



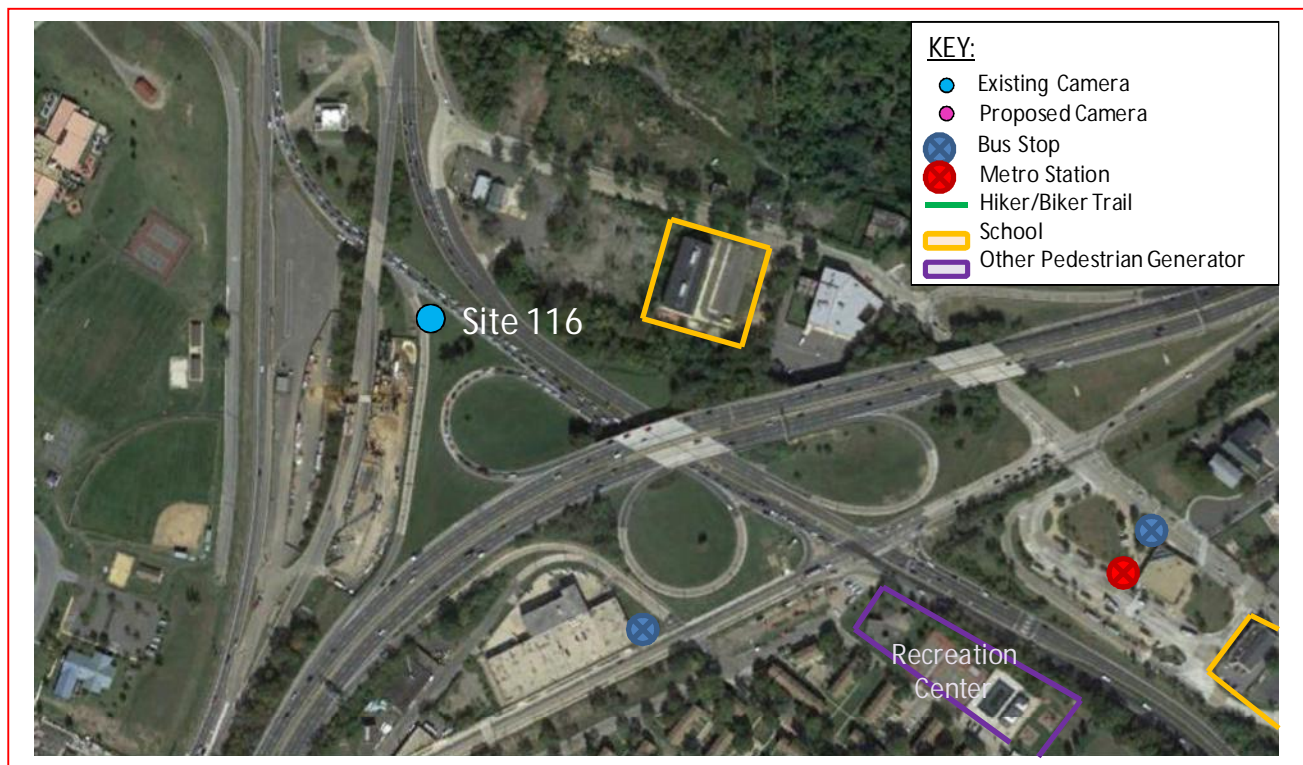
District Department of Transportation

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

Suitland Parkway 0.3 Miles from Firth Sterling Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8C	Existing	Suitland Parkway 0.3 Miles from Firth Sterling Avenue Southeast Northwest-bound



The existing speed camera is located in Ward 8 on Suitland Parkway 0.3 miles prior to Firth Sterling Avenue Southeast in the northwest-bound direction. Suitland Parkway runs between Pennsylvania Avenue to the east and Anacostia Freeway to the west. The posted speed limit is 35 MPH. This speed camera was installed on November 2008.

