



District Department of Transportation

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

700 Block Ridge Road SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	605	7	7E	Planned	700 Block Ridge Road Southeast Southeast-bound



The *planned* speed camera will be located in Ward 7 at the 700 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

700 Block Ridge Road SE

Field Assessment Summary

Ridge Road Southeast is assumed to run 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:

- This is a residential area with houses on the east side of the street.
- Ridge Playground is a block away.
- The area also contains Benning Terrace Recreation Center and a bike trail.
- There is one school in the area: Davis Elementary School.
- There is sidewalk on the east side of the street and on-street parking on both sides of the street.
- The pavement is in fair condition and there is curb and gutter with drainage inlets.



Looking Northwest-bound

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District Department of Transportation

700 Block Ridge Road SE



Looking Southeast-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	12
85th Percentile Speed (MPH)	17
10 MPH Pace Speed (MPH)	6-15
ADT	3,892

The mean speed is lower than the posted speed by 13 MPH and the 85th percentile speed is lower than the posted speed by 8 MPH at this location.

Crash Data Analysis

From the Accident Summary Report for the dates provided between January 1, 2010 and December 31, 2012, there were a total of 48 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 crashes at this location were Right Angle (10 crashes), Side Swipe (8 crashes), Left Turn (6 crashes) and Head On (6 crashes). Furthermore, this site experienced a high frequency (22 crashes) of injury-related crashes.

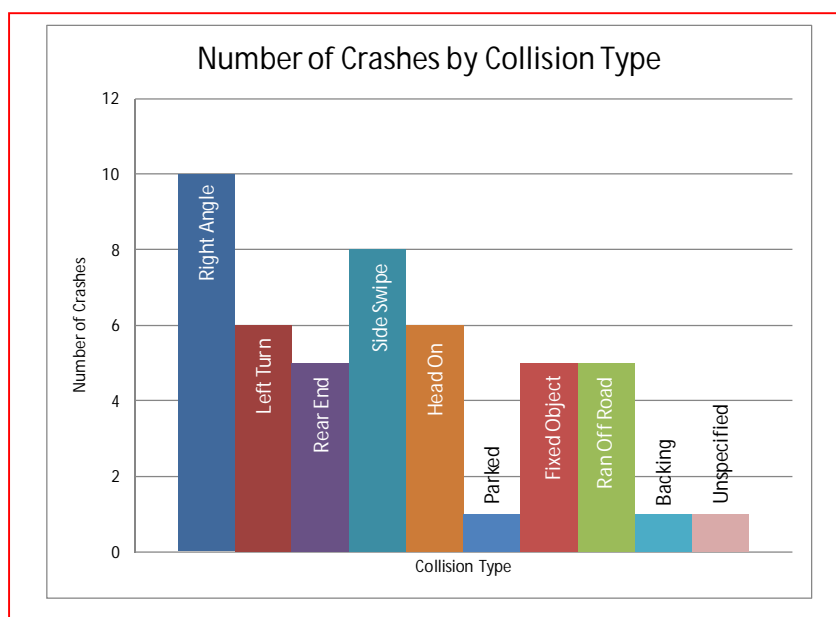
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District Department of Transportation

700 Block Ridge Road SE

Severity			Weather			Surface condition			Light Condition		
Total	48										
Fatal	0	0.0%	Clear	36	75.0%	Dry	33	68.8%	Day	27	56.3%
Injury	22	45.8%	Rain	6	12.5%	Wet	10	20.8%	Night	17	35.4%
Truck	3	6.3%	Snow	2	4.2%	Snow/Ice	3	6.3%			
Taxi	2	4.2%									



Safety Nexus

This site presents the following safety considerations which 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 (22 crashes) of injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses on the east side of the street.
 - b. There is one school in the area: Davis Elementary School.
 - c. Ridge Playground, Benning Terrace Recreation Center, and a bike trail are nearby which generate 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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700 Block Ridge Road SE

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 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

700 Block of Ridge Rd SE SEB Speed

SEB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	Total
11/20/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	2	4	4	0	0	0	0	0	0	0	0	0	0	0	10
05:00	5	10	4	4	1	0	0	0	0	0	0	0	0	0	24
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	397	57	6	0	0	0	0	0	0	0	0	0	0	0	460
17:00	382	132	13	0	0	0	0	0	0	0	0	0	0	0	527
18:00	336	70	4	0	0	0	0	0	0	0	0	0	0	0	410
19:00	159	53	5	0	0	0	0	0	0	0	0	0	0	0	217
20:00	122	38	6	0	0	0	0	0	0	0	0	0	0	0	166
21:00	19	73	28	1	0	0	0	0	0	0	0	0	0	0	121
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	2401	1119	261	25	4	0	0	0	0	0	0	0	0	0	3810

