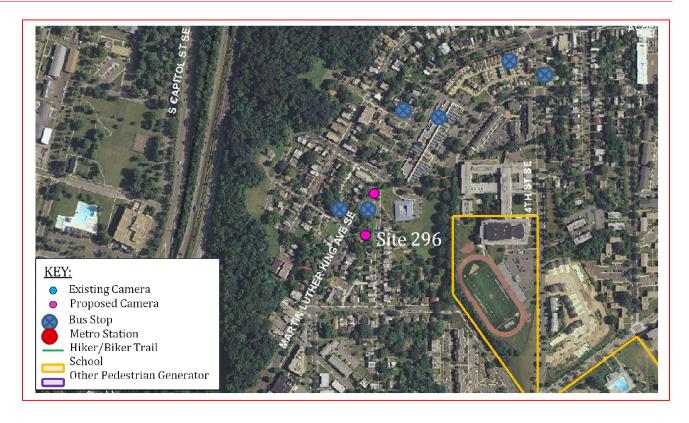




Speed Limit and Safety Nexus Studies for Automated Enforcement Locations in the District of Columbia 3600 Block Martin Luther King, Jr. Avenue SE

Study Area and Location

| District | PSA | Ward | ANC | Phase | Description |
|----------|-----|------|-----|----------|---|
| 7 | 707 | 8 | 8C | Proposed | 3600 Block Martin Luther King, Jr. Avenue |
| | | | | | Southeast, Southwest-bound |



The *proposed* speed camera is located in Ward 8 at the 3600 block of Martin Luther King Jr. Avenue Southeast in the southwest-bound direction. Martin Luther King Jr. Avenue runs between Good Hope Road Southeast to the north and South Capitol Street Southwest to the south. The posted speed limit is 25 MPH.



District Department of Transportation

55 M Street, SE, Suite 400

Washington, DC 20003



Field Assessment Summary

Martin Luther King, Jr. Avenue Southeast is assumed to run in a northeast-southwest direction and is classified as a minor arterial. Martin Luther King, Jr. Avenue has one travel lane in each direction. This site has the following characteristics:

- This is a residential area with houses and driveways.
- There are two schools in the area: Simon Elementary School and Frank W. Ballou Senior High School. The Oxon Run Public Pool is located just east of Simon Elementary School.
- There is sidewalk on both sides of the street and on-street parking on both sides of the street.
- There is a crosswalk at Upsal Street Southeast.
- The pavement is in good condition and there is curb and gutter with drainage inlets.
- There is a bus stop northeast-bound after Upsal Street Southeast.







Speed Data Analysis

| Posted Speed Limit (MPH) | 25 |
|-----------------------------|-------|
| Mean Speed (MPH) | 27 |
| 85th Percentile Speed (MPH) | 32 |
| 10 MPH Pace Speed | 22-31 |
| ADT | 4,977 |

The mean speed is 2 MPH higher than the posted speed limit, and the 85th percentile speed is 7 MPH higher than the posted speed limit.

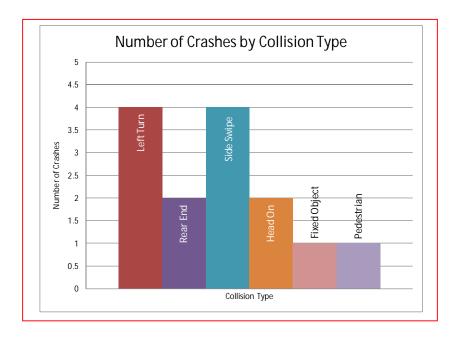
Crash Data Analysis

From the Accident Summary Report provided for the dates between January 1, 2010 and December 31, 2012, there were a total of 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 most common types of collision at this location were Side Swipe and Left Turn (4 crashes each), and Rear End and Head On (2 crashes each). The other collision types had 1 crash or less each. There was 1 crash where vehicular speeding was the contributing factor. Furthermore, the site experienced 9 injury-related crashes.

