



District Department of Transportation

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

800 Block Ridge Road SE SE/B

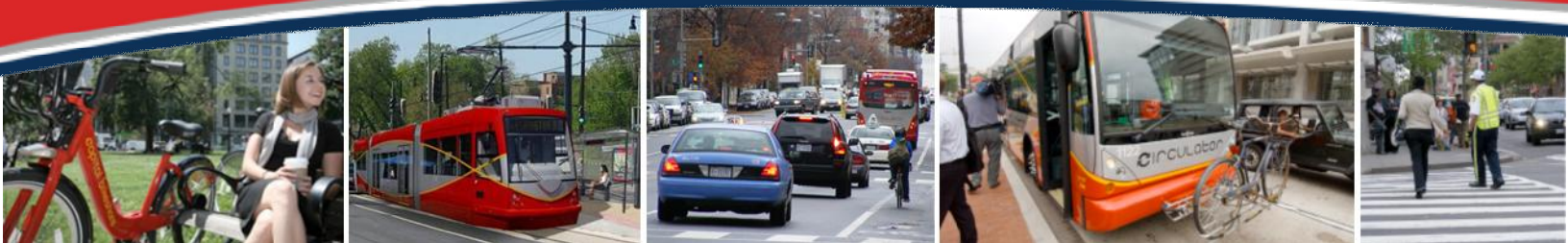
Study Area and Location

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



The *proposed* speed camera will be located in Ward 7 at the 800 block of Ridge Road Southeast in the southeast-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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District Department of Transportation

800 Block Ridge Road SE SE/B

Field Assessment Summary

Ridge Road Southeast is assumed to run in a northwest-southeast direction and is classified as a minor arterial. Ridge Road 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 side and has a bike trail through it that generates pedestrian activity.
- Ridge Playground and Fort Dupont Pool are in the area, both of which generate pedestrian activity.
- There is a 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



District Department of Transportation

800 Block Ridge Road SE SE/B



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	11
85th Percentile Speed (MPH)	17
10 MPH Pace Speed	6-15
ADT	3,854

The mean speed is lower than the posted speed limit by 14 MPH and the 85th percentile speed is lower than the posted speed limit by 8 MPH at this location.

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.

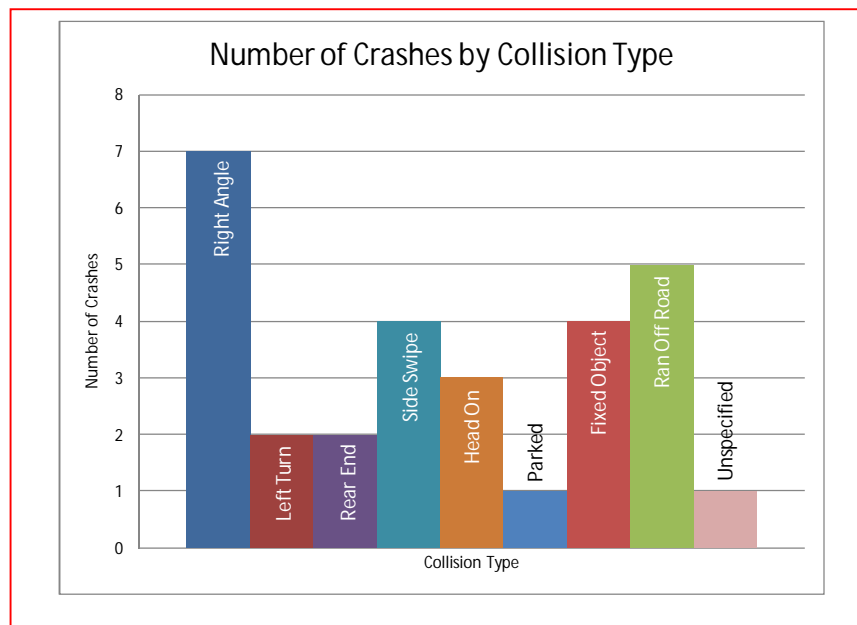
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District Department of Transportation

800 Block Ridge Road SE SE/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 speed data analysis shows travel speeds being lower than the posted speed limit.
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 side and has a bike trail through it that generates pedestrian activity.
 - c. Ridge Playground and Fort Dupont Pool generate pedestrian and bicycle activity.
 - d. There is on-street parking in both directions.

