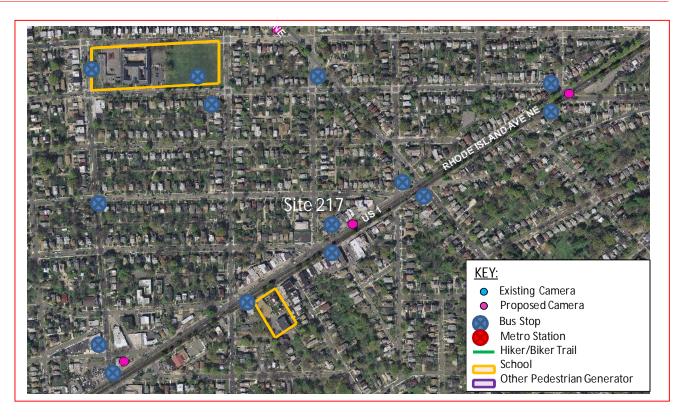




Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 2200-2300 Block Rhode Island Avenue NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description	
5	503	5	5 A	Proposed	2200-2300 Blocks Rhode Island Avenue	
					Northeast Northeastbound	



This *proposed* speed camera will be located in Ward 5 between blocks 2200 and 2300 of Rhode Island Avenue Northeast in the northeast-bound direction. Rhode Island Avenue runs between Eastern Avenue Northeast to the east and North Capitol Street Northwest where it becomes Rhode Island Avenue Northwest to the west. The posted speed limit is 30 MPH.





Field Assessment Summary

Rhode Island Avenue is assumed to run in the northeast-southwest direction, and is classified as a principal arterial. Rhode Island Avenue has three travel lanes in each direction. This site has the following characteristics:

- This is a residential and commercial area with houses and small businesses.
- There are two schools in the area: Burroughs Education Campus and the Geneva Ivey Day School.
- There is a concrete island at Thayer Street and a concrete island at 24th Street.
- There is a traffic signal with pedestrian signals and crosswalks at 24th Street NE and another crosswalk at Thayer Street.
- There is sidewalk and on-street parking on both sides of the street.
- The pavement is in fair condition and there is curb and gutter with drainage inlets.
- There is a bus stop southwest-bound at Thayer Street.



Looking Northeast-bound





Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	19
85th Percentile Speed (MPH)	27
10 MPH Pace Speed (MPH)	19-28
ADT	10,628

The mean speed is lower than the posted speed limit by 11 MPH and the 85th percentile speed is lower than the posted speed by 3 MPH at this location.

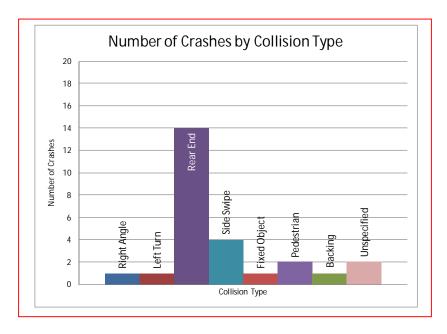
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 26 crashes at this location. A breakdown of collision type can be found in the chart on the next page. The most common type of collision at this location was Rear End with 14 crashes. The other collision types had four crashes or less. Furthermore, this site experienced nine injury-related crashes.

W5 - 370



Se	verity		We	eather		Surface	condit	ion	Light Condition			
Total	26											
Fatal	0	0.0%	Clear	23	88.5%	Dry	23	88.5%	Day	15	57.7%	
Injury	9	34.6%	Rain	3	11.5%	Wet	3	11.5%	Night	10	38.5%	
Truck	8	30.8%	Snow	0	0.0%	Snow/Ice	0	0.0%				
Bus	2	7.7%										



Safety Nexus

This site presents the following safety considerations which may support the 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 This site experienced nine injury-related crashes.
- 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 small businesses.
 - b. There are two schools in the area: Burroughs Education Campus and the Geneva Ivey Day School.
 - c. There are several bus stops which generate pedestrian activity.
 - d. There is on-street parking on both sides 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 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

2200-2300 blocks of Rhode Island Ave NE NEB Speed

NEB															
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
11/13/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	15	19	99	50	5	0	0	0	0	0	0	0	0	0	188
22:00	11	25	181	101	14	2	0	0	0	0	0	0	0	0	334
23:00	6	24	142	101	18	0	0	0	0	0	0	0	0	0	291
Total	32	68	422	252	37	2	0	0	0	0	0	0	0	0	813

