



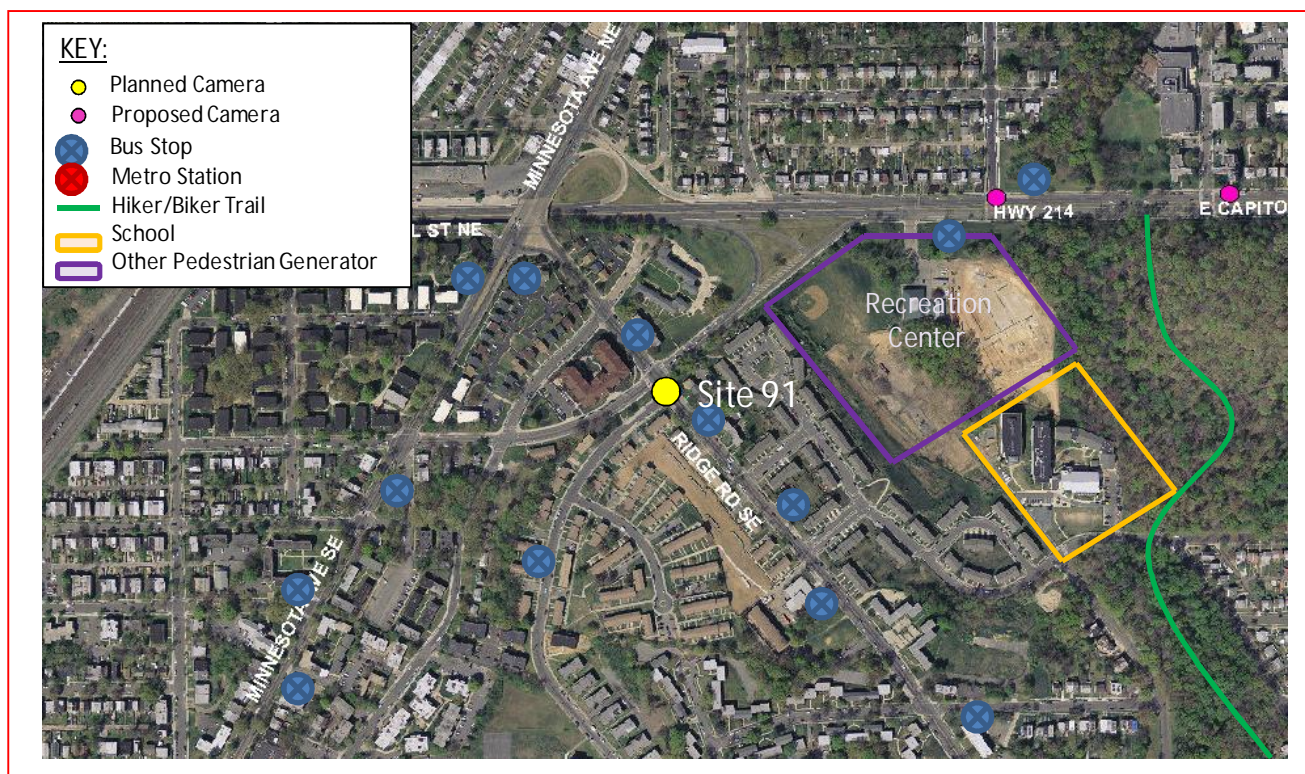
District Department of Transportation

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

### 100 Block Ridge Road SE NW/B

#### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	603	7	7A	Planned	100 Block Ridge Road Southeast Northwest-bound



The *planned* speed camera will be located in Ward 7 at the 100 block of Ridge Road Southeast in the northwest-bound direction. Ridge Road 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

100 Block Ridge Road SE NW/B

## Field Assessment Summary

Ridge Road 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:

- This is a residential area with apartments.
- There is one school in the area, the Seed School. The Benning Stoddert Recreation Center is also in the area.
- There is sidewalk on both sides of the street and a crosswalk with an in-street pedestrian crossing sign at Bay Lane.
- There is on-street parking on both sides of the street and bus stops on both sides of the street near 37<sup>th</sup> 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

100 Block Ridge Road SE NW/B



Looking Northwest-bound

## Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	9
85th Percentile Speed (MPH)	12
10 MPH Pace Speed (MPH)	4-13
ADT	4,030

The mean speed is lower than the posted speed limit by 16 MPH and the 85<sup>th</sup> percentile speed is lower than the posted speed by 13 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 26 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 Rear End (6 crashes) and Left Turn (5 crashes). This location experienced eight injury-related crashes.

