



District Department of Transportation

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

Suitland Road from Alabama Avenue to Southern Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	608	7	7B	Proposed	Suitland Road from Alabama Avenue to Southern Avenue Southeast



The *proposed* speed camera will be located in Ward 7 on Suitland Road from Alabama Avenue to Southern Avenue Southeast. Suitland Road runs between Alabama Avenue Southeast to the northwest and Southern Avenue Southeast to the southeast. The posted speed limit is 25 MPH.

W7 - 523





District Department of Transportation

Suitland Road from Alabama Avenue to Southern Avenue SE

Field Assessment Summary

Suitland Road runs in a northwest-southeast direction and is classified as a collector. Suitland Road has one travel lane in each direction. This site has the following characteristics:

- This is a residential area with houses and driveways.
- There is one school in the area: Beers Elementary School.
- The Francis A. Gregory Library is also in the area and generates pedestrian activity.
- There is a concrete island and a traffic signal with pedestrian signals at Alabama Avenue.
- There is another traffic signal with pedestrian signals at Southern Avenue.
- There is sidewalk on the south side of the street and on-street parking on both sides of the street for a segment of the road.
- There are crosswalks at Alabama Avenue SE, Bangor Street SE, 37th Street SE, 38th Street SE, Camden Street SE, and Southern Avenue SE.
- The pavement is in fair condition and there is curb and gutter with drainage inlets.
- There are speed humps and a downgrade slope southeast-bound near Alabama Avenue.
- There are several bus stops in the area.



Looking Northwest-bound

W7 - 524



District Department of Transportation

Suitland Road from Alabama Avenue to Southern Avenue SE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	35
85th Percentile Speed (MPH)	43
10 MPH Pace Speed	31-40
ADT	5,322

The mean speed is higher than the posted speed limit by 10 MPH and the 85th percentile speed is higher than the posted speed limit by 18 MPH 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 22 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 (6 crashes), Side Swipe, Left Turn and Right Angle (3 crashes each). The other collision types had 2 crashes or less each. There were 3 crashes where vehicular speeding was the contributing factor. Furthermore, the site experienced 8 injury-related crashes.

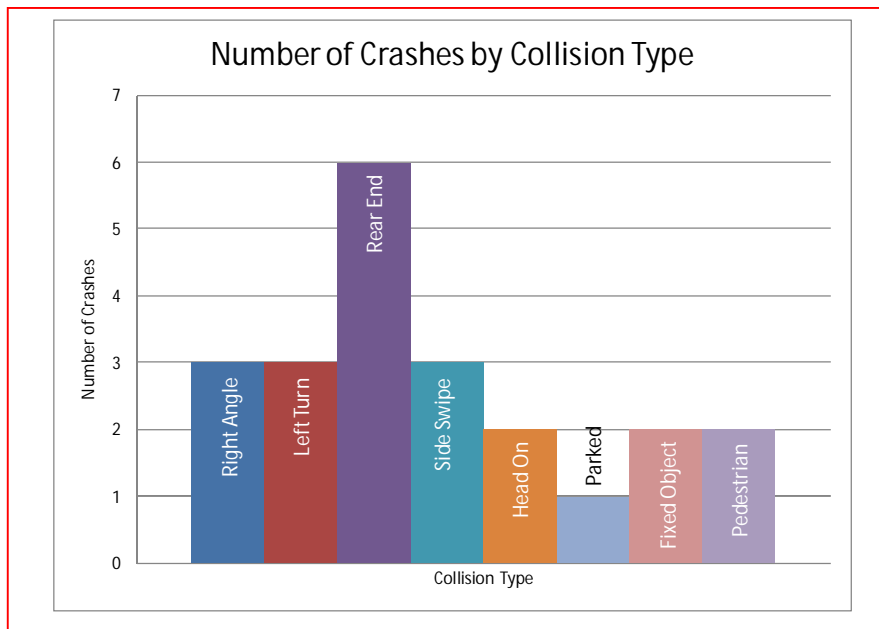
W7 - 525



District Department of Transportation

Suitland Road from Alabama Avenue to Southern Avenue SE

Severity			Weather			Surface condition			Light Condition		
Total	22										
Fatal	0	0.0%	Clear	19	86.4%	Dry	20	90.9%	Day	9	40.9%
Injury	8	36.4%	Rain	2	9.1%	Wet	2	9.1%	Night	11	50.0%
Truck	1	4.5%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	1	4.5%									



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 – This site experienced 8 injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses and driveways.
 - b. There is one school in the area: Beers Elementary School.
 - c. The Francis A. Gregory Library is also in the area and generates pedestrian activity.
 - d. There are several bus stops in the area which generate pedestrian activity.
 - e. There is on-street parking on both sides of the street.
 - f. There are speed humps on the street which reveals a speeding issue on the road.

