



District Department of Transportation

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

Suitland Parkway Southeast 0.6 Mile South of Stanton Road SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8C	Proposed	Suitland Parkway Southeast 0.6 Miles South of Stanton Road Southeast, Northwest-bound



The *proposed* speed camera will be located in Ward 8 on Suitland Parkway Southeast 0.6 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 - 151





District Department of Transportation

Suitland Parkway Southeast 0.6 Mile South of Stanton Road SE

Field Assessment Summary

Suitland Parkway Southeast 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 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 northwest-bound direction.



Looking Northwest-bound



District Department of Transportation

Suitland Parkway Southeast 0.6 Mile South of Stanton Road SE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	35
Mean Speed (MPH)	39
85th Percentile Speed (MPH)	45
10 MPH Pace Speed	38-47
ADT	21,492

The mean speed limit is 4 MPH higher than the posted speed limit and the 85th percentile speed is 10 MPH higher than the posted speed limit at this location.

Crash Data Analysis

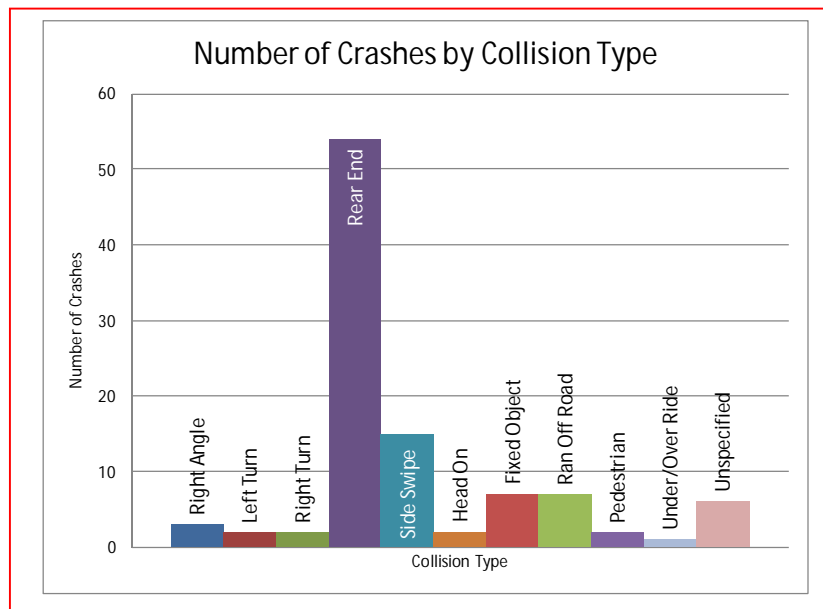
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 101 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location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



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Suitland Parkway Southeast 0.6 Mile South of Stanton Road SE

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 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.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.

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



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

Due to the speed data analysis, the elevated number of speed-related crashes and injury-related crashes, the specific site characteristics, and 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 .6 mi S.o. Stanton SE 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	0	0	0	0	2	9	13	8	3	0	0	0	0	0	35
03:00	8	0	0	0	5	30	109	69	14	1	1	0	0	0	237
04:00	34	0	0	0	6	49	328	260	47	5	0	0	0	0	729
05:00	104	13	20	72	73	396	744	236	27	2	0	0	0	0	1687
06:00	137	25	64	136	313	671	569	97	7	0	0	0	0	0	2019
07:00	254	58	78	211	309	266	175	39	1	1	0	0	0	0	1392
08:00	80	0	0	4	34	440	917	224	21	5	0	0	0	0	1725
09:00	56	0	0	1	21	264	713	282	28	1	0	0	0	0	1366
10:00	45	0	0	1	26	280	534	184	35	0	0	0	0	0	1105
11:00	46	0	0	3	12	157	482	205	19	2	0	0	0	0	926
12 PM	33	0	0	7	20	201	472	170	18	2	0	0	0	0	923
13:00	41	0	0	0	19	173	540	207	22	2	2	1	0	0	1007
14:00	43	0	0	2	16	264	518	246	31	2	0	0	0	0	1122
15:00	36	0	0	0	30	205	536	218	26	4	0	0	0	0	1055
16:00	29	0	0	1	36	236	484	181	28	5	0	0	0	0	1000
17:00	23	0	0	2	39	353	456	96	8	0	0	0	0	0	977
18:00	29	0	0	0	43	317	454	92	5	3	0	0	0	0	943
19:00	19	0	0	0	30	247	332	74	10	1	0	0	0	0	713
20:00	19	0	0	4	37	208	298	82	10	0	0	0	0	0	658
21:00	15	0	0	5	22	172	256	95	9	1	0	0	0	0	575
22:00	12	0	0	0	14	107	297	122	20	3	0	0	0	0	575
23:00	6	0	0	0	13	98	169	64	10	2	0	0	0	0	362
Total	1069	96	162	449	1120	5143	9396	3251	399	42	3	1	0	0	21131

