

# Carole Highlands

## SAFE MOBILITY STUDY



2024

# Abstract

<b>Date</b>	April 2024
<b>Title</b>	Carole Highlands Safe Mobility Study
<b>Author</b>	The Maryland-National Capital Park and Planning Commission
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The goal of the Carole Highlands Safe Mobility Study is to work in close partnership with local community and partner agencies—such as the Prince George’s County Department of Public Works and Transportation (DPW&T)—to develop design options that maximize safe mobility, support the Prince George’s County Vision Zero program and goals, and enhance access and connectivity to the Purple Line, University Boulevard, and other important community-identified destinations. This report describes existing conditions for mobility and access in Carole Highlands and provides recommendations for improving conditions.

*Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.*

# Carole Highlands

SAFE MOBILITY STUDY



2024

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION  
Prince George's County Planning Department

April 2024

By Toole Design Group, LLC, Torti Gallas + Partners, and Mercado Consultants, LLC  
for The Maryland-National Capital Park and Planning Commission

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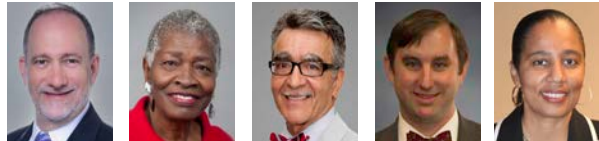
- The preparation, adoption, and, from time to time, amendment or extension of the General Plan for the physical development of the Maryland-Washington Regional District.
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# Table of Contents

<b>Introduction</b>	<b>10</b>
<b>Public and Stakeholder Engagement</b>	<b>13</b>
<b>Policy and Planning Context</b>	<b>19</b>
Policies	20
Countywide Plans	20
Local Plans	21
Construction Plans	21
<b>Study Area Profile</b>	<b>23</b>
People	24
Population	24
Race and Ethnicity	24
Age	24
Housing Units and Occupancy	24
Vehicle Ownership	24
Travel Behaviors	25
Land Use	26
Commercial Uses	26
Institutional Uses	26
Residential Uses	26
Natural Features and the Pepco Right-of-Way	27
Lighting	28
<b>Transportation</b>	<b>31</b>
Street Infrastructure	32
Street Network	32
Intersections	32
Pedestrian Infrastructure	33
Sidewalks	33
Crosswalks	34
Curb Ramps	35
Bicycle Infrastructure and Shared-Use Paths	36
Public Transportation Infrastructure	36

<b>Circulation and Access</b>	<b>41</b>
Pedestrian Circulation and Access	42
Bicycle Circulation and Access Needs	47
Public Transit Circulation and Access	49
Motor Vehicle Circulation and Access	49
<b>Safety</b>	<b>53</b>
Crashes	54
Crash Location	54
Location of Motor Vehicle KSI Crashes	54
Location of Pedestrian/Bicyclist KSI Crashes	56
Crash Types and Pre-Crash Movements	58
Traffic Safety Concerns	59
Speeding	59
Driver Yielding	60
Visibility	60
Personal Security Concerns	61
<b>Opportunities, Constraints, and Considerations</b>	<b>63</b>
Opportunities	64
Constraints and Considerations	65
<b>Recommendations</b>	<b>71</b>
Recommended Access and Connectivity Projects	72
Other Recommended Projects	88
<b>Appendices</b>	<b>103</b>
Appendix A: Project Management Kick-Off Meeting	104
Appendix B: Project Management Team Site Visit	108
Appendix C: Community Walk Audit	112
Appendix D: Carole Highlands Safe Mobility Project Summary Results	118
Appendix E: Key Plan Recommendations from Previous Plans	128
Appendix F: Public Right-of-Way Dimensions for Key Streets	132
<b>Acknowledgments</b>	<b>133</b>

# Table of Contents

## Figures

<b>Figure 1.</b>	Community walk audit on June 25, 2022.....	14
<b>Figure 2.</b>	Pedestrian access and safety improvement heat map.....	16
<b>Figure 3.</b>	Bicycle access and safety improvement heat map.....	17
<b>Figure 4.</b>	Summary results from community survey.....	24
<b>Figure 5.</b>	Summary results from community survey.....	25
<b>Figure 6.</b>	Carole Highlands Elementary School.....	26
<b>Figure 7.</b>	A northeast view of the Pepco right-of-way.....	27
<b>Figure 8.</b>	The Hannon Street goat connector trail.....	28
<b>Figure 9.</b>	Study area sidewalk affected by vegetative overgrowth.....	33
<b>Figure 10.</b>	Pedestrians cross uncontrolled crosswalks.....	34
<b>Figure 11.</b>	An example of a diagonal ramp on Riggs Road.....	35
<b>Figure 12.</b>	An example of a curb ramp without a detectable warning surface.....	35
<b>Figure 13.</b>	An example of inappropriate bike rack design.....	36
<b>Figure 14.</b>	Bikeshare station beyond the study area boundary.....	37
<b>Figure 15.</b>	Unkempt conditions at study area bus stop.....	37
<b>Figure 16.</b>	Carole Highlands students use informal Hannon Street connector trail.....	42
<b>Figure 17.</b>	Gate from the informal trail to Carole Highlands Elementary School.....	42
<b>Figure 18.</b>	Informal trail to commercial areas on University Boulevard.....	43
<b>Figure 19.</b>	Limited pedestrian access to University Boulevard retail shops.....	43
<b>Figure 20.</b>	Informal trail on the south side of University Plaza Shopping Center.....	43
<b>Figure 21.</b>	A post office at the shops near Holton Lane in the study area.....	45
<b>Figure 22.</b>	Missing sidewalk south of Hannon Street in the study area.....	45
<b>Figure 23.</b>	A bus stop on MD 410 (East West Highway) bereft of a controlled pedestrian crossing.....	45
<b>Figure 24.</b>	Sligo Creek Trail crossing at MD 410 (East West Highway).....	47
<b>Figure 25.</b>	Bridge over Sligo Creek on north side of (MD 410) East West Highway.....	47
<b>Figure 26.</b>	A bicycle commuter traveling west on Erskine Street.....	47
<b>Figure 27.</b>	A commuter departs a Metrobus at Riggs Road north of Drexel Street.....	49
<b>Figure 28.</b>	KSI Crashes by Year.....	54
<b>Figure 29.</b>	Pedestrians walking along MD 193 (University Boulevard) at 15th Avenue.....	58
<b>Figure 30.</b>	Variable message sign on Erskine Street at 16th Place.....	59
<b>Figure 31.</b>	Pedestrian safety message on MD 193 (University Boulevard) west of Riggs Road.....	60
<b>Figure 32.</b>	Turner Memorial AME church parking lot, a source of personal security concern.....	61
<b>Figure 33.</b>	The absence of lighting along the Hannon Street informal connector trail.....	61
<b>Figure 34.</b>	Purple Line construction vs business activity along MD 193 (University Boulevard).....	64
<b>Figure 35.</b>	Proposed shared-use path connects 15th Avenue to Holton Lane.....	65
<b>Figure 36.</b>	Aerial view of Quantum Properties land holdings.....	65
<b>Figure 37.</b>	Southerly view of Pepco right-of-way.....	66
<b>Figure 38.</b>	A bicyclist riding on a sidewalk adjacent to Riggs Road.....	68
<b>Figure 39.</b>	Proposed median reduction along Riggs Road.....	68
<b>Figure 40.</b>	An informal pathway connection at 18th Avenue and Hannon Street.....	69
<b>Figure 41.</b>	Shared-use path concept at Hannon Street to commercial areas.....	75
<b>Figure 42.</b>	Shared-use path concept at Hannon Street to Carole Highlands Elementary School.....	77
<b>Figure 43.</b>	Shared-use path concept at 15th Avenue to Holton Lane.....	79
<b>Figure 44.</b>	Missing sidewalks on Erskine Street between 15th Avenue and 16th Place.....	81
<b>Figure 45.</b>	Shared-use lane and sidewalk concept along Erskine Street: Part 1.....	82
<b>Figure 46.</b>	Sidewalk concept along Erskine Street: Part 2.....	83
<b>Figure 47.</b>	Intersection improvement concept at Erskine St/Drexel St/18th Ave: Part 3.....	84
<b>Figure 48.</b>	Bicycle repair station along Sligo Creek Trail.....	85
<b>Figure 49.</b>	Bicycle repair station signage.....	85
<b>Figure 50.</b>	Bicycle repair station identification.....	85
<b>Figure 51.</b>	Erskine/Drexel Street/18th Avenue intersection bereft of traffic-calming structure.....	87
<b>Figure 52.</b>	A traffic-calming mini roundabout.....	87



<b>Figure 53.</b>	A yield street Northwest Washington, D.C.....	100
<b>Figure 54.</b>	Bicycle and pedestrian signal heads in New York City .....	100
<b>Figure 55.</b>	Bicycle and pedestrian signal heads Bethesda, Maryland.....	100
<b>Figure 56.</b>	Flex posts at 13th and Upshur Streets, Northwest Washington, D.C.....	100
<b>Figure 57.</b>	Shared-use path and roadway street name sign blades in Minneapolis, MN .....	101
<b>Figure 58.</b>	Protected pedestrian lane on Grove Street in Silver Spring, MD .....	101
<b>Figure 59.</b>	Pedestrian crossing island on Franklin Avenue in Silver Spring, MD .....	101
<b>Figure 60.</b>	Mast arm-mounted street name sign in Herndon, VA.....	101

