



Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 4400 Block River Road NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	202	3	3E	Existing	4400 Block River Road Northwest Northbound



This existing speed camera is located in Ward 3 at the 4400 block of River Road Northwest in the northbound direction. River Road within the city runs from Western Avenue Northwest in the north to Wisconsin Avenue Northwest in the south. The posted speed limit is 25 MPH. The existing speed camera was installed in June 2001.





Field Assessment Summary

River Road is assumed to run in a North-South direction, and is classified as a minor arterial. River Road has one travel lane in each direction. This site has the following characteristics:

- There is one school in the area: Georgetown Day High School.
- This site is located in a residential area with houses, driveways, sidewalks with curb and gutter, and onstreet parking on both sides of the street.
- The existing pavement is in good condition.
- There are shared bicycle lanes in both the northbound and southbound directions.







Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	26
85th Percentile Speed (MPH)	32
10 MPH Pace Speed	23-32 MPH
Sample Size	4,733
ADT	4,820

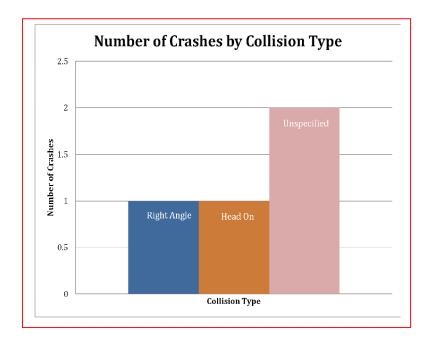
Both the mean speed and the 85th percentile speed are higher than the posted speed limit. The 85th percentile speed is 7 MPH higher than the speed limit. Due to the residential nature, this location may benefit from additional speed enforcement.

Crash Data Analysis

Between January 1, 2010 and December 31, 2012, there were a total of four crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. Two crashes were type unspecified, one was a Right Angle crash, and one was a head on crash.

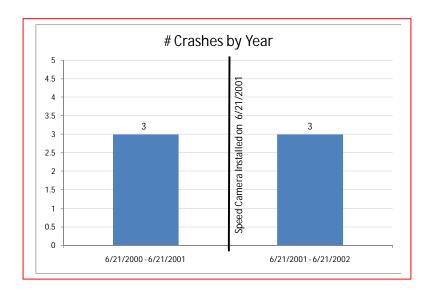


Severity			We	eather		Surface	condit	ion	Light Condition		
Total	4										
Fatal	0	0.0%	Clear	4	100.0%	Dry	4	100.0%	Day	2	50.0%
Injury	1	25.0%	Rain	0	0.0%	Wet	0	0.0%	Night	2	50.0%
Bus	0	0.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Pedestrian	0	0.0%									



This speed camera was installed on 6/21/2001. The graph on the next page shows the number of crashes in the year prior to the speed camera's installation (3 crashes) and the year after the speed camera's installation (3 crashes). There was a no change in number of crashes before and after the speed camera installation.





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 higher than the posted speed limit.
- 2. Crash Data There was small number of crashes at this site, and there was no change in number of crashes before and after the speed camera installation.
- 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, driveways, and sidewalks on both sides of the street.
 - b. There is one school in the area: Georgetown Day High School.
 - c. There are bicycle lanes in both directions of travel along River Road NW.
 - d. There is on-street parking on both sides of the street at this location.

Although the crash data did not reveal any significant reductions since the installation of the speed camera, the speed data analysis showed the mean and 85th percentile speeds to be higher than the posted speed limit. Thus, due to the site characteristics, the nearby school zone, the elevated 85th percentile speeds, and the multimodal travel options present, 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

