



## Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 1400 Block New Jersey Avenue NW

## Study Area and Location

District	PSA	Ward	ANC	Phase	Description				
5	501	5	5C	Proposed	1400 Block New Jersey Avenue Northwest				
				Northbound					



This *proposed* speed camera will be located in Ward 5 on the 1400 block of New Jersey Avenue Northwest in the northbound direction. New Jersey Avenue runs between Florida Avenue in the north and Tingey Street in the south. The posted speed limit is 25 MPH.





#### Field Assessment Summary

New Jersey Avenue is assumed to run in the North-South direction and is classified as a minor arterial. New Jersey Avenue has two travel lanes in each direction. The site has the following characteristics:

- This site is located in a residential area with houses and driveways on both sides of the street.
- There is on-street parking and brick sidewalk with curb, gutter, and drainage inlets on both sides of the street.
- The existing pavement is in good condition.
- There is a traffic signal and crosswalks with pedestrian signals at the intersection with P Street Northwest. There are crosswalks with no signals at the intersection of O Street Northwest.
- There are three schools in the area: Kipp DC: Will Academy, Paul Laurence Dunbar Senior High School, and Margaret Murray Washington Vocational High School.
- Bundy Park and New York Avenue Playground are also in the area.







### Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	13
85th Percentile Speed (MPH)	18
10 MPH Pace Speed (MPH)	10-19
ADT	6,434

Both the mean speed and the 85<sup>th</sup> percentile speed are lower than the posted speed limit at this location. The 85<sup>th</sup> percentile speed is 7 MPH lower than the posted speed limit.

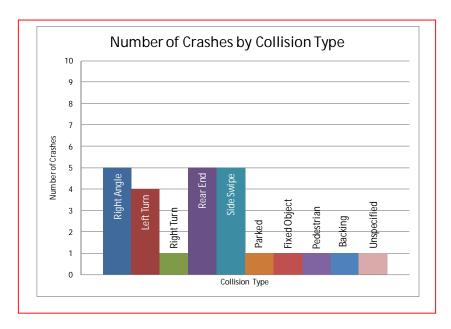
# Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 25 crashes at this location. A breakdown of collision type can be found in the chart on the next page. The most common types of collision at this location were Right Angle (5 crashes), Rear End (5 crashes), and Side Swiped (5 crashes). Furthermore, this location experienced a high frequency (13 crashes) of injury-related crashes.

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	Severity			Weather		Surfa	ce cond	ition	Light Condition			
Total	25											
Fatal	0	0.0%	Clear	23	92.0%	Dry	22	88.0%	Day	17	68.0%	
Injury	13	52.0%	Rain	1	4.0%	Wet	2	8.0%	Night	8	32.0%	
Bicycle	3	12.0%	Snow	1	4.0%	Snow/Ice	0	0.0%				
Motorcycle	2	8.0%										



## Safety Nexus

This site presents the following safety considerations which may support the 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 location experienced a high frequency (13 crashes) of injury-related crashes.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
  - a. Located in a residential area with houses and driveways on both sides of the street.
  - b. There are three schools in the area: Kipp DC: Will Academy, Paul Laurence Dunbar Senior High School, and Margaret Murray Washington Vocational High School.
  - c. Bundy Park and New York Avenue Playground are in the area which generates pedestrian and bicycle activity.
  - d. There are several bus stops in the area which generate pedestrian activity.
  - e. There is on-street parking on both sides of the street.

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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

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#### 1400 block of New Jersey Ave NW NB Speed

