



District Department of Transportation

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

4400 Block New Hampshire Avenue NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
4	407	4	4C	Proposed	4400 Block New Hampshire Ave, NW



The *proposed* speed camera will be located in Ward 4 at the 4400 block of New Hampshire Avenue Northwest. New Hampshire Avenue runs from Eastern Avenue Northeast in the northeast to Park Road Northwest in the southwest. The posted speed limit is 30 MPH.

W4 - 293





District Department of Transportation

4400 Block New Hampshire Avenue NW

Field Assessment Summary

New Hampshire Avenue is assumed to run in a northeast-southwest direction and is classified as a minor arterial. New Hampshire Avenue has one travel lane in each direction. This site has the following characteristics:

- This site is located in a residential area with houses on both sides of the roadway.
- The roadway pavement is in good condition and has curb and gutter pan drainage features on both sides.
- There are sidewalks and on-street parking on both sides of the street.
- There are several bus stops nearby that generate pedestrian activity, including one on the south end of the block.
- There are four schools in the area: E.L. Haynes Public Charter School, Center City Public Charter School, 2 New Heights and the Christian Family Montessori School.



Looking Northbound

W4 - 294



District Department of Transportation

4400 Block New Hampshire Avenue NW



Looking Southbound

Speed Data Analysis

	Northeast-Bound	Southwest-Bound
Posted Speed Limit (MPH)	30	30
Mean Speed (MPH)	16	13
85th Percentile Speed (MPH)	21	20
10 MPH Pace Speed	12-21	6-15
Sample Size	5,110	5,305
ADT	10,415	

The mean speeds and the 85th percentile speeds are both lower than the posted speed in both directions 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 13 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 crashes at this location were Rear End (7) and Right Angle (3). Furthermore, this site experienced six injury-related crashes.

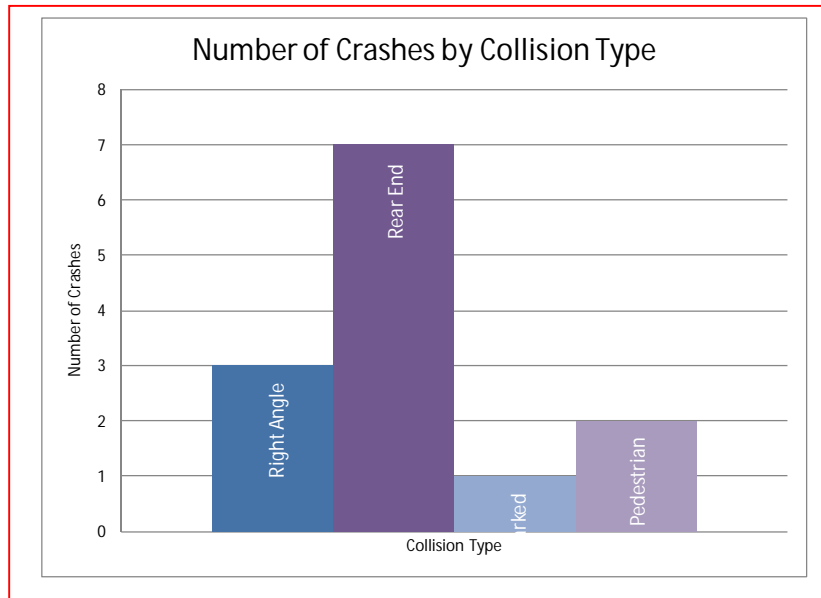
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District Department of Transportation

4400 Block New Hampshire Avenue NW

Severity			Weather			Surface condition			Light Condition		
Total	13										
Fatal	0	0.0%	Clear	12	92.3%	Dry	12	92.3%	Day	9	69.2%
Injury	6	46.2%	Rain	1	7.7%	Wet	1	7.7%	Night	4	30.8%
Truck	2	15.4%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Taxi	1	7.7%									



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 the posted speed limit.
2. Crash Data – This site experienced six injury-related crashes.
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 several bus stops nearby that generate pedestrian activity, including one on the south end of the block.
 - c. There are four schools in the area: E.L. Haynes Public Charter School, Center City Public Charter School, 2 New Heights and the Christian Family Montessori School.



