



District Department of Transportation

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

### 1500 Block T Street NW

#### Study Area and Location

District	PSA	Ward	ANC	Phase	Description
2	301	2	2B	Proposed	1500 Block T Street Northwest Eastbound



This *proposed* speed camera will be located in Ward 2 at the 1500 block of T Street Northwest in the eastbound direction. T Street Northwest runs between Florida Avenue Northwest to the west and North Capitol Street Northwest to the east. The posted speed limit is 25 MPH.

W2 - 148





District Department of Transportation  
1500 Block T Street NW

## Field Assessment Summary

T Street is assumed to run in the east-west direction, and is classified as a local road. T Street has one travel lane in the eastbound direction only. This site has the following characteristics:

- This site is located in a residential area with houses, driveways, and on-street parking on both sides of the street.
- Sidewalks with curb, gutter, and drainage inlets are on both sides of the street on the south side of the street.
- The existing pavement is in good condition.
- There are multiple bus stops and one Metrorail station in the area.
- There is an eastbound bicycle lane on the south side of the street.
- There are traffic signals and crosswalks with pedestrian signals at 15<sup>th</sup> Street NW and 16<sup>th</sup> Street NW.

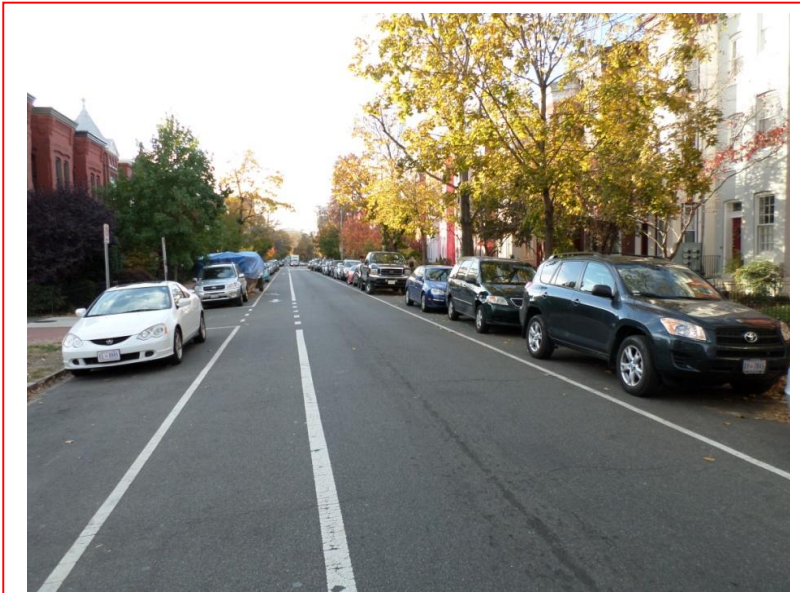


Looking Eastbound





District Department of Transportation  
1500 Block T Street NW



Looking Westbound

## Speed Data Analysis

Posted Speed Limit (MPH)	25
Mean Speed (MPH)	22
85th Percentile Speed (MPH)	30
10 MPH Pace Speed	21-30
ADT	2,727

The mean speed is 3 MPH lower than the posted speed limit, and the 85<sup>th</sup> percentile speed is 5 MPH higher than the posted speed limit.

