



District Department of Transportation

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

3300 Block Minnesota Avenue SE SW/B

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
6	604	7	7A	Existing	3300 Block Minnesota Avenue Southeast Southwest-bound



The existing speed camera is located in Ward 7 at the 3300 block of Minnesota Avenue Southeast in the southwest-bound direction. Minnesota Avenue runs between Sherriff Road Northeast to the north and Good Hope Road Southeast to the south. The posted speed limit is 25 MPH. This speed camera was installed on September 2003.

W7 - 81





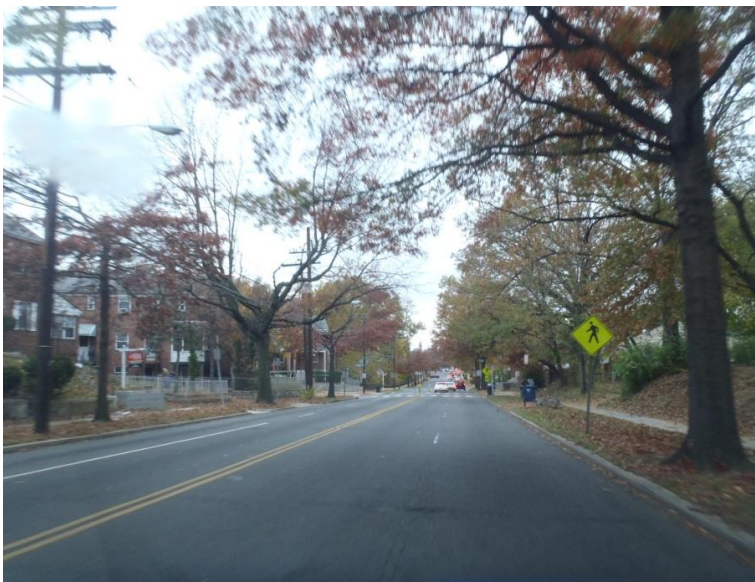
District Department of Transportation

3300 Block Minnesota Avenue SE SW/B

Field Assessment Summary

Minnesota Avenue is assumed to run in a northeast-southwest direction, and is classified as a minor arterial. Minnesota Avenue has two travel lanes in each direction. This site has the following characteristics:

- This is a residential area with apartments and houses.
- There are two schools in the area: Kimball Elementary School and John Philip Sousa Middle School. The site is located within the school zone of Kimball Elementary School.
- Fort Dupont Park is also in the area.
- A warning sign was noted in the area "DEAF CHILD." Thus, there is a deaf child in the area.
- There is sidewalk on both sides of the street and crosswalks with in-street pedestrian crossing signs at G Street, F Street, E Street, and 34th Street.
- There are traffic signals with pedestrian signals at Ely Place SE and G Street SE.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There are bus stops on both sides of the street at G Street and F Street, and a bus stop westbound between 34th Street and D Street.



Looking Northeast-bound



District Department of Transportation

3300 Block Minnesota Avenue SE SW/B



Looking Southwest-bound

Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	16
85th Percentile Speed (MPH)	22
10 MPH Pace Speed (MPH)	13-22
ADT	7,596

The mean speed is lower than the posted speed limit by 9 MPH and the 85th percentile speed is lower than the posted speed by 3 MPH at this location.

Crash Data Analysis

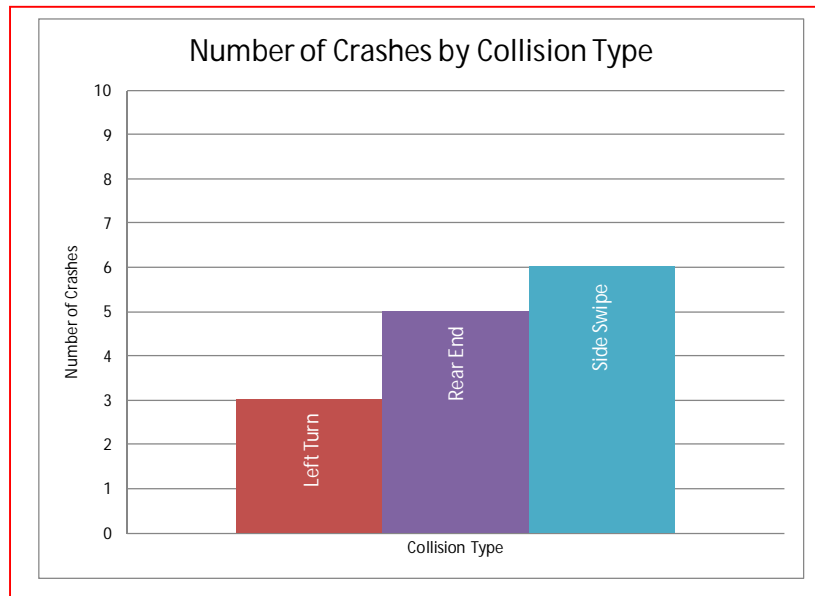
From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012 there were a total of 14 crashes at this location. A breakdown of number of crashes by collision type can be found in the chart on the next page. The most common types of crashes at this location were Side Swiped (6), Rear End (5) and Left Turn (3). Furthermore, this site experienced six injury-related crashes.



