



District Department of Transportation

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

### 4500 Block Clermont Drive NE

### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
5	405	5	5C	Proposed	4500 Block Clermont Drive Northeast Southbound



This *proposed* speed camera will be located in Ward 5 on the 4500 block of Clermont Drive Northeast in the southbound direction. Clermont Drive runs between Allison Street Northeast to the north and Harewood Road Northwest to the south. The posted speed limit is 25 MPH.

W5 - 299





District Department of Transportation

4500 Block Clermont Drive NE

## Field Assessment Summary

Clermont Drive is assumed to run in the north-south direction, and is classified as a principal arterial. Clermont Drive has two travel lanes in each direction and one left turn lane at Allison Street Northeast and Webster Street Northeast. This site has the following characteristics:

- This site is located in a residential area with apartments on both sides of the street.
- There is sidewalk with curb, gutter, and drainage inlets on the east side of the street.
- There is a grass and concrete median in the road and a traffic signal with pedestrian signals at Allison Street.
- The existing pavement is in good condition. There is a slight slope downgrade in the northbound direction.
- There is one school in the area: Catholic University.



Looking Northbound

W5 - 300





District Department of Transportation

4500 Block Clermont Drive NE



Looking Southbound

## Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	23
85th Percentile Speed (MPH)	28
10 MPH Pace Speed (MPH)	20-29
ADT	14,244

The mean speed was 2 MPH lower than the posted speed limit and the 85<sup>th</sup> percentile speed was 3 MPH higher than the posted speed limit at this location.

## Crash Data Analysis

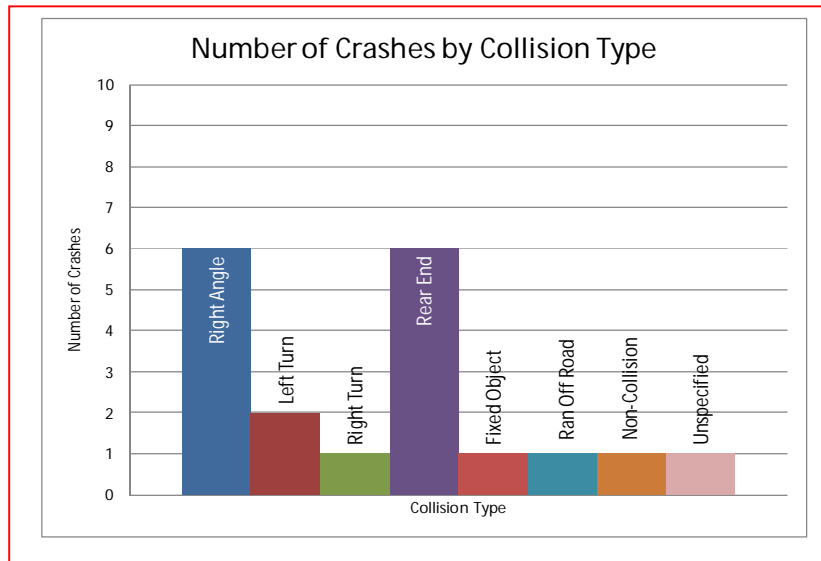
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 19 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of collision at this location were Right Angle (6 crashes) and Rear End (6 crashes). The other collision types had less than two crashes or less.



District Department of Transportation

4500 Block Clermont Drive NE

Severity			Weather			Surface condition			Light Condition		
Total	19										
Fatal	0	0.0%	Clear	9	47.4%	Dry	8	42.1%	Day	12	63.2%
Injury	3	15.8%	Rain	6	31.6%	Wet	9	47.4%	Night	5	26.3%
Taxi	3	15.8%	Snow	1	5.3%	Snow/Ice	1	5.3%			
Truck	1	5.3%									



## Safety Nexus

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

1. Speed Data – The 85th percentile speed is higher than the posted speed limit at this location.
2. Crash Data – The crash data analysis shows a low number of crashes at this location, including three 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 on both sides of the street.
  - b. There is one school in the area: Catholic University.
  - c. There are several 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 and pedestrian generators, there is a nexus between traffic safety and the speed camera at this location.

