

Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 5900 Block New Hampshire Avenue NE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
4	406 4 4B Proposed		Proposed	5900 Block New Hampshire Avenue Northeast	
					Northeastbound



The *proposed* speed camera will be located in Ward 4 at the 5900 block of New Hampshire Avenue Northeast in the northeastbound direction. New Hampshire Avenue runs between Eastern Avenue Northeast to the northeast and Park Road Northwest to the southwest. The posted speed limit is 30 MPH.



District Department of Transportation

55 M Street, Suite 400



Field Assessment Summary

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

- This is a residential area with houses on both sides of the street.
- There are three schools in the area: LaSalle Elementary School, Ideal Academy Public Charter School, and Imagine Hope Community Charter School.
- There is sidewalk on both sides of the street and a crosswalk at Oneida Street.
- There is a traffic signal with pedestrian signals and crosswalks at Peabody Street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a bus stop southbound south of Peabody Street and another northbound south of Oneida Street.







Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	16
85th Percentile Speed (MPH)	22
10 MPH Pace Speed	14-23
ADT	9,415

The mean speed is lower than the posted speed limit by 14 MPH and the 85th percentile speed is lower than the posted speed limit by 8 MPH at this location.

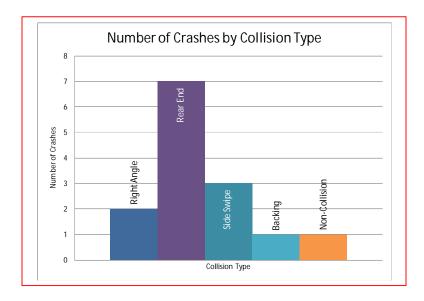
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 14 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 Rear End (7 crashes), Side Swipe (3 crashes), Right Angle (3 crashes). The other collision types had one crash or less each. Furthermore, this site experienced seven injury-related crashes.

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Se	verity		We	eather		Surface	condit	ion	Light Condition			
Total	14											
Fatal	0	0.0%	Clear	11	78.6%	Dry	11	78.6%	Day	10	71.4%	
Injury	7	50.0%	Rain	3	21.4%	Wet	3	21.4%	Night	4	28.6%	
Taxi	1	7.1%	Snow	0	0.0%	Snow/Ice	0	0.0%				
Bus	0	0.0%										



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 This site experienced seven injury-related crashes
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses on both sides of the street.
 - b. There are three schools in the area: LaSalle Elementary School, Ideal Academy Public Charter School, and Imagine Hope Community Charter School.
 - c. There are multiple bus stops in the area which generate pedestrian activity.

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, due to the number of injury-related crashes, the specific site characteristics of a residential

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neighborhood, 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

5900 block of New Hampshire 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
11/10/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	31	116	90	5	0	0	0	0	0	0	0	0	0	0	242
Total	31	116	90	5	0	0	0	0	0	0	0	0	0	0	242

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1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

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5900 block of New Hampshire 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
11/11/13	24	118	74	3	0	1	0	0	0	0	0	0	0	0	220
01:00	24	62	56	4	1	0	0	0	0	0	0	0	0	0	147
02:00	9	58	31	2	1	0	0	0	0	0	0	0	0	0	101
03:00	3	35	29	6	0	0	0	0	0	0	0	0	0	0	73
04:00	14	37	29	0	0	0	0	0	0	0	0	0	0	0	80
05:00	33	39	59	13	0	0	0	0	0	0	0	0	0	0	144
06:00	50	50	94	5	0	0	0	0	0	0	0	0	0	0	199
07:00	82	75	175	30	1	0	0	0	0	0	0	0	0	0	363
08:00	67	90	190	14	0	0	0	0	0	0	0	0	0	0	361
09:00	94	105	163	18	1	0	0	0	0	0	0	0	0	0	381
10:00	99	163	163	6	0	0	0	0	0	0	0	0	0	0	431
11:00	110	236	184	5	1	0	0	0	0	0	0	0	0	0	536
12 PM	107	206	168	4	0	0	0	0	0	0	0	0	0	0	485
13:00	79	226	203	7	0	0	0	0	0	0	0	0	0	0	515
14:00	112	247	190	9	0	0	0	0	0	0	0	0	0	0	558
15:00	160	291	210	15	0	0	0	0	0	0	0	0	0	0	676
16:00	170	333	181	8	1	0	0	0	0	0	0	0	0	0	693
17:00	152	368	193	8	0	0	0	0	0	0	0	0	0	0	721
18:00	112	311	135	4	0	0	0	0	0	0	0	0	0	0	562
19:00	96	301	158	3	0	0	0	0	0	0	0	0	0	0	558
20:00	66	269	122	14	0	1	0	0	0	0	0	0	0	0	472
21:00	86	244	94	8	0	0	0	0	0	0	0	0	0	0	432
22:00	57	215	99	7	1	0	0	0	0	0	0	0	0	0	379
23:00	7	48	27	3	1	0	0	0	0	0	0	0	0	0	86
Total	1813	4127	3027	196	8	2	0	0	0	0	0	0	0	0	9173
Grand Total	1844	4243	3117	201	8	2	0	0	0	0	0	0	0	0	9415

 15th Percentile:
 8 MPH

 50th Percentile:
 16 MPH

 85th Percentile:
 22 MPH

 95th Percentile:
 24 MPH

 Stats
 Mean Speed(Average) :
 16 MPH

 10 MPH Pace Speed :
 14-23 MPH

 Number in Pace :
 5304

 Percent in Pace :
 56.3%

 Number of Vehicles > 30 MPH :
 24

 Percent of Vehicles > 30 MPH :
 0.3%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

