



## Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 2600-2800 Block 10th Street NE

Study	Area a	and Loo	ation		
District	PSA	Ward	ANC	Phase	Description
5	504	5	5B	Proposed	2600-2800 Block 10 <sup>th</sup> Street Northeast
					Site 227

This *proposed* speed camera will be located in Ward 5 between blocks 2600 and 2800 of 10<sup>th</sup> Street Northeast. 10<sup>th</sup> Street Northeast runs from Gallatin Street Northeast to the north and to the East Capitol Street to the south where it becomes 10<sup>th</sup> Street Southeast. The posted speed limit is 25 MPH.



55 M Street, SE, Suite 400

Washington, DC 20003



District Department of Transportation 2600-2800 Block 10th Street NE

## Field Assessment Summary

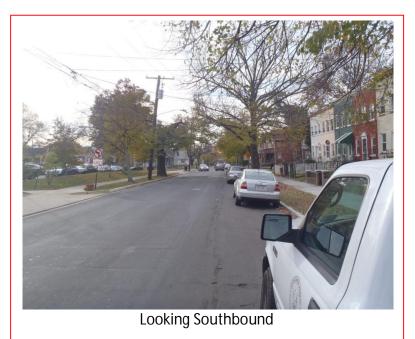
10<sup>th</sup> Street Northeast is assumed to run in the north-south direction, and is classified as a local street. 10<sup>th</sup> Street is bi-directional with no centerline marking. This site has the following characteristics:

- The site is in a residential area with single family homes on both sides of the street.
- There are sidewalks with curb and gutter on both sides of the street.
- There are five schools in this area: Noyes Elementary School, High Road Upped School of Washington, DC Prep Academy, DC Prep Edgewood Middle Campus, and Imagine Hope Community Charter School.
- There is one other pedestrian generator in the area: Noyes Recreation Center.
- There is on-street parking on the west side of the street.
- The existing pavement is in good condition.
- There are two speed humps and a mid-block hatched crosswalk for school crossing.
- There are bus stops on the south end of the block as well as in the surrounding area. There is also a Metrorail station in the area.









## Speed Data Analysis

	Northbound	Southbound
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	15	11
85th Percentile Speed (MPH)	20	16
10 MPH Pace Speed	11-20	5-14
Sample Size	1,378	1,423
ADT	2,8	301

The mean speeds and 85<sup>th</sup> percentile speeds in both directions are lower than the posted speed limit. The 85<sup>th</sup> percentile speed is 5 MPH lower than the speed limit in the northbound direction, and 9 MPH lower in the southbound direction.

# Crash Data Analysis

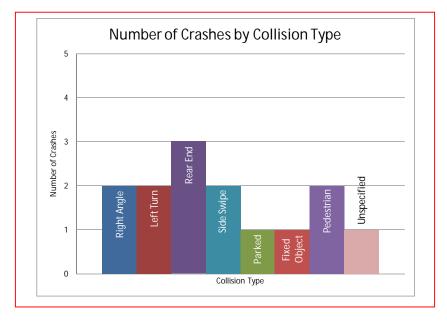
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 14 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart below. The most common type of collision at this location was Rear End with three crashes.



District Department of Transportation 2600-2800 Block 10th Street NE

Side Swiped, Right Angle, Left Turn, and Pedestrian Involved had two crashes each. This site experienced a high frequency (6 crashes) of injury-related crashes.

Seve	erity		We	eather		Surface	conditi	ion	Light C	onditio	on
Total	14										
Fatal	0	0.0%	Clear	12	85.7%	Dry	12	85.7%	Day	8	57.1%
Injury	6	42.9%	Rain	0	0.0%	Wet	0	0.0%	Night	1	7.1%
Police/EMS	2	14.3%	Snow	0	0.0%	Repairing	0	0.0%			
Truck	1	7.1%									



### 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 six injury-related crashes.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
  - a. This site is in a residential area with single family homes along both sides of the street.
  - b. There are five schools in this area: Noyes Elementary School, High Road Upped School of Washington, DC Prep Academy, DC Prep Edgewood Middle Campus, and Imagine Hope Community Charter School.

