



District Department of Transportation

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

DC-295 SW 0.7 Miles South of Exit 1 S/B

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	708	8	8D	Existing	DC-295 Southwest 0.7 Miles South of Exit 1 Southbound



This existing speed camera is located in Ward 8 on I-295 Southwest 0.7 miles south of Exit 1 in the southbound direction. I-295 runs between the DC 295 to the north and the DC-Maryland Line to the south. The posted speed limit is 50 MPH. This speed camera was installed on November 21, 2011.





District Department of Transportation

DC-295 SW 0.7 Miles South of Exit 1 S/B

Field Assessment Summary

I-295 is assumed to run in the north-south direction, and is classified as a freeway. I-295 has three travel lanes in each direction. This site has the following characteristics:

- There is a grassy median separating the northbound and southbound travel lanes.
- The pavement is in good condition and there is open ditch drainage.
- There is a truck weigh station on the east side of I-295 near the camera location, with a deceleration lane from the northbound lanes to the weigh station area. The exit lane from the truck weigh station overlaps with the deceleration lane to Exit 1B/1C.



Looking Northbound



District Department of Transportation

DC-295 SW 0.7 Miles South of Exit 1 S/B



Speed Data Analysis

Posted Speed Limit (MPH)	50
Mean Speed (MPH)	51
85th Percentile Speed (MPH)	69
10 MPH Pace Speed (MPH)	64-73
ADT	38,622

The mean speed is higher than the posted speed limit by 1 MPH and the 85th percentile speed is higher than the posted speed by 19 MPH at this location.

Crash Data Analysis

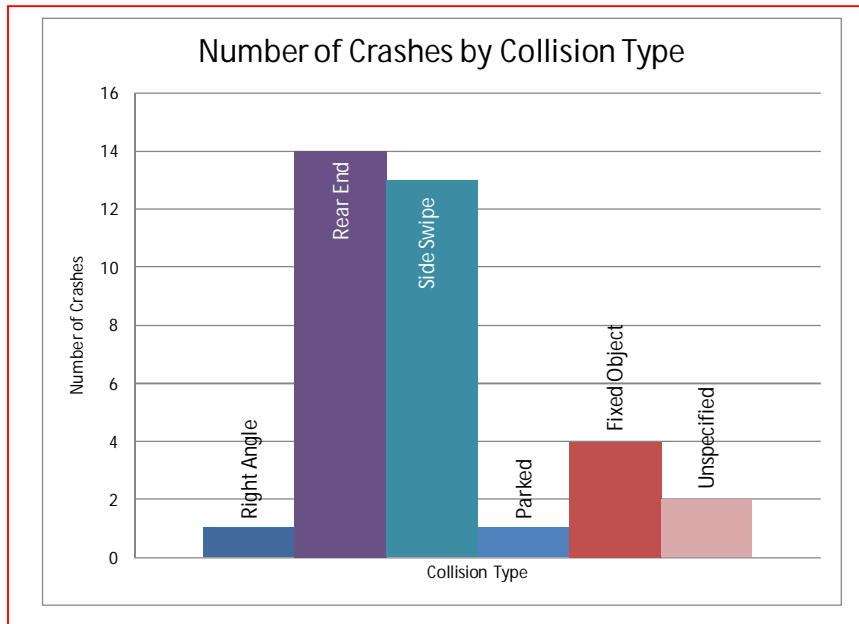
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012 there were a total of 35 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of crashes at this location were Rear End (14 crashes) and Side Swipe (13 crashes). Furthermore, this site experienced a high frequency (15 crashes) of injury-related crashes.



