



District Department of Transportation

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

2900 Block Arizona Avenue NW S/B

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	205	3	3D	Existing	2900 Block Arizona Avenue Northwest Southbound



This existing speed camera is located in Ward 3 at the 2900 block of Arizona Avenue Northwest in the southbound direction. Arizona Avenue Northwest runs from Loughboro Road Northwest in the northeast to Canal Road Northwest in the southwest. The posted speed limit is 25 MPH. The existing speed camera was installed in June 2001.

W3 - 46





District Department of Transportation

2900 Block Arizona Avenue NW S/B

Field Assessment Summary

Arizona Avenue is assumed to run in the East-West direction and is classified as a principal arterial. Arizona Avenue has one travel lane in each direction. The site has the following characteristics:

- This site is located in a residential area with houses, driveways, and on-street parking on both sides of the street.
- There is sidewalk with curb and gutter on the east side of the road.
- There are rumble strips prior to Hawthorne Place in both northbound and southbound directions.
- The existing pavement is in good condition.



Northbound



District Department of Transportation

2900 Block Arizona Avenue NW S/B



Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	21
85th Percentile Speed (MPH)	25
10 MPH Pace Speed	18-27 MPH
ADT	6,624

The mean speed is 4 MPH lower than the posted speed limit at this location. The 85th percentile speeds is the same as the posted speed limit at this location.

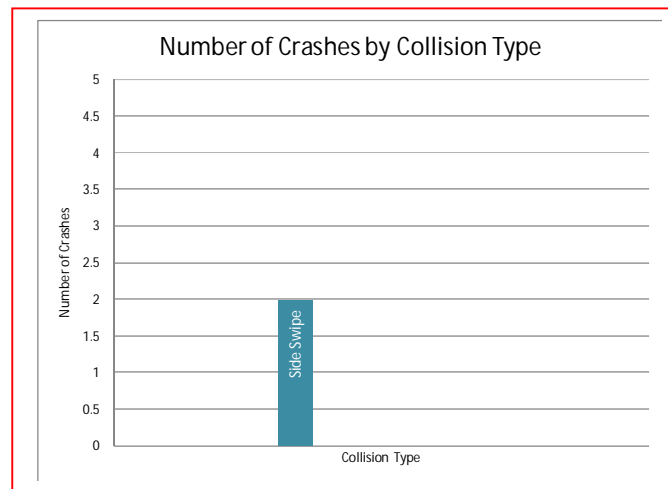
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of two crashes at this location. The two crashes were both Side Swipe. A graph of number of crashes by collision type can be found on the next page.



Severity			Weather			Surface condition			Light Condition		
Total	2										
Fatal	0	0.0%	Clear	2	100.0%	Dry	2	100.0%	Day	0	0.0%
Injury	1	50.0%	Rain	0	0.0%	Wet	0	0.0%	Night	1	50.0%
Truck	0	0.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	0	0.0%									

The speed camera was installed on 6/21/2001. In the year prior to the speed camera's installation there was one crash and the year after the speed camera's installation there were no crashes. The number of crashes decreased after the installation of the speed camera.



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 lower than or equal to the posted speed limit.
2. Crash Data – Although there was a reduction in the number of crashes since the installation of the speed camera, there was only a small number of crashes recorded for the site.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. The site is located in a residential area with driveways along both sides.
 - b. There are multiple bus stops in the area which generate pedestrian activity.
 - c. There is on-street parking at this site.



District Department of Transportation

2900 Block Arizona Avenue NW S/B

The speed data analysis showed the mean speeds to be lower than the posted speed limit, and the crash data analysis showed a reduction in the number of crashes at this site, albeit a small number of crashes. Due to the analysis results coupled with the specific site characteristics and 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

