



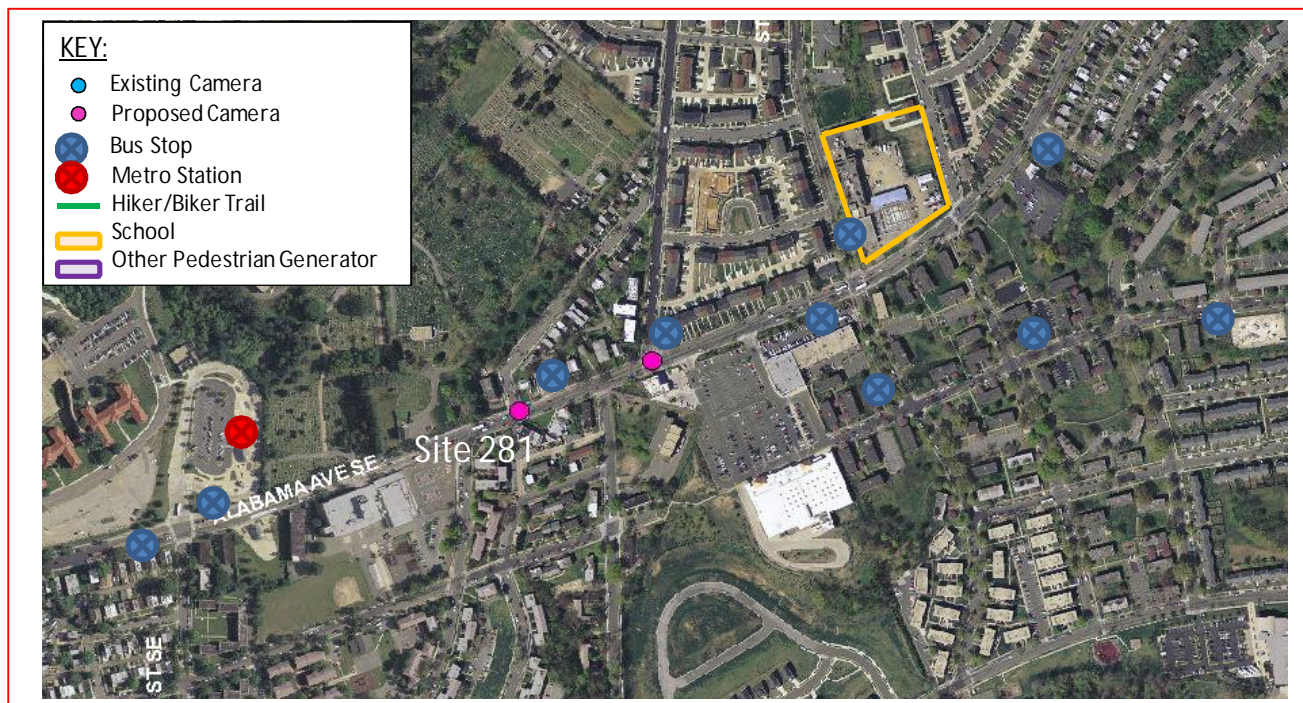
District Department of Transportation

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

1400 Block Alabama Avenue SE

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
7	703	8	8E	Proposed	1400 Block Alabama Avenue Southeast, Eastbound and Westbound



The *proposed* speed camera will be located in Ward 8 at the 1400 block of Alabama Avenue Southeast in the eastbound and westbound directions. Alabama Avenue Southeast runs between E Street Southeast to the north and Martin Luther King, Jr. Avenue Southeast to the south. The posted speed limit is 25 MPH.

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District Department of Transportation

1400 Block Alabama Avenue SE

Field Assessment Summary

Alabama Avenue Southeast is assumed to run in an east-west direction and is classified as a minor arterial. Alabama Avenue Southeast has two travel lanes in each direction. This site has the following characteristics:

- This is a residential area with apartments.
- There is one school in the area: Turner Elementary School.
- There are several commercial areas nearby that generate pedestrian activity.
- There are multiple bus stops and one Metrorail station near the site that generate pedestrian activity.
- There is sidewalk on both sides of the street and crosswalks at Congress Street, 15th Street, and 15th Place.
- There is a traffic signal with pedestrian signals at Congress Street.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is on-street parking on both sides of the street.



