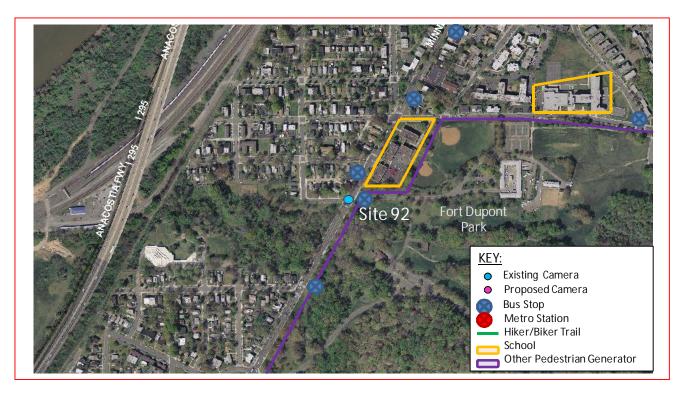




Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 3300 Block Minnesota Avenue SE NE/B

Study Area and Location

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



The existing speed camera is located in Ward 7 at the 3300 block of Minnesota Avenue Southeast in the northeastbound 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 October 2002.





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, 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





Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	15
85th Percentile Speed (MPH)	21
10 MPH Pace Speed (MPH)	11-20
ADT	8,384

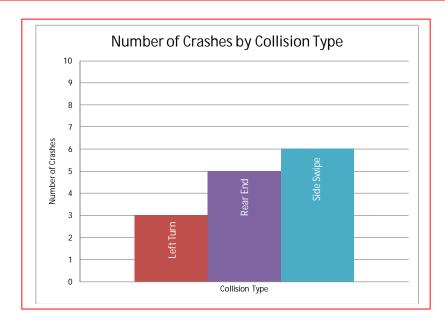
The mean speed is lower than the posted speed limit by 10 MPH and the 85th percentile speed is lower than the posted speed by 4 MPH at this location.

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 only types of crashes at this location were Side Swipe (6), Rear End (5) and Left Turn (3). Furthermore, this site experienced six injury-related crashes.

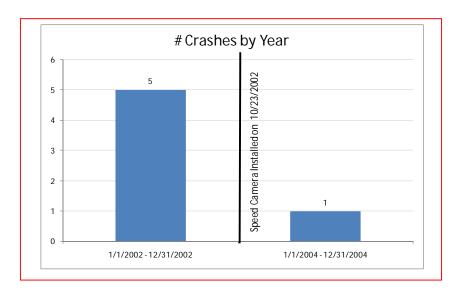


Seve		We	ather		Surface	conditi	ion	Light Condition			
Total	14										
Fatal	0	0.0%	Clear	13	92.9%	Dry	13	92.9%	Day	8	57.1%
Injury	6	42.9%	Rain	1	7.1%	Wet	1	7.1%	Night	6	42.9%
Bus	4	28.6%	Fog/Mist	0	0.0%	Snow/Ice	0	0.0%			
Police/EMS	2	14.3%									



The speed camera was installed on 10/23/2002. The chart 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.





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 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.

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

3300 Block of Minnesota Ave SE Speed

NEB															
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
11/22/13	44	131	32	3	0	0	0	0	0	0	0	0	0	0	210
01:00	18	97	25	1	1	0	0	0	0	0	0	0	0	0	142
02:00	12	52	18	1	0	0	0	0	0	0	0	0	0	0	83
03:00	8	52	18	2	0	0	0	0	0	0	0	0	0	0	80
04:00	6	27	7	0	0	0	0	0	0	0	0	0	0	0	40
05:00	18	43	8	0	0	0	0	0	0	0	0	0	0	0	69
06:00	9	31	90	46	13	4	1	1	0	0	0	0	0	0	195
07:00	23	63	171	66	12	2	0	0	0	0	0	0	0	0	337
08:00	100	231	133	43	3	2	0	0	0	0	0	0	0	0	512
09:00	201	193	32	1	0	0	0	0	0	0	0	0	0	0	427
10:00	123	244	32	0	0	0	0	0	0	0	0	0	0	0	399
11:00	111	249	55	4	0	0	0	0	0	0	0	0	0	0	419
12 PM	134	259	45	1	1	0	0	0	0	0	0	0	0	0	440
13:00	190	211	30	3	0	0	0	0	0	0	0	0	0	0	434
14:00	85	160	189	52	4	1	0	0	0	0	0	0	0	0	491
15:00	67	161	225	58	10	5	0	2	0	0	0	0	0	0	528
16:00	231	252	44	2	0	0	0	0	0	0	0	0	0	0	529
17:00	170	268	58	2	1	0	0	0	0	0	0	0	0	0	499
18:00	197	245	36	1	0	0	0	0	0	0	0	0	0	0	479
19:00	169	300	57	0	1	0	0	0	0	0	0	0	0	0	527
20:00	115	289	38	2	0	0	0	0	0	0	0	0	0	0	444
21:00	80	236	60	3	0	0	0	0	0	0	0	0	0	0	379
22:00	34	146	171	38	6	1	0	0	0	0	0	0	0	0	396
23:00	20	128	147	27	3	0	0	0	0	0	0	0	0	0	325
Total	2165	4068	1721	356	55	15	1	3	0	0	0	0	0	0	8384
Grand Total	2165	4068	1721	356	55	15	1	3	0	0	0	0	0	0	8384

