



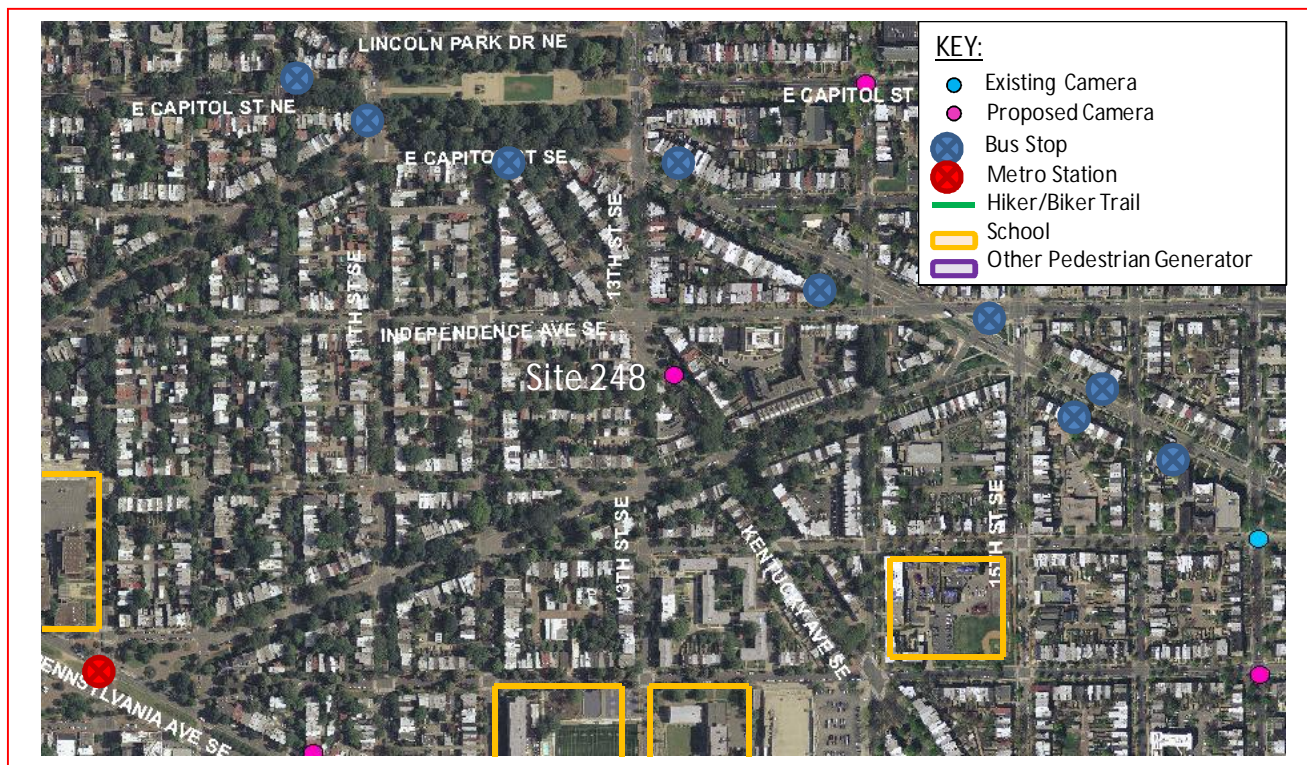
District Department of Transportation

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

100-200 Block Kentucky Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
1	108	6	6B	Proposed	100 to 200 Blocks Kentucky Avenue Southeast Northeast-bound and Southwest-bound



The *proposed* speed camera will be located in Ward 6 between the 100 to 200 blocks of Kentucky Avenue southeast for the northeast-bound and southwest-bound traffic. Kentucky Avenue SE runs from East Capitol Street Southeast in the north to Pennsylvania Avenue Southeast in the south. The posted speed limit is 25 MPH.