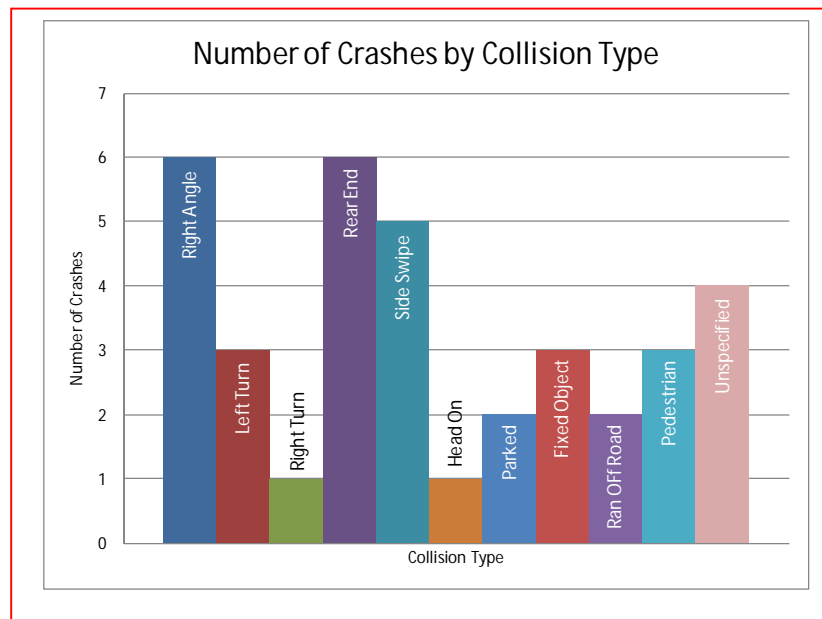
## Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 36 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 collision at this location were Rear End (6 crashes), Right Angle (6 crashes), and Side Swiped (5 crashes). Furthermore, this site experienced a high frequency (11 crashes) of injury-related crashes.



District Department of Transportation  
1500 Block T Street NW

Severity			Weather			Surface condition			Light Condition		
Total	36										
Fatal	0	0.0%	Clear	30	83.3%	Dry	30	83.3%	Day	19	52.8%
Injury	11	30.6%	Rain	2	5.6%	Wet	2	5.6%	Night	13	36.1%
Taxi	6	16.7%	Snow	2	5.6%	Snow/Ice	2	5.6%			
Truck	5	13.9%									



## 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 85th percentile speed is higher than the posted speed limit at this location.
2. Crash Data – This location experienced a high frequency (11 crashes) of injury-related crashes.
3. Field Assessment – The following site characteristics suggest a need for a safer travel environment:
  - a. This site is located in a residential area with driveways along the south side of the street.
  - b. There are multiple bus stops and one Metrorail station in the area which generate pedestrian activity.
  - c. There is on-street parking in this area.
  - d. There is an eastbound bicycle lane on the south side of the street.



District Department of Transportation  
1500 Block T Street NW

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.

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 1500 block of T St NW EB Speed

EB

Start Time	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
11/05/13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	11	0	0	3	5	2	0	0	1	0	0	0	0	0	22
03:00	1	0	1	1	1	0	0	0	0	0	0	0	0	0	4
04:00	2	1	5	0	1	1	2	0	0	0	0	0	0	0	12
05:00	1	4	5	3	2	3	1	1	1	0	0	0	0	0	21
06:00	1	3	9	11	11	6	1	0	0	0	0	0	0	0	42
07:00	14	20	31	33	7	3	1	0	0	0	0	0	0	0	109
08:00	19	26	42	24	13	6	0	1	0	0	0	0	0	0	131
09:00	14	30	34	29	18	5	2	0	1	0	0	0	0	0	133
10:00	21	15	27	42	13	4	0	0	0	0	0	0	0	0	122
11:00	23	25	42	39	18	2	0	0	1	0	0	0	0	0	150
12 PM	25	33	37	28	11	2	2	0	1	0	0	0	0	0	139
13:00	37	38	33	29	6	6	1	0	0	0	0	0	0	0	150
14:00	31	33	48	44	17	2	1	0	0	0	0	0	0	0	176
15:00	20	20	63	80	39	8	2	0	0	0	0	0	0	0	232
16:00	20	25	50	64	26	9	2	1	0	0	0	0	0	0	197
17:00	44	44	71	47	26	2	0	0	0	0	0	0	0	0	234
18:00	25	41	55	51	33	9	0	0	0	0	0	0	0	0	214
19:00	7	24	57	53	18	9	3	0	0	0	0	0	0	0	171
20:00	5	13	31	49	37	8	1	1	0	0	0	0	0	0	145
21:00	10	19	32	35	24	10	1	0	0	0	0	0	0	0	131
22:00	3	5	12	32	19	11	3	2	1	0	0	0	0	0	88
23:00	0	2	7	22	15	6	2	0	0	0	0	0	0	0	54
Total	334	421	692	719	360	114	25	6	6	0	0	0	0	0	2677

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 1500 block of T St NW EB Speed

