



ROLLINS AVENUE

Complete Streets Study

June 2026

Prepared For:
City of Rockville
Department of Public Works
111 Maryland Ave
Rockville, MD 20850

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1. PROJECT OVERVIEW

Rollins Avenue is a vital connector for residential neighborhoods and commercial destinations in Rockville, serving the diverse needs of families, commuters, and local businesses while connecting to more regional transportation modes like Washington Area Transit Authority (WMATA) Metrorail Red Line and MCDOT Ride On bus service. Rollins Avenue is owned and maintained by the City of Rockville and runs east and west between Rockville Pike (MD 355) and Montrose Woods Park as shown in **Figure 1**.

The corridor is approximately 0.7 miles in length and contains a mix of land uses and destinations, including Montrose Park and Community Center, Georgetown Hill Early School, two older-adult residential communities, Rockville Fire Station 23, multi-family housing complexes and single-family residences, and multiple commercial shopping centers. The mix of destinations along Rollins Avenue encourages multimodal transportation, yet the street has limited facilities for walking and bicycling. A portion of Rollins Avenue falls within an Equity Emphasis Area and a regional activity center, as identified by the Metropolitan Washington Council of Governments (MWCOC)^{1,2}, highlighting the importance of improving safety along the corridor. Enhancing this stretch of street will strengthen the city's multimodal network, making it easier to connect to the Bethesda Trolley Trail, nearby bike routes, Metrorail stations, and future BRT service on Rockville Pike (MD 355) and Veirs Mill Road (MD 586).

This Complete Streets Study seeks to make Rollins Avenue safer and more accessible for everyone, no matter travel mode, age, or ability of road users. It evaluates ways to redesign the corridor to support walking, biking, transit, and driving, following Complete Streets principles that aim to support all modes of travel.

This Study is funded by MWCOC's Regional Roadway Safety Program (RRSP) and is managed by MWCOC and the City of Rockville. Kittelson and Associates Inc. is collaborating with T3 Design Corporation to conduct the Study.

¹ MWCOC, Equity Emphasis Areas for Transportation Planning Board's Enhanced Environmental Justice Analysis, <https://www.mwcog.org/transportation/planning-areas/fairness-and-accessibility/environmental-justice/equity-emphasis-areas/>

² MWCOC, Regional Activity Centers Maps, <https://www.mwcog.org/documents/2025/05/14/regional-activity-centers-maps-activity-centers-land-use-region-forward/>



Figure 1. Study Area Map

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1.1 CORRIDOR CONTEXT

The study corridor encompasses approximately 0.7 miles of Rollins Avenue, from Rockville Pike (MD 355) to Montrose Woods Park. Rollins Avenue provides convenient access to destinations such as Montrose Woods Park, Montrose Park and Community Center, and various residential, recreational, and commercial locations. The City of Rockville is committed to enhancing safety and multimodal connectivity on City streets, including Rollins Avenue. The primary aim of this Study is to identify intersection and corridor improvements that foster protected, comfortable, and low-stress pedestrian and bicycle facilities, consistent with Complete Streets design principles.

Rollins Avenue intersects Rockville Pike (MD 355) at the corridor’s eastern terminus. Rockville Pike (MD 355) falls under the jurisdiction of the Maryland State Highway Administration (SHA) and is operated by Montgomery County Department of Transportation (MCDOT), necessitating cross-jurisdictional coordination among the City of Rockville, MCDOT, and MDOT SHA.



Figure 2. Southwest corner of Rockville Pike (MD 355) and Rollins Avenue

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Figure 3. Northwest corner of Rockville Pike (MD 355) and Rollins Avenue

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The Study’s approach is informed by the objectives set forth in the City’s Comprehensive Plan, Bikeway Master Plan, Pedestrian Master Plan, Vision Zero Action Plan, and the Transportation Planning Board’s R3-2021, as summarized in **Table 1**.

Table 1. City of Rockville Plan Objectives

Objective	Plan
Improve the safety of bicycling in Rockville for users of all groups.	Bikeway Master Plan
<p>Promote walking, rolling, and bicycling modes with new and upgraded facilities.</p> <p>Provide safe transportation facilities for all modes by implementing Complete Street projects and attaining Vision Zero goals.</p>	City of Rockville's Comprehensive Plan
Identify a combination of equitable engineering, enforcement, education, and evaluation, along with associated funding needed for the City to reach the goal toward zero deaths and serious injuries by 2030.	City of Rockville's Vision Zero Action Plan
<p>Ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents.</p> <p>Reaffirm road user safety as a top priority.</p> <p>Develop local roadway safety plans and ensure their equitable impacts on all road users.</p>	Transportation Planning Board's R3-2021
<p>Goals:</p> <ul style="list-style-type: none"> ■ Ensure Accessibility – Strive to ensure that all people have access to destinations in Rockville and that improving access should be provided over expanding mobility. ■ Increase Walking and Rolling – Plan and build for a desired level of pedestrian activity and support efforts to reach that level. <p>Plan Action Items:</p> <ul style="list-style-type: none"> ■ Policy Update – The city shall update its policies that impact pedestrian transportation to better reflect the needs and concerns of people walking and rolling and encourage more walking and rolling in Rockville. ■ Pedestrian Priority Improvements – The city should continue to carry out ongoing pedestrian priority improvements throughout the city to help make walking and rolling a safer, more convenient, and more desirable mode of transportation. ■ Crosswalks – The city should provide marked crosswalks proactively and equitably throughout Rockville, as appropriate. ■ Pedestrian Environment – The city shall balance the use of public space between the curb and building front to benefit pedestrian travel in the community. 	City of Rockville's Pedestrian Master Plan

1.1.1 Equity

Rollins Avenue is partially located within MWCOG’s Equity Emphasis Areas, as shown in **Figure 4**. The northern section of Rollins Avenue from E Jefferson Street to Rockville Pike (MD 355) is identified as an Equity Emphasis Area, with a high percentage of Asian residents (three times the regional average) and rates of low income that are twice that of the regional average.

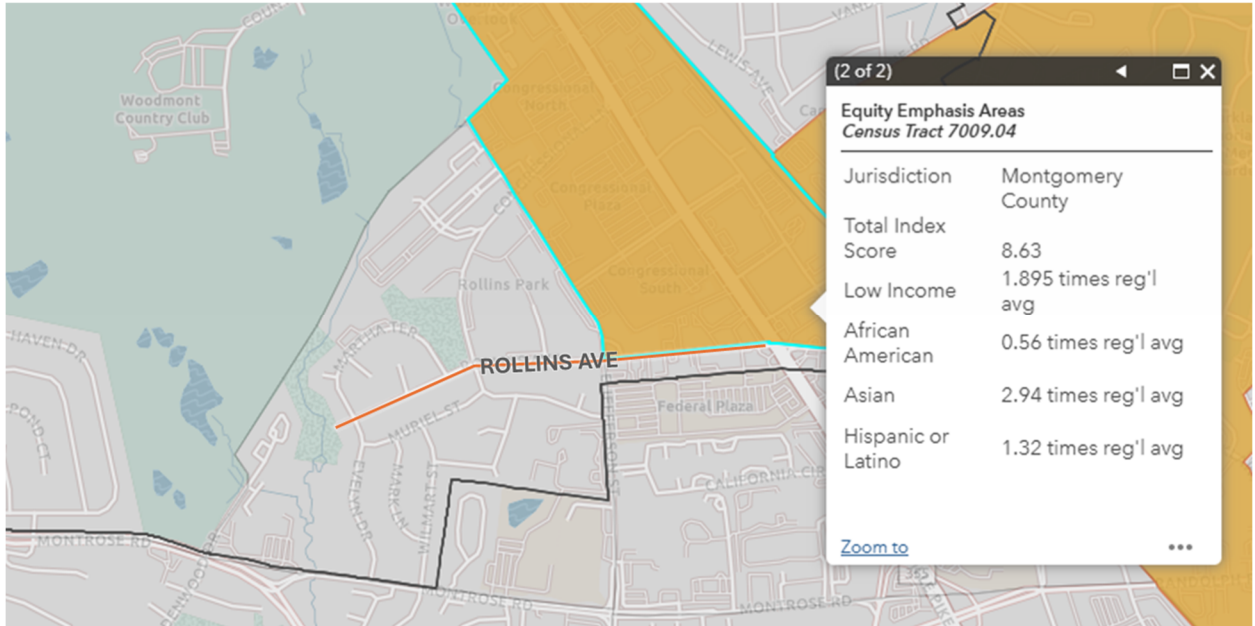


Figure 4. Equity Emphasis Area Map

Source: Metropolitan Washington Council of Governments (2022)

1.1.2 Land Use and Transportation

The land uses along Rollins Avenue include a blend of residential, commercial, and recreational types, making it a vital link for area residents, employees, and visitors. The varying land uses are displayed in **Figure 5** and **Figure 6**. The eastern portion of the corridor features apartment complexes as well as commercial destinations such as Federal Plaza. The western portion features recreational land uses, including Montrose Park and Community Center, and single- and multi-family residences. **Figure 7** shows the surrounding land use in more detail.

The region’s commitment to multimodal transportation is evident, with plans for Rollins Avenue to connect to the Rockville Pike (MD 355) Flash Bus Rapid Transit (BRT), which will bring enhanced pedestrian and bicycle facilities to Rockville Pike (MD 355) and increase multimodal connectivity demands.



Figure 5. Western Rollins Avenue with residential land use

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Figure 6. Eastern Rollins Avenue with mixed-use commercial and residential land use

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Data from the 2024 American Community Survey (ACS) shows that 14.7% of Rockville’s employees commute by walking, biking, or transit (see **Figure 8**). The City is reinforcing its commitment to multimodal travel to help residents and visitors choose how to travel.

Additionally, commuter behavior changed after the COVID-19 pandemic. ACS data shows commute patterns in Rockville shifted between 2019 and 2024, with more employees working from home in 2024 and fewer public transportation commuters. The percentage of the population biking and walking also decreased since 2019, while the number of commuters driving alone to work has nearly stabilized to pre-pandemic levels, highlighting the need to better support alternative modes.

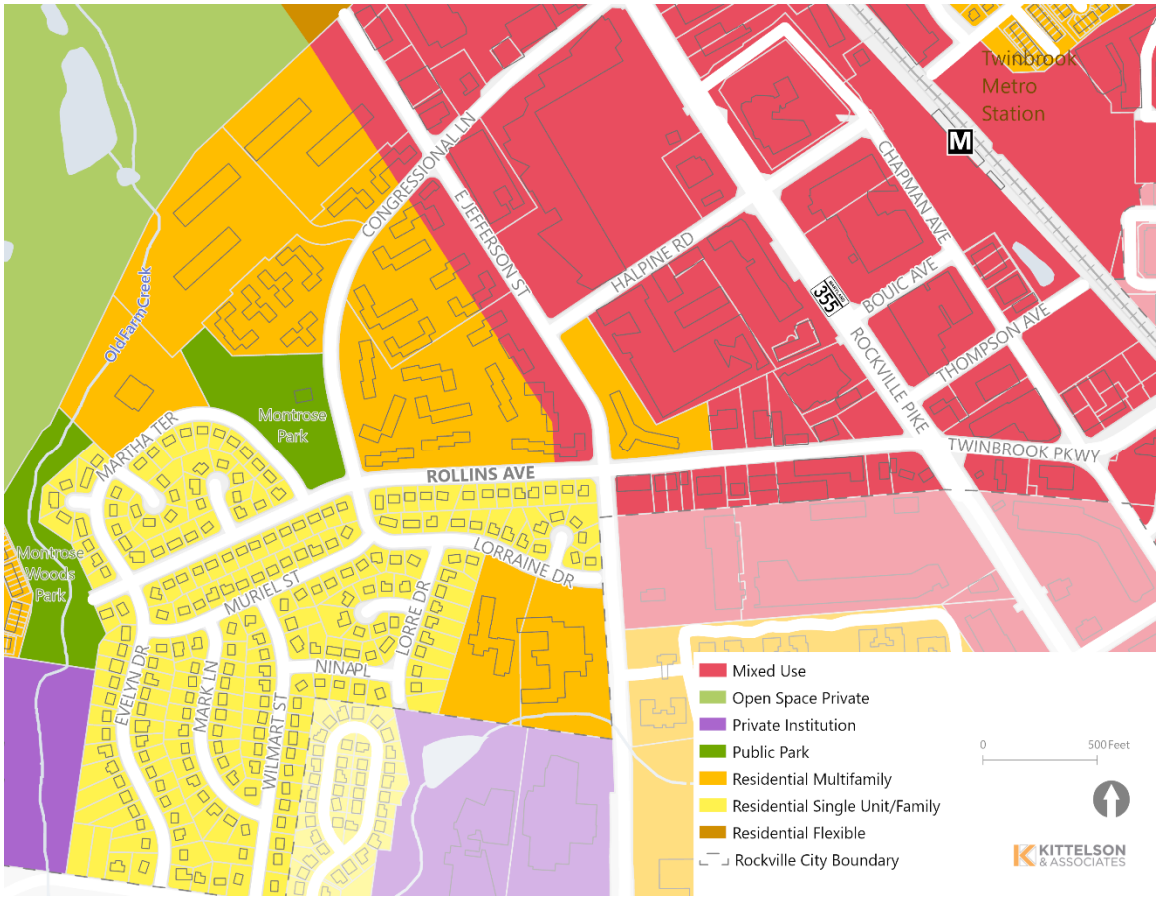


Figure 7. Planned Land Use Map

Source: City of Rockville, 2025, City's Comprehensive Master Plan

Rockville Maryland Commute Modes

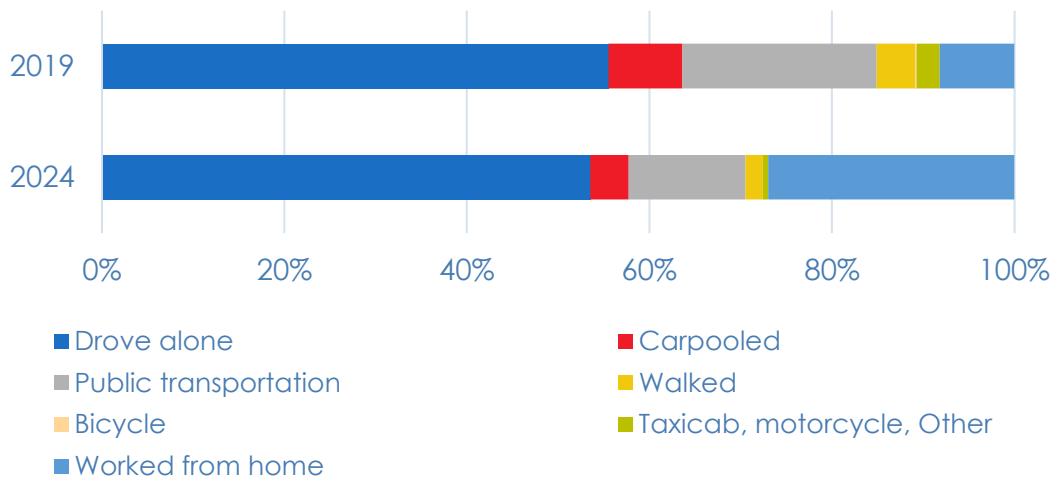
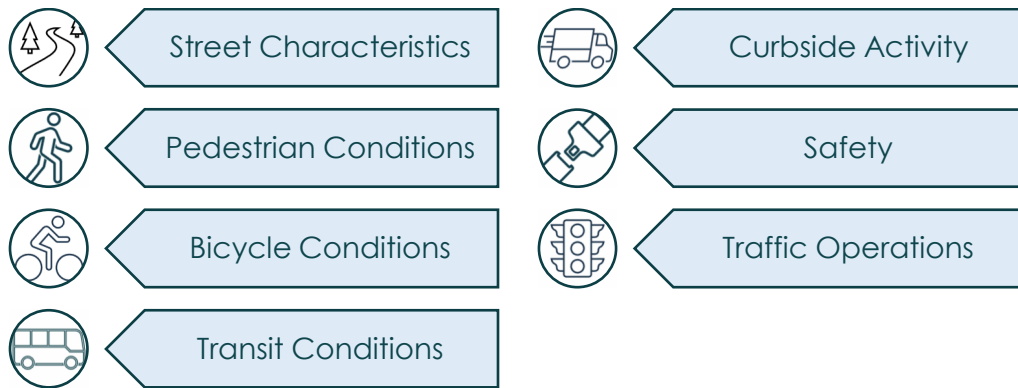