W8 - 13





District Department of Transportation

Suitland Parkway 0.3 Miles from Firth Sterling Avenue 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 are two schools in the area: Howard Road Academy and Septima Clark Public Charter School.
- There is a traffic signal with pedestrian signals at Firth Sterling Avenue.
- There is sidewalk on the north side that ends at a pedestrian foot bridge between Stanton Road and Sheridan Road.
- There is a grassy median and the pavement is in good condition with curb and gutter with drainage inlets.



Looking Northwest-bound



District Department of Transportation

Suitland Parkway 0.3 Miles from Firth Sterling Avenue SE



Looking Northwest-bound

Speed Data Analysis

Posted Speed Limit (MPH)	35
Mean Speed (MPH)	29
85th Percentile Speed (MPH)	34
10 MPH Pace Speed (MPH)	27-36
ADT	14,352

The mean speed is 6 MPH lower than the posted speed and the 85th percentile speed is 1 MPH lower than the posted speed.

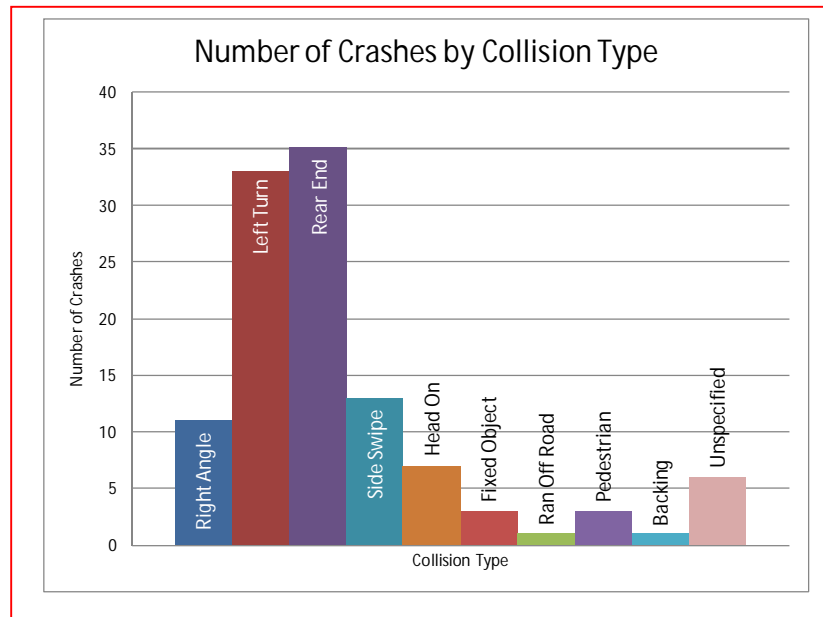
Crash Data Analysis

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 (35 crashes), Left Turn (33 crashes), Side Swipe (13 crashes) and Right Angle (11 crashes). Furthermore, this site experienced a high frequency (72 crashes) of injury-related crashes.



Suitland Parkway 0.3 Miles from Firth Sterling Avenue SE

Severity			Weather			Surface condition			Light Condition		
Total	113										
Fatal	0	0.0%	Clear	94	83.2%	Dry	91	80.5%	Day	67	59.3%
Injury	72	63.7%	Rain	14	12.4%	Wet	17	15.0%	Night	38	33.6%
Truck	14	12.4%	Fog/Mist	0	0.0%	Repairing	1	0.9%			
Police/EMS	4	3.5%									



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.

