# Bike Lanes on Old Georgetown Road (MD 187)

**(2025 JCR, p. 109-110)**

**September 2025**

Maryland Department of Transportation
State Highway Administration

The Maryland Department of Transportation State Highway Administration (SHA) offers this report in response to the Maryland General Assembly's request for information on the Old Georgetown Road (MD 187) bike lanes between Tilden Lane and West Cedar Lane, including:

1. A detailed analysis of any cut-through traffic impacts on surrounding neighborhood streets as a result of the bike lanes;
2. Northbound and southbound travel times during both peak and off-peak hours, including travel times for emergency and police vehicles;
3. Bike lane utilization counts;
4. Year-over-year data for crash statistics from March 15 to August 1 from 2018 to 2025 specifying the type of crash;
5. Specific crash data for segments of the bike lanes;
6. Vehicle volume counts for northbound and southbound during both peak and off-peak hours;
7. An analysis of the impact of the lanes on the sidewalks, including pedestrian usage with any accompanying data during peak and off-peak hours;
8. Information about communications with first responders and any impact of the bike lanes on first responders;
9. How the bike lanes are addressed during winter weather, including how they performed during winter 2024 through 2025;
10. Cost information for maintenance or other fiscal impact of maintaining the bike lanes in fiscal 2024 and year-to-date 2025; and
11. An analysis of pedestrian activity during both peak and off-peak hours.

## Introduction

The Maryland State Highway Administration (SHA) installed bike lanes along the MD 187 corridor between Cedar and Tilden Lane as part of a lane repurposing to address bicycle safety concerns, including two fatalities. The outermost travel lane in each direction was repurposed and converted to a buffered bike lane. The bike lanes were installed between Cedar Lane and Ryland Drive in early 2020 and between Ryland Drive and Tilden Lane in December 2022. The extent of the bike lanes and repurposing are presented below in Figure 1.

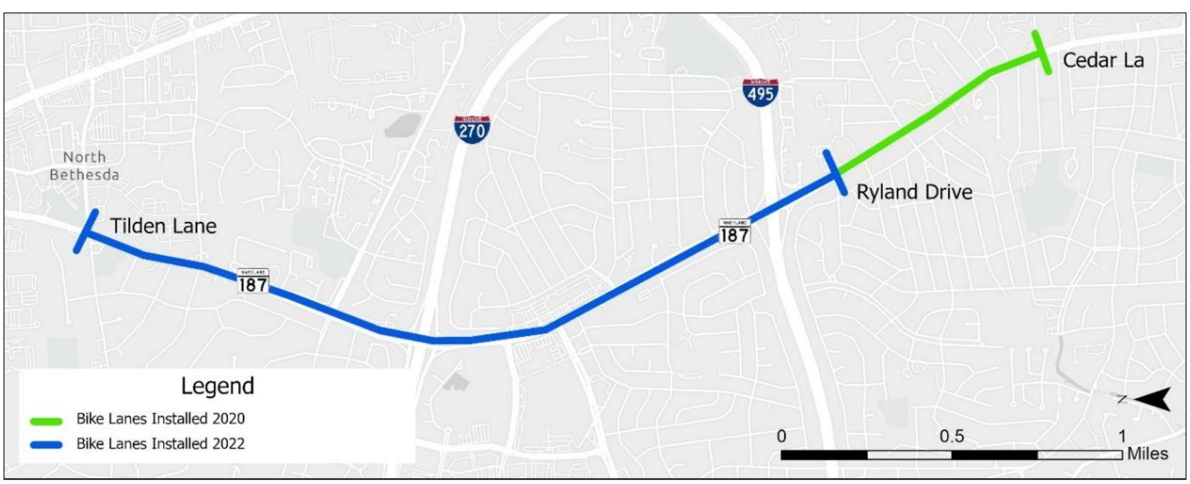


**Figure 1: Extent of the MD 187 Lane Repurposing**

The bike lanes are consistent with the MD 187 Needs Analysis completed in January 2022 by the SHA Office of Planning and Preliminary Engineering (OPPE) in consultation with SHA District 3. The Needs Analysis outlines a long-term vision for the corridor by identifying strategies to address pedestrian and bicycle network deficiencies, enhance multi-modal safety, and improve travel conditions for all users along the corridor. Converting the outside travel lane along each direction of the MD 187 corridor to a buffered bike lane was identified as a long-term improvement in the Needs Analysis.

## 1. A detailed analysis of any cut-through traffic impacts on surrounding neighborhood streets as a result of the bike lanes

An Origin-Destination study was performed in May 2025 to verify the percentage of vehicles traveling in a North-South orientation that are using Luxmanor Road between Tilden and Tuckerman Lanes to avoid driving on MD 187 within those limits. Based on its proximity to MD 187, Luxmanor Road was identified as the route most likely to be used as a local street alternative to MD 187 in the presence of congestion on Old Georgetown Road.

No Origin-Destination study was performed for potential neighborhood cut-throughs along MD 187 between Ryland Drive and Cedar Lane as these concerns were dismissed by attendees of the Maplewood Citizen's Association public meeting on January 29, 2025.

The analysis was completed using license plate recognition cameras to track the path of vehicles traveling along MD 187 and Luxmanor Road on Thursday May 15, 2025, between 6 AM and 7 PM. One camera was used per lane, per location. While being recorded, license plate data was transcribed with software used to match the data between recording locations. This methodology has a sample catch rate of 75-90%, which assures that the trip patterns captured are a good representation of all trips. Figure 2 displays the studied locations along the two routes:

A. MD 187 north of Tilden Lane/Nicholson Lane
B. Luxmanor Road south of Tilden Lane
C. Poindexter Lane between Luxmanor Road and MD 187
D. Luxmanor Road north of Tuckerman Lane
E. MD 187 south of Tuckerman Lane

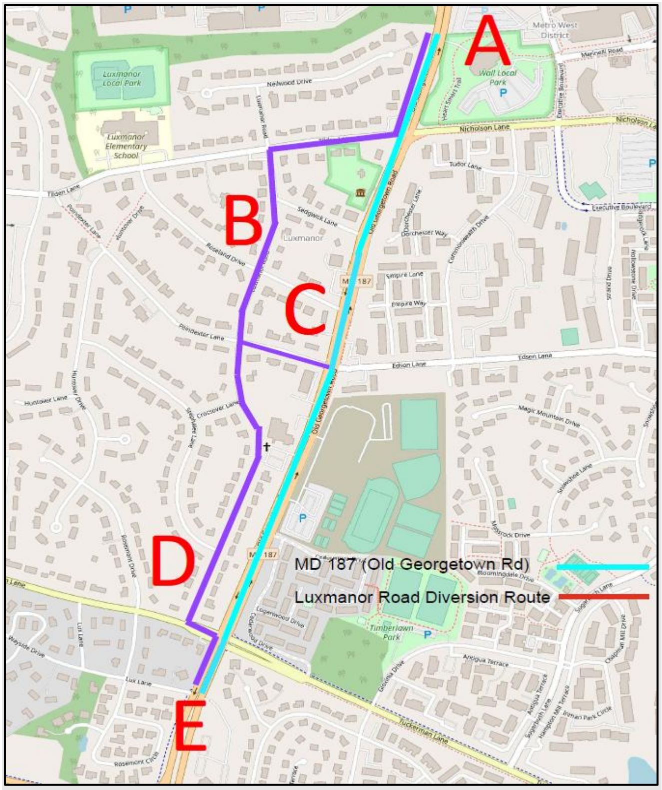

**Figure 2: Routes for Neighborhood Cut-Through Analysis**

Trips that traveled between recording locations A and/or B to and from recording locations D and/or E that also used a combination of locations B, C, and D to make the trip and took less than 15 minutes between the end points were considered trips that potentially used Luxmanor Road as a bypass. Trips longer than 15 minutes that traveled these patterns were assumed to be travelers that had a destination within the Luxmanor Road corridor and therefore were not using the route only to divert from any congestion on MD 187.