Figure 8. Census Commute Behavior in Rockville, Maryland

American Community Survey, 2019 and 2024 1-year estimate

2. EXISTING CONDITIONS

To inform future transportation improvements and ensure that recommendations are tailored to the corridor's unique context, the project team conducted a comprehensive review of existing conditions along the study corridor. This review is essential for identifying current issues, strengths, and opportunities related to how people travel through the area. The following section summarizes key aspects of the study corridor, focusing on the following:



While the typical section on Rollins Avenue remains constant throughout the corridor, the land uses change from residential uses west of East Jefferson Street to commercial and mixed uses east of East Jefferson Street to Rockville Pike (MD 355). The project team evaluated the existing conditions of the Rollins Avenue corridor as one segment but will develop recommendations for the corridor based on the context and use of the two corridor segments.

2.1 SITE VISIT

The project team conducted a site visit on January 8, 2026, to observe multimodal activity, take measurements of the sidewalks and lane widths, observe curbside activity, and discuss potential treatment options for the corridor. The team made several observations, summarized below and detailed in **Appendix A**:

- There are sidewalks along the length of both sides of Rollins Avenue, but missing marked crosswalks at stop-controlled intersections across and along Rollins Avenue in the residential segment (**Figure 9**), narrow 4' sidewalks in the residential areas along most of the corridor with some sections of sidewalks widening to 8' along the mixed-use segment, and bi-directional ramps that direct pedestrians towards the center of the intersection (**Figure 10**).
- Landscape buffers exist along the length of the corridor between the sidewalks and travel lanes, creating a more comfortable walking environment (**Figure 11**).
- The City recently restriped high-visibility crosswalks at existing crossing locations (**Figure 12**).
- There is a need for enhanced fire engine access to the fire station (**Figure 13**).
- There is a demand for a midblock crossing across Rollins Avenue at the 7-Eleven location between East Jefferson Street and Rockville Pike (MD 355) (**Figure 14**).
- Connections beyond the western corridor limits may be challenging, due to Old Farm Creek (**Figure 15**).
- The City installed a speed feedback sign in response to community concerns about speeding on Rollins Avenue (**Figure 16**).



Figure 9. Unmarked crossing at Rollins Court and Rollins Avenue

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Figure 10. Bidirectional curb ramps at Martha Terrace / Evelyn Drive and Rollins Avenue

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Figure 11. Landscape buffer with mature trees between Congressional Lane and East Jefferson Street

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Figure 14. A potential mid-block crossing location in front of 7-Eleven, east of East Jefferson Street

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Figure 12. High-visibility crosswalks at Congressional Lane / Lorraine Drive and Rollins Avenue

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Figure 15. Roadway end at Old Farm Creek

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Figure 13. Rockville Fire Station 23 and Emergency Signal

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Figure 16. Speed Feedback Sign on Rollins Avenue (for westbound vehicles)

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2.2 EXISTING STREET CHARACTERISTICS

Rollins Avenue features a consistent street layout from its western terminus to Rockville Pike (MD 355). The typical cross-section on Rollins Avenue is forty feet, as depicted in **Figure 17**.

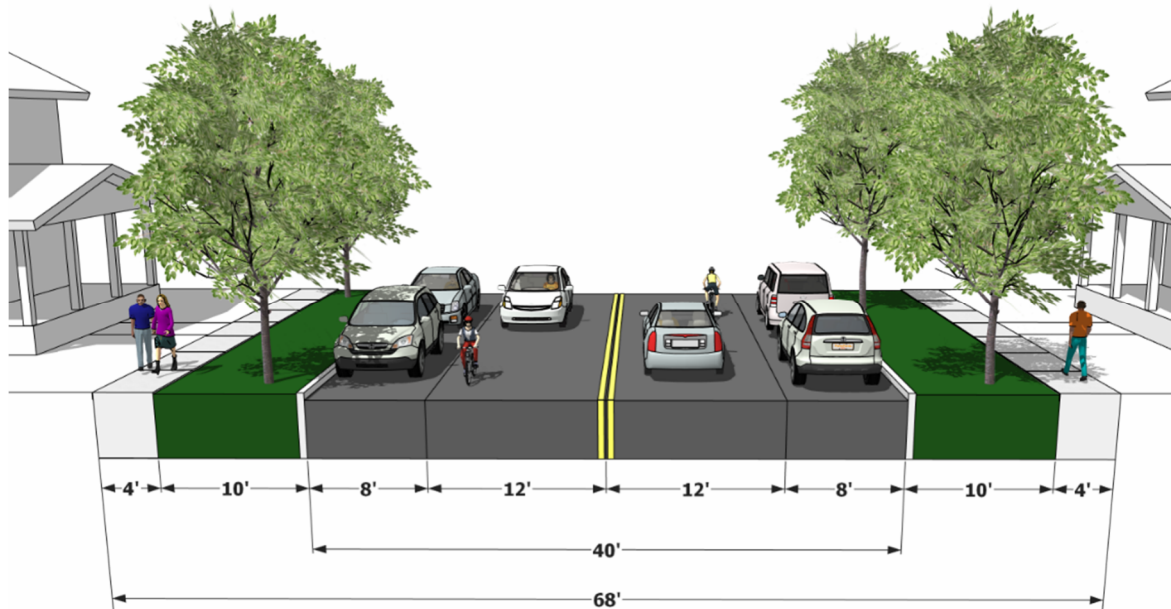


Figure 17. Existing Typical Cross Section along Rollins Avenue

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The posted speed limit on Rollins Avenue is 25 mph for most of the corridor, except for a posted speed limit of 30-mph between Rockville Pike (MD 355) and Jefferson Street for westbound vehicles only. The mixed-use segment of Rollins Avenue between East Jefferson Street and Rockville Pike (MD 355) has a roadway functional classification of Business District II, and a majority of the residential segment has a classification of Primary Residential Class 2, while the cul-de-sac is a Secondary Residential street. The roadway requirements for each functional classification are summarized below:

- Business District II:
 - Minimum of 38 ft pavement width
 - Minimum 10 ft wide sidewalk (unless constrained by property line)
 - Minimum 7 ft wide buffer
- Primary Residential Class 2:
 - Minimum of 36 ft pavement width
 - City sidewalk standards
- Secondary Residential:
 - Minimum of 26 ft pavement width
 - City sidewalk standards

Intersection controls along the corridor are shown in **Figure 18** and include:

- Rollins Avenue at Martha Terrace/Evelyn Drive: Four-way intersection with stop control on Rollins Avenue
- Rollins Avenue and Rollins Court: Three-way intersection with stop control on Rollins Court
- Rollins Avenue and Martha Terrace: Three-way intersection with yield control on Martha Terrace
- Rollins Avenue and Congressional Lane: Four-way intersection with all-way stop control
- Rollins Avenue and East Jefferson Street: Four-way signalized intersection
- Rollins Avenue and Fire Station: Two-way emergency signal
- Rollins Avenue and Rockville Pike (MD 355): Four-way signalized intersection

The roadway functional classification for the study area is shown in **Figure 18**.

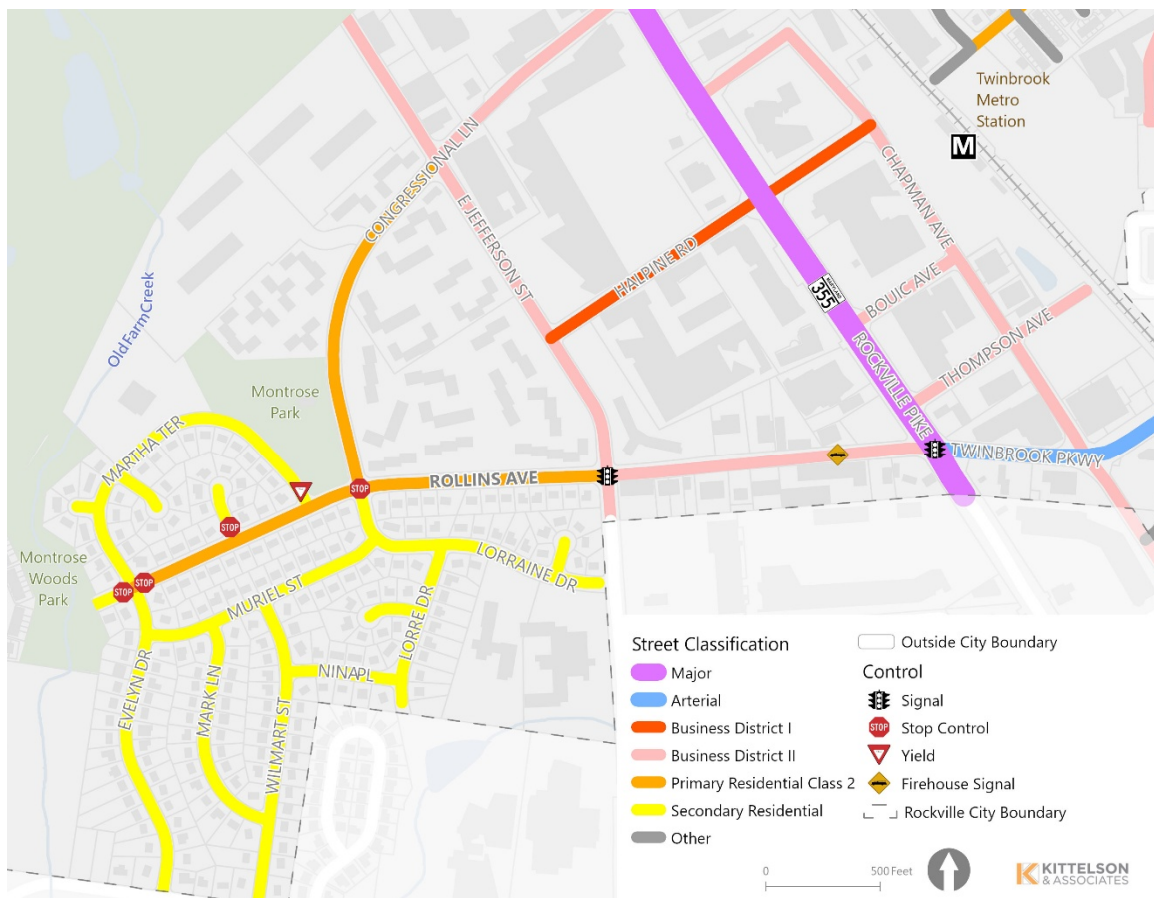


Figure 18. Roadway Classification Map

Source: City of Rockville, 2025

Data was collected along the study corridor, including turning movement counts collected during the morning peak hours of 8:00 am to 11:00 am and the evening peak hours of 3:00 pm to 7:00 pm. Turning movement counts collected volumes for vehicles, pedestrians, and bicycles at five intersections, as shown in **Figure 19**:

- Rollins Avenue and Rockville Pike (MD 355)
- Rollins Avenue and mall entrance at 7-11
- Rollins Avenue and Jefferson Street
- Rollins Avenue and Congressional Lane
- Rollins Avenue and Martha Terrace

Additionally, data collection included collecting tube counts at two locations along Rollins Avenue, as shown in **Figure 19**. The tube counts collected vehicular volumes and speeds.

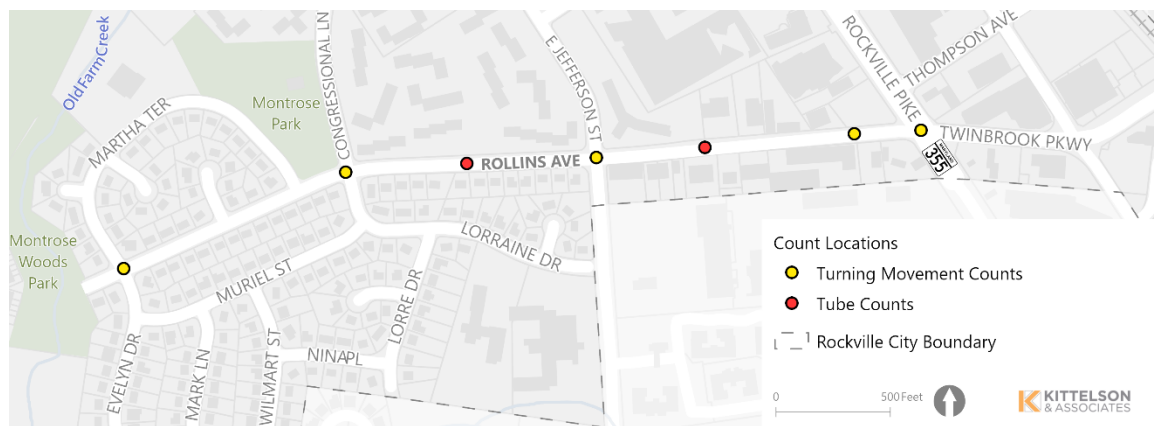


Figure 19. Data Collection

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2.2.1 Pedestrian Conditions

Pedestrian conditions along Rollins Avenue support walking, with sidewalks provided along the corridor, trees that offer shade, and high-visibility crosswalks at controlled intersections. However, conditions vary, and there are several opportunities to make walking more comfortable and improve connections to nearby destinations and transit stops.