W6 - 297



District Department of Transportation

55 M Street, SE, Suite 400

Washington, DC 20003



District Department of Transportation

100-200 Block Kentucky Avenue SE

Field Assessment Summary

Kentucky Avenue Southeast is assumed to run in a northwest-southeast direction and is classified as a collector road. Kentucky Avenue SE has one travel lane in each direction. This site has the following characteristics:

- This site is located in a residential area with houses and apartments on both sides of the roadway.
- Sidewalks with curb and gutter exist on both sides.
- There are several bus stops and a metro station near the site that generate pedestrian activity.
- There are four schools in the area: Hine Jr. High School, Watkins Elementary School, International Graduate University and Payne Elementary School.



Looking Northwest

W6 - 298



District Department of Transportation

100-200 Block Kentucky Avenue SE



Looking Southeast

Speed Data Analysis

	NWB	SEB
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	12	18
85th Percentile Speed (MPH)	18	25
10 MPH Pace Speed	4-13	18-27
Sample Size	215	853
ADT	1,068	

The mean speed is less than the posted speed in both directions at this location. The 85th percentile speed is less than the posted speed in the northwest bound direction and equal to the posted speed in the southeast bound direction 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 four crashes at this location. A breakdown of number of crashes by collision type can be found in the chart below. The most common types of crashes at this location were Right Angle (2), Right Turn (1) and Parked (1).

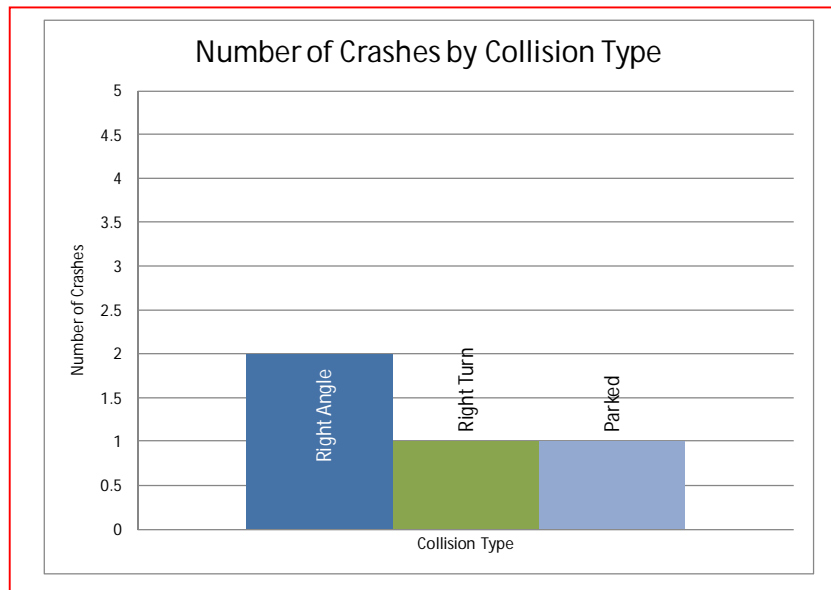
W6 - 299



District Department of Transportation

100-200 Block Kentucky Avenue SE

Severity			Weather			Surface condition			Light Condition		
Total	4										
Fatal	0	0.0%	Clear	3	75.0%	Dry	3	75.0%	Day	1	25.0%
Injury	1	25.0%	Rain	1	25.0%	Wet	1	25.0%	Night	3	75.0%
Truck	2	50.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	0	0.0%									



Safety Nexus

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

1. Speed Data – The 85th percentile speed is lower than the posted speed limit in the Northwest-bound direction while it is the same as the posted speed limit in the Southeast-bound direction at this location.
2. Crash Data – The crash data analysis shows a low number of crashes at this location.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This site is located in a residential area with many apartment buildings and houses on both sides of the street and in the surrounding area.
 - b. There are several bus stops and a metro station near the site that generate pedestrian activity.
 - c. There are 4 schools in the area: Hine Jr. High School, Watkins Elementary School, International Graduate University and Payne Elementary School.

W6 - 300



District Department of Transportation

100-200 Block Kentucky Avenue SE

Although the speed data analysis showed low travel speeds and the crash data analysis showed a low number of crashes in this area, there are other factors that reflect a safety concern. Due to the specific site characteristics of a residential area, the proximity of school zones, and the pedestrian generators, there is a nexus between traffic safety and speed camera at this location.