NB															
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	13	41	6	1	0	0	0	0	0	0	0	0	0	0	61
02:00	4	22	9	0	0	0	0	0	0	0	0	0	0	0	35
03:00	5	21	11	0	0	0	0	0	0	0	0	0	0	0	37
04:00	16	41	25	1	0	0	0	0	0	0	0	0	0	0	83
05:00	17	93	36	3	0	0	0	0	0	0	0	0	0	0	149
06:00	56	170	30	3	0	0	0	0	0	0	0	0	0	0	259
07:00	127	196	45	1	0	0	0	0	0	0	0	0	0	0	369
08:00	83	220	55	0	0	0	0	0	0	0	0	0	0	0	358
09:00	61	206	40	0	0	0	0	0	0	0	0	0	0	0	307
10:00	68	178	43	0	0	0	0	0	0	0	0	0	0	0	289
11:00	73	194	38	1	0	0	0	0	0	0	0	0	0	0	306
12 PM	118	199	31	0	0	0	0	0	0	0	0	0	0	0	348
13:00	144	154	23	1	0	0	0	0	0	0	0	0	0	0	322
14:00	147	201	18	0	0	0	0	0	0	0	0	0	0	0	366
15:00	184	138	19	0	0	0	0	0	0	0	0	0	0	0	341
16:00	181	202	25	0	0	0	0	0	0	0	0	0	0	0	408
17:00	176	187	20	0	0	0	0	0	0	0	0	0	0	0	383
18:00	134	211	21	0	0	0	0	0	0	0	0	0	0	0	366
19:00	174	170	14	0	0	0	0	0	0	0	0	0	0	0	358
20:00	131	133	16	0	0	0	0	0	0	0	0	0	0	0	280
21:00	164	127	15	0	0	0	0	0	0	0	0	0	0	0	306
22:00	143	126	14	0	0	0	0	0	0	0	0	0	0	0	283
23:00	131	93	16	1	0	0	0	0	0	0	0	0	0	0	241
Total	2350	3323	570	12	0	0	0	0	0	0	0	0	0	0	6255

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#### 1400 block of New Jersey Ave NW NB Speed

NB															
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
11/16/13	68	100	11	0	0	0	0	0	0	0	0	0	0	0	179
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	68	100	11	0	0	0	0	0	0	0	0	0	0	0	179
Grand Total	2418	3423	581	12	0	0	0	0	0	0	0	0	0	0	6434

 15th Percentile:
 6 MPH

 50th Percentile:
 13 MPH

 85th Percentile:
 18 MPH

 95th Percentile:
 21 MPH

 Stats
 Mean Speed(Average) :
 13 MPH

 10 MPH Pace Speed :
 10-19 MPH

MPH Pace Speed: 10-19 MPH Number in Pace: 3835 Percent in Pace: 59.6%

Number of Vehicles > 25 MPH: 51
Percent of Vehicles > 25 MPH: 0.8%

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#### 1400 block of New Jersey Ave NW NB Volume

Start	Fri	15-Nov-13	Sat	16-Nov-13	Sun	17-Nov-13	Daily Av	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	88	58	*	*	*	58	88
12:15	*	89	44	*	*	*	44	89
12:30	*	89	45	*	*	*	45	89
12:45	*	82	32	*	*	*	32	82
01:00	16	80	*	*	*	*	16	80
01:15	14	74	*	*	*	*	14	74
01:30	15	87	*	*	*	*	15	87
01:45	16	81	*	*	*	*	15 16	8
02:00	6	78	*	*	*	*	6	78
02:00	11	86	*	*	*	*	6 11	86
02:13		85	*	*	*	*	- 11	00
	5	00	*	*	*	*	5 13 7	85
02:45	13	117	*	*	*	*	13	117
03:00	7	87	•	<u> </u>	*	*		87
03:15	9	75	*	*			9	75
03:30	9	80	*	*	*	*	9	80
03:45	12	99	*	*	*	*	12	99
04:00	10	102	*	*	*	*	10	102
04:15	19	105	*	*	*	*	19	105
04:30	23	106	*	*	*	*	23	106
04:45	31	95	*	*	*	*	31	95
05:00	27	99	*	*	*	*	27	99
05:15	35	100	*	*	*	*	27 35	100
05:30	30	99	*	*	*	*	30	99
05:45	57	85	*	*	*	*	57	85
06:00	53	89	*	*	*	*	53	89
06:15	68	92	*	*	*	*	68	92
06:30	65	79	*	*	*	*	65	79
06:30	73	106	*	*	*	*	73	100
		106	*	*	*	*	73	106
07:00	78	95		*	*	*	78 <b>92</b>	95
07:15	92	102	*				92	102
07:30	78	89	*	*	*	*	78	89
07:45	121	72	*	*	*	*	121	72
08:00	100	55	*	*	*	*	100	55
08:15	89	67	*	*	*	*	89	67
08:30	78	74	*	*	*	*	78	74
08:45	91	84	*	*	*	*	91	84
09:00	86	77	*	*	*	*	86	77
09:15	79	74	*	*	*	*	79	74
09:30	67	70	*	*	*	*	67	70
09:45	75	85	*	*	*	*	75	85
10:00	87	70	*	*	*	*	87	70
10:15	68	70 67	*	*	*	*	68	67
10:30	58	72	*	*	*	*	58	72
10:45	76	74	*	*	*	*	76	74
11:00	76	55	*	*	*	*	76 76	55
11.00		70	*	*	*	*	70	70
11:15	66	70			*	*	66	70
11:30	88	63	*	*	*	*	88	63
11:45	76	53					76	53
Total	2253	4002	179	0	0	0	2432	4002
Combined Total	62	55	17	79	0		6434	
Peak	07:15	03:45	12:00				07:15	03:45
Vol.	391	412	179				391	412
v OI.	0.808	0.972	0.772				0.808	0.972
P.H.F.								

