



District Department of Transportation

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

### 3500 Block Martin Luther King, Jr. Avenue SE SW/B

#### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	707	8	8C	Proposed	3500 Block Martin Luther King, Jr. Avenue Southeast, Southwest-bound



The *proposed* speed camera is located in Ward 8 at the 3500 block of Martin Luther King, Jr. Avenue Southeast in the southwest-bound direction. Martin Luther King, Jr. Avenue Southeast runs between Good Hope Road Southeast to the north and South Capitol Street Southwest to the south. The posted speed limit is 25 MPH.

W8 - 240





District Department of Transportation

3500 Block Martin Luther King, Jr. Avenue SE SW/B

## Field Assessment Summary

Martin Luther King, Jr. Avenue Southeast is assumed to run in a northeast-southwest direction and is classified as a minor arterial. Martin Luther King, Jr. Avenue has one travel lane in each direction. This site has the following characteristics:

- This is a residential area with houses and driveways.
- There are two schools in the area: Simon Elementary School and Frank W. Ballou Senior High School.
- The Oxon Run Public Pool is located just east of Simon Elementary School.
- There are sidewalks and on-street parking on both sides of the street. There is a crosswalk at Savannah Street Southeast.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a bus stop northeast-bound before Horner Place Southeast and a bus stop southwest-bound before Sterling Street Southeast.



Looking Northeast-bound

W8 - 241



District Department of Transportation

## 3500 Block Martin Luther King, Jr. Avenue SE SW/B



Looking Southwest-bound

### Speed Data Analysis

	SW-B	NE-B
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	26	23
85th Percentile Speed (MPH)	32	29
10 MPH Pace Speed	23-32	21-30
ADT	9,798	

In the southwest-bound direction, the mean speed is 1 MPH higher than the posted speed limit, and the 85<sup>th</sup> percentile speed is 7 MPH higher than the posted speed limit.

### 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 6 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The types of collision at this location were Rear End (4 crashes), Head On and Fixed Object (1 crash each). There were no other collision types reported. There was 1 crash where vehicular speeding was the contributing factor.

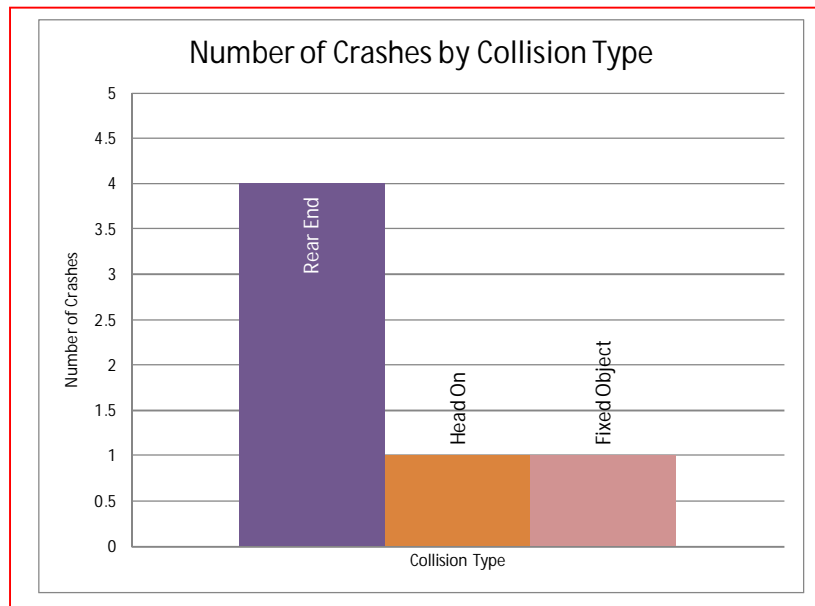
W8 - 242



District Department of Transportation

3500 Block Martin Luther King, Jr. Avenue SE SW/B

Severity			Weather			Surface condition			Light Condition		
Total	6										
Fatal	0	0.0%	Clear	3	50.0%	Dry	3	50.0%	Day	4	66.7%
Injury	2	33.3%	Rain	0	0.0%	Wet	3	50.0%	Night	2	33.3%
Emergency	1	16.7%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Truck	1	16.7%									



## 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 travel speeds are higher than the posted speed limit at this location.
2. Crash Data – There was 1 crash where vehicular speeding was the contributing factor. There were 2 injury-related crashes at this location.
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 are two schools in the area: Simon Elementary School and Frank W. Ballou Senior High School.