Looking Eastbound



District Department of Transportation

1400 Block Alabama Avenue SE



Looking Westbound

Speed Data Analysis

	Eastbound	Westbound
Posted Speed Limit (MPH)	25	25
Mean Speed (MPH)	27	16
85th Percentile Speed (MPH)	42	22
10 MPH Pace Speed	30-39	14-23
Sample Size	6,465	7,403
ADT	13,868	

The mean speed is higher than the posted speed limit by 2 MPH in the eastbound direction and lower than the posted limit by 9 MPH in the westbound direction at this location. The 85th percentile speed is higher than the posted speed by 17 MPH in the eastbound direction and lower than the posted speed by 3 MPH in the westbound 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 15 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 collision at this location were Rear End (3 crashes), and

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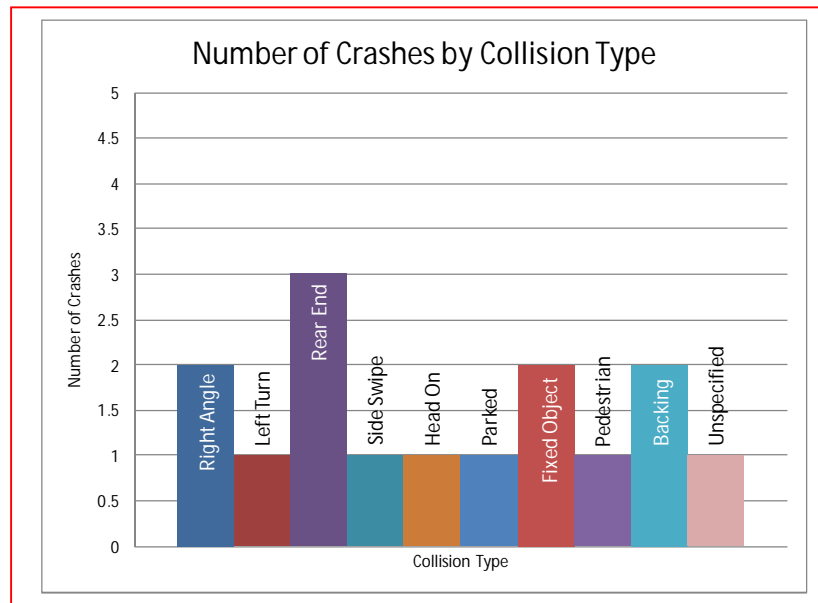


District Department of Transportation

1400 Block Alabama Avenue SE

Right Angle, Fixed Object and Backing Up (2 crashes each). The other collision types had 1 crash or less each. Furthermore, the site experienced 6 injury-related crashes.

Severity			Weather			Surface condition			Light Condition		
Total	15										
Fatal	0	0.0%	Clear	13	86.7%	Dry	12	80.0%	Day	11	73.3%
Injury	6	40.0%	Rain	2	13.3%	Wet	2	13.3%	Night	4	26.7%
Truck	5	33.3%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	1	6.7%									



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 85th percentile speed is much higher than the posted speed limit in the eastbound direction and lower than the posted speed limit in the westbound direction at this location.
2. Crash Data – The site experienced 6 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: Turner Elementary School.



District Department of Transportation

1400 Block Alabama Avenue SE

- c. There are several commercial areas nearby that generate pedestrian activity.
- d. There are multiple bus stops and one Metrorail station near the site that generate pedestrian activity.
- e. There is on-street parking in both directions.

