



Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 5000 7th Street NW

Study Area and Location

| District | PSA | Ward | ANC | Phase | Description |
|----------|-----|------|-------|----------|--|
| 4 | 407 | 4 | 4D/4A | Proposed | 5000 7 th Street Northwest Southbound |



The *proposed* speed camera will be located in Ward 4 at the 5000 block of 7th Street Northwest for the southbound direction. 7th Street Northwest runs from Whittier Street Northwest in the north to Rock Creek Church Road Northwest in the south. The posted speed limit is 25 MPH.



District Department of Transportation

55 M Street, Suite 400

Washington, DC 20003



Field Assessment Summary

7th Street Northwest is assumed to run in a north-south direction and is classified as a local road. 7th Street Northwest has one lane of travel in each direction. This site has the following characteristics:

- This site is located in a residential area with houses on both sides of the roadway.
- The existing pavement is in fair condition and has curb on both sides.
- There are sidewalks and in-street parking on both sides of the road.
- There are two schools in the area: Truesdell Education Campus and Barnard Elementary School.
- The Rudolph Playground is in the area and generates pedestrian and bicycle activity.
- There are several bus stops in the area that generate pedestrian activity.



Looking Northbound





Looking Southbound

Speed Data Analysis

| Posted Speed Limit (MPH) | 25 |
|-----------------------------|------|
| Mean Speed (MPH) | 9 |
| 85th Percentile Speed (MPH) | 12 |
| 10 MPH Pace Speed (MPH) | 4-13 |
| ADT | 540 |

The mean speed limit is lower than the posted speed limit by 16 MPH and the 85th percentile speed is lower than the posted speed limit by 13 MPH at this location.

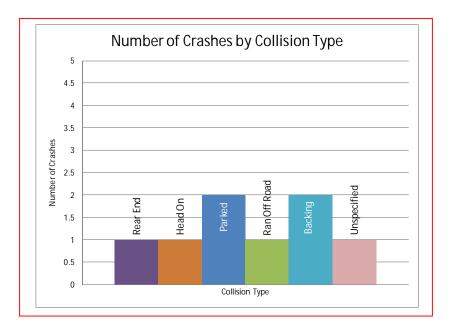
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2013 and December 31, 2012 there were a total of eight 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 Parked (2) and Backing (2). Crash data also shows two (2) accidents where speeding was the contributing factor at this location.

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| | Severity | | | Weather | | Surfa | ce cond | ition | Light Condition | | |
|--------|----------|-------|-------|---------|-------|----------|---------|-------|-----------------|---|-------|
| Total | 8 | | | | | | | | | | |
| Fatal | 0 | 0.0% | Clear | 6 | 75.0% | Dry | 5 | 62.5% | Day | 7 | 87.5% |
| Injury | 2 | 25.0% | Rain | 1 | 12.5% | Wet | 1 | 12.5% | Night | 0 | 0.0% |
| Taxi | 1 | 12.5% | Snow | 0 | 0.0% | Snow/Ice | 0 | 0.0% | | | |
| Bus | 1 | 12.5% | | | | | | | | | |



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 were two crashes where speeding was the contributing factor at this location.
- 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 houses on both sides of the roadway.
 - b. There are two schools in the area: Truesdell Education Campus and Barnard Elementary School.
 - c. The Rudolph Playground is in the area which generates pedestrian and bicycle activity.

Despite low travel speeds as revealed in the speed data analysis and low number of crashes as revealed in the crash data analysis, there are safety concerns in this residential area. The proximity of the site to schools and a playground provides opportunities for vehicle-pedestrian and vehicle-bicycle conflicts. Thus, due to the

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specific site characteristics of a pedestrian neighborhood, the proximity to schools zones, the proximity to a neighborhood playground, and the 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

5000 block of 7th St NW SB Speed

| SB | | | | | | | | | | | | | | | |
|----------------|-----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-------|
| 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 |
| 11/15/13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 01:00 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 02:00 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 03:00 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:00 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 05:00 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 |
| 06:00 | 15 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| 07:00 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 |
| 08:00 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 |
| 09:00 | 22 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| 10:00 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 |
| 11:00 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
| 12 PM | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 13:00 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
| 14:00 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 15:00 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 16:00 | 37 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| 17:00 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| 18:00 | 42 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| 19:00 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| 20:00 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| 21:00 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 |
| 22:00 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| 23:00 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| Total | 536 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 540 |
| Grand Total | 536 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 540 |