EB

Start Time	15	16	21	26	31	36	41	46	51	56	61	66	71	76	999	Total
11/06/13	5	0	0	16	7	2	1	0	0	0	0	0	1	0	0	32
01:00	0	0	2	4	5	4	3	0	0	0	0	0	0	0	0	18
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	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<b>Total</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>20</b>	<b>12</b>	<b>6</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>50</b>	
<b>Grand Total</b>	<b>339</b>	<b>421</b>	<b>694</b>	<b>739</b>	<b>372</b>	<b>120</b>	<b>29</b>	<b>6</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2727</b>	

15th Percentile : 10 MPH  
 50th Percentile : 22 MPH  
 85th Percentile : 30 MPH  
 95th Percentile : 35 MPH

Stats  
 Mean Speed(Average) : 22 MPH  
 10 MPH Pace Speed : 21-30 MPH  
 Number in Pace : 1153  
 Percent in Pace : 42.3%  
 Number of Vehicles > 25 MPH : 1077  
 Percent of Vehicles > 25 MPH : 39.5%

# SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD  
MOUNT AIRY, MD 21771

[www.sammateng.com](http://www.sammateng.com)

## 1500 block of T St NW EB Volume

Start Time	Tue	05-Nov-13	Wed	06-Nov-13	Thu	07-Nov-13	Daily Average	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.
12:00	*	37	9	*	*	*	9	37
12:15	*	32	8	*	*	*	8	32
12:30	*	33	8	*	*	*	8	33
12:45	*	37	7	*	*	*	7	37
01:00	*	39	3	*	*	*	3	39
01:15	*	34	4	*	*	*	4	34
01:30	*	43	7	*	*	*	7	43
01:45	*	34	4	*	*	*	4	34
02:00	13	45	*	*	*	*	13	45
02:15	0	45	*	*	*	*	0	45
02:30	2	39	*	*	*	*	2	39
02:45	7	47	*	*	*	*	7	47
03:00	1	56	*	*	*	*	1	56
03:15	2	54	*	*	*	*	2	54
03:30	0	62	*	*	*	*	0	62
03:45	1	60	*	*	*	*	1	60
04:00	3	46	*	*	*	*	3	46
04:15	3	47	*	*	*	*	3	47
04:30	1	53	*	*	*	*	1	53
04:45	5	51	*	*	*	*	5	51
05:00	4	55	*	*	*	*	4	55
05:15	3	49	*	*	*	*	3	49
05:30	6	60	*	*	*	*	6	60
05:45	8	70	*	*	*	*	8	70
06:00	7	60	*	*	*	*	7	60
06:15	7	70	*	*	*	*	7	70
06:30	12	44	*	*	*	*	12	44
06:45	16	40	*	*	*	*	16	40
07:00	21	63	*	*	*	*	21	63
07:15	25	42	*	*	*	*	25	42
07:30	33	26	*	*	*	*	33	26
07:45	30	40	*	*	*	*	30	40
08:00	22	47	*	*	*	*	22	47
08:15	36	35	*	*	*	*	36	35
08:30	37	31	*	*	*	*	37	31
08:45	36	32	*	*	*	*	36	32
09:00	26	42	*	*	*	*	26	42
09:15	32	34	*	*	*	*	32	34
09:30	39	27	*	*	*	*	39	27
09:45	36	28	*	*	*	*	36	28
10:00	35	21	*	*	*	*	35	21
10:15	33	24	*	*	*	*	33	24
10:30	34	21	*	*	*	*	34	21
10:45	20	22	*	*	*	*	20	22
11:00	33	14	*	*	*	*	33	14
11:15	54	17	*	*	*	*	54	17
11:30	33	15	*	*	*	*	33	15
11:45	30	8	*	*	*	*	30	8
Total	746	1931	50	0	0	0	796	1931
Combined Total	2677		50		0		2727	
Peak	11:00	05:30	12:00				11:00	05:30
Vol.	150	260	32				150	260
P.H.F.	0.694	0.929	0.889				0.694	0.929
ADT		ADT 2,727	AADT 2,727					