District Department of Transportation

DC-295 SW 0.7 Miles South of Exit 1 S/B

Severity			Weather			Surface condition			Light Condition		
Total	35										
Fatal	0	0.0%	Clear	27	77.1%	Dry	25	71.4%	Day	22	62.9%
Injury	15	42.9%	Rain	7	20.0%	Wet	6	17.1%	Night	10	28.6%
Truck	10	28.6%	Snow	0	0.0%	Snow	0	0.0%			
Police/EMS	2	5.7%									

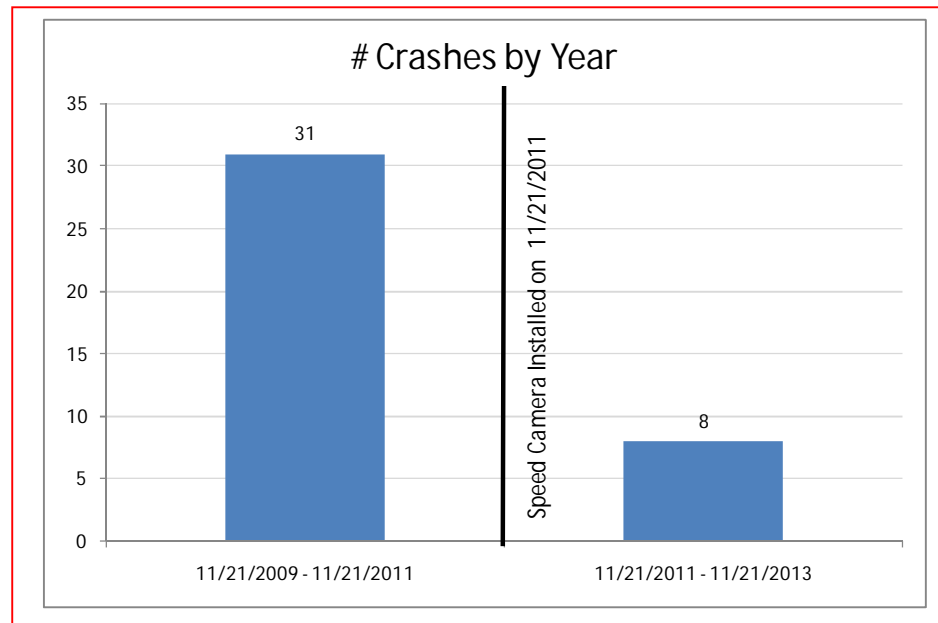


The speed camera was installed on 11-21-2011. The graph below shows the number of crashes in the two years prior to the speed camera's installation (31 crashes) and the two years after the speed camera's installation (8 crashes). There was a decrease in the number of crashes after the installation of the camera.



District Department of Transportation

DC-295 SW 0.7 Miles South of Exit 1 S/B



Safety Nexus

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

1. Speed Data – The 85th percentile speed is much higher than the posted speed limit.
2. Crash Data – This site experienced a high frequency (15 crashes) of injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. The exit lane from the truck weigh station overlaps with the deceleration lane to Exit 1B/1C. This interaction between accelerating trucks leaving the weigh station and decelerating vehicles exiting the freeway can create potential conflicts and can promote speeding in the area.

The deceleration lane entering the truck weight station is approximately 800 feet, and the acceleration lane departing the truck weigh station is approximately 200 feet and merges into a deceleration exiting lane to I-495. At this critical junction, it is desired to have vehicles travel at slower speeds to minimize vehicle conflicts and to allow trucks to find available gaps to merge into traffic. Thus due to this reason along with the elevated speeds, and the high frequency of injury-related crashes, there is a nexus between traffic safety and the speed camera at this location.

