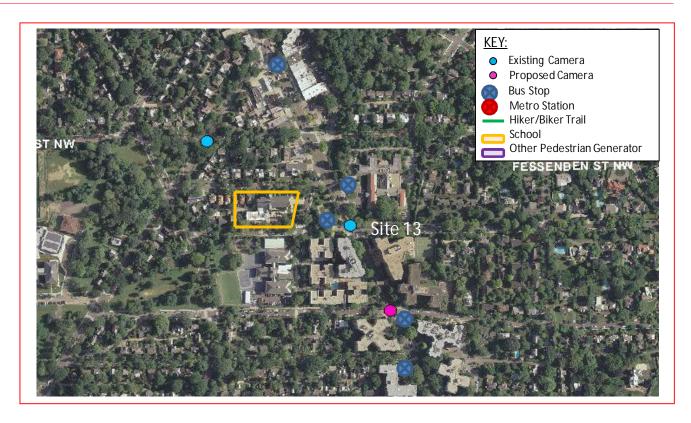




Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 4900 Block Connecticut Avenue NW

Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	203	3	3F	Existing	4900 Block Connecticut Avenue Northwest,
					Southeast-bound



This existing speed camera is located in Ward 3 at the 4900 block of Connecticut Avenue Northwest in the southeast-bound direction. Connecticut Avenue runs between Western Avenue Northwest to the north and H Street to the south. The posted speed limit is 30 MPH. The existing speed camera was installed in September 2011.





Field Assessment Summary

Connecticut Avenue is assumed to run in a North-South direction, and is classified as a principal arterial. Connecticut Avenue has two travel lanes in each direction. This location has the following characteristics:

- This site is located in a commercial and residential area with apartment buildings in the area, and driveways on both sides of the street.
- There is sidewalk with curb and gutter and on-street parking on both sides of the street.
- The existing pavement is in good condition and there is a downhill slope in the northbound direction.
- There is one school in this area: Auguste Montessori School.
- There is one bus stop on the northbound side and more in the surrounding area. Two bus routes make a right turn from the northbound direction.







Speed Data Analysis

Posted Speed Limit (MPH)	30
Mean Speed (MPH)	23
85th Percentile Speed (MPH)	29
10 MPH Pace Speed	21-30 MPH
ADT	9,976

Both the mean speed and the 85th percentile speeds are lower than the posted speed limit at this location. The 85th percentile speed is 1 MPH lower than the posted speed limit.

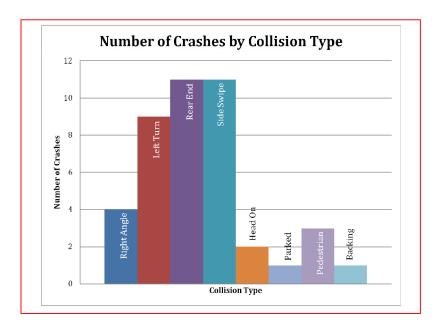
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 42 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 are Side Swipe (11 crashes), Rear End (11 crashes), and Left Turn (9 crashes). The other collision types had less than four crashes or less each.





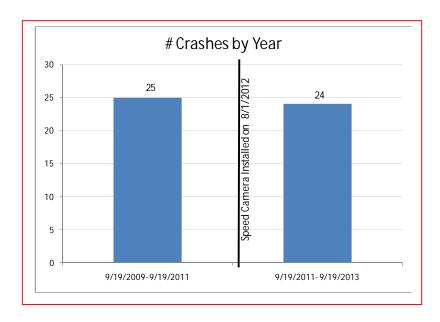
Sev	Severity			eather		Surface	conditi	ion	Light Condition		
Total	42										
Fatal	0	0.0%	Clear	37	88.1%	Dry	36	85.7%	Day	30	71.4%
Injury	17	40.5%	Rain	4	9.5%	Wet	5	11.9%	Night	10	23.8%
Taxi	8	19.0%	Snow	0	0.0%	Snow/Ice	0	0.0%			
Bus	6	14.3%									



The speed camera was installed on 09/20/2011. The graph on the next page below shows the number of crashes in the two years prior to the speed camera's installation (25 crashes) and the two years after the speed camera's installation (24 crashes). The number of crashes decreased after the installation of the speed camera.