District Department of Transportation

3300 Block Minnesota Avenue SE SW/B

Severity			Weather			Surface condition			Light Condition		
Total	14										
Fatal	0	0.0%	Clear	13	92.9%	Dry	13	92.9%	Day	8	57.1%
Injury	6	42.9%	Rain	1	7.1%	Wet	1	7.1%	Night	6	42.9%
Bus	4	28.6%	Fog/Mist	0	0.0%	Snow/Ice	0	0.0%			
Police/EMS	2	14.3%									

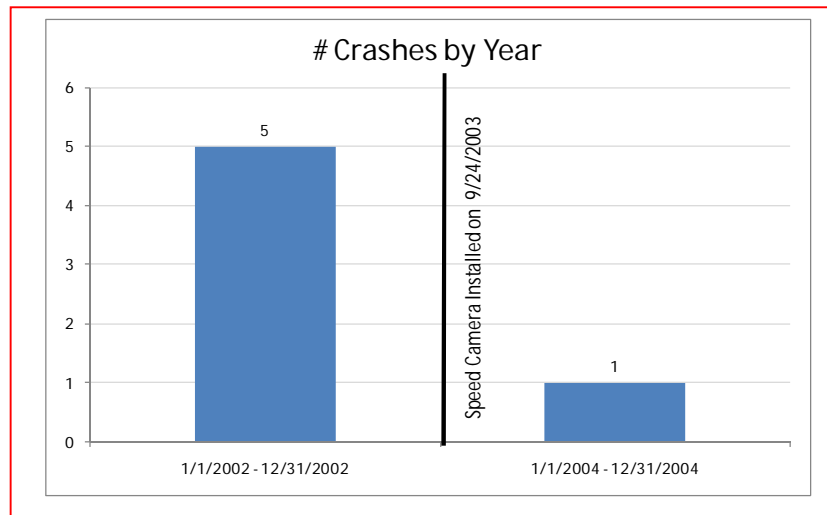


The speed camera was installed on 9/24/2003. The graph on the next page shows the number of crashes in the year prior to the speed camera's installation (5 crashes) and the year after the speed camera's installation (1 crash). There was a decrease seen in number of crashes after the installation of the camera.



District Department of Transportation

3300 Block Minnesota Avenue SE SW/B



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 six injury-related crashes. There was a decrease seen in number of crashes after the installation of the camera.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with apartments and houses.
 - b. There are two schools in the area: Kimball Elementary School and John Philip Sousa Middle School. The site is located within the school zone of Kimball Elementary School.
 - c. Fort Dupont Park is in the area which generates pedestrian and bicycle activity.
 - d. A warning sign was noted in the area “DEAF CHILD.” Thus, there is a deaf child in the area, so the need for slower traffic is a necessity.
 - e. There are several bus stops in the area which generate pedestrian activity.

Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, due to the number of injury-related crashes, the specific site characteristics, the proximity of schools to the site, the need for safety due to a deaf child present in the area, and other 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