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy .6 mi S.o. Stanton SE NWB Speed

NWB															
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/03/13	0	0	0	1	9	54	80	25	3	0	0	0	0	0	172
01:00	2	0	0	0	6	44	46	11	1	2	0	0	0	0	112
02:00	1	0	0	1	5	29	24	14	3	0	0	0	0	0	77
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	3	0	0	2	20	127	150	50	7	2	0	0	0	0	361
Grand Total	1072	96	162	451	1140	5270	9546	3301	406	44	3	1	0	0	21492

15th Percentile : 32 MPH
 50th Percentile : 41 MPH
 85th Percentile : 45 MPH
 95th Percentile : 49 MPH

Stats
 Mean Speed(Average) : 39 MPH
 10 MPH Pace Speed : 38-47 MPH
 Number in Pace : 13461
 Percent in Pace : 62.6%
 Number of Vehicles > 35 MPH : 17345
 Percent of Vehicles > 35 MPH : 80.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy .6 mi S.o. Stanton SE 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	*	233	46	*	*	*	46	233
12:15	*	230	55	*	*	*	55	230
12:30	*	210	39	*	*	*	39	210
12:45	*	250	32	*	*	*	32	250
01:00	*	262	29	*	*	*	29	262
01:15	*	224	35	*	*	*	35	224
01:30	*	266	29	*	*	*	29	266
01:45	*	255	19	*	*	*	19	255
02:00	*	272	29	*	*	*	29	272
02:15	*	282	24	*	*	*	24	282
02:30	*	300	24	*	*	*	24	300
02:45	35	268	*	*	*	*	35	268
03:00	35	256	*	*	*	*	35	256
03:15	42	287	*	*	*	*	42	287
03:30	81	255	*	*	*	*	81	255
03:45	79	257	*	*	*	*	79	257
04:00	94	246	*	*	*	*	94	246
04:15	153	220	*	*	*	*	153	220
04:30	214	284	*	*	*	*	214	284
04:45	268	250	*	*	*	*	268	250
05:00	316	251	*	*	*	*	316	251
05:15	412	276	*	*	*	*	412	276
05:30	487	209	*	*	*	*	487	209
05:45	472	241	*	*	*	*	472	241
06:00	521	260	*	*	*	*	521	260
06:15	445	204	*	*	*	*	445	204
06:30	500	257	*	*	*	*	500	257
06:45	553	222	*	*	*	*	553	222
07:00	393	185	*	*	*	*	393	185
07:15	345	201	*	*	*	*	345	201
07:30	315	163	*	*	*	*	315	163
07:45	339	164	*	*	*	*	339	164
08:00	495	166	*	*	*	*	495	166
08:15	471	173	*	*	*	*	471	173
08:30	393	167	*	*	*	*	393	167
08:45	366	152	*	*	*	*	366	152
09:00	353	148	*	*	*	*	353	148
09:15	346	136	*	*	*	*	346	136
09:30	391	162	*	*	*	*	391	162
09:45	276	129	*	*	*	*	276	129
10:00	320	146	*	*	*	*	320	146
10:15	235	156	*	*	*	*	235	156
10:30	308	146	*	*	*	*	308	146
10:45	242	127	*	*	*	*	242	127
11:00	239	111	*	*	*	*	239	111
11:15	234	92	*	*	*	*	234	92
11:30	229	83	*	*	*	*	229	83
11:45	224	76	*	*	*	*	224	76
Total	11221	9910	361	0	0	0	11582	9910
Combined Total	21131		361		0		21492	
Peak	06:00	02:00	12:00				06:00	02:00
Vol.	2019	1122	172				2019	1122
P.H.F.	0.913	0.935	0.782				0.913	0.935
ADT	ADT 21,492		AADT 21,492					

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:** 9/17/2013

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

Time of Day	#ACC	%	Day of week	#ACC	%
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%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
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%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
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%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	4	1.9%	Daylight:	50	49.5%
Motorcycle/Moped:	3	1.5%	Dawn/Dusk:	5	5.0%
Bicycle:	0	0.0%	Dark(Lighted):	33	32.7%
Fixed Object:	0	0.0%	Dark(Not Lighted):	12	11.9%
Unspecified:	13	6.3%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	1	1.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
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 9/17/2013 6:45:21 PM