District Department of Transportation

4400 Block New Hampshire Avenue NW

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 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.

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SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4400 block of New Hampshire Ave NW Speed

NEB

Start Time	1 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
11/10/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	17	96	56	3	0	0	0	0	0	0	0	0	0	0	172
Total	17	96	56	3	0	0	0	0	0	0	0	0	0	0	172

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

4400 block of New Hampshire Ave NW Speed

NEB																
Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total
	15	20	25	30	35	40	45	50	55	60	65	70	75			
11/11/13	6	57	52	1	0	0	0	0	0	0	0	0	0	0	0	116
01:00	7	34	31	2	1	0	0	0	0	0	0	0	0	0	0	75
02:00	5	25	33	3	0	0	0	0	0	0	0	0	0	0	0	66
03:00	5	26	15	1	0	0	0	0	0	0	0	0	0	0	0	47
04:00	2	19	20	0	1	0	0	0	0	0	0	0	0	0	0	42
05:00	15	37	19	0	0	0	0	0	0	0	0	0	0	0	0	71
06:00	34	37	18	7	0	0	0	0	0	0	0	0	0	0	0	96
07:00	41	64	37	9	0	0	0	0	0	0	0	0	0	0	0	151
08:00	34	62	32	5	0	0	0	0	0	0	0	0	0	0	0	133
09:00	36	84	34	11	1	0	0	0	0	0	0	0	0	0	0	166
10:00	32	110	27	2	0	0	0	0	0	0	0	0	0	0	0	171
11:00	74	164	16	2	0	0	0	0	0	0	0	0	0	0	0	256
12 PM	47	163	33	1	0	0	0	0	0	0	0	0	0	0	0	244
13:00	59	148	20	1	0	0	0	0	0	0	0	0	0	0	0	228
14:00	54	191	91	7	0	1	0	0	0	0	0	0	0	0	0	344
15:00	178	119	94	33	4	1	0	0	0	0	0	0	0	0	0	429
16:00	188	123	107	34	4	0	0	0	0	0	0	0	0	0	0	456
17:00	70	230	118	10	0	0	0	0	0	0	0	0	0	0	0	428
18:00	37	258	114	5	0	0	0	0	0	0	0	0	0	0	0	414
19:00	49	174	102	9	1	0	0	0	0	0	0	0	0	0	0	335
20:00	34	154	59	1	0	0	0	0	0	0	0	0	0	0	0	248
21:00	29	126	55	5	0	0	0	0	0	0	0	0	0	0	0	215
22:00	20	128	57	2	0	0	0	0	0	0	0	0	0	0	0	207
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1056	2533	1184	151	12	2	0	0	0	0	0	0	0	0	0	4938
Grand Total	1073	2629	1240	154	12	2	0	0	0	0	0	0	0	0	0	5110

15th Percentile : 8 MPH
 50th Percentile : 15 MPH
 85th Percentile : 21 MPH
 95th Percentile : 24 MPH

Stats
 Mean Speed(Average) : 16 MPH
 10 MPH Pace Speed : 12-21 MPH
 Number in Pace : 2997
 Percent in Pace : 58.6%
 Number of Vehicles > 30 MPH : 22
 Percent of Vehicles > 30 MPH : 0.4%

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Start Time	1 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
11/10/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	45	31	21	5	0	0	0	0	0	0	0	0	0	0	102
Total	45	31	21	5	0	0	0	0	0	0	0	0	0	0	102

