

Study Area and Location



### Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 4100 Block Cathedral Avenue NW

Study	AIEd d		Jation		
District	PSA	Ward	ANC	Phase	Description
2	204	3	3B	Proposed	4100 Block Cathedral Avenue Northwest
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	Hiker/Bi	ker Irail		The second	
		edestrian Gen	erator		A LEAST CONTRACTOR OF THE DESIGNATION OF THE DESIGN
		APC 1-1 10000000-1_2 - 1200 100012			

This *proposed* speed camera will be located in Ward 3 at the 4100 block of Cathedral Avenue Northwest. Cathedral Avenue runs from Foxhall Road Northwest in the west to Wisconsin Avenue Northwest in the east. The posted speed limit is 25 MPH.







4100 Block Cathedral Avenue NW

### Field Assessment Summary

Cathedral Avenue is assumed to run in an East-West direction and is classified as a collector. Cathedral Avenue has one travel lane in each direction. This site has the following characteristics:

- This site is located in a residential area with houses in the surrounding area.
- There are guardrails on both sides of the street.
- There are on-street parking and a sidewalk with curb and gutter on the north side of the street.
- The existing pavement is in good condition and there is a downhill slope in the westbound direction.
- There is one school nearby: Annunciation Catholic School.



Eastbound





4100 Block Cathedral Avenue NW



# Speed Data Analysis

Direction	Eastbound	Westbound
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	26	20
85th Percentile Speed (MPH)	39	24
10 MPH Pace Speed (MPH)	29-38	18-27
Sample Size	2,521	2,231
ADT	4,	752

The mean speed in the eastbound direction is 1 MPH higher than the posted speed limit and the mean speed in the westbound direction is 5 MPH lower than the posted speed limit. The 85<sup>th</sup> percentile speed in the eastbound direction is 14 MPH higher than the posted speed limit, and the 85<sup>th</sup> percentile speed in the westbound direction is 1 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 13 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 Side Swipe with five crashes.

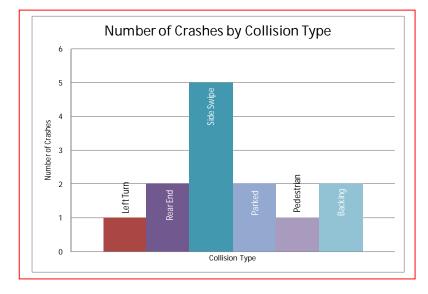
W3 - 425





## 4100 Block Cathedral Avenue NW

Sev	Severity			eather		Surface	condit	ion	Light Condition			
Total	13											
Fatal	0	0.0%	Clear	13	100.0%	Dry	13	100.0%	Day	11	84.6%	
Injury	2	15.4%	Rain	0	0.0%	Wet	0	0.0%	Night	2	15.4%	
Truck	3	23.1%	Snow	0	0.0%	Snow/Ice	0	0.0%				
Bus	2	15.4%										



### Safety Nexus

This site presents the following safety considerations which may establish 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 in the westbound direction. The 85th percentile speed is much higher than the posted speed limit at this location in the eastbound direction.
- 2. Crash Data The crash data analysis shows a low number of crashes at this location.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
  - a. Located in a residential area with houses in the surrounding area.
  - b. There is one school in the area: Annunciation Catholic School.
  - c. There are multiple bus stops in the area which generate pedestrian activity.





Although the crash data analysis showed a low number of crashes at this location, due to the speed data analysis, the specific site characteristics, the pedestrian generators, and the pedestrian environment present, there is a nexus between traffic safety and the speed camera at this location.