4400 Block of River Rd 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
11/05/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	19	0	3	7	16	8	3	0	0	0	0	0	0	0	56
06:00	27	0	12	34	22	8	3	2	0	0	0	0	0	0	108
07:00	69	13	50	77	42	13	5	1	0	0	0	0	0	0	270
08:00	26	6	41	102	68	8	0	0	0	0	0	0	0	0	251
09:00	39	2	35	68	42	7	1	0	0	0	0	0	0	0	194
10:00	20	6	62	93	33	3	1	0	0	0	0	0	0	0	218
11:00	13	7	64	95	32	2	0	0	0	0	0	0	0	0	213
12 PM	16	14	65	121	48	6	3	0	0	0	0	0	0	0	273
13:00	5	3	59	97	61	9	3	0	0	0	0	0	0	0	237
14:00	3	4	63	146	78	13	3	0	0	0	0	0	0	0	310
15:00	6	14	91	205	59	9	0	0	0	0	0	0	0	0	384
16:00	9	7	104	239	73	8	0	0	0	0	0	0	0	0	440
17:00	21	31	114	273	64	8	0	0	0	0	0	0	0	0	511
18:00	9	23	95	171	79	9	1	0	0	0	0	0	0	0	387
19:00	6	18	65	133	42	9	3	0	0	0	0	0	0	0	276
20:00	2	7	34	126	54	6	2	0	0	0	0	0	0	0	231
21:00	11	4	31	99	49	8	3	0	0	0	0	0	0	0	205
22:00	8	0	14	38	44	10	1	0	0	0	0	0	0	0	115
23:00	3	11	11	10	25	12	11	0	11	0	0	0	0	0	54
Total	312	160	1003	2134	931	156	33	3	11	0	0	0	0	0	4733

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

4400 Block of River Rd 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
11/06/13	3	0	0	8	12	6	2	1	0	0	0	0	0	0	32
01:00	2	0	1	3	6	7	1	2	0	0	0	0	0	0	22
02:00	0	0	0	2	2	2	1	0	0	0	0	0	0	0	7
03:00	2	0	2	3	3	0	0	1	0	0	0	0	0	0	11
04:00	5	0	1	2	6	1	0	0	0	0	0	0	0	0	15
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	12	0	4	18	29	16	4	4	0	0	0	0	0	0	87
Grand Total	324	160	1007	2152	960	172	37	7	1	0	0	0	0	0	4820

 15th Percentile:
 18 MPH

 50th Percentile:
 26 MPH

 85th Percentile:
 32 MPH

 95th Percentile:
 35 MPH

 Stats
 Mean Speed(Average) :
 26 MPH

 10 MPH Pace Speed :
 23-32 MPH

10 MPH Pace Speed: 23-32 MPH
Number in Pace: 2934
Percent in Pace: 60.9%
er of Vehicles > 25 MPH 2982

Number of Vehicles > 25 MPH: 2982 Percent of Vehicles > 25 MPH: 61.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

4400 Block of River Rd NW NB Volume

Start	Tue	05-Nov-	13 Wed	06-Nov-13	3 Thu	07-Nov-13	Dail	y Average
Time	A.M		A.M.		A.M.	P.M.	A.M.	P.M.
12:		* 79	11	*	*	*	11	79
12:	15	* 69	9	*	*	*	9	69
12:	30	* 60	5		*	*	5	60
12:		* 65			*	*	5 7	65
01:		* 72	6	*	*	*		72
01:		* 58	5	*	*	*	6 5	58
01:	30	* 51	5		*	*	5	51
01:	45	* 56	6		*	*	5 6	56
02:		* 62	0	*	*	*	0	62
02:	15	* 82	3	*	*	*	3	82
02:	30	* 90	0	*	*	*	0	90
02:		* 76	4	*	*	*	4	76
03:	00	* 87	1		*	*	1	87
03:	15	* 110	3		*	*	3	110
03:	30	* 94	2	*	*	*	2 5	94
03:		* 93	5		*	*	5	93
04:		* 121	4	*	*	*	4 2	121
04:	15	* 100	2		*	*	2	100
04:		* 101	7		*	*	7	101
04:	45	* 118	2		*	*	2	118
05:	00 1	14 133	*	*	*	*	14	133
05:	15	7 123	*	*	*	*	7	123
05:	30 1	18 120	*	*	*	*	18	120
05:	45 1	17 135	*	*	*	*	17	135
06:	00 1	11 126	*	*	*	*	11	126
06:		24 96	*	*	*		24	96
06:	30 2	26 88	*	*	*	*	26	88
06:	45 4	17 77	*	*	*	*	47	77
07:	00 8	52 85	*	*		*	52	85
07:		67	^ _	*	*	*	80	67
07:		65	^ _	•	•	*	68	65
07:		70 59	^ •	*	*	*	70	59
08:	15	76 78		*	*	*	76	78
08:	15 5	59 52		*		*	59	52
08:	30 5	57 46 59 55	*	*	*	*	57 59	46
08:			*	*	*	*	59	55
09: 09:	15	57 56 12 55	*	*	*	*	57 42	56 55
09.	20 2	50 38	*	*	*	*	50	38
09:		15 56	*		*	*	45	56
10:	00 5	51 33	*	*	*	*	51	33
10:		30 30	*	*	*	*	60	30
10:	30 6	54 25	*	*	*	*	54	25
10:	15	53 27	*	*	*	*	53	27
11:		32 11	*	*	*	*	32	11
11:		51 13	*	*	*	*	51	13
11:	30	72 19		*	*	*	72	19
11:	45 5	58 11	*	*	*	*	58	11
To			87	0	0	0	1397	3423
Comb			0,		· ·			
	otal	4733		87		0	4	820
Pe		15 05:00	12:00				07:15	05:00
v	ol. 29	94 511	32				294	511
P.H							0.919	0.946
	ADT	ADT 4,8						