Rollins Avenue is lined with sidewalks that are approximately four feet wide (**Figure 20**). This is below the five feet minimum width specified for sidewalks in the City's Pedestrian Master Plan. The sidewalk widens to eight feet in two sections east of East Jefferson Street near commercial storefronts (**Figure 21**). There is a high concentration of driveways and commercial entrances in the mixed-use segment of Rollins Avenue that create conflict points between pedestrians and drivers. **Figure 22** depicts sidewalk widths along the corridor in more detail.



Figure 20. Four feet wide sidewalk in the residential segment

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Figure 21. Sidewalk widens to eight feet on the south side of Rollins Avenue, east of East Jefferson Street

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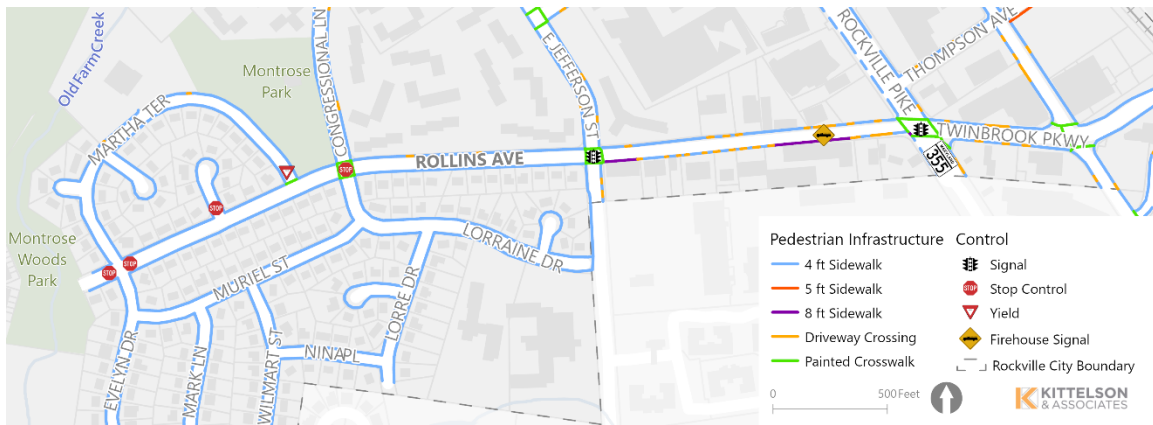


Figure 22. Pedestrian Infrastructure Map

Source: City of Rockville, 2025

The corridor experiences primarily residential and commercial pedestrian, bicycle, and scooter activity. This is attributed by the mix of residential and commercial land uses, as well as the proximity to several bus routes including Ride On ExtRa route 101 and the nearby Twinbrook Metrorail station. Pedestrian counts were collected in December 2025 at the following intersections:

1. Martha Terrace / Evelyn Drive
2. Congressional Lane
3. East Jefferson Street
4. Shopping Mall Entrance (at Qdoba)
5. Rockville Pike (MD 355)

Table 2 summarizes morning (AM) and evening (PM) peak hour counts along Rollins Avenue. Rockville Pike (MD 355) experienced the highest pedestrian volumes during both the AM and PM peak hour, while the other intersections in the mixed-use area of Rollins Avenue, East Jefferson Street and the Shopping Mall Entrance, experienced the next highest volumes. There was still considerable pedestrian activity at the intersection of Congressional Lane and Rollins Avenue. Montrose Park is a key destination along the corridor that currently lacks a marked pedestrian crosswalk at Martha Terrace.

Table 2. Summary of Pedestrian Activity – AM (PM) Peak Hour

Rollins Avenue Cross Street	North Leg	South Leg	Crossing Rollins Avenue	
			East Leg	West Leg
Martha Terrace (west) / Evelyn Drive	1 (1)	2 (1)	2 (7)	4 (6)
Congressional Lane	15 (7)	5 (10)	4 (4)	4 (3)
East Jefferson Street	8 (6)	5 (10)	10 (13)	7 (4)
Shopping Mall Entrance (at Qdoba)	14 (11)	7 (18)	1 (0)	4 (4)
Rockville Pike (MD 355)	24 (30)	4 (23)	5 (27)	14 (6)

Source: T3, 2026

PEDESTRIAN CROSSINGS

Crosswalks across Rollins Avenue include a mix of stop-controlled crosswalks, signalized crosswalks, and a yield-controlled single leg crosswalk. There are no midblock crossings along the length of the corridor.

There are five marked crosswalks across Rollins Avenue between the western terminus and Rockville Pike (MD 355), with an average spacing between crosswalks of approximately 920 feet. The greatest distance between crosswalks is 1,430 feet between East Jefferson Street and Rockville Pike (MD 355), which is also the same segment with the highest level of pedestrian activity (**Table 2**). These details, along with field observations and public input, indicate that a mid-block crossing along this segment near the existing 7-Eleven would be beneficial to serve existing pedestrian crossing demand.

All the existing marked crosswalks along the study corridor were recently restriped as high-visibility continental crosswalks, which helps to improve visibility of both the crosswalks and crossing pedestrians, as shown in **Figure 23**. The study area has overhead roadway lighting every 70 to 290 feet along Rollins Avenue, helping to further increase pedestrian visibility.



Figure 23. High-visibility crosswalk and diagonal curb ramp at Rollins Avenue and Congressional Lane

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Curb ramps along the corridor vary in comfort and safety. Most curb ramps in the residential segment of Rollins Avenue are diagonal curb ramps (**Figure 23**). These ramps direct pedestrians toward the center of the intersection, increasing exposure to potential vehicle conflicts and reducing sightlines between pedestrians and drivers, which can negatively affect both perceived comfort and actual safety.

There are two locations with unmarked crossings between curb ramps, located at:

- Rollins Avenue and Martha Terrace / Evelyn Drive (two-way stop-controlled on Rollins Avenue) – all legs
- Rollins Avenue and Rollins Court (one-way stop-control on Rollins Court) – north leg

There is an emergency signal located in front of Rockville Fire Station 23 shown in **Figure 24**. Due to the nature of this signal, there is no marked crossing across Rollins Avenue at this location.



Figure 24. Emergency Signal in front of Fire Station 23

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Additionally, there are two locations with unmarked crossings across Rollins Avenue between a curb ramp and a standard curb (without curb ramp), including:

- Rollins Avenue and Martha Terrace (yield-controlled on Martha Terrace) – east and west legs
- Rollins Avenue and Rollins Court (one-way stop-control on Rollins Court) – east and west legs

To stripe crosswalks at these locations, installation of a curb ramp on the south side of Rollins Avenue would be required for ADA compliance and parking spaces would need to be removed. Conflicts with existing residential driveways, utility poles, and landscaping would also need to be considered.

2.2.2 Bicycle Conditions

Rollins Avenue is currently signed as a shared roadway between Martha Terrace / Evelyn Drive and East Jefferson Street. This segment has signage, but no pavement markings indicating that it serves as a bike route. **Figure 25** shows an example of one of the “Bike Route” signs.

Additionally, there are two Capital Bikeshare Locations located within one-third of a mile from Rollins Avenue at the intersection of Congressional Lane and East Jefferson Street and at the Twinbrook Metrorail station (**Figure 26**). There is no bicycle parking located within public right-of-way along the length of the study corridor.



Figure 25. Bike Route sign on Rollins Avenue before Congressional Lane

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Figure 26. Capital Bike Share Station at Congressional Lane and East Jefferson Street

Google Streetview

The Rockville Bikeway Master Plan recommends that the remainder of Rollins Avenue be a shared roadway, defined as a road where “vehicle and bicycle traffic may share the same lane,” often denoted with a “Bike Route” sign (**Figure 27**). The Bikeway Master Plan also indicates a path west of the end of the Rollins Avenue through Montrose Woods Park as a “Study.” As discussed in the Site Visit summary, this connection may be challenging due to Old Farm Creek.

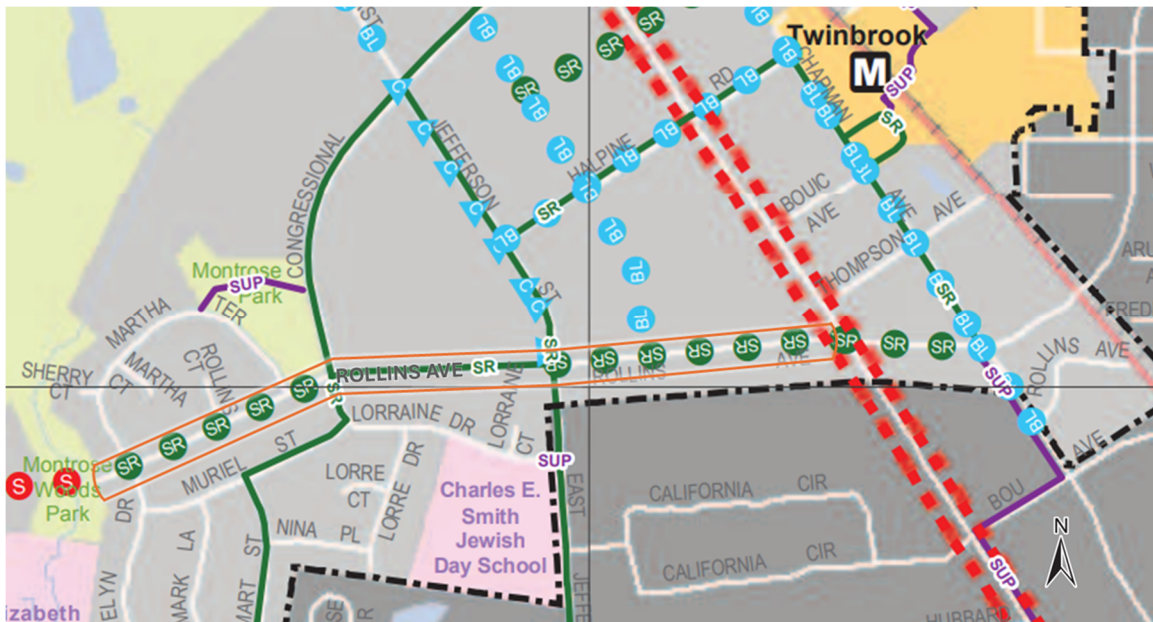


Figure 27. Bikeway Master Plan Proposed Facilities

Source: Rockville Bikeway Master Plan

Following the Bikeway Master Plan, published in 2017, the City has been making strides in advancing bicycle infrastructure through active project studies on Congressional Lane, East Jefferson Street, and Halpine Road. Between the Bikeway Master Plan and these additional projects, there are several proposed bike network projects near to the study corridor, as shown in **Figure 28** and described below:

- Shared roadway on Congressional Lane from Rollins Avenue to East Jefferson Street (ongoing City study),
- Shared roadway on East Jefferson Street from Rollins Avenue to Congressional Lane (ongoing City study)
- Separated Bike Lane on Congressional Lane from East Jefferson Street to Rockville Pike (MD 355) (ongoing City study)
- Buffered Bike Lane or Shared Roadway on Halpine Road from East Jefferson Street to Rockville Pike (MD 355) (ongoing City study)
- Cycle Track or Separated Bike Lane on Rockville Pike (MD 355) in study area (Rockville Bikeway Master Plan and Montgomery County Bicycle Master Plan)
- Separated Bike Lane on East Jefferson Street south of Rollins Avenue (Montgomery County Bicycle Master Plan)

Note that for projects undergoing City study, the proposed treatments are subject to change.

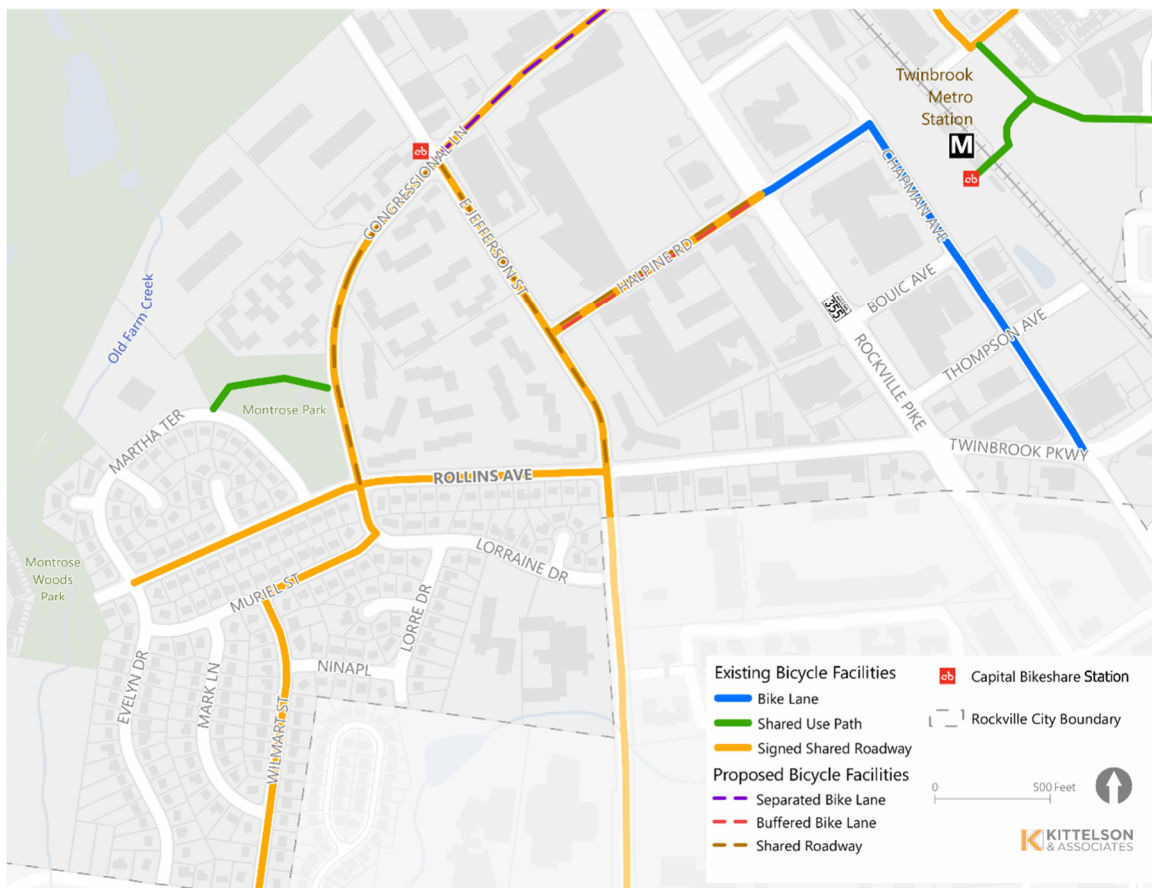


Figure 28. Bicycle Facilities Map

Source: Rockville Bikeway Master Plan

2.2.3 Transit Conditions

Montgomery County’s transit service, Ride On, provides connectivity within Rockville to adjacent areas. Ride On service is provided near Rollins Avenue with bus stops at the intersections between Rollins Avenue and Congressional Lane, East Jefferson Street, and Rockville Pike (MD 355). Additionally, the WMATA Metrorail Red Line service runs parallel to Rockville Pike (MD 355), with the Twinbrook Metrorail station located approximately one-third mile from Rollins Avenue and Rockville Pike (MD 355). The Ride On routes that service the Rollins Avenue study area are shown in **Table 3** and include routes 5, 26, 44, 45, 46, and Ride On ExtRa route 101.