W6 - 301

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

100 - 200 block of Kentucky Ave SE 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	
11/24/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	2	3	14	2	1	0	0	0	0	0	0	0	0	0	22
22:00	3	1	7	6	0	0	0	0	0	0	0	0	0	0	17
23:00	1	2	5	3	1	0	0	0	0	0	0	0	0	0	12
Total	6	6	26	11	2	0	0	0	0	0	0	0	0	0	51

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

100 - 200 block of Kentucky Ave SE Speed

SEB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/25/13	1	0	0	3	2	0	0	0	0	0	0	0	0	0	6
01:00	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
02:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
03:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
04:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00	2	0	2	0	0	0	0	0	0	0	0	0	0	0	4
06:00	5	0	3	3	1	0	0	0	0	0	0	0	0	0	12
07:00	2	2	14	2	1	0	0	0	0	0	0	0	0	0	21
08:00	13	14	35	12	3	0	0	0	0	0	0	0	0	0	77
09:00	6	6	14	10	2	0	0	0	0	0	0	0	0	0	38
10:00	6	5	17	3	2	0	0	0	0	0	0	0	0	0	33
11:00	10	5	18	10	1	0	0	0	0	0	0	0	0	0	44
12 PM	11	2	21	12	1	0	0	0	0	0	0	0	0	0	47
13:00	20	8	12	7	2	0	0	0	0	0	0	0	0	0	49
14:00	18	3	16	6	0	0	0	0	0	0	0	0	0	0	43
15:00	22	20	34	12	2	0	0	0	0	0	0	0	0	0	90
16:00	11	20	29	9	1	0	0	0	0	0	0	0	0	0	70
17:00	21	34	33	6	1	0	0	0	0	0	0	0	0	0	95
18:00	13	28	36	11	0	0	0	0	0	0	0	0	0	0	88
19:00	6	12	23	6	1	0	0	0	0	0	0	0	0	0	48
20:00	10	6	8	5	0	0	0	0	0	0	0	0	0	0	29
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	179	166	318	117	22	0	0	0	0	0	0	0	0	0	802
Grand Total	185	172	344	128	24	0	0	0	0	0	0	0	0	0	853

15th Percentile : 7 MPH
 50th Percentile : 18 MPH
 85th Percentile : 25 MPH
 95th Percentile : 29 MPH

Stats
 Mean Speed(Average) : 18 MPH
 10 MPH Pace Speed : 18-27 MPH
 Number in Pace : 391
 Percent in Pace : 45.8%
 Number of Vehicles > 25 MPH : 140
 Percent of Vehicles > 25 MPH : 16.4%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

100 - 200 block of Kentucky Ave SE Speed

NWB															
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
11/24/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	5	0	0	1	0	0	0	0	0	0	0	0	0	0	6
22:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	4
Total	8	2	1	1	0	0	0	0	0	0	0	0	0	0	12

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

100 - 200 block of Kentucky Ave SE Speed

NWB																
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total	
11/25/13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
07:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
08:00	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0	11
09:00	3	1	0	2	1	0	0	0	0	0	0	0	0	0	0	7
10:00	8	0	0	2	0	0	0	0	0	0	0	0	0	0	0	10
11:00	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	8
12 PM	9	1	2	3	4	0	0	0	0	0	0	0	0	0	0	19
13:00	16	2	0	2	1	0	0	0	0	0	0	0	0	0	0	21
14:00	12	0	2	1	0	0	0	0	0	0	0	0	0	0	0	15
15:00	20	0	3	1	0	0	0	0	0	0	0	0	0	0	0	24
16:00	16	0	1	0	0	0	0	0	0	0	0	0	0	0	0	17
17:00	18	1	0	3	0	0	0	0	0	0	0	0	0	0	0	22
18:00	9	3	0	2	0	0	0	0	0	0	0	0	0	0	0	14
19:00	6	1	2	3	1	0	0	0	0	0	0	0	0	0	0	13
20:00	10	2	1	1	0	0	0	0	0	0	0	0	0	0	0	14
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	143	15	14	23	7	1	0	0	0	0	0	0	0	0	0	203
Grand Total	151	17	15	24	7	1	0	0	0	0	0	0	0	0	0	215

