



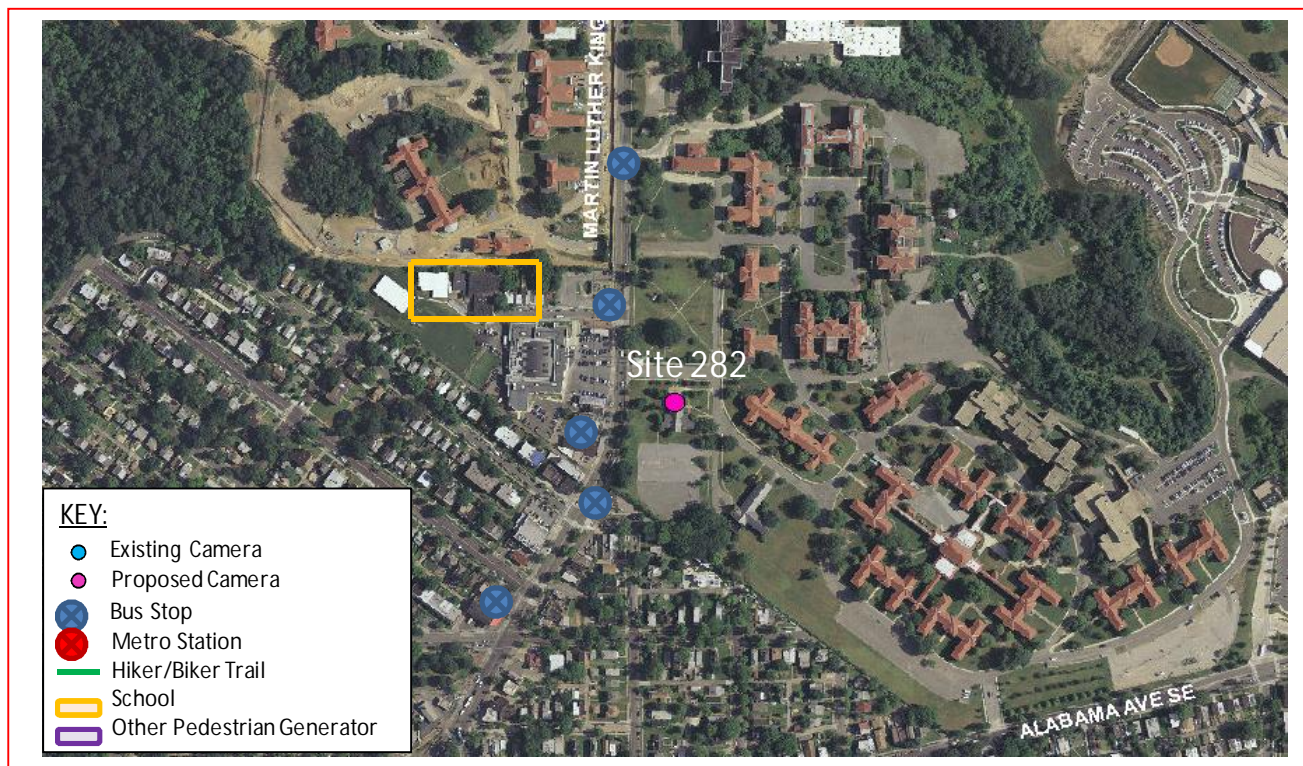
District Department of Transportation

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

2700 Block Martin Luther King, Jr. Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8C	Proposed	2700 Block Martin Luther King, Jr. Avenue Southeast, Northbound



The *proposed* speed camera will be located in Ward 8 at the 2700 block of Martin Luther King, Jr. Avenue Southeast in the northbound 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 30 MPH.