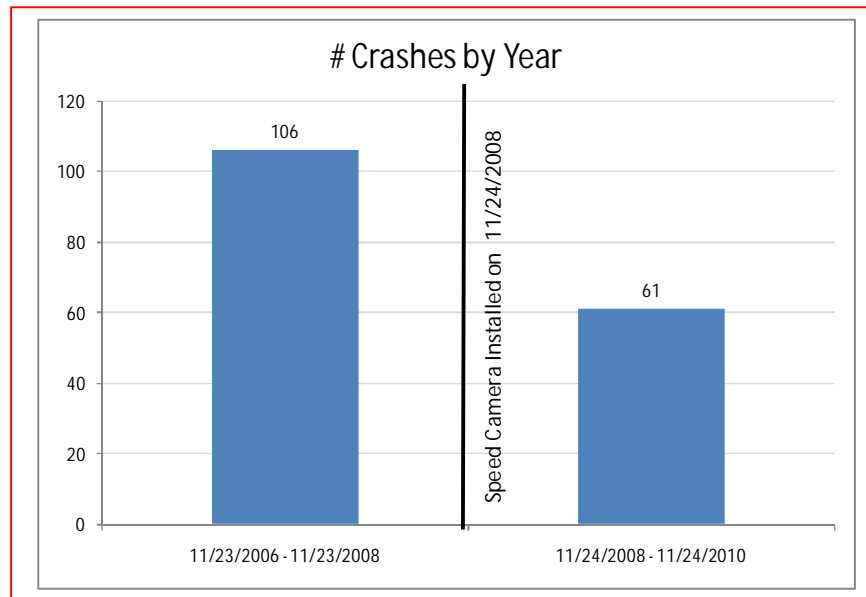
This speed camera was installed on November 24, 2008. A graph showing the number of crashes for the 2 years prior to installation and the 2 years after installation can be found on the next page. The number of crashes decreased from 106 in the 2 years before installation to 61 in the 2 years after installation. The number of injury crashes also decreased from 50 in the 2 years before installation to 37 in the 2 years after installation.

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



District Department of Transportation

Suitland Parkway 0.3 Miles from Firth Sterling Avenue SE



The intersection of Firth Sterling Avenue SE and Suitland Parkway SE is one of the Top 5% High Accident Locations for 2010-2012.¹

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 speed data analysis shows travel speeds being lower than the posted speed limit.
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 (72 crashes) of injury-related crashes. The number of crashes decreased after installation. The intersection of Firth Sterling Avenue SE and Suitland Parkway SE is one of the Top 5% High Accident Locations for 2010-2012.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. There are two schools in the area: Howard Road Academy and Septima Clark Public Charter School.
 - b. There are several bus stops in the area which generate pedestrian activity.

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, due to the elevated number of speed-related crashes and injury-related crashes, the specific site

¹ DDOT, *Top 5% High Accident Locations Map for 2010-2012*



District Department of Transportation

Suitland Parkway 0.3 Miles from Firth Sterling Avenue SE

characteristics, the proximity of schools to the site, the designation of the intersection as a high accident location, 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 .3 m pr Firth Sterling Av SE NWB Speed

NWB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/03/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	3	0	1	17	74	30	0	0	0	0	0	0	0	0	125
04:00	15	0	1	53	348	106	2	0	0	0	0	0	0	0	525
05:00	49	17	61	385	644	66	0	0	0	0	0	0	0	0	1222
06:00	113	49	168	573	541	54	0	0	0	0	0	0	0	0	1498
07:00	217	108	176	451	314	15	0	0	0	0	0	0	0	0	1281
08:00	319	86	100	186	188	18	0	0	0	0	0	0	0	0	897
09:00	42	3	45	293	594	82	0	0	0	0	0	0	0	0	1059
10:00	22	0	6	176	529	57	2	0	0	0	0	0	0	0	792
11:00	14	0	6	137	459	52	3	0	0	0	0	0	0	0	671
12 PM	17	0	4	127	461	73	2	0	0	0	0	0	0	0	684
13:00	18	0	6	119	478	73	2	0	0	0	0	0	0	0	696
14:00	17	0	10	216	430	63	3	0	0	0	0	0	0	0	739
15:00	15	0	1	116	424	90	1	0	0	0	0	0	0	0	647
16:00	22	0	2	146	354	58	2	0	0	0	0	0	0	0	584
17:00	10	0	3	171	382	36	0	0	0	0	0	0	0	0	602
18:00	10	0	2	143	322	36	1	0	0	0	0	0	0	0	514
19:00	4	0	2	89	244	30	1	0	0	0	0	0	0	0	370
20:00	3	0	2	75	214	31	1	0	0	0	0	0	0	0	326
21:00	4	0	2	54	227	46	1	0	0	0	0	0	0	0	334
22:00	5	0	0	58	225	49	0	0	0	0	0	0	0	0	337
23:00	2	0	2	42	120	32	3	0	0	0	0	0	0	0	201
Total	921	263	600	3627	7572	1097	24	0	0	0	0	0	0	0	14104