## Maps

<b>Map 1.</b>	Carole Highlands Context Map.....	11
<b>Map 2.</b>	Locations of Street Light Poles .....	29
<b>Map 3.</b>	Existing Pedestrian, Bicycle, and Public Transit Infrastructure .....	38
<b>Map 4.</b>	Key Existing Pedestrian Routes and Access Needs .....	46
<b>Map 5.</b>	Key Existing Bicycle Routes and Access Needs .....	48
<b>Map 6.</b>	Key Existing Public Transportation Transit Access .....	50
<b>Map 7.</b>	Key Existing Motor Vehicle Routes and Access Needs.....	51
<b>Map 8.</b>	Crash Density Map .....	55
<b>Map 9.</b>	Motor Vehicle KSI Crash Density.....	56
<b>Map 10.</b>	Pedestrian and Bicycle KSI Crash Density.....	57
<b>Map 11.</b>	Recommended Access and Connectivity Projects .....	73
<b>Map 12.</b>	Other Recommended Projects.....	89

## Appendices Figures

<b>Figure A1.</b>	A fence separates an informal trail from the Carole Highlands school grounds .....	113
<b>Figure A2.</b>	An informal goat trail connects Hannon Street to Carole Highlands Elementary School.....	114
<b>Figure A3.</b>	Survey Response Rates .....	118
<b>Figure A4.</b>	Response statistics: preferred survey response methods.....	118
<b>Figure A5.</b>	Response statistics: percentage of respondents that will remain engaged .....	118
<b>Figure A6.</b>	Response statistics: current travel methods.....	123
<b>Figure A7.</b>	Response statistics: preferred travel methods.....	123
<b>Figure A8.</b>	Response statistics: current travel methods in and around Carole Highlands.....	124
<b>Figure A9.</b>	Response statistics: preferred travel methods in and around Carole Highlands.....	125
<b>Figure A10.</b>	Response statistics: percentage of respondents that live in Carole Highlands.....	126
<b>Figure A11.</b>	Response demographics: race/ethnicity.....	126
<b>Figure A12.</b>	Response demographics: age.....	127
<b>Figure A13.</b>	Existing and Proposed Bikeways: 2015 Greater Chillum Community Study.....	131

## Tables

<b>Table 1.</b>	Study Area Arterial Streets, Speed Limit, Functional Classification, and AADT.....	32
<b>Table 2.</b>	Other Recommended Projects.....	90

## Additional Images

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# Introduction

Carole Highlands is a 212-acre community in northwestern Prince George's County located approximately one mile from the District of Columbia border and between the University of Maryland, College Park (UMD) campus and the City of Takoma Park. The community is bounded by MD 193 (University Boulevard) to the north, MD 410 (East West Highway) to the south, MD 212 (Riggs Road) to the east, and the Montgomery County line to the west (**Map 1**).

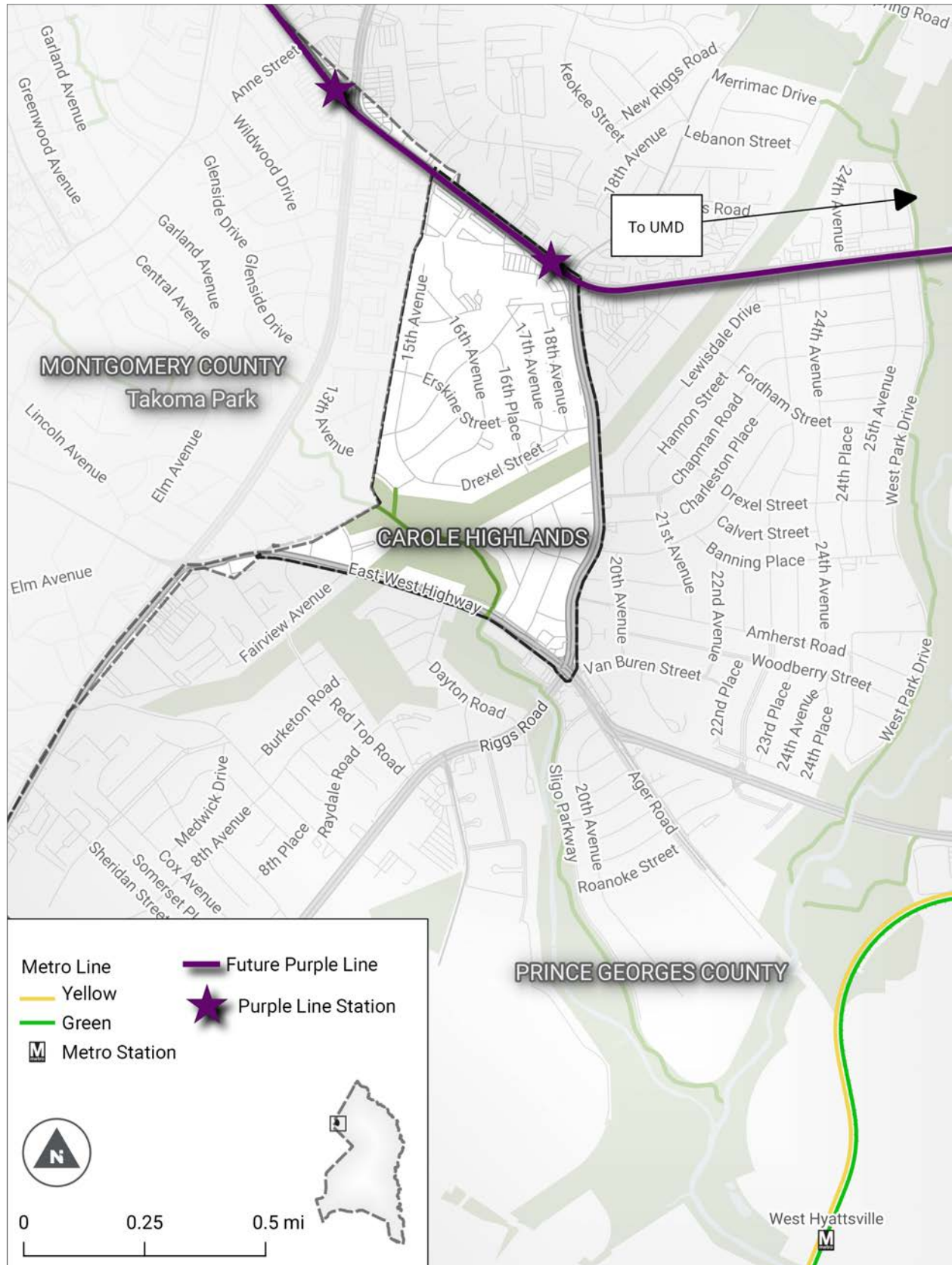
The goal of the Carole Highlands Safe Mobility Study is to work with the community and partner agencies to develop project recommendations that maximize safe mobility, and enhance access and connectivity to the Purple Line, University Boulevard, and other important community-identified destinations. One such partner agency—the Prince George's County Department of Public Works and Transportation (DPW&T)—manages the County's Vision Zero program.

This report describes existing conditions for mobility and access in Carole Highlands and provides recommendations for improving safety and access. The report includes:

- A description of the Carole Highlands study area
- A description of the stakeholder engagement activities and resulting feedback that informed this study process
- A description of the policy and planning context for the Carole Highlands study
- A profile of the Carole Highlands community, including people, land use, lighting, and natural features
- Maps and descriptions of existing transportation infrastructure, including street infrastructure, pedestrian infrastructure, bicycle infrastructure, shared-use paths, and public transportation
- Maps and descriptions of existing circulation and access needs for pedestrians, bicyclists, motorists, and public transit
- Maps and descriptions of traffic safety and personal security needs
- A description of opportunities, constraints, and other related considerations
- Project recommendations, including planning-level concept designs and cost estimates for the highest priority access and connectivity projects

The project recommendations target the affected operating agencies, namely, the Department of Public Works and Transportation, the Maryland Department of Transportation's State Highway Administration (MDOT SHA), and the Maryland-National Capital Park and Planning Commission (M-NCPPC) Department of Parks and Recreation. These operating agencies may accept, reject, or modify the project recommendations in this report. No timeline currently exists regarding decisions to implement the project recommendations. Operating agencies choosing to implement design option recommendations are expected to notify residents and other stakeholders consistent with their procedures.