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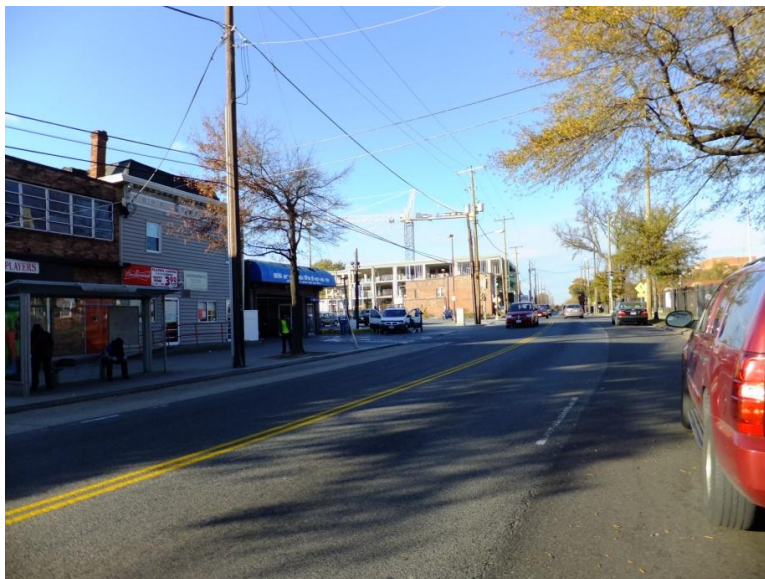
District Department of Transportation

2700 Block Martin Luther King, Jr. Avenue SE

Field Assessment Summary

Martin Luther King, Jr. Avenue is assumed to run in a north-south direction and is classified as a minor arterial. Martin Luther King, Jr. Avenue has two travel lanes in each direction. This site has the following characteristics:

- This is a residential and commercial area with small businesses.
- There is one school in the area: Friendship Public Charter School/Tech Prep Academy.
- There is a Boys and Girls Club near the site which generates pedestrian activity.
- There are several bus stops in the area that generate pedestrian activity.
- There is sidewalk on both sides of the street.
- There is a traffic signal with pedestrian signals and crosswalks at a gated entrance in the middle of the block.
- There are three more crosswalks at the three-way stop at Milwaukee Place Southeast and four more crosswalks at the four-way stop at Lebaum Street Southeast.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is on-street parking on both sides of the street with restricted hours.



Looking Northbound

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District Department of Transportation

2700 Block Martin Luther King, Jr. Avenue SE



Looking Northbound

Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	36
85th Percentile Speed (MPH)	44
10 MPH Pace Speed	32-41
ADT	6,959

The mean speed is higher than the posted speed limit by 6 MPH and the 85th percentile speed is higher than the posted speed limit by 14 MPH at this location.

Crash Data Analysis

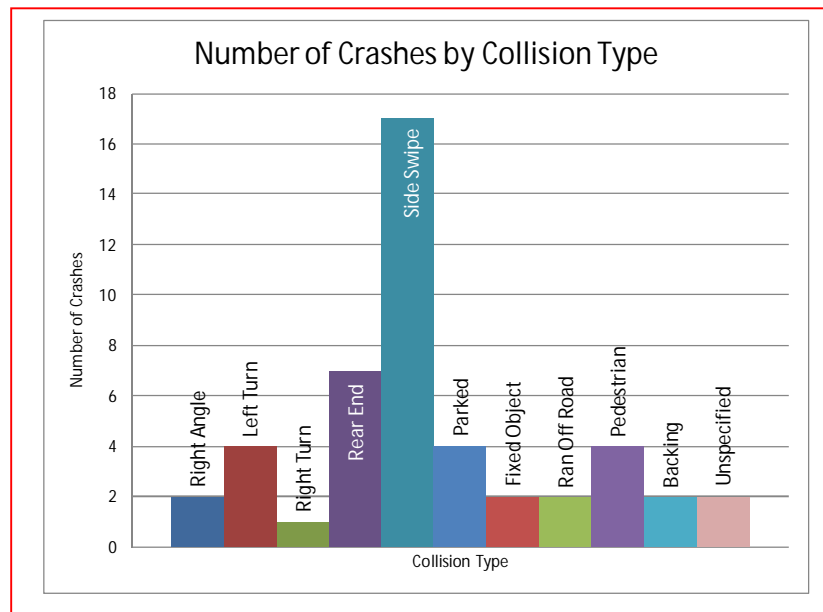
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 47 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location were Side Swipe (17 crashes), Rear End (7 crashes), Pedestrian Involved, Parked, and Left Turn (4 crashes each). The other collision types had 2 crashes or less each. Furthermore, this site experienced a high frequency (15 crashes) of injury-related crashes.