DC Department of Transportation - Traffic Accident Reporting and Analysis System

## Accident Summary Report (R-8)

**Corridor:** T ST,NW,NE From SIXTEENTH ST,NW TO FOURTEENTH ST,NW

**Time Period Covered:** From 01/01/2010 To 12/31/2012

**Prepared By:** Rahul Jain

**Prepared Date:** 10/6/2013

		<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>	<b>Collision Type</b>	<b>#ACC</b>	<b>%</b>
Total Number of Accident:	36	Right Angle:	6	16.7%	Fixed Object:	3	8.3%
Total Number of Fatalities:	0	Left Turn:	3	8.3%	Ran Off Road:	0	0.0%
Total Number of Injuries:	13	Right Turn:	1	2.8%	Ped. Involved:	2	5.6%
Total Number of Disabling Injuries:	0	Rear End:	6	16.7%	Backing:	3	8.3%
Total Number of NonDisabling Injuries:	6	Side Swiped:	5	13.9%	Non Collision:	0	0.0%
Total Number of Pedestrians Involved:	1	Head On:	1	2.8%	Under/Over Ride:	0	0.0%
Total Number of Bicycles Involved:	3	Parked:	2	5.6%	Unspecified:	4	11.1%
Total Number of Motorcycles Involved:	0						

<b>Time of Day</b>	<b>#ACC</b>	<b>%</b>
07:30 ~ 09:30:	4	11.1%
09:30 ~ 11:30:	4	11.1%
11:30 ~ 13:30:	3	8.3%
13:30 ~ 16:00:	6	16.7%
16:00 ~18:30:	2	5.6%
18:30 ~ 07:30:	17	47.2%
Unspecified:	0	0.0%

<b>Day o fweek</b>	<b>#ACC</b>	<b>%</b>
Sunday:	8	22.2%
Monday:	1	2.8%
Tuesday:	3	8.3%
Wednesday:	2	5.6%
Thursday:	9	25.0%
Friday:	7	19.4%
Saturday:	6	16.7%

<b>Weather Condition</b>	<b>#ACC</b>	<b>%</b>
Clear:	30	83.3%
Rain:	2	5.6%
Snow:	2	5.6%
Sleet/Hail:	0	0.0%
Fog/Mist:	0	0.0%
Crosswind/Blowing Sand:	0	0.0%
Unspecified:	2	5.6%

<b>Surface Condition</b>	<b>#ACC</b>	<b>%</b>
Dry:	30	83.3%
Wet:	2	5.6%
Snow/Ice:	2	5.6%
Slush:	0	0.0%
Water/Sand:	0	0.0%
Repairing:	0	0.0%
Unspecified:	2	5.6%

<b>Type of Vehicle</b>	<b>#VEH</b>	<b>%</b>
Passenger Car:	46	69.7%
Bus:	0	0.0%
Truck:	5	7.6%
Taxi:	6	9.1%
Minivan:	0	0.0%
Police/Emergency Vehicle:	0	0.0%
Motorcycle/Moped:	1	1.5%
Bicycle:	3	4.5%
Fixed Object:	0	0.0%
Unspecified:	5	7.6%

<b>Accident Severity Type</b>	<b>#ACC</b>	<b>%</b>
Fatal Collision:	0	0.0%
Injury Collision:	11	30.6%
PDO Collision:	25	69.4%

<b>Light Condition</b>	<b>#ACC</b>	<b>%</b>
Daylight:	19	52.8%
Dawn/Dusk:	2	5.6%
Dark(Lighted):	13	36.1%
Dark(Not Lighted):	0	0.0%
Dark(Unknown Lighting):	0	0.0%
Unspecified:	2	5.6%

<b>Contributing Factor</b>	<b>#VEH</b>	<b>%</b>
Driver: Speed:	1	1.5%
Driver: Alcohol/Drug:	0	0.0%
Driver: Electronic Device:	0	0.0%
Driver: Others:	15	22.7%
Vehicle:	0	0.0%
Roadway:	0	0.0%
Unspecified:	50	75.8%

<b>Pedestrian Actions</b>	<b>#ACC</b>	<b>%</b>
In Crosswalk with Signal:	0	0.0%
In Crosswalk against Signal:	0	0.0%
In Crosswalk no Signal:	0	0.0%
In Unmarked Crosswalk:	0	0.0%
Not in Crosswalk:	0	0.0%
From Between Parked Cars:	0	0.0%
Unspecified:	1	100.0%

20 Records are not approved as of 10/6/2013 12:14:09 PM