Due to the speed data analysis, 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

1400 block of Alabama Ave SE Speed

WB

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	0	9	16	4	1	0	0	0	0	0	0	0	0	0	30
03:00	6	7	7	6	0	0	0	0	0	0	0	0	0	0	26
04:00	5	15	28	3	0	0	0	0	0	0	0	0	0	0	51
05:00	13	45	54	22	1	0	0	0	0	0	0	0	0	0	135
06:00	30	99	160	15	2	0	0	0	0	0	0	0	0	0	306
07:00	145	216	163	11	3	0	0	0	0	0	0	0	0	0	538
08:00	158	276	120	6	0	0	0	0	0	0	0	0	0	0	560
09:00	54	163	120	14	0	1	0	0	0	0	0	0	0	0	352
10:00	48	128	127	22	1	0	0	0	0	0	0	0	0	0	326
11:00	30	155	189	11	0	0	0	0	0	0	0	0	0	0	385
12 PM	61	188	194	12	1	0	0	0	0	0	0	0	0	0	456
13:00	54	184	170	16	2	0	0	0	0	0	0	0	0	0	426
14:00	70	194	128	10	2	0	0	0	0	0	0	0	0	0	404
15:00	126	231	118	9	0	0	0	0	0	0	0	0	0	0	484
16:00	196	192	78	2	0	0	0	0	0	0	0	0	0	0	468
17:00	182	172	94	4	0	0	0	0	0	0	0	0	0	0	452
18:00	128	217	110	6	0	0	0	0	0	0	0	0	0	0	461
19:00	82	148	109	7	1	0	0	0	0	0	0	0	0	0	347
20:00	65	118	127	5	0	0	0	0	0	0	0	0	0	0	315
21:00	34	132	116	7	1	0	0	0	0	0	0	0	0	0	290
22:00	37	85	78	9	1	0	0	0	0	0	0	0	0	0	210
23:00	27	63	66	9	0	0	0	0	0	0	0	0	0	0	165
Total	1551	3037	2372	210	16	1	0	0	0	0	0	0	0	0	7187

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1400 block of Alabama Ave SE Speed

WB

Start Time	1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total
	15	20	25	30	35	40	45	50	55	60	65	70	75	999	
11/21/13	23	34	35	2	0	0	0	0	0	0	0	0	0	0	94
01:00	105	0	0	0	0	0	0	0	0	0	0	0	0	0	105
02:00	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
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	145	34	35	2	0	0	0	0	0	0	0	0	0	0	216
Grand Total	1696	3071	2407	212	16	1	0	0	0	0	0	0	0	0	7403

15th Percentile : 8 MPH
 50th Percentile : 15 MPH
 85th Percentile : 22 MPH
 95th Percentile : 24 MPH

Stats
 Mean Speed(Average) : 16 MPH
 10 MPH Pace Speed : 14-23 MPH
 Number in Pace : 3932
 Percent in Pace : 53.1%
 Number of Vehicles > 25 MPH : 354
 Percent of Vehicles > 25 MPH : 4.8%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1400 block of Alabama Ave SE Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/20/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	1	1	2	2	1	1	4	1	2	1	0	2	0	1	19
03:00	0	1	1	2	1	4	6	2	5	2	0	0	0	0	24
04:00	4	3	6	3	3	6	8	3	4	1	0	2	0	0	43
05:00	11	5	4	13	9	12	7	8	1	4	3	1	2	2	82
06:00	39	5	26	21	20	32	23	12	10	6	4	4	1	0	203
07:00	120	16	50	36	43	30	22	6	6	4	0	2	0	0	335
08:00	123	16	42	65	57	23	12	10	8	1	3	1	0	0	361
09:00	48	10	28	39	46	46	19	10	11	5	3	2	1	0	268
10:00	36	8	28	28	58	49	38	20	9	10	8	1	3	2	298
11:00	26	9	24	30	40	59	48	22	10	4	8	1	1	0	282
12 PM	62	11	29	38	31	61	34	22	10	9	3	0	5	2	317
13:00	48	13	43	49	63	67	54	36	16	3	2	1	1	2	398
14:00	57	13	36	47	56	62	49	28	16	8	5	1	2	3	383
15:00	92	25	42	62	89	66	41	17	6	5	1	0	1	0	447
16:00	138	44	73	89	124	83	45	14	7	1	1	1	0	0	620
17:00	98	22	59	70	157	129	47	17	9	3	1	1	0	0	613
18:00	89	34	46	61	110	93	43	22	11	3	2	0	0	1	515
19:00	58	17	33	40	46	49	39	19	12	2	3	0	0	1	319
20:00	43	14	31	36	49	57	37	21	3	4	0	0	1	0	296
21:00	31	11	20	25	13	28	34	23	10	1	3	1	2	1	203
22:00	12	7	14	20	22	43	28	14	13	4	2	1	1	0	181
23:00	11	4	16	20	14	23	31	22	11	11	3	1	0	0	167
Total	1147	289	653	796	1052	1023	669	349	190	92	55	23	21	15	6374

