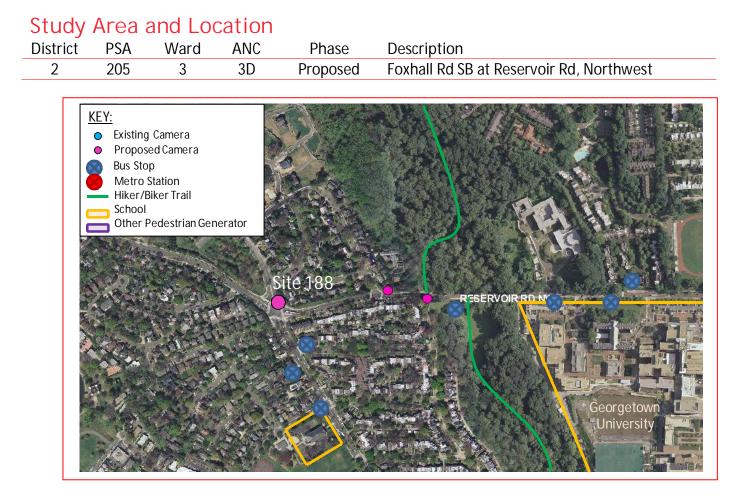




Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia Foxhall Road S/B at Reservoir Road NW



The *proposed* speed camera will be located in Ward 3 at the intersection of Foxhall Road and Reservoir Road Northwest and is for the southbound traffic. Foxhall Roads runs from Loughboro Road Northwest in the north to Canal Road NW in the south. The posted speed limit is 25 MPH.

W3 - 553







Field Assessment Summary

Foxhall Road is assumed to run in a north-south direction and is classified as a minor arterial. Foxhall Road has two travel lanes in both directions north of the intersection and one travel lane in each direction south of the intersection. In both directions of Foxhall Road there is a free right onto Reservoir Road and a left turn lane onto Reservoir Road. This site has the following characteristics:

- This site is located in a residential area with houses on both sides of the roadway.
- There is sidewalk on both sides of the roadway.
- The roadway pavement is in good condition and has curb and gutter drainage features.
- There are two schools in the area: Hardy Middle School and Georgetown University.
- There are several bus stops in the area that generate pedestrian activity.
- Archbold and Foundry Branch Valley parks are near the site and have bike trails that go through them and generate pedestrian and bicycle activity.



W3 - 554







Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	21
85th Percentile Speed (MPH)	28
10 MPH Pace Speed	20-29
ADT	7,921

The mean speed is 4 MPH lower than the posted speed and the 85th percentile speed is 3 MPH higher than the posted speed at this location.

Crash Data Analysis

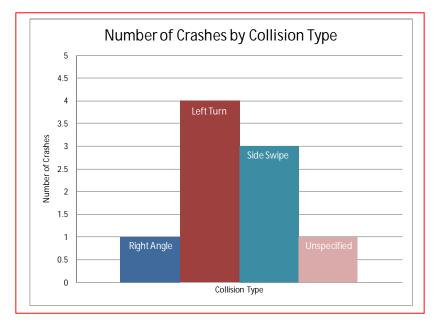
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of nine crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location were Left Turn (4 crashes), Side Swipe (3 crashes). The other collision types had one crash or less each.



d.	
District Department of Transportation	on
I Road S/R at Reservoir Road N	١١٨/

Foxhall Road S/B at Reservoir Road NW

Severity				We	eather		Surface	condit	ion	Light (on	
	Total	9										
	Fatal	0	0.0%	Clear	7	77.8%	Dry	7	77.8%	Day	5	55.6%
	Injury	0	0.0%	Rain	2	22.2%	Wet	2	22.2%	Night	2	22.2%
	Taxi	1	11.1%	Snow	0	0.0%	Snow/Ice	0	0.0%			
	Bus	1	11.1%									



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 85th percentile speed is higher than the posted speed limit at this location.
- 2. Crash Data The crash data analysis shows a low number of crashes at this location.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
 - a. This site is located in a residential area with houses on both sides of the roadway.
 - b. There are two schools in the area: Hardy Middle School and Georgetown University.
 - c. There are bike trails in the area that generate pedestrian and bicycle activity.





Although the crash data analysis showed a low number of crashes at this location, due to the speed data analysis, the specific site characteristics, the proximity of schools to the site, and other pedestrian generators, there is a nexus between safety and the speed camera at this location.

