Parkway runs between Pennsylvania Avenue to the east and Anacostia Freeway to the west. The posted speed limit is 45 MPH.

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District Department of Transportation

Suitland Parkway SE 0.9 Miles South of Stanton Road SE

Field Assessment Summary

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

- There is one school in the area: Garfield Elementary School.
- There are several bus stops in the area that generate pedestrian activity.
- There is a grassy median 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 Northwest-bound



District Department of Transportation

Suitland Parkway SE 0.9 Miles South of Stanton Road SE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	45
Mean Speed (MPH)	45
85th Percentile Speed (MPH)	53
10 MPH Pace Speed	43-52
ADT	21,316

The mean speed is equal to the posted speed limit and the 85th percentile speed is 8 MPH higher than the posted speed limit at this location

Crash Data Analysis

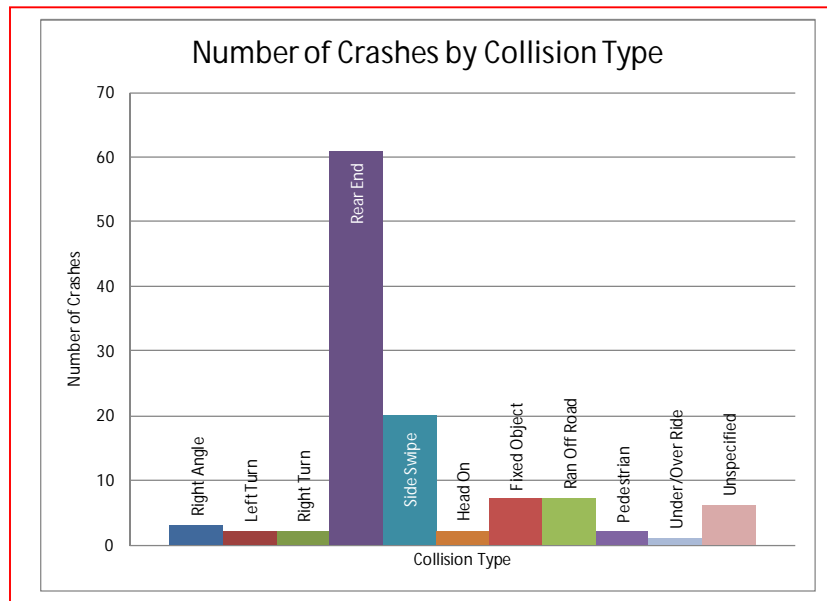
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012 there were a total of 113 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of crashes at this location were Rear End (61 crashes) and Side Swipe (20 crashes). Furthermore, this site experienced a high frequency (48 crashes) of injury-related crashes.

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Suitland Parkway SE 0.9 Miles South of Stanton Road SE

Severity			Weather			Surface condition			Light Condition		
Total	113										
Fatal	0	0.0%	Clear	92	81.4%	Dry	91	80.5%	Day	57	50.4%
Injury	48	42.5%	Rain	14	12.4%	Wet	14	12.4%	Night	48	42.5%
Truck	16	14.2%	Snow	3	2.7%	Snow/Ice	4	3.5%			
Bus	7	6.2%									



There were an elevated number of speed-related crashes at this location, including rear end crashes. The AASHTO 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”¹ as two errors leading to rear-end crashes. Both of these errors can be decreased with a decrease in travel speed.

Safety Nexus

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

1. Speed Data – The 85th percentile speed is much higher than the posted speed limit at this location.
2. Crash Data – There were an elevated number of speed-related crashes at this location, including rear end crashes, as well as a high frequency (48 crashes) of injury-related crashes.

¹ AASHTO Highway Safety Manual, 1st Edition, 2010; Volume 1, page 2-13



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Suitland Parkway SE 0.9 Miles South of Stanton Road SE

3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - There is one school in the area: Garfield Elementary School.
 - There are several bus stops in the area that generate pedestrian activity.