 15th Percentile:
 7 MPH

 50th Percentile:
 15 MPH

 85th Percentile:
 21 MPH

 95th Percentile:
 24 MPH

 Stats
 Mean Speed(Average) :
 15 MPH

 10 MPH Pace Speed :
 11-20 MPH

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

3300 Block of Minnesota Ave SE Volume

Start	22-Nov-13		NEB		SWB	C	ombined	23-Nov-	NEB		SWB		Comb	ined
Time	Fri	A.M.	P.M.	A.M.	P.M.	A.M	. P.M.	Sat	A.M.	P.M.	A.M.	P.M.	A.M.	P.N
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			*	*	*	*	*	
01:00					101		207		*	*	*	*	*	
		44	106	36		80			*	*	*	*	*	
01:15		40	107	38	85	78								
01:30		27	117	29	88	56			*	*	*	*	*	
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		34			*	*	*	*	*	
03:00		24		17	98				*	*	*	*	*	
			125			41	223		*	*	*	*	*	
03:15		14	131	11	117	25								
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			*	*	*	*	*	
04:30		6	127	14	81	20	208		*	*	*	*	*	
04:45		12	135	20	101	32			*	*	*	*	*	
									*	*	*	*	*	
05:00		15	107	14	121	29	228		*	*		*		
05:15		16	134	18	108	34					*		*	
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			*	*	*	*	*	
06:30		52	112	46	112	98	224		*	*	*	*	*	
06:45		71	131	37	109	108			*	*	*	*	*	
									*	*	*	*	*	
07:00		59	132	62	99	121	231		*	*	*	*	*	
07:15		78	145	75	144		55555							
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			*	*	*	*	*	
08:30		142	124	108		5555			*	*	*	*	*	
									*	*	*	*	*	
08:45		123	111	122	_					*	*	*	*	
09:00		121	104	85	108	206	212		*					
09:15		127	105	118	81	245			*	*	*	*	*	
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			*	*	*	*	*	
10:13		92	102	93	109	185	211		*	*	*	*	*	
									*	*	*	*	*	
10:45		100	100	113	81	213			*	*	*	*	*	
11:00		121	110	92	88	213	198		*			*	*	
11:15		88	85	87	80	175			*	*	*		*	
11:30		105	68	109	70	214	138		*	*	*	*	*	
11:45		105	62	83	63	188	125		*	*	*	*	*	
Total		2913	5471	2717	4879	5630			0	0	0	0	0	
Day Total			384		7596		15980		0	-	0	-	0	
% Total		8.2%	34.2%	17.0%	30.5%	· ·	. 5 7 0 0	0.0%		0.0%	0.0%		J	
,	'	J.2 /0	J-1.2 /U	17.070	JU.J /U			0.070	0.0 /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			0.880		0.885							
	(J.91Z	0.916	0.971	U.00U	0.970	U.003							

Accident Summary Report (R-8)

Time Period Covered: F	From 01/01/20	10 To 12/31	/2012 Prepare	ed By:	Rahul Jain	Prepared Da	te: 9	9/15/2013
Total Number of Accident:		14	Collision Type	#ACC	%	Collision Type	#ACC	. 9
Total Number of Fatalities:		0	Right Angle:	0	0.0%	Fixed Object:	0	0.0%
Total Number of Injuries:		8	Left Turn:	3	21.4%	Ran Off Road:	0	0.0%
Total Number of Disabling I	Injuries:	0	Right Turn:	0	0.0%	Ped. Involved:	0	0.0%
Total Number of NonDisabl	ing Injuries:	0	Rear End:	5	35.7%	Backing:	0	0.0%
Total Number of Pedestrian	ns Involved:	0	Side Swiped:	6	42.9%	Non Collision:	0	0.0%
Total Number of Bicycles Ir	nvolved:	2	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycle	es Involved:	0	Parked:	0	0.0%	Jnspecified:	0	0.0%
Time of Day	#ACC	<u></u> %			Day o fweek	#AC	C	9/
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	#AC	C	%
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 #AC	c	%
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	#AC	C	%
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 Ligh	iting): 0		0.0%
•					Unspecified:	0		0.0%
Contributing Factor	#VEH	%			Pedestrian Action	s #AC	C	%
Driver: Speed:	1	3.4%			In Crosswalk with S	ignal: 0		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk agains	-		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	ınal: 0		0.0%
Driver: Others:	3	10.3%			In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	1	3.4%			From Between Park	ced 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)