Table 3. Ride On Transit Service

Route	Headways	Service
5	20-50 mins	Twinbrook Station to Silver Spring Station
26	20-50 mins	Glenmont Station to Montgomery Mall
44	55 mins (5:50 am to 9:21 am and 3:50 am to 7:50 pm, M-F)	Twinbrook Station to Rockville Station
45	25-50 mins	Twinbrook Station to Rockville Regional Transit Center
46	15-55 mins	Montgomery College to Medical Center Station
101	12-15 mins	Lakeforest Transit Center to Medical Center Station

Source: MCDOT, 2026

The “M12 – University Boulevard” route is the only Metrobus line that services this area. This route operates between Twinbrook Metrorail Station and Hyattsville Crossing Metrorail Station with connections to Wheaton Metrorail Station and the Takoma Langley Crossroads Transit Center. During the morning rush from 6am – 9am and the evening afternoon and evening rush from 3pm to 9pm, it stops at Twinbrook Metrorail Station at a frequency of 12 minutes or less.

Additionally, MCDOT is advancing a bus rapid transit (BRT) project as part of the county’s Flash BRT system, called MD 355 Flash BRT, from Bethesda to Clarksburg. The Central Phase of this project, which extends from Milestone Park & Ride to Rockville Metrorail Station, is currently in design. The intersection of Rollins Avenue and Rockville Pike (MD 355) is included in the Southern Phase of this project, which will move forward as a future phase.

Amenities at the nearby transit stations include shelters, benches, and wayfinding signage. The transit stops for southbound Route 26 at the intersection of Rollins Avenue and Congressional Lane, for southbound Route 5 at the intersection of Rollins Avenue and East Jefferson Street, and for southbound Route 46 at the intersection of Rollins Avenue and Rockville Pike (MD 355) all have pedestrian-oriented amenities, such as seating and shade structures (**Figure 29**). The stop for northbound Route 5 at the intersection of Rollins Avenue and East Jefferson Street has a bench and signage, as shown in **Figure 30**. **Figure 31** shows the map of these routes and stops in more detail.



Figure 29. Route 26 transit Stop near Rollins Avenue and Congressional Lane with shade structure and bench

[Google Streetview](#)



Figure 30. Route 5 transit Stops near Rollins Avenue and East Jefferson Street with bench, but no shade structure

[Google Streetview](#)

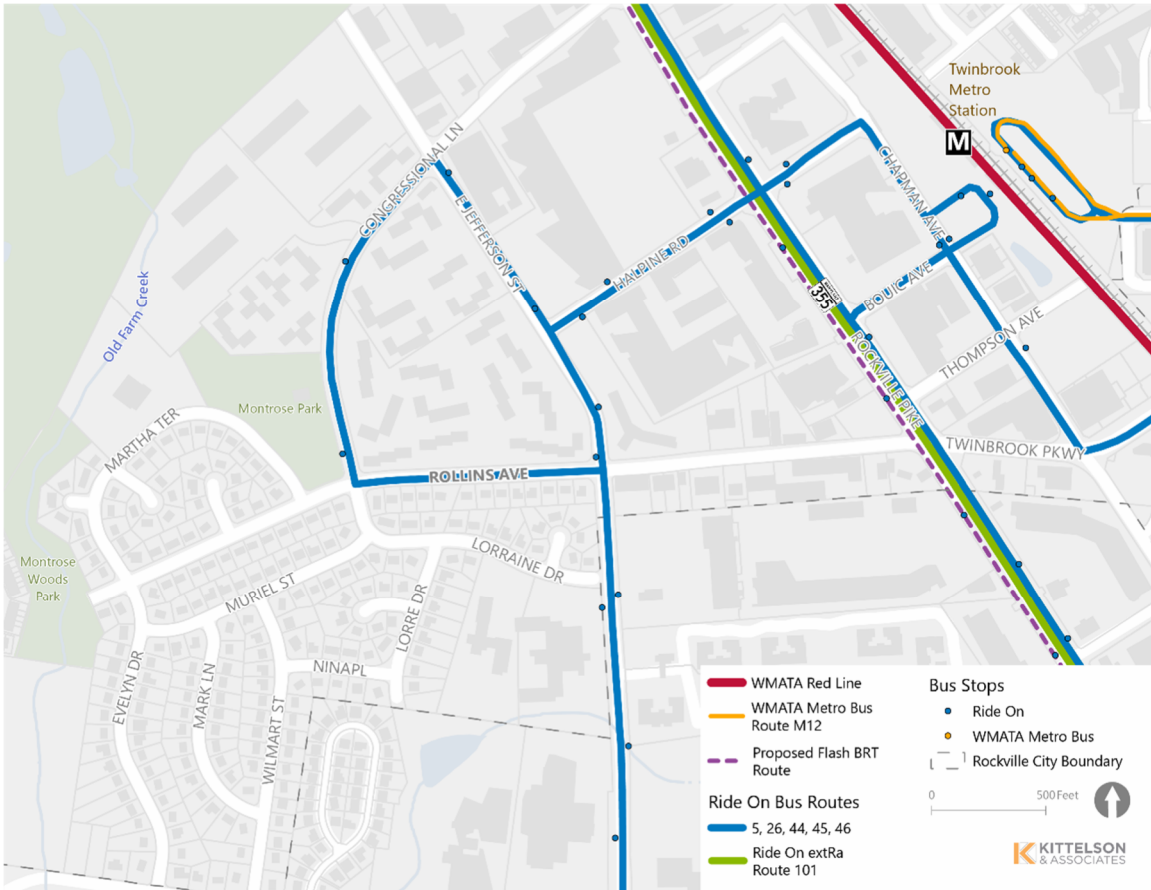


Figure 31. Transit Network Map

Source: Montgomery County GIS Open Data, 2025; MD iMAP Data Catalog, 2025

2.2.4 Curbside Activity

The on-street parallel parking restrictions vary along Rollins Avenue, as shown in **Figure 32**. Along the residential segment of the corridor, parking is largely unrestricted west of East Jefferson Street. The exceptions to unrestricted parking are listed below:

- On the south side of Rollins Avenue from Congressional Lane to just west of East Jefferson Street: Permit Parking Only from 6PM-6AM Monday-Friday, and for 24 hours on Saturday and Sunday
- On two small segments on the north and south side of Rollins Avenue just west of East Jefferson Street: No Parking Anytime

By contrast, along the mixed-use segment of the corridor east of East Jefferson Street, parking is primarily restricted. There is no parking permitted at any time along both sides of the corridor, with the following exceptions:

- On the south side of Rollins Avenue just east of East Jefferson Street: Loading Zone, No Parking 6AM-6pm Monday-Saturday
- On the north side of Rollins Avenue just east of the Bethany House Apartment Building: No Parking 4-6PM
- On two small segments on the north and south side of Rollins Avenue between the Fire Station and the Post Office: No restrictions

Field observations were completed mid-week, midday and showed that parking was more utilized in the commercial areas of the corridor as opposed to the residential areas.

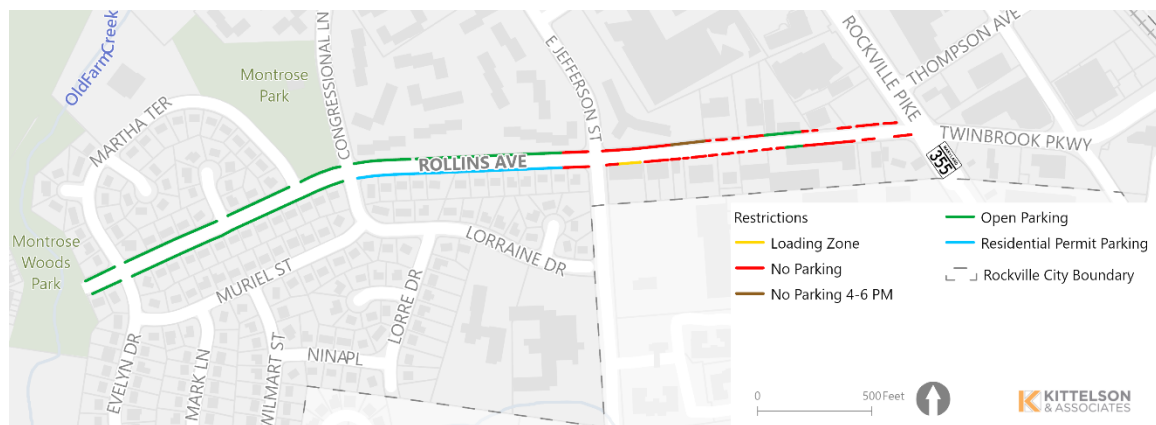


Figure 32. Parking Restrictions Map

Source: Kittelson & Associates, Inc.

2.3 SAFETY

As part of this study, a detailed crash analysis was conducted to identify patterns, trends, and contributing factors for crashes along Rollins Avenue. The purpose of this analysis is to inform recommendations that enhance safety for all road users, including pedestrians, bicyclists, and drivers. By examining recent crash data, the project team can target interventions that address the most significant risks and work toward creating a safer, more accessible corridor for the community.

The City provided crash data for Rollins Avenue from 2021-2025. The project team reviewed this data to understand crashes and safety concerns along the corridor. The crash data presented in this section only accounts for crashes recorded in this dataset and should function as a reference.

Between 2021 and 2025, there were seventy-six crashes along Rollins Avenue. In this five-year period, there was one fatal crash in 2025 at the intersection of Rollins Avenue and East Jefferson Street. **Figure 33** and **Figure 34** display crash severity over the last five years for crashes occurring along two segments: from the corridor’s western terminus through East Jefferson Street and east of East Jefferson Street to Rockville Pike (MD 355).

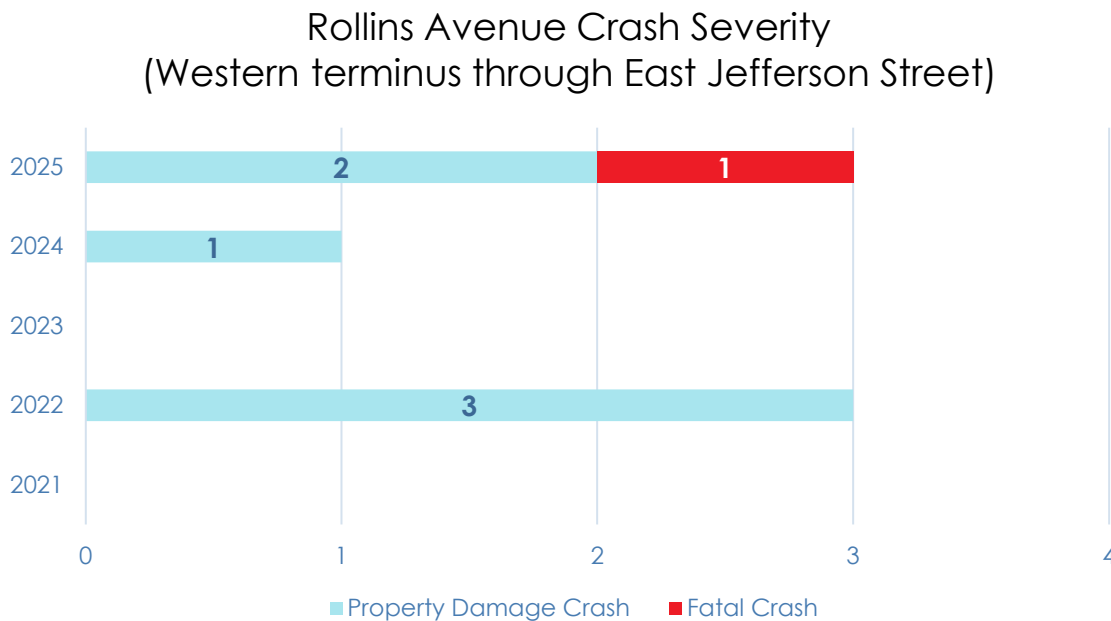


Figure 33. Rollins Avenue Crash Severity by Year (Western terminus through East Jefferson Street)

Maryland Department of Transportation, 2025

Rollins Avenue Crash Severity (East of E Jefferson Street)

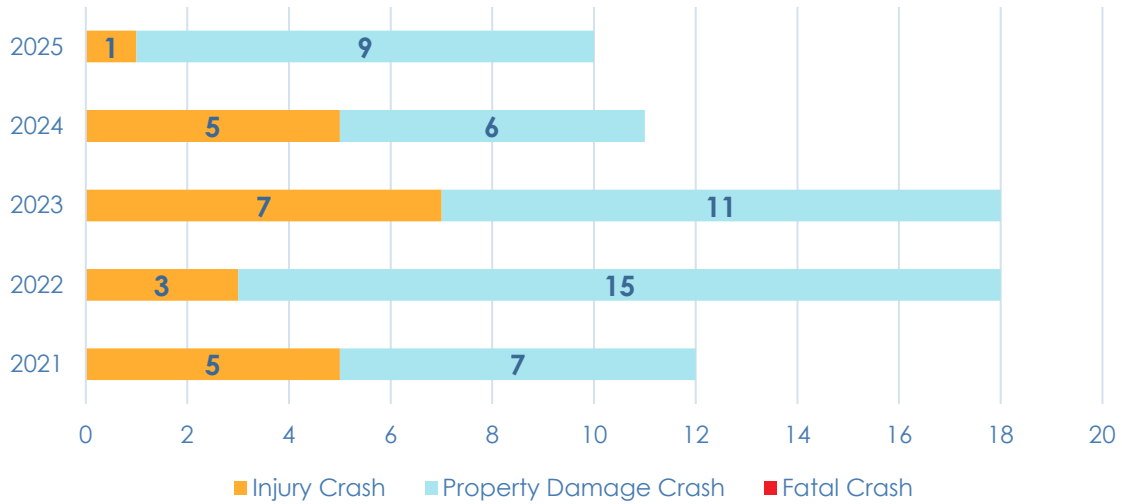


Figure 34. Rollins Avenue Crash Severity by Year (East of East Jefferson Street)

Maryland Department of Transportation, 2025

Figure 35 and **Figure 36** display the crashes by type for all crashes on Rollins Avenue from 2021-2025. As shown, angle crashes, or crashes that involve vehicles hitting at or near right angles while executing a turn, with the front of one vehicle striking the side of the other vehicle, accounted for approximately 43% of all crashes along Rollins Avenue from the western terminus through the intersection of East Jefferson Street, and 22% of all crashes along Rollins Avenue east of East Jefferson Street, from 2021-2025. Other predominant crash types included left turns, sideswipes, and rear ends.