District Department of Transportation

## 3500 Block Martin Luther King, Jr. Avenue SE SW/B

- c. The Oxon Run Public Pool is located just east of Simon Elementary School, which 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.

Due to the speed data analysis, the crash data analysis, 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](http://www.sammateng.com)

## 3500 Block of M. L. King Jr. Ave. SE Speed

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	
11/22/13	2	0	11	25	14	2	2	0	0	0	0	0	0	0	56
01:00	2	0	4	10	7	3	2	1	0	0	0	0	0	0	29
02:00	0	1	4	22	9	3	1	0	0	0	0	0	0	0	40
03:00	0	1	2	7	7	2	1	0	0	0	0	0	0	0	20
04:00	0	0	4	15	10	3	1	0	0	0	0	0	0	0	33
05:00	1	0	10	24	19	13	6	0	0	0	0	0	0	0	73
06:00	9	4	11	50	39	9	5	1	0	0	0	0	0	0	128
07:00	27	7	42	84	44	5	3	0	0	0	0	0	0	0	212
08:00	31	7	74	124	59	8	0	1	0	0	0	0	0	0	304
09:00	15	9	48	104	41	9	5	2	1	0	1	0	0	0	235
10:00	15	12	57	103	38	6	1	0	0	0	0	0	0	0	232
11:00	24	7	45	86	45	13	3	0	0	0	0	0	0	0	223
12 PM	12	5	55	134	43	9	3	0	0	0	0	0	0	0	261
13:00	17	9	65	130	58	16	0	0	0	0	0	0	0	0	295
14:00	16	11	71	135	47	13	3	0	0	0	0	0	0	0	296
15:00	16	8	86	129	68	16	3	2	0	0	0	0	0	0	328
16:00	36	31	172	115	47	7	2	1	0	0	0	0	0	0	411
17:00	23	14	115	128	42	8	2	3	0	0	0	0	0	0	335
18:00	11	8	71	137	48	9	1	2	0	0	0	0	0	0	287
19:00	9	5	50	106	50	14	1	0	0	0	0	0	0	0	235
20:00	8	5	21	93	36	10	2	0	0	0	0	0	0	0	175
21:00	8	3	25	72	37	8	2	1	0	0	0	0	0	0	156
22:00	7	5	32	69	35	7	4	0	0	0	0	0	0	0	159
23:00	4	2	17	42	42	9	4	0	0	0	0	0	0	0	120
Total	293	154	1092	1944	885	202	57	14	1	0	1	0	0	0	4643
Grand Total	293	154	1092	1944	885	202	57	14	1	0	1	0	0	0	4643

15th Percentile : 18 MPH  
 50th Percentile : 26 MPH  
 85th Percentile : 32 MPH  
 95th Percentile : 36 MPH

Stats  
 Mean Speed(Average) : 26 MPH  
 10 MPH Pace Speed : 23-32 MPH  
 Number in Pace : 2768  
 Percent in Pace : 59.6%  
 Number of Vehicles > 30 MPH : 1206  
 Percent of Vehicles > 30 MPH : 26.0%