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5900 block of New Hampshire Ave NE NEB Volume

Start	Sun	10-Nov-13	Mon	11-Nov-13	Tue	12-Nov-13	Daily A	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	75	136	*	*	75	1
12:15	*	*	64	93	*	*	64	
12:30	*	*	46	141	*	*	46	
12:45	*	*	35	115	*	*	35	
01:00	*	*	28	114	*	*	28	
01:15	*	*	45	135	*	*	45	
01:30	*	*	39	130	*	*	39	
01:45	*	*	35	136	*	*	35	
02:00	*	*	28	136	*	*	28	
02:15	*	*	29	140	*	*	29	
02:30	*	*	22	142	*	*	22	
02:45	*	*	22	140	*	*	22	
03:00	*	*	20	176	*	*	20	
03:15	*	*	19	156	*	*	20 19	
03:30	*	*	18	161	*	*	18	
03:45	*	*	16	183	*	*	16	
04:00	*	*	19	161	*	*	19	
04:05	*	*	23	184	*	*	23	
04:13	*	*	15	161	*	*	15	
04:45	*	*	23	187	*	*	23	
	*	*	30	189	*	*	23	
05:00	*	*			*	*	30	
05:15	*	*	32	196	*	*	32	
05:30		*	42	178	*	*	42	
05:45	*		40	158			40	
06:00	*	*	37	132	*	*	37	
06:15	*		48	149		*	48	
06:30	*	*	58	135	*	*	58	
06:45	*	*	56	146	*	*	56	
07:00	*	*	85	118	*	*	85	
07:15	*	*	78	153	*	*	78	
07:30	*	*	102	147	*	*	102	
07:45	*	*	98	140	*	*	98	
08:00	*	*	102	135	*	*	102	
08:15	*	*	65	121	*	*	65	
08:30	*	*	99	126	*	*	99	
08:45	*	*	95	90	*	*	95	
09:00	*	*	101	114	*	*	101	
09:15	*	*	97	107	*	*	97	
09:30	*	*	98	126	*	*	98	
09:45	*	*	85	85	*	*	85	
10:00	*	*	109	91	*	*	109	
10:15	*	*	112	121	*	*	112	
10:30	*	*	102	88	*	*	102	
10:45	*	*	108	79	*	*	108	
11:00	*	*	105	86	*	*	105	
11:15	*	80	130	*	*	*	130	
11:30	*	86	160	*	*	*	160	
11:45	*	76	141	*	*	*	141	
Total	0	242	3036	6137	0	0	3036	6
Combined						U		
Total	24	12	91		0		9415	
Peak			11:00	04:45			11:00	04
Vol.			536	750			536	
P.H.F.			0.838	0.957			0.838	0.9

Accident Summary Report (R-8)

Time Period Covered: From	om 01/01/20 ⁻	10 To 12/31	2012 Prepare	ed By:	Rahul Jain	Prepared Da	ite: 9	9/17/2013
Total Number of Accident:		14	Collision Type	#ACC	% (Collision Type	#ACC	; 9
Total Number of Fatalities:		0	Right Angle:	2	14.3%	Fixed Object:	0	0.0%
Total Number of Injuries:		9	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Inj	uries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisablin	g Injuries:	2	Rear End:	7	50.0% I	Backing:	1	7.1%
Total Number of Pedestrians	Involved:	0	Side Swiped:	3	21.4%	Non Collision:	1	7.1%
Total Number of Bicycles Inve	olved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles	Involved:	0	Parked:	0	0.0% ل	Jnspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	:C	%
07:30 ~ 09:30:	3	21.4%			Sunday:	3		21.4%
09:30 ~ 11:30:	0	0.0%			Monday:	2		14.3%
11:30 ~ 13:30:	1	7.1%			Tuesday:	3		21.4%
13:30 ~ 16:00:	4	28.6%			Wednesday:	2		14.3%
16:00 ~18:30:	1	7.1%			Thursday:	2		14.3%
18:30 ~ 07:30:	5	35.7%			Friday:	1		7.1%
Unspecified:	0	0.0%			Saturday:	1		7.1%
Weather Condition	#ACC	%			Surface Condition	#AC	:C	%
Clear:	11	78.6%			Dry:	11		78.6%
Rain:	3	21.4%			Wet:	3		21.4%
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 #AC	:C	%
Passenger Car:	26	83.9%			Fatal Collision:	0	-	0.0%
Bus:	0	0.0%			Injury Collision:	7		50.0%
Truck:	3	9.7%			PDO Collision:	7		50.0%
Taxi:	1	3.2%			1 DO COMOION.			
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle:	0	0.0%			Daylight:	10		71.4%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	4		28.6%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	1	3.2%			Dark(Unknown Ligh	ting): 0		0.0%
опореонной.		0.270			Unspecified:	0		0.0%
Contributing Factor	#VEH	%			Pedestrian Actions	s #AC	c	%
Driver: Speed:	0	0.0%			In Crosswalk with S	ignal: 0		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk agains	st Signal: 0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	-		0.0%
Driver: Others:	7	22.6%			In Unmarked Cross			0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Park	ed Cars: 0		0.0%
Unspecified:	24	77.4%			Unspecified:	0		0.0%

¹⁰ Records are not approved as of 9/17/2013 9:49:15 AM