



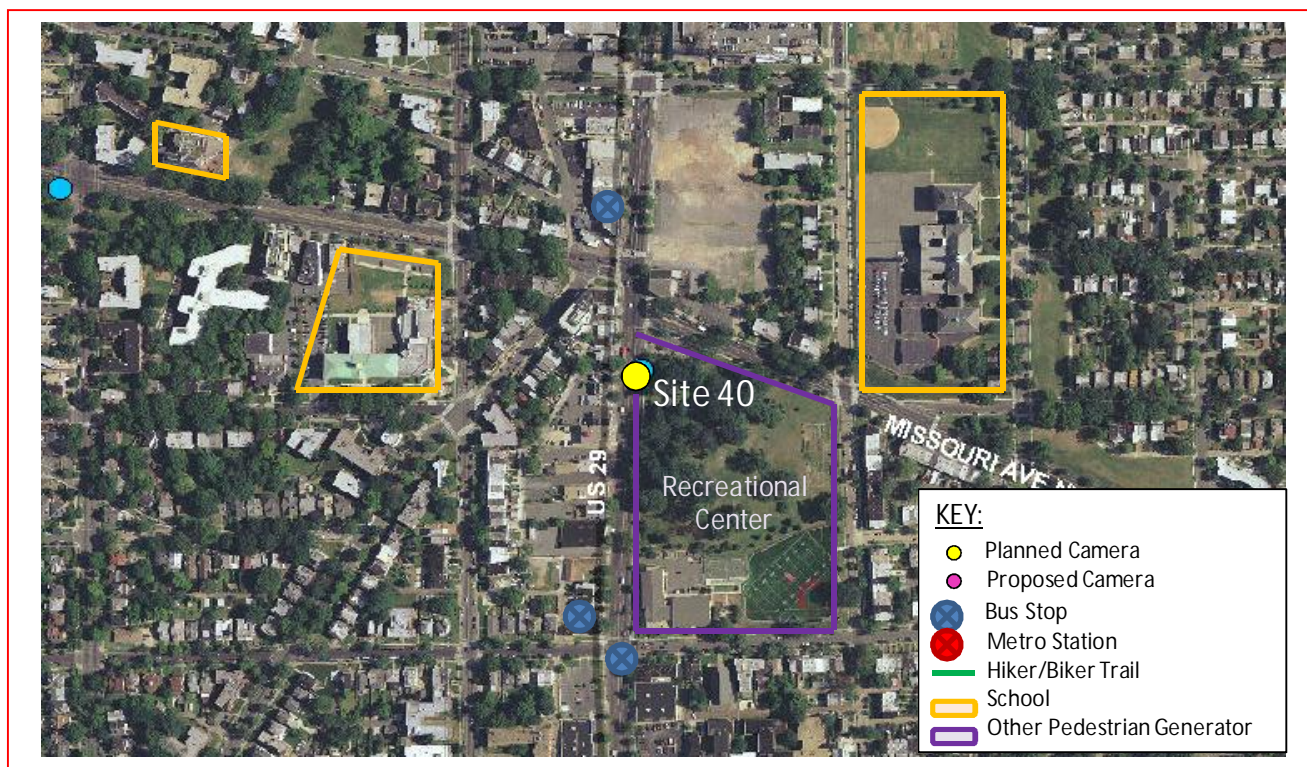
District Department of Transportation

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

Georgia Avenue S/B at Missouri Avenue NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
4	402/403	4	4B/4C	Planned	Georgia Avenue Southbound at Missouri Avenue Northwest



The *planned* speed camera will be located in Ward 4 at the intersection of Georgia Avenue and Missouri Avenue Northwest in the southbound direction. Georgia Avenue runs between Eastern Avenue Northwest north and Florida Avenue Northwest to the south. The posted speed limit is 30 MPH.

W4 - 159





District Department of Transportation

Georgia Avenue S/B at Missouri Avenue NW

Field Assessment Summary

Georgia Avenue is assumed to run in a North-South direction, and is classified as a principal arterial. Georgia Avenue has two travel lanes in each direction. Missouri Avenue has two travel lanes in each direction and a left turn lane southbound. This site has the following characteristics:

- This site is located in a commercial area with a work zone for Wal-Mart construction.
- There are sidewalks with curb and gutter on both sides of the street, and a concrete median on both Missouri Avenue approaches.
- There is an existing traffic signal and crosswalks with pedestrian signals.
- There are three schools in this area: Paul Public Charter School, Brightwood Elementary School, and Latin American Montessori Bilingual Public Charter School.
- There is a bus stop southbound on the north leg of the intersection, and there are several bus stops in the area.