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 4500 block of Clermont Dr NE SB Speed

SB

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
11/13/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	1	3	27	38	15	2	0	0	0	0	0	0	0	0	86
04:00	8	3	51	152	39	10	1	0	0	0	0	0	0	0	264
05:00	34	5	128	409	133	14	2	0	0	0	0	0	0	0	725
06:00	79	16	277	682	103	11	3	0	0	0	0	0	0	0	1171
07:00	85	18	287	660	102	4	0	0	0	0	0	0	0	0	1156
08:00	83	41	604	472	29	0	1	0	0	0	0	0	0	0	1230
09:00	81	73	581	350	22	1	0	0	0	0	0	0	0	0	1108
10:00	55	74	442	116	6	0	0	0	0	0	0	0	0	0	693
11:00	55	91	411	98	6	1	0	0	0	0	0	0	0	0	662
12 PM	38	100	380	103	10	1	0	0	0	0	0	0	0	0	632
13:00	56	52	354	114	6	1	0	0	0	0	0	0	0	0	583
14:00	56	52	352	201	17	0	0	0	0	0	0	0	0	0	678
15:00	43	41	417	208	19	3	0	0	0	0	0	0	0	0	731
16:00	50	46	403	235	19	2	0	0	0	0	0	0	0	0	755
17:00	40	66	435	228	23	2	1	0	0	0	0	0	0	0	795
18:00	53	42	406	209	13	1	0	0	0	0	0	0	0	0	724
19:00	33	79	269	116	8	0	0	0	0	0	0	0	0	0	505
20:00	28	53	250	98	13	2	0	0	0	0	0	0	0	0	444
21:00	24	40	235	116	8	1	0	0	0	0	0	0	0	0	424
22:00	35	41	199	101	17	0	0	0	0	0	0	0	0	0	393
23:00	14	18	130	68	5	1	0	0	0	0	0	0	0	0	236
Total	951	954	6638	4774	613	57	8	0	0	0	0	0	0	0	13995

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## 4500 block of Clermont Dr NE SB Speed

SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/14/13	9	18	57	33	5	0	0	0	0	0	0	0	0	0	122
01:00	5	9	37	15	1	0	0	0	0	0	0	0	0	0	67
02:00	1	11	31	16	1	0	0	0	0	0	0	0	0	0	60
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	15	38	125	64	7	0	0	0	0	0	0	0	0	0	249
Grand Total	966	992	6763	4838	620	57	8	0	0	0	0	0	0	0	14244

15th Percentile : 15 MPH  
 50th Percentile : 23 MPH  
 85th Percentile : 28 MPH  
 95th Percentile : 30 MPH

Stats  
 Mean Speed(Average) : 23 MPH  
 10 MPH Pace Speed : 20-29 MPH  
 Number in Pace : 9579  
 Percent in Pace : 67.2%  
 Number of Vehicles > 25 MPH : 5283  
 Percent of Vehicles > 25 MPH : 37.1%

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## 4500 block of Clermont Dr NE SB Volume