There was one bicyclist-involved crash, two pedestrian-involved crashes, and one other conveyance-involved crash during this five-year period. One of the pedestrian-involved crashes was fatal at East Jefferson Street. Additional details for the bicycle and pedestrian-involved crashes are shown in **Table 4**.

Rollins Avenue Crash Types (Western terminus through East Jefferson Street)

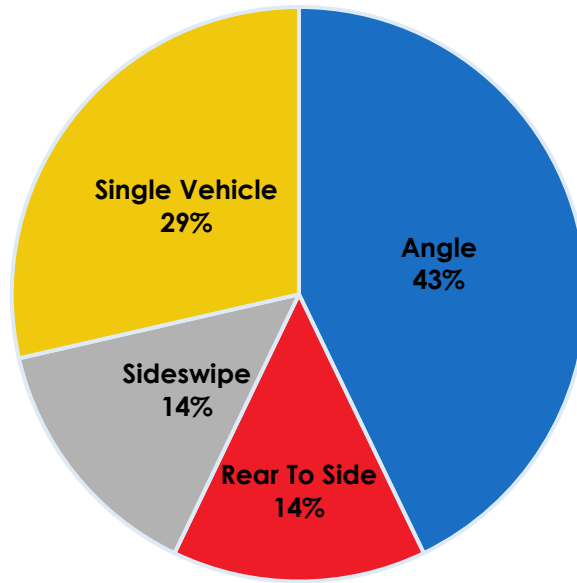


Figure 35. Crash Type (Western terminus through East Jefferson Street)

Maryland Department of Transportation, 2025

Rollins Avenue Crash Types (East of E Jefferson Street)

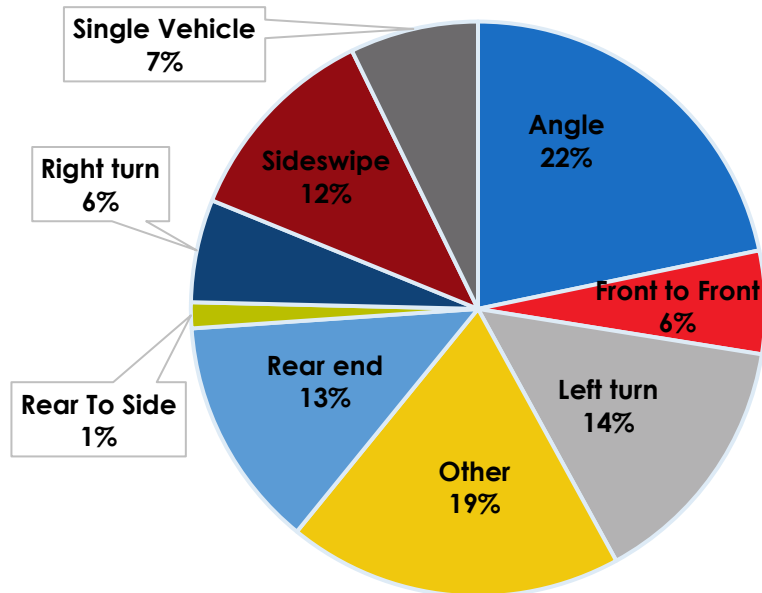


Figure 36. Rollins Avenue Crash Types (East of East Jefferson Street)

Maryland Department of Transportation, 2025

Table 4. Bicycle and Pedestrian Involved Crashes

Crash Date	Involved Individuals	Location	Severity	Details
4/13/23	1 Bicyclist	Rollins Avenue and Rockville Pike (MD 355)	Injury	A person driving struck a person biking while on a marked crosswalk.
9/5/23	1 Other Conveyance-involved ³	Sidewalk	Injury	Angle collision that occurred on the sidewalk beside 168 Rollins Avenue.
11/26/23	1 Pedestrian	Rollins Avenue and Rockville Pike (MD 355)	Injury	A person driving struck a person walking while on a marked crosswalk.
11/21/25	1 Pedestrian	Rollins Avenue and East Jefferson Street	Fatal	A person driving southbound and turning left to travel eastbound onto Rollins Avenue struck a person walking across a marked crosswalk across Rollins Avenue northbound.

In general, injury crashes were most concentrated at the intersection of Rollins Avenue and Rockville Pike (MD 355). Fifty-two percent of all crashes along Rollins Avenue were specified in the crash report as intersection related.

³ Involving a non-motorist who is not classified as a bicyclist or pedestrian.

Table 5 and **Table 6** show the total number of crashes along Rollins Avenues by Crash Type and Severity.

Table 5. Crashes by Crash Type and Severity (Western terminus through East Jefferson Street)

Crash Type	Injury Crash	Property Damage Only Crash	Fatal	Total
Angle	-	3	-	3
Rear to Side	-	1	-	1
Sideswipe	-	1	-	1
Single Vehicle	-	1	1	2

Table 6. Crashes by Crash Type and Severity (East of East Jefferson Street)

Crash Type	Injury Crash	Property Damage Only Crash	Total
Angle	6	9	15
Front to Front	1	3	4
Left turn	4	6	10
Other	5	8	13
Rear end	3	6	9
Rear To Side		1	1
Right turn	1	3	4
Sideswipe		8	8
Single Vehicle	1	4	5

3. TRAFFIC OPERATIONS

This section provides an overview of the existing traffic operations observed and evaluated along Rollins Avenue. The team collected the turning movement counts, vehicular speed, and volume data for analysis. Additionally, the team conducted a field visit and observed traffic and operations.



Figure 37. Fire Station on Rollins Avenue near Rockville Pike (MD 355)

Source: Kittelson and Associates, Inc.

3.1 EXISTING SPEED AND VOLUME ANALYSIS

In addition to the field measurements and data collected in December 2025 (turning movement counts and tube counts), shown previously in **Figure 19** and detailed in **Table 7**, the city provided additional tube count data from February 2025 for vehicular speeds and volumes (**Table 8**) on Rollins Avenue at the following locations:

- Rollins Avenue between E Jefferson Street and Congressional Lane (February 4-7, 2025)
- Rollins Avenue between Congressional Lane and Evelyn Drive (February 4-7, 2025)

Table 7 summarizes weekday (Tuesday through Thursday) average daily traffic (ADT), average speeds, 85th-percentile speeds, the number of vehicles exceeding the posted speed limit, and maximum observed speeds for the three study segments along Rollins Avenue. The ADT along the corridor ranges from 709 to 5,047 vehicles per day (VPD), with the segment between E Jefferson Street and Rockville Pike (MD 355) carrying the highest traffic volumes at approximately 5,047 VPD.

Rollins Avenue has a posted speed limit of 25 mph along most of the corridor both eastbound and westbound. Rollins Avenue from Rockville Pike (MD 355) to E Jefferson Street has a posted speed limit of 30 mph for westbound vehicles. Data collected indicate that 1.0 percent to 10.3 percent of vehicles travel above the posted speed limit across the study segments. Vehicles traveling between E Jefferson Street and Congressional Lane operate at higher speeds compared to the other segments, with an 85th-percentile speed of 34.1 mph. A high proportion of heavy vehicles was observed in the eastbound direction between Jefferson Street and Congressional Lane, where heavy vehicles accounted for approximately 19.2 percent of traffic. In contrast, the segment between E Jefferson Street and Rockville Pike (MD 355) exhibited lower average operating speeds compared to the other segments, with an average speed of approximately 25.6 mph.

Table 7. Rollins Avenue Speed and Volume Analysis (Collected by the Project Team in December 2025)

Tube Counts Summary	Rollins Avenue Between Rockville Pike (MD 355) & E Jefferson Street		Rollins Avenue between E Jefferson Street & Congressional Lane	
	EB	WB	EB	WB
Average Daily Traffic (ADT)	4,980 veh/day	5,047 veh/day	709 veh/ day	795 veh/ day
Peak Hour Volume (Veh/hr)	405 veh/hr	403 veh/hr	64 veh/hr	86 veh/hr
Truck (Counts/%)	214/ 4.3%	309/ 6.1%	136/ 19.2%	26/ 3.3%
Posted Speed Limit	25 mph (eastbound) 30 mph (westbound)		25 mph	
Average Speed	25.6 mph	23.6 mph	28.2 mph	27.8 mph
85th Percentile Speed	31.5 mph	31.0 mph	34.1 mph	33.1 mph
Exceeding Posted Speed (# of vehicles)	44 veh/ 1%	48 veh/ 1%	73 veh/ 10.3%	50 veh/ 6.6%

Table 8. Rollins Avenue Speed and Volume Analysis (Provided by the City from February 2025)

Tube Counts Summary	Rollins Avenue between Congressional Lane & Evelyn Drive		Rollins Avenue Between E Jefferson Street & Congressional Lane	
	EB	WB	EB	WB
Average Daily Traffic (ADT)	206 veh/day	817 veh/day	438 veh/ day	550 veh/ day
Peak Hour Volume (Veh/hr)	34 veh/hr	120 veh/hr	77 veh/hr	85 veh/ hr
Truck (Counts/%)	19/ 9.2%	65/ 8.0%	90/ 20.5%	40/ 7.3%
Posted Speed Limit	25 mph			
Average Speed	25.4 mph	25.9 mph	27.6 mph	29.0 mph
85th Percentile Speed	30.1 mph	30.0 mph	32.8 mph	33.7 mph
Exceeding Posted Speed (# of vehicles)	120/ 58.3%	490/ 60.0%	29 veh/ 6.6%	56 veh/ 10.2%

3.2 EXISTING INTERSECTION OPERATIONS

The team evaluated existing traffic operations at the two signalized and three unsignalized intersections along the Rollins Avenue study corridor. A review of the turning movement count data identified the systemwide AM peak hour as 10:00 AM to 11:00 AM and the systemwide PM peak hour as 4:45 PM to 5:45 PM. Because this is a corridor-level study, the analysis was conducted using the systemwide peak hours rather than individual intersection peak hours. This is a common practice for corridor evaluations, as it provides a consistent basis for assessing operational impacts on adjacent intersections, including changes in queue lengths, delays, and overall corridor performance. Additionally, the individual peak hours for both signalized intersections, which carry the highest traffic volumes, fall within the identified systemwide peak periods. The only exception is the AM peak hour at E Jefferson Street and Rollins Avenue, where the peak volume is only three vehicles per hour higher than the systemwide AM peak hour. Therefore, the intersection was further evaluated during its individual AM peak hour, and the results indicated no noticeable difference in delays or queue lengths compared to the systemwide peak hour analysis.

A copy of the systemwide peak hour determination table is shown in **Appendix B. Figure 38** presents the AM and PM peak hour turning movement counts.

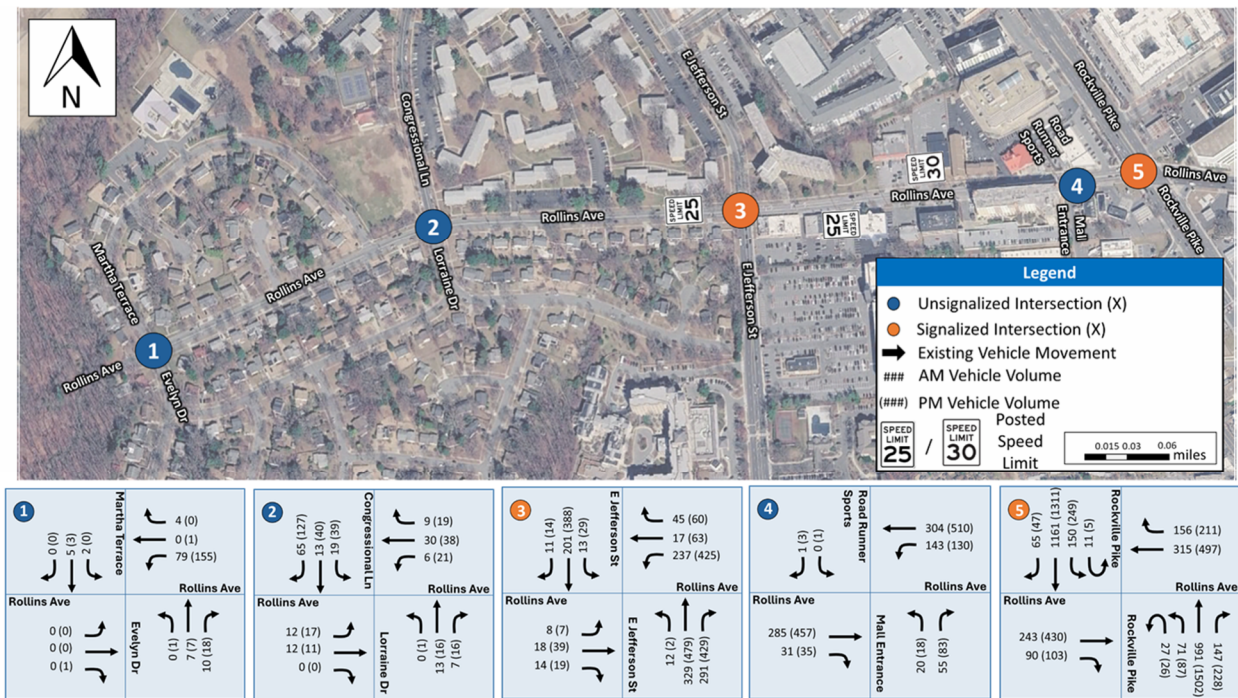


Figure 38. AM and PM Peak Hour Turning Movement Counts

Source: T3 Design

3.3 CAPACITY ANALYSIS – EXISTING YEAR TRAFFIC CONDITIONS

The existing conditions traffic operations models for the AM and PM peak hours were developed using Synchro Professional (Version 11). Both peak-hour models were developed based on existing lane configurations, peak-hour traffic volumes shown in **Figure 38**, and traffic signal timing and phasing data provided by the City of Rockville.

Intersection performance was evaluated using control delay (seconds per vehicle) and Level of Service (LOS), reported in accordance with Highway Capacity Manual (HCM) 2000 methodologies. HCM 2000 methodologies were used for signalized intersection since HCM 6th Edition/HCM 2010 do not support results for non-NEMA Standard phasing, while HCM 6th was used to report results for unsignalized intersections. Intersection delay and LOS results for the study intersections are summarized in **Table 9**, and detailed Synchro output reports are provided in **Appendix C**. LOS E and LOS F results are highlighted in red for emphasis.

The Synchro analysis indicates that the unsignalized intersections along Rollins Avenue operate at acceptable levels of service during both the AM and PM peak periods. The intersections of Rollins Avenue with Martha Terrace/Evelyn Drive, Congressional Lane/Lorraine Drive, and Road Runner Sports/Shopping Center operate at LOS A for all movements, with very low delays and negligible queue lengths.

The signalized intersection of Rollins Avenue and East Jefferson Street operates at an overall LOS B during the AM peak hour and LOS C during the PM peak hour. All movements during both peak hours operate at LOS D or better. However, the westbound left-turn movement exhibits 95th-percentile queues exceeding available storage during the PM peak hour.