Accident Summary Report (R-8)

Time Period Covered: F	rom 01/01/201	0 To 12/31	/2012 Prepare	ed By:	Rahul Jain	Prepared Da	te: 1	0/6/2013
Total Number of Accident:		4	Collision Type	#ACC	%	Collision Type	#ACC	9
Total Number of Fatalities:		0	Right Angle:	1	25.0%	Fixed Object:	0	0.0%
Total Number of Injuries:		1	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling I	njuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabl	ing Injuries:	1	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of Pedestrian	s Involved:	0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles In	volved:	0	Head On:	1	25.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycle	s Involved:	0	Parked:	0	0.0%	Jnspecified:	2	50.0%
Time of Day	#ACC	<u></u> %			Day o fweek	#AC	C	9/
07:30 ~ 09:30:	0	0.0%			Sunday:	0		0.0%
09:30 ~ 11:30:	0	0.0%			Monday:	0		0.0%
11:30 ~ 13:30:	0	0.0%			Tuesday:	0		0.0%
13:30 ~ 16:00:	1	25.0%			Wednesday:	1		25.0%
16:00 ~18:30:	1	25.0%			Thursday:	0		0.0%
18:30 ~ 07:30:	2	50.0%			Friday:	1		25.0%
Unspecified:	0	0.0%			Saturday:	2		50.0%
Weather Condition	#ACC	%			Surface Condition	#AC	c	%
Clear:	4	100.0%			Dry:	4		100.0%
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:	0	0.0%			Unspecified:	0		0.0%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	c	%
Passenger Car:	7	100.0%			Fatal Collision:	0		0.0%
Bus:	0	0.0%			Injury Collision:	1		25.0%
Truck:	0	0.0%			PDO Collision:	3		75.0%
Taxi:	0	0.0%						
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle:	0	0.0%			Daylight:	2		50.0%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	2		50.0%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	0	0.0%			Dark(Unknown Ligh	iting): 0		0.0%
					Unspecified:	0		0.0%
Contributing Factor	#VEH	%			Pedestrian Action	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	ınal: 0		0.0%
Driver: Others:	0	0.0%			In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	2	28.6%			From Between Park	ced Cars: 0		0.0%
Unspecified:	5	71.4%			Unspecified:	0		0.0%