Over the course of the 13-hour recording period on May 15, 2025 a total of 48 trips in the southbound and northbound directions were documented taking a path that would be considered a potential cut-through trip per the above attributes. This was out of a total of approximately 8,000 trips recorded that day passing at least two of the recording stations (about 0.6% of the total). Most of the recorded trips passed directly between locations A and E.

The previous Origin-Destination analyses performed by SHA on January 18, 2023, and August 21, 2024, show a total of 0.3% trips (18 out of 5,500) and 0.2% trips (13 out of 6,400) fitting the attributes of a cut-through trip, respectively. There is a de minimis pattern of cut-through traffic using Luxmanor Road to avoid driving on MD 187 based on the three years of data collected.

## 2. Northbound and southbound travel times during both peak and off-peak hours, including travel times for emergency and police vehicles

Typical mid-weekday (Tuesday to Thursday) travel times for vehicular traffic along MD 187 were obtained from the Regional Integrated Transportation Information System (RITIS) platform for the four time periods listed below to demonstrate changes over time.

1. May 2019 – the last May before the COVID-19 pandemic modified travel patterns and the implementation of the southern bike lanes (Cedar Lane to Ryland Drive).
2. May 2023 – May following the 2022 implementation of the northern bike lanes (Ryland Drive to Tilden Lane).
3. May 2024 – Previous May.
4. May 2025 – Most recent May.

The travel times are summarized separately for two segments of MD 187:

- Segment 1: Cedar Lane to Ryland Drive (bike lanes installed in 2020)
- Segment 2: Ryland Drive to Tilden Lane (bike lanes installed in 2022)

Figure 3 and Figure 4 present the average weekday corridor travel times along segment 1 in minutes by hour of the day along the northbound and southbound, respectively. Average weekday corridor travel times along segment 2 are presented in Figure 5 and Figure 6.

SHA contacted first responders for bike lanes feedback, including any increase in responder travel times, which is not tracked and recorded by SHA. Information received from first responders is noted in item 8. All information from first responders was qualitative; no quantitative travel time information was available or provided.

### 2.1 Segment 1: Cedar Lane to Ryland Drive

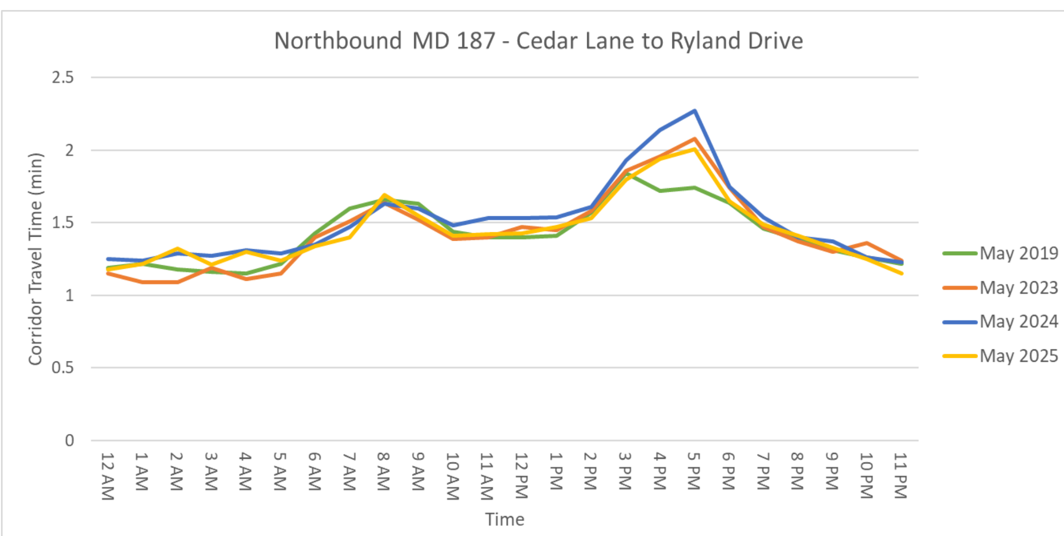


**Figure 3: Northbound MD 187 Travel Times – Cedar Lane to Ryland Drive**

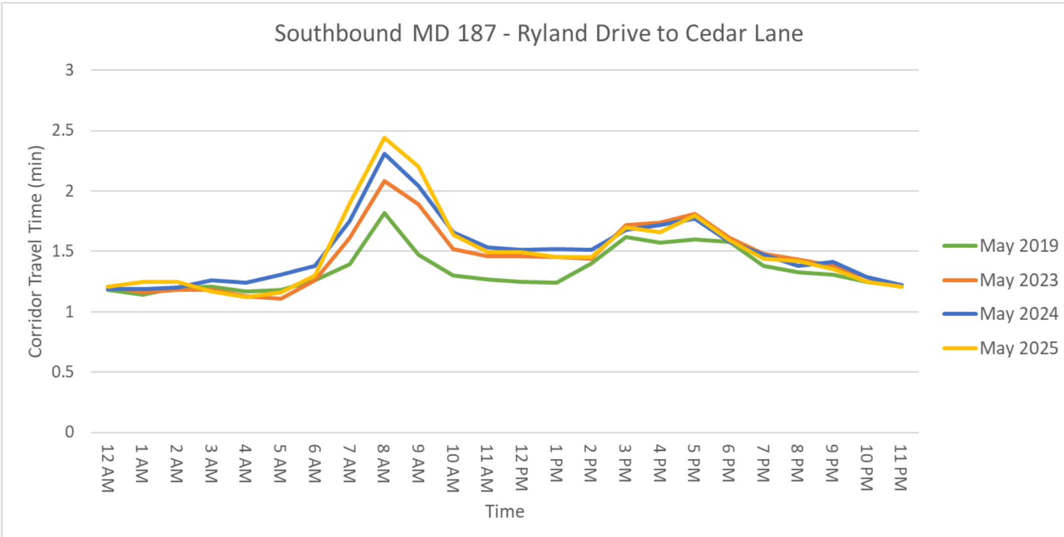


**Figure 4: Southbound MD 187 Travel Times – Ryland Drive to Cedar Lane**

Below is a summary of the impacts of the lane repurposing on corridor travel times for Segment 1 (Cedar Lane to Ryland Drive):

- In the northbound direction:
  - Since the installation of the bike lanes (May 2019 to May 2025): AM peak hour travel times have increased by 2% (2 seconds) and PM peak hour travel times have increased by 16% (16 seconds).
  - Since the previous data monitoring (May 2024 to May 2025): AM peak hour travel times have increased by 4% (4 seconds) and PM peak hour travel times have decreased by 11% (15 seconds).
- In the southbound direction:
  - Since the installation of the bike lanes (May 2019 to May 2025): AM peak hour travel times have increased by 34% (37 seconds) and PM peak hour travel times have increased by 13% (12 seconds).
  - Since the previous data monitoring (May 2024 to May 2025): AM peak hour travel times have increased by 9% (9 seconds) and PM peak hour travel times have increased by 2% (2 seconds).