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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	
11/22/13	0	7	19	28	13	4	1	0	0	0	0	0	0	0	72
01:00	0	3	11	15	8	2	1	0	0	0	0	0	0	0	40
02:00	0	1	7	13	1	0	0	0	0	0	0	0	0	0	22
03:00	0	1	11	6	0	1	0	0	0	0	0	0	0	0	19
04:00	0	3	6	10	3	1	1	0	0	0	0	0	0	0	24
05:00	4	11	27	34	14	1	1	0	0	0	0	0	0	0	92
06:00	11	19	48	66	36	8	0	0	0	0	0	0	0	0	188
07:00	52	57	138	156	44	11	1	0	0	0	0	0	0	0	459
08:00	37	46	117	151	52	6	0	0	0	0	0	0	0	0	409
09:00	24	36	100	91	27	2	1	0	0	0	0	0	0	0	281
10:00	31	29	95	98	30	3	0	1	0	0	0	0	0	0	287
11:00	23	29	74	87	28	2	2	0	0	0	0	0	0	0	245
12 PM	20	29	100	103	29	5	0	0	0	0	0	0	0	0	286
13:00	25	35	104	112	33	3	1	0	0	0	0	0	0	0	313
14:00	24	31	114	98	24	3	0	1	0	0	0	0	0	0	295
15:00	31	64	106	98	30	6	1	0	0	0	0	0	0	0	336
16:00	45	55	122	88	20	1	0	0	0	0	0	0	0	0	331
17:00	25	50	111	101	20	3	0	0	0	0	0	0	0	0	310
18:00	22	36	98	80	21	6	1	0	0	0	0	0	0	0	264
19:00	7	35	108	83	16	2	1	0	0	0	0	0	0	0	252
20:00	15	20	66	77	15	5	1	0	0	0	0	0	0	0	199
21:00	8	16	56	62	19	5	1	0	0	0	0	0	0	0	167
22:00	6	7	42	51	21	5	0	0	0	0	0	0	0	0	132
23:00	13	13	35	49	16	5	1	0	0	0	0	0	0	0	132
Total	423	633	1715	1757	520	90	15	2	0	0	0	0	0	0	5155
Grand Total	423	633	1715	1757	520	90	15	2	0	0	0	0	0	0	5155

15th Percentile : 13 MPH  
 50th Percentile : 23 MPH  
 85th Percentile : 29 MPH  
 95th Percentile : 33 MPH

Stats  
 Mean Speed(Average) : 23 MPH  
 10 MPH Pace Speed : 21-30 MPH  
 Number in Pace : 2834  
 Percent in Pace : 55.0%  
 Number of Vehicles > 30 MPH : 688  
 Percent of Vehicles > 30 MPH : 13.3%

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## 3500 Block of M. L. King Jr. Ave. SE Volume

Start Time	22-Nov-13		SWB		NEB		Combined		23-Nov-Sat	SWB		NEB		Combined	
	Fri		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00			14	62	16	72	30	134	*	*	*	*	*	*	
12:15			8	64	14	75	22	139	*	*	*	*	*	*	
12:30			17	71	30	66	47	137	*	*	*	*	*	*	
12:45			17	64	12	73	29	137	*	*	*	*	*	*	
01:00			7	66	8	81	15	147	*	*	*	*	*	*	
01:15			8	81	12	87	20	168	*	*	*	*	*	*	
01:30			8	86	10	57	18	143	*	*	*	*	*	*	
01:45			6	62	10	88	16	150	*	*	*	*	*	*	
02:00			9	71	5	79	14	150	*	*	*	*	*	*	
02:15			13	69	7	75	20	144	*	*	*	*	*	*	
02:30			7	81	7	64	14	145	*	*	*	*	*	*	
02:45			11	75	3	77	14	152	*	*	*	*	*	*	
03:00			7	88	3	68	10	156	*	*	*	*	*	*	
03:15			5	73	5	<b>100</b>	10	173	*	*	*	*	*	*	
03:30			4	85	9	<b>68</b>	13	153	*	*	*	*	*	*	
03:45			4	82	2	<b>100</b>	6	182	*	*	*	*	*	*	
04:00			10	<b>127</b>	3	<b>96</b>	13	<b>223</b>	*	*	*	*	*	*	
04:15			7	<b>83</b>	6	72	13	<b>155</b>	*	*	*	*	*	*	
04:30			7	<b>90</b>	10	83	17	<b>173</b>	*	*	*	*	*	*	
04:45			9	<b>111</b>	5	80	14	<b>191</b>	*	*	*	*	*	*	
05:00			7	89	15	70	22	159	*	*	*	*	*	*	
05:15			28	93	23	82	51	175	*	*	*	*	*	*	
05:30			16	88	27	71	43	159	*	*	*	*	*	*	
05:45			22	65	27	87	49	152	*	*	*	*	*	*	
06:00			28	72	31	68	59	140	*	*	*	*	*	*	
06:15			30	82	37	59	67	141	*	*	*	*	*	*	
06:30			36	61	57	68	93	129	*	*	*	*	*	*	
06:45			34	72	63	69	97	141	*	*	*	*	*	*	
07:00			43	71	89	70	132	141	*	*	*	*	*	*	
07:15			45	54	<b>115</b>	64	160	118	*	*	*	*	*	*	
07:30			56	61	<b>135</b>	55	<b>191</b>	116	*	*	*	*	*	*	
07:45			68	49	<b>120</b>	63	<b>188</b>	112	*	*	*	*	*	*	
08:00			<b>74</b>	57	<b>104</b>	49	<b>178</b>	106	*	*	*	*	*	*	
08:15			<b>73</b>	37	113	51	<b>186</b>	88	*	*	*	*	*	*	
08:30			<b>79</b>	35	106	58	185	93	*	*	*	*	*	*	
08:45			<b>78</b>	46	86	41	164	87	*	*	*	*	*	*	
09:00			61	38	73	41	134	79	*	*	*	*	*	*	
09:15			51	48	75	49	126	97	*	*	*	*	*	*	
09:30			68	33	68	44	136	77	*	*	*	*	*	*	
09:45			55	37	65	33	120	70	*	*	*	*	*	*	
10:00			59	39	60	38	119	77	*	*	*	*	*	*	
10:15			64	42	85	37	149	79	*	*	*	*	*	*	
10:30			56	44	66	34	122	78	*	*	*	*	*	*	
10:45			53	34	76	23	129	57	*	*	*	*	*	*	
11:00			53	30	59	37	112	67	*	*	*	*	*	*	
11:15			53	30	61	29	114	59	*	*	*	*	*	*	
11:30			58	33	71	34	129	67	*	*	*	*	*	*	
11:45			59	27	54	32	113	59	*	*	*	*	*	*	