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

2200-2300 blocks of Rhode Island Ave NE NEB Speed

NEB															
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
11/14/13	3	11	75	75	9	1	3	0	0	0	0	0	0	0	177
01:00	3	7	52	39	8	0	0	0	0	0	0	0	0	0	109
02:00	4	2	21	29	6	0	0	0	0	0	0	0	0	0	62
03:00	1	9	17	18	4	0	0	0	0	0	0	0	0	0	49
04:00	1	2	25	25	7	1	0	0	0	0	0	0	0	0	61
05:00	5	5	36	43	10	0	0	0	0	0	0	0	0	0	99
06:00	6	11	45	100	34	1	0	0	0	0	0	0	0	0	197
07:00	18	12	96	161	45	6	0	0	0	0	0	0	0	0	338
08:00	23	45	180	174	35	3	0	0	0	0	0	0	0	0	460
09:00	31	51	171	140	36	2	0	0	0	0	0	0	0	0	431
10:00	49	72	196	155	40	6	0	0	0	0	0	0	0	0	518
11:00	63	83	244	164	47	2	0	0	0	0	0	0	0	0	603
12 PM	104	124	218	159	35	2	0	0	0	0	0	0	0	0	642
13:00	104	64	269	193	43	4	0	0	0	0	0	0	0	0	677
14:00	147	161	292	167	39	1	0	0	0	0	0	0	0	0	807
15:00	263	202	216	90	9	0	0	0	0	0	0	0	0	0	780
16:00	264	169	238	133	26	0	0	0	0	0	0	0	0	0	830
17:00	265	258	262	125	7	0	0	0	0	0	0	0	0	0	917
18:00	266	136	204	98	20	0	0	0	0	0	0	0	0	0	724
19:00	152	160	227	66	6	0	0	0	0	0	0	0	0	0	611
20:00	51	103	255	101	9	0	0	0	0	0	0	0	0	0	519
21:00	8	25	100	62	9	0	0	0	0	0	0	0	0	0	204
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	1831	1712	3439	2317	484	29	3	0	0	0	0	0	00	0	9815
Grand Total	1863	1780	3861	2569	521	31	3	0	0	0	0	0	0	0	10628

 15th Percentile:
 8 MPH

 50th Percentile:
 20 MPH

 85th Percentile:
 27 MPH

 95th Percentile:
 30 MPH

 Stats
 Mean Speed(Average) :
 19 MPH

 10 MPH Pace Speed :
 19-28 MPH

 Number in Pace :
 4996

 Number in Pace :
 4996

 Percent in Pace :
 47.0%

 Number of Vehicles > 30 MPH :
 654

 Percent of Vehicles > 30 MPH :
 6.2%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

2200-2300 blocks of Rhode Island Ave NE NEB Volume

Start	Wed	13-Nov-13	Thu	14-Nov-13	Fri	15-Nov-13	Daily Av	erage
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	67	146	*	*	67	14
12:15	*	*	51	166	*	*	51	10
12:30	*	*	33	160	*	*	33	16
12:45	*	*	26	170	*	*	26	1
01:00	*	*	32	171	*	*	32	17
01:00	*	*	25	179	*	*	25	1
01:15	*	*	25	179	*	*	25	1.
01:30	*	*	24 28	171	*	*	24 28	17
01:45			28	156			28	1:
02:00	*	*	19 18	173	*	*	19	1
02:15			18	202			18	2
02:30	*	*	9 16	201	*	*	9 16	2
02:45	*	*	16	231	*	*	16	2
03:00	*	*	10	208	*	*	10	20
03:15	*	*	10	198	*	*	10	19
03:30	*	*	11	176	*	*	11	1
03:45	*	*	18	198	*	*	18	19
04:00	*	*	17	223	*	*	17	2
04:15	*	*	14	236	*	*	14	2
04:30	*	*	14	225	*	*	14	2
04:45	*	*	16	146	*	*	16	14
05:00	*	*	27	248	*	*	27	2
	*	*	21	240	*	*	21	
05:15	*	*	21	201	*	*	21	2
05:30	*	*	19 32	227	*	*	19 32	2
05:45			32	241			32	2
06:00	*	*	43	171	*	*	43	1
06:15	*	*	43	174	*	*	43	17
06:30	*	*	47	176	*	*	47	1
06:45	*	*	64	203	*	*	64	20
07:00	*	*	75	148	*	*	75	14
07:15	*	*	90	151	*	*	90	1
07:30	*	*	83 90	164	*	*	83	10
07:45	*	*	90	148	*	*	90	1
08:00	*	*	144	129	*	*	144	1
08:15	*	*	111	133	*	*	111	1
08:30	*	*	98	132	*	*	98	1
	*	*	107	125	*	*	107	1.
08:45	*	*	107	125	*	*	107	
09:00	*	*	113	119	*	*	113	1
09:15			108	85			108	
09:30	*	81	102	*	*	*	102	
09:45	*	107	108	*	*	*	108	1
10:00	*	89	133	*	*	*	133 126	
10:15	*	80	126	*	*	*	126	
10:30	*	94	130	*	*	*	130	
10:45	*	71	129	*	*	*	129	
11:00	*	78	152	*	*	*	152	
11:15	*	78	147	*	*	*	147	
11:30	*	82	162	*	*	*	162	
	*		142	*	*	*		
11:45		53					142	7.5
Total	0	813	3104	6711	0	0	3104	75
Combined	81	13	98	15	0		10628	3
Total								
Peak		09:45	11:00	05:00			11:00	05:
Vol.		370	603	917			603	9
P.H.F.		0.864	0.931	0.924			0.931	0.9
ADT		ADT 10,628	AADT 10,628					

