



District Department of Transportation

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

2400 Block Sherman Avenue NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
3	304	1	1B	Proposed	2400 Block Sherman Avenue Northwest, Southbound



The *proposed* speed camera will be located in Ward 1 at the 2400 block of Sherman Avenue Northwest in the southbound direction. Sherman Avenue runs between New Hampshire Avenue to the north and Florida Avenue to the south. The posted speed limit is 25 MPH.

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District Department of Transportation

2400 Block Sherman Avenue NW

Field Assessment Summary

Sherman Avenue is assumed to run in a north-south direction, and is classified as a minor arterial. Sherman Avenue has one travel lane in each direction and a northbound left turn lane at Euclid Street. This site has the following characteristics:

- This is a residential area with houses, apartments, and driveways.
- There is a work zone at this site.
- There are six schools in the area: Cardozo Senior High School, Meyer Elementary School, Benjamin Banneker Academic High School, Howard University, Meridian Public Charter School, and Booker T Washington Public Charter School.
- There is a grassy median and sidewalk and on-street parking on both sides of the street.
- There are traffic signals with pedestrian signals and crosswalks at Barry Place and Euclid Street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a speed table on Euclid Street. There are shared use bicycle pavement markings.
- There are bus stops in both directions at Euclid Street and another northbound before Barry Place.



Looking Northbound



District Department of Transportation

2400 Block Sherman Avenue NW



Looking Southbound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	27
85th Percentile Speed (MPH)	32
10 MPH Pace Speed	24-33
ADT	6,769

Both the mean speed and the 85th percentile speed are higher than the posted speed limit at this location. The 85th 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 29 crashes at this location. A breakdown of collision type can be found in the chart on the next page. The most common types of collision at this location were Rear End (7 crashes), and Right Angle (6 crashes). The other collision types had four crashes or less. The crash data also shows three (3) accidents caused by vehicular speeding at this location.

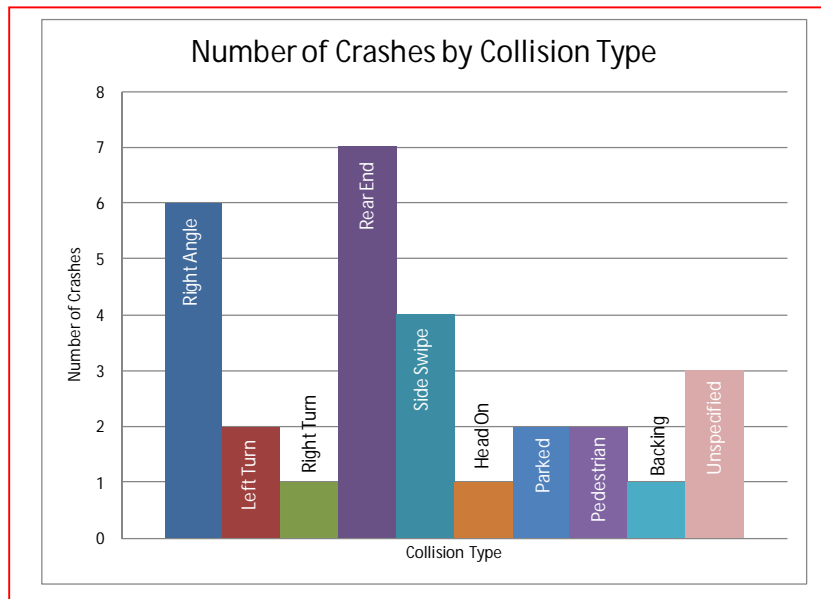
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District Department of Transportation

2400 Block Sherman Avenue NW

Severity			Weather			Surface condition			Light Condition		
Total	29										
Fatal	0	0.0%	Clear	21	72.4%	Dry	20	69.0%	Day	17	58.6%
Injury	10	34.5%	Rain	5	17.2%	Wet	6	20.7%	Night	8	27.6%
Police/EMS	3	10.3%	Fog/Mist	0	0.0%	Repairing	2	6.9%			
Truck	2	6.9%									



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.
2. Crash Data – There is an elevated number of speed-related crashes at this location, including rear end, right angle, and side swipe collisions, as well as a high frequency (10 crashes) of injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This area is a residential area with houses, apartments, and driveways.
 - b. There is a work zone in this area.
 - c. There are six schools in the area: Cardozo Senior High School, Meyer Elementary School, Benjamin Banneker Academic High School, Howard University, Meridian Public Charter School, and Booker T Washington Public Charter School.