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

1400 block of Alabama Ave SE Speed

EB

Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/21/13	9	1	7	8	4	11	16	8	12	2	2	2	1	2	85
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
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	15	1	7	8	4	11	16	8	12	2	2	2	1	2	91
Grand Total	1162	290	660	804	1056	1034	685	357	202	94	57	25	22	17	6465

15th Percentile : 8 MPH
 50th Percentile : 28 MPH
 85th Percentile : 42 MPH
 95th Percentile : 50 MPH

Stats
 Mean Speed(Average) : 27 MPH
 10 MPH Pace Speed : 30-39 MPH
 Number in Pace : 1733
 Percent in Pace : 26.9%
 Number of Vehicles > 25 MPH : 3699
 Percent of Vehicles > 25 MPH : 57.4%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammatteng.com

1400 block of Alabama Ave SE Volume

Start Time	20-Nov-13		WB		EB		Combined		21-Nov-Thu	WB		EB		Combined	
	Wed		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	*		*	108	*	80	*	188	29	*		*	25	*	54
12:15	*		*	114	*	74	*	188	24	*		*	25	*	49
12:30	*		*	110	*	77	*	187	21	*		*	23	*	44
12:45	*		*	124	*	86	*	210	20	*		*	12	*	32
01:00	*		*	115	*	119	*	234		*		*	0	*	24
01:15	*		*	104	*	100	*	204		*		*	0	*	32
01:30	*		*	104	*	94	*	198		*		*	0	*	25
01:45	*		*	103	*	85	*	188		*		*	0	*	24
02:00	*		*	115	*	82	*	197	17	*		*	6	*	23
02:15	9			90	8	97	17	187	*	*		*	*	*	*
02:30	9			102	6	111	15	213	*	*		*	*	*	*
02:45	12			97	5	93	17	190	*	*		*	*	*	*
03:00	9			105	8	104	17	209	*	*		*	*	*	*
03:15	6			125	8	100	14	225	*	*		*	*	*	*
03:30	5			119	4	116	9	235	*	*		*	*	*	*
03:45	6			135	4	127	10	262	*	*		*	*	*	*
04:00	7			135	7	156	14	291	*	*		*	*	*	*
04:15	11			110	8	157	19	267	*	*		*	*	*	*
04:30	11			98	17	140	28	238	*	*		*	*	*	*
04:45	22			125	11	167	33	292	*	*		*	*	*	*
05:00	21			99	13	157	34	256	*	*		*	*	*	*
05:15	21			108	21	152	42	260	*	*		*	*	*	*
05:30	34			123	23	143	57	266	*	*		*	*	*	*
05:45	59			122	25	161	84	283	*	*		*	*	*	*
06:00	51			116	34	166	85	282	*	*		*	*	*	*
06:15	65			133	52	119	117	252	*	*		*	*	*	*
06:30	89			113	46	131	135	244	*	*		*	*	*	*
06:45	101			99	71	99	172	198	*	*		*	*	*	*
07:00	111			104	81	80	192	184	*	*		*	*	*	*
07:15	114			84	93	88	207	172	*	*		*	*	*	*
07:30				163	81	80	244	150	*	*		*	*	*	*
07:45				150	80	71	230	160	*	*		*	*	*	*
08:00				140	76	73	213	158	*	*		*	*	*	*
08:15				141	88	95	236	151	*	*		*	*	*	*
08:30				150	76	100	250	147	*	*		*	*	*	*
08:45				129	75	93	222	155	*	*		*	*	*	*
09:00				102	70	86	188	126	*	*		*	*	*	*
09:15				93	80	57	150	126	*	*		*	*	*	*
09:30				74	80	58	132	132	*	*		*	*	*	*
09:45				83	60	67	150	109	*	*		*	*	*	*
10:00				79	51	86	165	99	*	*		*	*	*	*
10:15				74	60	72	146	110	*	*		*	*	*	*
10:30				74	43	66	140	94	*	*		*	*	*	*
10:45				99	56	74	173	88	*	*		*	*	*	*
11:00				86	56	54	140	96	*	*		*	*	*	*
11:15				93	33	81	174	67	*	*		*	*	*	*
11:30				104	44	71	175	99	*	*		*	*	*	*
11:45				102	32	76	178	70	*	*		*	*	*	*