W8 - 53

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

DC 295 SW .7 miles S.O Exit 1 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
12/03/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	11	0	0	0	0	0	0	5	11	24	50	57	41	117	316
04:00	72	0	0	0	0	0	1	9	29	64	133	147	142	519	1116
05:00	330	0	0	0	0	2	15	51	122	216	361	504	589	872	3062
06:00	497	0	0	0	4	5	42	142	263	464	679	747	552	351	3746
07:00	376	29	37	51	51	50	50	70	172	214	260	250	158	99	1867
08:00	342	69	43	29	14	10	32	34	59	73	82	64	64	81	996
09:00	231	1	0	0	0	0	8	32	81	201	345	384	436	850	2569
10:00	190	0	0	0	1	7	8	27	82	210	338	358	362	551	2134
11:00	160	0	0	0	0	0	6	18	57	151	305	369	314	654	2034
12 PM	139	0	0	0	0	5	7	26	73	162	314	316	329	666	2037
13:00	173	0	0	0	1	0	4	24	50	153	263	375	345	732	2120
14:00	222	0	0	0	0	6	12	30	62	184	287	348	438	736	2325
15:00	162	0	0	0	0	0	6	24	67	134	252	397	366	740	2148
16:00	144	0	0	0	1	2	18	28	69	176	317	346	359	556	2016
17:00	142	0	0	0	1	3	11	42	133	255	382	431	340	351	2091
18:00	100	0	0	0	0	4	11	31	105	248	291	384	346	349	1869
19:00	87	0	0	0	0	1	4	23	64	175	241	289	252	341	1477
20:00	45	0	0	0	0	0	4	7	37	118	214	232	199	302	1158
21:00	59	0	0	0	0	0	2	11	49	79	179	218	207	372	1176
22:00	35	0	0	0	0	2	4	8	44	75	152	194	144	359	1017
23:00	19	0	0	0	0	1	1	6	18	64	115	108	108	212	652
Total	3536	99	80	80	73	98	246	648	1647	3440	5560	6518	6091	9810	37926

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

DC 295 SW .7 miles S.O Exit 1 SB Speed

SB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
12/04/13	7	0	0	0	0	1	0	4	12	42	47	55	44	89	301
01:00	5	0	0	0	0	0	0	3	13	36	40	44	38	40	219
02:00	2	0	0	0	0	0	2	5	7	21	30	28	29	52	176
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	14	0	0	0	0	1	2	12	32	99	117	127	111	181	696
Grand Total	3550	99	80	80	73	99	248	660	1679	3539	5677	6645	6202	9991	38622

15th Percentile : 9 MPH
 50th Percentile : 61 MPH
 85th Percentile : 69 MPH
 95th Percentile : 71 MPH

Stats
 Mean Speed(Average) : 51 MPH
 10 MPH Pace Speed : 64-73 MPH
 Number in Pace : 12459
 Percent in Pace : 43.5%
 Number of Vehicles > 50 MPH : 20841
 Percent of Vehicles > 50 MPH : 72.8%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