W3 - 427

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

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WB															
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
11/08/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	12	13	28	11	0	0	0	0	0	0	0	0	0	0	64
Total	12	13	28	11	0	0	0	0	0	0	0	0	0	0	64

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

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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
11/09/13	3	6	32	3	0	0	0	0	0	0	0	0	0	0	44
01:00	4	3	14	6	Õ	0	Ő	0	Ő	Ő	Ő	Ő	0	Ő	27
02:00	2	1	6	0	0	0	0	0	0	0	0	0	0	0	9
03:00	2	3	6	1	0	0	0	0	0	0	0	0	0	0	12
04:00	1	2	5	1	1	0	0	0	0	0	0	0	0	0	10
05:00	0	2	8	6	2	0	0	0	0	0	0	0	0	0	18
06:00	2	8	16	3	2	0	0	0	0	0	0	0	0	0	31
07:00	2	11	30	7	0	0	0	0	0	0	0	0	0	0	50
08:00	8	22	56	8	0	0	0	0	0	0	0	0	0	0	94
09:00	10	30	76	12	0	0	0	0	0	0	0	0	0	0	128
10:00	8	30	93	19	1	0	0	0	0	0	0	0	0	0	151
11:00	5	22	85	12	1	0	0	0	0	0	0	0	0	0	125
12 PM	10	36	124	21	0	1	0	0	0	0	0	0	0	0	192
13:00	10	35	90	12	0	0	0	0	0	0	0	0	0	0	147
14:00	11	21	102	19	0	0	0	0	0	0	0	0	0	0	153
15:00	7	33	94	23	0	0	0	0	0	0	0	0	0	0	157
16:00	22	38	96	14	0	1	0	0	0	0	0	0	0	0	171
17:00	12	49	70	9	0	0	0	0	0	0	0	0	0	0	140
18:00	7	37	86	13	0	0	0	0	0	0	0	0	0	0	143
19:00	5	30	70	7	0	0	0	0	0	0	0	0	0	0	112
20:00	3	20	51	11	0	0	0	0	0	0	0	0	0	0	85
21:00	7	26	56	14	0	0	0	0	0	0	0	0	0	0	103
22:00	2	14	38	11	0	0	0	0	0	0	0	0	0	0	65
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	143	479	1304	232	7	2	0	0	0	0	0	0	0	0	2167
Grand Total	155	492	1332	243	7	2	0	0	0	0	0	0	0	0	2231
Stats			50th F 85th F 95th F ean Speed(			12 MPH 20 MPH 24 MPH 27 MPH 20 MPH 27 MPH									
		10 MPH Pace Speed : Number in Pace : Percent in Pace : Number of Vehicles > 25 MPH : Percent of Vehicles > 25 MPH :			10-2	1479 66.3% 328 14.7%									

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EB															
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
11/08/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	15	2	10	11	12	6	4	3	0	2	0	0	0	0	65
Total	15	2	10	11	12	6	4	3	0	2	0	0	0	0	65

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EB															
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
11/09/13	5	0	5	7	5	2	5	1	0	0	0	0	0	0	30
01:00	8	1	4	5	6	6	0	1	Ő	0	Ő	Ő	0	Ő	31
02:00	2	Ó	2	2	2	1	0	Ó	Ō	0	0	0	0	0	9
03:00	4	0	0	3	1	2	0	0	0	0	0	0	0	0	10
04:00	0	0	2	1	2	1	1	0	0	0	1	0	0	0	8
05:00	4	1	1	2	2	2	1	1	0	0	0	0	0	0	14
06:00	4	1	1	3	3	5	3	0	1	0	0	0	0	0	21
07:00	8	2	5	9	14	12	10	3	2	2	0	0	0	0	67
08:00	14	4	4	14	16	17	13	2	2	1	0	0	0	0	87
09:00	26	4	11	25	27	24	21	7	3	3	0	0	0	0	151
10:00	28	3	20	21	32	23	14	11	2	1	0	0	0	0	155
11:00	31	6	11	28	46	27	19	14	3	0	0	0	0	0	185
12 PM	43	4	16	31	32	33	16	5	7	1	1	2	0	0	191
13:00	46	6	20	22	40	34	21	10	1	2	0	0	0	0	202
14:00	41	5	14	24	49	43	13	8	3	0	0	0	0	0	200
15:00	30	12	14	33	40	30	13	8	3	0	1	0	0	1	185
16:00	32	3	20	31	37	28	11	6	4	1	0	0	0	0	173
17:00	25	6	16	30	49	33	19	8	1	0	0	0	0	0	187
18:00	35	5	15	22	31	27	10	6	2	0	0	0	0	0	153
19:00	12	4	9	17	28	27	11	6	2	1	0	1	0	0	118
20:00	20	1	5	23	18	17	10	6	2	1	0	0	0	0	103
21:00	17	2	4	21	20	12	7	2	1	0	0	0	0	0	86
22:00	18	1	12	18	15	12	7	5	0	0	0	0	1	1	90
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	453	71	211	392	515	418	225	110	39	13	3	3	1	2	2456
Grand Total	468	73	221	403	527	424	229	113	39	15	3	3	1	2	2521
				Percentile : Percentile :		8 MPH 28 MPH									
				Percentile :		39 MPH									
				Percentile :		46 MPH									
Stats		Me	ean Speed()	Average):		26 MPH									
			0 MPH Pac			38 MPH									
				r in Pace :		811									
				t in Pace :		32.2%									
		Number of				1492									
		Percent of	Vehicles >	25 MPH :		59.2%									