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800 Block Ridge Road SE SE/B

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, 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 Block of Ridge Rd SE SEB Speed

SEB	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	
11/20/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	12	3	2	1	0	0	0	0	0	0	0	0	0	0	18
06:00	12	25	15	5	0	0	0	0	0	0	0	0	0	0	57
07:00	70	36	9	2	0	0	0	0	0	0	0	0	0	0	117
08:00	161	41	4	0	0	0	0	0	0	0	0	0	0	0	206
09:00	91	30	7	0	0	0	0	0	0	0	0	0	0	0	128
10:00	90	47	4	1	0	0	0	0	0	0	0	0	0	0	142
11:00	65	70	8	0	1	0	0	0	0	0	0	0	0	0	144
12 PM	116	52	3	0	0	0	0	0	0	0	0	0	0	0	171
13:00	61	115	38	5	0	0	0	0	0	0	0	0	0	0	219
14:00	54	115	38	4	0	0	0	0	0	0	0	0	0	0	211
15:00	233	73	11	0	0	0	0	0	0	0	0	0	0	0	317
16:00	395	57	6	0	0	0	0	0	0	0	0	0	0	0	458
17:00	367	132	13	0	0	0	0	0	0	0	0	0	0	0	512
18:00	335	70	4	0	0	0	0	0	0	0	0	0	0	0	409
19:00	157	53	5	0	0	0	0	0	0	0	0	0	0	0	215
20:00	122	38	6	0	0	0	0	0	0	0	0	0	0	0	166
21:00	19	72	28	1	0	0	0	0	0	0	0	0	0	0	120
22:00	12	42	32	1	0	0	0	0	0	0	0	0	0	0	87
23:00	14	36	22	2	2	0	0	0	0	0	0	0	0	0	76
Total	2388	1107	255	22	3	0	0	0	0	0	0	0	0	0	3775

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

800 Block of Ridge Rd SE SEB Speed

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/21/13	4	20	14	3	0	0	0	0	0	0	0	0	0	0	41
01:00	2	6	9	4	0	0	0	0	0	0	0	0	0	0	21
02:00	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
03:00	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
04:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	23	26	23	7	0	0	0	0	0	0	0	0	0	0	79
Grand Total	2411	1133	278	29	3	0	0	0	0	0	0	0	0	0	3854

15th Percentile : 5 MPH
 50th Percentile : 10 MPH
 85th Percentile : 17 MPH
 95th Percentile : 20 MPH

Stats
 Mean Speed(Average) : 11 MPH
 10 MPH Pace Speed : 6-15 MPH
 Number in Pace : 2383
 Percent in Pace : 61.8%
 Number of Vehicles > 25 MPH : 38
 Percent of Vehicles > 25 MPH : 1.0%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