# Accident Summary Report (R-8)

Time Period Covered: F	rom 01/01/20	10 To 12/31	/2012 Prepare	d By:	Rahul Jain	Prepared Da	te: 9	9/16/2013
Total Number of Accident:		25	Collision Type	#ACC	%	Collision Type	#ACC	, 9
Total Number of Fatalities:		0	Right Angle:	5	20.0%	Fixed Object:	1	4.0%
Total Number of Injuries:		20	Left Turn:	4	16.0%	Ran Off Road:	0	0.0%
Total Number of Disabling I	njuries:	2	Right Turn:	1	4.0%	Ped. Involved:	1	4.0%
Total Number of NonDisabl	ing Injuries:	4	Rear End:	5	20.0%	Backing:	1	4.0%
Total Number of Pedestrian	s Involved:	1	Side Swiped:	5	20.0%	Non Collision:	0	0.0%
Total Number of Bicycles In	volved:	3	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycle	es Involved:	0	Parked:	1	4.0%	Unspecified:	1	4.0%
Time of Day	#ACC	%			Day o fweek	#AC	c	9/
07:30 ~ 09:30:	5	20.0%			Sunday:	2		8.0%
09:30 ~ 11:30:	0	0.0%			Monday:	3		12.0%
11:30 ~ 13:30:	2	8.0%			Tuesday:	5		20.0%
13:30 ~ 16:00:	4	16.0%			Wednesday:	3		12.0%
16:00 ~18:30:	6	24.0%			Thursday:	7		28.0%
18:30 ~ 07:30:	8	32.0%			Friday:	2		8.0%
Unspecified:	0	0.0%			Saturday:	3		12.0%
Weather Condition	#ACC	%			Surface Condition	#AC	C	9
Clear:	23	92.0%			Dry:	22		88.0%
Rain:	1	4.0%			Wet:	2		8.0%
Snow:	1	4.0%			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:	1		4.0%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	C	9
Passenger Car:	37	75.5%			Fatal Collision:	0		0.0%
Bus:	1	2.0%			Injury Collision:	13		52.0%
Truck:	1	2.0%			PDO Collision:	12		48.0%
Taxi:	1	2.0%						
Minivan:	0	0.0%			Light Condition	#AC	C	9/
Police/Emergency Vehicle:	1	2.0%			Daylight:	17		68.0%
Motorcycle/Moped:	2	4.1%			Dawn/Dusk:	0		0.0%
Bicycle:	3	6.1%			Dark(Lighted):	8		32.0%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	3	6.1%			Dark(Unknown Ligh	•		0.0%
					Unspecified:	0		0.0%
Contributing Factor	#VEH	%			Pedestrian Action		С	9/
Driver: Speed:	0	0.0%			In Crosswalk with S	•		100.0%
Driver: Alcohol/Drug:	1	2.0%			In Crosswalk again	-		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig			0.0%
Driver: Others:	15	30.6%			In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Parl	ked Cars: 0		0.0%
Unspecified:	33	67.3%			Unspecified:	0		0.0%

<sup>12</sup> Records are not approved as of 9/16/2013 8:28:02 AM