



District Department of Transportation

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

800 Block Ridge Road SE NW/B

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	605	7	7E	Proposed	800 Block Ridge Road Southeast Northwest-bound



The *proposed* speed camera will be located in Ward 7 at the 800 block of Ridge Road Southeast in the northwest-bound direction. Ridge Road Southeast runs between East Capitol Street Northeast to the north and Southern Avenue Southeast to the south. The posted speed limit is 25 MPH.

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800 Block Ridge Road SE NW/B

Field Assessment Summary

Ridge Road Southeast runs in a northwest-southeast direction and is classified as a minor arterial. Ridge Road Southeast has one travel lane in each direction. This site has the following characteristics:

- There is one school in the area: Davis Elementary School.
- Fort Dupont Park is to the west of the site and has a bike trail through it that generates pedestrian activity.
- Ridge Playground and Fort Dupont Pool also are in the area.
- There is sidewalk on the north side of the street.
- There is on-street parking on both sides of the street.
- The pavement is in fair condition and there is curb and gutter with drainage inlets. There is a downgrade slope in the southeast-bound direction.



Looking Northwest-bound

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District Department of Transportation

800 Block Ridge Road SE NW/B



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	35
85th Percentile Speed (MPH)	42
10 MPH Pace Speed	31-40
ADT	3,670

The mean speed and the 85th percentile speed are both higher than the posted speed limit at this location. The 85th percentile speed is 17 MPH higher 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 29 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 collision at this location were Right Angle (7 crashes), Run-Off-Road (5 crashes), Side Swipe and Fixed Object (4 crashes), and Head On (3 crashes). The other collision types had 2 crashes or less each. There were 3 crashes where vehicular speeding was the contributing factor. Furthermore, the site experienced a high frequency (14 crashes) of injury-related crashes.

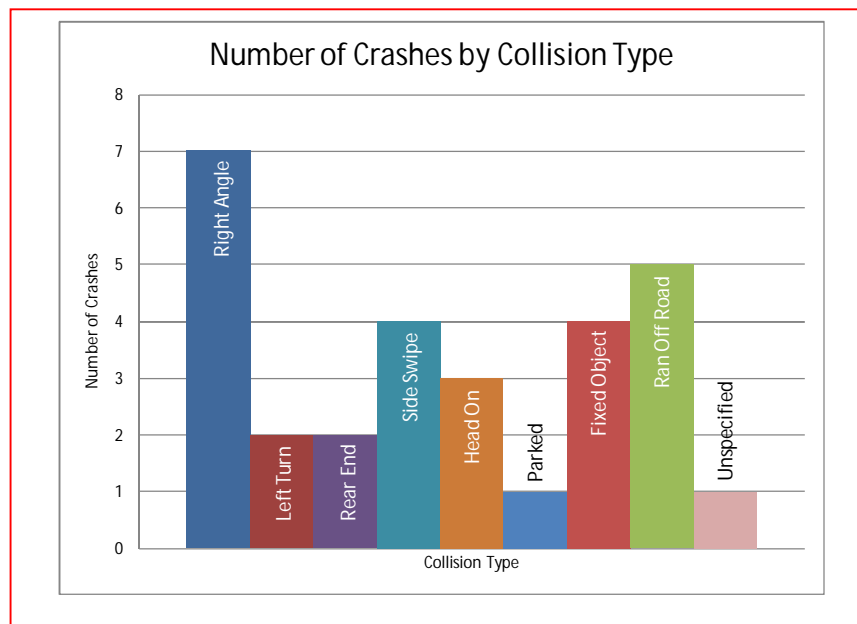
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800 Block Ridge Road SE NW/B

Severity			Weather			Surface condition			Light Condition		
Total	29										
Fatal	0	0.0%	Clear	25	86.2%	Dry	22	75.9%	Day	16	55.2%
Injury	14	48.3%	Rain	1	3.4%	Wet	3	10.3%	Night	10	34.5%
Truck	3	10.3%	Snow	1	3.4%	Snow/Ice	2	6.9%			
Taxi	2	6.9%									



Safety Nexus

This site presents the following safety considerations which may establish a nexus between traffic safety and the speed camera:

1. Speed Data – The mean and 85th percentile speed are much higher than the posted speed limit at this location.
2. Crash Data – This location experienced a high frequency (14 crashes) of injury-related crashes. There were 3 crashes where vehicular speeding was the contributing factor.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. There is one school in the area: Davis Elementary School.
 - b. Fort Dupont Park is to the west of the site and has a bike trail through it that generates pedestrian activity.

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800 Block Ridge Road SE NW/B

- c. Ridge Playground and Fort Dupont Pool are in the area which generate pedestrian and bicycle activity.
- d. There is on-street parking in both directions.