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- d. This is a shared-use bicycle lane.
- e. There are several bus stops in the area which generate pedestrian activity.
- f. There is on-street parking on both sides of the street.

Due to the speed data analysis, the elevated number of speed-related crashes and injury-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.

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

2400 Block of Sherman Av NW SB Speed

SB

Start Time	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
11/04/13	7	1	4	21	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
01:00	1	0	7	15	10	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37
02:00	0	1	1	8	6	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
03:00	0	0	1	5	11	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
04:00	0	0	4	21	24	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
05:00	0	0	3	60	88	25	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180
06:00	2	1	19	172	149	19	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	366
07:00	5	4	77	328	167	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	603
08:00	23	29	134	378	133	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	706
09:00	15	13	97	318	107	15	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	569
10:00	9	4	34	178	93	14	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	334
11:00	6	10	66	146	48	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	282
12 PM	3	7	68	141	63	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	295
13:00	9	14	84	140	60	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	316
14:00	5	11	78	165	67	10	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	339
15:00	13	18	85	200	91	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	416
16:00	9	34	127	166	87	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	438
17:00	2	24	118	246	65	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	461
18:00	2	5	72	172	82	6	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	342
19:00	4	6	73	137	65	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	288
20:00	4	3	70	104	32	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	219
21:00	5	8	38	82	42	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183
22:00	0	1	37	68	33	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	152
23:00	3	1	18	35	22	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86
Total	127	195	1315	3306	1559	226	32	5	2	1	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	6769	

Daily
 15th Percentile : 21 MPH
 50th Percentile : 27 MPH
 85th Percentile : 32 MPH
 95th Percentile : 35 MPH

Mean Speed(Average) : 27 MPH
 10 MPH Pace Speed : 24-33 MPH
 Number in Pace : 4631
 Percent in Pace : 68.4%
 Number of Vehicles > 25 MPH : 4753
 Percent of Vehicles > 25 MPH : 70.2%

Grand Total	127	195	1315	3306	1559	226	32	5	2	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6769
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Overall
 15th Percentile : 21 MPH
 50th Percentile : 27 MPH
 85th Percentile : 32 MPH
 95th Percentile : 35 MPH

Mean Speed(Average) : 27 MPH
 10 MPH Pace Speed : 24-33 MPH
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1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

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2400 Block of Sherman Av NW SB Volume