Due to the elevated number of speed-related crashes and injury-related crashes, the site characteristics, the proximity of the school to the site and the elevated 85th percentile speeds at this location, 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

Suitland Pkwy SE .9 mi South of Stanton Road SEB Speed

SEB

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
12/02/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	0	0	0	0	4	11	22	24	23	11	2	0	1	0	98
04:00	0	0	0	0	0	8	13	26	23	13	9	2	1	2	97
05:00	1	0	0	0	4	7	13	33	19	15	5	2	0	0	99
06:00	5	0	0	0	2	17	34	78	86	45	22	1	2	1	293
07:00	15	0	0	0	7	33	77	147	169	97	36	7	1	3	592
08:00	36	0	0	1	5	38	145	255	229	100	25	7	3	0	844
09:00	24	0	0	1	8	36	138	252	216	90	39	10	2	1	817
10:00	21	0	0	0	2	34	144	204	161	88	21	3	0	0	678
11:00	22	0	0	0	3	43	165	229	160	56	19	3	0	0	700
12 PM	33	0	0	0	4	47	150	292	177	93	21	3	1	0	821
13:00	47	1	0	0	10	74	223	282	186	91	24	4	3	0	945
14:00	55	0	1	0	13	71	201	377	252	86	17	3	0	0	1076
15:00	74	1	0	0	6	57	319	517	354	100	27	3	0	1	1459
16:00	96	0	0	8	23	56	351	763	525	134	20	6	1	0	1983
17:00	109	0	2	11	23	143	578	803	368	96	20	2	0	1	2156
18:00	103	0	0	4	47	242	701	678	300	52	11	0	0	1	2139
19:00	68	0	0	1	10	148	509	620	263	86	7	1	0	0	1713
20:00	39	0	0	2	17	94	400	401	178	57	4	4	0	1	1197
21:00	37	0	1	1	21	93	236	305	142	31	4	1	0	0	872
22:00	26	0	0	1	5	57	219	328	187	38	12	1	1	1	876
23:00	21	0	0	0	3	30	142	274	170	69	12	3	0	1	725
Total	832	2	4	30	217	1339	4780	6888	4188	1448	357	66	16	13	20180

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy SE .9 mi South of Stanton Road SEB Speed

SEB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/03/13	20	0	0	0	2	15	119	225	152	34	16	4	1	1	589
01:00	11	0	0	1	2	20	94	116	81	26	10	0	1	0	362
02:00	1	0	1	2	3	14	34	37	34	9	4	2	2	1	144
03:00	0	0	0	1	2	4	6	13	10	2	3	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	32	0	1	4	9	53	253	391	277	71	33	6	4	2	1136
Grand Total	864	2	5	34	226	1392	5033	7279	4465	1519	390	72	20	15	21316

15th Percentile : 39 MPH
 50th Percentile : 46 MPH
 85th Percentile : 53 MPH
 95th Percentile : 57 MPH

Stats
 Mean Speed(Average) : 45 MPH
 10 MPH Pace Speed : 43-52 MPH
 Number in Pace : 11709
 Percent in Pace : 55.0%
 Number of Vehicles > 45 MPH : 13048
 Percent of Vehicles > 45 MPH : 61.3%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy SE .9 mi South of Stanton Road SEB 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	*	195	169	*	*	*	169	195
12:15	*	194	166	*	*	*	166	194
12:30	*	210	151	*	*	*	151	210
12:45	*	222	103	*	*	*	103	222
01:00	*	237	120	*	*	*	120	237
01:15	*	241	106	*	*	*	106	241
01:30	*	232	88	*	*	*	88	232
01:45	*	235	48	*	*	*	48	235
02:00	*	259	47	*	*	*	47	259
02:15	*	267	38	*	*	*	38	267
02:30	*	282	34	*	*	*	34	282
02:45	*	268	25	*	*	*	25	268
03:00	*	302	41	*	*	*	41	302
03:15	42	350	*	*	*	*	42	350
03:30	26	395	*	*	*	*	26	395
03:45	30	412	*	*	*	*	30	412
04:00	35	417	*	*	*	*	35	417
04:15	20	473	*	*	*	*	20	473
04:30	22	560	*	*	*	*	22	560
04:45	20	533	*	*	*	*	20	533
05:00	20	540	*	*	*	*	20	540
05:15	20	541	*	*	*	*	20	541
05:30	22	531	*	*	*	*	22	531
05:45	37	544	*	*	*	*	37	544
06:00	54	555	*	*	*	*	54	555
06:15	75	539	*	*	*	*	75	539
06:30	84	542	*	*	*	*	84	542
06:45	80	503	*	*	*	*	80	503
07:00	129	491	*	*	*	*	129	491
07:15	144	407	*	*	*	*	144	407
07:30	144	434	*	*	*	*	144	434
07:45	175	381	*	*	*	*	175	381
08:00	184	322	*	*	*	*	184	322
08:15	225	336	*	*	*	*	225	336
08:30	209	268	*	*	*	*	209	268
08:45	226	271	*	*	*	*	226	271
09:00	219	219	*	*	*	*	219	219
09:15	212	228	*	*	*	*	212	228
09:30	216	220	*	*	*	*	216	220
09:45	170	205	*	*	*	*	170	205
10:00	191	233	*	*	*	*	191	233
10:15	158	205	*	*	*	*	158	205
10:30	154	223	*	*	*	*	154	223
10:45	175	215	*	*	*	*	175	215
11:00	175	203	*	*	*	*	175	203
11:15	170	184	*	*	*	*	170	184
11:30	181	182	*	*	*	*	181	182
11:45	174	156	*	*	*	*	174	156
Total	4218	15962	1136	0	0	0	5354	15962
Combined Total	20180		1136		0		21316	
Peak	08:15	05:45	12:00				08:15	05:45
Vol.	879	2180	589				879	2180
P.H.F.	0.972	0.982	0.871				0.972	0.982
ADT	ADT 21,316		AADT 21,316					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: SUITLAND PKWY,SE At STANTON RD,SE

