



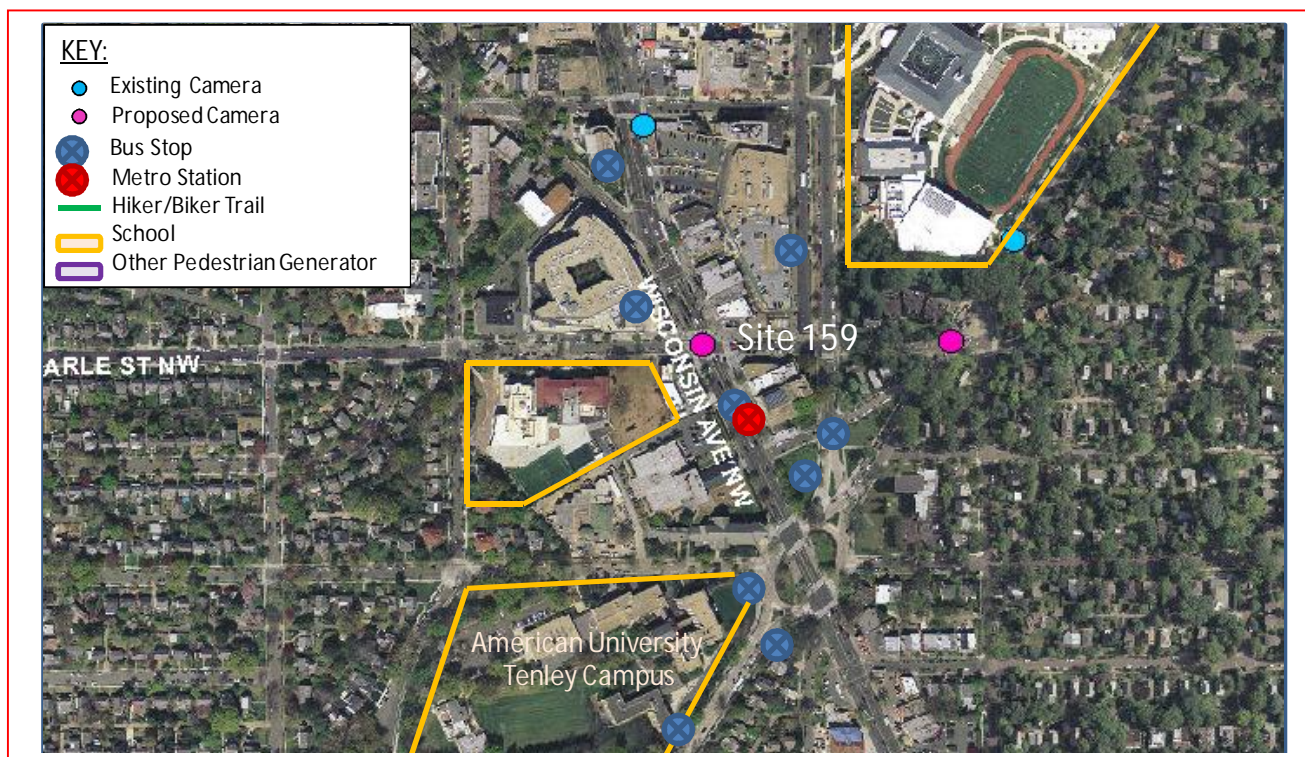
District Department of Transportation

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

4100 Block Albemarle Street NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	202	3	3E	Proposed	4100 Block Albemarle Street Northwest Westbound



The *proposed* speed camera will be located in Ward 3 at the 4100 block of Albemarle Street Northwest in the westbound direction. Albemarle Street runs between east of 28th Street Northwest to the east and west of Massachusetts Avenue Northwest to the west. The posted speed limit is 25 MPH.