Start Time	Wed 13-Nov-13		Thu 14-Nov-13		Fri 15-Nov-13		Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	154	35	*	*	*	35	154
12:15	*	159	29	*	*	*	29	159
12:30	*	144	31	*	*	*	31	144
12:45	*	175	27	*	*	*	27	175
01:00	*	162	11	*	*	*	11	162
01:15	*	128	21	*	*	*	21	128
01:30	*	128	23	*	*	*	23	128
01:45	*	165	12	*	*	*	12	165
02:00	*	140	15	*	*	*	15	140
02:15	*	156	17	*	*	*	17	156
02:30	*	178	10	*	*	*	10	178
02:45	*	204	18	*	*	*	18	204
03:00	9	177	*	*	*	*	9	177
03:15	20	198	*	*	*	*	20	198
03:30	27	163	*	*	*	*	27	163
03:45	30	193	*	*	*	*	30	193
04:00	34	143	*	*	*	*	34	143
04:15	62	224	*	*	*	*	62	224
04:30	74	188	*	*	*	*	74	188
04:45	94	200	*	*	*	*	94	200
05:00	130	183	*	*	*	*	130	183
05:15	146	199	*	*	*	*	146	199
05:30	224	207	*	*	*	*	224	207
05:45	225	206	*	*	*	*	225	206
06:00	249	176	*	*	*	*	249	176
06:15	290	194	*	*	*	*	290	194
06:30	327	162	*	*	*	*	327	162
06:45	305	192	*	*	*	*	305	192
07:00	337	154	*	*	*	*	337	154
07:15	289	112	*	*	*	*	289	112
07:30	248	133	*	*	*	*	248	133
07:45	282	106	*	*	*	*	282	106
08:00	324	130	*	*	*	*	324	130
08:15	279	120	*	*	*	*	279	120
08:30	291	101	*	*	*	*	291	101
08:45	336	93	*	*	*	*	336	93
09:00	282	104	*	*	*	*	282	104
09:15	323	124	*	*	*	*	323	124
09:30	299	98	*	*	*	*	299	98
09:45	204	98	*	*	*	*	204	98
10:00	178	103	*	*	*	*	178	103
10:15	170	115	*	*	*	*	170	115
10:30	159	89	*	*	*	*	159	89
10:45	186	86	*	*	*	*	186	86
11:00	142	62	*	*	*	*	142	62
11:15	195	69	*	*	*	*	195	69
11:30	159	56	*	*	*	*	159	56
11:45	166	49	*	*	*	*	166	49
Total	7095	6900	249	0	0	0	7344	6900
Combined Total	13995		249		0		14244	
Peak	06:15	04:15	12:00				06:15	04:15
Vol.	1259	795	122				1259	795
P.H.F.	0.934	0.887	0.871				0.934	0.887
ADT	ADT 14,244		AADT 14,244					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** CLERMONT DR,NE From ALLISON ST,NE TO WEBSTER ST,NE

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

**Prepared By:** Rahul Jain

**Prepared Date:** 9/16/2013

		<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Accident:	19	Right Angle:	6	31.6%	Fixed Object:	1	5.3%
Total Number of Fatalities:	0	Left Turn:	2	10.5%	Ran Off Road:	1	5.3%
Total Number of Injuries:	5	Right Turn:	1	5.3%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	6	31.6%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	0	0.0%	Non Collision:	1	5.3%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	0	0.0%	Unspecified:	1	5.3%
Total Number of Motorcycles Involved:	0						

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>	<b>Day o fweek</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	2	10.5%	Sunday:	0	0.0%
09:30 ~ 11:30:	2	10.5%	Monday:	2	10.5%
11:30 ~ 13:30:	3	15.8%	Tuesday:	2	10.5%
13:30 ~ 16:00:	4	21.1%	Wednesday:	6	31.6%
16:00 ~18:30:	2	10.5%	Thursday:	1	5.3%
18:30 ~ 07:30:	6	31.6%	Friday:	5	26.3%
Unspecified:	0	0.0%	Saturday:	3	15.8%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>	<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	9	47.4%	Dry:	8	42.1%
Rain:	6	31.6%	Wet:	9	47.4%
Snow:	1	5.3%	Snow/Ice:	1	5.3%
Sleet/Hail:	0	0.0%	Slush:	0	0.0%
Fog/Mist:	2	10.5%	Water/Sand:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	1	5.3%	Unspecified:	1	5.3%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>	<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Passenger Car:	33	89.2%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	3	15.8%
Truck:	1	2.7%	PDO Collision:	16	84.2%
Taxi:	3	8.1%			
Minivan:	0	0.0%	<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Police/Emergency Vehicle:	0	0.0%	Daylight:	12	63.2%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	1	5.3%
Bicycle:	0	0.0%	Dark(Lighted):	5	26.3%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	1	5.3%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>	<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
Driver: Speed:	0	0.0%	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:	12	32.4%	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:	25	67.6%	Unspecified:	0	0.0%

12 Records are not approved as of 9/16/2013 8:01:56 AM