



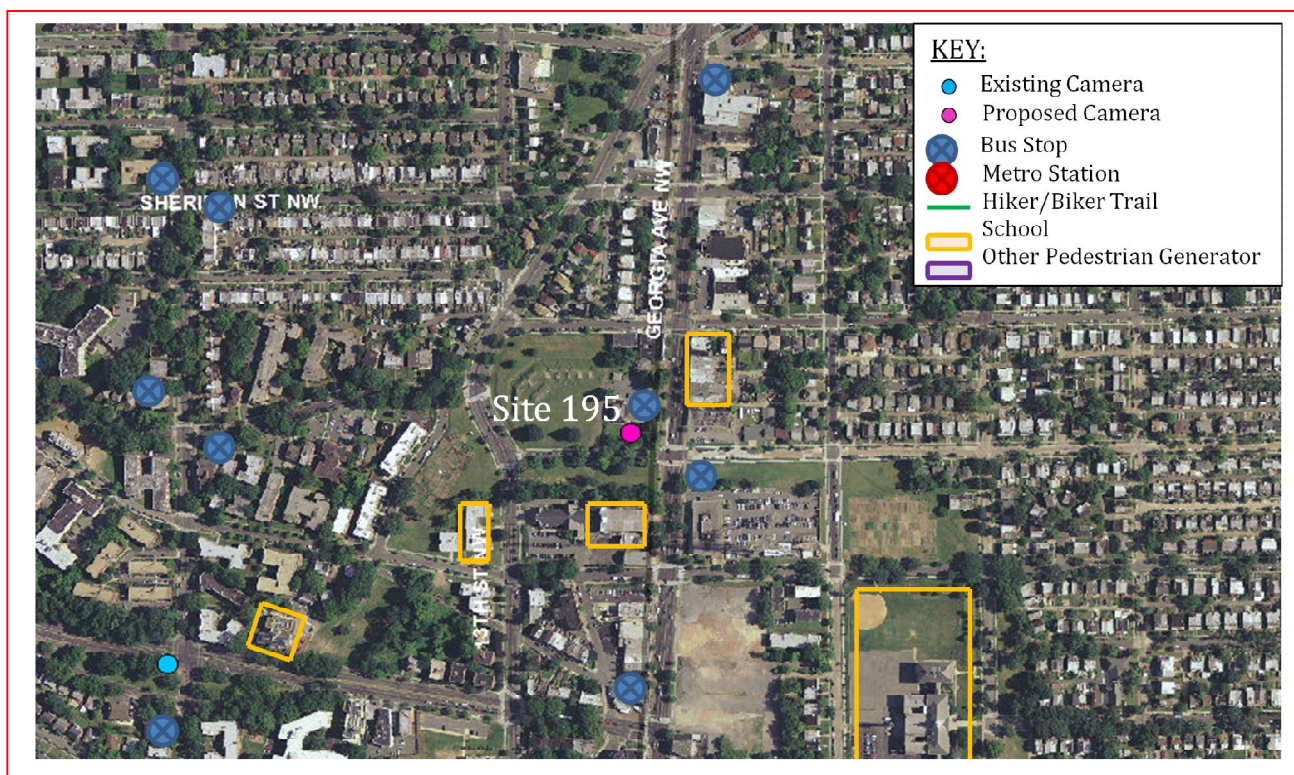
District Department of Transportation

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

### 6100 Block Georgia Avenue NW

### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
4	402	4	4A	Proposed	6100 Block Georgia Avenue Northwest Southbound



The *proposed* speed camera will be located in Ward 4 at the 6100 block of Georgia Avenue Northwest in the southbound direction. Georgia Avenue Northwest runs from Eastern Avenue Northwest to the north and Florida Avenue Northwest to the south, where it becomes 7<sup>th</sup> Street Northwest. The posted speed limit is 30 MPH.

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District Department of Transportation

6100 Block Georgia Avenue NW

## Field Assessment Summary

Georgia Avenue Northwest is assumed to run in a north-south direction, and is classified as a principal arterial. Georgia Avenue Northwest has two travel lanes in each direction. This site has the following characteristics:

- This is a residential and commercial area with houses and retail stores.
- There are five schools in the area: Center City PCS Brightwood Campus, Latin American Montessori Bilingual Public Charter School, Paul Public Charter School, The Bridges Academy, and Nativity School.
- District Police Headquarters and Emory Fellowship Church are located in the area.
- There are sidewalks on both sides of the street and crosswalks at Quackenbro Street and Rittenhouse Street Northwest.
- There is a traffic signal with pedestrian signals at Rittenhouse Street Northwest.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a bus stop southbound near the Quackenbro Street intersection.
- There is on-street meter parking in each direction.