W3 - 270





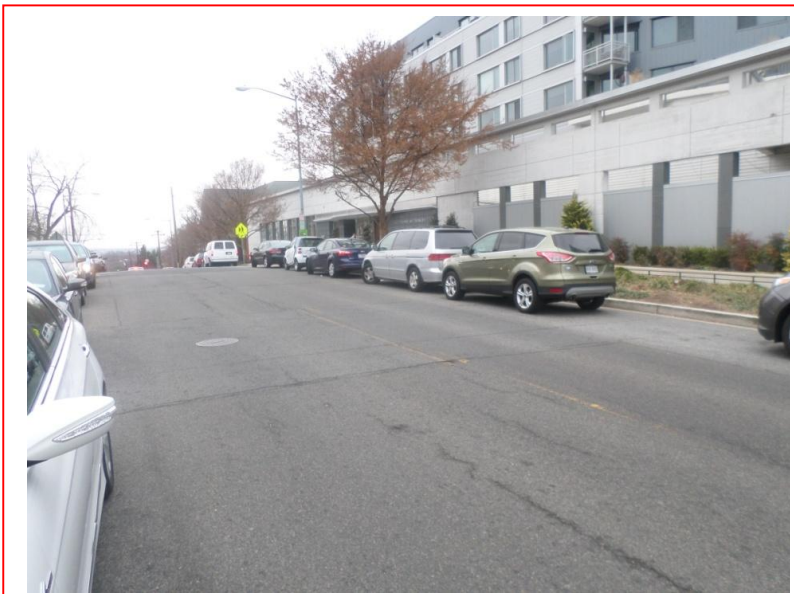
District Department of Transportation

4100 Block Albemarle Street NW

Field Assessment Summary

Albemarle Street is assumed to run in an east-west direction, and is classified as a collector road. Albemarle Street has one travel lane in each direction with a left turn lane in the eastbound direction at Wisconsin Avenue Northwest. This site has the following characteristics:

- This is a residential and commercial area.
- There are three schools in the area: American University - Tenley Campus, Janney Elementary School, and Woodrow Wilson High School.
- The Tenleytown Metrorail Station is also in the area.
- There is sidewalk on both sides of the street and on-street parking on the north side of the street.
- There are traffic signals with pedestrian signals and crosswalks at 42nd Street and Wisconsin Avenue. There is another crosswalk midblock.
- The pavement is in good condition and there is curb and gutter with drainage inlets. There is a slope downgrade westbound.



Looking Eastbound

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District Department of Transportation

4100 Block Albemarle Street NW



Looking Westbound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	13
85th Percentile Speed (MPH)	19
10 MPH Pace Speed (MPH)	8-17
ADT	2,044

The mean speed is lower than the posted speed limit by 12 MPH and the 85th percentile speed is lower than the posted speed by 6 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 18 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 collision at this location was Side Swiped with nine crashes. The other collision types had two crashes or less. There is one (1) accident where vehicular speeding was the contributing factor.

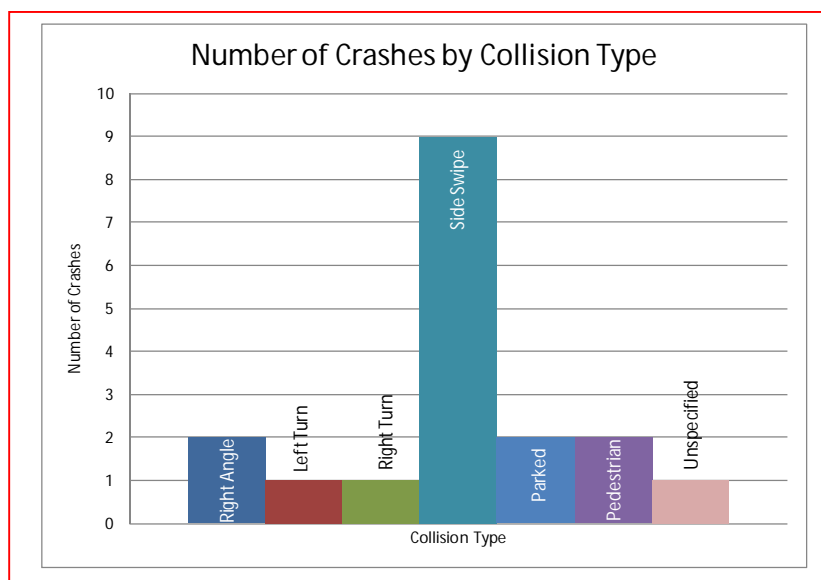
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District Department of Transportation

4100 Block Albemarle Street NW

Severity			Weather			Surface condition			Light Condition		
Total	18										
Fatal	0	0.0%	Clear	13	72.2%	Dry	13	72.2%	Day	12	66.7%
Injury	4	22.2%	Rain	4	22.2%	Wet	4	22.2%	Night	4	22.2%
Taxi	0	0.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	3	16.7%									



There were an elevated number of speed-related crashes at this location, including side swipe crashes. The AASHTO 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”¹ as two errors leading to side swipe crashes. Both of these errors can be decreased with a decrease in travel speed.