**Map 1.** Carole Highlands Context Map





# Section 1

Public and Stakeholder  
Engagement

**This report is informed by several public and stakeholder engagement activities.**

- The project management team held a kick-off meeting on February 8, 2022. Notes from this meeting are in Appendix A.
- The project management team conducted a site visit and walk audit on April 8, 2022, at four key locations in the study area. The Site Visit Guide and observations from the tours are in Appendix B.
- The Project management team and Prince George's County Council Member Deni Taveras met on April 20, 2022, to discuss the project.
- The project management team joined Carole Highlands residents on June 25, 2022, for walking tours of the study area, followed by a meeting at the Turner Memorial African Methodist Episcopal (AME) Church on 16th Place (**Figure 1**). Three community members attended the meeting; two joined the walking tours. Minutes from the meeting and observations from the walking tours are in Appendix C.



**Figure 1.** Community walk audit participants gather at Turner Memorial AME Church before the walk audit, on June 25, 2022. (PHOTO BY TOOLE DESIGN GROUP)

- The project management team received 40 responses from an online community survey conducted from June 6 to July 8, 2022. The survey was delivered in English and Spanish and received two responses in Spanish. See **Figures 2** and **3** for heat maps showing areas where respondents indicated a desire for pedestrian and bicycle access and safety improvements. The red color on the maps illustrates locations most often identified by survey respondents. The orange, yellow, green, and blue colors indicate areas identified less frequently in descending order from orange to blue. Full summary results are in Appendix D.





**Figure 2.** Pedestrian access and safety improvement heat map





**Figure 3.** Bicycle access and safety improvement heat map



# Section 2

Policy and Planning Context

The context for this study is shaped by State of Maryland and Prince George's County policies, as well as Countywide plans, local plans, and construction plans. The following policies and plans were reviewed by the project team.

## Policies

- Prince George's County Landscape Manual (2010)
- Prince George's County Department of Public Works and Transportation Specifications and Standards for Roadways and Bridges (2012)
- Prince George's County Urban Street Design Standards (2017)
- Maryland Department of Transportation State Highway Administration Context Driven Guide (2020) Prince George's County Zoning Ordinance (2022)

## Countywide Plans

- Prince George's County *Approved Countywide Master Plan of Transportation* (2009)
- *Formula 2040: Functional Master Plan for Parks, Recreation, and Open Space* (2013)
- *Plan Prince George's 2035*, Prince George's County Approved General Plan (2014)
- *Approved Resource Conservation Plan: Countywide Functional Master Plan* (2017)
- Prince George's County Department of Parks and Recreation *Strategic Trails Plan* (2018)
- Prince George's County Vision Zero Action Plan (2019)
- 2022 Fiscal Year Approved CIP (Capital Improvement Program) Budget
- 2023 Fiscal Year Proposed CIP Budget
- Prince George's County Capital Roadway and Bridge Projects

## Local Plans

- *Langley Park-College Park-Greenbelt Approved Master Plan* (1989)
- *Takoma/Langley Crossroads Sector Plan*, Prince George's County (2009)
- *Purple Line Bicycle Hub Location Study* (2010)
- *Approved Historic Sites and Districts Plan* (2010)
- *Purple Line Corridor Access Study* (2011)
- *Takoma/Langley Crossroads Sector Plan*, Montgomery County (2012)
- *Greater Chillum Community Study* (2015)
- *Northern Gateway SPACeS PAMC Project 30% Design and Engineering Report* (2021)
- *Northern Gateway Wayfinding and Signage Study* (2021)
- *Langley Park Neighborhood Bicycle Boulevards* (2021)

## Construction Plans

- Purple Line Center Platform Typical Plans (2022)

Key plan recommendations are listed in Appendix E by location and topic with supporting maps where available.



# Section 3

Study Area Profile

## People

### POPULATION

The Carole Highlands study area has a population of 2,485 community members.<sup>1</sup>

### RACE AND ETHNICITY

Twenty-five percent of the population identify as African American, 12 percent identify as White, 3 percent identify as American Indian, 4 percent identify as Asian, 15 percent are two or more races, and 40 percent identify as another race alone. Almost 6 in 10 (59 percent) identify as Hispanic or Latino.

### AGE

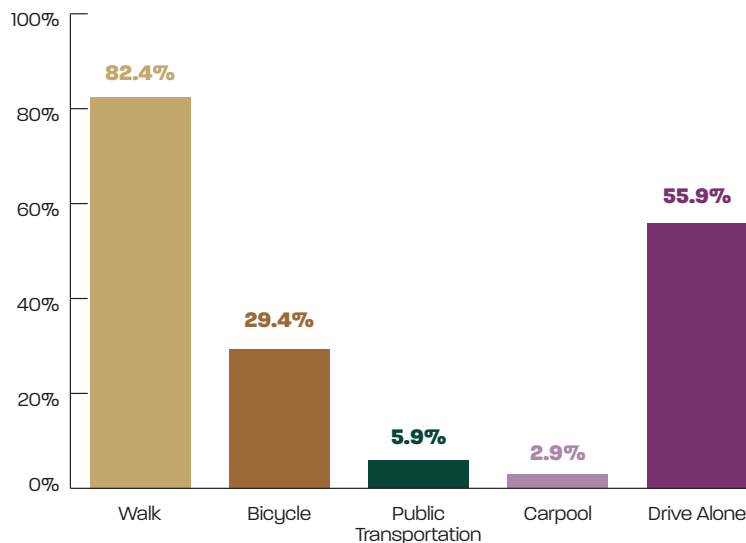
Of study area residents, 31 percent are under age 20 years old, 27 percent are between the ages of 20 and 39, 26 percent are between ages 40 and 59, and 15 percent are age 60 or older.

### HOUSING UNITS AND OCCUPANCY

Carole Highlands includes 809 housing units, 97 percent of which are occupied. Among occupied units, 67 percent are owner-occupied, and 33 percent are renter-occupied.

### VEHICLE OWNERSHIP

Vehicle ownership is more common in owner-occupied homes, with 92 percent of owner-occupied households having at least one vehicle and 65 percent having at least two vehicles. Of renter-occupied households in the study area, 70 percent own a vehicle.



**Figure 4.** Summary results from community survey of the most common way respondents travel between destinations inside Carole Highlands and destinations in adjacent areas.

<sup>1</sup> Data on population, race and ethnicity, age, housing units and occupancy, and vehicle ownership were provided by the Prince George's Planning Department from the 2019 ACS 5-Year Estimates.



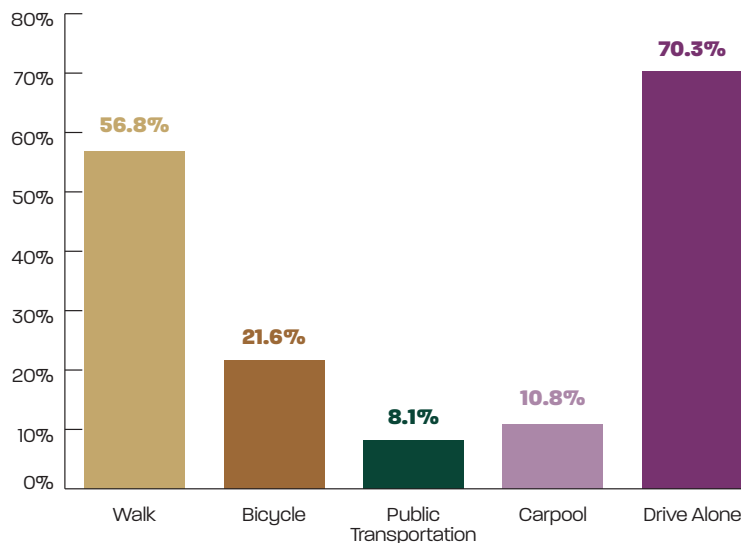
## Travel Behaviors

Of working-age residents in Carole Highlands, 76 percent commute to work by driving alone and 23 percent commute to work by public transportation. Of residents that use public transportation, 10 percent ride the bus, 10 percent use Metrorail, and 3 percent use commuter rail.<sup>2</sup> However, these numbers do not provide a complete picture of the travel behavior of residents in the study area.

According to the Metropolitan Washington Council of Governments (MWCOC), in Prince George's County, 75 percent of weekday trips are non-work related. These trips—which include trips to stores, trips to school, and trips for recreation—are typically shorter than commute trips, and are more likely to be completed by walking or bicycling.

Data for non-work trips are not available from the United States census or MWCOC for Carole Highlands; however, the Carole Highlands Safe Mobility Project Community Input Survey (hereinafter referred to as the survey) attempted to gain insight into non-work trips in the study area. When asked to select the top two modes of travel within Carole Highlands, more than 80 percent selected walk, half answered drive, and more than a quarter selected bike (**Figure 4**).

The survey also asked respondents to rank the top two modes of transportation they are likely to use when traveling within the Carole Highlands vicinity. More than two-thirds of respondents answered driving alone, 41.7 percent answered walking, 25 percent answered biking, and 16.7 percent indicated that they use public transportation (**Figure 5**).



**Figure 5.** Summary results from community survey of the most common way respondents travel between destinations within Carole Highlands.

<sup>2</sup> Data on commuting to work were provided by the Prince George's Planning Department from 2019 ACS 5-Year Estimates.

## Land Use

The Carole Highlands study area contains a range of land uses, including commercial, institutional, and residential.