The Connecticut Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011, according to the report *TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011)*¹.

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 speed data analysis shows travel speeds being lower than the posted speed limit.
- 2. Crash Data There was an elevated number of speed-related crashes at this location, including rear end collisions, and the number of crashes decreased since installation of the speed camera. Also, the Connecticut Avenue Corridor is listed as one of the top ten high frequency crash corridors from 2009 to 2011.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
 - a. The site is located in a residential and commercial area with apartment buildings in the area and driveways on both sides of the street.
 - b. There is one school in the area: Auguste Montessori School.
 - c. There are multiple bus stops in the area which generate pedestrian activity.

W3 - 27

¹ DDOT, TRAFFIC SAFETY STATISTICS REPORT FOR THE DISTRICT OF COLUMBIA (2009-2011), pg.80.





The speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, and the crash data analysis showed a reduction in crashes since the installation of the speed camera. Due to the analysis results along with 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

4900 block of Connecticut Ave NW SEB Speed

SEB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/05/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	1	2	10	9	2	0	0	0	0	0	0	0	0	0	24
03:00	3	1	9	14	11	2	0	0	0	0	0	0	0	0	40
04:00	3	0	29	47	20	7	1	0	0	0	0	0	0	0	107
05:00	14	5	65	135	46	6	0	0	0	0	0	0	0	0	271
06:00	38	31	205	281	47	6	1	0	0	0	0	0	0	0	609
07:00	90	48	228	352	79	16	1	0	0	0	0	0	0	0	814
08:00	110	70	264	290	65	6	0	0	0	0	0	0	0	0	805
09:00	59	30	325	355	84	14	1	0	0	0	0	0	0	0	868
10:00	59	41	216	288	75	11	0	0	0	0	0	0	0	0	690
11:00	44	32	191	286	69	6	3	0	0	0	0	0	0	0	631
12 PM	42	42	243	232	54	3	2	0	0	0	0	0	0	0	618
13:00	36	24	169	198	79	6	0	0	0	0	0	0	0	0	512
14:00	38	19	121	209	101	10	0	0	0	0	0	0	0	0	498
15:00	60	22	144	229	63	9	1	0	0	0	0	0	0	0	528
16:00	68	34	147	159	60	2	0	0	0	0	0	0	0	0	470
17:00	93	33	159	129	30	6	0	0	0	0	0	0	0	0	450
18:00	79	45	148	152	34	2	0	0	0	0	0	0	0	0	460
19:00	32	44	230	132	28	2	0	0	0	0	0	0	0	0	468
20:00	20	21	154	136	21	5	0	0	0	0	0	0	0	0	357
21:00	11	28	141	101	21	0	0	0	0	0	0	0	0	0	302
22:00	4	12	86	108	15	0	0	0	0	0	0	0	0	0	225
23:00	9	5	44	60	13	2	0	0	0	0	0	0	0	0	133
Total	913	589	3328	3902	1017	121	10	0	0	0	0	0	0	0	9880

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

4900 block of Connecticut Ave NW SEB Speed

SEB															
Start	1	16	21	26	31	36	41	46	51	56	61	66	71	76	
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	999	Total
11/06/13	2	9	20	27	4	0	0	0	0	0	0	0	0	0	62
01:00	8	1	10	11	4	0	0	0	0	0	0	0	0	0	34
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	10	10	30	38	8	0	0	0	0	0	0	0	0	0	96
Grand Total	923	599	3358	3940	1025	121	10	0	0	0	0	0	0	0	9976

 15th Percentile :
 12 MPH

 50th Percentile :
 24 MPH

 85th Percentile :
 29 MPH

 95th Percentile :
 32 MPH

 Stats
 Mean Speed(Average) :
 23 MPH

 10 MPH Pace Speed :
 21-30 MPH

Number in Pace : 5994
Percent in Pace : 60.1%
Number of Vehicles > 30 MPH : 1364
Percent of Vehicles > 30 MPH : 13.7%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