### 2.2 Segment 2: Ryland Drive to Tilden Lane

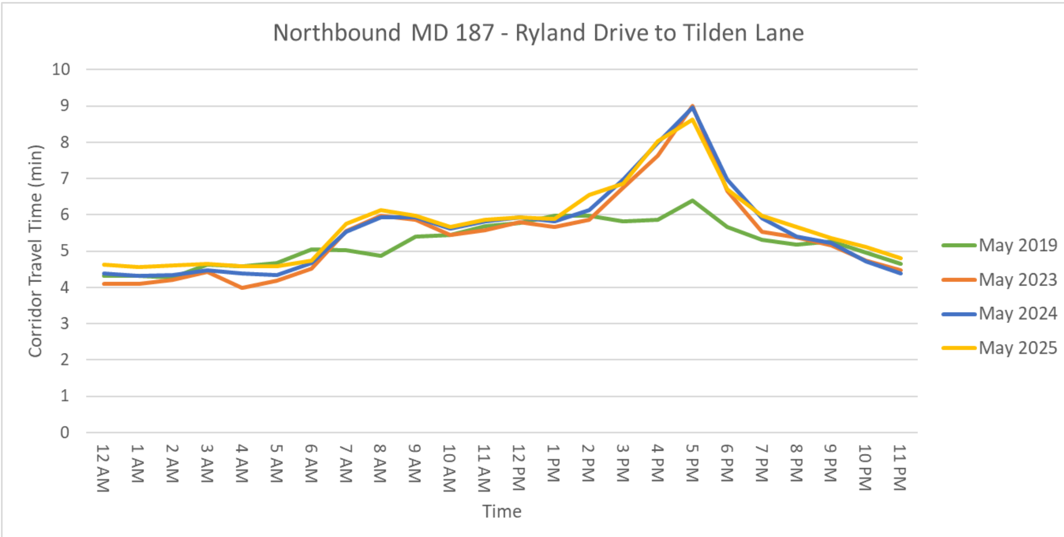


**Figure 5: Northbound MD 187 Travel Times – Ryland Drive to Tilden Lane**

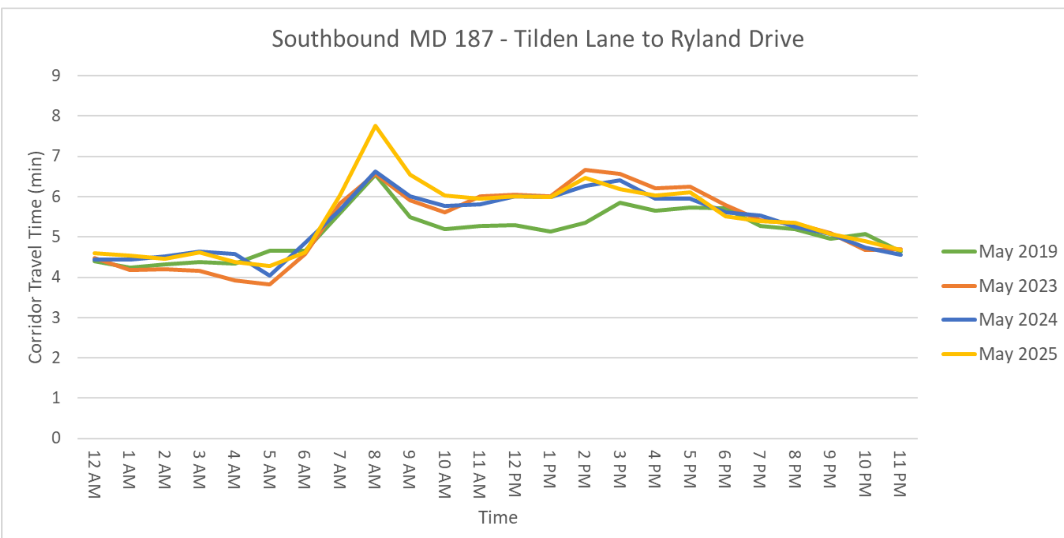


**Figure 6: Southbound MD 187 Travel Times – Tilden Lane to Ryland Drive**

Below is a summary of the impacts of the lane repurposing on corridor travel times for Segment 2 (Ryland Drive to Tilden Lane):

- In the northbound direction:
  - Since the installation of the bike lanes (May 2019 to May 2025): AM peak hour travel times have increased by 26% (1.3 minutes) and PM peak hour travel times have increased by 35% (2.2 minutes).
  - Since the previous data monitoring (May 2024 to May 2025): AM peak hour travel times have increased by 3% (11 seconds) and PM peak hour travel times have decreased by 4% (22 seconds).
- In the southbound direction:

- Since the installation of the bike lanes (May 2019 to May 2025): AM peak hour travel times have increased by 18% (1.2 minutes) and PM peak hour travel times have increased by 6% (22 seconds).
- Since the previous data monitoring (May 2024 to May 2025): AM peak hour travel times have increased by 17% (1.1 minutes) and PM peak hour travel times have increased by 3% (11 seconds).

It should be noted that a portion of the observed travel time increases may be attributed to the posted speed limit reduction implemented by SHA which came into effect in April 2023 (40 mph to 35 mph).

## 3. Bike Lane Utilization Counts

24-hour bicycle volumes along the MD 187 corridor were collected in April 2025 during a typical weekday and Saturday. The dates on which the counts were collected are summarized in Table 1.

**Table 1: Bicycle Count Dates**

| Location | Count Date | |
|---|---|---|
| | Weekday | Weekend |
| Tilden Lane | 4/9/2025 | 4/12/2025 |
| Edson Lane | 4/9/2025 | 4/12/2025 |
| Tuckerman Lane | 4/29/2025 | 4/26/2025 |
| I-270 North Ramps | 4/24/2025 | 4/26/2025 |
| I-270 South Ramps | 4/24/2025 | 4/26/2025 |
| Rock Spring Dr | 4/29/2025 | 4/26/2025 |
| Democracy Blvd | 4/8/2025 | 4/26/2025 |
| I-495 West Ramps | 4/22/2025 | 4/26/2025 |
| I-495 East Ramps | 4/22/2025 | 4/26/2025 |
| Ryland Dr | 4/8/2025 | 4/26/2025 |
| Beech Ave | 4/8/2025 | 4/26/2025 |
| Cedar Lane | 4/8/2025 | 4/26/2025 |

The number of cyclists recorded traveling along MD 187 between Cedar Lane and Ryland Drive is summarized in Table 2 and compared to the most recent available historical counts. All counts were collected after the 2020 implementation of the bike lanes between Cedar Lane and Ryland Drive. It should be noted that the 2022 and 2023 counts were collected during December and that the 2025 weekday counts at Ryland Drive, Beech Avenue, and Cedar Lane were collected during a high-wind day which may have reduced bike volumes.

**Table 2: Daily Cyclists along MD 187 – Cedar Lane to Ryland Drive**

| Location | Weekday | | | | Saturday |
|---|---|---|---|---|---|
| | 12/14/22 | 12/06/23 | 10/17/24 | 4/8/25 - 4/22/25 | 4/26/25 |
| I-495 West Ramps | - | 19 | - | 95 | 22 |
| I-495 East Ramps | - | 31 | - | 55 | 30 |
| Ryland Dr | 17 | - | - | 33 | 35 |
| Beech Ave | - | - | 25 | 34 | 33 |
| Cedar Ln | - | 55 | - | 35 | 24 |

The number of daily cyclists recorded traveling along MD 187 between Ryland Drive and Tilden Lane is summarized in Table 3 and compared to previous counts from September 2022 (before the bike lanes), April 2023 (after the bike lanes), and May 2024. It should be noted that the 2025 weekday count at Democracy Boulevard was collected during a high-wind day which may have reduced typical spring bike volumes.