### COMMERCIAL USES

Commercial activity in Carole Highlands is concentrated along University Boulevard, on Riggs Road near the intersection of University Boulevard, and on East West Highway near Riggs Road. Major commercial developments include:

The south side of University Boulevard within the study project boundary is part of the International Corridor, recognized for the businesses and residences serving a community with immigrant roots, primarily from Latin America. There are numerous businesses located along University Boulevard at the northern edge of Carole Highlands. This varied business mix includes ethnic restaurants, grocery, furniture, jewelry, and specialty stores, as well as dental, legal and other professional services providers.

This commercial area is extremely automobile oriented and separated from the sidewalk by parking lots. While these businesses are relatively accessible to pedestrians who live in the Langley Park community on the north side of University Boulevard, access by walking or bicycling for Carole Highlands residents to the University Boulevard corridor is difficult at best due to topography and the lack of proper accessible facilities.

### INSTITUTIONAL USES

Institutional uses include Carole Highlands Elementary School and Turner Memorial AME Church.

- Carole Highlands Elementary School is on Hannon Street east of 16th Avenue in the north-central portion of the neighborhood. The school serves approximately 500 students. Over 80 percent of students identify as Hispanic or Latino. 14.1 percent identify as Black or African American, 1.7 percent identify as Asian or Asian/Pacific Islander, and 0.6 percent identify as White. Approximately 60 percent of students travel by school bus, 20 percent by personal vehicle, and 20 percent of students walk to school. There are currently seven bus routes that serve the school.
- Turner Memorial AME Church, located on 16th Place between Erskine Street and Drexel Street is a place of worship and located in Carole Highlands.
- Langley Park Multi-Service Center, located at 1401 University Boulevard within La Union Mall, houses several social service providers including the Prince George's County Health, Social Services, and Family Services departments and the Economic Development Corporation.

### RESIDENTIAL USES

Residential uses occupy the bulk of the study area. Multi-family residential dwellings are concentrated in the Riggs Park Estates section of Carole Highlands, in the study area's northeastern corner. Single-family residential is the dominant land use elsewhere in the vicinity and is divided into three neighborhoods: one neighborhood north of the Pepco right-of-way (Carole Highlands), and two neighborhoods south of the Pepco right-of-way (Riggs Park Estates and Park Lawn).



**Figure 6.** Carole Highlands Elementary School.  
(PHOTO BY TOOLE DESIGN GROUP)



**Figure 7.** A northeast view of the Pepco right-of-way. (PHOTO BY M-NCPPC)

## Natural Features and the Pepco Right-of-Way

Carole Highlands is on the fall line between the Coastal and Piedmont areas of the Atlantic seaboard and has hilly topography, which can present a challenge for bicyclists. The result is curved, sloped streets that can be difficult to retrofit with sidewalks and can obstruct visibility and sight lines between street users.

Sligo Creek runs through the southern end of the study area. It is a beautiful natural area with forested sections on both sides. The creek is both an attraction and a barrier. The Sligo Creek Trail provides access along the creek and connections to a vast network of trails in Prince George's County and the Washington, D.C. metropolitan area, as well as to numerous nearby destinations, including the West Hyattsville Metrorail Station, Takoma Park, and Silver Spring.

However, there are only two connections to the trail within the study area, one via a spur from Sligo Parkway and one via the trail's intersection with East West Highway.

The Pepco right-of-way crosses Sligo Creek at a diagonal angle and is also both an attraction and a barrier within the study area. The meadow bordering the Pepco power lines is home to a variety of bird and animal species; however, except the Sligo Creek Trail, the right-of-way includes no formal trail or street connections across or along it. In the southeastern corner of the study area the Pepco right-of-way effectively isolates the Riggs Park Estates and Park Lawn neighborhoods from the rest of Carole Highlands.

## Lighting

Within the study area, streetlights exist on both sides of streets at regular increments, however there is no lighting on the Sligo Creek Trail or along informal trails within the study area. Most streetlights are high pressure sodium vapor (HPS) lighting, with some mercury vapor (MV) lighting as well. See **Map 2** for the location of streetlight poles.



**Figure 8.** The Hannon Street goat connector trail is one of the informal paths in the study area that needs lighting and pavement. (PHOTO BY M-NCPPC)

Map 2. Locations of Streetlight Poles





# Section 4

## Transportation

## Street Infrastructure

### STREET NETWORK

The study area street network is characterized by an arterial street network on the periphery and a local street network within the interior, with few connections between the two. This is especially true in the portion of the study area north of the Pepco right-of-way, which is connected to the arterial network via Erskine and Drexel Streets. Erskine Street includes speed management features such as speed humps to discourage cut-through traffic and speeding.

**Table 1** below provides a list of study area arterials, with the number of through lanes, speed limit, and Annual Average Daily Traffic (AADT)<sup>3</sup> volumes for segments in the study area.

The speed limit on all other streets in the study area is 25 miles per hour.

### INTERSECTIONS

There are four signalized intersections within the study area:

- University Boulevard and 15th Avenue
- University Boulevard and Riggs Road
- Riggs Road and Drexel Street
- Riggs Road and East West Highway

There are notable all-way stop-sign-controlled intersections at Erskine Street and 15th Avenue and Erskine Street and 16th Avenue. Most other intersections are controlled by two-way stop signs.

**Table 1.** Study Area Arterial Streets, Speed Limit, Functional Classification, and AADT

Street Name	Functional Classification	Number of Through Lanes	Speed Limit	AADT 2018F	AADT (Current)
University Boulevard	Principal Arterial	6	35	38,880	33,831
East West Highway	Principal Arterial	4	30	23,402	18,851
Riggs Road	Minor Arterial	6	35	39,721	33,173

<sup>3</sup> Data are from MDOT SHA Statewide AADT Lines. The year of "AADT (Current)" is not provided.



## Pedestrian Infrastructure

### SIDEWALKS

Sidewalks are present on both sides of all arterial roadways and on all streets in the Riggs Park Estates and Park Lawn neighborhoods, except for a small gap on the north side of Avalon Place near 17th Avenue. From 16th Place eastward, sidewalks are mostly present in the northeastern corner of the neighborhood, although none of the sidewalks directly connect to the commercial areas or sidewalks on University Boulevard and Riggs Road. There are also notable gaps in the following areas:

- The east side of 18th Avenue near Hannon Street and on the north side of Hannon Street near 18th Avenue
- The south side of Erskine Street between 16th Place and 18th Avenue
- The south side of Drexel Street between 16th Place and 18th Avenue

In addition, there is a sidewalk on the east side of 16th Avenue north of Elson Street, and a sidewalk on the north side of Hannon Street between 16th Avenue and 15th Avenue.

According to the Prince George's County Planning Department and confirmed via field observation, all sidewalks in the Carole Highlands study are too narrow for pedestrian safety and do not meet the County's standard width of 5 feet. The narrow sidewalks make it difficult for pedestrians to walk side by side or to pass pedestrians on the sidewalk. Narrow sidewalks are particularly uncomfortable for pedestrians on Riggs Road and University Boulevard where motor vehicle speed is high. On these roads, there is little to no buffer from motor vehicle traffic, there are a substantial number of heavy vehicles, and some segments are overgrown with vegetation.

Additionally, where driveways cross sidewalks, the sidewalk cross-slope often appears to exceed the 2 percent maximum cross-slope established in the United States Access Board's proposed Public Right-of-Way Accessibility Guidelines (PROWAG).



**Figure 9.** Vegetative overgrowth on this sidewalk at Riggs Road near University Boulevard causes a narrow walkway. (PHOTO BY TOOLE DESIGN GROUP)

## CROSSWALKS

Marked crosswalks exist at three of the four signalized intersections in the study area but are missing at University Boulevard and 15th Avenue, where the intersection was recently repaved.

There are marked crosswalks at two uncontrolled intersections on East West Highway: one at the Sligo Creek Trail crossing and another at Olson Road. Several intersections in the interior of the study area are likely to be used by students accessing Carole Highlands Elementary School, including intersections on 16th Place and 16th Avenue.