The most constrained intersection within the study area is Rollins Avenue/Twinbrook Parkway/Rockville Pike (MD 355). During the AM peak hour, multiple movements along Rollins Avenue and Twinbrook Parkway operate at LOS E, resulting in an overall intersection LOS C. Similar conditions persist during the PM peak hour, with several approaches continuing to operate at LOS E and experiencing substantial delays and long queues. Several movements at this intersection exceed capacity, as indicated by 95th-percentile queue lengths that may extend beyond available storage.

Table 9. Capacity Analysis Results – Existing Year (2025) Conditions

Intersection/ Control Type	Approach	Movement	AM Peak			PM Peak		
			Delay (sec)	LOS	95th Percentile Queue Length	Delay (sec)	LOS	95th Percentile Queue Length
Rollins Avenue & Martha Terrace/Evelyn Drive (Unsignalized)	Rollins Avenue	EBLTR	0.0	A	0	8.3	A	0
		EB	0.0	A	-	8.3	A	-
	Rollins Avenue	WBLTR	9.1	A	7.5	9.7	A	20
		WB	9.1	A	-	9.7	A	-
	Evelyn Drive	NBLTR	0.0	A	0	7.2	A	0
		NB	0.0	A	-	0.3	A	-
	Martha Terrace	SBLTR	7.2	A	0	0.0	A	0
SB		2.1	A	-	0.0	A	-	
Overall Intersection			6.7	A	-	8.2	A	-
Rollins Avenue & Congressional Lane/ Lorraine Drive (Unsignalized)	Rollins Avenue	EBLTR	7.6	A	2.5	8.1	A	5
		EB	7.6	A	-	8.1	A	-
	Rollins Avenue	WBLTR	7.4	A	5	8.3	A	10
		WB	7.4	A	-	8.3	A	-
	Lorraine Drive	NBLTR	7.1	A	2.5	7.5	A	5
		NB	7.1	A	-	7.5	A	-
	Congressional Lane	SBLTR	7.8	A	10	9.3	A	32.5
SB		7.8	A	-	9.3	A	-	
Overall Intersection			7.6	A	-	8.8	A	-
Rollins Avenue & Road Runner Sports/Shopping Center (Unsignalized)	Rollins Avenue	EBT	0.0	A	0.0	0.0	A	0.0
		EBTR	0.0	A	0.0	0.0	A	0.0
		EB	0.0	A	-	0.0	A	-
	Rollins Avenue	WBLT	8.4	A	12.5	9.0	A	10.0
		WBT	0.4	A	0.0	0.5	A	0
		WB	3.0	A	-	2.2	A	-
	Shopping Center	NBL	0.0	A	0.0	0.0	A	0.0
		NBR	0.0	A	0.0	0.0	A	0.0
		NB	0.0	A	-	0.0	A	-
	Road Runner Sports	SBL	0.0	A	0.0	24.8	C	0.0
		SBR	9.3	A	0.0	9.9	A	0.0
SB		9.3	A	-	13.6	B	-	
Overall Intersection			1.8	A	-	1.3	A	-
Rollins Avenue & East Jefferson Street (Signalized)	Rollins Avenue	EBL	36.7	D	17	38.4	D	15
		EBTR	37.3	D	35	41.3	D	52
		EB	37.2	D	-	41.0	D	-
	Rollins Avenue	WBL	39.6	D	184	48.3	D	#374
		WBTR	26.3	C	35	24.8	C	72
	East Jefferson Street	WB	36.9	D	-	43.0	D	-
		NBLT	11.7	B	213	21.5	C	#372
	NBR	1.7	A	63	2.5	A	119	

Intersection/ Control Type	Approach	Movement	AM Peak			PM Peak		
			Delay (sec)	LOS	95th Percentile Queue Length	Delay (sec)	LOS	95th Percentile Queue Length
	East Jefferson Street	NB	7.1	A	-	12.5	B	-
		SBLT	9.1	A	63	16.5	B	150
		SBTR	9.1	A	63	16.5	B	150
		SB	9.1	A	-	16.5	B	-
	Overall Intersection		15.9	B	-	23.2	C	-
Rollins Avenue/Twinbrook Parkway & Rockville Pike (MD 355) (Signalized)	Rollins Avenue	EBTR	59.0	E	200.0	61.2	E	349.0
		EB	59.0	E	-	61.2	E	-
	Twinbrook Parkway	WBT	60.2	E	204.0	57.1	E	314.0
		WBR	65.9	E	224.0	59.0	E	294.0
		WB	62.1	E	-	57.7	E	-
	Rockville Pike (MD 355)	NBL	9.3	A	57.0	16.6	B	64.0
		NBT	13.8	B	257.0	26.9	C	473.0
		NBR	11.5	B	35.0	20.9	C	129.0
	Rockville Pike (MD 355)	NB	13.1	B	-	25.5	C	-
		SBL	8.8	A	83.0	50.3	D	#307.0
		SBTR	13.6	B	290.0	19.2	B	394.0
	SB	13.0	B	-	24.1	C	-	
Overall Intersection		24.8	C	-	34.1	C	-	
Note: # 95th percentile volume exceeds capacity, queue may be longer								

4. ISSUES & OPPORTUNITIES

Based on the existing conditions analysis and field walk, the team identified key issues and opportunities that can be addressed within the scope of this Study. The issues and opportunities align with the project's vision to Complete Street design principles to create protected, comfortable, and low-stress pedestrian and bicycle facilities along Rollins Avenue, thereby enhancing connectivity, safety, and access for all modes and users. The team identified the following key issues, depicted in **Figure 39**:

- One fatal pedestrian-involved crash occurred at the intersection of Rollins Avenue and East Jefferson Street, indicating safety concerns on this corridor.
- Old Farm Creek at the western end of Rollins Avenue creates challenges for considering adding bicycle and pedestrian connections west of the corridor.
- There is a need for enhanced fire engine access to fire station.
- The corridor has narrow sidewalks (four feet) along most of the corridor.
- Existing curb, driveways, and utility poles limit locations for additional crosswalks across Rollins Avenue.
- Existing yield control at Martha Terrace is inconsistent with surrounding stop-controlled side streets.
- Bi-directional ramps at crosswalks limit pedestrian comfort while crossing.
- There is a demand for midblock crossings near 7-Eleven.
- There are long crossing distances across Rockville Pike (MD 355).

Additionally, the team identified the following opportunities:

- The corridor has a mix of residential and commercial land uses, which encourage pedestrian and bicycle trips.
- The corridor has a wide landscape buffer (ten feet) and mature trees along much of the corridor.
- The corridor has multimodal transportation options with the proximity to multiple Ride On bus routes, future Flash BRT, and the Twinbrook Metrorail station.
- The corridor has a complete sidewalk network along the entire corridor that can be widened in future.
- The city recently restriped high-visibility crosswalks along Rollins Avenue.
- Rollins Avenue provides access to Montrose Park, Rollins Congressional Swimming pool, Montrose Discovery Preschool, and shopping centers.
- The low speeds and low volumes on Rollins Avenue create a low-stress environment for people biking and walking.
- There are opportunities to tie Rollins Avenue improvements into planned bicycle improvements on parallel streets, such as East Jefferson Street and Congressional Lane.

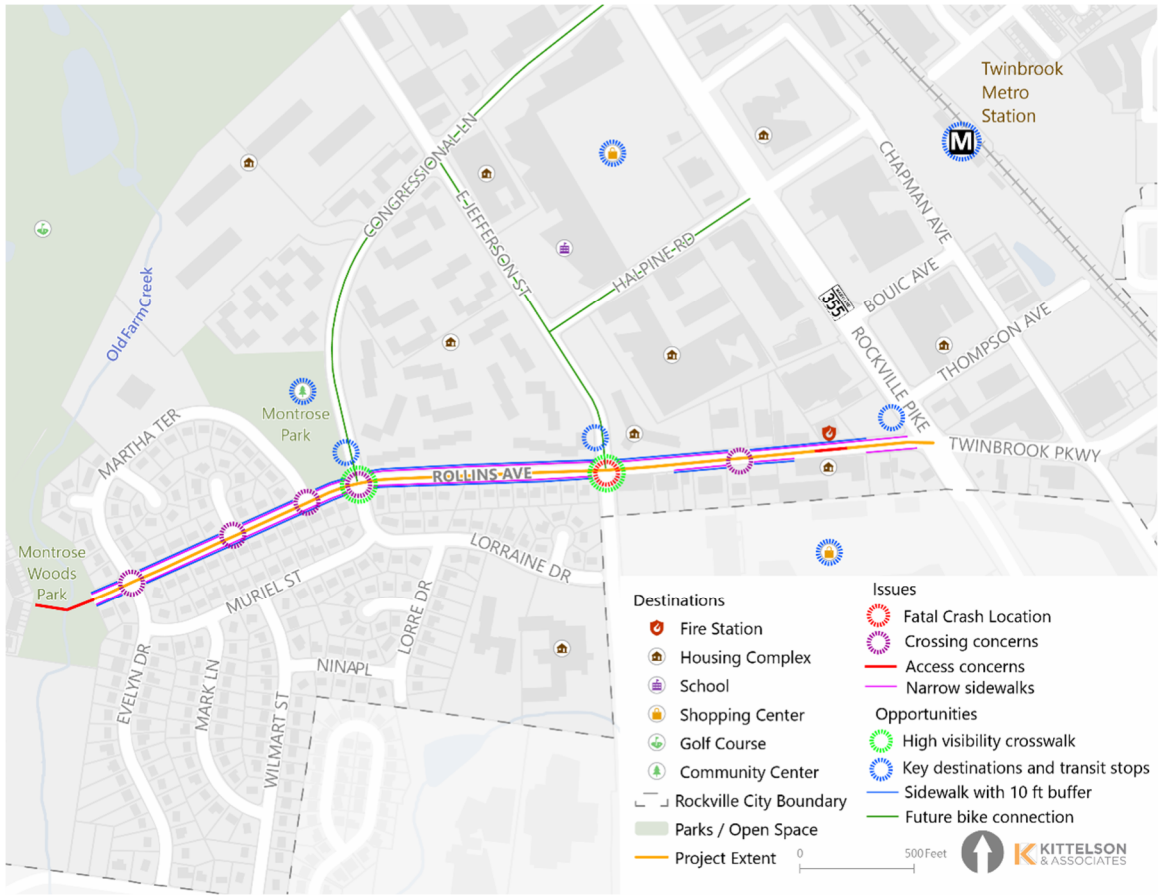


Figure 39. Issues and Opportunities Map

Source: Kittelson and Associates, Inc.

5. TOOLBOX OF STRATEGIES

Based on the findings from the safety evaluation, traffic operations analysis, and synthesis of existing conditions, safety strategies were identified to target safety challenges along Rollins Avenue and align with the project’s goals. **Table 10** details the project’s goals and identifies recommendations for safety strategies that align with each goal.

Table 10. Project Goal Alignment with Recommendations for Improvements

Goal	Recommendation
Safer (lower) vehicle speeds	<ul style="list-style-type: none"> ■ Traffic calming treatments ■ Speed enforcement ■ Street design
Improve access to key destinations	<ul style="list-style-type: none"> ■ Provide safer crossing opportunities ■ Widen sidewalks
More comfortable conditions for people walking	<ul style="list-style-type: none"> ■ Widen sidewalks
Reduce crashes	<ul style="list-style-type: none"> ■ Lower vehicle speeds and volumes through traffic calming design ■ Safer crossings for people biking, walking, and rolling ■ Improved intersection and mid-block crossings
Maintain vehicle access and mitigate traffic and congestion	<ul style="list-style-type: none"> ■ Optimize traffic signal operations ■ Balance multimodal transportation needs
Maintain parking	<ul style="list-style-type: none"> ■ Balance improvements with parking and curbside needs

The team compiled a toolbox of safety and complete streets strategies that build on the recommendations detailed in **Table 10**. The safety strategies are organized into corridor strategies and intersection-related strategies. The strategies were identified after synthesizing the existing conditions, discussing goals and opportunities with the City, and reviewing local and state guidance and best practices. The City of Rockville has implemented several of these strategies at other locations throughout the city.

Corridor strategies focus on improving multimodal safety and encouraging slower speeds through traffic calming along the length of Rollins Avenue. The corridor strategies considered for Rollins Avenue are shown in **Table 11**.

Table 11. Toolbox of Corridor Safety Strategies

Treatment	Safety Benefit(s)	Tradeoff(s)	Timeline
Striped buffer between travel lane and parking (Figure 40)	Lane narrowing and traffic calming; visually narrows travel lane	Narrowed right-of-way for bicyclists sharing the travel lane	Short-term
Speed humps (Figure 41)	Traffic calming, deters 'cut-through' traffic, reinforces bicycle boulevard	Minor impact to fire trucks and transit vehicles	Short-term
Shared lane markings and signage (Figure 42)	Improved awareness of cyclists' presence; establishes bicycle boulevard	Offers limited protection for people biking	Short-term



Figure 40. Lane Narrowing with Striped Buffer

Source: 1st State Bikes



Figure 42. Shared Lane Markings and Signage

Source: TC Palm



Figure 41. Speed Humps

Source: NACTO

Intersection and midblock strategies focus on improving multimodal safety at the intersection, where the majority of crashes are occurring. Similar to the corridor treatments, these intersection and midblock treatments focus on encouraging slower speeds through traffic calming at the intersections along Rollins Avenue. The intersection and midblock safety strategies considered for Rollins Avenue are shown in **Table 12**.

Table 12. Toolbox of Corridor Safety Strategies

Treatment	Safe Benefit(s)	Tradeoff(s)	Timeline
Painted curb extensions and flex posts (Figure 43)	Pedestrian visibility; reinforces parking restrictions	May require maintenance for flexible delineators and other physical installations	Short-term
Concrete curb extensions (Figure 44)	Pedestrian visibility; parking compliance; improved pedestrian safety and comfort	Requires full curb reconstruction; may require utility coordination	Long-term
Pedestrian refuge (Figure 45)	Improved pedestrian safety and comfort; reduces pedestrian exposure to vehicles	Requires some parking removal	Long-term
Leading pedestrian interval (signal) (Figure 46)	Improves pedestrian safety and comfort at intersections; reduces conflicts between pedestrians and turning vehicles	May impact signal operations	Short-term
No turn on red signage (Figure 47)	Reduces conflict between turning vehicles and people biking or walking	May impact signal operations; requires signage; may require education and/or enforcement	Short-term
Midblock crosswalk (Figure 48)	Addresses pedestrian crossing demand	May require additional safety measures: raised crossing, curb extensions; may result in parking loss	Short-term



Figure 43. Painted Curb Extensions and Flex Posts

Source: City of Orlando

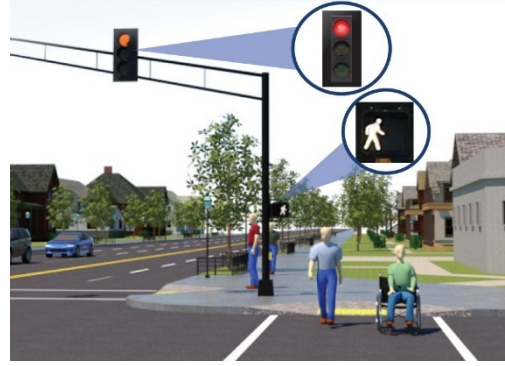


Figure 46. Leading Pedestrian Interval (Signal)

Source: NCDOT



Figure 44. Concrete Curb Extensions

Source: City of Rockville



Figure 47. No Turn on Red Signage

Source: DCist



Figure 45. Pedestrian Refuge

Kittelson and Associates, Inc.