⁴ Records are not approved as of 10/6/2013 12:46:11 PM

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Time Period Covered: F	rom 06/20/2000	To 06/20	0/2001 Prep a	ared By:	Rahul Jain	Prepared Da	ite: 1	1/19/20
Total Number of Accident:		3	Collision Typ	e #ACC	%	Collision Type	#ACC	9
Total Number of Fatalities:		0	Right Angle:	1	33.3%	Fixed Object:	0	0.0%
Total Number of Injuries:		0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling I	njuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabl	ing Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of Pedestrian	s Involved:	0	Side Swiped:	1	33.3%	Non Collision:	0	0.0%
Total Number of Bicycles In	volved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycle	es Involved:	0	Parked:	1	33.3%	Unspecified:	0	0.0%
Time of Day	#ACC		,		Day o fweek	#AC	C:	9/
07:30 ~ 09:30:	1	33.3%	,		Sunday:	0		0.0%
09:30 ~ 11:30:	0	0.0%	,		Monday:	0		0.0%
11:30 ~ 13:30:	0	0.0%			Tuesday:	0		0.0%
13:30 ~ 16:00:	0	0.0%			Wednesday:	1		33.3%
16:00 ~18:30:	0	0.0%			Thursday:	1		33.3%
18:30 ~ 07:30:	2	66.7%			Friday:	0		0.0%
Unspecified:	0	0.0%			Saturday:	1		33.3%
Weather Condition	#ACC	%	,		Surface Condition	# A C	:C	%
Clear:	3	100.0%	,		Dry:	2		66.7%
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:	0	0.0%			Unspecified:	1		33.3%
Type of Vehicle	#VEH	%	,		Accident Severity	Type #AC		%
Passenger Car:	2	33.3%			Fatal Collision:	0		0.0%
Bus:	0	0.0%			Injury Collision:	0		0.0%
Truck:	3	50.0%			PDO Collision:	3		100.0%
Taxi:	0	0.0%			. 20 00			
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle:	0	0.0%			Daylight:	2		66.7%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%	1		Dark(Lighted):	0		0.0%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	1	16.7%			Dark(Unknown Ligh	nting): 1		33.3%
	·				Unspecified:	0		0.0%
Contributing Factor	#VEH	%	,		Pedestrian Action	s #AC	:C	%
Driver: Speed:	0	0.0%			In Crosswalk with S	Signal: 0		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk again	st Signal: 0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	gnal: 0		0.0%
Driver: Others:	2	33.3%			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:	4	66.7%			Unspecified:	0		0.0%

³ Records are not approved as of 11/19/2013 11:46:43 AM

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

			,NW TO DAVENF	PORT ST	,NW			
Time Period Covered: From	om 06/21/200 ⁻	1 To 06/21	1/2002 Prepar	ed By:	Rahul Jain	Prepared Da	te: 1	1/19/201
Total Number of Accident:		3	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:		0	Right Angle:	1	33.3%	Fixed Object:	1	33.3%
Total Number of Injuries:		2	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Inj		1	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisablin	g Injuries:	1	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of Pedestrians	Involved:	0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles Inventor	olved:	0	Head On:	1	33.3%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles	Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Time of Day	#ACC	%	,		Day o fweek	#AC	c	%
07:30 ~ 09:30:	0	0.0%	,		Sunday:	1		33.3%
09:30 ~ 11:30:	0	0.0%	,		Monday:	0		0.0%
11:30 ~ 13:30:	0	0.0%	,		Tuesday:	1		33.3%
13:30 ~ 16:00:	1	33.3%	,		Wednesday:	0		0.0%
16:00 ~18:30:	0	0.0%	,		Thursday:	1		33.3%
18:30 ~ 07:30:	2	66.7%	,		Friday:	0		0.0%
Unspecified:	0	0.0%)		Saturday:	0		0.0%
Weather Condition	#ACC	%	,		Surface Condition	n #AC	:C	%
Clear:	2	66.7%	,		Dry:	2		66.7%
Rain:	1	33.3%	,		Wet:	1		33.3%
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:	<i>7</i>	87.5%			Fatal Collision:	0		0.0%
Bus:	0	0.0%	I		Injury Collision:	2		66.7%
Truck:	0	0.0%			PDO Collision:	1		33.3%
Taxi:	0	0.0%			1 20 0011101011.	· .		
Minivan:	0	0.0%	I		Light Condition	#AC	C	%
Police/Emergency Vehicle:	0	0.0%			Daylight:	1		33.3%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	0		0.0%
Fixed Object:	1	12.5%	I		Dark(Not Lighted):	0		0.0%
Unspecified:	0	0.0%			Dark(Unknown Lig	hting): 2		66.7%
опореолюч.	Ü	0.070	,		Unspecified:	0		0.0%
Contributing Factor	#VEH	%	,		Pedestrian Action	ıs #AC	c	%
Driver: Speed:	0	0.0%	,		In Crosswalk with S	Signal: 0		0.0%
Driver: Alcohol/Drug:	0	0.0%	,		In Crosswalk again	st Signal: 0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Si	-		0.0%
Driver: Others:	1	12.5%			In Unmarked Cross	-		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	2	25.0%			From Between Par	ked Cars: 0		0.0%
-	5	62.5%	I		Unspecified:	0		0.0%

³ Records are not approved as of 11/19/2013 11:47:54 AM