**Table 3: Daily Cyclists along MD 187 – Ryland Drive to Tilden Lane**

| Location | Weekday | | | | Saturday | |
|---|---|---|---|---|---|---|
| | Sep '22 | Apr '23 | May '24 | Apr '25 | May '24 | Apr '25 |
| Tilden Lane | - | - | - | 50 | - | 13 |
| Edson Lane | - | - | - | 49 | - | 19 |
| Tuckerman Lane | 25 | 44 | 53 | 117 | 11 | 39 |
| I-270 North Ramp | 34 | 56 | 26 | 60 | 2 | 36 |
| I-270 South Ramps | 34 | 63 | 36 | 101 | 16 | 48 |
| Rock Spring Drive | n/a | 61 | 35 | 104 | 11 | 40 |
| Democracy Boulevard | 16 | 70 | 37 | 21 | 9 | 19 |

## 4. Year-over-year data for crash statistics from March 15 to August 1 from 2018 to 2025 specifying the type of crash

Crash data for the MD 187 corridor was obtained from SHA's Office of Traffic and Safety (OOTS) for the seven-year period between January 1, 2018, and December 31, 2024. Crashes from 2025 were not included as the data is not finalized. Crash data for segment 1, from Cedar Lane to Ryland Drive, and segment 2, from Ryland Drive to Tilden Lane, are summarized in the following sections.

### 4.1 Segment 1: Cedar Lane to Ryland Drive

A summary of recorded crash types and severity is presented in Table 4 and Table 5, respectively. Crash data from March 15 to August 1 for each year is separately summarized in Table 6 and Table 7 as this time period was specifically requested by the Maryland General Assembly.

**Table 4: Crash Severity – MD 187 from Cedar Lane to Ryland Drive**

| Crash Severity | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Fatal | 0 | 1 | 0 | 0 | 0 | 0 | 0 | **1** |
| Injury | 6 | 5 | 3 | 2 | 2 | 2 | 6 | **26** |
| Property Damage Only | 6 | 6 | 2 | 5 | 6 | 6 | 5 | **36** |
| **TOTAL** | **12** | **12** | **5** | **7** | **8** | **8** | **11** | **63** |

**Table 5: Crash Type – MD 187 from Cedar Lane to Ryland Drive**

| Crash Type | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Rear End | 3 | 4 | 1 | 4 | 3 | 3 | 4 | **22** |
| Angle | 3 | 4 | 1 | 0 | 0 | 3 | 0 | **11** |
| Left Turn | 2 | 1 | 0 | 1 | 1 | 2 | 2 | **9** |
| Sideswipe | 1 | 2 | 0 | 0 | 3 | 0 | 3 | **9** |
| Fixed Object | 1 | 0 | 2 | 1 | 0 | 0 | 0 | **4** |
| **Pedestrian** | **2** | **0** | **0** | **0** | **1** | **0** | **1** | **4** |
| **Bike** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **3** |
| Other | 0 | 0 | 0 | 1 | 0 | 0 | 0 | **1** |

Two pedestrian and two bike crashes occurred following the implementation of the bike lanes. The pedestrian crashes are described below, and the bike crashes are described in the Bike Crash Data section (item 5).

1. The 2022 pedestrian crash occurred at the south leg of the Beech Avenue intersection. A motorist making a right turn onto MD 187 southbound hit a pedestrian in the crosswalk. The crash resulted in an injury.
2. The 2024 pedestrian crash also occurred at the south leg of the Beech Avenue intersection. A motorist making a left turn hit a pedestrian in the crosswalk. The crash resulted in an injury.

Crash data from March 15 to August 1 for each year is summarized in Table 6 and Table 7 as this time period was specifically requested by the Maryland General Assembly.

**Table 6: Crash Severity – MD 187 from Cedar Lane to Ryland Drive – March 15 to August 1**

| Crash Severity | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Fatal | 0 | 1 | 0 | 0 | 0 | 0 | 0 | **1** |
| Injury | 5 | 3 | 1 | 0 | 0 | 1 | 4 | **14** |
| Property Damage Only | 2 | 1 | 1 | 2 | 2 | 0 | 3 | **11** |
| **TOTAL** | **7** | **5** | **2** | **2** | **2** | **1** | **7** | **26** |

**Table 7: Crash Type – MD 187 from Cedar Lane to Ryland Drive – March 15 to August 1**

| Crash Type | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Rear End | 0 | 3 | 0 | 1 | 1 | 0 | 3 | **8** |
| Left Turn | 1 | 0 | 0 | 0 | 0 | 1 | 0 | **2** |
| Angle | 2 | 1 | 1 | 0 | 0 | 0 | 1 | **5** |
| Sideswipe | 1 | 0 | 0 | 0 | 1 | 0 | 1 | **3** |
| Fixed Object | 1 | 0 | 1 | 0 | 0 | 0 | 1 | **3** |
| **Pedestrian** | **2** | **1** | **0** | **0** | **0** | **0** | **0** | **3** |
| **Bike** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| Parked Vehicle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Opposite Direction | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Other | 0 | 0 | 0 | 1 | 0 | 0 | 1 | **2** |

### 4.2 Segment 2: Ryland Drive to Tilden Lane

A summary of recorded crash types and severity is presented in Table 8 and Table 9, respectively. Crash data from March 15 to August 1 for each year is separately summarized in Table 10 and Table 11 as this time period was specifically requested by the Maryland General Assembly.

**Table 8: Crash Severity – MD 187 from Ryland Drive to Tilden Lane**

| Crash Severity | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Fatal | 0 | 0 | 0 | 0 | 1 | 0 | 1 | **2** |
| Injury | 28 | 29 | 16 | 8 | 19 | 19 | 20 | **139** |
| Property Damage Only | 49 | 29 | 22 | 22 | 33 | 58 | 30 | **243** |
| **TOTAL** | **77** | **58** | **38** | **30** | **53** | **77** | **51** | **384** |

**Table 9: Crash Type – MD 187 from Ryland Drive to Tilden Lane**

| Crash Type | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Rear End | 31 | 16 | 16 | 9 | 12 | 31 | 18 | **133** |
| Left Turn | 17 | 13 | 8 | 11 | 11 | 11 | 5 | **76** |
| Angle | 10 | 13 | 8 | 3 | 10 | 10 | 18 | **72** |
| Sideswipe | 9 | 6 | 3 | 2 | 8 | 11 | 2 | **41** |
| Fixed Object | 4 | 9 | 3 | 3 | 5 | 8 | 4 | **36** |
| **Pedestrian** | **3** | **1** | **0** | **0** | **2** | **1** | **0** | **7** |
| **Bike** | **0** | **0** | **0** | **1** | **2** | **1** | **3** | **7** |
| Parked Vehicle | 0 | 0 | 0 | 0 | 1 | 0 | 0 | **1** |
| Opposite Direction | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Other | 3 | 0 | 0 | 1 | 2 | 4 | 1 | **11** |

One pedestrian and four bike crashes occurred following the implementation of the bike lanes. The pedestrian crash occurred in 2023 at the southbound approach of the I-495 outer loop ramp terminal. While stopped at the signal, a driver exited their vehicle to inspect it. The light turned green while they were still out of the vehicle, and they were struck by another vehicle's side-view mirror. The crash did not result in any injuries and was unrelated to the presence of the bike lanes. The bike crashes are described in the Bike Crash Data section (item 5).

Crash data from March 15 to August 1 for each year is summarized in Table 10 and Table 11 as this time period was specifically requested by the Maryland General Assembly.