800 Block of Ridge Rd SE SEB Volume

Start Time	Wed	20-Nov-13	Thu	21-Nov-13	Fri	22-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	38	16	*	*	*	16	38
12:15	*	38	11	*	*	*	11	38
12:30	*	45	7	*	*	*	7	45
12:45	*	50	7	*	*	*	7	50
01:00	*	60	4	*	*	*	4	60
01:15	*	46	9	*	*	*	9	46
01:30	*	50	4	*	*	*	4	50
01:45	*	63	4	*	*	*	4	63
02:00	*	48	2	*	*	*	2	48
02:15	*	56	2	*	*	*	2	56
02:30	*	43	3	*	*	*	3	43
02:45	*	64	1	*	*	*	1	64
03:00	*	58	2	*	*	*	2	58
03:15	*	78	1	*	*	*	1	78
03:30	*	90	2	*	*	*	2	90
03:45	*	91	2	*	*	*	2	91
04:00	*	99	0	*	*	*	0	99
04:15	*	102	2	*	*	*	2	102
04:30	1	119	*	*	*	*	1	119
04:45	1	138	*	*	*	*	1	138
05:00	6	125	*	*	*	*	6	125
05:15	1	134	*	*	*	*	1	134
05:30	5	152	*	*	*	*	5	152
05:45	6	101	*	*	*	*	6	101
06:00	17	115	*	*	*	*	17	115
06:15	7	123	*	*	*	*	7	123
06:30	14	87	*	*	*	*	14	87
06:45	19	84	*	*	*	*	19	84
07:00	25	62	*	*	*	*	25	62
07:15	31	55	*	*	*	*	31	55
07:30	33	50	*	*	*	*	33	50
07:45	28	48	*	*	*	*	28	48
08:00	63	42	*	*	*	*	63	42
08:15	38	42	*	*	*	*	38	42
08:30	56	34	*	*	*	*	56	34
08:45	49	48	*	*	*	*	49	48
09:00	34	31	*	*	*	*	34	31
09:15	35	31	*	*	*	*	35	31
09:30	27	33	*	*	*	*	27	33
09:45	32	25	*	*	*	*	32	25
10:00	26	25	*	*	*	*	26	25
10:15	27	16	*	*	*	*	27	16
10:30	41	22	*	*	*	*	41	22
10:45	48	24	*	*	*	*	48	24
11:00	29	15	*	*	*	*	29	15
11:15	39	25	*	*	*	*	39	25
11:30	37	23	*	*	*	*	37	23
11:45	39	13	*	*	*	*	39	13
Total	814	2961	79	0	0	0	893	2961
Combined Total	3775		79		0		3854	
Peak	08:00	04:45	12:00				08:00	04:45
Vol.	206	549	41				206	549
P.H.F.	0.817	0.903	0.641				0.817	0.903
ADT	ADT 3,854		AADT 3,854					

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

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	29	Right Angle:	7	24.1%	Fixed Object:	4	13.8%
Total Number of Fatalities:	0	Left Turn:	2	6.9%	Ran Off Road:	5	17.2%
Total Number of Injuries:	19	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	1	Rear End:	2	6.9%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	2	Side Swiped:	4	13.8%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	3	10.3%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	1	3.4%	Unspecified:	1	3.4%
Total Number of Motorcycles Involved:	1						

Time of Day	#ACC	%
07:30 ~ 09:30:	2	6.9%
09:30 ~ 11:30:	3	10.3%
11:30 ~ 13:30:	2	6.9%
13:30 ~ 16:00:	2	6.9%
16:00 ~18:30:	6	20.7%
18:30 ~ 07:30:	14	48.3%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	2	6.9%
Monday:	1	3.4%
Tuesday:	4	13.8%
Wednesday:	5	17.2%
Thursday:	8	27.6%
Friday:	2	6.9%
Saturday:	7	24.1%

Weather Condition	#ACC	%
Clear:	25	86.2%
Rain:	1	3.4%
Snow:	1	3.4%
Sleet/Hail:	1	3.4%
Fog/Mist:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	1	3.4%

Surface Condition	#ACC	%
Dry:	22	75.9%
Wet:	3	10.3%
Snow/Ice:	2	6.9%
Slush:	1	3.4%
Water/Sand:	1	3.4%
Repairing:	0	0.0%
Unspecified:	0	0.0%

Type of Vehicle	#VEH	%
Passenger Car:	33	67.3%
Bus:	0	0.0%
Truck:	3	6.1%
Taxi:	2	4.1%
Minivan:	0	0.0%
Police/Emergency Vehicle:	2	4.1%
Motorcycle/Moped:	1	2.0%
Bicycle:	0	0.0%
Fixed Object:	0	0.0%
Unspecified:	8	16.3%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	14	48.3%
PDO Collision:	15	51.7%

Light Condition	#ACC	%
Daylight:	16	55.2%
Dawn/Dusk:	2	6.9%
Dark(Lighted):	8	27.6%
Dark(Not Lighted):	2	6.9%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	1	3.4%

Contributing Factor	#VEH	%
Driver: Speed:	3	6.1%
Driver: Alcohol/Drug:	0	0.0%
Driver: Electronic Device:	0	0.0%
Driver: Others:	10	20.4%
Vehicle:	0	0.0%
Roadway:	2	4.1%
Unspecified:	34	69.4%

Pedestrian Actions	#ACC	%
In Crosswalk with Signal:	0	0.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	0	0.0%

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