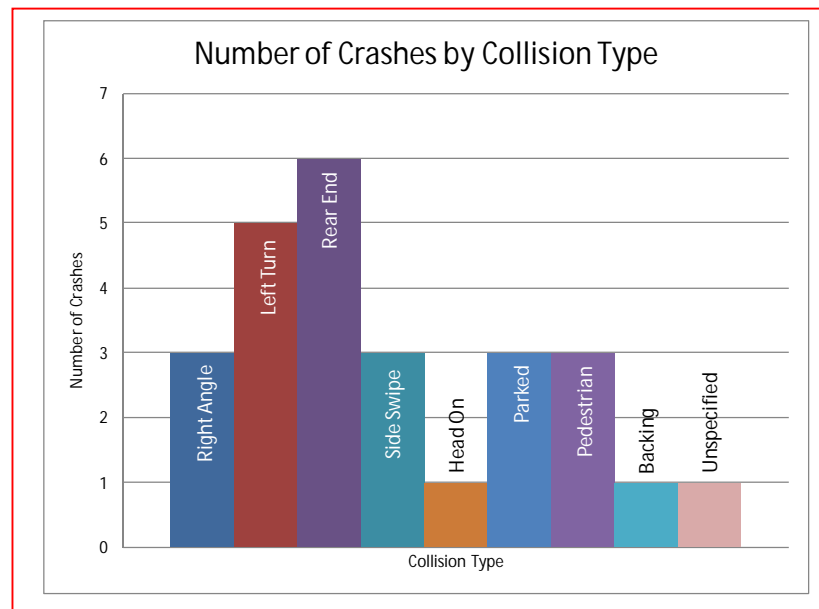
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District Department of Transportation

100 Block Ridge Road SE NW/B

Severity			Weather			Surface condition			Light Condition		
Total	26										
Fatal	0	0.0%	Clear	19	73.1%	Dry	21	80.8%	Day	15	57.7%
Injury	8	30.8%	Rain	3	11.5%	Wet	3	11.5%	Night	10	38.5%
Bus	2	7.7%	Snow	3	11.5%	Snow/Ice	2	7.7%			
Truck	2	7.7%									



## 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 eight 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 apartments.
  - b. There is one school in the area, the Seed School.
  - c. The Benning Stoddert Recreation Center is in the area which generates 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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District Department of Transportation

100 Block Ridge Road SE NW/B

Although the speed data analysis showed the mean and 85<sup>th</sup> 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

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## 100 Block of Ridge Rd SE NWB Speed

NWB																
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	
11/20/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	147	0	0	0	0	0	0	0	0	0	0	0	0	0	147	
06:00	272	0	0	0	0	0	0	0	0	0	0	0	0	0	272	
07:00	361	0	0	0	0	0	0	0	0	0	0	0	0	0	361	
08:00	355	0	0	0	0	0	0	0	0	0	0	0	0	0	355	
09:00	256	0	0	0	0	0	0	0	0	0	0	0	0	0	256	
10:00	204	0	0	0	0	0	0	0	0	0	0	0	0	0	204	
11:00	163	0	0	0	0	0	0	0	0	0	0	0	0	0	163	
12 PM	191	0	0	0	0	0	0	0	0	0	0	0	0	0	191	
13:00	204	0	0	0	0	0	0	0	0	0	0	0	0	0	204	
14:00	220	0	0	0	0	0	0	0	0	0	0	0	0	0	220	
15:00	238	0	0	0	0	0	0	0	0	0	0	0	0	0	238	
16:00	217	0	0	0	0	0	0	0	0	0	0	0	0	0	217	
17:00	222	0	0	0	0	0	0	0	0	0	0	0	0	0	222	
18:00	219	0	0	0	0	0	0	0	0	0	0	0	0	0	219	
19:00	182	0	0	0	0	0	0	0	0	0	0	0	0	0	182	
20:00	145	0	0	0	0	0	0	0	0	0	0	0	0	0	145	
21:00	129	0	0	0	0	0	0	0	0	0	0	0	0	0	129	
22:00	97	0	0	0	0	0	0	0	0	0	0	0	0	0	97	
23:00	70	0	0	0	0	0	0	0	0	0	0	0	0	0	70	
Total	3892	0	0	0	0	0	0	0	0	0	0	0	0	0	3892	

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## 100 Block of Ridge Rd SE NWB Speed

NWB																
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	
11/21/13	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41
01:00	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24
02:00	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
03:00	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
04:00	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47
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	138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	138
Grand Total	4030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4030

15th Percentile : 4 MPH  
50th Percentile : 7 MPH  
85th Percentile : 12 MPH  
95th Percentile : 14 MPH

Stats  
Mean Speed(Average) : 9 MPH  
10 MPH Pace Speed : 4-13 MPH  
Number in Pace : 3246  
Percent in Pace : 80.5%  
Number of Vehicles > 25 MPH : 0  
Percent of Vehicles > 25 MPH : 0.0%