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 were an elevated number of speed-related crashes at this location, including side swipe collisions. There were four injury-related crashes at this location.

¹ AASHTO Highway Safety Manual, 1st Edition, 2010; Volume 1, page 2-13



District Department of Transportation

4100 Block Albemarle Street NW

3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential and commercial area.
 - b. There are three schools in the area, American University - Tenley Campus, Janney Elementary School, and Woodrow Wilson High School.
 - c. There are multiple bus stops and one metro station in the area which generate pedestrian activity
 - d. There is on-street parking on the north side of the street.

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, 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.

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SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4100 block of Albemarle St NW WB Speed

WB															
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
11/06/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
06:00	5	11	12	0	0	0	0	0	0	0	0	0	0	0	28
07:00	48	59	20	1	0	0	0	0	0	0	0	0	0	0	128
08:00	100	60	10	2	0	0	0	0	0	0	0	0	0	0	172
09:00	60	72	18	2	0	0	0	0	0	0	0	0	0	0	152
10:00	42	45	13	2	0	0	0	0	0	0	0	0	0	0	102
11:00	41	42	23	1	0	0	0	0	0	0	0	0	0	0	107
12 PM	45	53	16	0	0	0	0	0	0	0	0	0	0	0	114
13:00	29	39	32	2	0	0	0	0	0	0	0	0	0	0	102
14:00	51	47	24	2	0	0	0	0	0	0	0	0	0	0	124
15:00	76	52	18	0	0	0	0	0	0	0	0	0	0	0	146
16:00	74	70	15	2	0	0	0	0	0	0	0	0	0	0	161
17:00	122	47	12	1	0	0	0	0	0	0	0	0	0	0	182
18:00	79	72	10	0	0	0	0	0	0	0	0	0	0	0	161
19:00	47	73	17	2	0	0	0	0	0	0	0	0	0	0	139
20:00	27	39	15	2	1	0	0	0	0	0	0	0	0	0	84
21:00	14	26	12	4	0	0	0	0	0	0	0	0	0	0	56
22:00	10	16	14	3	0	0	0	0	0	0	0	0	0	0	43
23:00	3	9	3	1	0	0	0	0	0	0	0	0	0	0	16
Total	874	832	285	27	1	0	0	0	0	0	0	0	0	0	2019

SAMMAT ENGINEERING SERVICES, LLC

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MOUNT AIRY, MD 21771

www.sammateng.com

4100 block of Albemarle St NW WB Speed

WB															
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
11/07/13	3	3	1	0	0	0	0	0	0	0	0	0	0	0	7
01:00	0	3	3	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7
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	7	13	5	0	0	0	0	0	0	0	0	0	0	0	25
Grand Total	881	845	290	27	1	0	0	0	0	0	0	0	0	0	2044

15th Percentile : 6 MPH
50th Percentile : 12 MPH
85th Percentile : 19 MPH
95th Percentile : 22 MPH

Stats
Mean Speed(Average) : 13 MPH
10 MPH Pace Speed : 8-17 MPH
Number in Pace : 1115
Percent in Pace : 54.5%
Number of Vehicles > 25 MPH : 38
Percent of Vehicles > 25 MPH : 1.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4100 block of Albemarle St NW WB Volume