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Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	15	20	25	30	35	40	45	50	55	60	65	70	75	999	
11/11/13	40	26	18	3	1	0	0	0	0	0	0	0	0	0	88
01:00	17	12	6	2	1	0	0	0	0	0	0	0	0	0	38
02:00	10	11	15	4	0	0	0	0	0	0	0	0	0	0	40
03:00	17	10	3	5	0	0	0	0	0	0	0	0	0	0	35
04:00	40	21	24	5	1	0	0	0	0	0	0	0	0	0	91
05:00	138	79	51	6	0	0	0	0	0	0	0	0	0	0	274
06:00	136	107	93	7	1	0	0	0	0	0	0	0	0	0	344
07:00	195	144	86	2	0	0	0	0	0	0	0	0	0	0	427
08:00	172	94	52	9	0	0	0	0	0	0	0	0	0	0	327
09:00	145	96	101	6	1	0	0	0	0	0	0	0	0	0	349
10:00	153	54	72	18	0	0	0	0	0	0	0	0	0	0	297
11:00	159	56	68	3	0	0	0	0	0	0	0	0	0	0	286
12 PM	141	43	60	16	0	0	0	0	0	0	0	0	0	0	260
13:00	173	72	57	11	1	0	0	0	0	0	0	0	0	0	314
14:00	155	62	82	8	1	0	0	0	0	0	0	0	0	0	308
15:00	29	5	9	0	0	0	0	0	0	0	0	0	0	0	43
16:00	47	12	28	1	1	1	0	0	0	0	0	0	0	0	90
17:00	168	103	86	5	0	0	0	0	0	0	0	0	0	0	362
18:00	173	97	93	2	0	0	0	0	0	0	0	0	0	0	365
19:00	129	80	85	6	0	0	0	0	0	0	0	0	0	0	300
20:00	130	64	34	6	0	0	0	0	0	0	0	0	0	0	234
21:00	82	48	32	1	0	0	0	0	0	0	0	0	0	0	163
22:00	82	44	35	7	0	0	0	0	0	0	0	0	0	0	168
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2531	1340	1190	133	8	1	0	0	0	0	0	0	0	0	5203
Grand Total	2576	1371	1211	138	8	1	0	0	0	0	0	0	0	0	5305

15th Percentile : 5 MPH
 50th Percentile : 11 MPH
 85th Percentile : 20 MPH
 95th Percentile : 24 MPH

Stats
 Mean Speed(Average) : 13 MPH
 10 MPH Pace Speed : 6-15 MPH
 Number in Pace : 2823
 Percent in Pace : 53.2%
 Number of Vehicles > 30 MPH : 16
 Percent of Vehicles > 30 MPH : 0.3%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

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4400 block of New Hampshire Ave NW Volume