**Table 10: Crash Severity – MD 187 from Ryland Drive to Tilden Lane – March 15 to August 1**

| Crash Severity | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Fatal | 0 | 0 | 0 | 0 | 1 | 0 | 1 | **2** |
| Injury | 7 | 9 | 2 | 3 | 8 | 7 | 9 | **45** |
| Property Damage Only (PDO) | 19 | 11 | 2 | 12 | 7 | 19 | 12 | **82** |
| **TOTAL** | **26** | **20** | **4** | **15** | **16** | **26** | **22** | **129** |

**Table 11: Crash Type – MD 187 from Ryland Drive to Tilden Lane – March 15 to August 1**

| Crash Type | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Rear End | 11 | 6 | 2 | 4 | 1 | 6 | 4 | **34** |
| Left Turn | 5 | 3 | 0 | 5 | 5 | 5 | 3 | **26** |
| Angle | 2 | 4 | 1 | 1 | 5 | 5 | 10 | **18** |
| Sideswipe | 4 | 3 | 1 | 1 | 1 | 4 | 1 | **14** |
| Fixed Object | 1 | 4 | 0 | 2 | 0 | 2 | 2 | **11** |
| **Pedestrian** | **1** | **0** | **0** | **0** | **2** | **0** | **0** | **3** |
| **Bike** | **0** | **0** | **0** | **1** | **2** | **1** | **1** | **5** |
| Parked Vehicle | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Opposite Direction | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Other | 2 | 0 | 0 | 1 | 0 | 3 | 1 | **6** |

## 5. Specific crash data for segments of the bike lanes

Bike crash data from SHA's Office of Traffic and Safety was summarized for the seven-year period between January 1, 2018, and December 31, 2024 (before and after the bike lanes were installed in the MD 187 corridor). Crashes from 2025 were not included as the data is not finalized. Crashes involving electric scooters were considered as bike crashes.

### 5.1 Segment 1: Cedar Lane to Ryland Drive

Two bike crashes occurred following the implementation of the bike lanes. Both crashes occurred between vehicles and cyclists traveling along crosswalks:

1. The 2020 crash occurred at the Cedar Lane intersection. A motorist attempted to make a right turn on red from westbound Cedar Lane to northbound MD 187 and failed to yield right-of-way to a scooter on the east leg crosswalk. The crash resulted in an injury.
2. The 2024 crash occurred at the Beech Avenue intersection. A motorist attempted to make a right turn from Eastbound Beech Avenue to southbound MD 187 and collided with a cyclist on the south leg crosswalk. The crash resulted in an injury.

Under Maryland Transportation Article §21–202, certain turning movements require vehicular traffic to yield the right–of–way to any pedestrian or bicycle lawfully within an adjacent crosswalk. Additionally, under Transportation Article §21-1202, a bicyclist is generally afforded the same rights applicable to pedestrians while lawfully operating their bicycle in or through a crosswalk.

**Table 12: Bike Crash Data – MD 187 from Cedar Lane to Tilden Lane**

| Crash Severity | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Fatal | 0 | 1 | 0 | 0 | 0 | 0 | 0 | **1** |
| Injury | 0 | 0 | 1 | 0 | 0 | 0 | 1 | **2** |
| PDO | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| **TOTAL** | **0** | **1** | **1** | **0** | **0** | **0** | **1** | **3** |

### 5.2 Segment 2: Ryland Drive to Tilden Lane

Four bike crashes occurred following the implementation of the bike lanes:

1. The 2023 crash occurred at one the entrances to the Wildwood Shopping Center. A motorist making a right turn into the shopping center cut off a cyclist traveling northbound along the MD 187 bike lane. The crash resulted in property damage only (PDO).
2. The first 2024 crash occurred at one of the entrances to the Wildwood Shopping Center. A motorist attempted to make a right turn into the shopping center and failed to yield right-of-way to a scooter traveling along the MD 187 bike lane. The crash resulted in an injury.
3. The second 2024 crash occurred at the I-495 West Ramp Terminal. A motorist made a left-turn from MD 187 southbound onto the I-495 West on-ramp and failed to yield right-of-way to a cyclist traveling southbound along the MD 187 bike lane. The crash resulted in an injury.
4. The third 2024 crash occurred at the Ryland Drive intersection. A motorist making a left turn from the westbound approach collided with a cyclist on the south leg crosswalk. The crash resulted in property damage only.

Under Transportation Article §21-1209, the driver of a vehicle is required to yield the right-of-way to a person who is lawfully riding a bicycle in a designated bike lane or shoulder if the driver of the vehicle is about to enter or cross the designated bike lane or shoulder.

**Table 13: Bike Crash Data – MD 187 from Ryland Drive to Tilden Lane**

| Crash Severity | Year | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | TOTAL |
| Fatal | 0 | 0 | 0 | 0 | 1 | 0 | 0 | **1** |
| Injury | 0 | 0 | 0 | 1 | 1 | 0 | 2 | **4** |
| PDO | 0 | 0 | 0 | 0 | 0 | 1 | 1 | **2** |
| **TOTAL** | **0** | **0** | **0** | **1** | **2** | **1** | **3** | **7** |

## 6. Vehicle volume counts for northbound and southbound during both peak and off-peak hours.

In April 2025, 24-hour intersection counts were collected during a typical weekday at several key locations along the MD 187 corridor, including Tuckerman Lane, Democracy Boulevard, I-495 interchange, and Cedar Lane. The daily traffic volumes south of Tuckerman Lane, north of Democracy Boulevard, north of I-495, and north of Cedar Lane, were converted to Annual Average Daily Traffic (AADT) and compared to AADTs of previous years, as shown in Table 14.

AADTs along the northern bike lane segment (Ryland Drive to Tilden Lane) have not varied significantly since the implementation of the bike lanes in late 2022. AADTs at Tuckerman Lane and Democracy Boulevard have changed by less than 2% since 2022.

AADTs along the southern bike lane segment (Cedar Lane to Ryland Drive) have reduced significantly since 2018, when the most recent pre-bike lane count data was collected. AADTs at I-495 and Cedar Lane have decreased by 28% and 20%, respectively. It should be noted that a portion of the traffic volume decrease is attributable to general trends of reduced traffic volumes following the COVID-19 pandemic.

**Table 14: MD 187 Annual Average Daily Traffic**

| Location | AADT | | | | |
|---|---|---|---|---|---|
| | 2018 | 2022 | 2023 | 2024 | 2025 |
| South of Tuckerman Lane | - | 36,100 | 36,600 | 36,000 | 36,000 |
| North of Democracy Blvd | - | 28,700 | 28,500 | 28,200 | 28,500 |
| North of I-495 | 43,400 | - | 32,600 | - | 31,200 |
| North of Cedar Lane | 31,900 | - | 24,000 | - | 25,500 |

Hourly traffic volumes along MD 187 were also compared, as shown in Figure 7 through Figure 10. Between Ryland Drive and Tilden Lane, diurnal traffic trends remain similar between the newly collected April 2025 counts, the most recent available historical counts from May 2024, and the most recent pre-bike lane counts from September 2022:

- South of Tuckerman Lane, between 7 AM and 7 PM, volumes decreased by approximately 9% (2,902 vehicles) since 2022 and decreased by approximately 6% (1,886 vehicles) since 2024.

- North of Democracy Boulevard, between 7 AM and 7 PM, volumes decreased by approximately 7% (1,753 vehicles) since 2022 and decreased by approximately 2% (437 vehicles) since 2024.