	From 01/01/2002		T,SE TO G ST,SE /2002 Prepar e		Rahul Jain	Prepared Da	ite: 1	1/19/20
Total Number of Accident:		5	Collision Type	#ACC	%	Collision Type	#ACC	9,
Total Number of Fatalities:		0	Right Angle:	1		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 NonDisabl	ling Injuries:	2	Rear End:	2	40.0%	Backing:	0	0.0%
Total Number of Pedestriar		0	Side Swiped:	0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles Ir	nvolved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycle		0	Parked:	1	20.0%	Unspecified:	0	0.0%
Time of Day	#ACC	%			Day o fweek	#AC	:C	%
07:30 ~ 09:30:	1	20.0%			Sunday:	2		40.0%
09:30 ~ 11:30:	0	0.0%			Monday:	1		20.0%
11:30 ~ 13:30:	0	0.0%			Tuesday:	1		20.0%
13:30 ~ 16:00:	0	0.0%			Wednesday:	0		0.0%
16:00 ~18:30:	1	20.0%			Thursday:	0		0.0%
18:30 ~ 07:30:	3	60.0%			Friday:	0		0.0%
Unspecified:	0	0.0%			Saturday:	1		20.0%
Weather Condition	#ACC	%			Surface Condition	#AC	C C	%
Clear:	4	80.0%			Dry:	5		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:	1	20.0%			Unspecified:	0		0.0%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	:C	%
Passenger Car:	9	81.8%			Fatal Collision:	0		0.0%
Bus:	0	0.0%			Injury Collision:	3		60.0%
Truck:	2	18.2%			PDO Collision:	2		40.0%
Taxi:	0	0.0%						
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle:	0	0.0%			Daylight:	2		40.0%
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 Ligh	nting): 3		60.0%
С поросинов.	· ·	0.070			Unspecified:	0		0.0%
Contributing Factor	#VEH	%			Pedestrian Action	s #AC	C	%
Driver: Speed:	2	18.2%			In Crosswalk with S	Signal: 0		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk again	st Signal: 0		0.0%
Driver: Electronic Device:	0	0.0%			In Crosswalk no Sig	gnal: 0		0.0%
Driver: Others:	1	9.1%			In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%			From Between Park	ked Cars: 0		0.0%
Unspecified:	8	72.7%			Unspecified:	0		0.0%

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

Accident Summary Report (R-8)

	OTA AVE,NE,SE F From 01/01/2004				Rahul Jain	Prepared Da	ite: 1	1/19/20
Total Number of Accident:		1	Collision Ty	pe #AC	C %	Collision Type	#ACC	9,
Total Number of Fatalities:		0	Right Angle:	0		Fixed Object:	0	0.0%
Total Number of Injuries:		0	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 NonDisab	ling Injuries:	0	Rear End:	0	0.0%	Backing:	0	0.0%
Total Number of Pedestria		0	Side Swiped	: 0	0.0%	Non Collision:	0	0.0%
Total Number of Bicycles I	nvolved:	0	Head On:	0	0.0%	Under/Over Ride:	0	0.0%
Total Number of Motorcycl	es Involved:	0	Parked:	0	0.0%	Unspecified:	1	100.0%
Time of Day	#ACC		,		Day o fweek	#AC	:C	9/
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	#AC	:C	%
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 #AC		%
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	#AC	C	%
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 Ligh	nting): 1		100.0%
					Unspecified:	0		0.0%
Contributing Factor	#VEH	%	,		Pedestrian Action	s #AC	c	%
Driver: Speed:	0	0.0%			In Crosswalk with S	ignal: 0		0.0%
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk agains	-		0.0%
Driver: Electronic Device:	0	0.0%	,		In Crosswalk no Sig	gnal: 0		0.0%
Driver: Others:	0	0.0%	,		In Unmarked Cross	walk: 0		0.0%
Vehicle:	0	0.0%	,		Not in Crosswalk:	0		0.0%
Roadway:	0	0.0%	,		From Between Park	ked 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