W7 - 526



District Department of Transportation

Suitland Road from Alabama Avenue to Southern Avenue SE

Due to the speed data analysis, the elevated number of injury-related crashes, the specific site characteristics of a residential area, the presence of speed humps, and the pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

W7 - 527

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Rd from Alabama to Southern Ave SE EB Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	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	1	0	1	3	8	6	6	2	2	1	1	0	0	0	31
Total	1	0	1	3	8	6	6	2	2	1	1	0	0	0	31

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Rd from Alabama to Southern Ave SE EB Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/25/13	0	0	0	6	8	19	8	7	1	1	1	0	0	0	51
01:00	0	0	0	1	6	3	6	1	0	2	0	1	0	0	20
02:00	0	1	0	1	2	8	1	1	1	1	0	1	0	0	17
03:00	0	0	0	1	6	1	3	1	0	3	1	0	0	0	16
04:00	0	0	0	1	1	9	3	2	0	2	0	0	0	0	18
05:00	0	0	1	7	9	19	9	5	3	1	0	1	0	0	55
06:00	2	1	3	11	15	30	29	10	2	3	1	0	0	0	107
07:00	15	2	6	15	53	68	47	31	7	4	4	1	0	0	253
08:00	28	3	7	39	73	94	41	18	11	3	1	0	0	0	318
09:00	10	0	2	29	69	61	47	19	8	4	1	0	0	0	250
10:00	12	0	4	28	80	87	42	16	7	2	0	0	0	0	278
11:00	8	5	3	31	84	78	33	13	9	3	1	0	0	0	268
12 PM	10	4	6	29	78	99	38	25	4	2	0	1	0	0	296
13:00	11	1	10	49	67	82	50	21	5	2	0	0	1	0	299
14:00	13	1	7	37	85	88	52	19	6	5	1	0	0	0	314
15:00	21	3	18	62	126	80	52	24	8	0	0	0	0	0	394
16:00	27	7	13	44	118	141	58	26	8	3	0	0	0	0	445
17:00	27	7	25	98	154	99	57	17	4	0	1	0	0	0	489
18:00	28	8	37	66	134	109	55	11	8	2	1	0	0	0	459
19:00	11	1	4	36	98	109	61	28	9	3	1	0	0	0	361
20:00	10	0	1	28	71	78	51	11	4	7	2	2	0	1	266
21:00	0	0	1	15	44	47	32	13	4	1	0	1	0	0	158
22:00	2	0	7	13	23	33	21	7	6	0	2	0	1	0	115
23:00	5	0	2	3	13	8	7	1	3	1	1	0	0	0	44
Total	240	44	157	650	1417	1450	803	327	118	55	19	8	2	1	5291
Grand Total	241	44	158	653	1425	1456	809	329	120	56	20	8	2	1	5322

15th Percentile : 26 MPH
 50th Percentile : 35 MPH
 85th Percentile : 43 MPH
 95th Percentile : 49 MPH

Stats
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 2606
 Percent in Pace : 49.0%
 Number of Vehicles > 25 MPH : 4632
 Percent of Vehicles > 25 MPH : 87.0%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Rd from Alabama to Southern Ave SE EB Volume

Start Time	Sun	24-Nov-13	Mon	25-Nov-13	Tue	26-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	18	74	*	*	18	74
12:15	*	*	13	71	*	*	13	71
12:30	*	*	12	74	*	*	12	74
12:45	*	*	8	77	*	*	8	77
01:00	*	*	6	64	*	*	6	64
01:15	*	*	6	76	*	*	6	76
01:30	*	*	3	87	*	*	3	87
01:45	*	*	5	72	*	*	5	72
02:00	*	*	5	76	*	*	5	76
02:15	*	*	4	74	*	*	4	74
02:30	*	*	2	76	*	*	2	76
02:45	*	*	6	88	*	*	6	88
03:00	*	*	4	85	*	*	4	85
03:15	*	*	5	98	*	*	5	98
03:30	*	*	4	103	*	*	4	103
03:45	*	*	3	108	*	*	3	108
04:00	*	*	5	108	*	*	5	108
04:15	*	*	3	113	*	*	3	113
04:30	*	*	4	105	*	*	4	105
04:45	*	*	6	119	*	*	6	119
05:00	*	*	14	106	*	*	14	106
05:15	*	*	15	137	*	*	15	137
05:30	*	*	9	121	*	*	9	121
05:45	*	*	17	125	*	*	17	125
06:00	*	*	12	113	*	*	12	113
06:15	*	*	20	109	*	*	20	109
06:30	*	*	32	119	*	*	32	119
06:45	*	*	43	118	*	*	43	118
07:00	*	*	52	87	*	*	52	87
07:15	*	*	52	83	*	*	52	83
07:30	*	*	70	98	*	*	70	98
07:45	*	*	79	93	*	*	79	93
08:00	*	*	65	89	*	*	65	89
08:15	*	*	86	70	*	*	86	70
08:30	*	*	84	58	*	*	84	58
08:45	*	*	83	49	*	*	83	49
09:00	*	*	67	43	*	*	67	43
09:15	*	*	57	48	*	*	57	48
09:30	*	*	76	37	*	*	76	37
09:45	*	*	50	30	*	*	50	30
10:00	*	*	66	39	*	*	66	39
10:15	*	*	73	25	*	*	73	25
10:30	*	*	82	25	*	*	82	25
10:45	*	*	57	26	*	*	57	26
11:00	*	*	60	25	*	*	60	25
11:15	*	*	65	19	*	*	65	19
11:30	*	16	62	*	*	*	62	16
11:45	*	15	81	*	*	*	81	15
Total	0	31	1651	3640	0	0	1651	3671
Combined Total	31		5291		0		5322	
Peak			08:15	05:15			08:15	05:15
Vol.			320	496			320	496
P.H.F.			0.930	0.905			0.930	0.905
ADT	ADT 5,322		AADT 5,322					