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- c. There is one other pedestrian generator in the area: Noyes Recreation Center.
- d. There are multiple bus stops and one Metrorail station in the area which generate pedestrian activity.
- e. There is on-street parking on the west side 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 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.

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## SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

#### www.sammateng.com

#### 2600-2800 blocks of 10th St NE Speed

<u>NB</u> 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
11/15/13	4	3	1	0	0	0	0	0	0	0	0	0	0	0000	8
01:00	1	4	1	0	0	Ő	0	0	0	0	Ő	0	Ő	0	6
02:00	0	1	0	0	0 0	0	0	0	0	0	0	0	0	0	1
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
04:00	1	1	0	0	0	0	Ō	Ō	0	0	0	0	0	0	2
05:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7
06:00	7	8	8	0	0	0	0	0	0	0	0	0	0	0	23
07:00	16	22	6	1	0	0	0	0	0	0	0	0	0	0	45
08:00	19	44	10	1	0	0	Ō	Ō	0	0	0	0	0	0	74
09:00	17	44	17	3	0	0	0	0	0	0	0	0	0	0	81
10:00	17	29	9	0	0	0	Ō	Ō	0	0	0	0	0	0	55
11:00	15	43	12	2	0	0	0	0	0	0	0	0	0	0	72
12 PM	21	41	16	1	0	0	0	0	0	0	0	0	0	0	79
13:00	28	42	14	2	0	0	0	0	0	0	0	0	0	0	86
14:00	23	47	25	1	0	0	0	Ō	0	0	0	0	0	0	96
15:00	34	65	22	1	0	0	0	0	0	0	0	0	0	0	122
16:00	37	78	21	1	0	0	0	0	0	0	0	0	0	0	137
17:00	34	88	29	2	0	0	0	0	0	0	0	0	0	0	153
18:00	32	67	31	3	0	0	0	0	0	0	0	0	0	0	133
19:00	19	51	11	0	0	0	0	0	0	0	0	0	0	0	81
20:00	4	19	16	1	0	0	0	0	0	0	0	0	0	0	40
21:00	7	21	4	0	0	0	0	0	0	0	0	0	0	0	32
22:00	4	16	4	0	0	0	0	0	0	0	0	0	0	0	24
23:00	1	14	3	0	0	0	0	0	0	0	0	0	0	0	18
Total	345	754	260	19	0	0	0	0	0	0	0	0	0	0	1378
Grand Total	345	754	260	19	0	0	0	0	0	0	0	0	0	0	1378
Stats		10 Number of	50th P 85th P 95th P ean Speed(/ 0 MPH Pac Number	e Speed : r in Pace : t in Pace : 25 MPH :		7 MPH 14 MPH 20 MPH 23 MPH 15 MPH 15 MPH 828 60.1% 33 2.4%									

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#### 2600-2800 blocks of 10th St NE 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
11/15/13	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
01:00	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
02:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
04:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7
05:00	7	4	1	0	0	0	0	0	0	0	0	0	0	0	12
06:00	20	12	3	0	0	0	0	0	0	0	0	0	0	0	35
07:00	94	24	7	1	0	0	0	0	0	0	0	0	0	0	126
08:00	127	44	10	0	0	0	0	0	0	0	0	0	0	0	181
09:00	55	27	10	2	0	0	0	0	0	0	0	0	0	0	94
10:00	53	23	1	1	0	0	0	0	0	0	0	0	0	0	78
11:00	40	28	5	0	0	0	0	0	0	0	0	0	0	0	73
12 PM	51	18	3	0	0	0	0	0	0	0	0	0	0	0	72
13:00	74	26	7	1	0	0	0	0	0	0	0	0	0	0	108
14:00	66	25	2	0	0	0	0	0	0	0	0	0	0	0	93
15:00	70	24	3	0	0	0	0	0	0	0	0	0	0	0	97
16:00	66	21	5	0	0	0	0	0	0	0	0	0	0	0	92
17:00	67	22	6	0	0	0	0	0	0	0	0	0	0	0	95
18:00	50	21	5	0	0	0	0	0	0	0	0	0	0	0	76
19:00	33	15	3	1	0	0	0	0	0	0	0	0	0	0	52
20:00	20	17	2	0	0	0	0	0	0	0	0	0	0	0	39
21:00	17	6	2	1	0	0	0	0	0	0	0	0	0	0	26
22:00	15	11	1	0	0	0	0	0	0	0	0	0	0	0	27
23:00	14	6	2	0	0	0	0	0	0	0	0	0	0	0	22
Total	953	385	78	7	0	0	0	0	0	0	0	0	0	0	1423
Grand	953	385	78	7	0	0	0	0	0	0	0	0	0	0	1423
Total	900	300	70	1	0	0	0	0	0	0	0	0	0	0	1425
			50th P 85th P	ercentile : ercentile : ercentile : ercentile :		4 MPH 9 MPH 16 MPH 20 MPH									
Stats		10 Number of	Percent	e Speed : r in Pace : t in Pace : 25 MPH :		11 MPH 14 MPH 912 64.1% 9 0.7%									

## SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

#### www.sammateng.com

#### 2600-2800 blocks of 10th St NE Volume

Time 12:00 12:15 12:30 12:45 01:00	15-Nov-13 Fri A.M. 0 3	NB P.M. 32	A.M.	SB P.M.	A.M.	nbined	16-Nov-		NB P.M.		SB	Com	
12:00 12:15 12:30 12:45 01:00	0				A.IVI.	P.M.	Sat	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:15 12:30 12:45 01:00		JZ	1	13	1	45		*	*	*	*	*	*
12:45 01:00		16	1	23	4	39		*	*	*	*	*	*
12:45 01:00	3	11	1	18	4	29		*	*	*	*	*	*
01:00	2	20	1	18	3	38		*	*	*	*	*	*
	2	17	3	30	5	47		*	*	*	*	*	*
01:15	1	25	2	28	3	53		*	*	*	*	*	*
01:30	1	24	2	21	3	45		*	*	*	*	*	*
01:45	2	20	1	29	3	49		*	*	*	*	*	*
02:00	0	22	1	26	1	48		*	*	*	*	*	*
02:15	1	23	2	18	3	41		*	*	*	*	*	*
02:30	0	23	0	19	0	42		*	*	*	*	*	*
02:45	0	28	0	30	0	58		*	*	*	*	*	*
03:00	1	26	0	23	1	49		*	*	*	*	*	*
03:15	0	35	1	25	1	60		*	*	*	*	*	*
03:30	0	32	0	26	0	58		*	*	*	*	*	*
03:45	2	29	2	23	4	52		*	*	*	*	*	*
04:00	0	32	1	25	1	57		*	*	*	*	*	*
04:15	0	43	2	28	2	71		*	*	*	*	*	*
04:30	1	30	1	22	2	52		*	*	*	*	*	*
04:45	1	32	3	17	4	49		*	*	*	*	*	*
05:00	2	39	3	20	5	59		*	*	*	*	*	*
05:15	3	36	4	27	7	63		*	*	*	*	*	*
05:30	2	41	1	24	3	65		*	*	*	*	*	*
05:45	0	37	4	24	4	61		*	*	*	*	*	*
06:00	4	27	2	16	6	43		*	*	*	*	*	*
06:15	9	30	8	19	17	49		*	*	*	*	*	*
06:30	3	47	11	21	14	68		*	*	*	*	*	*
06:45	7	29	14	20	21	49		*	*	*	*	*	*
07:00	5	24	16	12	21	36		*	*	*	*	*	*
07:15	13	22	23	14	36	36		*	*	*	*	*	*
07:30	13	15	37	13	50	28		*	*	*	*	*	*
07:45	14	20	50	13	64	33		*	*	*	*	*	*
08:00	13	6	64	13	77	19		*	*	*	*	*	*
08:15	24	15	50	9	74	24		*	*	*	*	*	*
08:30	21	12	35	8	56	20		*	*	*	*	*	*
08:45	16	7	32	9	48	16		*	*	*	*	*	*
09:00	25	10	31	5	56	15		*	*	*	*	*	*
09:15	20	9	25	8	45	17		*	*	*	*	*	*
09:30	20	5	20	8	40	13		*	*	*	*	*	*
09:45	16	8	18	5	34	13		*	*	*	*	*	*
10:00	11	7	18	5	29	12		*	*	*	*	*	*
10:15	6	6	20	4	26	10		*	*	*	*	*	*
10:30	22	5	23	10	45	15		*	*	*	*	*	*
10:45	16	6	17	8	33	14		*	*	*	*	*	*
11:00	19	10	23	6	42	16		*	*	*	*	*	*
11:15	16	2	13	6	29	8		*	*	*	*	*	*
11:30	14	5	14	5	28	10		*	*	*	*	*	*
11:45	23	1	23	5	46	6		*	*	*	*	*	*
Total	377	1001	624	799	1001	1800		0	0	0	0	0	0
Day Total		378		23	28	01		Č		0		0	5
% Total	13.5%	35.7%	22.3%	28.5%				0.0%	0.0%	0.0%	0.0%	Ū	
Peak	08:15	05:00	07:30	01:00	07:45	05:00							
Vol.	86	153	201	108	271	248							
P.H.F.	0.860	0.933	0.785	0.900	0.880	0.873							

