



District Department of Transportation

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

Suitland Parkway Southeast 0.2 Mile South of Stanton Road NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8C	Proposed	Suitland Parkway Southeast 0.2 Mile South of Stanton Road Southeast, Northwest-bound



The *proposed* speed camera will be located in Ward 8 on Suitland Parkway Southeast 0.2 mile south of Stanton Road Southeast in the northwest-bound direction. Suitland Parkway Southeast runs between Pennsylvania Avenue to the east and Anacostia Freeway to the west. The posted speed limit is 35 MPH.

W8 - 178





District Department of Transportation

Suitland Parkway Southeast 0.2 Mile South of Stanton Road NW

Field Assessment Summary

Suitland Parkway Southeast is assumed to run in a northwest-southeast 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: Wilkinson Elementary School, Moten Elementary School and John Hayden Middle School.
- The Wilkinson Recreation Center and Avalon Playground are in the area and generate pedestrian activity.
- There are several bus stops near the site that generate pedestrian activity.
- There is a pedestrian/bicycle path along the north side of the road.
- There is a traffic signal with pedestrian signals at Stanton Road.
- 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

W8 - 179



District Department of Transportation

Suitland Parkway Southeast 0.2 Mile South of Stanton Road NW



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	35
Mean Speed (MPH)	38
85th Percentile Speed (MPH)	51
10 MPH Pace Speed	41-50
ADT	18,378

The mean speed is 3 MPH higher than the posted speed limit and the 85th percentile speed is 16 MPH higher than the posted speed limit at this location.

Crash Data Analysis

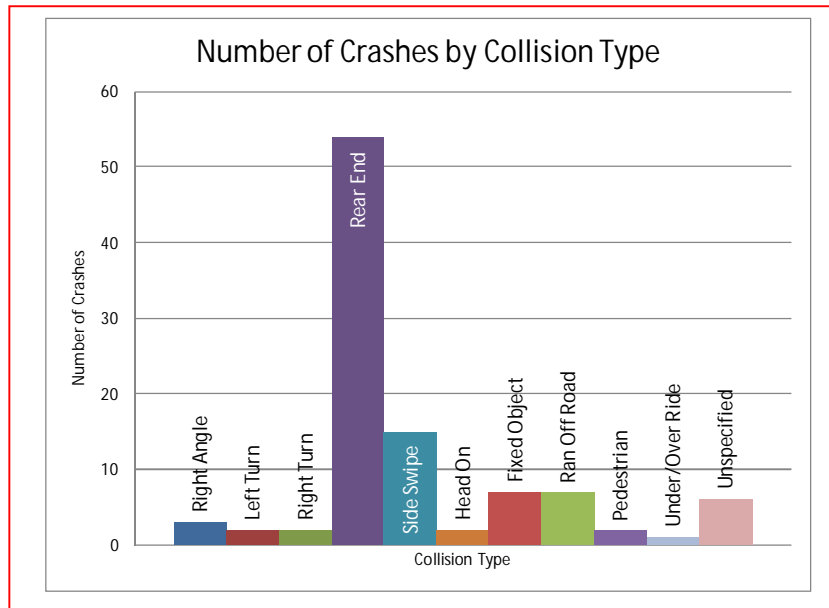
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 101 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location were Rear End (54 crashes), Side Swipe (15 crashes), and both Fixed Object and Run-Off-Road with 7 crashes. The other collision types had 6 crashes or less each. There were 12 crashes where vehicular speeding was the contributing factor. Furthermore, the site experienced a high frequency (43 crashes) of injury-related crashes.

W8 - 180



Suitland Parkway Southeast 0.2 Mile South of Stanton Road NW

Severity			Weather			Surface condition			Light Condition		
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 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.¹ Both of these errors can be reduced with a decrease in travel speed.

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 85th 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.

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



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Suitland Parkway Southeast 0.2 Mile South of Stanton Road NW

3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a) There are three schools in the area: Wilkinson Elementary School, Moten Elementary School and John Hayden Middle School.
 - b) The Wilkinson Recreation Center and Avalon Playground are in the area and generate pedestrian activity.
 - c) There are several bus stops near the site that generate pedestrian activity.
 - d) The 85th percentile speed is 16 MPH higher than the posted speed limit.