District Department of Transportation

2700 Block Martin Luther King, Jr. Avenue SE

Severity			Weather			Surface condition			Light Condition		
Total	47										
Fatal	0	0.0%	Clear	43	91.5%	Dry	43	91.5%	Day	27	57.4%
Injury	15	31.9%	Rain	2	4.3%	Wet	4	8.5%	Night	18	38.3%
Bus	7	14.9%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Emergency	7	14.9%									



There were an elevated number of speed-related crashes at this location, including Side Swipe 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 sideswipe 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 the speed camera and traffic safety:

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.



District Department of Transportation

2700 Block Martin Luther King, Jr. Avenue SE

2. Crash Data – There was an elevated number of speed-related crashes, including Side Swipe collisions at this location, as well as a high frequency (15 crashes) of injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential and commercial area with small businesses.
 - b. There is one school in the area: Friendship Public Charter School/Tech Prep Academy.
 - c. There is a Boys and Girls Club near the site 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 elevated number of injury-related crashes, the specific site characteristics, and pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

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SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

2700 Block of M L King Jr. Ave SE NB Speed

NB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/22/13	2	1	5	16	16	14	4	3	2	0	1	0	0	1	65
01:00	2	0	0	4	10	7	7	2	2	0	0	0	0	0	34
02:00	1	0	2	3	7	6	4	1	1	0	0	0	0	0	25
03:00	0	0	1	3	6	2	4	4	0	0	0	0	0	0	20
04:00	0	0	1	15	8	9	8	5	1	0	0	0	0	0	47
05:00	3	0	4	11	31	24	40	11	12	0	5	0	0	3	144
06:00	9	1	14	28	57	120	88	44	27	11	5	1	0	1	406
07:00	48	20	23	51	192	285	219	98	26	15	8	3	1	3	992
08:00	42	1	25	51	114	237	191	110	31	18	9	2	1	0	832
09:00	9	2	11	43	83	103	89	43	13	6	4	0	1	0	407
10:00	7	0	8	25	82	73	31	24	8	2	0	0	0	0	260
11:00	7	0	4	37	94	94	41	23	8	1	1	2	0	0	312
12 PM	6	0	8	23	93	83	43	31	10	6	3	0	0	0	306
13:00	3	3	6	27	85	91	62	29	11	7	2	1	0	0	327
14:00	6	3	9	31	78	101	64	17	17	2	4	0	1	0	333
15:00	15	1	7	51	108	117	54	21	10	9	0	0	0	1	394
16:00	17	1	15	41	127	132	76	26	11	5	3	0	0	0	454
17:00	16	2	26	65	106	81	42	10	4	4	2	1	0	1	360
18:00	9	5	11	30	86	77	27	14	9	4	0	1	1	0	274
19:00	5	3	12	46	90	66	28	19	0	2	1	0	2	0	274
20:00	4	2	3	24	78	47	30	10	9	1	2	0	0	0	210
21:00	3	3	18	44	58	32	12	1	1	0	0	0	0	0	172
22:00	8	3	9	32	44	41	28	9	3	0	0	0	0	0	177
23:00	1	1	5	21	48	31	16	7	2	2	0	0	0	0	134
Total	223	52	227	722	1701	1873	1208	562	218	95	50	11	7	10	6959
Grand Total	223	52	227	722	1701	1873	1208	562	218	95	50	11	7	10	6959

15th Percentile : 27 MPH
 50th Percentile : 36 MPH
 85th Percentile : 44 MPH
 95th Percentile : 50 MPH

Stats
 Mean Speed(Average) : 36 MPH
 10 MPH Pace Speed : 32-41 MPH
 Number in Pace : 3314
 Percent in Pace : 47.7%
 Number of Vehicles > 30 MPH : 5447
 Percent of Vehicles > 30 MPH : 78.4%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