2900 block of Arizona Avenue NW SB Speed

SB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	20	25	30	35	40	45	50	55	60	65	70	75	999		
11/05/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
04:00	1	1	9	3	0	0	0	0	0	0	0	0	0	0	14
05:00	7	11	23	14	6	0	0	0	0	0	0	0	0	0	61
06:00	7	20	90	39	7	0	0	0	0	0	0	0	0	0	163
07:00	10	68	254	82	4	0	0	0	0	0	0	0	0	0	418
08:00	30	164	187	37	1	0	0	0	0	0	0	0	0	0	419
09:00	11	79	153	43	1	0	0	0	0	0	0	0	0	0	287
10:00	7	64	164	45	5	0	0	0	0	0	0	0	0	0	285
11:00	13	76	177	43	3	0	0	0	0	0	0	0	0	0	312
12 PM	15	118	176	33	3	0	0	0	0	0	0	0	0	0	345
13:00	13	92	153	66	3	0	0	0	0	0	0	0	0	0	327
14:00	9	128	247	68	3	0	0	0	0	0	0	0	0	0	455
15:00	62	209	304	46	3	0	0	0	0	0	0	0	0	0	624
16:00	12	191	434	62	4	0	0	0	0	0	0	0	0	0	703
17:00	11	196	436	90	1	0	0	0	0	0	0	0	0	0	734
18:00	6	104	354	81	6	0	0	0	0	0	0	0	0	0	551
19:00	4	35	172	58	2	2	0	0	0	0	0	0	0	0	273
20:00	3	38	160	39	3	0	0	0	0	0	0	0	0	0	243
21:00	2	36	116	48	4	0	0	0	0	0	0	0	0	0	206
22:00	1	10	57	33	4	1	1	0	0	0	0	0	0	0	107
23:00	0	2	27	17	2	0	0	0	0	0	0	0	0	0	48
Total	225	1644	3694	947	65	3	1	0	0	0	0	0	0	0	6579

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

2900 block of Arizona Avenue NW SB Speed

SB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total
11/06/13	0	1	12	7	0	0	0	0	0	0	0	0	0	0	0	20
01:00	0	1	7	4	1	0	0	0	0	0	0	0	0	0	0	13
02:00	0	1	4	3	0	0	0	0	0	0	0	0	0	0	0	8
03:00	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	4
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	0	5	24	15	1	0	0	0	0	0	0	0	0	0	0	45
Grand Total	225	1649	3718	962	66	3	1	0	0	0	0	0	0	0	0	6624

15th Percentile : 14 MPH
 50th Percentile : 21 MPH
 85th Percentile : 25 MPH
 95th Percentile : 28 MPH

Stats
 Mean Speed(Average) : 21 MPH
 10 MPH Pace Speed : 18-27 MPH
 Number in Pace : 4422
 Percent in Pace : 66.8%
 Number of Vehicles > 25 MPH : 1183
 Percent of Vehicles > 25 MPH : 17.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