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

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#### 4100 block of Cathedral Ave NW Volume

Start	08-Nov-13		WB	E	В	Com	bined	09-Nov-	1	NB		EB	Comb	ined
Time	Fri	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	Sat	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00		*	*	*	*	*	*		15	55	8	50	23	105
12:15		*	*	*	*	*	*		7	45	7	57	14	102
12:30		*	*	*	*	*	*		13	41	6	35	19	7
12:45		*	*	*	*	*	*		9	51	9	49	18	10
01:00		*	*	*	*	*	*		13	37	13	55	26	92
01:15		*	*	*	*	*	*		4	39	3	47	7	8
01:30		*	*	*	*	*	*		4	39	9	51	15	8
01:30		*	*	*	*	*	*		4	34	6	49	10	8
		*	*	*	*	*	*							
02:00		*	*		*	*	*		1	52	0	59	1	11
02:15		*	*	*	*	*	*		3	35	3	53	6	8
02:30		*	*	- -	*	*	*		2	34	2	43	4	7
02:45			*		*		*		3	32	4	45	7	7
03:00		*	*	*	*	*	*		4	42	6	45	10	8
03:15				*					2	50	1	45	3	9
03:30		*	*	*	*	*	*		2	30	2	42	4	7
03:45		*	*	*	*	*	*		4	35	1	53	5	8
04:00		*	*	*	*	*	*		3	49	3	51	6	10
04:15		*	*	*	*	*	*		2	46	2	27	4	7
04:30		*	*	*	*	*	*		4	30	1	52	5	8
04:45		*	*	*	*	*	*		1	46	2	43	3	8
05:00		*	*	*	*	*	*		2	46	3	42	5	8
05:15		*	*	*	*	*	*		3	31	5	53	8	84
05:30		*	*	*	*	*	*		8	31	4	56	12	8
05:45		*	*	*	*	*	*		5	32	2	36	7	6
06:00		*	*	*	*	*	*		1	31	1	37	2	6
06:15		*	*	*	*	*	*		8	37	4	47	12	8
06:30		*	*	*	*	*	*		10	38	8	39	18	7
06:45		*	*	*	*	*	*		12	37	8	30	20	6
07:00		*	*	*	*	*	*		10	25	10	38	20	6
07:15		*	*	*	*	*	*		10	36	9	28	19	64
07:30		*	*	*	*	*	*		14	33	20	20	34	5
07:45		*	*	*	*	*	*		14	18	20	24	44	
07.45		*	*	*	*	*	*		15	22	20 14	33	44 29	40 5
		*	*	*	*	*	*							
08:15		*	*	*	*	*	*		20	23	15	23	35	4
08:30		*	*	- -	*	*	*		30	19	29	25	59	4
08:45		*	*	*	*	*	*		29	21	29	22	58	4
09:00		*		*	*	*			29	26	23	22	52	4
09:15			*				*		26	20	36	17	62	3
09:30		*	*	*	*	*	*		36	22	50	25	86	4
09:45		*	*	*	*	*	*	_	37	35	42	22	79	5
10:00		*	*	*	*	*	*		39	17	39	26	78	4
10:15		*	*	*	*	*	*		34	17	35	23	69	4
10:30		*	*	*	*	*	*		39	15	37	20	76	3
10:45		*	*	*	*	*	*		39	13	44	19	83	3
11:00		*	15	*	13	*	28		25	*	43	*	68	
11:15		*	24	*	24	*	48		35	*	33	*	68	
11:30		*	15	*	19	*	34		32	*	51	*	83	
11:45		*	10	*	9	*	19		33	*	58	*	91	
Total		0	64	0	65	0	129		699	1465	768	1686	1467	315
	I	-	64			129				64		1000	4618	
Day Total	I			65		123	2						4010	)
% Total		0.0%	49.6%	0.0%	50.4%				15.1%	31.7%	16.6%	36.5%		
D!			11-00		44.00		11.00		10.00	10.00	44-00	04-00	00.00	10-0
Peak			11:00		11:00		11:00		10:00	12:00	11:00	01:30	09:30	12:00
			61		65		129		151	102	185	212	312	383
Vol. P.H.F.			64 0.667		0.677		0.672		151 0.968	192 0.873	0.797	0.898	0.907	0.912