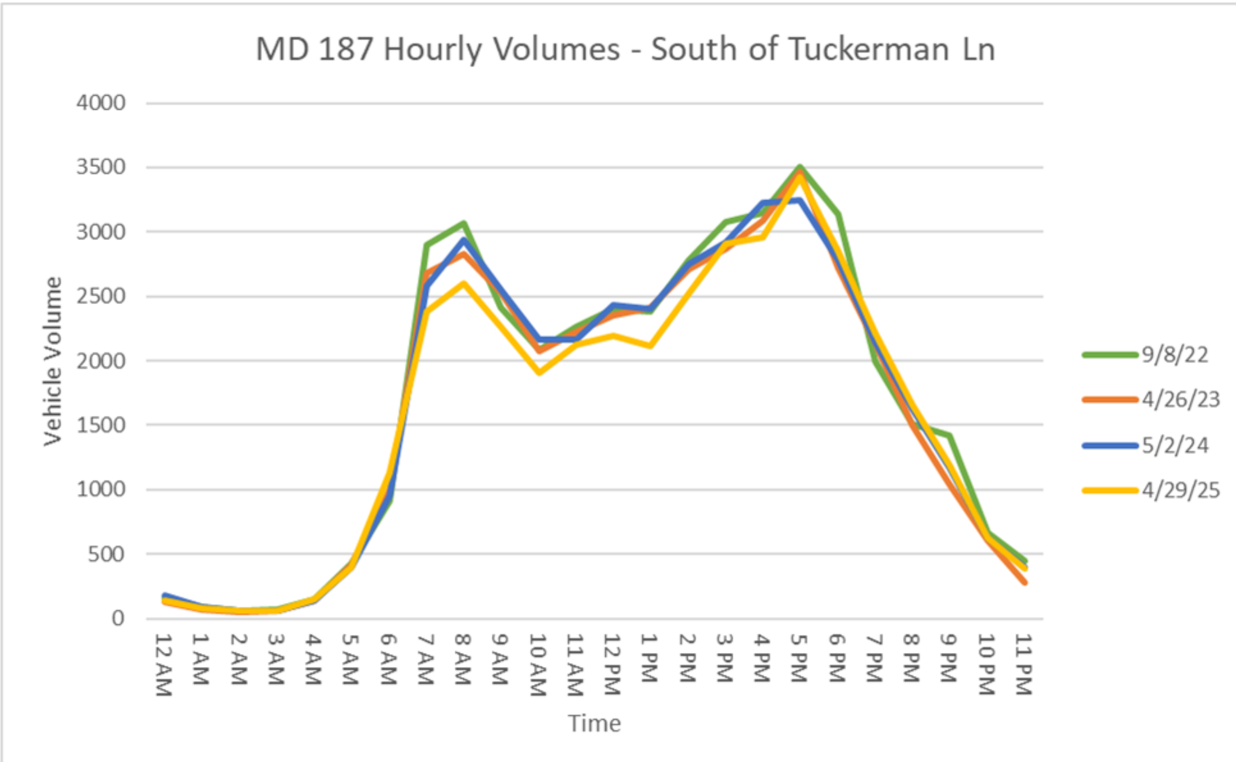


**Figure 7: MD 187 Hourly Traffic Volumes – South of Tuckerman Lane**

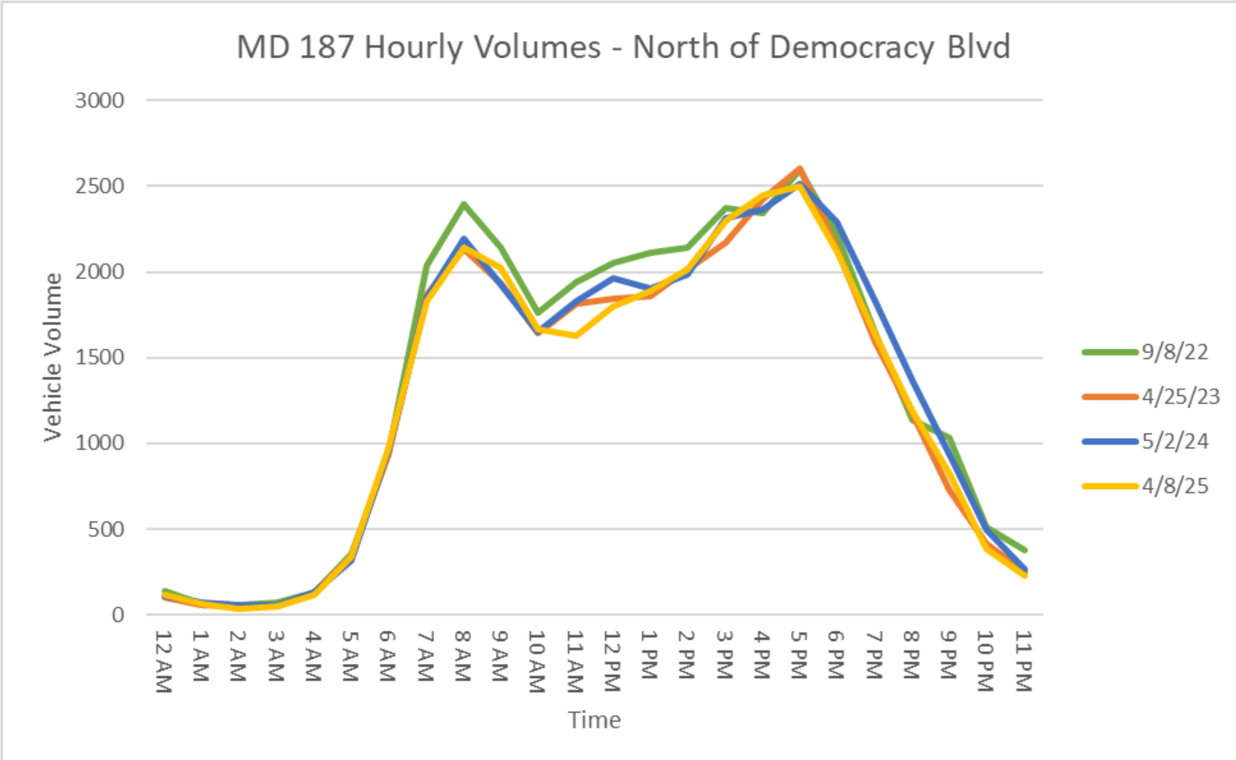


**Figure 8: MD 187 Hourly Traffic Volumes – North of Democracy Boulevard**

Between Cedar Lane and Ryland Drive, diurnal traffic trends show a notable reduction from pre-bike lane conditions in 2018. A portion of this traffic reduction is attributable to impacts from the COVID-19 pandemic. April 2025 diurnal traffic trends have remained similar since the most recent available historical counts from December 2023:

- North of I-495, between 7 AM and 7 PM, volumes decreased by approximately 25% (8,851 vehicles) since 2018 and decreased by approximately 7% (1,896 vehicles) since 2023.
- North of Cedar Lane, between 7 AM and 7 PM, volumes decreased by approximately 22% (5,979 vehicles) since 2018 and increased by approximately 2% (430 vehicles) since 2023.