2700 Block of M L King Jr. Ave SE NB Volume

Start Time	22-Nov-13		23-Nov-13		24-Nov-13		Daily Average	
	Fri A.M.	P.M.	Sat A.M.	P.M.	Sun A.M.	P.M.	A.M.	P.M.
12:00	15	74	*	*	*	*	15	74
12:15	19	86	*	*	*	*	19	86
12:30	16	82	*	*	*	*	16	82
12:45	15	64	*	*	*	*	15	64
01:00	6	88	*	*	*	*	6	88
01:15	12	81	*	*	*	*	12	81
01:30	7	64	*	*	*	*	7	64
01:45	9	94	*	*	*	*	9	94
02:00	7	92	*	*	*	*	7	92
02:15	5	71	*	*	*	*	5	71
02:30	3	86	*	*	*	*	3	86
02:45	10	84	*	*	*	*	10	84
03:00	4	91	*	*	*	*	4	91
03:15	8	103	*	*	*	*	8	103
03:30	2	112	*	*	*	*	2	112
03:45	6	88	*	*	*	*	6	88
04:00	5	113	*	*	*	*	5	113
04:15	14	132	*	*	*	*	14	132
04:30	13	117	*	*	*	*	13	117
04:45	15	92	*	*	*	*	15	92
05:00	26	96	*	*	*	*	26	96
05:15	31	83	*	*	*	*	31	83
05:30	40	95	*	*	*	*	40	95
05:45	47	86	*	*	*	*	47	86
06:00	64	76	*	*	*	*	64	76
06:15	69	74	*	*	*	*	69	74
06:30	120	57	*	*	*	*	120	57
06:45	153	67	*	*	*	*	153	67
07:00	198	70	*	*	*	*	198	70
07:15	237	80	*	*	*	*	237	80
07:30	283	67	*	*	*	*	283	67
07:45	274	57	*	*	*	*	274	57
08:00	245	47	*	*	*	*	245	47
08:15	219	56	*	*	*	*	219	56
08:30	194	61	*	*	*	*	194	61
08:45	174	46	*	*	*	*	174	46
09:00	136	38	*	*	*	*	136	38
09:15	106	44	*	*	*	*	106	44
09:30	86	42	*	*	*	*	86	42
09:45	79	48	*	*	*	*	79	48
10:00	74	43	*	*	*	*	74	43
10:15	57	47	*	*	*	*	57	47
10:30	60	42	*	*	*	*	60	42
10:45	69	45	*	*	*	*	69	45
11:00	97	29	*	*	*	*	97	29
11:15	76	28	*	*	*	*	76	28
11:30	72	33	*	*	*	*	72	33
11:45	67	44	*	*	*	*	67	44
Total	3544	3415	0	0	0	0	3544	3415
Combined Total	6959		0		0		6959	
Peak	07:15	04:00					07:15	04:00
Vol.	1039	454					1039	454
P.H.F.	0.918	0.860					0.918	0.860
ADT	ADT 6,959		AADT 6,959					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: MARTIN LUTHER KING JR AVE,SE From PECAN ST,SE TO LEBAUM ST,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:	47	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	2	4.3%	Fixed Object:	2	4.3%
Total Number of Injuries:	20	Left Turn:	4	8.5%	Ran Off Road:	2	4.3%
Total Number of Disabling Injuries:	4	Right Turn:	1	2.1%	Ped. Involved:	4	8.5%
Total Number of NonDisabling Injuries:	3	Rear End:	7	14.9%	Backing:	2	4.3%
Total Number of Pedestrians Involved:	2	Side Swiped:	17	36.2%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	1	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	4	8.5%	Unspecified:	2	4.3%
Time of Day				#ACC	%	Day of week	
07:30 ~ 09:30:				6	12.8%	Sunday:	
09:30 ~ 11:30:				4	8.5%	Monday:	
11:30 ~ 13:30:				3	6.4%	Tuesday:	
13:30 ~ 16:00:				6	12.8%	Wednesday:	
16:00 ~ 18:30:				10	21.3%	Thursday:	
18:30 ~ 07:30:				18	38.3%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				43	91.5%	Dry:	
Rain:				2	4.3%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				1	2.1%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				1	2.1%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				61	74.4%	Fatal Collision:	
Bus:				7	8.5%	Injury Collision:	
Truck:				4	4.9%	PDO Collision:	
Taxi:				1	1.2%		
Minivan:				0	0.0%	Light Condition	
Police/Emergency Vehicle:				7	8.5%	Daylight:	
Motorcycle/Moped:				0	0.0%	Dawn/Dusk:	
Bicycle:				1	1.2%	Dark(Lighted):	
Fixed Object:				0	0.0%	Dark(Not Lighted):	
Unspecified:				1	1.2%	Dark(Unknown Lighting):	
						Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				3	3.7%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				3	3.7%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				26	31.7%	In Unmarked Crosswalk:	
Vehicle:				2	2.4%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				48	58.5%	Unspecified:	

32 Records are not approved as of 11/25/2013 4:17:55 PM