ADT ADT 4,747 AADT 4,747

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

# Accident Summary Report (R-8)

	RAL AVE,NW From 01/01/20		VEXICO AVE,NW		.HO AVE,NW Rahul Jain	Prepared Da	te:	9/15/2013
Total Number of Accident:	11011101101120	13	Collision Type	-		Collision Type	#AC	
Total Number of Fatalities:		0	Right Angle:	0		Fixed Object:	0	0.0%
Total Number of Injuries:		3	Left Turn:	1		Ran Off Road:	0	0.0%
Total Number of Disabling	Injuries:	1	Right Turn:	0		Ped. Involved:	1	7.7%
Total Number of NonDisab		0	Rear End:	2		Backing:	2	15.4%
Total Number of Pedestria		1	Side Swiped:	5		Non Collision:	0	0.0%
Total Number of Bicycles I		0	Head On:	0		Jnder/Over Ride:		0.0%
Total Number of Motorcycl		0	Parked:	2		Inspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	с	%
07:30 ~ 09:30:	1	7.7%			Sunday:	0		0.0%
09:30 ~ 11:30:	2	15.4%			Monday:	1		7.7%
11:30 ~ 13:30:	4	30.8%			Tuesday:	4		30.8%
13:30 ~ 16:00:	3	23.1%			Wednesday:	0		0.0%
16:00 ~18:30:	2	15.4%			Thursday:	4		30.8%
18:30 ~ 07:30:	1	7.7%			Friday:	3		23.1%
Unspecified:	0	0.0%			Saturday:	1		7.7%
Weather Condition	#ACC	%			Surface Condition	#AC	с	%
Clear:	13	100.0%			Dry:	13		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	Гуре #АС	с	%
Passenger Car:	16	61.5%			Fatal Collision:	0		0.0%
Bus:	2	7.7%			Injury Collision:	2		15.4%
Truck:	3	11.5%			PDO Collision:	11		84.6%
Taxi:	1	3.8%					•	0/
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle	: 2	7.7%			Daylight:	11		84.6%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	2		15.4%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	2	7.7%			Dark(Unknown Light Unspecified:	ting): 0 0		0.0% 0.0%
Contributing Easter	#\/ELI	0/			Dodootrian Actions	#AC	<u> </u>	
Contributing Factor	# <b>VEH</b>	<b>%</b> 0.0%			Pedestrian Actions		0	% ^^^
Driver: Speed:	0	0.0%			In Crosswalk with Si	-		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk agains	-		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig			100.0%
Driver: Others:	6	23.1% 0.0%			In Unmarked Crossy			0.0%
Vehicle:	0				Not in Crosswalk:	0 od Corros		0.0%
Roadway:	0	0.0%			From Between Park			0.0%
Unspecified:	20	76.9%			Unspecified:	0		0.0%

6 Records are not approved as of 9/15/2013 9:35:03 PM