Start Time	10-Nov-13 Sun			NEB			SWB			Combined			11-Nov-Mon			NEB			SWB			Combined		
	A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		A.M.	P.M.		A.M.	P.M.	
12:00	*	*		*	*		*	*		*	*		43	71		22	59		65	130				
12:15	*	*		*	*		*	*		*	*		27	63		18	60		45	123				
12:30	*	*		*	*		*	*		*	*		19	58		34	72		53	130				
12:45	*	*		*	*		*	*		*	*		27	52		14	69		41	121				
01:00	*	*		*	*		*	*		*	*		23	53		11	65		34	118				
01:15	*	*		*	*		*	*		*	*		15	65		7	81		22	146				
01:30	*	*		*	*		*	*		*	*		18	51		11	83		29	134				
01:45	*	*		*	*		*	*		*	*		19	59		9	85		28	144				
02:00	*	*		*	*		*	*		*	*		11	81		12	71		23	152				
02:15	*	*		*	*		*	*		*	*		21	75		8	77		29	152				
02:30	*	*		*	*		*	*		*	*		15	99		14	87		29	186				
02:45	*	*		*	*		*	*		*	*		19	89		6	73		25	162				
03:00	*	*		*	*		*	*		*	*		10	112		8	25		18	137				
03:15	*	*		*	*		*	*		*	*		5	109		7	7		12	116				
03:30	*	*		*	*		*	*		*	*		18	104		14	3		32	107				
03:45	*	*		*	*		*	*		*	*		14	104		6	8		20	112				
04:00	*	*		*	*		*	*		*	*		14	135		21	6		35	141				
04:15	*	*		*	*		*	*		*	*		6	100		14	10		20	110				
04:30	*	*		*	*		*	*		*	*		9	119		29	7		38	126				
04:45	*	*		*	*		*	*		*	*		13	102		27	67		40	169				
05:00	*	*		*	*		*	*		*	*		16	108		58	92		74	200				
05:15	*	*		*	*		*	*		*	*		16	121		70	82		86	203				
05:30	*	*		*	*		*	*		*	*		20	99		76	86		96	185				
05:45	*	*		*	*		*	*		*	*		19	100		70	102		89	202				
06:00	*	*		*	*		*	*		*	*		22	110		74	85		96	195				
06:15	*	*		*	*		*	*		*	*		28	129		84	87		112	216				
06:30	*	*		*	*		*	*		*	*		17	94		98	102		115	196				
06:45	*	*		*	*		*	*		*	*		29	81		88	91		117	172				
07:00	*	*		*	*		*	*		*	*		36	92		92	82		128	174				
07:15	*	*		*	*		*	*		*	*		37	77		120	75		157	152				
07:30	*	*		*	*		*	*		*	*		29	80		108	72		137	152				
07:45	*	*		*	*		*	*		*	*		49	86		107	71		156	157				
08:00	*	*		*	*		*	*		*	*		34	65		94	61		128	126				
08:15	*	*		*	*		*	*		*	*		31	64		84	66		115	130				
08:30	*	*		*	*		*	*		*	*		29	66		65	53		94	119				
08:45	*	*		*	*		*	*		*	*		39	53		84	54		123	107				
09:00	*	*		*	*		*	*		*	*		34	62		108	36		142	98				
09:15	*	*		*	*		*	*		*	*		40	49		95	48		135	97				
09:30	*	*		*	*		*	*		*	*		40	51		81	37		121	88				
09:45	*	*		*	*		*	*		*	*		52	53		65	42		117	95				
10:00	*	*		*	*		*	*		*	*		42	47		70	50		112	97				
10:15	*	*		*	*		*	*		*	*		48	42		84	40		132	82				
10:30	*	*		*	*		*	*		*	*		38	48		69	42		107	90				
10:45	*	*		*	*		*	*		*	*		43	70		74	36		117	106				
11:00	*	38		*	20		*	58		58	*		84	*				142	*					
11:15	*	48		*	31		*	79		72	*		67	*				139	*					
11:30	*	48		*	25		*	73		70	*		73	*				143	*					
11:45	*	38		*	26		*	64		56	*		62	*				118	*					
Total		0	172		0	102		0	274		1390	3548		2596	2607		3986	6155						
Day Total			172			102			274			4938			5203			10141						
% Total		0.0%	62.8%		0.0%	37.2%					13.7%	35.0%	25.6%		25.7%									
Peak Vol.			11:00		11:00		11:00		11:00		11:00	03:45	07:15	05:45	07:00		05:45							
P.H.F.			0.896		0.823		0.867		0.889		0.848	0.894	0.922	0.920		0.936								

ADT ADT 10,415 AADT 10,415

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: NEW HAMPSHIRE AVE,NW,NE From ALLISON ST,NW TO WEBSTER ST,NW

Time Period Covered: From 01/01/2010 To 12/31/2012

Prepared By: Rahul Jain

Prepared Date: 9/16/2013

Total Number of Accident:	13	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	3	23.1%	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 Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	2	15.4%
Total Number of NonDisabling Injuries:	3	Rear End:	7	53.8%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	2	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	1	7.7%	Unspecified:	0	0.0%
Time of Day				#ACC	%	Day o fweek	
07:30 ~ 09:30:				1	7.7%	Sunday:	
09:30 ~ 11:30:				0	0.0%	Monday:	
11:30 ~ 13:30:				2	15.4%	Tuesday:	
13:30 ~ 16:00:				3	23.1%	Wednesday:	
16:00 ~18:30:				4	30.8%	Thursday:	
18:30 ~ 07:30:				3	23.1%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				12	92.3%	Dry:	
Rain:				1	7.7%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				0	0.0%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				0	0.0%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				24	80.0%	Fatal Collision:	
Bus:				0	0.0%	Injury Collision:	
Truck:				2	6.7%	PDO Collision:	
Taxi:				1	3.3%	Light Condition	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				0	0.0%	Dawn/Dusk:	
Motorcycle/Moped:				0	0.0%	Dark(Lighted):	
Bicycle:				0	0.0%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				3	10.0%	Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				1	3.3%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				0	0.0%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				4	13.3%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				25	83.3%	Unspecified:	