4900 block of Connecticut Ave NW SEB Volume

Start	Tue	05-Nov-13	Wed	06-Nov-13	Thu	07-Nov-13	Daily Ave	rage
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	179	21	*	*	*	21	179
12:15	*	146	21	*	*	*	21	146
12:30	*	156	11	*	*	*	11	156
12:45	*	137	9	*	*	*	9	137
01:00	*	111	13	*	*	*	13	111
01:15	*	129	7	*	*	*	7	129
01:30	*	134	7	*	*	*	7	134
01:45	*	138	7	*	*	*	7	138
02:00	8	129	*	*	*	*	8 6	129
02:15	6	119	*	*	*	*	6	119
02:30	4	131	*	*	*	*	4	131
02:45	6	119	*	*	*	*	6	119
03:00	7	144	*	*	*	*	7	144
03:15	8	149	*	*	*		8	149
03:30	12	124	*	*	*	*	12	124
03:45	13	111	*	*	*	*	13	111
04:00	15	128	*	*	*	*	15	128
04:15	14	123	*	*	*	*	14	123
04:30	39	122	*	*	*	*	39	122
04:45	39	97	*	*	*	*	39	97
05:00 05:15	37 59	125 114	*	*	*	*	37 59	125 114
05:30	83	87	*	*	*	*	83	87
05:45	92	124	*	*	*	*	92	124
06:00	111	112	*	*	*	*	111	112
06:15	120	86	*	*	*	*	120	86
06:30	169	119	*	*	*	*	169	119
06:45	209	143	*	*	*	*	209	143
07:00	196	139	*	*	*	*	196	139
07:15	173	104	*	*	*	*	173	104
07:30	209	91	*	*	*	*	209	91
07:45	236	134	*	*	*	*	236	134
08:00	182	102	*	*	*	*	182	102
08:15	189	78	*	*	*	*	189	78
08:30	231	89	*	*	*	*	231	89
08:45	203	88	*	*	*	*	203	88
09:00	214	77	*	*	*	*	214	77
09:15	215	71	*	*	*	*	215	71
09:30	230	84	*	*	*	*	230	84
09:45	209	70	*	*	*	*	209	70
10:00	196	56	*	*	*	*	196	56
10:15	167	56	*	*	*	*	167	56
10:30	165	61	*	*	*	*	165	61
10:45	162	52	*	*	*	*	162	52
11:00	159	43	*	*	*	*	159	43
11:15	158	49	*	*	*	*	158	49
11:30	155	17	*	*	*	*	155	17
11:45	159	24	*				159	24
Total	4859	5021	96	0	0	0	4955	5021
Combined Total	98	380	9	6	0		9976	
Peak	09:00	12:00	12:00				09:00	12:00
Vol.	868	618	62				868	618
P.H.F.	0.943	0.863	0.738	_			0.943	0.863
ADT		ADT 9,976	AADT 9,976	3				

Accident Summary Report (R-8)