 15th Percentile:
 4 MPH

 50th Percentile:
 8 MPH

 85th Percentile:
 12 MPH

 95th Percentile:
 14 MPH

 Stats
 Mean Speed(Average) :
 9 MPH

 10 MPH Pace Speed :
 4-13 MPH

10 MPH Pace Speed: 4-13 MPH

Number in Pace: 433

Percent in Pace: 80.2%

Number of Vehicles > 25 MPH: 0.0%

Percent of Vehicles > 25 MPH: 0.0%

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

5000 block of 7th St NW SB Volume

| Start | Fri | 15-Nov-13 | Sat | 16-Nov-13 | Sun | 17-Nov-13 | | verage |
|----------------|-------------|-----------|------|-----------|------|-----------|--------|--------|
| Time | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | 0 | 7 | * | * | * | * | 0 | |
| 12:15 | 0 | 5 | * | * | * | * | 0 | |
| 12:30 | 0 | 5 | * | * | * | * | 0 | |
| 12:45 | 1 | 5 | * | * | * | * | 1 | |
| 01:00 | 1 | 7 | * | * | * | * | 1 | |
| 01:15 | 0 | 7 | * | * | * | * | 0 | |
| 01:30 | 0 | 9 | * | * | * | * | 0 | |
| 01:45 | 1 | 9 | * | * | * | * | 1 | |
| 02:00 | 0 | 5 | * | * | * | * | 0 | |
| 02:15 | 1 | 4 | * | * | * | * | 1 | |
| 02:30 | 1 | 1 | * | * | * | * | 1 | |
| 02:45 | 1 | 4 | * | * | * | * | 1 | |
| 03:00 | 1 | 9 | * | * | * | * | 1 | |
| 03:15 | 0 | 7 | * | * | * | * | 0 | |
| 03:30 | 0 | 5 | * | * | * | * | 0 | |
| 03:45 | 0 | 9 | * | * | * | * | 0 | |
| 04:00 | 0 | 10 | * | * | * | * | 0 | |
| 04:00 | 1 | 9 | * | * | * | * | 1 | |
| 04:13 | | | * | * | * | * | | |
| 04:30 | 0 | 6 13 | * | * | * | * | 0 2 | |
| 05:00 | | | * | * | * | * | | |
| | 0 | 8 | * | * | * | * | 0 | |
| 05:15 | 2 | 11 | * | * | * | * | 2 | |
| 05:30 | 5 | 10 | * | * | * | * | 5 | |
| 05:45 | 0 | 8 | | | | | 0 | |
| 06:00 | 2 | 13 | * | * | * | * | 2 | |
| 06:15 | 2 | 13 | * | * | | * | 2 | |
| 06:30 | 4 | 10 | * | * | * | * | 4 | |
| 06:45 | 8 | 7 | * | * | * | * | 8 | |
| 07:00 | 10 | 4 | * | * | * | * | 10 | |
| 07:15 | 12 | 3 | * | * | * | * | 12 | |
| 07:30 | 16 | 0 | * | * | * | * | 16 | |
| 07:45 | 18 | 3 | * | * | * | * | 18 | |
| 08:00 | 21 | 11 | * | * | * | * | 21 | |
| 08:15 | 17 | 6 | * | * | * | * | 17 | |
| 08:30 | 12 | 8 | * | * | * | * | 12 | |
| 08:45 | 14 | 5 | * | * | * | * | 14 | |
| 09:00 | 4 | 5 | * | * | * | * | 4 | |
| 09:15 | 13 | 6 | * | * | * | * | 13 | |
| 09:30 | 5 | 9 | * | * | * | * | 5 | |
| 09:45 | 1 | 2 | * | * | * | * | 1 | |
| 10:00 | 9 | 2 | * | * | * | * | 9 | |
| 10:15 | 5 | 6 | * | * | * | * | 9 5 | |
| 10:30 | 7 | 7 | * | * | * | * | 7 | |
| 10:45 | 6 | 4 | * | * | * | * | 6 | |
| 11:00 | 6 | 4 | * | * | * | * | 6 | |
| 11:15 | 5 | 0 | * | * | * | * | 5 | |
| 11:30 | 6 | 4 | * | * | * | * | 6 | |
| 11:45 | 11 | 4 | * | * | * | * | 11 | |
| Total | 231 | 309 | 0 | 0 | 0 | 0 | 231 | |
| Combined | | 40 | |) | 0 | | 540 | |
| <u>Total</u> | 07.20 | 05:30 | | | | | 07.20 | 0.0 |
| Peak | 07:30 72 | 05:30 | | | | | 07:30 | 05 |
| | /) | 44 | | | | | 72 | |
| Vol. P.H.F. | 0.857 | 0.846 | | | | | 0.857 | 0.8 |