Figure 48. Midblock Crosswalk

Source: City of Rockville

6. CONCEPTUAL DESIGN ALTERNATIVES

Based on the issues and opportunities identified in the existing conditions analysis and the toolbox of safety strategies identified, the project team developed a set of signal and signage improvements as well as two corridor concepts that incorporate various traffic calming treatments for Rollins Avenue:

- Option 1: Quick-Build Safety Improvements
- Option 2: Long-Term Safety Improvements

Signal and Signage Improvements

Both of the conceptual design options include signal and signage improvements. **Table 13** details the signal and signage improvements and outlines the justification for each improvement. **Figure 49** displays the existing signal and signage along the corridor and details the additional recommended signal and signage improvements.

Table 13. Signal and Signage Improvements and Justifications

Improvement	Justification
Replace the yield sign at Martha Terrace with a stop sign	Implement consistent signage and intersection control along Rollins Avenue; improve pedestrian safety along Rollins Avenue
Add split signal phasing for northbound and southbound vehicles at E Jefferson Street	Improve pedestrian crossing safety and visibility; safety mitigation in response to the fatal pedestrian crash involving a pedestrian crossing the east leg of Rollins Avenue
Add a dual left turn lane to the outside lane on the west (eastbound) leg of Rollins Avenue and modify the signal timing	Balance traffic operations at the intersection and optimize traffic signal timing; increase left turning capacity at the intersection
Add a No Turn on Red sign to the southbound right turning vehicles on Rockville Pike (MD 355)	Reduce right turning conflicts between vehicles and people crossing the street; prioritize pedestrian safety and comfort
Add leading pedestrian intervals to all approaches at the intersection of Rollins Avenue and Rockville Pike (MD 355)	Reduce right turning conflicts between vehicles and people crossing the street; prioritize pedestrian safety and comfort; enhance pedestrian priority

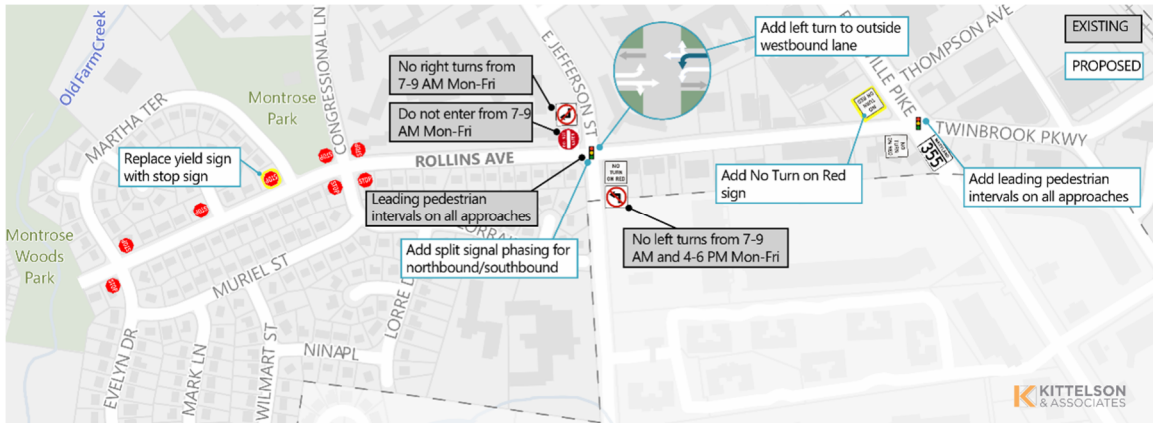


Figure 49. Corridor Signal and Signage Improvements

Source: Kittelson and Associates, Inc.

Option 1: Quick-Build Safety Improvements

Option 1 focuses on corridor-wide traffic calming to create a less stressful environment for people biking to share the road with people driving. This alternative can be implemented within the existing right of way and requires minimal construction. In addition to the signal and signage improvements previously detailed, Option 1 maintains the existing lane striping/configuration along the corridor and has minimal parking impacts. **Figure 50** illustrates Option 1 and highlights additional intersection treatments that advance traffic calming, including:

- Painted curb extensions and flex posts at:
 - Rollins Avenue (west and east legs) / Martha Terrace / Evelyn Drive
 - Rollins Avenue / Congressional Lane (southwest corner on Rollins Avenue and northeast corner on Rollins Avenue)
- Proposed crosswalk across Rollins Court
- Proposed crosswalk across Rollins Avenue at Martha Terrace
 - Warranted in Rockville’s Marked Crosswalk Guidelines, due to proximity to Montrose Park
- Speed humps on Rollins Avenue located east of Rollins Court and approximately 370’ east of Congressional Lane / Lorraine Drive
- Midblock crossing across Rollins Avenue with a paint and flex post median island located west of the 7-11
 - Warranted in Rockville’s Marked Crosswalk Guidelines, due to proximity to senior center (Bethany House Apartment Building)
- Shared lane markings and signage throughout the corridor
- Two-foot buffer between the parking and travel lane

Figure 51 illustrates the typical cross section for this alternative. **Appendix D** includes the detailed AutoCAD designs for Option 1.

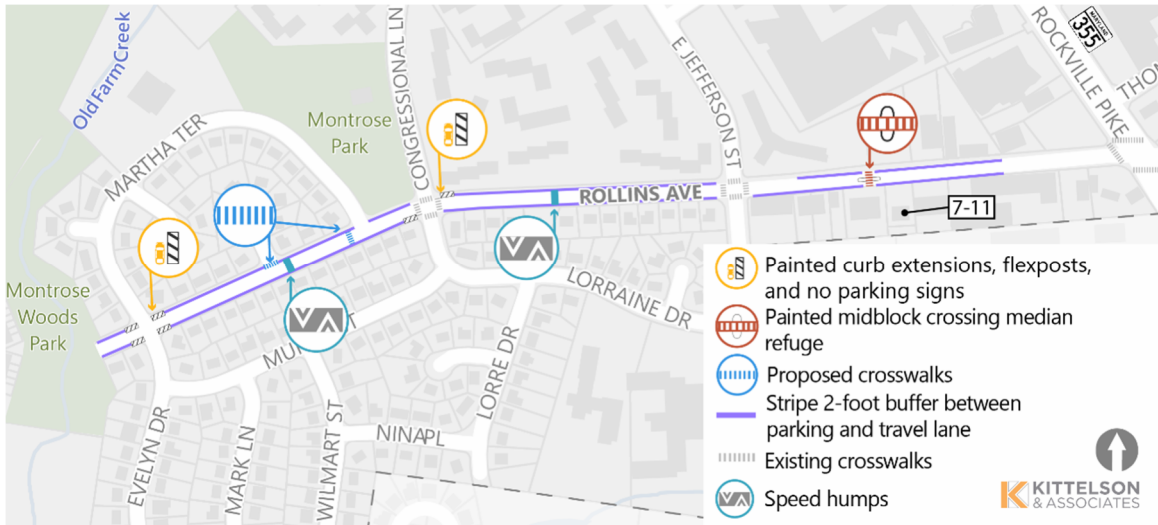


Figure 50. Option 1: Quick-Build Safety Improvements

Source: Kittelson and Associates, Inc.

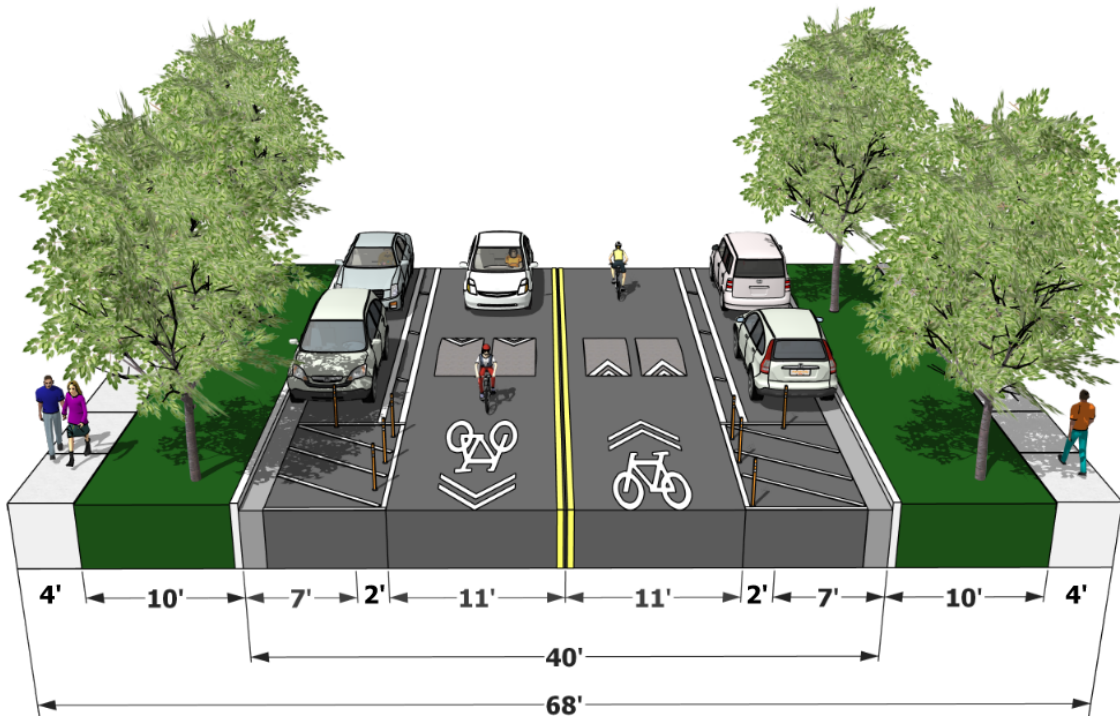


Figure 51. Option 1 Cross-Section: Quick-Build Safety Improvements

Source: Kittelson and Associates, Inc.

Option 2: Long-Term Safety Improvements

In addition to the signal and signage improvements previously detailed, Option 2 focuses on long-term safety improvements along the corridor and requires construction and additional design coordination. **Figure 52** illustrates Option 2 and highlights additional intersection treatments that advance traffic calming, including:

- Curb extensions at:
 - Rollins Avenue (west and east legs) / Martha Terrace / Evelyn Drive
 - Rollins Avenue / Congressional Lane (southwest corner on Rollins Avenue and northeast corner on Rollins Avenue)
- Proposed crosswalk across Rollins Court
- Proposed crosswalk across Rollins Avenue at Martha Terrace
 - Warranted in Rockville's Marked Crosswalk Guidelines, due to proximity to Montrose Park
- Speed humps on Rollins Avenue located east of Rollins Court and approximately 370' east of Congressional Lane / Lorraine Drive
- Midblock crossing across Rollins Avenue with a concrete median island located west of the 7-11
 - Warranted in Rockville's Marked Crosswalk Guidelines, due to proximity to senior center (Bethany House Apartment Building)
- Shared lane markings and signage throughout the corridor
- Two-foot buffer between the parking and travel lane
- Five-foot wide sidewalks

Figure 53 illustrates the typical cross section for this alternative. **Appendix D** includes the detailed AutoCAD designs for Option 2.

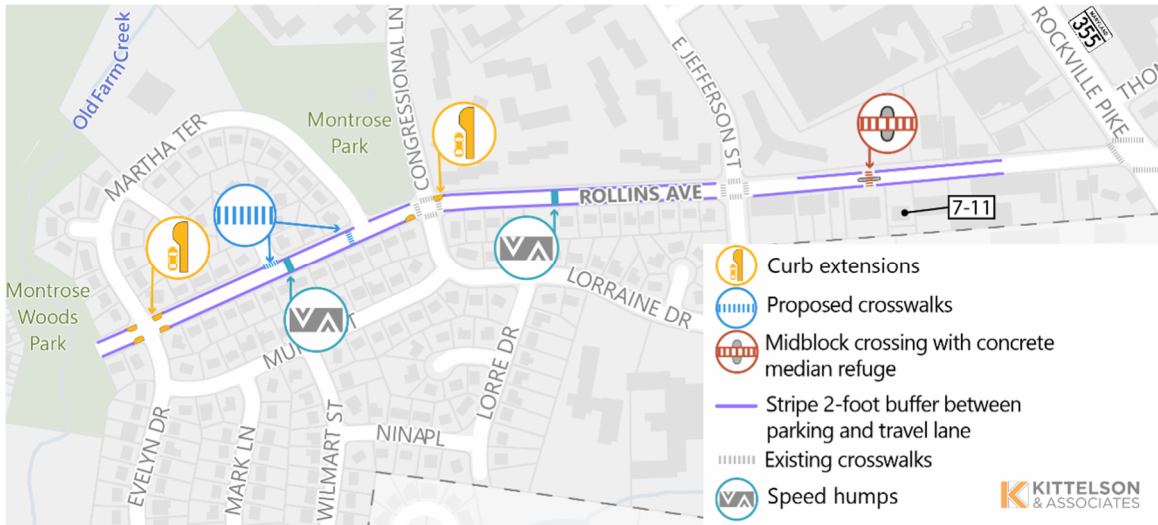


Figure 52. Option 2: Long-Term Safety Improvements

Source: Kittelson and Associates, Inc.