Start Time	Wed A.M.	06-Nov-13 P.M.	Thu A.M.	07-Nov-13 P.M.	Fri A.M.	08-Nov-13 P.M.	Daily Average	
							A.M.	P.M.
12:00	*	25	6	*	*	*	6	25
12:15	*	29	0	*	*	*	0	29
12:30	*	33	0	*	*	*	0	33
12:45	*	27	1	*	*	*	1	27
01:00	*	23	3	*	*	*	3	23
01:15	*	25	1	*	*	*	1	25
01:30	*	22	1	*	*	*	1	22
01:45	*	32	1	*	*	*	1	32
02:00	*	26	1	*	*	*	1	26
02:15	*	23	0	*	*	*	0	23
02:30	*	34	0	*	*	*	0	34
02:45	*	41	0	*	*	*	0	41
03:00	*	36	0	*	*	*	0	36
03:15	*	42	1	*	*	*	1	42
03:30	*	38	0	*	*	*	0	38
03:45	*	30	1	*	*	*	1	30
04:00	*	30	1	*	*	*	1	30
04:15	*	41	1	*	*	*	1	41
04:30	*	39	0	*	*	*	0	39
04:45	*	51	0	*	*	*	0	51
05:00	*	38	4	*	*	*	4	38
05:15	*	36	3	*	*	*	3	36
05:30	1	52	*	*	*	*	1	52
05:45	1	56	*	*	*	*	1	56
06:00	3	34	*	*	*	*	3	34
06:15	5	37	*	*	*	*	5	37
06:30	13	47	*	*	*	*	13	47
06:45	7	43	*	*	*	*	7	43
07:00	16	51	*	*	*	*	16	51
07:15	30	38	*	*	*	*	30	38
07:30	38	22	*	*	*	*	38	22
07:45	44	28	*	*	*	*	44	28
08:00	33	21	*	*	*	*	33	21
08:15	41	20	*	*	*	*	41	20
08:30	51	19	*	*	*	*	51	19
08:45	47	24	*	*	*	*	47	24
09:00	37	16	*	*	*	*	37	16
09:15	42	9	*	*	*	*	42	9
09:30	35	18	*	*	*	*	35	18
09:45	38	13	*	*	*	*	38	13
10:00	23	14	*	*	*	*	23	14
10:15	26	12	*	*	*	*	26	12
10:30	23	9	*	*	*	*	23	9
10:45	30	8	*	*	*	*	30	8
11:00	20	7	*	*	*	*	20	7
11:15	28	4	*	*	*	*	28	4
11:30	31	2	*	*	*	*	31	2
11:45	28	3	*	*	*	*	28	3
Total	691	1328	25	0	0	0	716	1328
Combined Total	2019		25		0		2044	
Peak	08:30	05:00	12:00				08:30	05:00
Vol.	177	182	7				177	182
P.H.F.	0.868	0.813	0.292				0.868	0.813
ADT		ADT 2,044	AADT 2,044					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: ALBEMARLE ST,NW From FORTIETH ST,NW TO FORTY SECOND ST,NW

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

Prepared By: Rahul Jain

Prepared Date: 9/15/2013

Total Number of Accident:	18	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	2	11.1%	Fixed Object:	0	0.0%
Total Number of Injuries:	4	Left Turn:	1	5.6%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	1	Right Turn:	1	5.6%	Ped. Involved:	2	11.1%
Total Number of NonDisabling Injuries:	1	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	1	Side Swiped:	9	50.0%	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:	2	11.1%	Unspecified:	1	5.6%

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	4	22.2%	Sunday:	3	16.7%
09:30 ~ 11:30:	0	0.0%	Monday:	3	16.7%
11:30 ~ 13:30:	4	22.2%	Tuesday:	2	11.1%
13:30 ~ 16:00:	3	16.7%	Wednesday:	2	11.1%
16:00 ~18:30:	3	16.7%	Thursday:	1	5.6%
18:30 ~ 07:30:	4	22.2%	Friday:	3	16.7%
Unspecified:	0	0.0%	Saturday:	4	22.2%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	13	72.2%	Dry:	13	72.2%
Rain:	4	22.2%	Wet:	4	22.2%
Snow:	0	0.0%	Snow/Ice:	0	0.0%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	1	5.6%	Unspecified:	1	5.6%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	24	68.6%	Fatal Collision:	0	0.0%
Bus:	3	8.6%	Injury Collision:	4	22.2%
Truck:	2	5.7%	PDO Collision:	14	77.8%
Taxi:	0	0.0%	Light Condition	#ACC	%
Minivan:	0	0.0%	Daylight:	12	66.7%
Police/Emergency Vehicle:	0	0.0%	Dawn/Dusk:	0	0.0%
Motorcycle/Moped:	0	0.0%	Dark(Lighted):	4	22.2%
Bicycle:	1	2.9%	Dark(Not Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
Unspecified:	5	14.3%	Unspecified:	2	11.1%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	1	2.9%	In Crosswalk with Signal:	0	0.0%
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	6	17.1%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	1	100.0%
Roadway:	1	2.9%	From Between Parked Cars:	0	0.0%
Unspecified:	27	77.1%	Unspecified:	0	0.0%

12 Records are not approved as of 9/15/2013 9:09:38 PM