Looking Northbound

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District Department of Transportation

6100 Block Georgia Avenue NW



Looking Southbound

## Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	20
85th Percentile Speed (MPH)	27
10 MPH Pace Speed	20-29
ADT	8,819

Both the mean speed and the 85<sup>th</sup> percentile speed are lower than the posted speed limit. The 85<sup>th</sup> percentile speed is 3 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 85 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 (29 crashes), Side Swipe (17 crashes), Right Angle (10 crashes) and both Parked and Backing Up with five crashes. The other collision types had four crashes or less each. Furthermore, this site experienced a high frequency (26 crashes) of injury-related crashes.

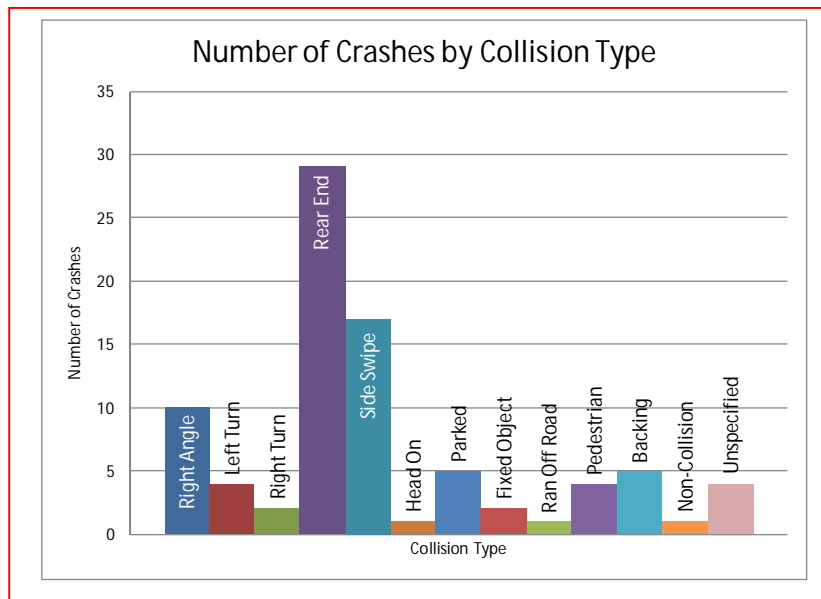
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District Department of Transportation

6100 Block Georgia Avenue NW

Severity			Weather			Surface condition			Light Condition		
Total	85										
Fatal	0	0.0%	Clear	67	78.8%	Dry	66	77.6%	Day	53	62.4%
Injury	26	30.6%	Rain	9	10.6%	Wet	13	15.3%	Night	28	32.9%
Taxi	10	11.8%	Snow	0	0.0%	Snow/Ice	1	1.2%			
Bus	1	1.2%									



There was an elevated number of speed related crashes at this location, including rear end and 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”<sup>1</sup> as two errors leading to rear-end and sideswipe crashes. Both of these errors can be decreased with a decrease in travel speed.

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)*<sup>2</sup>.

## Safety Nexus

This site presents the following safety considerations which may establish a nexus between the speed camera and traffic safety.

<sup>1</sup> AASHTO Highway Safety Manual, 1<sup>st</sup> Edition, 2010; Volume 1, page 2-13

<sup>2</sup> DDOT, *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*, pg.80.



District Department of Transportation

6100 Block Georgia Avenue NW

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 collisions, as well as a high frequency (26 crashes) of injury-related crashes. 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. This is a residential and commercial area with houses and retail stores in the surrounding area.
  - b. There are five schools in the area: Center City PCS Brightwood Campus, Latin American Montessori Bilingual Public Charter School, Paul Public Charter School, The Bridges Academy, and Nativity School. Police Headquarters and Emory Fellowship Church are located in the area.
  - c. There is a bus stop southbound near the Quackenbro Street intersection which generates 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 safety factors. Thus, due to the elevated number of speed-related and injury-related crashes, the specific site characteristics of a residential and commercial area, the proximity of schools to the site, and the other 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](http://www.sammateng.com)