Total	2709	4478	1915	4459	4624	8937	216	0	91	0	307	0
Day Total	7187	6374	13561	216	91	307						
% Total	20.0%	33.0%	14.1%	32.9%	70.4%	0.0%	29.6%	0.0%				
Peak Vol.	07:30 594	03:15 514	08:15 374	05:15 622	07:45 929	05:15 1091	01:00 105	12:00 85	12:00 179			
P.H.F.	0.911	0.952	0.935	0.931	0.929	0.934	0.820	0.850	0.829			

ADT ADT 13,868 AADT 13,868

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: ALABAMA AVE,SE From CONGRESS ST,SE TO FIFTEENTH ST,SE

Time Period Covered: From 01/01/2010 To 12/31/2012 **Prepared By:** Rahul Jain

Prepared Date: 9/16/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	15	Right Angle:	2	13.3%	Fixed Object:	2	13.3%
Total Number of Fatalities:	0	Left Turn:	1	6.7%	Ran Off Road:	0	0.0%
Total Number of Injuries:	10	Right Turn:	0	0.0%	Ped. Involved:	1	6.7%
Total Number of Disabling Injuries:	0	Rear End:	3	20.0%	Backing:	2	13.3%
Total Number of NonDisabling Injuries:	2	Side Swiped:	1	6.7%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	1	Head On:	1	6.7%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	0	Parked:	1	6.7%	Unspecified:	1	6.7%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day o fweek	#ACC	%
07:30 ~ 09:30:	2	13.3%	Sunday:	0	0.0%
09:30 ~ 11:30:	1	6.7%	Monday:	1	6.7%
11:30 ~ 13:30:	3	20.0%	Tuesday:	5	33.3%
13:30 ~ 16:00:	4	26.7%	Wednesday:	2	13.3%
16:00 ~18:30:	1	6.7%	Thursday:	2	13.3%
18:30 ~ 07:30:	4	26.7%	Friday:	2	13.3%
Unspecified:	0	0.0%	Saturday:	3	20.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	13	86.7%	Dry:	12	80.0%
Rain:	2	13.3%	Wet:	2	13.3%
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:	1	6.7%
Crosswind/Blowing Sand:	0	0.0%	Repairing:	0	0.0%
Unspecified:	0	0.0%	Unspecified:	0	0.0%

Type of Vehicle	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	19	73.1%	Fatal Collision:	0	0.0%
Bus:	1	3.8%	Injury Collision:	6	40.0%
Truck:	5	19.2%	PDO Collision:	9	60.0%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	1	3.8%	Daylight:	11	73.3%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	3	20.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	1	6.7%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#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:	1	3.8%	In Crosswalk no Signal:	1	100.0%
Driver: Others:	6	23.1%	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:	19	73.1%	Unspecified:	0	0.0%

12 Records are not approved as of 9/16/2013 12:35:59 PM