



Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 1200 Block Taylor Street NE

Study	/ Area a	a <mark>nd Lo</mark> o	cation		
District	PSA	Ward	ANC	Phase	Description
5	404	4	4C	Planned	1200 Block Taylor Street Northeast Westbound
5	KEY: Planned Propos Bus Sto Metro Hiker/E School	d Camera ed Camera p	nerator	ST NE	200 Block Taylor Street Northeast Westbound

The *planned* speed camera will be located in Ward 4 at the 1200 block of Taylor Street Northwest in the westbound direction. Taylor Street runs between 2nd Street Northeast to the west and Barnard Hill Park near the DC-Maryland State Line to the east. The posted speed limit is 25 MPH.







Field Assessment Summary

Taylor Street is assumed to run in the east-west direction, and is classified as a minor arterial. Taylor Street has one travel lane in each direction. This site has the following characteristics:

- This site is located in a residential area with houses, driveway, and sidewalks with curb and gutters on • both sides of the street.
- There is on-street parking on the south side of the street.
- The existing pavement is in good condition. •
- There is an existing traffic signal and crosswalks with pedestrian signals at the intersections with 12th • Street NE and 13th Street NE.
- There is one school in this area: Metropolitan Day School.
- Turkey Thicket Playground is in the area which generates pedestrian activity.
- There are multiple bus stops which generate pedestrian activity.



Looking Eastbound







Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	13
85th Percentile Speed (MPH)	19
10 MPH Pace Speed	6-15 MPH
ADT	4,409

Both the mean speed and the 85th percentile speed were lower than the posted speed limit. The 85th percentile speed is 6 MPH lower than the posted speed limit.

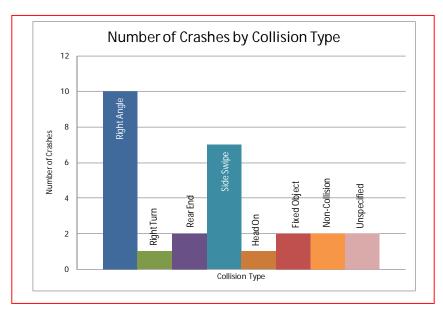
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 27 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 Right Angle (10 crashes), and Side Swiped (7 crashes). The other collision types had less than two crashes or less each.



d.
District Department of Transportation

 Severity			We	eather		Surface	conditi	ion	Light Condition			
Total	27											
Fatal	0	0.0%	Clear	17	63.0%	Dry	20	74.1%	Day	19	70.4%	
Injury	10	37.0%	Rain	6	22.2%	Wet	7	25.9%	Night	7	25. 9 %	
Truck	6	22.2%	Snow	1	3.7%	Snow/Ice	0	0.0%				
Bus	1	3.7%										



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 much lower than the posted speed limit.
- 2. Crash Data There was a total of 27 crashes at this location, with the most common type being Right Angle and Side Swiped. There were ten injury-related crashes.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
 - a. The site is located in a residential area with driveways on both sides of the street.
 - b. There is one school in this area: Metropolitan Day School.
 - c. Turkey Thicket Playground is in the area which generates pedestrian activity.
 - d. There are multiple bus stops which generate pedestrian activity
 - e. There is on-street parking at this location

W4 - 144





Although the speed data analysis showed the mean and 85th percentile speeds to be lower than the posted speed limit, the crash data analysis revealed safety factors. Thus, due to the elevated number of speedrelated and injury-related crashes, and the specific site characteristics of a residential area and the nearby 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