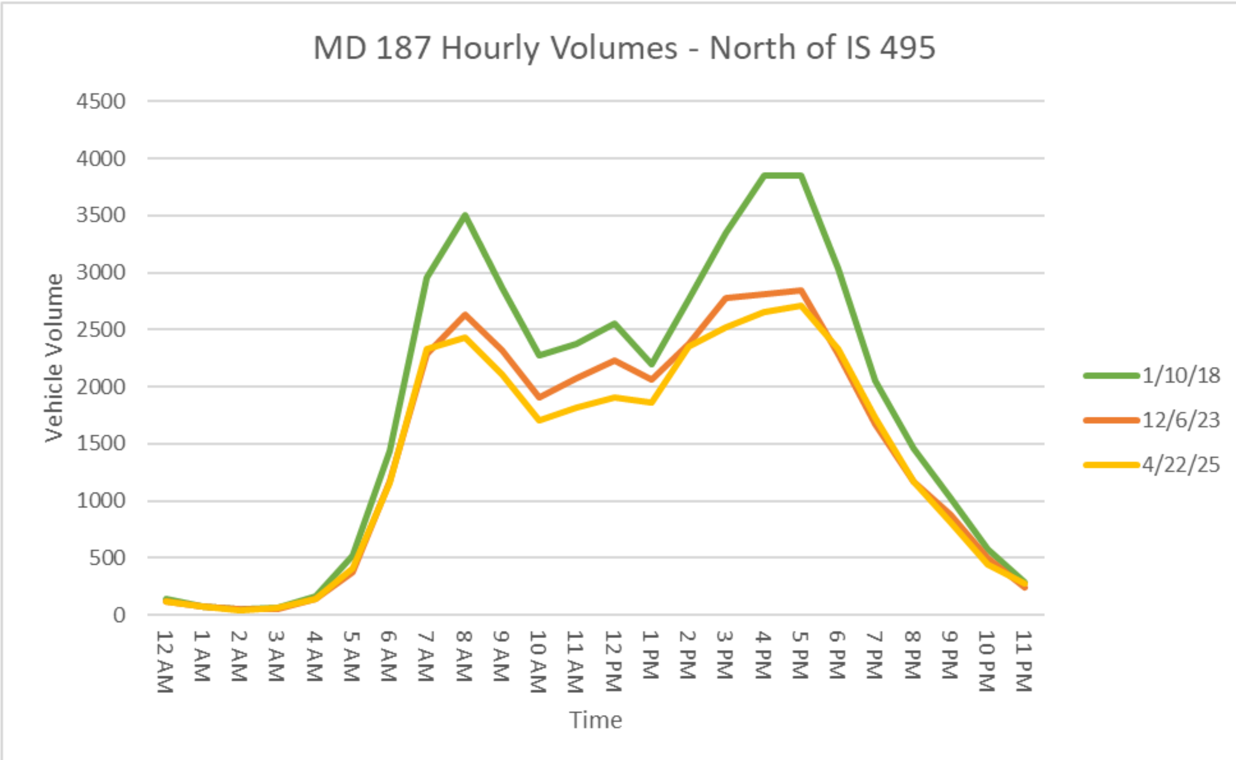


**Figure 9: MD 187 Hourly Traffic Volumes – North of I-495**

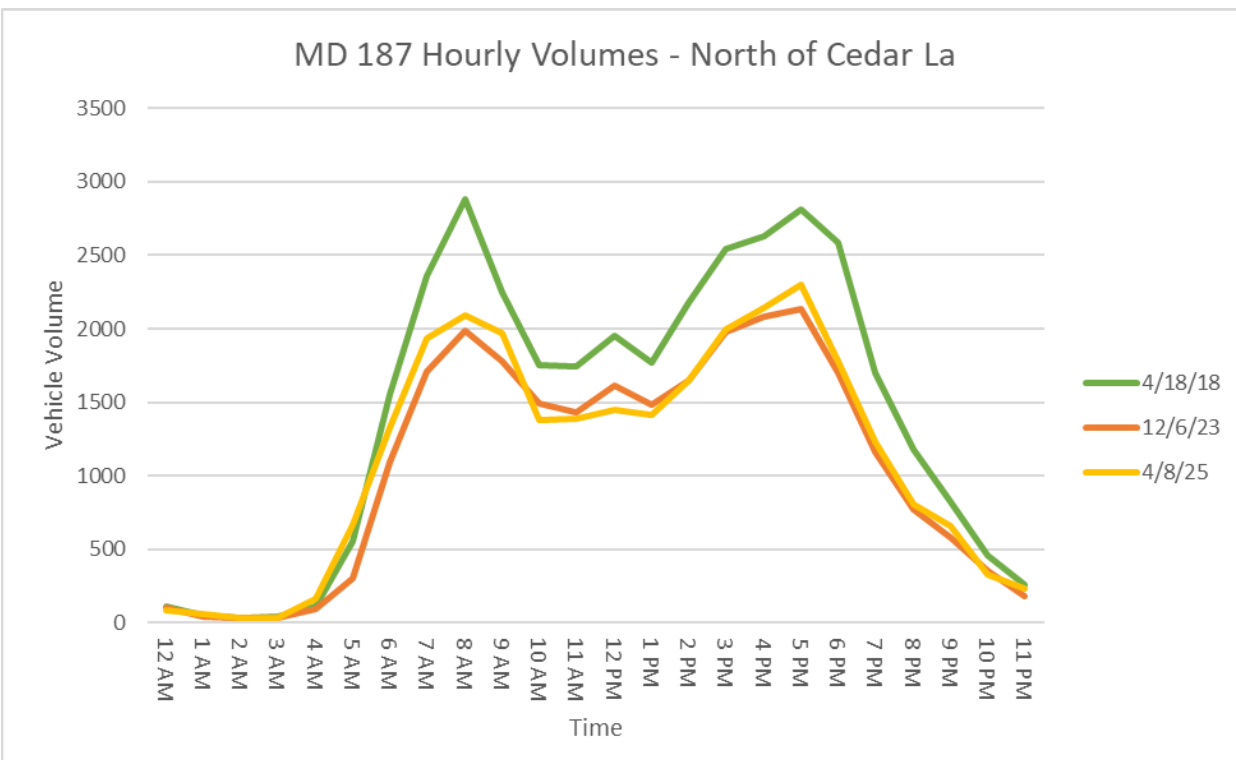


**Figure 10: MD 187 Hourly Traffic Volumes – North of Cedar Lane**

## 7. An analysis of the impact of the lanes on the sidewalks, including pedestrian usage with any accompanying data during peak and off-peak hours

The installation of the bike lanes has had the following impacts on the MD 187 corridor:

**Travel Times**

- Along the southern segment (Cedar Lane to Ryland Drive), peak hour travel times have increased since the implementation of the bike lanes. The largest travel time impacts are in the AM southbound direction with a 34% increase (37 seconds).
- Along the northern segment (Ryland Drive to Tilden Lane), peak hour travel times have increased since the implementation of the bike lanes. The largest travel time impacts are in the PM northbound direction with a 35% increase (2.2 minutes).
- Off peak travel times remain comparable along both segments since the implementation of the bike lanes.
- Since the previous data monitoring effort (2024), peak hour travel times along the southern segment have remained comparable. The largest travel time change was in the northbound PM direction with a 11% decrease (15 seconds). The largest increase was in the southbound AM direction with a 9% increase (9 seconds).
- Since the previous data monitoring effort (2024), peak hour travel times along the northern segment have increased by 17% (1.1 minutes) in the southbound AM direction but have otherwise remained comparable.
- All SHA evaluations have shown that the changes in travel times along MD 187 since the implementation of the bike lanes have resulted in de minimis diversion to local routes. Travel patterns largely have remained the same.

**Bike Utilization**

- Cyclists no longer need to travel along the sidewalk to avoid vehicular traffic.
- The number of cyclists has increased since the implementation of the bike lanes.
- Bike volumes are notably higher during weekdays than during the weekend.
- The 2025 bike counts are generally higher than the 2024 bike counts.

**Pedestrian Activity**

- There is significant pedestrian activity along the MD 187 corridor (see item 11).
- Most pedestrian crossings occur mid-day, between the AM and PM peak hours.

**Safety**

- Bicycle Lanes and Appropriate Speed Limits for All Road Users are FHWA proven safety countermeasures to reduce roadway fatalities and serious injuries.
- The greater visibility of the bike lanes (flexible posts, painted pavement) at intersections and driveways along with the speed reduction brings more attention to all vulnerable users traveling along the corridor.