2900 block of Arizona Avenue NW SB Volume

Start Time	Tue	05-Nov-13	Wed	06-Nov-13	Thu	07-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	96	4	*	*	*	4	96
12:15	*	85	9	*	*	*	9	85
12:30	*	73	4	*	*	*	4	73
12:45	*	91	3	*	*	*	3	91
01:00	*	77	4	*	*	*	4	77
01:15	*	84	4	*	*	*	4	84
01:30	*	85	4	*	*	*	4	85
01:45	*	81	1	*	*	*	1	81
02:00	*	110	3	*	*	*	3	110
02:15	*	108	2	*	*	*	2	108
02:30	*	123	2	*	*	*	2	123
02:45	*	114	1	*	*	*	1	114
03:00	*	149	3	*	*	*	3	149
03:15	*	150	1	*	*	*	1	150
03:30	4	164	*	*	*	*	4	164
03:45	0	161	*	*	*	*	0	161
04:00	0	170	*	*	*	*	0	170
04:15	0	185	*	*	*	*	0	185
04:30	6	182	*	*	*	*	6	182
04:45	8	166	*	*	*	*	8	166
05:00	11	194	*	*	*	*	11	194
05:15	18	170	*	*	*	*	18	170
05:30	19	182	*	*	*	*	19	182
05:45	13	188	*	*	*	*	13	188
06:00	29	174	*	*	*	*	29	174
06:15	37	155	*	*	*	*	37	155
06:30	38	132	*	*	*	*	38	132
06:45	59	90	*	*	*	*	59	90
07:00	70	92	*	*	*	*	70	92
07:15	80	79	*	*	*	*	80	79
07:30	137	50	*	*	*	*	137	50
07:45	131	52	*	*	*	*	131	52
08:00	109	84	*	*	*	*	109	84
08:15	120	61	*	*	*	*	120	61
08:30	106	43	*	*	*	*	106	43
08:45	84	55	*	*	*	*	84	55
09:00	68	61	*	*	*	*	68	61
09:15	78	56	*	*	*	*	78	56
09:30	71	46	*	*	*	*	71	46
09:45	70	43	*	*	*	*	70	43
10:00	73	32	*	*	*	*	73	32
10:15	66	26	*	*	*	*	66	26
10:30	80	30	*	*	*	*	80	30
10:45	66	19	*	*	*	*	66	19
11:00	62	15	*	*	*	*	62	15
11:15	73	13	*	*	*	*	73	13
11:30	78	6	*	*	*	*	78	6
11:45	99	14	*	*	*	*	99	14
Total	1963	4616	45	0	0	0	2008	4616
Combined Total	6579		45		0		6624	
Peak	07:30	05:00	12:00				07:30	05:00
Vol.	497	734	20				497	734
P.H.F.	0.907	0.946	0.556				0.907	0.946
ADT		ADT 6,624	AADT 6,624					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: ARIZONA AVE,NW From GARFIELD ST,NW TO CATHEDRAL AVE,NW

Time Period Covered: From 01/01/2010 To 12/31/2012 **Prepared By:** Rahul Jain

Prepared Date: 9/15/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	2	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	1	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	2	100.0%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%
09:30 ~ 11:30:	0	0.0%	Monday:	0	0.0%
11:30 ~ 13:30:	0	0.0%	Tuesday:	0	0.0%
13:30 ~ 16:00:	0	0.0%	Wednesday:	1	50.0%
16:00 ~18:30:	1	50.0%	Thursday:	0	0.0%
18:30 ~ 07:30:	1	50.0%	Friday:	1	50.0%
Unspecified:	0	0.0%	Saturday:	0	0.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	2	100.0%	Dry:	2	100.0%
Rain:	0	0.0%	Wet:	0	0.0%
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:	0	0.0%	Unspecified:	0	0.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	6	100.0%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	1	50.0%
Truck:	0	0.0%	PDO Collision:	1	50.0%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	0	0.0%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	1	50.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	1	50.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	0	0.0%	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:	0	0.0%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%
Unspecified:	6	100.0%	Unspecified:	0	0.0%

1 Records are not approved as of 9/15/2013 12:01:56 PM

Accident Summary Report (R-8)

Corridor: ARIZONA AVE,NW From GARFIELD ST,NW TO CATHEDRAL AVE,NW
Time Period Covered: From 06/21/2000 To 06/21/2001 **Prepared By:** Rahul Jain **Prepared Date:** 11/19/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	1	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	1	100.0%	Unspecified:	0	0.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%
09:30 ~ 11:30:	1	100.0%	Monday:	1	100.0%
11:30 ~ 13:30:	0	0.0%	Tuesday:	0	0.0%
13:30 ~ 16:00:	0	0.0%	Wednesday:	0	0.0%
16:00 ~ 18:30:	0	0.0%	Thursday:	0	0.0%
18:30 ~ 07:30:	0	0.0%	Friday:	0	0.0%
Unspecified:	0	0.0%	Saturday:	0	0.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	1	100.0%	Dry:	1	100.0%
Rain:	0	0.0%	Wet:	0	0.0%
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:	0	0.0%	Unspecified:	0	0.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	2	100.0%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	0	0.0%
Truck:	0	0.0%	PDO Collision:	1	100.0%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	1	100.0%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	0	0.0%	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:	0	0.0%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%
Unspecified:	2	100.0%	Unspecified:	0	0.0%

1 Records are not approved as of 11/19/2013 11:50:21 AM