1200 block of Taylor St NE WB Speed

WB															
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
11/09/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	17	9	0	0	0	0	0	0	0	0	0	0	0	0	26
02:00	17	21	2	0	0	0	0	0	0	0	0	0	0	0	40
03:00	32	7	0	0	0	0	0	0	0	0	0	0	0	0	39
04:00	14	16	2	0	0	0	0	0	0	0	0	0	0	0	32
05:00	18	19	5	0	0	0	0	0	0	0	0	0	0	0	42
06:00	34	33	3	0	0	0	0	0	0	0	0	0	0	0	70
07:00	38	51	6	0	1	0	0	0	0	0	0	0	0	0	96
08:00	64	75	14	0	0	0	0	0	0	0	0	0	0	0	153
09:00	135	32	2	0	0	0	0	0	0	0	0	0	0	0	169
10:00	201	31	0	0	0	0	0	0	0	0	0	0	0	0	232
11:00	158	58	2	0	0	0	0	0	0	0	0	0	0	0	218
12 PM	130	95	7	2	0	0	0	0	0	0	0	0	0	0	234
13:00	82	107	54	8	1	0	0	0	0	0	0	0	0	0	252
14:00	106	103	64	18	1	0	0	0	0	0	0	0	0	0	292
15:00	105	112	57	25	3	0	1	0	0	0	0	0	0	0	303
16:00	149	113	59	17	1	0	0	0	0	0	0	0	0	0	339
17:00	159	135	51	12	0	0	0	0	0	0	0	0	0	0	357
18:00	181	131	55	3	0	0	0	0	0	0	0	0	0	0	370
19:00	110	64	47	32	1	0	0	0	0	0	0	0	0	0	254
20:00	94	33	40	22	4	0	0	0	0	0	0	0	0	0	193
21:00	89	47	33	23	3	0	0	0	0	0	0	0	0	0	195
22:00	82	36	39	30	5	0	0	0	0	0	0	0	0	0	192
23:00	73	37	42	23	3	0	0	0	0	0	0	0	0	0	178
Total	2088	1365	584	215	23	0	1	0	0	0	0	0	0	0	4276

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

1200 block of Taylor St NE WB Speed

Percent in Pace :

Number of Vehicles > 25 MPH :

Percent of Vehicles > 25 MPH :

54.5%

195 4.4%

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
11/10/13	59	21	15	13	5	0	0	0	0	0	0	0	0	0	113
01:00	11	7	2	0	0	0	0	0	0	0	0	0	0	0	20
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	,
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	+
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	,
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	,
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	,
14:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	70	28	17	13	5	0	0	0	0	0	0	0	0	0	133
Grand	2150	1202	<i>c</i>	220	20	<u>^</u>		•	<u>^</u>		•	<u>^</u>	0		4400
Total	2158	1393	601	228	28	0	1	0	0	0	0	0	0	0	4409
			15th P	ercentile :		5 MPH									
			50th P	ercentile :		11 MPH									
			85th P	ercentile :		19 MPH									
			95th Po	ercentile :		24 MPH									
Stats		Me	an Speed(A	verage) :		13 MPH									
			0 MPH Pace		6-15 I										
				r in Pace :		2404									
				in Dasa .		E 4 E 0/									

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

1200 block of Taylor St NE WB Volume

Start	Sat	09-Nov-13	Sun	10-Nov-13	Mon	11-Nov-13	Daily A	/erage
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	52	31	*	*	*	31	52
12:15	*	62	33	*	*	*	33	62
12:30	*	64	23	*	*	*	23 26	64
12:45	*	56	26	*	*	*	26	56
01:00	*	54	20	*	*	*	20	54
01:15	9	67	*	*	*	*	9	67
01:30	5	85	*	*	*	*	5	8
01:45	12	46	*	*	*	*	12	46
02:00	9	59	*	*	*	*	9	59
02:15	13	72	*	*	*	*	9 13	7
02:30	10	90	*	*	*	*	10	9
02:45	8	71	*	*	*	*	8	7
03:00	9	77	*	*	*	*	9	77
03:15	11	83	*	*	*	*	11	83
03:30	7	63	*	*	*	*	7	63
03:45	12	80	*	*	*	*	12	80
03.45		66	*	*	*	*	7	6
04:00	7 8	97	*	*	*	*	7 8	0
04:15			*	*	*	*	8	91
04:30	7	90	*	*	*	*	7	90
04:45	10	86					10	86
05:00	4	75	*	*	*	*	4	7
05:15	10	92		*	*		10	92
05:30	21	95	*	*	*	*	21	9
05:45	7	95	*	*	*	*	7	9
06:00	9	87	*	*	*	*	9	8
06:15	19	91	*	*	*	*	19	9
06:30	20	108	*	*	*	*	20 22	10
06:45	22	84	*	*	*	*	22	84
07:00	27	66	*	*	*	*	27	66
07:15	21	46	*	*	*	*	27 21	46
07:30	21	66	*	*	*	*	21	66
07:45	27	76	*	*	*	*	27	76
08:00	37	44	*	*	*	*	37	4
08:15	28	48	*	*	*	*	28	48
08:30	42	57	*	*	*	*	42	5
08:45	46	44	*	*	*	*	46	44
09:00	40	41	*	*	*	*	40	4
09:15	36	51	*	*	*	*	36	5
09:13	43	47	*	*	*	*	43	42
09:45	50	56	*	*	*	*	50	50
			*	*	*	*		
10:00	46	53	*	*	*	*	46	5
10:15	51	38	*		*		51	3
10:30	54	45	*	*	*	*	54	4
10:45	81	56					81	50
11:00	55	36	*	*	*	*	55	3
11:15	58	67	*	*	*	*	58	6
11:30	47	43	*	*	*	*	47	43
11:45	58	32	*	*	*	*	58	32
Total	1117	3159	133	0	0	0	1250	3159
Combined				22	~			
Total	42	/0	13	5	0	1	4409	
Peak	10:30	05:45	12:00				10:30	05:45
Vol.	248	381	113				248	38
P.H.F.	0.765	0.882	0.856				0.765	0.882
		ADT 4,409	AADT 4,409				0.7 00	5.002