- The bike lanes provide an offset between the travel lanes and sidewalks, providing for better pedestrian safety and comfort.
- Bikes traveling along the corridor no longer need to contend with obstacles on the sidewalk (poles, trash cans, etc.).
- Along the southern segment (Cedar Lane to Ryland Drive), two bike crashes have occurred since the installation of the bike lane. Both occurred within a crosswalk and were unrelated to the bike lane. One crash was caused by a motorist failing to yield to a bicyclist. The cause of the second crash was not reported.
- Along the northern segment (Ryland Drive to Tilden Lane), four bike crashes have occurred since the installation of the bike lane. Three crashes occurred due to drivers turning from MD 187 failing to yield right of way to cyclists in the bike lane. One crash occurred within a crosswalk and was unrelated to the bike lane.

**Traffic Volumes**

- Along the southern segment (Cedar Lane to Ryland Drive) daily traffic volumes have decreased between 20% to 28% since the most recent pre-bike lane counts were collected in 2018. Peak hour traffic volumes have experienced a similar decrease of 18% to 31%. The actual impact of the bike lanes on traffic volumes cannot be isolated as the bike lanes were implemented during the onset of the COVID-19 pandemic.
- Along the northern segment (Ryland Drive to Tilden Lane) daily traffic volumes remain comparable to what they were before the bike lanes. Morning peak hour traffic volumes have decreased by approximately 11% to 15% while the evening peak hour traffic volumes have remained comparable to what they were before the bike lanes.
- Along both segments, daily and peak hour traffic volumes remain comparable to the most recent historical counts (2023 for the southern segment, 2024 for the northern segment).
- De minimis diversion has been observed from MD 187 to other local roads since the installation of the bike lanes.

## 8. Information about communications with first responders and any impact of the bike lanes on first responders

Prior to the installation of the bike lanes along MD 187, SHA coordinated directly with the Montgomery County Fire & Rescue Service (MCFRS) and Montgomery County Police Department (MCPD) regarding the project and impacts to traffic operations along the corridor.

On August 11, 2025, SHA reached out to emergency service agencies to receive first responder feedback on the bike lanes. MCFRS conducted a poll of stations near the corridor and responded with qualitative information summarized below. Feedback from other agencies was not received prior to the report deadline.

MCFRS's feedback indicated operational concerns for emergency response, including additional delay time added to responses and more challenges negotiating turns with emergency vehicles near the bike lane devices. Emergency responders have navigated through the flex posts to mitigate these delays and have directly utilized the bike lane for passing. However, MCFRS indicated that motorists tend to be more hesitant to cross the flex posts, so emergency responders are crossing into the bike lanes instead. MCFRS recommended against concrete barrier separation of bike lanes, pointing to the benefits that flex posts offer in passing for emergency response.

While MCFRS noted concerns with installing a concrete traffic barrier, SHA is not currently considering replacing the flex post infrastructure with hard barrier to separate the bike lane from the travel lane. SHA also has no significant maintenance concerns with emergency responders crossing the flex posts, as we are not aware of any damage to flex posts from emergency responder operations.

## 9. How the bike lanes are addressed during winter weather, including how they performed during winter 2024 through 2025

Winter maintenance is performed by two SHA Maintenance shops (geographic dividing line is the Capital Beltway). The winter maintenance mechanical teams were mobilized several times during the 2024-2025 winter season due to substantial snow falls. A skid steer loader was necessary to clear the snow from the bike lanes, including snow pushed off the mainline into the bike lanes by snowplows.

For Fiscal Years 2024 and 2025, the winter maintenance cost for the MD 187 bike lanes, including staff and equipment, was approximately $102,700. Most winter maintenance activities were also required for the roadway prior to the installation of the bike lanes.

## 10. Cost information for maintenance or other fiscal impact of maintaining the bike lanes in fiscal 2024 and year-to-date 2025

The bike lanes are maintained at monthly intervals by two SHA Maintenance shops (geographic dividing line is the Capital Beltway). Maintenance is performed on a Sunday and takes approximately eight hours per shop. Maintenance teams consist of two Team Leaders, ten Facility Maintenance Technicians, two dump trucks, and a skid steer loader with a sweeper bucket.

For Fiscal Years 2024 and 2025, the total non-winter maintenance cost for the MD 187 bike lanes, including staff and equipment, was approximately $51,500. Most non-winter maintenance activities (e.g., street sweeping, etc.) were also required prior to the installation of the bike lanes. However, there are additional costs to replace damaged flex posts, which generally occurs during winter operations and periodically during non winter operations.

When including winter maintenance, the total 2024-2025 annual maintenance cost for the MD 187 bike lanes was approximately $154,200.

## 11. An analysis of pedestrian activity during both peak and off-peak hours

24-hour pedestrian volumes along the MD 187 corridor were collected in April 2025 during a typical weekday and Saturday to document pedestrian activity along the corridor. The number of pedestrians at the MD 187 intersections during weekdays and Saturdays are summarized in Table 15 and Table 16, respectively.

**Table 15: Pedestrians Crossing at Intersections - Weekday**

| Intersection | Count Date | Daily | AM Peak Hour (8 AM) | Mid-day (9 AM - 5 PM) |
|---|---|---|---|---|
| MD 187 & Tilden Lane | 4/9/2025 | 572 | 34 | 296 |
| MD 187 & Edson Lane | 4/9/2025 | 808 | 52 | 538 |
| MD 187 & Tuckerman Lane | 4/29/2025 | 479 | 49 | 214 |
| MD 187 & I-270 NB Ramps | 4/24/2025 | 446 | 13 | 176 |
| MD 187 & I-270 SB Ramps | 4/24/2025 | 290 | 13 | 153 |
| MD 187 & Rock Spring Dr | 4/29/2025 | 600 | 24 | 338 |
| MD 187 & Democracy Blvd | 4/8/2025 | 697 | 27 | 529 |
| MD 187 & I-495 WB Ramps | 4/22/2025 | 125 | 9 | 71 |
| MD 187 & I-495 EB Ramps | 4/22/2025 | 116 | 11 | 63 |
| MD 187 & Ryland Dr | 4/8/2025 | 131 | 17 | 65 |
| MD 187 & Beech Ave | 4/8/2025 | 369 | 48 | 201 |
| MD 187 & Cedar Lane | 4/8/2025 | 371 | 51 | 169 |

**Table 16: Pedestrians Crossing at Intersections - Saturday**

| Intersection | Count Date | Daily | AM Peak Hour (8 AM) | Mid-day (9 AM - 5 PM) |
|---|---|---|---|---|
| MD 187 & Tilden Lane | 4/12/2025 | 474 | 41 | 316 |
| MD 187 & Edson Lane | 4/12/2025 | 452 | 50 | 254 |
| MD 187 & Tuckerman Lane | 4/26/2025 | 235 | 9 | 114 |
| MD 187 & I-270 NB Ramps | 4/26/2025 | 107 | 2 | 50 |
| MD 187 & I-270 SB Ramps | 4/26/2025 | 123 | 3 | 66 |
| MD 187 & Rock Spring Dr | 4/26/2025 | 327 | 14 | 176 |
| MD 187 & Democracy Blvd | 4/26/2025 | 297 | 9 | 183 |
| MD 187 & I-495 WB Ramps | 4/26/2025 | 55 | 5 | 25 |
| MD 187 & I-495 EB Ramps | 4/26/2025 | 60 | 4 | 33 |
| MD 187 & Ryland Dr | 4/26/2025 | 142 | 5 | 78 |
| MD 187 & Beech Ave | 4/26/2025 | 265 | 14 | 186 |
| MD 187 & Cedar Lane | 4/26/2025 | 355 | 20 | 216 |