Most crosswalk markings are standard markings with two parallel lines in the direction of pedestrian travel. There are also high-visibility “ladder-style” and continental crosswalks at:

- University Boulevard and Riggs Road (across slip lanes on south side of intersection)
- Riggs Road and Drexel Street
- Riggs Road and East West Highway
- East West Highway and Sligo Creek Trail crossing
- East West Highway and Olson Road (across East West Highway)
- Erskine Street and 16th Avenue
- Erskine Street and 16th Place

At some locations, crosswalk markings are not provided on all crosswalk legs. A notable example is the intersection of Riggs Road and Drexel Street, where there is a marked crosswalk across the south leg



**Figure 10.** Pedestrians seen crossing University Boulevard at 15th Avenue without a marked crosswalk. (PHOTO BY M-NCPPC)

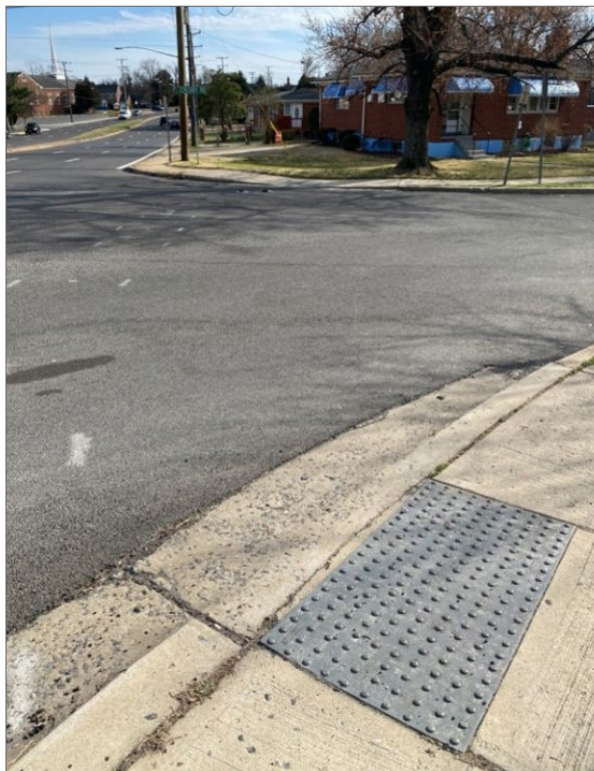
of the intersection but not across the north leg. The north leg is better aligned with the bus stops and multifamily housing near this intersection, which results in pedestrians often choosing to cross at the north leg where there are no crosswalk markings.

### CURB RAMPS

Curb ramps exist at most intersections where sidewalks are present; however, some do not align with the crosswalks they serve (**Figure 11**). Misaligned curb ramps prevent people that are vision-impaired from comfortably entering the crosswalk. Misaligned curb ramps force people that use wheelchairs and strollers to go into motor vehicle travel lanes to access the crosswalk.

Most curb ramps have detectable warning surfaces except for the following locations:

- Driveway entrances to University Plaza West and Hechinger Plaza Shopping Center on University Boulevard
- 18th Avenue and Erskine Street (both ramps)
- 17th Avenue and Erskine Street (both ramps)
- 16th Place and Elson Street (curb ramp on west side of Elson)
- 17th Avenue and Amherst Road (both ramps) (**Figure 12**)
- Crosby and Amherst Road (both ramps)



**Figure 11.** A curb ramp that improperly feeds a crosswalk near Riggs Road in the study area. (PHOTO BY TOOLE DESIGN GROUP)



**Figure 12.** A curb ramp at 17th Avenue and Amherst Road has no detectable warning surface. (PHOTO BY TOOLE DESIGN GROUP)

## Bicycle Infrastructure and Shared-Use Paths

The study area includes a section of the Sligo Creek Trail, a hard-surface shared-use path that runs along Sligo Creek at the southern end of the study area. There are no other bicycle facilities in the study area; however, separate bike lanes/cycle tracks are planned along University Boulevard with the development of the Purple Line.

There are two Capital Bikeshare docks near the study area: one in front of the Takoma Recreation Center on New Hampshire Avenue, and another in front of the Papa John's Pizza store on the south side of East West Highway near Riggs Road.

A wave (also known as a ribbon) bicycle rack along with a bicycle parking sign has been placed near the southeast corner of 15th Avenue and University Boulevard on private property (**Figure 13**). Bicyclists prefer something other than this type of bicycle rack because, if used as intended, the rack does not provide sufficient support for bicycle frames. Further, its location is on the edge of the parking lot, away from the entrances of the stores, which means it is unlikely to be used by store patrons traveling by bicycle. Short-term bicycle parking should ideally be closer to store entrances rather than the nearest motor vehicle parking space.



**Figure 13.** This inappropriate bike rack design falls short of County specifications. (PHOTO BY M-NCPPC)

## Public Transportation Infrastructure

The study area is served by several Metrobus lines. The C2, C4, F8, and J4 lines serve stops along University Boulevard; the C4 and R1 bus lines serve Riggs Road; and the F4 bus line has stops along East West Highway. Adjacent to the study area, Metrobus K6 runs along New Hampshire Avenue.

The study area is also served by Route 18 of the County's TheBus and the University of Maryland's Shuttle-UM, both of which have stops on University Boulevard. Most bus stops lack shelters and benches. There is only one bus stop with a shelter in the study area; it is located in front of Hechinger Plaza on University Boulevard. There are two additional bus stops with shelters adjacent to the Carole Highlands study area. One is on the north side of University Boulevard; the other is on the south side of East West Highway.

See **Map 3** for an illustration of existing pedestrian, bicycle, and public transit infrastructure.



**Figure 14.** A Capital Bikeshare station adjacent to a bus stop shelter, just beyond the study area boundary. (PHOTO BY M-NCPPC)



**Figure 15.** The only sheltered bus stop in Carole Highlands has missing glass panels and overflowing trash receptacles. (PHOTO BY M-NCPPC)

**Map 3. Existing Pedestrian, Bicycle, and Public Transit Infrastructure**





Students and caregivers emerge from the Hannon Street informal trail after dismissal from Carole Highlands Elementary School. (PHOTO BY M-NCPPC)





# Section 5

Circulation and Access

## Pedestrian Circulation and Access

Pedestrian circulation is concentrated on streets with sidewalks and on key access routes to Carole Highlands Elementary, the University Boulevard commercial area, public transit stops, and the Sligo Creek Trail.

### PEDESTRIAN ACCESS BETWEEN HANNON STREET/17TH AVENUE INTERSECTION AND CAROLE HIGHLANDS ELEMENTARY SCHOOL

Many Carole Highlands Elementary School students come from the Riggs Hill Condominiums and use the Hannon Street goat path connection between the intersection at Hannon Street and 17th Avenue and the elementary school (**Figure 16**). Although it is possible to access the school from the Riggs Hill condominiums via sidewalks on Elson Street and 16th Avenue, this route is significantly longer for most Riggs Hill residents, so many prefer to use the informal path connection to access the school.

A gate providing access to the school from the trail was temporarily closed, but later reopened following complaints from parents of students attending the school (**Figure 17**).



**Figure 16.** Students return from school through the informal Hannon Street goat connector trail. (PHOTO BY M-NCPPC)



**Figure 17.** A gate from an informal trail allows access to Carole Highlands Elementary School. (PHOTO BY TOOLE DESIGN GROUP)

### PEDESTRIAN ACCESS BETWEEN THE 18TH AVENUE/HANNON STREET INTERSECTION AND UNIVERSITY BOULEVARD, RIGGS ROAD

The commercial areas and public transit stops on University Boulevard are key destinations for pedestrians in Carole Highlands. However, there are no convenient, accessible pathways or sidewalks to these destinations.

Many residents use the informal paths that connect to these areas from locations near the intersection of 18th Avenue and Hannon Street (**Figures 18–20**). This informal trail is split between County property and commercial property. However, the Riggs Hill Condominiums recently installed a fence that presents a challenge for pedestrians attempting to reach the path that connects to Hechinger Plaza. The remaining path options are steep and laced with tree roots. One resident observed an older adult pedestrian fall while traversing the path. The pedestrian was unable to stand up without assistance from a neighbor. An accessible path from 18th Avenue and Hannon Street would provide much more convenient access for Carole Highlands residents to the future Riggs Road Purple Line Station.



**Figure 18.** An informal trail from the Hannon Street and 18th Avenue intersection allows access to commercial areas on University Boulevard. (PHOTO BY M-NCPPC)



**Figure 19.** A fence limits pedestrian access from 18th Avenue and the Hannon Street goat trail to the University Boulevard retail shops. (PHOTO BY M-NCPPC)



**Figure 20.** An informal trail is seen from a parking area on the south side of the University Plaza Shopping Center. (PHOTO BY M-NCPPC)

## **PEDESTRIAN ACCESS BETWEEN HOLTON LANE AND UNIVERSITY BOULEVARD VIA 15TH AVENUE**

Fencing blocks a potential access point between 15th Avenue and Holton Lane, where a United States Post Office, a grocery store, and other destinations are located. This would be a logical route for Carole Highlands residents to access the Takoma Langley Crossroads Transit Center and adjacent future Takoma-Langley Purple Line Station.

### **SIDEWALK NEEDS**

Community members have requested sidewalks on:

- Erskine Street (**Figure 44**)
- Drexel Street
- 15th Avenue
- 15th Place
- 16th Avenue south of Elson Street
- 18th Avenue south of Hannon Street on the east side (**Figure 22**)
- Hannon Street west of 18th Avenue on the north side
- Elson Street south of 16th Avenue
- Delmont Lane

Community members also reported concerns about the narrow, unbuffered sidewalks on Riggs Road, and vegetative overgrowth into the sidewalk along the Pepco right-of-way and on the west side of Riggs Road south of University Boulevard.