W3 - 557

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

Foxhall Road SB at Reservoir Rd NW Speed

SB															
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
11/08/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	93	84	179	66	7	0	0	0	0	0	0	0	0	0	429
09:00	45	54	157	129	13	1	0	0	0	0	0	0	0	0	399
10:00	18	27	161	125	21	1	0	0	0	0	0	0	0	0	353
11:00	37	50	166	156	19	3	0	0	0	0	0	0	0	0	431
12 PM	27	95	223	115	11	1	0	0	0	0	0	0	0	0	472
13:00	31	77	214	116	12	0	0	0	0	0	0	0	0	0	450
14:00	17	56	229	175	20	0	0	0	0	0	0	0	0	0	497
15:00	85	147	242	112	21	0	0	0	0	0	0	0	0	0	607
16:00	105	143	249	99	13	0	0	0	0	0	0	0	0	0	609
17:00	169	148	205	99	5	0	1	0	0	0	0	0	0	0	627
18:00	244	73	106	66	7	1	0	1	0	0	0	0	0	0	498
19:00	14	26	164	257	34	2	0	0	0	0	0	0	0	0	497
20:00	7	19	121	249	34	1	0	0	0	0	0	0	0	0	431
21:00	2	7	67	168	57	4	0	0	0	0	0	0	0	0	305
22:00	2	2	73	121	35	0	1	0	0	0	0	0	0	0	234
23:00	1	0	27	92	41	5	0	0	0	0	0	0	0	0	166
Total	897	1008	2583	2145	350	19	2	1	0	0	0	0	0	0	7005

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

Foxhall Road SB at Reservoir Rd NW Speed

SB Start 1 16 21 26 31 36 41 46 51 56 61 66 71 Time 15 20 25 30 35 40 45 50 55 60 65 70 75 11/09/13 1 5 18 37 21 2 0 <th>me 09/13 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 08:00 09:00 01:00</th> <th>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</th> <th>70 0 0 0 0 0 0 0 0 0 0 0 0 0</th> <th>75 0 0 0 0 0 0 0 0 0 0 0</th> <th>76 999 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</th> <th>Total 84 36 28 16 24 78 165 485 485 0 *</th>	me 09/13 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 08:00 09:00 01:00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	70 0 0 0 0 0 0 0 0 0 0 0 0 0	75 0 0 0 0 0 0 0 0 0 0 0	76 999 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total 84 36 28 16 24 78 165 485 485 0 *
Time 15 20 25 30 35 40 45 50 55 60 65 70 75 11/09/13 1 5 18 37 21 2 0<	me 09/13 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 08:00 09:00 01:00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	70 0 0 0 0 0 0 0 0 0 0 0 0 0	75 0 0 0 0 0 0 0 0 0 0 0	999 0 0 0 0 0 0 0 0 0 0 0 0 0	84 36 28 16 24 78 165 485 0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	09/13 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0 0 0 *	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 *	84 36 28 16 24 78 165 485 0
01:00 0 1 8 19 6 2 0 <td>01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00</td> <td>$\begin{array}{c ccccccccccccccccccccccccccccccccccc$</td> <td>0 0 0 0 0 0 0 0 0 *</td> <td>0 0 0 0 0 0 0 0 0 0</td> <td>0 0 0 0 0 0 0 0 0 *</td> <td>36 28 16 24 78 165 485 0</td>	01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0 0 *	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 *	36 28 16 24 78 165 485 0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00	0 0 5 11 8 4 0	0 0 0 0 0 0 0 0 *	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	28 16 24 78 165 485 0