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

Prepared By: Rahul Jain

Prepared Date: 1/9/2014

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	113	Right Angle:	3	2.7%	Fixed Object:	7	6.2%
Total Number of Fatalities:	0	Left Turn:	2	1.8%	Ran Off Road:	7	6.2%
Total Number of Injuries:	78	Right Turn:	2	1.8%	Ped. Involved:	2	1.8%
Total Number of Disabling Injuries:	8	Rear End:	61	54.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	11	Side Swiped:	20	17.7%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	2	Head On:	2	1.8%	Under/Over Ride:	1	0.9%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	6	5.3%
Total Number of Motorcycles Involved:	2						

Time of Day	#ACC	%
07:30 ~ 09:30:	12	10.6%
09:30 ~ 11:30:	6	5.3%
11:30 ~ 13:30:	4	3.5%
13:30 ~ 16:00:	18	15.9%
16:00 ~ 18:30:	15	13.3%
18:30 ~ 07:30:	58	51.3%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	12	10.6%
Monday:	15	13.3%
Tuesday:	20	17.7%
Wednesday:	17	15.0%
Thursday:	9	8.0%
Friday:	25	22.1%
Saturday:	15	13.3%

Weather Condition	#ACC	%
Clear:	92	81.4%
Rain:	14	12.4%
Snow:	3	2.7%
Sleet/Hail:	0	0.0%
Fog/Mist:	2	1.8%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	2	1.8%

Surface Condition	#ACC	%
Dry:	91	80.5%
Wet:	14	12.4%
Snow/Ice:	4	3.5%
Slush:	0	0.0%
Water/Sand:	1	0.9%
Repairing:	0	0.0%
Unspecified:	3	2.7%

Type of Vehicle	#VEH	%
Passenger Car:	180	77.9%
Bus:	7	3.0%
Truck:	16	6.9%
Taxi:	4	1.7%
Minivan:	0	0.0%
Police/Emergency Vehicle:	6	2.6%
Motorcycle/Moped:	3	1.3%
Bicycle:	0	0.0%
Fixed Object:	0	0.0%
Unspecified:	15	6.5%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	48	42.5%
PDO Collision:	65	57.5%

Light Condition	#ACC	%
Daylight:	57	50.4%
Dawn/Dusk:	6	5.3%
Dark(Lighted):	37	32.7%
Dark(Not Lighted):	11	9.7%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	2	1.8%

Contributing Factor	#VEH	%
Driver: Speed:	15	6.5%
Driver: Alcohol/Drug:	4	1.7%
Driver: Electronic Device:	1	0.4%
Driver: Others:	28	12.1%
Vehicle:	0	0.0%
Roadway:	2	0.9%
Unspecified:	181	78.4%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	0	0.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	1	50.0%
From Between Parked Cars:	0	0.0%
Unspecified:	1	50.0%

71 Records are not approved as of 1/9/2014 6:39:34 PM