Time Period Covered: F	rom 01/01/20	10 To 12/31	/2012 Prepare	ed By:	Rahul Jain	Prepared Da	te: 9	9/16/2013
Total Number of Accident:		42	Collision Type	#ACC	%	Collision Type	#ACC	; 9
Total Number of Fatalities:		0	Right Angle:	4	9.5%	Fixed Object:	0	0.0%
Total Number of Injuries:		27	Left Turn:	9	21.4%	Ran Off Road:	0	0.0%
Total Number of Disabling In	njuries:	0	Right Turn:	0	0.0%	Ped. Involved:	3	7.1%
Total Number of NonDisabli	ng Injuries:	7	Rear End:	11	26.2%	Backing:	1	2.4%
Total Number of Pedestrian	s Involved:	3	Side Swiped:	11	26.2%	Non Collision:	0	0.0%
Total Number of Bicycles In	volved:	0	Head On:	2	4.8%	Under/Over Ride:	0	0.0%
Total Number of Motorcycle	s Involved:	0	Parked:	1	2.4%	Unspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	c	9/
07:30 ~ 09:30:	9	21.4%			Sunday:	3		7.1%
09:30 ~ 11:30:	4	9.5%			Monday:	6		14.3%
11:30 ~ 13:30:	2	4.8%			Tuesday:	6		14.3%
13:30 ~ 16:00:	6	14.3%			Wednesday:	4		9.5%
16:00 ~18:30:	9	21.4%			Thursday:	8		19.0%
18:30 ~ 07:30:	12	28.6%			Friday:	11		26.2%
Unspecified:	0	0.0%			Saturday:	4		9.5%
Weather Condition	#ACC	%			Surface Condition	#AC	C	%
Clear:	37	88.1%			Dry:	36		85.7%
Rain:	4	9.5%			Wet:	5		11.9%
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	2.4%			Unspecified:	1		2.4%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	c	%
Passenger Car:	67	74.4%			Fatal Collision:	0		0.0%
Bus:	6	6.7%			Injury Collision:	17		40.5%
Truck:	5	5.6%			PDO Collision:	25		59.5%
Taxi:	8	8.9%						
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle:	0	0.0%			Daylight:	30		71.4%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	10		23.8%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	4	4.4%			Dark(Unknown Ligh			0.0%
·					Unspecified:	2		4.8%
Contributing Factor	#VEH	%			Pedestrian Action	s #AC	C	%
Driver: Speed:	3	3.3%			In Crosswalk with S	Signal: 1		33.3%
Driver: Alcohol/Drug:	1	1.1%			In Crosswalk again	-		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	gnal: 1		33.3%
Driver: Others:	24	26.7%			In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Parl	ked Cars: 0		0.0%
Unspecified:	62	68.9%			Unspecified:	1		33.3%

²⁷ Records are not approved as of 9/16/2013 3:56:11 PM

Accident Summary Report (R-8)

	From 09/19/20		MBERLAND ST,N /2011 Prepar		Rahul Jain	Prepared Da	ite: 1	1/20/20
Total Number of Accident:		25	Collision Type	#ACC	%	Collision Type	#ACC	9
Total Number of Fatalities:		0	Right Angle:	2	8.0%	Fixed Object:	0	0.0%
Total Number of Injuries:		20	Left Turn:	7	28.0%	Ran Off Road:	0	0.0%
Total Number of Disabling I	njuries:	0	Right Turn:	0	0.0%	Ped. Involved:	2	8.0%
Total Number of NonDisabl	ing Injuries:	6	Rear End:	7	28.0%	Backing:	1	4.0%
Total Number of Pedestrian	s Involved:	2	Side Swiped:	3	12.0%	Non Collision:	0	0.0%
Total Number of Bicycles In	volved:	0	Head On:	2	8.0%	Under/Over Ride	: 0	0.0%
Total Number of Motorcycle	es Involved:	0	Parked:	1	4.0%	Unspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	:C	9/
07:30 ~ 09:30:	3	12.0%			Sunday:	2		8.0%
09:30 ~ 11:30:	2	8.0%			Monday:	4		16.0%
11:30 ~ 13:30:	1	4.0%			Tuesday:	5		20.0%
13:30 ~ 16:00:	5	20.0%			Wednesday:	1		4.0%
16:00 ~18:30:	7	28.0%			Thursday:	3		12.0%
18:30 ~ 07:30:	7	28.0%			Friday:	7		28.0%
Unspecified:	0	0.0%			Saturday:	3		12.0%
Weather Condition	#ACC	%			Surface Condition	n #AC	c	%
Clear:	21	84.0%			Dry:	21		84.0%
Rain:	3	12.0%			Wet:	4		16.0%
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:	1	4.0%			Unspecified:	0		0.0%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	:C	%
Passenger Car:	46	78.0%			Fatal Collision:	0		0.0%
Bus:	1	1.7%			Injury Collision:	13		52.0%
Truck:	2	3.4%			PDO Collision:	12		48.0%
Taxi:	6	10.2%						
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle:	0	0.0%			Daylight:	17		68.0%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	7		28.0%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	4	6.8%			Dark(Unknown Lig	hting): 0		0.0%
					Unspecified:	1		4.0%
Contributing Factor	#VEH	%			Pedestrian Action	s #AC	c	%
Driver: Speed:	3	5.1%			In Crosswalk with S	Signal: 0		0.0%
Driver: Alcohol/Drug:	1	1.7%			In Crosswalk again	st Signal: 0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Si	gnal: 1		50.0%
Driver: Others:	15	25.4%			In Unmarked Cross	swalk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Par	ked Cars: 0		0.0%
Unspecified:	40	67.8%			Unspecified:	1		50.0%