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy .3 m pr Firth Sterling Av SE NWB Speed

NWB															
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/04/13	0	0	2	39	40	7	0	0	0	0	0	0	0	0	88
01:00	0	0	0	14	43	5	1	0	0	0	0	0	0	0	63
02:00	0	0	1	21	44	7	0	0	0	0	0	0	0	0	73
03:00	0	0	0	5	15	4	0	0	0	0	0	0	0	0	24
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	0	0	3	79	142	23	1	0	0	0	0	0	0	0	248
Grand Total	921	263	603	3706	7714	1120	25	0	0	0	0	0	0	0	14352

15th Percentile : 21 MPH
 50th Percentile : 30 MPH
 85th Percentile : 34 MPH
 95th Percentile : 36 MPH

Stats
 Mean Speed(Average) : 29 MPH
 10 MPH Pace Speed : 27-36 MPH
 Number in Pace : 9915
 Percent in Pace : 69.1%
 Number of Vehicles > 35 MPH : 1826
 Percent of Vehicles > 35 MPH : 12.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Suitland Pkwy .3 m pr Firth Sterling Av SE NWB Volume

Start Time	Tue		Wed		Thu		Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	169	24	*	*	*	24	169
12:15	*	163	24	*	*	*	24	163
12:30	*	163	24	*	*	*	24	163
12:45	*	189	16	*	*	*	16	189
01:00	*	185	17	*	*	*	17	185
01:15	*	163	14	*	*	*	14	163
01:30	*	187	18	*	*	*	18	187
01:45	*	161	14	*	*	*	14	161
02:00	*	174	12	*	*	*	12	174
02:15	*	178	18	*	*	*	18	178
02:30	*	204	18	*	*	*	18	204
02:45	*	183	25	*	*	*	25	183
03:00	*	176	24	*	*	*	24	176
03:15	33	171	*	*	*	*	33	171
03:30	45	146	*	*	*	*	45	146
03:45	47	154	*	*	*	*	47	154
04:00	60	148	*	*	*	*	60	148
04:15	100	138	*	*	*	*	100	138
04:30	150	148	*	*	*	*	150	148
04:45	215	150	*	*	*	*	215	150
05:00	206	141	*	*	*	*	206	141
05:15	278	188	*	*	*	*	278	188
05:30	372	131	*	*	*	*	372	131
05:45	366	142	*	*	*	*	366	142
06:00	377	150	*	*	*	*	377	150
06:15	356	130	*	*	*	*	356	130
06:30	397	117	*	*	*	*	397	117
06:45	368	117	*	*	*	*	368	117
07:00	401	97	*	*	*	*	401	97
07:15	387	98	*	*	*	*	387	98
07:30	256	87	*	*	*	*	256	87
07:45	237	88	*	*	*	*	237	88
08:00	139	81	*	*	*	*	139	81
08:15	219	93	*	*	*	*	219	93
08:30	237	62	*	*	*	*	237	62
08:45	302	90	*	*	*	*	302	90
09:00	263	85	*	*	*	*	263	85
09:15	273	66	*	*	*	*	273	66
09:30	291	106	*	*	*	*	291	106
09:45	232	77	*	*	*	*	232	77
10:00	213	82	*	*	*	*	213	82
10:15	210	89	*	*	*	*	210	89
10:30	205	98	*	*	*	*	205	98
10:45	164	68	*	*	*	*	164	68
11:00	157	71	*	*	*	*	157	71
11:15	179	51	*	*	*	*	179	51
11:30	163	42	*	*	*	*	163	42
11:45	172	37	*	*	*	*	172	37
Total	8070	6034	248	0	0	0	8318	6034
Combined Total	14104		248		0		14352	
Peak	06:30	02:15	12:00				06:30	02:15
Vol.	1553	741	88				1553	741
P.H.F.	0.968	0.908	0.917				0.968	0.908
ADT	ADT 14,352		AADT 14,352					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: SUITLAND PKWY,SE From S CAPITOL ST,BN TO FIRTH STERLING AVE,SE