Looking Northbound



District Department of Transportation

Georgia Avenue S/B at Missouri Avenue NW



Looking Southbound

Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	16
85th Percentile Speed (MPH)	25
10 MPH Pace Speed	6-15
ADT	8,865

Both the Mean Speed and 85th Percentile Speed are lower than the posted speed limit at this site. The 85th percentile speed is 5 MPH lower 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 147 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page.

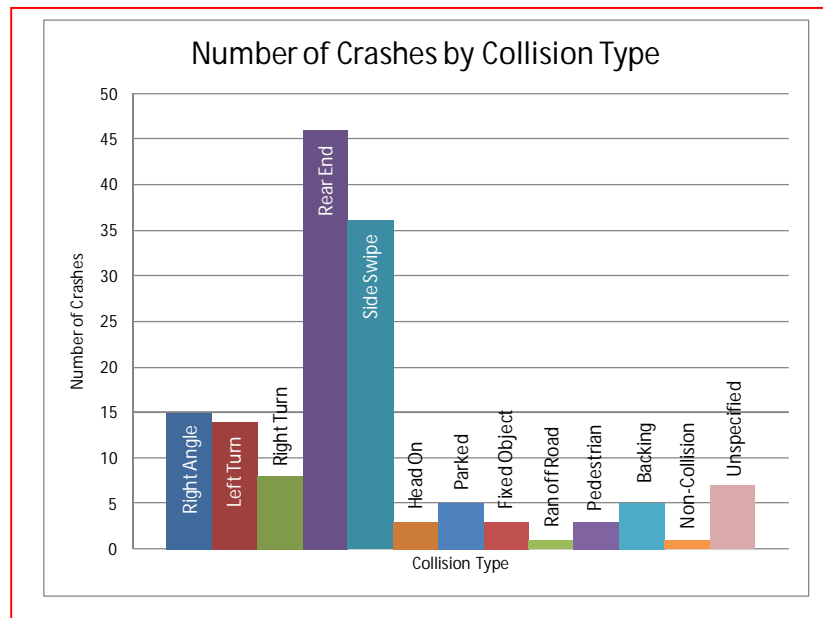
The most common type of crashes at this location were Rear End (46 crashes), Side Swipe (36 crashes), Right Angle (15 crashes), and Left Turn (14 crashes). The other collision types had eight crashes or less each. Furthermore, the crash data location experienced a high frequency (41 crashes) of injury-related crashes.



District Department of Transportation

Georgia Avenue S/B at Missouri Avenue NW

Severity		Weather			Surface condition			Light Condition		
Total	147									
Fatal	0 0.0%	Clear	121	82.3%	Dry	117	79.6%	Day	90	61.2%
Injury	41 27.9%	Rain	13	8.8%	Wet	19	12.9%	Night	47	32.0%
Truck	27 18.4%	Fog/Mist	4	2.7%	Snow/Ice	4	2.7%			
Taxi	15 10.2%									



The Georgia Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011, according to the report *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*¹.

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 speed data analysis shows travel speeds being much lower than the posted speed limit.
2. Crash Data – There was an elevated number of speed related crashes at this location, including Rear End and Sideswipe collisions. There was a high frequency (41 crashes) of injury-related crashes at this location.

¹ DDOT, *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*, pg. 80.



District Department of Transportation

Georgia Avenue S/B at Missouri Avenue NW

The Georgia Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011.

3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. There are three schools in this area: Paul Public Charter School, Brightwood Elementary School, and Latin American Montessori Bilingual Public Charter School.
 - b. Emery Recreation Center is in the area which generates pedestrian activity.
 - c. There are multiple bus stops which generate pedestrian activity.