Accident Summary Report (R-8)

Corridor: SUITLAND RD,SE From ALABAMA AVE,SE TO SOUTHERN AVE,SE

Time Period Covered: From 01/01/2010 To 12/31/2012 **Prepared By:** Rahul Jain

Prepared Date: 9/16/2013

Total Number of Accident:	22	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	3	13.6%	Fixed Object:	2	9.1%
Total Number of Injuries:	10	Left Turn:	3	13.6%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	2	9.1%
Total Number of NonDisabling Injuries:	0	Rear End:	6	27.3%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	4	Side Swiped:	3	13.6%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	2	9.1%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	1	4.5%	Unspecified:	0	0.0%
Time of Day				Day of week			
	#ACC	%			#ACC	%	
07:30 ~ 09:30:	2	9.1%		Sunday:	2	9.1%	
09:30 ~ 11:30:	2	9.1%		Monday:	4	18.2%	
11:30 ~ 13:30:	0	0.0%		Tuesday:	4	18.2%	
13:30 ~ 16:00:	1	4.5%		Wednesday:	3	13.6%	
16:00 ~ 18:30:	4	18.2%		Thursday:	2	9.1%	
18:30 ~ 07:30:	13	59.1%		Friday:	3	13.6%	
Unspecified:	0	0.0%		Saturday:	4	18.2%	
Weather Condition				Surface Condition			
	#ACC	%			#ACC	%	
Clear:	19	86.4%		Dry:	20	90.9%	
Rain:	2	9.1%		Wet:	2	9.1%	
Snow:	0	0.0%		Snow/Ice:	0	0.0%	
Sleet/Hail:	0	0.0%		Slush:	0	0.0%	
Fog/Mist:	0	0.0%		Water/Sand:	0	0.0%	
Crosswind/Blowing Sand:	0	0.0%		Repairing:	0	0.0%	
Unspecified:	1	4.5%		Unspecified:	0	0.0%	
Type of Vehicle				Accident Severity Type			
	#VEH	%			#ACC	%	
Passenger Car:	33	91.7%		Fatal Collision:	0	0.0%	
Bus:	1	2.8%		Injury Collision:	8	36.4%	
Truck:	1	2.8%		PDO Collision:	14	63.6%	
Taxi:	0	0.0%		Light Condition			
Minivan:	0	0.0%			#ACC	%	
Police/Emergency Vehicle:	1	2.8%		Daylight:	9	40.9%	
Motorcycle/Moped:	0	0.0%		Dawn/Dusk:	1	4.5%	
Bicycle:	0	0.0%		Dark(Lighted):	11	50.0%	
Fixed Object:	0	0.0%		Dark(Not Lighted):	0	0.0%	
Unspecified:	0	0.0%		Dark(Unknown Lighting):	0	0.0%	
				Unspecified:	1	4.5%	
Contributing Factor				Pedestrian Actions			
	#VEH	%			#ACC	%	
Driver: Speed:	3	8.3%		In Crosswalk with Signal:	2	66.7%	
Driver: Alcohol/Drug:	0	0.0%		In Crosswalk against Signal:	0	0.0%	
Driver: Electronic Device:	0	0.0%		In Crosswalk no Signal:	0	0.0%	
Driver: Others:	7	19.4%		In Unmarked Crosswalk:	0	0.0%	
Vehicle:	0	0.0%		Not in Crosswalk:	0	0.0%	
Roadway:	0	0.0%		From Between Parked Cars:	0	0.0%	
Unspecified:	26	72.2%		Unspecified:	1	33.3%	

15 Records are not approved as of 9/16/2013 10:53:25 AM