### **PEDESTRIAN CROSSING NEEDS**

Community members reported concerns about pedestrian crossing conditions at the following intersections:

- 16th Avenue and Hannon Street
- 16th Avenue and Elson Street
- Erskine Street and 15th Avenue
- Erskine Street and Elson Street
- Erskine Street and 16th Avenue
- Erskine Street and 16th Place
- Erskine Street and 17th Avenue
- Erskine Street, Drexel Street, and 18th Avenue
- East West Highway and Riggs Road
- East West Highway and Chillum Manor Road
- East West Highway and Fairview Avenue
- University Boulevard and Riggs Road
- Drexel Street and Riggs Road

The crossing concerns at the intersections of East West Highway and Chillum Manor Road and East West Highway and Fairview Avenue (**Figure 23**) relate to the bus stops at these locations and the lack of safe and convenient pedestrian crossings across East West Highway. See **Map 4** for an illustration of key existing pedestrian routes and access needs, including bus stops on arterial roadways that are more than 300 feet from a signalized crossing.



**Figure 21.** Some Carole Highlands residents would like a shared-use path between 15th Avenue and Holton Lane to access the Holton Lane shops, post office, and other areas. (PHOTO BY M-NCPPC)



**Figure 22.** The east side of 18th Avenue south of Hannon Street lacks a sidewalk. (PHOTO BY TOOLE DESIGN GROUP)



**Figure 23.** A bus stop on East West Highway at Fairview Avenue is not located near a controlled crossing location. (PHOTO BY TOOLE DESIGN GROUP)

**Map 4. Key Existing Pedestrian Routes and Access Needs**



## Bicycle Circulation and Access Needs

Bicycle circulation is focused on the Sligo Creek Trail and the connecting spur trail from Sligo Creek Parkway. Bicyclists also use Erskine Street to travel through the neighborhood and between Takoma Park and the University of Maryland campus.

Bicyclists avoid the arterial roadways on the edges of the study area because of a lack of dedicated space for them and the speed and volume of motor vehicles. When cyclists choose to travel on these roads, they often ride on the sidewalks because they are intimidated by roadway traffic. Cycling on a sidewalk presents a safety hazard for pedestrians and cyclists; narrow sidewalks often lack a buffer that separates pedestrian and bicycle commuters from motor vehicle traffic. This can create conflicts with pedestrians walking on sidewalks, and with motorists at intersections.

Community members reported concerns about bicyclist crossing conditions where the Sligo Creek Trail crosses MD 410 (East West Highway) (**Figure 24**). In addition, community members noted that temporary plywood acting as ramp access to a bridge over Sligo Creek north of East West Highway is in poor condition due to rot (**Figure 25**). The Department of Parks and Recreation staff reported that these ramps have been replaced with interim ramps while awaiting additional work for permanent repair.

Finally, community members requested a bicycle repair station on the Sligo Creek Trail and bicycle access through the neighborhood to the commercial areas on University Boulevard (see **Figures 48-50**).

See **Map 5** for an illustration of key existing bicycle routes and access needs.



**Figure 24.** Sligo Creek Trail crossing at MD 410 (East West Highway). (PHOTO BY M-NCPPC)

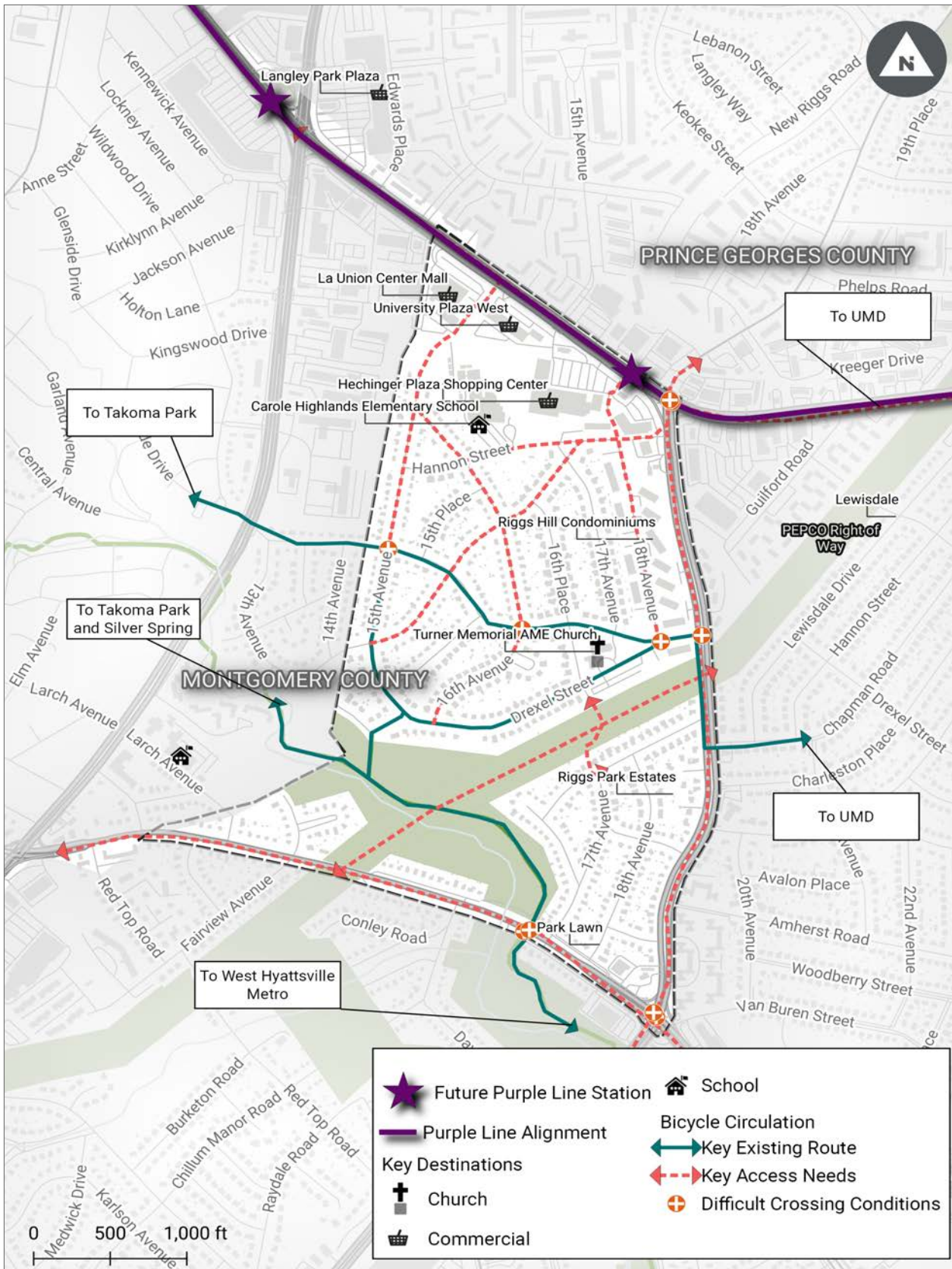


**Figure 25.** A bridge crosses Sligo Creek on the north side of MD 410 (East West Highway). (PHOTO BY TOOLE DESIGN GROUP)



**Figure 26.** A bicycle commuter travels westbound in the 1700 block of Erskine Street. (PHOTO BY M-NCPPC)

**Map 5. Key Existing Bicycle Routes and Access Needs**





## Public Transit Circulation and Access

Public transit circulation is limited to arterial roadways at the edge of Carole Highlands, including University Boulevard, Riggs Road, East West Highway, and New Hampshire Avenue.

- University Boulevard is served by the C2, C4, F8, and J4 Metrobus lines, the number 18 line of Prince George's County TheBus, and Shuttle UM. The future Purple Line will also travel down University Boulevard.
- Riggs Road is served by the C4 and R1 Metrobus lines.
- East West Highway is served by the F4 Metrobus line.
- New Hampshire Avenue is served by the K6 and K9 Metrobus lines.

No public transit buses travel through Carole Highlands' interior. See **Map 6** for an illustration of existing public transit routes.

## Motor Vehicle Circulation and Access

Motor vehicle circulation is concentrated on the arterial roadways surrounding Carole Highlands and on Erskine Street, which is used by some drivers as a shortcut between Riggs Road and New Hampshire Avenue. In addition, there is a motor vehicle circulation pattern associated with arrival and dismissal at Carole Highlands Elementary School that includes 16th Avenue, Hannon Street, and 15th Avenue.

Community members reported a need for an electric vehicle charging station within the Carole Highlands study area and a need for intersection improvements at several locations, including the University Boulevard/Riggs Road intersection and the Erskine Street/Drexel Street/18th Avenue intersection. One community member requested that the speed humps on Erskine Street be removed.

See **Map 7** for an illustration of key existing motor vehicle routes and access needs.