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, the crash data analysis revealed several factors related to safety. Thus, due to the elevated number of speed-related and injury-related crashes, the specific site characteristics of a commercial area, the proximity to schools, and the nearby 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

Georgia Ave SB at Missouri Ave NW Speed

SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/08/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	65	94	121	68	19	3	0	0	0	0	0	0	0	0	370
23:00	46	65	110	63	18	3	0	2	0	1	2	0	0	0	310
Total	111	159	231	131	37	6	0	2	0	1	2	0	0	0	680

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Georgia Ave SB at Missouri Ave NW Speed

SB

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	
11/09/13	15	30	69	71	15	2	1	0	0	0	0	0	0	0	203
01:00	9	18	39	43	12	4	0	0	0	0	0	0	0	0	125
02:00	10	13	35	29	16	2	0	0	0	0	0	0	0	0	105
03:00	10	15	24	25	11	2	0	0	0	0	0	0	0	0	87
04:00	6	10	21	24	15	5	1	0	0	0	0	0	0	0	82
05:00	11	18	39	42	18	3	0	0	0	0	0	0	0	0	131
06:00	33	48	73	70	30	3	1	0	0	0	0	0	0	0	258
07:00	72	69	114	94	17	3	2	0	0	0	0	0	0	0	371
08:00	92	70	142	97	18	4	0	0	0	0	0	0	0	0	423
09:00	179	128	151	66	14	0	0	0	0	0	0	0	0	0	538
10:00	320	90	44	20	3	1	1	0	0	0	0	0	0	0	479
11:00	179	94	124	74	17	3	0	0	0	0	0	0	0	0	491
12 PM	256	78	85	40	2	0	0	0	0	0	0	0	0	0	461
13:00	211	133	119	80	6	1	0	0	0	0	0	0	0	0	550
14:00	191	117	87	66	9	1	1	0	0	0	0	0	0	0	472
15:00	212	112	134	65	9	2	0	0	0	0	0	0	0	0	534
16:00	300	84	84	27	7	1	2	0	0	0	0	0	0	0	505
17:00	211	140	136	48	13	0	0	0	0	0	0	0	0	0	548
18:00	192	105	139	58	8	1	0	0	0	0	0	0	0	0	503
19:00	167	127	118	49	7	0	1	0	0	0	0	0	0	0	469
20:00	84	107	170	84	14	1	0	0	0	0	0	0	0	0	460
21:00	92	113	128	49	7	1	0	0	0	0	0	0	0	0	390
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2852	1719	2075	1221	268	40	10	0	0	0	0	0	0	0	8185
Grand Total	2963	1878	2306	1352	305	46	10	2	0	1	2	0	0	0	8865

15th Percentile : 6 MPH
 50th Percentile : 14 MPH
 85th Percentile : 25 MPH
 95th Percentile : 29 MPH

Stats
 Mean Speed(Average) : 16 MPH
 10 MPH Pace Speed : 6-15 MPH
 Number in Pace : 3711
 Percent in Pace : 41.9%
 Number of Vehicles > 30 MPH : 358
 Percent of Vehicles > 30 MPH : 4.0%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