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## 100 Block of Ridge Rd SE NWB 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	*	45	15	*	*	*	15	45
12:15	*	45	8	*	*	*	8	45
12:30	*	51	9	*	*	*	9	51
12:45	*	50	9	*	*	*	9	50
01:00	*	48	7	*	*	*	7	48
01:15	*	45	10	*	*	*	10	45
01:30	*	55	6	*	*	*	6	55
01:45	*	56	1	*	*	*	1	56
02:00	*	54	2	*	*	*	2	54
02:15	*	54	8	*	*	*	8	54
02:30	*	55	3	*	*	*	3	55
02:45	*	57	2	*	*	*	2	57
03:00	*	66	1	*	*	*	1	66
03:15	*	53	4	*	*	*	4	53
03:30	*	57	5	*	*	*	5	57
03:45	*	62	1	*	*	*	1	62
04:00	*	59	4	*	*	*	4	59
04:15	*	58	12	*	*	*	12	58
04:30	*	56	15	*	*	*	15	56
04:45	*	44	16	*	*	*	16	44
05:00	30	55	*	*	*	*	30	55
05:15	29	56	*	*	*	*	29	56
05:30	51	53	*	*	*	*	51	53
05:45	37	58	*	*	*	*	37	58
06:00	44	60	*	*	*	*	44	60
06:15	66	60	*	*	*	*	66	60
06:30	70	44	*	*	*	*	70	44
06:45	92	55	*	*	*	*	92	55
07:00	93	44	*	*	*	*	93	44
07:15	87	53	*	*	*	*	87	53
07:30	88	48	*	*	*	*	88	48
07:45	93	37	*	*	*	*	93	37
08:00	92	31	*	*	*	*	92	31
08:15	88	53	*	*	*	*	88	53
08:30	95	36	*	*	*	*	95	36
08:45	80	25	*	*	*	*	80	25
09:00	79	30	*	*	*	*	79	30
09:15	69	40	*	*	*	*	69	40
09:30	58	33	*	*	*	*	58	33
09:45	50	26	*	*	*	*	50	26
10:00	59	25	*	*	*	*	59	25
10:15	56	25	*	*	*	*	56	25
10:30	48	25	*	*	*	*	48	25
10:45	41	22	*	*	*	*	41	22
11:00	40	26	*	*	*	*	40	26
11:15	38	19	*	*	*	*	38	19
11:30	48	15	*	*	*	*	48	15
11:45	37	10	*	*	*	*	37	10
Total	1758	2134	138	0	0	0	1896	2134
Combined Total	3892		138		0		4030	
Peak	07:45	03:00	04:00				07:45	03:00
Vol.	368	238	47				368	238
P.H.F.	0.968	0.902	0.734				0.968	0.902
ADT	ADT 4,030		AADT 4,030					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** RIDGE RD,SE From B ST,SE TO C 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:	26	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Fatalities:	0	Right Angle:	3	11.5%	Fixed Object:	0	0.0%
Total Number of Injuries:	9	Left Turn:	5	19.2%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	3	11.5%
Total Number of NonDisabling Injuries:	1	Rear End:	6	23.1%	Backing:	1	3.8%
Total Number of Pedestrians Involved:	2	Side Swiped:	3	11.5%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	1	3.8%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	1	Parked:	3	11.5%	Unspecified:	1	3.8%

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>	<b>Day o fweek</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	4	15.4%	Sunday:	4	15.4%
09:30 ~ 11:30:	1	3.8%	Monday:	4	15.4%
11:30 ~ 13:30:	3	11.5%	Tuesday:	6	23.1%
13:30 ~ 16:00:	3	11.5%	Wednesday:	2	7.7%
16:00 ~18:30:	4	15.4%	Thursday:	6	23.1%
18:30 ~ 07:30:	11	42.3%	Friday:	1	3.8%
Unspecified:	0	0.0%	Saturday:	3	11.5%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	19	73.1%	Dry:	21	80.8%
Rain:	3	11.5%	Wet:	3	11.5%
Snow:	3	11.5%	Snow/Ice:	2	7.7%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	1	3.8%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	0	0.0%	Unspecified:	0	0.0%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Passenger Car:	43	79.6%	Fatal Collision:	0	0.0%
Bus:	2	3.7%	Injury Collision:	8	30.8%
Truck:	2	3.7%	PDO Collision:	18	69.2%
Taxi:	0	0.0%	<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Minivan:	0	0.0%	Daylight:	15	57.7%
Police/Emergency Vehicle:	0	0.0%	Dawn/Dusk:	1	3.8%
Motorcycle/Moped:	1	1.9%	Dark(Lighted):	10	38.5%
Bicycle:	0	0.0%	Dark(Not Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
Unspecified:	6	11.1%	Unspecified:	0	0.0%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
Driver: Speed:	3	5.6%	In Crosswalk with Signal:	2	100.0%
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:	11	20.4%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%
Unspecified:	40	74.1%	Unspecified:	0	0.0%

16 Records are not approved as of 10/6/2013 7:21:43 PM