04:00 2 0 5 10 5 2 0 <td>04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00</td> <td>2 0 5 10 5 2 0 0 0 0 0 7 2 11 39 18 1 0 0 0 0 0 2 0 23 111 17 1 1 0 0 0 0 6 31 190 228 19 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 * * * * * * * * * * * <t< td=""><td>0 0 0 0 0 *</td><td>0 0 0 0 0 0</td><td>0 0 0 0 0 *</td><td>16 24 78 165 485 0</td></t<></td>	04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00	2 0 5 10 5 2 0 0 0 0 0 7 2 11 39 18 1 0 0 0 0 0 2 0 23 111 17 1 1 0 0 0 0 6 31 190 228 19 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 * * * * * * * * * * * <t< td=""><td>0 0 0 0 0 *</td><td>0 0 0 0 0 0</td><td>0 0 0 0 0 *</td><td>16 24 78 165 485 0</td></t<>	0 0 0 0 0 *	0 0 0 0 0 0	0 0 0 0 0 *	16 24 78 165 485 0
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06:00 12 0 23 111 17 1 1 0	06:00 07:00 08:00 09:00 10:00 11:00	2 0 23 111 17 1 1 0 0 0 0 6 31 190 228 19 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 *	0 0 0 *	0 0 0 *	0 0 0 *	165 485 0
07:00 16 31 190 228 19 1 0 0 0 0 0 0 08:00 0 0 0 0 0 0 0 0 0 0 0 09:00 * * * * * * * * * * * * 10:00 * * * * * * * * * * * 11:00 * * * * * * * * * * 12:PM * * * * * * * * * * 14:00 * * * * * * * * * * 16:00 * * * * * * * * * * 18:00 * * * * * * * * * * 19:00 * * * * * * * * * * 20:00 * * * * * <t< td=""><td>07:00 08:00 09:00 10:00 11:00</td><td>6 31 190 228 19 1 0 0 0 0 0 0 0 0 0 0 0 0 0 * * * * * * * * * * * * * * * * * *</td><td>0 0 *</td><td>0 0 *</td><td>0 0 *</td><td>485 0</td></t<>	07:00 08:00 09:00 10:00 11:00	6 31 190 228 19 1 0 0 0 0 0 0 0 0 0 0 0 0 0 * * * * * * * * * * * * * * * * * *	0 0 *	0 0 *	0 0 *	485 0
08:00 0 <td>08:00 09:00 10:00 11:00</td> <td>0 0 0 0 0 0 0 0 0 0 * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *</td> <td>0 *</td> <td>0 *</td> <td>0</td> <td>0</td>	08:00 09:00 10:00 11:00	0 0 0 0 0 0 0 0 0 0 * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *	0 *	0 *	0	0
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112 PM * <td></td> <td></td> <td>*</td> <td></td> <td>•</td> <td>*</td>			*		•	*
13:00 * <td>2 PM</td> <td>* * * * * * * * * * *</td> <td></td> <td>*</td> <td>*</td> <td>*</td>	2 PM	* * * * * * * * * * *		*	*	*
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115:00 * <td>3:00</td> <td>* * * * * * * * * *</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td>	3:00	* * * * * * * * * *	*	*	*	*
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17:00 * <td>5:00</td> <td>* * * * * * * * * *</td> <td>*</td> <td>*</td> <td>*</td> <td>*</td>	5:00	* * * * * * * * * *	*	*	*	*
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21:00 * <td></td> <td></td> <td></td> <td></td> <td>*</td> <td>*</td>					*	*
22:00 * * * * * * * * * * * * * * * * * *					*	*
23:00 * * * * * * * * * * * * * *					*	*
23.00					*	*
<u>Total 38 41 266 460 97 13 1 0 0 0 0 0 0</u>					*	*
	Total	8 41 266 460 97 13 1 0 0 0 0	0	0	0	916
Grand 935 1049 2849 2605 447 32 3 1 0 0 0 0 0		5 1049 2849 2605 447 32 3 1 0 0 0	0	0	0	7921
Total 535 1049 2005 447 52 5 1 0 0 0 0 0	Total		0	0	0	
15th Percentile : 10 MPH						
50th Percentile : 22 MPH						
85th Percentile : 28 MPH						
95th Percentile : 31 MPH		95th Percentile : 31 MPH				
Stats Mean Speed(Average): 21 MPH	Stats	Mean Speed(Average): 21 MPH				
10 MPH Pace Speed : 20-29 MPH						
Number in Pace : 4295						
Percent in Pace : 54.2%						
Number of Vehicles > 25 MPH : 2686		Number of Vehicles > 25 MPH : 2686				
Percent of Vehicles > 25 MPH : 33.9%		Percent of Vehicles > 25 MPH : 33.9%				