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

700 Block of Ridge Rd SE SEB Speed

SEB

Start Time	1 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 999	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	0	6	4	2	0	1	0	0	0	0	0	0	0	0	13
03:00	0	1	4	1	1	0	0	0	0	0	0	0	0	0	7
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	6	33	31	10	1	1	0	0	0	0	0	0	0	0	82
Grand Total	2407	1152	292	35	5	1	0	0	0	0	0	0	0	0	3892

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

Stats
Mean Speed(Average) : 12 MPH
10 MPH Pace Speed : 6-15 MPH
Number in Pace : 2393
Percent in Pace : 61.5%
Number of Vehicles > 25 MPH : 44
Percent of Vehicles > 25 MPH : 1.1%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

700 Block of Ridge Rd SE SEB Volume

Start Time	Wed A.M.	20-Nov-13 P.M.	Thu A.M.	21-Nov-13 P.M.	Fri A.M.	22-Nov-13 P.M.	Daily Average	
							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	3	*	*	*	3	48
02:15	*	56	4	*	*	*	4	56
02:30	*	43	3	*	*	*	3	43
02:45	*	64	3	*	*	*	3	64
03:00	*	58	2	*	*	*	2	58
03:15	*	78	2	*	*	*	2	78
03:30	*	90	2	*	*	*	2	90
03:45	*	91	1	*	*	*	1	91
04:00	3	99	*	*	*	*	3	99
04:15	3	102	*	*	*	*	3	102
04:30	0	119	*	*	*	*	0	119
04:45	4	140	*	*	*	*	4	140
05:00	5	140	*	*	*	*	5	140
05:15	5	134	*	*	*	*	5	134
05:30	8	152	*	*	*	*	8	152
05:45	6	101	*	*	*	*	6	101
06:00	17	115	*	*	*	*	17	115
06:15	7	124	*	*	*	*	7	124
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	52	*	*	*	*	33	52
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	32	*	*	*	*	34	32
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	828	2982	82	0	0	0	910	2982
Combined Total	3810		82		0		3892	
Peak	08:00	04:45	12:00				08:00	04:45
Vol.	206	566	41				206	566
P.H.F.	0.817	0.931	0.641				0.817	0.931
ADT	ADT 3,892		AADT 3,892					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: RIDGE RD,SE From FORT DAVIS DR,SE TO BURNS ST,SE

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

Prepared By: Rahul Jain

Prepared Date: 10/6/2013

Total Number of Accident:	48	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	10	20.8%	Fixed Object:	5	10.4%
Total Number of Injuries:	33	Left Turn:	6	12.5%	Ran Off Road:	5	10.4%
Total Number of Disabling Injuries:	1	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	2	Rear End:	5	10.4%	Backing:	1	2.1%
Total Number of Pedestrians Involved:	0	Side Swiped:	8	16.7%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	6	12.5%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	1	Parked:	1	2.1%	Unspecified:	1	2.1%

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	6	12.5%	Sunday:	7	14.6%
09:30 ~ 11:30:	6	12.5%	Monday:	5	10.4%
11:30 ~ 13:30:	5	10.4%	Tuesday:	8	16.7%
13:30 ~ 16:00:	3	6.3%	Wednesday:	8	16.7%
16:00 ~18:30:	7	14.6%	Thursday:	10	20.8%
18:30 ~ 07:30:	21	43.8%	Friday:	3	6.3%
Unspecified:	0	0.0%	Saturday:	7	14.6%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	36	75.0%	Dry:	33	68.8%
Rain:	6	12.5%	Wet:	10	20.8%
Snow:	2	4.2%	Snow/Ice:	3	6.3%
Sleet/Hail:	1	2.1%	Slush:	1	2.1%
Fog/Mist:	0	0.0%	Water/Sand:	1	2.1%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	3	6.3%	Unspecified:	0	0.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	69	80.2%	Fatal Collision:	0	0.0%
Bus:	1	1.2%	Injury Collision:	22	45.8%
Truck:	3	3.5%	PDO Collision:	26	54.2%
Taxi:	2	2.3%	Light Condition	#ACC	%
Minivan:	0	0.0%	Daylight:	27	56.3%
Police/Emergency Vehicle:	2	2.3%	Dawn/Dusk:	2	4.2%
Motorcycle/Moped:	2	2.3%	Dark(Lighted):	15	31.3%
Bicycle:	0	0.0%	Dark(Not Lighted):	2	4.2%
Fixed Object:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
Unspecified:	7	8.1%	Unspecified:	2	4.2%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	6	7.0%	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:	17	19.8%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	3	3.5%	From Between Parked Cars:	0	0.0%
Unspecified:	60	69.8%	Unspecified:	0	0.0%

28 Records are not approved as of 10/6/2013 7:28:42 PM