ADT ADT 2,801 AADT 2,801

#### DC Department of Transportation - Traffic Accident Reporting and Analysis System

# Accident Summary Report (R-8)

	From 01/01/20		NE TO DOUGLA		Rahul Jain	Prepared Dat	e: 9/16/2013
Total Number of Accident:		14	Collision Type			•	#ACC %
Total Number of Fatalities		0	Right Angle:	2			1 7.1%
Total Number of Injuries:	-	9	Left Turn:	2		,	0 0.0%
Total Number of Disabling	Injuries.	0	Right Turn:	0			2 14.3%
Total Number of NonDisat		3	Rear End:	3			0 0.0%
Total Number of Pedestria	0,	2	Side Swiped:	2		0	0 0.0%
Total Number of Bicycles		0	Head On:	0		Under/Over Ride:	
Total Number of Motorcyc		0	Parked:	1			1 7.1%
Time of Day	#ACC	%			Day o fweek	#AC	C %
07:30 ~ 09:30:	3	21.4%			Sunday:	1	7.1%
09:30 ~ 11:30:	2	14.3%			Monday:	2	14.3%
11:30 ~ 13:30:	2	14.3%			Tuesday:	2	14.3%
13:30 ~ 16:00:	2	14.3%			Wednesday:	2	14.3%
16:00 ~18:30:	2	14.3%			Thursday:	0	0.0%
18:30 ~ 07:30:	3	21.4%			Friday:	5	35.7%
Unspecified:	0	0.0%			Saturday:	2	14.3%
Weather Condition	#ACC	%			Surface Condition	#AC	C %
Clear:	12	85.7%			Dry:	12	85.7%
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:	2	14.3%			Unspecified:	2	14.3%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	C %
Passenger Car:	21	75.0%			Fatal Collision:	0	0.0%
Bus:	0	0.0%			Injury Collision:	6	42.9%
Truck:	1	3.6%			PDO Collision:	8	57.1%
Taxi:	0	0.0%					
Minivan:	0	0.0%			Light Condition	#ACO	
Police/Emergency Vehicle	: 2	7.1%			Daylight:	8	57.1%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	2	14.3%
Bicycle:	0	0.0%			Dark(Lighted):	1	7.1%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0	0.0%
Unspecified:	4	14.3%			Dark(Unknown Ligh	•	0.0%
					Unspecified:	3	21.4%
Contributing Factor	#VEH	%			Pedestrian Action		
Driver: Speed:	0	0.0%			In Crosswalk with S	-	100.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk again	-	0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	•	0.0%
Driver: Others:	6	21.4%			In Unmarked Cross	walk: 0	0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0	0.0%
Roadway:	0	0.0%			From Between Park	ked Cars: 0	0.0%
Unspecified:	22	78.6%			Unspecified:	0	0.0%

8 Records are not approved as of 9/16/2013 9:49:04 AM