DC 295 SW .7 miles S.O Exit 1 SB Volume

Start Time	03-Dec-13		04-Dec-13		05-Dec-13		Daily Average	
	Tue A.M.	P.M.	Wed A.M.	P.M.	Thu A.M.	P.M.	A.M.	P.M.
12:00	*	525	83	*	*	*	83	525
12:15	*	503	88	*	*	*	88	503
12:30	*	531	71	*	*	*	71	531
12:45	*	478	59	*	*	*	59	478
01:00	*	506	65	*	*	*	65	506
01:15	*	543	55	*	*	*	55	543
01:30	*	546	54	*	*	*	54	546
01:45	*	525	45	*	*	*	45	525
02:00	*	583	37	*	*	*	37	583
02:15	*	545	50	*	*	*	50	545
02:30	*	593	43	*	*	*	43	593
02:45	*	604	46	*	*	*	46	604
03:00	51	600	*	*	*	*	51	600
03:15	67	482	*	*	*	*	67	482
03:30	100	570	*	*	*	*	100	570
03:45	98	496	*	*	*	*	98	496
04:00	149	512	*	*	*	*	149	512
04:15	225	481	*	*	*	*	225	481
04:30	341	522	*	*	*	*	341	522
04:45	401	501	*	*	*	*	401	501
05:00	531	512	*	*	*	*	531	512
05:15	763	552	*	*	*	*	763	552
05:30	884	525	*	*	*	*	884	525
05:45	884	502	*	*	*	*	884	502
06:00	935	471	*	*	*	*	935	471
06:15	921	529	*	*	*	*	921	529
06:30	956	438	*	*	*	*	956	438
06:45	934	431	*	*	*	*	934	431
07:00	966	409	*	*	*	*	966	409
07:15	553	378	*	*	*	*	553	378
07:30	156	345	*	*	*	*	156	345
07:45	192	345	*	*	*	*	192	345
08:00	127	309	*	*	*	*	127	309
08:15	153	280	*	*	*	*	153	280
08:30	142	279	*	*	*	*	142	279
08:45	574	290	*	*	*	*	574	290
09:00	670	304	*	*	*	*	670	304
09:15	638	278	*	*	*	*	638	278
09:30	646	297	*	*	*	*	646	297
09:45	615	297	*	*	*	*	615	297
10:00	565	299	*	*	*	*	565	299
10:15	541	256	*	*	*	*	541	256
10:30	532	272	*	*	*	*	532	272
10:45	496	190	*	*	*	*	496	190
11:00	524	199	*	*	*	*	524	199
11:15	515	172	*	*	*	*	515	172
11:30	514	157	*	*	*	*	514	157
11:45	481	124	*	*	*	*	481	124
Total	17840	20086	696	0	0	0	18536	20086
Combined Total	37926		696		0		38622	
Peak	06:15	02:15	12:00				06:15	02:15
Vol.	3777	2342	301				3777	2342
P.H.F.	0.977	0.969	0.855				0.977	0.969
ADT	ADT 38,622		AADT 38,622					

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: INTERSTATE 295,BN From ANACOSTIA FRWY (SB),SE TO OVERLOOK AVE,SW

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

Prepared By: Rahul Jain

Prepared Date: 1/8/2014

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	35	Right Angle:	1	2.9%	Fixed Object:	4	11.4%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	17	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	1	Rear End:	14	40.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	2	Side Swiped:	13	37.1%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	1	2.9%	Unspecified:	2	5.7%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%
07:30 ~ 09:30:	3	8.6%
09:30 ~ 11:30:	5	14.3%
11:30 ~ 13:30:	1	2.9%
13:30 ~ 16:00:	6	17.1%
16:00 ~18:30:	5	14.3%
18:30 ~ 07:30:	15	42.9%
Unspecified:	0	0.0%

Day o fweek	#ACC	%
Sunday:	3	8.6%
Monday:	1	2.9%
Tuesday:	7	20.0%
Wednesday:	8	22.9%
Thursday:	3	8.6%
Friday:	7	20.0%
Saturday:	6	17.1%

Weather Condition	#ACC	%
Clear:	27	77.1%
Rain:	7	20.0%
Snow:	0	0.0%
Sleet/Hail:	0	0.0%
Fog/Mist:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	1	2.9%

Surface Condition	#ACC	%
Dry:	25	71.4%
Wet:	6	17.1%
Snow/Ice:	0	0.0%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	4	11.4%

Type of Vehicle	#VEH	%
Passenger Car:	52	73.2%
Bus:	1	1.4%
Truck:	10	14.1%
Taxi:	0	0.0%
Minivan:	0	0.0%
Police/Emergency Vehicle:	2	2.8%
Motorcycle/Moped:	0	0.0%
Bicycle:	0	0.0%
Fixed Object:	0	0.0%
Unspecified:	6	8.5%

Accident Severity Type	#ACC	%
Fatal Collision:	0	0.0%
Injury Collision:	15	42.9%
PDO Collision:	20	57.1%

Light Condition	#ACC	%
Daylight:	22	62.9%
Dawn/Dusk:	0	0.0%
Dark(Lighted):	6	17.1%
Dark(Not Lighted):	4	11.4%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	3	8.6%