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

Prepared By: Rahul Jain

Prepared Date: 11/25/2012

Total Number of Accident:	113	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	1	Right Angle:	11	9.7%	Fixed Object:	3	2.7%
Total Number of Injuries:	128	Left Turn:	33	29.2%	Ran Off Road:	1	0.9%
Total Number of Disabling Injuries:	3	Right Turn:	0	0.0%	Ped. Involved:	3	2.7%
Total Number of NonDisabling Injuries:	25	Rear End:	35	31.0%	Backing:	1	0.9%
Total Number of Pedestrians Involved:	3	Side Swiped:	13	11.5%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	1	Head On:	7	6.2%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	2	Parked:	0	0.0%	Unspecified:	6	5.3%
Time of Day				#ACC	%	Day of week	
07:30 ~ 09:30:				11	9.7%	Sunday:	
09:30 ~ 11:30:				8	7.1%	Monday:	
11:30 ~ 13:30:				7	6.2%	Tuesday:	
13:30 ~ 16:00:				18	15.9%	Wednesday:	
16:00 ~ 18:30:				16	14.2%	Thursday:	
18:30 ~ 07:30:				53	46.9%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				94	83.2%	Dry:	
Rain:				14	12.4%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				0	0.0%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				5	4.4%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				196	84.8%	Fatal Collision:	
Bus:				1	0.4%	Injury Collision:	
Truck:				14	6.1%	PDO Collision:	
Taxi:				2	0.9%	Light Condition	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				4	1.7%	Dawn/Dusk:	
Motorcycle/Moped:				3	1.3%	Dark(Lighted):	
Bicycle:				1	0.4%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				10	4.3%	Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				10	4.3%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				2	0.9%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				51	22.1%	In Unmarked Crosswalk:	
Vehicle:				2	0.9%	Not in Crosswalk:	
Roadway:				1	0.4%	From Between Parked Cars:	
Unspecified:				165	71.4%	Unspecified:	

70 Records are not approved as of 11/25/2013 6:20:53 PM

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: SUITLAND PKWY,SE From S CAPITOL ST,BN TO FIRTH STERLING AVE,SE