W8 - 251



| Severity | | | W€ | eather | | Surface | condit | ion | Light Condition | | |
|----------|----|-------|-------|--------|-------|----------|--------|-------|-----------------|---|-------|
| Total | 14 | | | | | | | | | | |
| Fatal | 0 | 0.0% | Clear | 11 | 78.6% | Dry | 11 | 78.6% | Day | 9 | 64.3% |
| Injury | 9 | 64.3% | Rain | 2 | 14.3% | Wet | 3 | 21.4% | Night | 4 | 28.6% |
| Truck | 4 | 28.6% | Snow | 0 | 0.0% | Snow/Ice | 0 | 0.0% | | | |
| Bus | 1 | 7.1% | | | | | | | | | |



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 85th percentile speed is higher than the posted speed limit at this location.
- 2. Crash Data There was 1 crash where vehicular speeding was the contributing factor. Furthermore, this site experienced 9 injury-related crashes.
- 3. Field Assessment The following site characteristics suggest a need for a safer travel environment:
 - a. This is a residential area with houses and driveways.
 - b. There are two schools in the area: Simon Elementary School and Frank W. Ballou Senior High School.
 - c. The Oxon Run Public Pool is located just east of Simon Elementary School, which generates pedestrian activity.

W8 - 252





- d. There are several bus stops in the area which generate pedestrian activity.
- e. There is on-street parking on both sides of the street.

Due to the speed data analysis, the crash data analysis, the specific site characteristics, the proximity of schools to the site, 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

3600 Block of M L King Jr. Ave SE SWB Speed

| NB | | | | | | | | | | | | | | | |
|----------------|-----|-----|------|------|-----|-----|----|----|----|----|----|----|----|-----|-------|
| 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 | 1 | 1 | 8 | 25 | 16 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 57 |
| 01:00 | 0 | 0 | 4 | 12 | 8 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 |
| 02:00 | 0 | 1 | 4 | 15 | 16 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 38 |
| 03:00 | 1 | 1 | 3 | 3 | 13 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 |
| 04:00 | 2 | 0 | 2 | 13 | 11 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
| 05:00 | 0 | 1 | 6 | 28 | 19 | 10 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 06:00 | 1 | 1 | 14 | 47 | 52 | 18 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 141 |
| 07:00 | 3 | 3 | 68 | 113 | 36 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 235 |
| 08:00 | 14 | 26 | 105 | 118 | 54 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 327 |
| 09:00 | 47 | 24 | 60 | 87 | 38 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 266 |
| 10:00 | 1 | 16 | 58 | 130 | 42 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 253 |
| 11:00 | 2 | 15 | 40 | 115 | 43 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 |
| 12 PM | 5 | 13 | 66 | 132 | 40 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 266 |
| 13:00 | 6 | 19 | 115 | 137 | 36 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 323 |
| 14:00 | 10 | 12 | 89 | 142 | 48 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 315 |
| 15:00 | 3 | 4 | 109 | 157 | 62 | 14 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 354 |
| 16:00 | 2 | 30 | 210 | 147 | 35 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 433 |
| 17:00 | 7 | 37 | 143 | 137 | 49 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 378 |
| 18:00 | 4 | 5 | 89 | 144 | 48 | 7 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 303 |
| 19:00 | 6 | 6 | 64 | 127 | 37 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 249 |
| 20:00 | 3 | 2 | 38 | 93 | 37 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 184 |
| 21:00 | 1 | 1 | 29 | 78 | 45 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 164 |
| 22:00 | 0 | 1 | 36 | 83 | 36 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 167 |
| 23:00 | 3 | 0 | 22 | 42 | 46 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 |
| Total | 122 | 219 | 1382 | 2125 | 867 | 204 | 51 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 4977 |
| Grand Total | 122 | 219 | 1382 | 2125 | 867 | 204 | 51 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 4977 |