Accident Summary Report (R-8)

Time Period Covered:	From 01/01/20	10 To 12/31	/2012 Pre p	pared By:	Rahul Jain	Prepared Da	ite: 9	9/16/201
Total Number of Accident:		26	Collision Ty	pe #ACC	%	Collision Type	#ACC	9
Total Number of Fatalities:		0	Right Angle:	1	3.8%	Fixed Object:	1	3.89
Total Number of Injuries:		11	Left Turn:	1	3.8%	Ran Off Road:	0	0.09
Total Number of Disabling	Injuries:	3	Right Turn:	0	0.0%	Ped. Involved:	2	7.79
Total Number of NonDisab	ling Injuries:	1	Rear End:	14	53.8%	Backing:	1	3.89
Total Number of Pedestrian	ns Involved:	2	Side Swiped	: 4	15.4%	Non Collision:	0	0.09
Total Number of Bicycles In	nvolved:	0	Head On:	0	0.0%	Under/Over Ride	: 0	0.09
Total Number of Motorcycle	es Involved:	0	Parked:	0	0.0%	Unspecified:	2	7.79
Time of Day	#ACC	%			Day o fweek	#AC	c	9
07:30 ~ 09:30:	2	7.7%			Sunday:	2		7.79
09:30 ~ 11:30:	3	11.5%			Monday:	2		7.79
11:30 ~ 13:30:	1	3.8%			Tuesday:	3		11.59
13:30 ~ 16:00:	2	7.7%			Wednesday:	5		19.29
16:00 ~18:30:	9	34.6%			Thursday:	4		15.49
18:30 ~ 07:30:	9	34.6%			Friday:	7		26.99
Unspecified:	0	0.0%			Saturday:	3		11.5%
Weather Condition	#ACC	%			Surface Condition	n #AC		9
Clear:	23	88.5%			Dry:	23		88.5%
Rain:	3	11.5%			Wet:	3		11.59
Snow:	0	0.0%			Snow/Ice:	0		0.09
Sleet/Hail:	0	0.0%			Slush:	0		0.09
Fog/Mist:	0	0.0%			Water/Sand:	0		0.09
Crosswind/Blowing Sand:	0	0.0%			Repairing:	0		0.09
Unspecified:	0	0.0%			Unspecified:	0		0.0%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	:C	9,
Passenger Car:	36	70.6%			Fatal Collision:	0		0.09
Bus:	2	3.9%			Injury Collision:	9		34.69
Truck:	8	15.7%			PDO Collision:	17		65.49
Taxi:	1	2.0%						
Minivan:	0	0.0%			Light Condition	#AC	C	9
Police/Emergency Vehicle:	0	0.0%			Daylight:	15		57.7%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	1		3.8%
Bicycle:	0	0.0%			Dark(Lighted):	10		38.59
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.09
Unspecified:	4	7.8%			Dark(Unknown Lig	hting): 0		0.0%
C	·	1.070			Unspecified:	0		0.0%
Contributing Factor	#VEH	%			Pedestrian Action	ıs #AC	c	0
Driver: Speed:	2	3.9%			In Crosswalk with S	Signal: 0		0.09
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk again	st Signal: 0		0.09
Driver: Electronic Device:	0	0.0%			In Crosswalk no Si	-		50.09
Driver: Others:	10	19.6%			In Unmarked Cross	swalk: 0		0.09
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.09
Roadway:	0	0.0%			From Between Par	ked Cars: 0		0.09
Unspecified:	39	76.5%			Unspecified:	1		50.09

¹⁷ Records are not approved as of 9/16/2013 8:52:47 AM