15th Percentile : 4 MPH
 50th Percentile : 9 MPH
 85th Percentile : 18 MPH
 95th Percentile : 28 MPH

Stats
 Mean Speed(Average) : 12 MPH
 10 MPH Pace Speed : 4-13 MPH
 Number in Pace : 140
 Percent in Pace : 65.1%
 Number of Vehicles > 25 MPH : 19
 Percent of Vehicles > 25 MPH : 9.0%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammatteng.com

100 - 200 block of Kentucky Ave SE Volume

Start Time	24-Nov-13 Sun		SEB		NWB		Combined		25-Nov-Mon	SEB		NWB		Combined	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	*	*	*	*	*	*	*	2	14	0	4	2	18	
12:15	*	*	*	*	*	*	*	*	2	8	0	8	2	16	
12:30	*	*	*	*	*	*	*	*	0	9	0	2	0	11	
12:45	*	*	*	*	*	*	*	*	2	16	0	5	2	21	
01:00	*	*	*	*	*	*	*	*	0	10	0	3	0	13	
01:15	*	*	*	*	*	*	*	*	0	10	0	7	0	17	
01:30	*	*	*	*	*	*	*	*	0	14	0	5	0	19	
01:45	*	*	*	*	*	*	*	*	3	15	0	6	3	21	
02:00	*	*	*	*	*	*	*	*	1	9	1	4	2	13	
02:15	*	*	*	*	*	*	*	*	0	10	0	4	0	14	
02:30	*	*	*	*	*	*	*	*	1	12	1	3	2	15	
02:45	*	*	*	*	*	*	*	*	0	12	0	4	0	16	
03:00	*	*	*	*	*	*	*	*	0	23	0	10	0	33	
03:15	*	*	*	*	*	*	*	*	0	22	0	8	0	30	
03:30	*	*	*	*	*	*	*	*	2	31	0	5	2	36	
03:45	*	*	*	*	*	*	*	*	0	14	0	1	0	15	
04:00	*	*	*	*	*	*	*	*	0	15	0	4	0	19	
04:15	*	*	*	*	*	*	*	*	0	17	0	5	0	22	
04:30	*	*	*	*	*	*	*	*	1	20	0	5	1	25	
04:45	*	*	*	*	*	*	*	*	0	18	0	3	0	21	
05:00	*	*	*	*	*	*	*	*	0	25	0	5	0	30	
05:15	*	*	*	*	*	*	*	*	0	18	0	4	0	22	
05:30	*	*	*	*	*	*	*	*	2	20	0	9	2	29	
05:45	*	*	*	*	*	*	*	*	2	32	1	4	3	36	
06:00	*	*	*	*	*	*	*	*	3	29	0	2	3	31	
06:15	*	*	*	*	*	*	*	*	2	22	0	3	2	25	
06:30	*	*	*	*	*	*	*	*	4	21	1	8	5	29	
06:45	*	*	*	*	*	*	*	*	3	16	1	1	4	17	
07:00	*	*	*	*	*	*	*	*	8	12	0	3	8	15	
07:15	*	*	*	*	*	*	*	*	6	16	3	7	9	23	
07:30	*	*	*	*	*	*	*	*	5	15	0	2	5	17	
07:45	*	*	*	*	*	*	*	*	2	5	0	1	2	6	
08:00	*	*	*	*	*	*	*	*	10	7	2	3	12	10	
08:15	*	*	*	*	*	*	*	*	20	9	3	5	23	14	
08:30	*	*	*	*	*	*	*	*	21	5	3	3	24	8	
08:45	*	*	*	*	*	*	*	*	26	8	3	3	29	11	
09:00	*	7	*	2	*	9	*	16	*	1	*	17	*	*	
09:15	*	9	*	2	*	11	*	9	*	1	*	10	*	*	
09:30	*	2	*	0	*	2	*	7	*	4	*	11	*	*	
09:45	*	4	*	2	*	6	*	6	*	1	*	7	*	*	
10:00	*	5	*	2	*	7	*	7	*	2	*	9	*	*	
10:15	*	4	*	0	*	4	*	11	*	5	*	16	*	*	
10:30	*	4	*	0	*	4	*	4	*	1	*	5	*	*	
10:45	*	4	*	0	*	4	*	11	*	2	*	13	*	*	
11:00	*	5	*	4	*	9	*	14	*	4	*	18	*	*	
11:15	*	2	*	0	*	2	*	14	*	2	*	16	*	*	
11:30	*	3	*	0	*	3	*	13	*	2	*	15	*	*	
11:45	*	2	*	0	*	2	*	3	*	0	*	3	*	*	
Total	0	51	0	12	0	63	243	802	559	44	203	159	287	1005	718
Day Total	0.0%	81.0%	0.0%	19.0%	0.0%	63	24.2%	55.6%	4.4%	15.8%	20.3%	15.9%	28.7%	100.5%	71.8%
Peak Vol.		09:00		09:00		09:00	08:15	05:45	09:30	02:45	08:15	05:30			
P.H.F.		0.611		0.750		0.636	0.798	0.813	0.600	0.675	0.802	0.840			