 15th Percentile:
 20 MPH

 50th Percentile:
 26 MPH

 85th Percentile:
 32 MPH

 95th Percentile:
 35 MPH

 Stats
 Mean Speed(Average) :
 27 MPH

 10 MPH Pace Speed :
 22-31 MPH

SAMMAT ENGINEERING SERVICES, LLC

1515 RISING RIDGE ROAD MOUNT AIRY, MD 21771

www.sammateng.com

3600 Block of M L King Jr. Ave SE SWB Volume

| Start | Fri | 22-Nov-13 | Sat | 23-Nov-13 | Sun | 24-Nov-13 | Daily A | |
|----------|-------|-----------|------------|-----------|------|-----------|---------|-------|
| Time | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. | A.M. | P.M. |
| 12:00 | 14 | 66 | * | * | * | * | 14 | 6 |
| 12:15 | 12 | 63 | * | * | * | * | 12 | 6 |
| 12:30 | 15 | 73 | * | * | * | * | 15 | 7 |
| 12:45 | 16 | 64 | * | * | * | * | 16 | 6 |
| 01:00 | 7 | 78 | * | * | * | * | 7 | 7 |
| 01:15 | 9 | 87 | * | * | * | * | 9 | 8 |
| 01:30 | 9 | 95 | * | * | * | * | 9 6 | 9 |
| 01:45 | 6 | 63 | * | * | * | * | 6 | 6 |
| 02:00 | 10 | 86 | * | * | * | * | 10 | 8 |
| 02:15 | 9 | 65 | * | * | * | * | 9 | 6 |
| 02:30 | 9 | 92 | * | * | * | * | 9 | 9 |
| 02:45 | 10 | 72 | * | * | * | * | 10 | 7 |
| 03:00 | 9 | 87 | * | * | * | * | 9 7 | 8 |
| 03:15 | 7 | 79 | * | * | * | * | 7 | 7 |
| 03:30 | 5 | 98 | * | * | * | * | 5 | 9 |
| 03:45 | 4 | 90 | * | * | * | * | 4 | 9 |
| 04:00 | 8 | 119 | * | * | * | * | 8 | 11 |
| 04:15 | 8 | 110 | * | * | * | * | 8 | 11 |
| 04:30 | 8 | 95 | * | * | * | * | 8 | 9 |
| 04:45 | 11 | 109 | * | * | * | * | 11 | 10 |
| 05:00 | 7 | 100 | * | * | * | * | 7 | 10 |
| 05:15 | 25 | 104 | * | * | * | * | 25 | 10 |
| 05:30 | 17 | 91 | * | * | * | * | 17 | g |
| 05:45 | 22 | 83 | * | * | * | * | 22 | 8 |
| 06:00 | 30 | 78 | * | * | * | * | 30 | 7 |
| 06:15 | 32 | 77 | * | * | * | * | 32 | 7 |
| 06:30 | 36 | 77 | * | * | * | * | 36 | 7 |
| 06:45 | 43 | 71 | * | * | * | * | 43 | 7 |
| 07:00 | 48 | 76 | * | * | * | * | 48 | 7 |
| 07:15 | 49 | 60 | * | * | * | * | 49 | 6 |
| 07:30 | 55 | 69 | * | * | * | * | 55 | 6 |
| 07:45 | 83 | 44 | * | * | * | * | 83 | 4 |
| 08:00 | 80 | 60 | * | * | * | * | 80 | 6 |
| 08:15 | 87 | 43 | * | * | * | * | 87 | 4 |
| 08:30 | 83 | 36 | * | * | * | * | 83 | 3 |
| 08:45 | 77 | 45 | * | * | * | * | 77 | 4 |
| 09:00 | 76 | 39 | * | * | * | * | 76 | 3 |
| 09:15 | 54 | 51 | * | * | * | * | 54 | 5 |
| 09:30 | 75 | 34 | * | * | * | * | 75 | 3 |
| 09:45 | 61 | 40 | * | * | * | * | 61 | 2 |
| 10:00 | 66 | 45 | * | * | * | * | 66 | 4 |
| 10:15 | 67 | 46 | * | * | * | * | 67 | 4 |
| 10:30 | 68 | 40 | * | * | * | * | 68 | 4 |
| 10:45 | 52 | 36 | * | * | * | * | 52 | 3 |
| 11:00 | 50 | 33 | * | * | * | * | 50 | 3 |
| 11:15 | 59 | 30 | * | * | * | * | 59 | 3 |
| 11:30 | 61 | 37 | * | * | * | * | 61 | 3 |
| 11:45 | 60 | 32 | * | * | * | * | 60 | 3 |
| Total | 1709 | 3268 | 0 | 0 | 0 | 0 | 1709 | 326 |
| Combined | | | | | | | | |
| Total | 49 | 77 | (|) | 0 | | 4977 | 1 |
| Peak | 07:45 | 04:00 | | | | | 07:45 | 04:0 |
| Vol. | 333 | 433 | | | | | 333 | 43 |
| P.H.F. | 0.957 | 0.910 | | | | | 0.957 | 0.910 |
| ADT | 0.537 | ADT 4,977 | AADT 4,977 | _ | | | 0.337 | 0.510 |