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

Corridor: TAYLOR Time Period Covered:			I,NE TO THIRTE /2012 Prepar		Rahul Jain	Prepared Da	te:	10/6/2013
Total Number of Accident:		27	Collision Type	#ACC	%	Collision Type	#AC(C %
Total Number of Fatalities	:	0	Right Angle:	10		Fixed Object:	2	7.4%
Total Number of Injuries:		12	Left Turn:	0		Ran Off Road:	0	0.0%
Total Number of Disabling	Injuries:	0	Right Turn:	1	3.7% l	Ped. Involved:	0	0.0%
Total Number of NonDisat	-	1	Rear End:	2	7.4%	Backing:	0	0.0%
Total Number of Pedestria		0	Side Swiped:	7	25.9%	Non Collision:	2	7.4%
Total Number of Bicycles	Involved:	0	Head On:	1	3.7% เ	Jnder/Over Ride:	0	0.0%
Total Number of Motorcyc	les Involved:	1	Parked:	0	0.0% l	Jnspecified:	2	7.4%
Time of Day	#ACC	%			Day o fweek	#AC	:С	%
07:30 ~ 09:30:	3	11.1%			Sunday:	4		14.8%
09:30 ~ 11:30:	2	7.4%			Monday:	3		11.1%
11:30 ~ 13:30:	5	18.5%			Tuesday:	3		11.1%
13:30 ~ 16:00:	3	11.1%			Wednesday:	1		3.7%
16:00 ~18:30:	6	22.2%			Thursday:	5		18.5%
18:30 ~ 07:30:	8	29.6%			Friday:	5		18.5%
Unspecified:	0	0.0%			Saturday:	6		22.2%
Weather Condition	#ACC	%			Surface Condition	#AC	:С	%
Clear:	17	63.0%			Dry:	20		74.1%
Rain:	6	22.2%			Wet:	7		25.9%
Snow:	1	3.7%			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:	3	11.1%			Unspecified:	0		0.0%
Type of Vehicle	#VEH	%			Accident Severity	Type #AC	c	%
Passenger Car:	39	76.5%			Fatal Collision:	0		0.0%
Bus:	1	2.0%			Injury Collision:	10		37.0%
Truck:	6	11.8%			PDO Collision:	17		63.0%
Taxi:	0	0.0%						
Minivan:	0	0.0%			Light Condition	#AC	C	%
Police/Emergency Vehicle	e: 1	2.0%			Daylight:	19		70.4%
Motorcycle/Moped:	1	2.0%			Dawn/Dusk:	1		3.7%
Bicycle:	0	0.0%			Dark(Lighted):	6		22.2%
Fixed Object:	0	0.0%			Dark(Not Lighted):	1		3.7%
Unspecified:	3	5.9%			Dark(Unknown Ligh Unspecified:	ting): 0 0		0.0% 0.0%
Contributing Easter	#VEH	%			Pedestrian Actions	s #AC		%
Contributing Factor	#VEH 3	% 5.9%			In Crosswalk with S		U	% 0.0%
Driver: Speed:						0		
Driver: Alcohol/Drug:	0	0.0%			In Crosswalk agains	-		0.0%
Driver: Electronic Device: Driver: Others:	0 5	0.0%			In Crosswalk no Sig			0.0%
	5	9.8%			In Unmarked Crossy			0.0%
Vehicle:	0	0.0%			Not in Crosswalk:	0 od Coro: 0		0.0%
Roadway:	1	2.0%			From Between Park			0.0%
Unspecified:	42	82.4%			Unspecified:	0		0.0%

14 Records are not approved as of 10/6/2013 2:59:03 PM