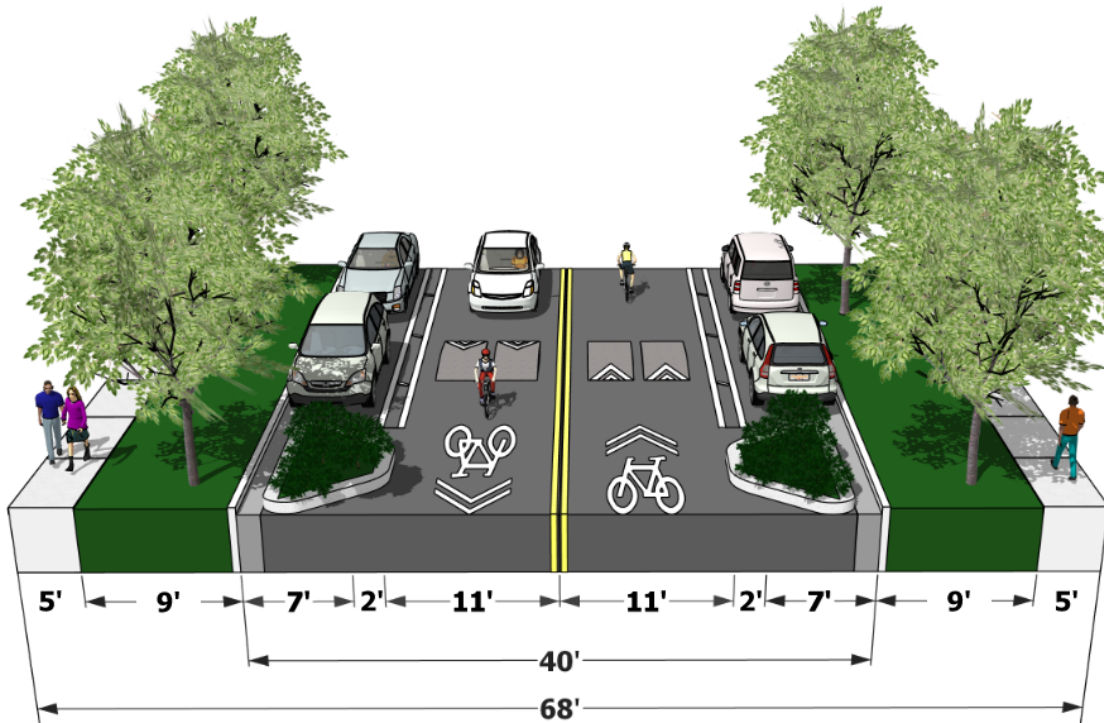


Figure 53. Option 2 Cross Section: Long Term Safety Improvements

Source: Kittelson and Associates, Inc.

7. ALTERNATIVES EVALUATION

This section compares and evaluates the two alternatives to quantify the impacts on multimodal safety, comfort for all transportation modes, and ability to create protected, comfortable, and low-stress multimodal facilities. The following section evaluates each alternative at a high level to determine:

- Pedestrian Stress and Comfort
- Bicycle Stress and Comfort
- Parking Impacts
- Drainage & Utility
- Cost
- Travel Impacts

Pedestrian Stress and Comfort

Pedestrian stress refers to the level of comfort and perceived safety experienced by pedestrians while traveling, influenced by factors such as traffic volumes and speeds, crossing distances, sidewalk width and condition, pedestrian-oriented amenities (e.g., shade, benches, lighting), intersection design, and the degree of separation from motor vehicles. Because every traveler is a pedestrian at some point in their journey, reducing pedestrian stress is essential to creating safe, accessible, and inviting environments. Improving pedestrian facilities and operating conditions can reduce perceived stress, lower crash risk, and encourage walking throughout the study intersections and surrounding area. Each of the recommended strategies outlined in the following sections is evaluated based on how well it reduces pedestrian stress. Each strategy is ranked based on the following pedestrian stress levels:

- **Major Improvement:** Strategy is anticipated to result in a major improvement in pedestrian stress, including safer, more comfortable walking conditions and reduced perceived and actual risk for people walking.
- **Moderate Improvement:** Strategy is anticipated to result in a moderate improvement in pedestrian stress, including moderately improved comfort and safety conditions for people walking.
- **Minor Improvement:** Strategy is anticipated to result in a minor improvement in pedestrian stress, including limited improvement in comfort or safety and continued exposure to higher perceived or actual risk for people walking.

Bicycle Stress and Comfort

Bicycle stress refers to the level of comfort and perceived safety experienced by bicyclists while traveling, influenced by factors such as traffic volumes, vehicle speeds, type and quality of bicycle facilities, intersection treatments, bicyclist-oriented amenities, and the degree of separation from motor vehicles. Because bicyclists are vulnerable roadway users, reducing stress is critical to encouraging safe and comfortable bicycling. Improving bicycle facilities and operating conditions can reduce perceived stress, lower crash risk, and create a more welcoming environment for people biking. Each of the recommended strategies outlined in the following sections is evaluated based on how well it reduces bicycle stress. Each strategy is ranked based on the following bicycle stress levels:

- **Major Improvement:** Strategy is anticipated to result in a major improvement in bicyclist stress, including safer, more comfortable conditions and reduced perceived and actual risk for people biking.
- **Moderate Improvement:** Strategy is anticipated to result in a moderate improvement in bicyclist stress, including moderately improved comfort and safety conditions for people biking.
- **Minor Improvement:** Strategy is anticipated to result in a minor improvement in bicyclist stress, including limited improvement in comfort or safety and continued exposure to higher perceived or actual risk for people biking.

Parking Impacts

Parking impacts measure the estimated effects of each alternative on parking supply and curbside access. Parking impacts assesses the removal or reconfiguration of on street or off-street parking spaces, changes in parking availability, and effects on parking circulation or convenience. The parking impacts for each strategy are ranked based on the following parking impact levels:

- **Low Impact:** Strategy is anticipated to result in minimal parking impacts, with little to no change in parking supply, access, or availability.
- **Moderate Impact:** Strategy is anticipated to result in moderate parking impacts, including a noticeable but manageable change in parking supply, access, or operations.
- **High Impact:** Strategy is anticipated to result in considerable parking impacts, including substantial removal or reconfiguration of parking spaces and greater effects on parking availability or operations.

Drainage & Utility

Drainage and utility considerations reflect the extent to which a recommended strategy affects existing curbs, stormwater infrastructure, and underground or overhead utilities. Modifications to curb lines, drainage patterns, stormwater inlets, and utility facilities can influence project feasibility, construction complexity, cost, and long-term maintenance. Each of the recommended strategies outlined in the following sections is evaluated based on its anticipated drainage and utility impacts. Each strategy is ranked based on the following drainage and utility impact levels:

- **Low Impact:** Strategy is anticipated to result in minimal or no modifications to existing curbs, stormwater facilities, or utilities, with limited effects on drainage, construction complexity, or cost.
- **Moderate Impact:** Strategy is anticipated to result in moderate modifications to curbs, stormwater facilities, or utilities, with manageable effects on drainage, construction complexity, and cost.
- **High Impact:** Strategy is anticipated to result in substantial modifications or relocations of curbs, stormwater facilities, or utilities, with greater impacts on drainage, construction complexity, cost, and long-term maintenance.

Cost

Costs are compared for each safety strategy and estimated using planning-level evaluation. The cost estimates provide a high-level estimate of the required fees associated with implementing or constructing each of the strategies. Each strategy is ranked based on the following costs:

- **Low Cost:** Alternative is anticipated to require less than \$500,000 to construct, implement, and/or advance.
- **Medium Cost:** Alternative is anticipated to require \$500,000 to \$1,000,000 to construct, implement, and/or advance.
- **High Cost:** Alternative is anticipated to require more than \$1,000,000 to construct, implement, and/or advance.

Travel Impacts

Travel impacts measure the estimated vehicular impact that results from each alternative. Travel impacts include queueing and travel time delays. The travel impacts for each strategy are ranked based on the following vehicle travel impacts:

- **Low Impact:** Strategy is anticipated to result in minimal travel impacts on drivers, resulting in a low travel impact.
- **Medium Impact:** Strategy is anticipated to result in moderate travel impacts on drivers, resulting in a medium travel impact.
- **High Impact:** Strategy is anticipated to result in considerable travel impacts on drivers, resulting in a high travel impact.

Table 14 details the traffic operations analysis for the two signalized intersections along the corridor:

- Rollins Avenue and E Jefferson Street
- Rollins Avenue and Rockville Pike (MD 355)

As shown in **Table 14**, the traffic operations result in minimal negative impacts to travel times along Rollins Avenue. The key impacts from the signal and signage improvements include:

- Rollins Avenue and East Jefferson Street:
 - **Rollins Avenue eastbound approach:** Little to no impact to approach operations.
 - **Rollins Avenue westbound left:** Reduction in delay and 95th percentile queues.
 - **Rollins Avenue westbound shared left-through-right:** Minor increase in LOS (LOS C to LOS D), delay, and 95th percentile queues.
 - **Rollins Avenue westbound approach:** Overall minor impacts. Approach level of service continues to operate acceptably with LOS D during both the AM peak and PM peaks.
 - **E Jefferson Street northbound:** Minor increase in LOS, delay, and 95th percentile queues. Approach level of service continues to operate acceptably with LOS B during the AM peak and LOS C during the PM peak.
 - **E Jefferson Street southbound:** Increase in LOS, delay, and 95th percentile queues. Approach level of service continues to operate acceptably with LOS C during the AM peak and LOS D during the PM peak.
- Rollins Avenue and Rockville Pike (MD 355)
 - Little to no impact on intersection operations.

The detailed Synchro output reports for the build scenario are provided in **Appendix E**.

Table 14. Existing and Build Traffic Operations Analysis

Intersection/ Control Type	Approach	Movement	Existing Synchro Analysis Results						Build Synchro Analysis Results					
			Delay (sec)	AM Peak LOS	95th % Queue length (ft)	Delay (sec)	PM Peak LOS	95th % Queue length (ft)	Storage Lengths (ft)	Delay (sec)	AM Peak LOS	95th % Queue length (ft)	Delay (sec)	PM Peak LOS
Rollins Avenue & East Jefferson Street (Signalized)	Rollins Avenue	EBL	36.7	D	17	38.4	D	15	38.7	D	18	39.1	D	15
		EBTR	37.3	D	35	41.3	D	52	38.0	D	21	44.3	D	54
	Rollins Avenue	EB Approach	37.2	D	-	41.0	D	-	38.3	D	-	43.7	D	-
		WBL	39.6	D	184	48.3	D	#374	46.1	D	#153	46.1	D	252
	East Jefferson Street	WBLTR	26.3	C	35	24.8	C	72	44.7	D	#147	54.3	D	#268
		WB Approach	36.9	D	-	43.0	D	-	45.4	D	-	50.2	D	-
	Overall Intersection	NBLT	11.7	B	213	21.5	C	#372	24.3	C	#276	45.9	D	#530
		NBR	1.7	A	63	2.5	A	119	12.8	B	96	14.7	B	134
		NB Approach	7.1	A	-	12.5	B	-	19.0	B	-	31.2	C	-
		SBLT	9.1	A	63	16.5	B	150	29.3	C	92	53.4	D	#225
Rollins Avenue	SBTR	9.1	A	-	16.5	B	-	29.3	C	-	53.4	D	-	
	SB Approach	15.9	B	-	23.2	C	-	28.0	C	-	42.1	D	-	
	EBTR	59.0	E	200	61.2	E	349	59.0	E	200	61.2	E	349	
	EB Approach	59.0	E	-	61.2	E	-	59.0	E	-	61.2	E	-	
Twinbrook Parkway	WBT	60.2	E	204	57.1	E	314	60.2	E	204	57.1	E	314	
	WBR	65.9	E	224	59.0	E	294	65.9	E	224	59.0	E	294	
	WB Approach	62.1	E	-	57.7	E	-	62.1	E	-	57.7	E	-	
	NBL	9.3	A	57	16.6	B	64	9.3	A	57	16.6	B	64	
Rockville Pike (Signalized)	NBT	13.8	B	257	26.9	C	473	13.8	B	257	26.9	C	473	
	NBR	11.5	B	35	20.9	C	129	11.5	B	35	20.9	C	129	
	NB Approach	13.1	B	-	25.5	C	-	13.1	B	-	25.5	C	-	
	SBL	8.8	A	83	50.3	D	#307	8.8	A	83	50.3	D	#307	
Overall Intersection	SBTR	13.6	B	290	19.2	B	394	13.6	B	292	19.3	B	394	
	SB Approach	13.0	B	-	24.1	C	-	13.1	B	-	24.1	C	-	
	WBR	24.8	C	-	34.1	C	-	24.8	C	-	34.1	C	-	
	WBT	24.8	C	-	34.1	C	-	24.8	C	-	34.1	C	-	

Summary of Alternatives Evaluation

Table 15 summarizes the high-level expected impacts for each of the two alternatives. Detailed cost and utility impacts will be determined in subsequent project phases.

Table 15. Summary of Alternatives Evaluation

Strategy	Option 1: Quick-Build Safety Improvements	Option 2: Long Term Safety Improvements
Pedestrian Stress	Moderate Improvement	Moderate Improvement
Bicycle Stress	Moderate Improvement	Moderate Improvement
Parking Impacts	Low Impact	Low Impact
Drainage & Utility	Low Impact	Moderate Impact
Cost	Low Cost (\$)	Medium Cost (\$\$)
Travel Impacts	Low Impact	Low Impact

8. PUBLIC OUTREACH

The City hosted a virtual public meeting on May 7th, 2026, to present the project's progress to the community and solicit input on the draft corridor concept designs. The presentation slides were provided online after the meeting and the City collected feedback on the concepts during the weeks following the meeting.

Appendix F provides the comments received by the community and the City's responses to each comment.

The following bullets summarize the feedback received:

- Primary concerns include speeding, traffic operations, parking conflicts, pedestrian safety
- Request for dedicated turn lanes on Jefferson Street approaches
- Request to minimize through traffic
- Request for speed humps, increased speed enforcement, and speed monitoring
- Strong desire to maintain parking on Rollins Avenue
- Concerns with vehicles blocking access points and limiting visibility
- Request to expand permit parking on both sides
- Request to restrict vehicle types (limit large trucks)
- Support for additional crosswalks
- Some opposition to sidewalk widening and curb extensions
- Mixed feedback on speed humps
- Recommended separated bicycle facilities
 - If infeasible, add traffic calming to supplement sharrows and "Bicycle May Use Full Lane" sign, consistent with MUTCD guidance.
- Center sharrows in travel lane
- Support for curb extensions
- Support for sidewalk widening
- Support for parking lane striping and buffer

9. NEXT STEPS

Based on the existing conditions analysis, alternatives evaluation, and public feedback, the city will carry out a multi-phased approach to advancing the recommended safety strategies and designing Rollins Avenue into a Complete Street to improve safety and comfort for all users. In the near term, the city will implement quick-build solutions detailed in Option 1: Quick-Build Safety Improvements as budget and staff capacity allow.

As a next step, the city will consider advancing additional traffic calming measures that require construction, additional design, and analysis, including:

- Upgrading the painted curb extensions and pedestrian median island to concrete to better reinforce pedestrian safety and comfort and
- Widening the sidewalks to meet PROWAG minimum standards.

This Study serves as the first step in identifying alternatives for Rollins Avenue to advance Complete Street principles and improve multimodal safety, comfort, and connectivity for all users. Following this Study, the City will continue to refine the alternatives and will work with the community to advance a preferred alternative to final design and implementation. The next steps in this Study are summarized below:

- Continuing public and stakeholder engagement;
- Coordinating with ongoing and adjacent efforts, including:
 - Flash BRT
 - Active projects on Congressional Lane, East Jefferson Street, and Halpine Road
- Developing detailed cost estimates for the corridor alternatives; and
- Securing funding for design and construction.