Georgia Ave SB at Missouri Ave NW Volume

Start Time	08-Nov-13		09-Nov-13		10-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	*	*	59	135	*	*	59	135
12:15	*	*	51	139	*	*	51	139
12:30	*	*	51	69	*	*	51	69
12:45	*	*	42	118	*	*	42	118
01:00	*	*	40	146	*	*	40	146
01:15	*	*	24	117	*	*	24	117
01:30	*	*	33	140	*	*	33	140
01:45	*	*	28	147	*	*	28	147
02:00	*	*	27	129	*	*	27	129
02:15	*	*	27	97	*	*	27	97
02:30	*	*	23	101	*	*	23	101
02:45	*	*	28	145	*	*	28	145
03:00	*	*	29	150	*	*	29	150
03:15	*	*	22	133	*	*	22	133
03:30	*	*	15	106	*	*	15	106
03:45	*	*	21	145	*	*	21	145
04:00	*	*	13	134	*	*	13	134
04:15	*	*	23	131	*	*	23	131
04:30	*	*	25	132	*	*	25	132
04:45	*	*	21	108	*	*	21	108
05:00	*	*	26	145	*	*	26	145
05:15	*	*	29	140	*	*	29	140
05:30	*	*	37	129	*	*	37	129
05:45	*	*	39	134	*	*	39	134
06:00	*	*	60	123	*	*	60	123
06:15	*	*	60	127	*	*	60	127
06:30	*	*	60	119	*	*	60	119
06:45	*	*	78	134	*	*	78	134
07:00	*	*	76	111	*	*	76	111
07:15	*	*	90	132	*	*	90	132
07:30	*	*	110	122	*	*	110	122
07:45	*	*	95	104	*	*	95	104
08:00	*	*	86	130	*	*	86	130
08:15	*	*	88	113	*	*	88	113
08:30	*	*	121	112	*	*	121	112
08:45	*	*	128	105	*	*	128	105
09:00	*	*	128	90	*	*	128	90
09:15	*	*	150	94	*	*	150	94
09:30	*	*	134	95	*	*	134	95
09:45	*	*	126	111	*	*	126	111
10:00	*	87	87	*	*	*	87	87
10:15	*	108	125	*	*	*	125	108
10:30	*	91	137	*	*	*	137	91
10:45	*	84	130	*	*	*	130	84
11:00	*	87	128	*	*	*	128	87
11:15	*	89	145	*	*	*	145	89
11:30	*	77	93	*	*	*	93	77
11:45	*	57	125	*	*	*	125	57
Total	0	680	3293	4892	0	0	3293	5572
Combined Total	680		8185		0		8865	
Peak	10:00		08:45	01:00			08:45	01:00
Vol.	370		540	550			540	550
P.H.F.	0.856		0.900	0.935			0.900	0.935
ADT	ADT 8,865		AADT 8,865					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: GEORGIA AVE,NW From PEABODY ST,NW TO MADISON ST,NW

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

Prepared By: Rahul Jain

Prepared Date: 11/24/2012

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	147	Right Angle:	15	10.2%	Fixed Object:	3	2.0%
Total Number of Fatalities:	0	Left Turn:	14	9.5%	Ran Off Road:	1	0.7%
Total Number of Injuries:	59	Right Turn:	8	5.4%	Ped. Involved:	3	2.0%
Total Number of Disabling Injuries:	0	Rear End:	46	31.3%	Backing:	5	3.4%
Total Number of NonDisabling Injuries:	11	Side Swiped:	36	24.5%	Non Collision:	1	0.7%
Total Number of Pedestrians Involved:	2	Head On:	3	2.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	3	Parked:	5	3.4%	Unspecified:	7	4.8%
Total Number of Motorcycles Involved:	3						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	22	15.0%	Sunday:	18	12.2%
09:30 ~ 11:30:	12	8.2%	Monday:	20	13.6%
11:30 ~ 13:30:	17	11.6%	Tuesday:	22	15.0%
13:30 ~ 16:00:	17	11.6%	Wednesday:	21	14.3%
16:00 ~ 18:30:	21	14.3%	Thursday:	24	16.3%
18:30 ~ 07:30:	58	39.5%	Friday:	22	15.0%
Unspecified:	0	0.0%	Saturday:	20	13.6%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	121	82.3%	Dry:	117	79.6%
Rain:	13	8.8%	Wet:	19	12.9%
Snow:	2	1.4%	Snow/Ice:	4	2.7%
Sleet/Hail:	0	0.0%	Slush:	1	0.7%
Fog/Mist:	4	2.7%	Water/Sand:	1	0.7%
Crosswind/Blowing Sand:	1	0.7%	Repairing:	2	1.4%
Unspecified:	6	4.1%	Unspecified:	3	2.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	216	73.7%	Fatal Collision:	0	0.0%
Bus:	8	2.7%	Injury Collision:	41	27.9%
Truck:	27	9.2%	PDO Collision:	106	72.1%
Taxi:	15	5.1%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	13	4.4%	Daylight:	90	61.2%
Motorcycle/Moped:	4	1.4%	Dawn/Dusk:	7	4.8%
Bicycle:	3	1.0%	Dark(Lighted):	47	32.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	7	2.4%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	3	2.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	5	1.7%	In Crosswalk with Signal:	1	50.0%
Driver: Alcohol/Drug:	4	1.4%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	1	0.3%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	54	18.4%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	1	0.3%	Not in Crosswalk:	0	0.0%
Roadway:	2	0.7%	From Between Parked Cars:	0	0.0%
Unspecified:	226	77.1%	Unspecified:	1	50.0%

84 Records are not approved as of 11/24/2013 3:34:10 PM