Start Time	Mon	04-Nov-13	Tue	05-Nov-13	Wed	06-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	10	89	*	*	*	*	10	89
12:15	13	69	*	*	*	*	13	69
12:30	20	60	*	*	*	*	20	60
12:45	8	77	*	*	*	*	8	77
01:00	10	73	*	*	*	*	10	73
01:15	11	81	*	*	*	*	11	81
01:30	12	81	*	*	*	*	12	81
01:45	4	81	*	*	*	*	4	81
02:00	8	74	*	*	*	*	8	74
02:15	5	92	*	*	*	*	5	92
02:30	6	78	*	*	*	*	6	78
02:45	5	95	*	*	*	*	5	95
03:00	8	95	*	*	*	*	8	95
03:15	8	92	*	*	*	*	8	92
03:30	3	101	*	*	*	*	3	101
03:45	3	128	*	*	*	*	3	128
04:00	15	133	*	*	*	*	15	133
04:15	7	103	*	*	*	*	7	103
04:30	20	103	*	*	*	*	20	103
04:45	18	99	*	*	*	*	18	99
05:00	29	118	*	*	*	*	29	118
05:15	39	121	*	*	*	*	39	121
05:30	66	109	*	*	*	*	66	109
05:45	46	113	*	*	*	*	46	113
06:00	62	99	*	*	*	*	62	99
06:15	81	82	*	*	*	*	81	82
06:30	116	91	*	*	*	*	116	91
06:45	107	70	*	*	*	*	107	70
07:00	130	70	*	*	*	*	130	70
07:15	141	74	*	*	*	*	141	74
07:30	167	72	*	*	*	*	167	72
07:45	165	72	*	*	*	*	165	72
08:00	172	68	*	*	*	*	172	68
08:15	179	38	*	*	*	*	179	38
08:30	176	53	*	*	*	*	176	53
08:45	179	60	*	*	*	*	179	60
09:00	173	49	*	*	*	*	173	49
09:15	170	45	*	*	*	*	170	45
09:30	113	46	*	*	*	*	113	46
09:45	113	43	*	*	*	*	113	43
10:00	92	48	*	*	*	*	92	48
10:15	97	34	*	*	*	*	97	34
10:30	87	41	*	*	*	*	87	41
10:45	58	29	*	*	*	*	58	29
11:00	65	24	*	*	*	*	65	24
11:15	71	22	*	*	*	*	71	22
11:30	81	20	*	*	*	*	81	20
11:45	65	20	*	*	*	*	65	20
Total	3234	3535	0	0	0	0	3234	3535
Combined Total	6769		0		0		6769	
Peak	08:15	03:45					08:15	03:45
Vol.	707	467					707	467
P.H.F.	0.987	0.878					0.987	0.878
ADT	ADT 6,769		AADT 6,769					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: SHERMAN AVE,NW From EUCLID ST,NW TO BARRY PL,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:	29	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	6	20.7%	Fixed Object:	0	0.0%
Total Number of Injuries:	11	Left Turn:	2	6.9%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	1	Right Turn:	1	3.4%	Ped. Involved:	2	6.9%
Total Number of NonDisabling Injuries:	1	Rear End:	7	24.1%	Backing:	1	3.4%
Total Number of Pedestrians Involved:	0	Side Swiped:	4	13.8%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	2	Head On:	1	3.4%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	2	6.9%	Unspecified:	3	10.3%
Time of Day				Day of week			
	#ACC	%			#ACC	%	
07:30 ~ 09:30:	2	6.9%		Sunday:	3	10.3%	
09:30 ~ 11:30:	4	13.8%		Monday:	3	10.3%	
11:30 ~ 13:30:	1	3.4%		Tuesday:	6	20.7%	
13:30 ~ 16:00:	5	17.2%		Wednesday:	3	10.3%	
16:00 ~ 18:30:	7	24.1%		Thursday:	5	17.2%	
18:30 ~ 07:30:	10	34.5%		Friday:	2	6.9%	
Unspecified:	0	0.0%		Saturday:	7	24.1%	
Weather Condition				Surface Condition			
	#ACC	%			#ACC	%	
Clear:	21	72.4%		Dry:	20	69.0%	
Rain:	5	17.2%		Wet:	6	20.7%	
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:	2	6.9%	
Unspecified:	3	10.3%		Unspecified:	1	3.4%	
Type of Vehicle				Accident Severity Type			
	#VEH	%			#ACC	%	
Passenger Car:	44	80.0%		Fatal Collision:	0	0.0%	
Bus:	0	0.0%		Injury Collision:	10	34.5%	
Truck:	2	3.6%		PDO Collision:	19	65.5%	
Taxi:	1	1.8%		Light Condition			
Minivan:	0	0.0%			#ACC	%	
Police/Emergency Vehicle:	3	5.5%		Daylight:	17	58.6%	
Motorcycle/Moped:	0	0.0%		Dawn/Dusk:	2	6.9%	
Bicycle:	2	3.6%		Dark(Lighted):	8	27.6%	
Fixed Object:	0	0.0%		Dark(Not Lighted):	0	0.0%	
Unspecified:	3	5.5%		Dark(Unknown Lighting):	0	0.0%	
				Unspecified:	2	6.9%	
Contributing Factor				Pedestrian Actions			
	#VEH	%			#ACC	%	
Driver: Speed:	3	5.5%		In Crosswalk with Signal:	0	0.0%	
Driver: Alcohol/Drug:	1	1.8%		In Crosswalk against Signal:	0	0.0%	
Driver: Electronic Device:	0	0.0%		In Crosswalk no Signal:	0	0.0%	
Driver: Others:	11	20.0%		In Unmarked Crosswalk:	0	0.0%	
Vehicle:	1	1.8%		Not in Crosswalk:	0	0.0%	
Roadway:	2	3.6%		From Between Parked Cars:	0	0.0%	
Unspecified:	37	67.3%		Unspecified:	0	0.0%	

11 Records are not approved as of 9/15/2013 10:23:05 PM