## 6100 block of Georgia Ave NW SB Speed

SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
11/12/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	7	6	20	17	6	2	0	0	0	0	0	0	0	0	58
Total	7	6	20	17	6	2	0	0	0	0	0	0	0	0	58

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SB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
11/13/13	2	6	27	26	10	2	0	0	0	0	0	0	0	0	73
01:00	2	3	15	15	5	1	2	0	0	0	0	0	0	0	43
02:00	2	4	14	15	8	1	0	0	0	0	0	0	0	0	44
03:00	1	5	9	16	3	0	0	0	0	0	0	0	0	0	34
04:00	3	2	16	28	5	0	0	0	0	0	0	0	0	0	54
05:00	9	5	65	89	42	10	0	0	0	0	0	0	0	0	220
06:00	25	24	145	182	94	25	5	0	0	0	0	0	0	0	500
07:00	174	87	228	150	42	9	0	0	0	0	0	0	0	0	690
08:00	322	145	136	31	10	0	0	0	0	0	0	0	0	0	644
09:00	86	125	238	144	34	9	0	0	0	0	0	0	0	0	636
10:00	50	86	221	130	19	1	0	0	0	0	0	0	0	0	507
11:00	60	107	180	90	12	1	0	0	0	0	0	0	0	0	450
12 PM	54	119	178	93	21	2	0	1	0	0	0	0	0	0	468
13:00	78	87	205	97	15	0	0	0	0	0	0	0	0	0	482
14:00	51	107	186	119	21	1	0	0	0	0	0	0	0	0	485
15:00	76	88	241	140	21	3	0	0	0	0	0	0	0	0	569
16:00	86	99	200	139	23	6	0	0	0	0	0	0	0	0	553
17:00	78	84	195	141	24	2	0	0	0	0	0	0	0	0	524
18:00	56	78	224	182	34	2	0	0	0	0	0	0	0	0	576
19:00	35	43	147	107	16	1	0	0	0	0	0	0	0	0	349
20:00	20	49	151	91	11	2	0	0	0	0	0	0	0	0	324
21:00	10	14	118	97	17	5	0	0	0	0	0	0	0	0	261
22:00	6	16	97	64	27	2	0	0	0	0	0	0	0	0	212
23:00	2	3	25	21	12	0	0	0	0	0	0	0	0	0	63
<b>Total</b>	<b>1288</b>	<b>1386</b>	<b>3261</b>	<b>2207</b>	<b>526</b>	<b>85</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8761</b>
<b>Grand Total</b>	<b>1295</b>	<b>1392</b>	<b>3281</b>	<b>2224</b>	<b>532</b>	<b>87</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8819</b>

15th Percentile : 9 MPH  
 50th Percentile : 21 MPH  
 85th Percentile : 27 MPH  
 95th Percentile : 31 MPH

Stats  
 Mean Speed(Average) : 20 MPH  
 10 MPH Pace Speed : 20-29 MPH  
 Number in Pace : 4343  
 Percent in Pace : 49.2%  
 Number of Vehicles > 30 MPH : 694  
 Percent of Vehicles > 30 MPH : 7.9%

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## 6100 block of Georgia Ave NW SB Volume