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

Foxhall Road SB at Reservoir Rd NW Volume

Start	Fri	08-Nov-13	Sat	09-Nov-13	Sun	10-Nov-13	Daily A	/erage
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	138	32	*	*	*	32	138
12:15	*	106	15	*	*	*	15	106
12:30	*	105	22	*	*	*	22	105
12:45	*	123	22 15	*	*	*	22 15	123
01:00	*	117	11	*	*	*	11	117
01:15	*	107	9	*	*	*	9	107
01:30	*	111	10	*	*	*	10	111
01:45	*	115	6	*	*	*	6	115
02:00	*	107	9	*	*	*	0	107
02:00	*	122	3	*	*	*	9 3	122
02:13	*	131	8	*	*	*	8	131
02:30	*	137	8	*	*	*	8	137
02.45	*	147		*	*	*	0	
03:00	*	147	5	*	*	*	5	147
03:15	*	149	4	*	*	*	4	149
03:30	*	163	4	*	*	*	4	163
03:45		148	3				3	148
04:00	*	154	3	*	*	*	3	154
04:15	*	167	4	*	*	*	4	167
04:30	*	161	5	*	*	*	5	161
04:45	*	127	12	*	*	*	12	127
05:00	*	172	7	*	*	*	7	172
05:15	*	172	15	*	*	*	15	172
05:30	*	171	25	*	*	*	25	171
05:45	*	112	31	*	*	*	31	112
06:00	*	93	23	*	*	*	23	93
06:15	*	126	38	*	*	*	38	126
06:30	*	145	50	*	*	*	50	145
06:45	*	134	54	*	*	*	54	134
07:00	*	133	85	*	*	*	85	133
	*		104	*	*	*		
07:15	*	121		*	*	*	104	121
07:30	*	123	149	*	*	*	149	123
07:45		120	147				147	120
08:00	98	130	*	*	*	*	98	130
08:15	133	110	*	*	*	*	133	110
08:30	97	106	*	*	*	*	97	106
08:45	101	85	*	*	*	*	101	85
09:00	104	92	*	*	*	*	104	92
09:15	101	61	*	*	*	*	101	61
09:30	102	78	*	*	*	*	102	78
09:45	92	74	*	*	*	*	92	74
10:00	85	75	*	*	*	*	85	75
10:15	87	58	*	*	*	*	87	58
10:30	89	49	*	*	*	*	89	49
10:45	92	52	*	*	*	*	92	52
11:00	102	49	*	*	*	*	102	49
11:15	102	27	*	*	*	*	102	27
11:30	99	50	*	*	*	*	99	50
			*	*	*	*		
<u>11:45</u>	127	40	040				127	40
Total	1612	5393	916	0	0	0	2528	5393
Combined	70	05	91	6	C		7921	
Total				-				
Peak	08:15	04:45	07:00				07:30	04:45
Vol.	435	642	485				527	642
P.H.F.	0.818	0.933	0.814	_			0.884	0.933
ADT		ADT 7,921	AADT 7,921					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

	From 01/01/2010		FTH ST,NW TO RE		Rahul Jain	Prepared Dat	te: 9/15/2	2013
Total Number of Accident:		9	Collision Type	#ACC		•	#ACC	%
Total Number of Fatalities:		0	Right Angle:	1		ixed Object:		0.0%
Total Number of Injuries:		0	Left Turn:	4		Ran Off Road:		0.0%
Total Number of Disabling	Iniuries:	0	Right Turn:	0		Ped. Involved:		0.0%
Total Number of NonDisab		0	Rear End:	0		Backing:		0.0%
Total Number of Pedestria		0	Side Swiped:	3		Non Collision:		0.0%
Total Number of Bicycles I		0	Head On:	0		Jnder/Over Ride:	0 (0.0%
Total Number of Motorcycl	es Involved:	0	Parked:	0	0.0% L	Inspecified:	1 1 [.]	1.1%
Time of Day	#ACC	%			Day o fweek	#AC	c	%
07:30 ~ 09:30:	0	0.0%			Sunday:	1	1	1.1%
09:30 ~ 11:30:	0	0.0%			Monday:	0	(0.0%
11:30 ~ 13:30:	2	22.2%			Tuesday:	2	23	2.2%
13:30 ~ 16:00:	2	22.2%			Wednesday:	4		4.4%
16:00 ~18:30:	2	22.2%			Thursday:	1		1.1%
18:30 ~ 07:30:	3	33.3%			Friday:	1		1.1%
Unspecified:	0	0.0%			Saturday:	0	(0.0%
Weather Condition	#ACC	%			Surface Condition	#AC	c	%
Clear:	7	77.8%			Dry:	7	7	7.8%
Rain:	2	22.2%			Wet:	2	23	2.2%
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:	0	0.0%	5		Unspecified:	0	(0.0%
Type of Vehicle	#VEH	%			Accident Severity	Гуре #АС	с	%
Passenger Car:	17	81.0%	5		Fatal Collision:	0	(0.0%
Bus:	1	4.8%))		Injury Collision:	0	(0.0%
Truck:	1	4.8%))		PDO Collision:	9	100	0.0%
Taxi:	1	4.8%						
Minivan:	0	0.0%			Light Condition	#AC	-	%
Police/Emergency Vehicle	: 0	0.0%			Daylight:	5		5.6%
Motorcycle/Moped:	0	0.0%	5		Dawn/Dusk:	1		1.1%
Bicycle:	0	0.0%	5		Dark(Lighted):	2		2.2%
Fixed Object:	0	0.0%	5		Dark(Not Lighted):	0		0.0%
Unspecified:	1	4.8%			Dark(Unknown Light Unspecified:	ting): 0 1		0.0% 1.1%
Contributing Easter	#VEH	۵/			Podostrian Astistic			
Contributing Factor		% 0.0%			Pedestrian Actions In Crosswalk with Si			% ^^^
Driver: Speed:	0	0.0%				0		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk agains	-		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig			0.0%
Driver: Others:	5	23.8%			In Unmarked Crossy			0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Park			0.0%
Unspecified:	16	76.2%			Unspecified:	0	(0.0%

7 Records are not approved as of 9/15/2013 10:02:04 PM