Time Period Covered: From 11/23/2006 To 11/23/2008

Prepared By: Rahul Jain

Prepared Date: 1/14/2014

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	106	Right Angle:	8	7.5%	Fixed Object:	10	9.4%
Total Number of Fatalities:	0	Left Turn:	29	27.4%	Ran Off Road:	6	5.7%
Total Number of Injuries:	82	Right Turn:	3	2.8%	Ped. Involved:	1	0.9%
Total Number of Disabling Injuries:	6	Rear End:	26	24.5%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	19	Side Swiped:	11	10.4%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	1	Head On:	5	4.7%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	7	6.6%
Total Number of Motorcycles Involved:	2						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	14	13.2%	Sunday:	15	14.2%
09:30 ~ 11:30:	13	12.3%	Monday:	13	12.3%
11:30 ~ 13:30:	2	1.9%	Tuesday:	12	11.3%
13:30 ~ 16:00:	7	6.6%	Wednesday:	21	19.8%
16:00 ~ 18:30:	16	15.1%	Thursday:	11	10.4%
18:30 ~ 07:30:	54	50.9%	Friday:	16	15.1%
Unspecified:	0	0.0%	Saturday:	18	17.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	81	76.4%	Dry:	74	69.8%
Rain:	21	19.8%	Wet:	24	22.6%
Snow:	1	0.9%	Snow/Ice:	7	6.6%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	1	0.9%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	2	1.9%	Unspecified:	1	0.9%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	182	90.5%	Fatal Collision:	1	0.9%
Bus:	3	1.5%	Injury Collision:	50	47.2%
Truck:	7	3.5%	PDO Collision:	55	51.9%
Taxi:	3	1.5%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	1	0.5%	Daylight:	53	50.0%
Motorcycle/Moped:	2	1.0%	Dawn/Dusk:	5	4.7%
Bicycle:	0	0.0%	Dark(Lighted):	9	8.5%
Fixed Object:	0	0.0%	Dark(Not Lighted):	1	0.9%
Unspecified:	3	1.5%	Dark(Unknown Lighting):	37	34.9%
			Unspecified:	1	0.9%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	11	5.5%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	3	1.5%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	51	25.4%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	3	1.5%	From Between Parked Cars:	0	0.0%
Unspecified:	133	66.2%	Unspecified:	1	100.0%

106 Records are not approved as of 1/14/2014 12:16:23 PM

Accident Summary Report (R-8)

Corridor: SUITLAND PKWY,SE From S CAPITOL ST,BN TO FIRTH STERLING AVE,SE

Time Period Covered: From 11/24/2008 To 11/24/2010

Prepared By: Rahul Jain

Prepared Date: 1/14/2014

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	61	Right Angle:	4	6.6%	Fixed Object:	6	9.8%
Total Number of Fatalities:	0	Left Turn:	18	29.5%	Ran Off Road:	1	1.6%
Total Number of Injuries:	66	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	5	Rear End:	20	32.8%	Backing:	1	1.6%
Total Number of NonDisabling Injuries:	24	Side Swiped:	6	9.8%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	4	6.6%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	1	1.6%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%
07:30 ~ 09:30:	8	13.1%
09:30 ~ 11:30:	5	8.2%
11:30 ~ 13:30:	1	1.6%
13:30 ~ 16:00:	11	18.0%
16:00 ~18:30:	6	9.8%
18:30 ~ 07:30:	30	49.2%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	8	13.1%
Monday:	9	14.8%
Tuesday:	7	11.5%
Wednesday:	9	14.8%
Thursday:	14	23.0%
Friday:	6	9.8%
Saturday:	8	13.1%

Weather Condition	#ACC	%
Clear:	45	73.8%
Rain:	13	21.3%
Snow:	0	0.0%
Sleet/Hail:	1	1.6%
Fog/Mist:	1	1.6%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	1	1.6%

Surface Condition	#ACC	%
Dry:	45	73.8%
Wet:	15	24.6%
Snow/Ice:	0	0.0%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	1	1.6%

Type of Vehicle	#VEH	%
Passenger Car:	109	84.5%
Bus:	0	0.0%
Truck:	8	6.2%
Taxi:	0	0.0%
Minivan:	0	0.0%
Police/Emergency Vehicle:	2	1.6%
Motorcycle/Moped:	1	0.8%
Bicycle:	0	0.0%
Fixed Object:	0	0.0%
Unspecified:	9	7.0%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	37	60.7%
PDO Collision:	24	39.3%

Light Condition	#ACC	%
Daylight:	36	59.0%
Dawn/Dusk:	2	3.3%
Dark(Lighted):	20	32.8%
Dark(Not Lighted):	3	4.9%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	0	0.0%

Contributing Factor	#VEH	%
Driver: Speed:	6	4.7%
Driver: Alcohol/Drug:	2	1.6%
Driver: Electronic Device:	0	0.0%
Driver: Others:	25	19.4%
Vehicle:	0	0.0%
Roadway:	2	1.6%
Unspecified:	94	72.9%

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:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	0	0.0%

41 Records are not approved as of 1/14/2014 12:14:25 PM