3300 Block of Minnesota Ave SE Speed

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	
11/22/13	26	87	45	7	0	0	0	0	0	0	0	0	0	0	165
01:00	11	68	36	4	2	0	0	0	0	0	0	0	0	0	121
02:00	6	30	20	1	0	0	0	0	0	0	0	0	0	0	57
03:00	8	27	17	4	1	0	0	0	0	0	0	0	0	0	57
04:00	6	34	22	2	0	0	0	0	0	0	0	0	0	0	64
05:00	10	44	24	3	0	0	0	0	0	0	0	0	0	0	81
06:00	8	29	74	27	6	0	0	0	0	0	0	0	0	0	144
07:00	20	65	167	74	9	4	1	0	0	0	0	0	0	0	340
08:00	102	151	173	38	10	0	0	0	0	0	0	0	0	0	474
09:00	96	206	122	12	1	0	0	0	0	0	0	0	0	0	437
10:00	103	190	105	8	0	0	0	0	0	0	0	0	0	0	406
11:00	60	219	85	7	0	0	0	0	0	0	0	0	0	0	371
12 PM	107	208	103	13	0	0	0	0	0	0	0	0	0	0	431
13:00	88	202	83	12	0	0	0	0	0	0	0	0	0	0	385
14:00	50	134	187	39	0	0	0	0	0	0	0	0	0	0	410
15:00	65	132	202	29	7	0	0	0	0	0	0	0	0	0	435
16:00	143	164	80	8	0	0	0	0	0	0	0	0	0	0	395
17:00	138	219	82	8	1	0	0	0	0	0	0	0	0	0	448
18:00	162	219	98	9	0	0	0	0	0	0	0	0	0	0	488
19:00	148	245	90	8	0	0	0	0	0	0	0	0	0	0	491
20:00	82	223	92	6	4	0	0	0	0	0	0	0	0	0	407
21:00	69	194	69	10	1	0	0	0	0	0	0	0	0	0	343
22:00	30	139	149	26	1	0	0	0	0	0	0	0	0	0	345
23:00	37	106	137	19	2	0	0	0	0	0	0	0	0	0	301
Total	1575	3335	2262	374	45	4	1	0	0	0	0	0	0	0	7596
Grand Total	1575	3335	2262	374	45	4	1	0	0	0	0	0	0	0	7596

15th Percentile : 8 MPH
 50th Percentile : 16 MPH
 85th Percentile : 22 MPH
 95th Percentile : 25 MPH

Stats
 Mean Speed(Average) : 16 MPH
 10 MPH Pace Speed : 13-22 MPH
 Number in Pace : 4124
 Percent in Pace : 54.3%
 Number of Vehicles > 25 MPH : 470
 Percent of Vehicles > 25 MPH : 6.2%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD
MOUNT AIRY, MD 21771

www.sammateng.com

3300 Block of Minnesota Ave SE Volume

Start Time	22-Nov-13		NEB		SWB		Combined		23-Nov-Sat	NEB		SWB		Combined	
	Fri		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			61	112	46	110	107	222		*	*	*	*	*	*
12:15			52	100	43	125	95	225		*	*	*	*	*	*
12:30			51	119	38	97	89	216		*	*	*	*	*	*
12:45			46	109	38	99	84	208		*	*	*	*	*	*
01:00			44	106	36	101	80	207		*	*	*	*	*	*
01:15			40	107	38	85	78	192		*	*	*	*	*	*
01:30			27	117	29	88	56	205		*	*	*	*	*	*
01:45			31	104	18	111	49	215		*	*	*	*	*	*
02:00			22	122	13	109	35	231		*	*	*	*	*	*
02:15			19	127	13	92	32	219		*	*	*	*	*	*
02:30			17	124	22	101	39	225		*	*	*	*	*	*
02:45			25	118	9	108	34	226		*	*	*	*	*	*
03:00			24	125	17	98	41	223		*	*	*	*	*	*
03:15			14	131	11	117	25	248		*	*	*	*	*	*
03:30			20	124	17	107	37	231		*	*	*	*	*	*
03:45			22	148	12	113	34	261		*	*	*	*	*	*
04:00			13	134	15	101	28	235		*	*	*	*	*	*
04:15			9	133	15	112	24	245		*	*	*	*	*	*
04:30			6	127	14	81	20	208		*	*	*	*	*	*
04:45			12	135	20	101	32	236		*	*	*	*	*	*
05:00			15	107	14	121	29	228		*	*	*	*	*	*
05:15			16	134	18	108	34	242		*	*	*	*	*	*
05:30			16	135	29	107	45	242		*	*	*	*	*	*
05:45			22	123	20	112	42	235		*	*	*	*	*	*
06:00			30	110	34	121	64	231		*	*	*	*	*	*
06:15			42	126	27	146	69	272		*	*	*	*	*	*
06:30			52	112	46	112	98	224		*	*	*	*	*	*
06:45			71	131	37	109	108	240		*	*	*	*	*	*
07:00			59	132	62	99	121	231		*	*	*	*	*	*
07:15			78	145	75	144	153	289		*	*	*	*	*	*
07:30			95	130	103	133	198	263		*	*	*	*	*	*
07:45			105	120	100	115	205	235		*	*	*	*	*	*
08:00			115	94	122	122	237	216		*	*	*	*	*	*
08:15			132	115	122	95	254	210		*	*	*	*	*	*
08:30			142	124	108	93	250	217		*	*	*	*	*	*
08:45			123	111	122	97	245	208		*	*	*	*	*	*
09:00			121	104	85	108	206	212		*	*	*	*	*	*
09:15			127	105	118	81	245	186		*	*	*	*	*	*
09:30			99	93	137	80	236	173		*	*	*	*	*	*
09:45			80	77	97	74	177	151		*	*	*	*	*	*
10:00			101	107	79	74	180	181		*	*	*	*	*	*
10:15			106	87	121	81	227	168		*	*	*	*	*	*
10:30			92	102	93	109	185	211		*	*	*	*	*	*
10:45			100	100	113	81	213	181		*	*	*	*	*	*
11:00			121	110	92	88	213	198		*	*	*	*	*	*
11:15			88	85	87	80	175	165		*	*	*	*	*	*
11:30			105	68	109	70	214	138		*	*	*	*	*	*
11:45			105	62	83	63	188	125		*	*	*	*	*	*