Start Time	Tue	12-Nov-13	Wed	13-Nov-13	Thu	14-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	27	102	*	*	27	102
12:15	*	*	19	120	*	*	19	120
12:30	*	*	14	118	*	*	14	118
12:45	*	*	13	128	*	*	13	128
01:00	*	*	12	134	*	*	12	134
01:15	*	*	10	128	*	*	10	128
01:30	*	*	11	125	*	*	11	125
01:45	*	*	10	95	*	*	10	95
02:00	*	*	10	128	*	*	10	128
02:15	*	*	14	130	*	*	14	130
02:30	*	*	13	115	*	*	13	115
02:45	*	*	7	112	*	*	7	112
03:00	*	*	8	149	*	*	8	149
03:15	*	*	12	141	*	*	12	141
03:30	*	*	4	141	*	*	4	141
03:45	*	*	10	138	*	*	10	138
04:00	*	*	9	127	*	*	9	127
04:15	*	*	7	139	*	*	7	139
04:30	*	*	16	140	*	*	16	140
04:45	*	*	22	147	*	*	22	147
05:00	*	*	26	130	*	*	26	130
05:15	*	*	43	122	*	*	43	122
05:30	*	*	60	152	*	*	60	152
05:45	*	*	91	120	*	*	91	120
06:00	*	*	94	141	*	*	94	141
06:15	*	*	114	156	*	*	114	156
06:30	*	*	132	153	*	*	132	153
06:45	*	*	160	126	*	*	160	126
07:00	*	*	180	89	*	*	180	89
07:15	*	*	158	102	*	*	158	102
07:30	*	*	204	85	*	*	204	85
07:45	*	*	148	73	*	*	148	73
08:00	*	*	150	82	*	*	150	82
08:15	*	*	159	84	*	*	159	84
08:30	*	*	163	83	*	*	163	83
08:45	*	*	172	75	*	*	172	75
09:00	*	*	176	66	*	*	176	66
09:15	*	*	139	68	*	*	139	68
09:30	*	*	172	60	*	*	172	60
09:45	*	*	149	67	*	*	149	67
10:00	*	*	126	58	*	*	126	58
10:15	*	*	129	58	*	*	129	58
10:30	*	*	130	52	*	*	130	52
10:45	*	*	122	44	*	*	122	44
11:00	*	*	130	33	*	*	130	33
11:15	*	*	126	30	*	*	126	30
11:30	*	31	96	*	*	*	96	31
11:45	*	27	98	*	*	*	98	27
Total	0	58	3895	4866	0	0	3895	4924
Combined Total	58		8761		0		8819	
Peak Vol.			06:45 702	06:00 576			06:45 702	06:00 576
P.H.F.			0.860	0.923			0.860	0.923
ADT		ADT 8,819		AADT 8,819				



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** GEORGIA AVE,NW From RITTENHOUSE ST,NW TO PEABODY ST,NW

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

**Prepared By:** Rahul Jain

**Prepared Date:** 10/27/2012

Total Number of Accident:	85	<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:	10	11.8%	Fixed Object:	2	2.4%
Total Number of Injuries:	40	Left Turn:	4	4.7%	Ran Off Road:	1	1.2%
Total Number of Disabling Injuries:	1	Right Turn:	2	2.4%	Ped. Involved:	4	4.7%
Total Number of NonDisabling Injuries:	6	Rear End:	29	34.1%	Backing:	5	5.9%
Total Number of Pedestrians Involved:	4	Side Swiped:	17	20.0%	Non Collision:	1	1.2%
Total Number of Bicycles Involved:	2	Head On:	1	1.2%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	1	Parked:	5	5.9%	Unspecified:	4	4.7%
<b>Time of Day</b>				<b>#ACC</b>	<b>%</b>	<b>Day of week</b>	
07:30 ~ 09:30:				17	20.0%	Sunday:	
09:30 ~ 11:30:				6	7.1%	Monday:	
11:30 ~ 13:30:				5	5.9%	Tuesday:	
13:30 ~ 16:00:				9	10.6%	Wednesday:	
16:00 ~ 18:30:				15	17.6%	Thursday:	
18:30 ~ 07:30:				33	38.8%	Friday:	
Unspecified:				0	0.0%	Saturday:	
<b>Weather Condition</b>				<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	
Clear:				67	78.8%	Dry:	
Rain:				9	10.6%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				1	1.2%	Water/Sand:	
Crosswind/Blowing Sand:				1	1.2%	Repairing:	
Unspecified:				7	8.2%	Unspecified:	
<b>Type of Vehicle</b>				<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	
Passenger Car:				127	75.6%	Fatal Collision:	
Bus:				1	0.6%	Injury Collision:	
Truck:				15	8.9%	PDO Collision:	
Taxi:				10	6.0%		
Minivan:				0	0.0%	<b>Light Condition</b>	
Police/Emergency Vehicle:				9	5.4%	Daylight:	
Motorcycle/Moped:				2	1.2%	Dawn/Dusk:	
Bicycle:				2	1.2%	Dark(Lighted):	
Fixed Object:				0	0.0%	Dark(Not Lighted):	
Unspecified:				2	1.2%	Dark(Unknown Lighting):	
						Unspecified:	
<b>Contributing Factor</b>				<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	
Driver: Speed:				2	1.2%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				6	3.6%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				34	20.2%	In Unmarked Crosswalk:	
Vehicle:				2	1.2%	Not in Crosswalk:	
Roadway:				2	1.2%	From Between Parked Cars:	
Unspecified:				122	72.6%	Unspecified:	

53 Records are not approved as of 10/27/2013 4:55:29 PM