Due to the speed data analysis, the elevated number of speed-related crashes and injury-related crashes, 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

Suitland Pkwy SE .2mi South Of Stanton Rd. S.E. NWB Speed

NWB															
Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	15	20	25	30	35	40	45	50	55	60	65	70	75	999	
12/02/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	7	0	0	0	2	13	38	77	66	23	7	2	3	1	239
04:00	45	7	26	35	62	100	147	146	82	40	7	5	4	0	706
05:00	200	32	56	60	101	146	162	189	161	81	19	7	2	0	1216
06:00	261	37	30	56	92	116	221	275	123	23	7	0	2	0	1243
07:00	301	25	29	46	71	60	44	8	7	4	2	0	0	0	597
08:00	197	21	47	66	89	113	182	277	210	67	22	2	1	0	1294
09:00	114	20	20	42	88	125	192	301	254	103	23	6	1	0	1289
10:00	134	34	48	72	116	144	161	168	84	18	7	1	0	0	987
11:00	59	21	32	53	105	162	210	150	79	14	6	3	0	0	894
12 PM	76	16	25	49	113	181	171	133	67	16	3	1	1	0	852
13:00	95	28	62	78	121	162	175	117	52	32	2	1	1	0	926
14:00	92	15	24	40	69	124	191	244	174	48	14	2	0	0	1037
15:00	71	11	9	30	52	95	171	238	206	79	22	5	0	0	989
16:00	51	4	10	25	59	89	174	265	171	81	23	11	0	0	963
17:00	50	1	11	22	51	117	222	273	144	46	16	2	0	0	955
18:00	40	2	11	18	39	109	212	270	136	50	13	3	1	0	904
19:00	20	0	3	19	81	173	187	136	79	13	6	0	0	0	717
20:00	16	0	0	3	19	121	211	200	71	15	6	0	0	0	662
21:00	15	1	0	6	34	99	192	125	72	25	4	2	0	0	575
22:00	12	0	0	3	17	61	177	184	80	29	6	5	1	0	575
23:00	6	0	1	0	1	46	103	104	70	16	7	1	2	0	357
Total	1862	275	444	723	1382	2356	3543	3880	2388	823	222	59	19	1	17977

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy SE .2mi South Of Stanton Rd. S.E. NWB Speed

NWB															
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/03/13	2	0	0	0	5	14	51	44	34	15	3	0	0	0	168
01:00	1	0	0	0	3	12	31	45	21	2	1	0	0	0	116
02:00	6	0	0	0	4	14	30	34	22	5	1	1	0	0	117
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	9	0	0	0	12	40	112	123	77	22	5	1	0	0	401
Grand Total	1871	275	444	723	1394	2396	3655	4003	2465	845	227	60	19	1	18378

15th Percentile : 12 MPH
 50th Percentile : 41 MPH
 85th Percentile : 51 MPH
 95th Percentile : 56 MPH

Stats
 Mean Speed(Average) : 38 MPH
 10 MPH Pace Speed : 41-50 MPH
 Number in Pace : 6727
 Percent in Pace : 36.6%
 Number of Vehicles > 35 MPH : 12441
 Percent of Vehicles > 35 MPH : 67.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy SE .2mi South Of Stanton Rd. S.E. NWB 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	*	214	46	*	*	*	46	214
12:15	*	219	53	*	*	*	53	219
12:30	*	219	39	*	*	*	39	219
12:45	*	200	30	*	*	*	30	200
01:00	*	246	32	*	*	*	32	246
01:15	*	212	36	*	*	*	36	212
01:30	*	258	29	*	*	*	29	258
01:45	*	210	19	*	*	*	19	210
02:00	*	232	30	*	*	*	30	232
02:15	*	256	24	*	*	*	24	256
02:30	*	282	24	*	*	*	24	282
02:45	*	267	39	*	*	*	39	267
03:00	32	245	*	*	*	*	32	245
03:15	47	257	*	*	*	*	47	257
03:30	86	227	*	*	*	*	86	227
03:45	74	260	*	*	*	*	74	260
04:00	96	243	*	*	*	*	96	243
04:15	152	236	*	*	*	*	152	236
04:30	213	249	*	*	*	*	213	249
04:45	245	235	*	*	*	*	245	235
05:00	220	248	*	*	*	*	220	248
05:15	294	265	*	*	*	*	294	265
05:30	405	207	*	*	*	*	405	207
05:45	297	235	*	*	*	*	297	235
06:00	218	245	*	*	*	*	218	245
06:15	356	204	*	*	*	*	356	204
06:30	331	241	*	*	*	*	331	241
06:45	338	214	*	*	*	*	338	214
07:00	141	188	*	*	*	*	141	188
07:15	164	198	*	*	*	*	164	198
07:30	94	160	*	*	*	*	94	160
07:45	198	171	*	*	*	*	198	171
08:00	308	160	*	*	*	*	308	160
08:15	346	182	*	*	*	*	346	182
08:30	351	160	*	*	*	*	351	160
08:45	289	160	*	*	*	*	289	160
09:00	360	145	*	*	*	*	360	145
09:15	292	139	*	*	*	*	292	139
09:30	374	163	*	*	*	*	374	163
09:45	263	128	*	*	*	*	263	128
10:00	278	144	*	*	*	*	278	144
10:15	200	154	*	*	*	*	200	154
10:30	274	150	*	*	*	*	274	150
10:45	235	127	*	*	*	*	235	127
11:00	224	112	*	*	*	*	224	112
11:15	229	84	*	*	*	*	229	84
11:30	214	85	*	*	*	*	214	85
11:45	227	76	*	*	*	*	227	76
Total	8465	9512	401	0	0	0	8866	9512
Combined Total	17977		401		0		18378	
Peak	08:15	02:30	12:00				08:15	02:30
Vol.	1346	1051	168				1346	1051
P.H.F.	0.935	0.932	0.792				0.935	0.932
ADT	ADT 18,378		AADT 18,378					