ADT ADT 1,068 AADT 1,068

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: KENTUCKY AVE,SE From EAST CAPITOL ST,BN TO SOUTH CAROLINA AVE,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:	4	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	2	50.0%	Fixed Object:	0	0.0%
Total Number of Injuries:	1	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	1	25.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycles Involved:	0	Parked:	1	25.0%	Unspecified:	0	0.0%
Time of Day				Day o fweek			
	#ACC	%			#ACC	%	
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%		
09:30 ~ 11:30:	0	0.0%	Monday:	0	0.0%		
11:30 ~ 13:30:	1	25.0%	Tuesday:	1	25.0%		
13:30 ~ 16:00:	0	0.0%	Wednesday:	1	25.0%		
16:00 ~18:30:	0	0.0%	Thursday:	1	25.0%		
18:30 ~ 07:30:	3	75.0%	Friday:	1	25.0%		
Unspecified:	0	0.0%	Saturday:	0	0.0%		
Weather Condition				Surface Condition			
	#ACC	%			#ACC	%	
Clear:	3	75.0%	Dry:	3	75.0%		
Rain:	1	25.0%	Wet:	1	25.0%		
Snow:	0	0.0%	Snow/Ice:	0	0.0%		
Sleet/Hail:	0	0.0%	Slush:	0	0.0%		
Fog/Mist:	0	0.0%	Water/Sand:	0	0.0%		
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%		
Unspecified:	0	0.0%	Unspecified:	0	0.0%		
Type of Vehicle				Accident Severity Type			
	#VEH	%			#ACC	%	
Passenger Car:	7	77.8%	Fatal Collision:	0	0.0%		
Bus:	0	0.0%	Injury Collision:	1	25.0%		
Truck:	2	22.2%	PDO Collision:	3	75.0%		
Taxi:	0	0.0%	Light Condition				
Minivan:	0	0.0%			#ACC	%	
Police/Emergency Vehicle:	0	0.0%	Daylight:	1	25.0%		
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%		
Bicycle:	0	0.0%	Dark(Lighted):	3	75.0%		
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%		
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%		
			Unspecified:	0	0.0%		
Contributing Factor				Pedestrian Actions			
	#VEH	%			#ACC	%	
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:	2	22.2%	In Unmarked Crosswalk:	0	0.0%		
Vehicle:	1	11.1%	Not in Crosswalk:	0	0.0%		
Roadway:	0	0.0%	From Between Parked Cars:	0	0.0%		
Unspecified:	6	66.7%	Unspecified:	0	0.0%		

3 Records are not approved as of 9/15/2013 8:46:02 PM