Total	2913	5471	2717	4879	5630	10350	0	0	0	0	0	0
Day Total	8384		7596		15980		0	0	0	0	0	0
% Total	18.2%	34.2%	17.0%	30.5%			0.0%	0.0%	0.0%	0.0%		
Peak	08:15	03:45	08:00	07:15	08:00	06:45						
Vol.	518	542	474	514	986	1023						
P.H.F.	0.912	0.916	0.971	0.880	0.970	0.885						

ADT ADT 15,980 AADT 15,980

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: MINNESOTA AVE,NE,SE From E ST,SE TO G ST,SE

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

Prepared Date: 9/15/2013

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	14	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	3	21.4%	Ran Off Road:	0	0.0%
Total Number of Injuries:	8	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	5	35.7%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	6	42.9%	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:	2	Parked:	0	0.0%	Unspecified:	0	0.0%
Total Number of Motorcycles Involved:	0						

Time of Day	#ACC	%	Day of week	#ACC	%
07:30 ~ 09:30:	1	7.1%	Sunday:	2	14.3%
09:30 ~ 11:30:	0	0.0%	Monday:	0	0.0%
11:30 ~ 13:30:	1	7.1%	Tuesday:	1	7.1%
13:30 ~ 16:00:	3	21.4%	Wednesday:	2	14.3%
16:00 ~ 18:30:	5	35.7%	Thursday:	2	14.3%
18:30 ~ 07:30:	4	28.6%	Friday:	4	28.6%
Unspecified:	0	0.0%	Saturday:	3	21.4%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	13	92.9%	Dry:	13	92.9%
Rain:	1	7.1%	Wet:	1	7.1%
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	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	19	65.5%	Fatal Collision:	0	0.0%
Bus:	4	13.8%	Injury Collision:	6	42.9%
Truck:	0	0.0%	PDO Collision:	8	57.1%
Taxi:	0	0.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	2	6.9%	Daylight:	8	57.1%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	2	6.9%	Dark(Lighted):	6	42.9%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	2	6.9%	Dark(Unknown Lighting):	0	0.0%
			Unspecified:	0	0.0%

Contributing Factor	#VEH	%	Pedestrian Actions	#ACC	%
Driver: Speed:	1	3.4%	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:	3	10.3%	In Unmarked Crosswalk:	0	0.0%
Vehicle:	0	0.0%	Not in Crosswalk:	0	0.0%
Roadway:	1	3.4%	From Between Parked Cars:	0	0.0%
Unspecified:	24	82.8%	Unspecified:	0	0.0%

11 Records are not approved as of 9/15/2013 2:14:53 PM

Accident Summary Report (R-8)