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: 9/17/2013

Total Number of Accident:	101	Collision Type	#ACC	%	Collision Type	#ACC	%	
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%	
Time of Day				#ACC	%	Day o fweek		
07:30 ~ 09:30:				10	9.9%	Sunday:		
09:30 ~ 11:30:				4	4.0%	Monday:		
11:30 ~ 13:30:				5	5.0%	Tuesday:		
13:30 ~ 16:00:				18	17.8%	Wednesday:		
16:00 ~18:30:				10	9.9%	Thursday:		
18:30 ~ 07:30:				54	53.5%	Friday:		
Unspecified:				0	0.0%	Saturday:		
14				13.9%	13		12.9%	
18				17.8%	18		17.8%	
14				13.9%	9		8.9%	
22				21.8%	11		10.9%	
Weather Condition				#ACC	%	Surface Condition		
Clear:				81	80.2%	Dry:		
Rain:				14	13.9%	Wet:		
Snow:				3	3.0%	Snow/Ice:		
Sleet/Hail:				0	0.0%	Slush:		
Fog/Mist:				1	1.0%	Water/Sand:		
Crosswind/Blowing Sand:				0	0.0%	Repairing:		
Unspecified:				2	2.0%	Unspecified:		
79				78.2%	14		13.9%	
4				4.0%	0		0.0%	
1				1.0%	1		1.0%	
0				0.0%	0		0.0%	
3				3.0%	3		3.0%	
Type of Vehicle				#VEH	%	Accident Severity Type		
Passenger Car:				164	79.6%	Fatal Collision:		
Bus:				4	1.9%	Injury Collision:		
Truck:				14	6.8%	PDO Collision:		
Taxi:				4	1.9%	58		57.4%
Minivan:				0	0.0%	Light Condition		
Police/Emergency Vehicle:				4	1.9%	Daylight:		
Motorcycle/Moped:				3	1.5%	Dawn/Dusk:		
Bicycle:				0	0.0%	Dark(Lighted):		
Fixed Object:				0	0.0%	Dark(Not Lighted):		
Unspecified:				13	6.3%	Dark(Unknown Lighting):		
50				49.5%	1		1.0%	
5				5.0%	12		11.9%	
33				32.7%	0		0.0%	
12				11.9%	1		1.0%	
Contributing Factor				#VEH	%	Pedestrian Actions		
Driver: Speed:				12	5.8%	In Crosswalk with Signal:		
Driver: Alcohol/Drug:				4	1.9%	In Crosswalk against Signal:		
Driver: Electronic Device:				1	0.5%	In Crosswalk no Signal:		
Driver: Others:				22	10.7%	In Unmarked Crosswalk:		
Vehicle:				2	1.0%	Not in Crosswalk:		
Roadway:				2	1.0%	From Between Parked Cars:		
Unspecified:				163	79.1%	Unspecified:		
0				0.0%	0		0.0%	
0				0.0%	0		0.0%	
0				0.0%	0		0.0%	
1				100.0%	0		0.0%	
0				0.0%	0		0.0%	
0				0.0%	0		0.0%	

62 Records are not approved as of 9/17/2013 6:45:21 PM