¹³ Records are not approved as of 11/20/2013 2:43:48 PM

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

	From 09/20/20		MBERLAND ST,N' /2013 Prepare		Rahul Jain	Prepared Da	ite: 1	1/20/20
Total Number of Accident:		24	Collision Type	#ACC	%	Collision Type	#ACC	9,
Total Number of Fatalities:		0	Right Angle:	3	12.5%	Fixed Object:	0	0.0%
Total Number of Injuries:		10	Left Turn:	5	20.8%	Ran Off Road:	0	0.0%
Total Number of Disabling I	njuries:	0	Right Turn:	0	0.0%	Ped. Involved:	1	4.29
Total Number of NonDisabl	ing Injuries:	1	Rear End:	5	20.8%	Backing:	0	0.09
Total Number of Pedestrian	s Involved:	1	Side Swiped:	10	41.7%	Non Collision:	0	0.0%
Total Number of Bicycles In	volved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycle	es Involved:	0	Parked:	0	0.0%	Unspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	:C	9
07:30 ~ 09:30:	7	29.2%			Sunday:	2		8.39
09:30 ~ 11:30:	2	8.3%			Monday:	2		8.3%
11:30 ~ 13:30:	2	8.3%			Tuesday:	1		4.29
13:30 ~ 16:00:	1	4.2%			Wednesday:	6		25.0%
16:00 ~18:30:	5	20.8%			Thursday:	6		25.0%
18:30 ~ 07:30:	7	29.2%			Friday:	6		25.0%
Unspecified:	0	0.0%			Saturday:	1		4.2%
Weather Condition	#ACC	%			Surface Condition	#AC	:C	9
Clear:	20	83.3%			Dry:	18		75.0%
Rain:	3	12.5%			Wet:	4		16.7%
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	4.2%			Unspecified:	2		8.3%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	c	9
Passenger Car:	29	64.4%			Fatal Collision:	0		0.0%
Bus:	7	15.6%			Injury Collision:	6		25.0%
Truck:	3	6.7%			PDO Collision:	18		75.0%
Taxi:	3	6.7%						
Minivan:	0	0.0%			Light Condition	#AC	C	9
Police/Emergency Vehicle:	0	0.0%			Daylight:	17		70.8%
Motorcycle/Moped:	0	0.0%			Dawn/Dusk:	0		0.0%
Bicycle:	0	0.0%			Dark(Lighted):	6		25.0%
Fixed Object:	0	0.0%			Dark(Not Lighted):	0		0.0%
Unspecified:	3	6.7%			Dark(Unknown Ligh	nting): 0		0.0%
•					Unspecified:	1		4.2%
Contributing Factor	#VEH	%			Pedestrian Action	s #AC	c	9
Driver: Speed:	0	0.0%			In Crosswalk with S	Signal: 1		100.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk again	-		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	gnal: 0		0.0%
Driver: Others:	9	20.0%			In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Parl	ked Cars: 0		0.0%
Unspecified:	36	80.0%			Unspecified:	0		0.0%

¹⁵ Records are not approved as of 11/20/2013 2:42:43 PM