Contributing Factor	#VEH	%
Driver: Speed:	7	9.9%
Driver: Alcohol/Drug:	2	2.8%
Driver: Electronic Device:	0	0.0%
Driver: Others:	12	16.9%
Vehicle:	0	0.0%
Roadway:	0	0.0%
Unspecified:	50	70.4%

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%

26 Records are not approved as of 1/8/2014 6:31:56 PM

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: INTERSTATE 295,BN From ANACOSTIA FRWY (SB),SE TO OVERLOOK AVE,SW

Time Period Covered: From 11/21/2009 To 11/21/2011

Prepared By: Rahul Jain

Prepared Date: 1/8/2014

Total Number of Accident:	31	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	1	3.2%	Fixed Object:	3	9.7%
Total Number of Injuries:	15	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	1	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	0	Rear End:	12	38.7%	Backing:	0	0.0%
Total Number of Pedestrians Involved:	0	Side Swiped:	12	38.7%	Non Collision:	1	3.2%
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	3.2%	Unspecified:	1	3.2%
Time of Day				#ACC	%	Day o fweek	
07:30 ~ 09:30:				3	9.7%	Sunday:	
09:30 ~ 11:30:				4	12.9%	Monday:	
11:30 ~ 13:30:				1	3.2%	Tuesday:	
13:30 ~ 16:00:				4	12.9%	Wednesday:	
16:00 ~18:30:				5	16.1%	Thursday:	
18:30 ~ 07:30:				14	45.2%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				23	74.2%	Dry:	
Rain:				7	22.6%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				1	3.2%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				0	0.0%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				49	68.1%	Fatal Collision:	
Bus:				1	1.4%	Injury Collision:	
Truck:				9	12.5%	PDO Collision:	
Taxi:				0	0.0%	Light Condition	
Minivan:				0	0.0%	Daylight:	
Police/Emergency Vehicle:				3	4.2%	Dawn/Dusk:	
Motorcycle/Moped:				0	0.0%	Dark(Lighted):	
Bicycle:				0	0.0%	Dark(Not Lighted):	
Fixed Object:				0	0.0%	Dark(Unknown Lighting):	
Unspecified:				10	13.9%	Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				6	8.3%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				2	2.8%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				11	15.3%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				53	73.6%	Unspecified:	

24 Records are not approved as of 1/8/2014 6:35:45 PM

Accident Summary Report (R-8)**Corridor:** INTERSTATE 295,BN From ANACOSTIA FRWY (SB),SE TO OVERLOOK AVE,SW**Time Period Covered:** From 11/21/2011 To 11/21/2013**Prepared By:** Rahul Jain**Prepared Date:** 1/8/2014

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	8	Right Angle:	0	0.0%	Fixed Object:	1	12.5%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	4	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	5	62.5%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	2	Side Swiped:	1	12.5%	Non Collision:	0	0.0%
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	12.5%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	0	0.0%	Sunday:	0	0.0%
09:30 ~ 11:30:	1	12.5%	Monday:	1	12.5%
11:30 ~ 13:30:	1	12.5%	Tuesday:	0	0.0%
13:30 ~ 16:00:	3	37.5%	Wednesday:	3	37.5%
16:00 ~18:30:	0	0.0%	Thursday:	1	12.5%
18:30 ~ 07:30:	3	37.5%	Friday:	2	25.0%
Unspecified:	0	0.0%	Saturday:	1	12.5%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	6	75.0%	Dry:	5	62.5%
Rain:	1	12.5%	Wet:	1	12.5%
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:	1	12.5%	Unspecified:	2	25.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	14	87.5%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	4	50.0%
Truck:	2	12.5%	PDO Collision:	4	50.0%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	5	62.5%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	1	12.5%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	2	25.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	1	6.3%	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	12.5%	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:	13	81.3%	Unspecified:	0	0.0%

4 Records are not approved as of 1/8/2014 6:34:28 PM