DC Department of Transportation - Traffic Accident Reporting and Analysis System

Accident Summary Report (R-8)

| Corridor: 7TH ST,NW | I,SW From G | ALLATIN S | ST,NW TO EME | RSON ST, | NW | | | |
|------------------------------|--------------|-----------|---------------------|----------|-----------------------|----------------|------|-----------|
| Time Period Covered: Fr | om 01/01/201 | 0 To 12/3 | 1/2012 Pre p | ared By: | Rahul Jain | Prepared Da | ate: | 9/16/2013 |
| Total Number of Accident: | | 8 | Collision Ty | pe #ACC | ; % c | ollision Type | #AC | C % |
| Total Number of Fatalities: | | 0 | Right Angle: | 0 | 0.0% F | ixed Object: | 0 | 0.0% |
| Total Number of Injuries: | | 2 | Left Turn: | 0 | 0.0% R | an Off Road: | 1 | 12.5% |
| Total Number of Disabling In | ijuries: | 0 | Right Turn: | 0 | 0.0% P | ed. Involved: | 0 | 0.0% |
| Total Number of NonDisablin | ng Injuries: | 1 | Rear End: | 1 | 12.5% B | acking: | 2 | 25.0% |
| Total Number of Pedestrians | Involved: | 0 | Side Swiped: | : 0 | 0.0% N | on Collision: | 0 | 0.0% |
| Total Number of Bicycles Inv | olved: | 1 | Head On: | 1 | 12.5% U | nder/Over Ride | : 0 | 0.0% |
| Total Number of Motorcycles | s Involved: | 0 | Parked: | 2 | 25.0% U | nspecified: | 1 | 12.5% |
| Time of Day | #ACC | % | , D | | Day o fweek | #AC | cc | % |
| 07:30 ~ 09:30: | 2 | 25.0% | 5 | | Sunday: | 1 | | 12.5% |
| 09:30 ~ 11:30: | 3 | 37.5% | 5 | | Monday: | 1 | | 12.5% |
| 11:30 ~ 13:30: | 1 | 12.5% | 5 | | Tuesday: | 2 | | 25.0% |
| 13:30 ~ 16:00: | 0 | 0.0% | , D | | Wednesday: | 0 | | 0.0% |
| 16:00 ~18:30: | 1 | 12.5% | 5 | | Thursday: | 1 | | 12.5% |
| 18:30 ~ 07:30: | 1 | 12.5% | 5 | | Friday: | 1 | | 12.5% |
| Unspecified: | 0 | 0.0% | Ď | | Saturday: | 2 | | 25.0% |
| Weather Condition | #ACC | % | , | | Surface Condition | #AC | cc | % |
| Clear: | 6 | 75.0% | | | Dry: | 5 | | 62.5% |
| Rain: | 1 | 12.5% | , D | | Wet: | 1 | | 12.5% |
| Snow: | 0 | 0.0% | , D | | Snow/Ice: | 0 | | 0.0% |
| Sleet/Hail: | 0 | 0.0% | , o | | Slush: | 0 | | 0.0% |
| Fog/Mist: | 0 | 0.0% | , o | | Water/Sand: | 0 | | 0.0% |
| Crosswind/Blowing Sand: | 0 | 0.0% | , D | | Repairing: | 0 | | 0.0% |
| Unspecified: | 1 | 12.5% | Ď | | Unspecified: | 2 | | 25.0% |
| Type of Vehicle | #VEH | % | , | | Accident Severity T | ype #AC | cc | % |
| Passenger Car: | 8 | 57.1% | , D | | Fatal Collision: | 0 | | 0.0% |
| Bus: | 1 | 7.1% | , D | | Injury Collision: | 2 | | 25.0% |
| Truck: | 0 | 0.0% | , D | | PDO Collision: | 6 | | 75.0% |
| Taxi: | 1 | 7.1% | - | | Limbt Canditian | 44.0 | | |
| Minivan: | 0 | 0.0% | , b | | Light Condition | #A0 | ,, | 97.50 |
| Police/Emergency Vehicle: | 1 | 7.1% | , i | | Daylight: | 7 | | 87.5% |
| Motorcycle/Moped: | 0 | 0.0% | , | | Dawn/Dusk: | 0 | | 0.0% |
| Bicycle: | 1 | 7.1% | , D | | Dark(Lighted): | 0 | | 0.0% |
| Fixed Object: | 0 | 0.0% | , D | | Dark(Not Lighted): | 0 | | 0.0% |
| Unspecified: | 2 | 14.3% | b | | Dark(Unknown Light | | | 0.0% |
| | | | | | Unspecified: | 1 | | 12.5% |
| Contributing Factor | #VEH | % | | | Pedestrian Actions | #AC | СС | % |
| Driver: Speed: | 2 | 14.3% | | | In Crosswalk with Sig | • | | 0.0% |
| Driver: Alcohol/Drug: | 0 | 0.0% | | | In Crosswalk against | - | | 0.0% |
| Driver: Electronic Device: | 0 | 0.0% | | | In Crosswalk no Sigr | | | 0.0% |
| Driver: Others: | 2 | 14.3% | | | In Unmarked Crossw | | | 0.0% |
| Vehicle: | 0 | 0.0% | | | Not in Crosswalk: | 0 | | 0.0% |
| Roadway: | 0 | 0.0% | | | From Between Parke | | | 0.0% |
| Unspecified: | 10 | 71.4% | 5 | | Unspecified: | 0 | | 0.0% |

⁶ Records are not approved as of 9/16/2013 8:19:02 AM