Due to the speed data analysis, 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.

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SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

800 Blk of Ridge RD SE, NWB Speed

NWB															
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/11/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	2	0	4	25	40	29	8	0	0	0	0	0	0	0	108
21:00	0	0	6	23	32	24	5	6	2	2	0	0	0	0	100
22:00	0	0	0	18	27	22	7	2	0	0	0	0	0	0	76
23:00	0	1	4	9	10	9	10	3	1	1	0	0	0	0	48
Total	2	1	14	75	109	84	30	11	3	3	0	0	0	0	332

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

800 Blk of Ridge RD SE, NWB Speed

NWB															
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/12/13	1	0	0	11	10	4	2	1	0	0	0	0	0	0	29
01:00	1	0	2	5	4	1	0	1	0	0	0	0	1	0	15
02:00	0	0	0	1	1	4	0	0	0	0	0	0	0	0	6
03:00	0	0	1	1	2	3	0	0	0	0	0	0	0	0	7
04:00	0	0	2	2	9	13	1	3	1	0	0	0	0	0	31
05:00	0	0	4	13	24	24	6	4	4	0	1	0	1	0	81
06:00	0	0	1	30	69	104	39	13	7	0	1	0	0	0	264
07:00	0	0	5	42	131	182	156	40	18	2	1	1	0	0	578
08:00	1	1	15	49	105	140	96	35	8	2	0	0	1	0	453
09:00	0	0	11	17	48	55	26	11	7	2	1	0	0	2	180
10:00	4	3	8	41	40	29	9	5	2	0	0	0	0	1	142
11:00	1	3	12	33	53	31	13	5	0	1	0	0	0	1	153
12 PM	0	3	6	39	49	32	14	1	0	0	0	0	0	0	144
13:00	2	1	3	32	56	48	13	6	0	0	0	0	0	0	161
14:00	8	1	14	40	51	51	10	5	2	1	1	0	0	0	184
15:00	0	0	3	29	73	47	36	11	2	1	1	0	0	0	203
16:00	1	0	7	29	68	40	24	8	4	0	0	0	0	0	181
17:00	0	3	23	50	68	44	13	4	0	0	0	0	0	0	205
18:00	2	1	6	39	64	39	18	8	1	1	0	0	0	0	179
19:00	0	0	4	33	59	36	20	2	0	0	0	0	0	0	154
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	21	16	127	536	984	927	496	163	56	10	6	2	2	4	3350
Grand Total	23	17	141	611	1093	1011	526	174	59	13	6	2	2	4	3682

15th Percentile : 27 MPH
 50th Percentile : 34 MPH
 85th Percentile : 42 MPH
 95th Percentile : 46 MPH

Stats
 Mean Speed(Average) : 35 MPH
 10 MPH Pace Speed : 31-40 MPH
 Number in Pace : 1974
 Percent in Pace : 53.7%
 Number of Vehicles > 25 MPH : 3416
 Percent of Vehicles > 25 MPH : 92.9%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

800 Blk of Ridge RD SE, NWB

Start Time	Wed	11-Dec-13	Thu	12-Dec-13	Fri	13-Dec-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	12	34	*	*	12	34
12:15	*	*	7	42	*	*	7	42
12:30	*	*	7	39	*	*	7	39
12:45	*	*	3	29	*	*	3	29
01:00	*	*	3	32	*	*	3	32
01:15	*	*	5	54	*	*	5	54
01:30	*	*	4	40	*	*	4	40
01:45	*	*	3	35	*	*	3	35
02:00	*	*	1	39	*	*	1	39
02:15	*	*	1	46	*	*	1	46
02:30	*	*	3	42	*	*	3	42
02:45	*	*	1	57	*	*	1	57
03:00	*	*	1	51	*	*	1	51
03:15	*	*	1	49	*	*	1	49
03:30	*	*	2	47	*	*	2	47
03:45	*	*	3	56	*	*	3	56
04:00	*	*	3	40	*	*	3	40
04:15	*	*	5	37	*	*	5	37
04:30	*	*	14	47	*	*	14	47
04:45	*	*	9	57	*	*	9	57
05:00	*	*	13	53	*	*	13	53
05:15	*	*	20	60	*	*	20	60
05:30	*	*	21	48	*	*	21	48
05:45	*	*	27	44	*	*	27	44
06:00	*	*	26	51	*	*	26	51
06:15	*	*	56	52	*	*	56	52
06:30	*	*	81	34	*	*	81	34
06:45	*	*	101	42	*	*	101	42
07:00	*	*	122	45	*	*	122	45
07:15	*	*	138	29	*	*	138	29
07:30	*	*	164	44	*	*	164	44
07:45	*	*	154	36	*	*	154	36
08:00	*	25	132	0	*	*	132	12
08:15	*	24	122	*	*	*	122	24
08:30	*	29	100	*	*	*	100	29
08:45	*	30	99	*	*	*	99	30
09:00	*	21	60	*	*	*	60	21
09:15	*	37	51	*	*	*	51	37
09:30	*	18	39	*	*	*	39	18
09:45	*	24	30	*	*	*	30	24
10:00	*	29	45	*	*	*	45	29
10:15	*	21	36	*	*	*	36	21
10:30	*	13	27	*	*	*	27	13
10:45	*	13	34	*	*	*	34	13
11:00	*	24	33	*	*	*	33	24
11:15	*	7	43	*	*	*	43	7
11:30	*	9	33	*	*	*	33	9
11:45	*	8	44	*	*	*	44	8
Total	0	332	1939	1411	0	0	1939	1730
Combined Total	332		3350		0		3669	
Peak		08:30	07:15	04:45			07:15	04:45
Vol.		117	588	218			588	218
P.H.F.		0.791	0.896	0.908			0.896	0.908
ADT		ADT 3,670	AADT 3,670					