Total	1585	3058	2138	3017	3723	6075	0	0	0	0	0	0	0
Day Total	4643		5155		9798		0	0	0	0	0	0	0
% Total	16.2%	31.2%	21.8%	30.8%			0.0%	0.0%	0.0%	0.0%			

Peak	08:00	04:00	07:15	03:15	07:30	04:00
Vol.	304	411	474	364	743	742
P.H.F.	0.962	0.809	0.878	0.910	0.973	0.832

ADT                      ADT 9,798                      AADT 9,798



## Accident Summary Report (R-8)

**Corridor:** MARTIN LUTHER KING JR AVE,SE From SAVANNAH ST,SE TO STERLING 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:	6	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Fatalities:	0	Right Angle:	0	0.0%	Fixed Object:	1	16.7%
Total Number of Injuries:	5	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	0	Rear End:	4	66.7%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	1	16.7%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
<b>Time of Day</b>				<b>#ACC</b>	<b>%</b>	<b>Day o fweek</b>	
07:30 ~ 09:30:				0	0.0%	Sunday:	
09:30 ~ 11:30:				3	50.0%	Monday:	
11:30 ~ 13:30:				0	0.0%	Tuesday:	
13:30 ~ 16:00:				1	16.7%	Wednesday:	
16:00 ~18:30:				0	0.0%	Thursday:	
18:30 ~ 07:30:				2	33.3%	Friday:	
Unspecified:				0	0.0%	Saturday:	
<b>Weather Condition</b>				<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	
Clear:				3	50.0%	Dry:	
Rain:				0	0.0%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				1	16.7%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				2	33.3%	Unspecified:	
<b>Type of Vehicle</b>				<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	
Passenger Car:				7	63.6%	Fatal Collision:	
Bus:				0	0.0%	Injury Collision:	
Truck:				1	9.1%	PDO Collision:	
Taxi:				0	0.0%	<b>Light Condition</b>	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				1	9.1%	Dawn/Dusk:	
Motorcycle/Moped:				1	9.1%	Dark(Lighted):	
Bicycle:				0	0.0%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				1	9.1%	Unspecified:	
<b>Contributing Factor</b>				<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	
Driver: Speed:				1	9.1%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				1	9.1%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				2	18.2%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				7	63.6%	Unspecified:	

3 Records are not approved as of 9/17/2013 8:32:09 AM