Accident Summary Report (R-8)

| Time Period Covered: | From 01/01/20 | 10 To 12/31 | /2012 Pre j | pared By: | Rahul Jain | Prepared Da | ite: 9 | 9/17/201 |
|-----------------------------|----------------|-------------|--------------------|-----------|---------------------|-----------------|--------|----------|
| Total Number of Accident: | | 14 | Collision Ty | pe #ACC | C % | Collision Type | #ACC | ; 9 |
| Total Number of Fatalities: | | 0 | Right Angle: | 0 | 0.0% | Fixed Object: | 1 | 7.19 |
| Total Number of Injuries: | | 14 | Left Turn: | 4 | 28.6% | Ran Off Road: | 0 | 0.0% |
| Total Number of Disabling | Injuries: | 1 | Right Turn: | 0 | 0.0% | Ped. Involved: | 1 | 7.19 |
| Total Number of NonDisable | ling Injuries: | 0 | Rear End: | 2 | 14.3% | Backing: | 0 | 0.0% |
| Total Number of Pedestrian | | 0 | Side Swiped | : 4 | 28.6% | Non Collision: | 0 | 0.0% |
| Total Number of Bicycles Ir | nvolved: | 0 | Head On: | 2 | 14.3% | Under/Over Ride | : 0 | 0.0% |
| Total Number of Motorcycle | | 1 | Parked: | 0 | 0.0% | Unspecified: | 0 | 0.0% |
| Time of Day | #ACC | <u></u> % | | | Day o fweek | #AC | c | 9/ |
| 07:30 ~ 09:30: | 2 | 14.3% | | | Sunday: | 0 | | 0.0% |
| 09:30 ~ 11:30: | 1 | 7.1% | | | Monday: | 3 | | 21.49 |
| 11:30 ~ 13:30: | 0 | 0.0% | | | Tuesday: | 2 | | 14.3% |
| 13:30 ~ 16:00: | 2 | 14.3% | | | Wednesday: | 3 | | 21.49 |
| 16:00 ~18:30: | 4 | 28.6% | | | Thursday: | 1 | | 7.19 |
| 18:30 ~ 07:30: | 5 | 35.7% | | | Friday: | 1 | | 7.1% |
| Unspecified: | 0 | 0.0% | | | Saturday: | 4 | | 28.6% |
| Weather Condition | #ACC | % | | | Surface Condition | n #AC | | 9/ |
| Clear: | 11 | 78.6% | | | Dry: | 11 | | 78.6% |
| Rain: | 2 | 14.3% | | | Wet: | 3 | | 21.4% |
| Snow: | 0 | 0.0% | | | Snow/Ice: | 0 | | 0.0% |
| Sleet/Hail: | 0 | 0.0% | | | Slush: | 0 | | 0.0% |
| Fog/Mist: | 1 | 7.1% | | | 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 | 9 |
| Passenger Car: | 17 | 68.0% | | | Fatal Collision: | 0 | | 0.0% |
| Bus: | 1 | 4.0% | | | Injury Collision: | 9 | | 64.3% |
| Truck: | 4 | 16.0% | | | PDO Collision: | 5 | | 35.7% |
| Taxi: | 0 | 0.0% | - | | | | | |
| Minivan: | 0 | 0.0% | | | Light Condition | #AC | C | % |
| Police/Emergency Vehicle: | 1 | 4.0% | | | Daylight: | 9 | | 64.3% |
| Motorcycle/Moped: | 1 | 4.0% | | | Dawn/Dusk: | 1 | | 7.1% |
| Bicycle: | 0 | 0.0% | | | Dark(Lighted): | 4 | | 28.6% |
| Fixed Object: | 0 | 0.0% | | | Dark(Not Lighted): | 0 | | 0.0% |
| Unspecified: | 1 | 4.0% | | | Dark(Unknown Light | nting): 0 | | 0.0% |
| | · | | | | Unspecified: | 0 | | 0.0% |
| Contributing Factor | #VEH | % | | | Pedestrian Action | s #AC | c | 9/ |
| Driver: Speed: | 1 | 4.0% | | | 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 Si | - | | 0.0% |
| Driver: Others: | 4 | 16.0% | | | 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: | 20 | 80.0% | | | Unspecified: | 0 | | 0.0% |

¹¹ Records are not approved as of 9/17/2013 8:35:25 AM