Accident Summary Report (R-8)

Corridor: RIDGE RD,SE From G ST,SE TO BURNS ST,SE

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

Prepared By: Rahul Jain

Prepared Date: 9/15/2013

Total Number of Accident:	29	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	7	24.1%	Fixed Object:	4	13.8%
Total Number of Injuries:	19	Left Turn:	2	6.9%	Ran Off Road:	5	17.2%
Total Number of Disabling Injuries:	1	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	2	Rear End:	2	6.9%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	0	Side Swiped:	4	13.8%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	3	10.3%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	1	Parked:	1	3.4%	Unspecified:	1	3.4%
Time of Day				Day of week			
	#ACC	%			#ACC	%	
07:30 ~ 09:30:	2	6.9%	Sunday:	2	6.9%		
09:30 ~ 11:30:	3	10.3%	Monday:	1	3.4%		
11:30 ~ 13:30:	2	6.9%	Tuesday:	4	13.8%		
13:30 ~ 16:00:	2	6.9%	Wednesday:	5	17.2%		
16:00 ~ 18:30:	6	20.7%	Thursday:	8	27.6%		
18:30 ~ 07:30:	14	48.3%	Friday:	2	6.9%		
Unspecified:	0	0.0%	Saturday:	7	24.1%		
Weather Condition				Surface Condition			
	#ACC	%			#ACC	%	
Clear:	25	86.2%	Dry:	22	75.9%		
Rain:	1	3.4%	Wet:	3	10.3%		
Snow:	1	3.4%	Snow/Ice:	2	6.9%		
Sleet/Hail:	1	3.4%	Slush:	1	3.4%		
Fog/Mist:	0	0.0%	Water/Sand:	1	3.4%		
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%		
Unspecified:	1	3.4%	Unspecified:	0	0.0%		
Type of Vehicle				Accident Severity Type			
	#VEH	%			#ACC	%	
Passenger Car:	33	67.3%	Fatal Collision:	0	0.0%		
Bus:	0	0.0%	Injury Collision:	14	48.3%		
Truck:	3	6.1%	PDO Collision:	15	51.7%		
Taxi:	2	4.1%	Light Condition				
Minivan:	0	0.0%			#ACC	%	
Police/Emergency Vehicle:	2	4.1%	Daylight:	16	55.2%		
Motorcycle/Moped:	1	2.0%	Dawn/Dusk:	2	6.9%		
Bicycle:	0	0.0%	Dark(Lighted):	8	27.6%		
Fixed Object:	0	0.0%	Dark(Not Lighted):	2	6.9%		
Unspecified:	8	16.3%	Dark(Unknown Lighting):	0	0.0%		
Contributing Factor				Pedestrian Actions			
	#VEH	%			#ACC	%	
Driver: Speed:	3	6.1%	In Crosswalk with Signal:	0	0.0%		
Driver: Alcohol/Drug:	0	0.0%	In Crosswalk against Signal:	0	0.0%		
Driver: Electronic Device:	0	0.0%	In Crosswalk no Signal:	0	0.0%		
Driver: Others:	10	20.4%	In Unmarked Crosswalk:	0	0.0%		
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%		
Roadway:	2	4.1%	From Between Parked Cars:	0	0.0%		
Unspecified:	34	69.4%	Unspecified:	0	0.0%		

17 Records are not approved as of 9/15/2013 2:36:12 PM