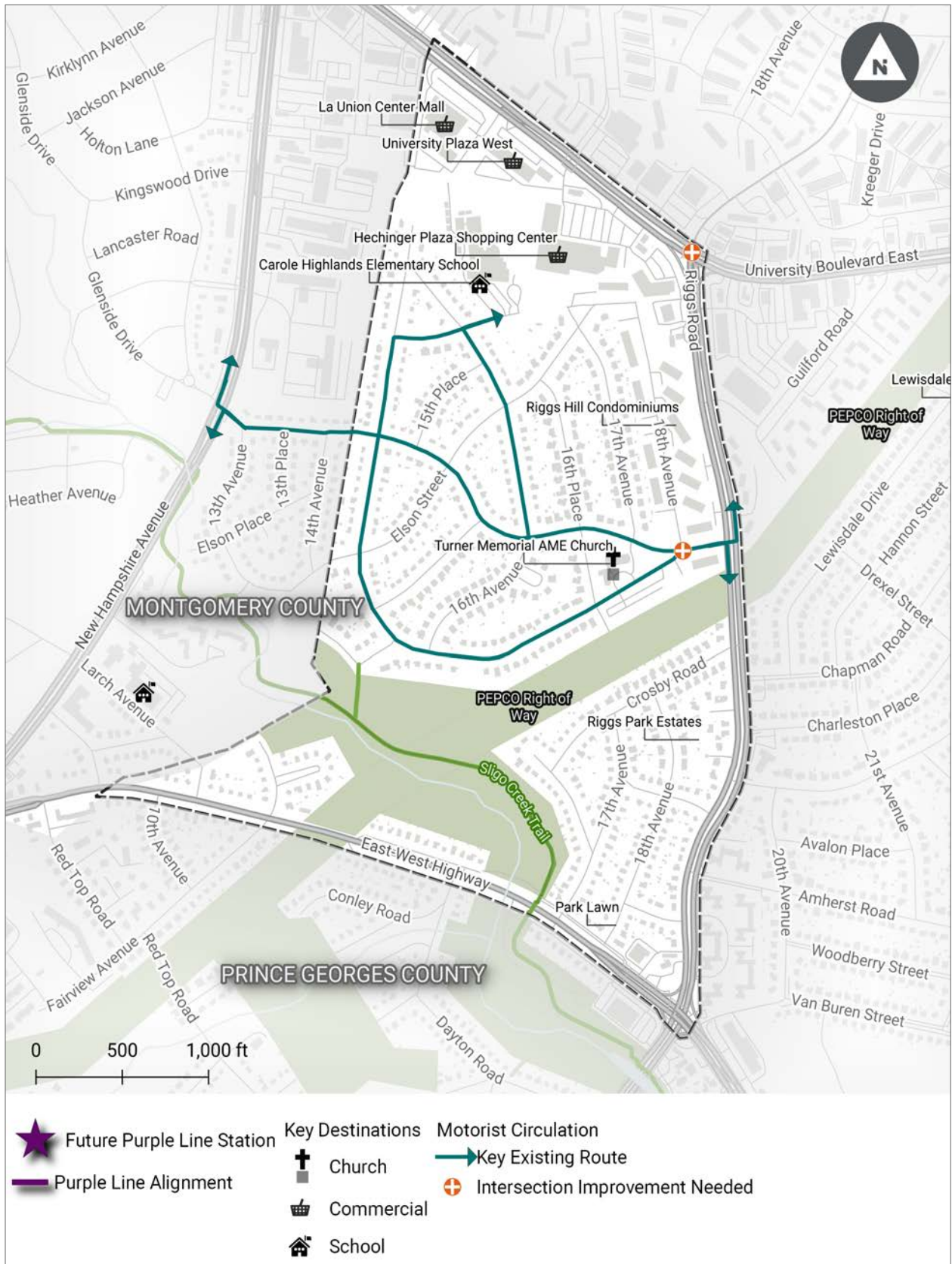


**Figure 27.** A commuter departs a Metrobus at Riggs Road north of Drexel Street. (PHOTO BY M-NCPPC)

**Map 6. Key Existing Public Transportation Transit Access**



Map 7. Key Existing Motor Vehicle Routes and Access Needs





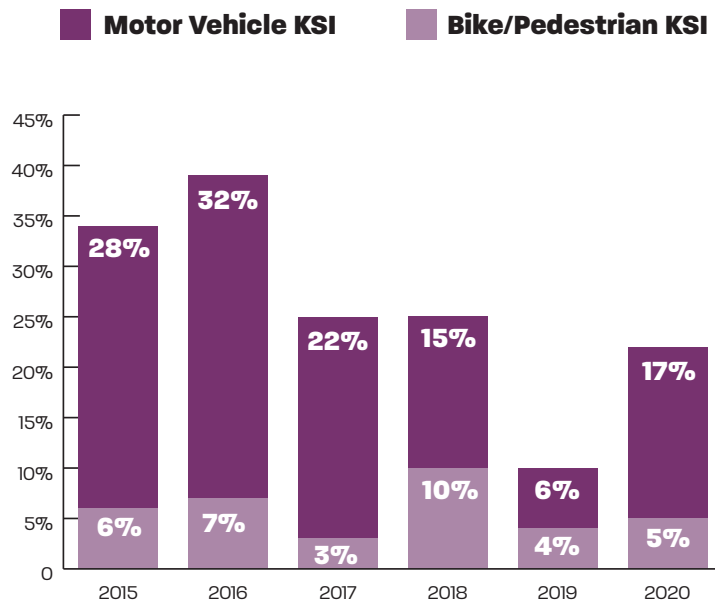
# Section 6

## Safety

## Crashes

Over a 6-year period, from 2015 to 2020, there were 679 reported crashes in the study area. Of the reported crashes in the study area, 644 involved only motorists and 35 involved a motorist and a pedestrian or bicyclist.<sup>4</sup> Twenty-three percent of all crashes resulted in a person being killed or seriously injured (KSI), including 19 percent of crashes involving only motorists and 89 percent of crashes involving a pedestrian or bicyclist and a motorist. In the case of crashes involving a pedestrian or bicyclist and a motorist, the victim was always the pedestrian or bicyclist.<sup>5</sup>

Overall, KSI crashes trended down from 2015 to 2020 (**Figure 28**), with the highest number of KSI crashes (39) occurring in 2016. However, pedestrian and bicyclist crashes have not followed this downward trend, with the peak year occurring in 2018.



**Figure 28.** KSI Crashes by Year

## CRASH LOCATION

Crashes are concentrated on the arterial roadways surrounding Carole Highlands, particularly at the intersections of MD 193 (University Boulevard) and MD 212 (Riggs Road), University Boulevard and 15th Avenue, and Riggs Road and East West Highway. Comparatively few crashes occurred on neighborhood streets within Carole Highlands. Seven of the neighborhood crashes, one-third of the total, occurred at the Erskine Street, Drexel Street, and 18th Avenue intersection. There were also three crashes at 18th Avenue and Hannon Street, three crashes on 15th Avenue north of 16th Avenue, two crashes at 16th Place and Drexel Street, and three crashes at Erskine Street and 15th Avenue. See **Map 8** for additional detail on where crashes are concentrated in the study area.

## LOCATION OF MOTOR VEHICLE KSI CRASHES

Motor vehicle KSI (killed or seriously injured) crashes follow the pattern for overall crashes, with 25 motor vehicle KSIs at the University Boulevard/Riggs Road intersection, 15 motor vehicle KSIs at the Riggs Road/East West Highway intersection, and 13 KSIs at the University Boulevard/15th Avenue intersection. In addition, there were 29 motor vehicle KSIs on Riggs Road between University Boulevard and East West Highway and 25 motor vehicle KSIs on East West Highway between Riggs Road and the Montgomery County line. Only two motor vehicle KSIs occurred on streets in the interior portion of the Carole Highlands study area (at the intersection of Erskine Street, Drexel Street, and 18th Avenue and along Sligo Parkway East).

See **Map 9** for additional detail on where motor vehicle KSI crashes are concentrated in the study area. The heat map indicates the density of crashes in locations throughout the study area. Those points illustrated on the map by a black dot and a number symbolize locations where there have been at least one KSI crash. A black dot without a number indicates there was only one KSI crash.

<sup>4</sup> Pedestrians and bicyclists are not distinguished in the crash data.

<sup>5</sup> Data are from MDOT SHA.