Corridor: MINNESOTA AVE,NE,SE From E ST,SE TO G ST,SE

Time Period Covered: From 01/01/2002 To 12/31/2002

Prepared By: Rahul Jain

Prepared Date: 11/19/201

Total Number of Accident:	5	Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Fatalities:	0	Right Angle:	1	20.0%	Fixed Object:	1	20.0%
Total Number of Injuries:	6	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Disabling Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabling Injuries:	2	Rear End:	2	40.0%	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	20.0%	Unspecified:	0	0.0%
Time of Day				#ACC	%	Day of week	
07:30 ~ 09:30:				1	20.0%	Sunday:	
09:30 ~ 11:30:				0	0.0%	Monday:	
11:30 ~ 13:30:				0	0.0%	Tuesday:	
13:30 ~ 16:00:				0	0.0%	Wednesday:	
16:00 ~ 18:30:				1	20.0%	Thursday:	
18:30 ~ 07:30:				3	60.0%	Friday:	
Unspecified:				0	0.0%	Saturday:	
Weather Condition				#ACC	%	Surface Condition	
Clear:				4	80.0%	Dry:	
Rain:				0	0.0%	Wet:	
Snow:				0	0.0%	Snow/Ice:	
Sleet/Hail:				0	0.0%	Slush:	
Fog/Mist:				0	0.0%	Water/Sand:	
Crosswind/Blowing Sand:				0	0.0%	Repairing:	
Unspecified:				1	20.0%	Unspecified:	
Type of Vehicle				#VEH	%	Accident Severity Type	
Passenger Car:				9	81.8%	Fatal Collision:	
Bus:				0	0.0%	Injury Collision:	
Truck:				2	18.2%	PDO Collision:	
Taxi:				0	0.0%		
Minivan:				0	0.0%	Light Condition	
Police/Emergency Vehicle:				0	0.0%	Daylight:	
Motorcycle/Moped:				0	0.0%	Dawn/Dusk:	
Bicycle:				0	0.0%	Dark(Lighted):	
Fixed Object:				0	0.0%	Dark(Not Lighted):	
Unspecified:				0	0.0%	Dark(Unknown Lighting):	
						Unspecified:	
Contributing Factor				#VEH	%	Pedestrian Actions	
Driver: Speed:				2	18.2%	In Crosswalk with Signal:	
Driver: Alcohol/Drug:				0	0.0%	In Crosswalk against Signal:	
Driver: Electronic Device:				0	0.0%	In Crosswalk no Signal:	
Driver: Others:				1	9.1%	In Unmarked Crosswalk:	
Vehicle:				0	0.0%	Not in Crosswalk:	
Roadway:				0	0.0%	From Between Parked Cars:	
Unspecified:				8	72.7%	Unspecified:	

5 Records are not approved as of 11/19/2013 2:01:23 PM

Accident Summary Report (R-8)

Corridor: MINNESOTA AVE,NE,SE From E ST,SE TO G ST,SE

Time Period Covered: From 01/01/2004 To 12/31/2004

Prepared By: Rahul Jain

Prepared Date: 11/19/201

		Collision Type	#ACC	%	Collision Type	#ACC	%
Total Number of Accident:	1	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Fatalities:	0	Left Turn:	0	0.0%	Ran Off Road:	0	0.0%
Total Number of Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of Disabling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of NonDisabling Injuries:	0	Side Swiped:	0	0.0%	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	100.0%
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:	0	0.0%	Monday:	0	0.0%
11:30 ~ 13:30:	0	0.0%	Tuesday:	0	0.0%
13:30 ~ 16:00:	0	0.0%	Wednesday:	0	0.0%
16:00 ~18:30:	0	0.0%	Thursday:	0	0.0%
18:30 ~ 07:30:	1	100.0%	Friday:	0	0.0%
Unspecified:	0	0.0%	Saturday:	1	100.0%

Weather Condition	#ACC	%	Surface Condition	#ACC	%
Clear:	1	100.0%	Dry:	1	100.0%
Rain:	0	0.0%	Wet:	0	0.0%
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	#VEH	%	Accident Severity Type	#ACC	%
Passenger Car:	0	0.0%	Fatal Collision:	0	0.0%
Bus:	0	0.0%	Injury Collision:	0	0.0%
Truck:	0	0.0%	PDO Collision:	1	100.0%
Taxi:	1	100.0%			
Minivan:	0	0.0%	Light Condition	#ACC	%
Police/Emergency Vehicle:	0	0.0%	Daylight:	0	0.0%
Motorcycle/Moped:	0	0.0%	Dawn/Dusk:	0	0.0%
Bicycle:	0	0.0%	Dark(Lighted):	0	0.0%
Fixed Object:	0	0.0%	Dark(Not Lighted):	0	0.0%
Unspecified:	0	0.0%	Dark(Unknown Lighting):	1	100.0%
			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:	0	0.0%	In Crosswalk no Signal:	0	0.0%
Driver: Others:	0	0.0%	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:	1	100.0%	Unspecified:	0	0.0%

1 Records are not approved as of 11/19/2013 2:02:35 PM