**Map 8. Crash Density Map (All Modes, All Levels of Crash Severity)**



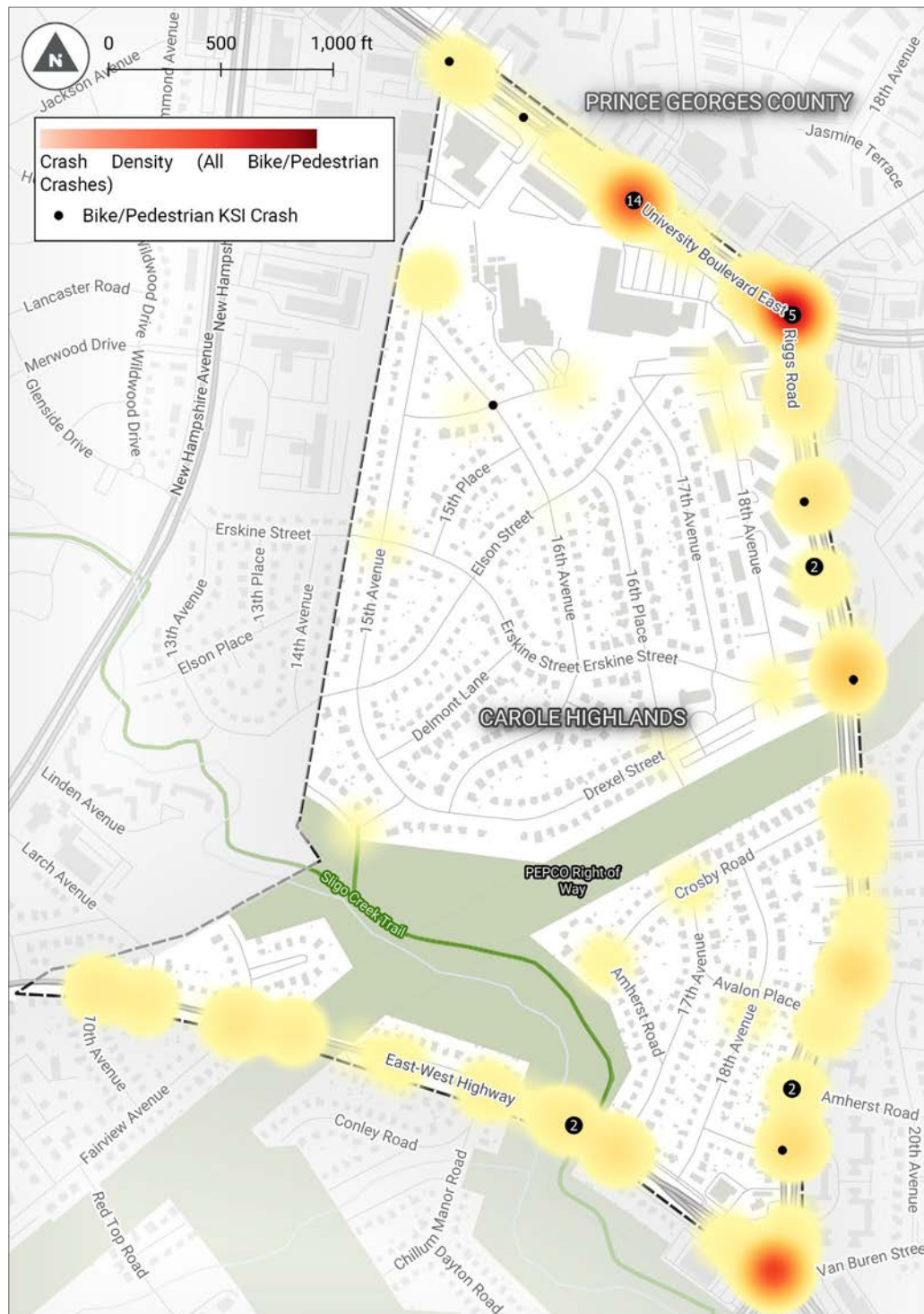
**Map 9. Motor Vehicle KSI Crash Density**



**LOCATION OF PEDESTRIAN/BICYCLIST KSI CRASHES**

Pedestrian and bicyclist KSI crashes were concentrated at the intersection of University Boulevard and 15th Avenue, where almost half of all pedestrian and bicyclist KSI crashes were reported. University Boulevard and Riggs Road, with five KSI crashes, was another pedestrian/bicyclist KSI hot spot. There were seven pedestrian/bicyclist KSIs on Riggs Road with all but one occurring in the



**Map 10.** Pedestrian and Bicycle KSI Crash Density

mid-block locations. One crash occurred at the intersection of Riggs Road and Erskine Street. Two pedestrian/bicyclist KSIs occurred near the Sligo Creek Trail crossing of East West Highway. One pedestrian/bicyclist KSI occurred at 16th Avenue and Hannon Street near Carole Highlands Elementary School. See **Map 10** for additional detail on where pedestrian and bicyclist KSI crashes are concentrated in the study area.

## CRASH TYPES AND PRE-CRASH MOVEMENTS

For motor vehicle crashes, the crash types and pre-crash movements were as follows:

rear end	39.0%
side swipe	16.8%
backing up	13.2%
left turn	10.9%
driverless moving vehicle	10.2%
parking/parked vehicle	4.8%
head on	3.4%
right turn	1.6%

For pedestrian and bicycle crashes, the pedestrian/cyclist locations and pre-crash movements were as follows:

mid-block crossing	42.9%
crossing at intersection with a crosswalk	28.6%
standing on roadway	5.7%
walking on the roadway with no sidewalk	5.7%
playing in roadway	2.9%
walking on the sidewalk	2.9%
unknown/not reported	11.3%



**Figure 29.** Pedestrians walk along University Boulevard at 15th Avenue in the study area. (PHOTO BY M-NCPPC)

## Traffic Safety Concerns

### SPEEDING

Community members reported concerns about speeding on several streets in Carole Highlands:

- Erskine Street
- Drexel Street
- 15th Avenue
- 16th Avenue

Despite the installation of speed humps, speeding on Erskine Street remains a concern, leading to a recent speed awareness event near the intersection of Erskine Street and Drexel Street (**Figure 29**). The Carole Highlands Neighborhood Association has requested speed humps on Drexel Street, 15th Avenue (from Drexel Street to Hannon Street) (**Figure 30**), and 16th Avenue (from Erskine Street to Hannon Street).

The Prince George's County DPW&T rejected this request in 2018 because the streets did not meet criteria used by their Neighborhood Traffic Management Program compared to other streets in the County where similar requests were made. The Carole Highlands Neighborhood Association continues to pursue speed humps on Drexel Street, 15th Avenue, and 16th Avenue.



**Figure 30.** A variable message sign encourages drivers to obey traffic rules near Erskine Street at 16th Place in the study area. (PHOTO BY M-NCPPC)



**Figure 31.** A pedestrian safety message west of Riggs Road on University Boulevard encourages the use of crosswalks. (PHOTO BY M-NCPPC)

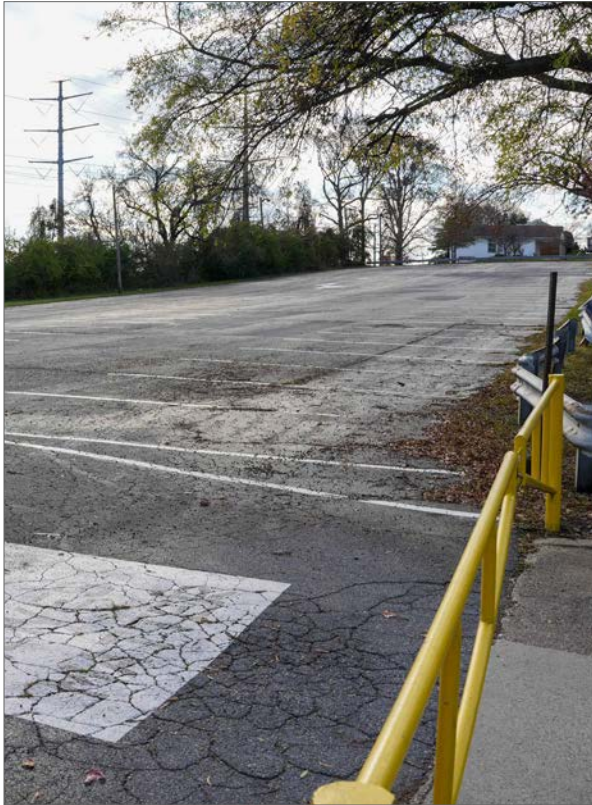
### **DRIVER YIELDING**

There are concerns about drivers failing to yield at several intersections in the study area, including:

- 16th Avenue and Hannon Street
- 16th Avenue and Elson Street
- Erskine Street and 15th Avenue
- Erskine Street and Elson Street
- Erskine Street and 16th Avenue
- Erskine Street and 16th Place
- Erskine Street, Drexel Street, and 18th Avenue
- East West Highway and Riggs Road
- East West Highway and Sligo Creek Trail

### **VISIBILITY**

Finally, community members cited concerns with motorists' ability to see pedestrians walking in the roadway due to the horizontal and vertical curves on Erskine Street and Drexel Street.



**Figure 32.** The parking lot of the Turner Memorial AME Church on Drexel Street is a source of personal security concern for study area participants. (PHOTO BY M-NCPPC)



**Figure 33.** The absence of lighting reduces the perception of personal safety along the Hannon Street connector goat trail. (PHOTO BY M-NCPPC)

## Personal Security Concerns

Community members reported concerns about personal security on the informal paths between the 17th Avenue/Hannon Street intersection and Carole Highlands Elementary School, and between the 18th Avenue/Hannon Street intersection and Hechinger Plaza and other destinations near the University Boulevard/Riggs Road intersection. There are also concerns about personal security in the Turner Memorial AME Church parking lot on Drexel Street, on the Sligo Creek Trail, and on the connecting spur trail from Sligo Creek Parkway. These concerns relate to specific incidents and the absence of lighting in many locations.



# Section 7

Opportunities, Constraints,  
and Considerations

## Opportunities

There are many opportunities to improve safe mobility and access in the study area. This section highlights three: the Purple Line, zoning requirements, and the Sligo Creek Trail.

### PURPLE LINE

Once constructed, the Purple Line will provide transit access to jobs and activity centers in Bethesda, Silver Spring, College Park, and New Carrollton with easy transfers to Metrorail, Amtrak, and MARC. Two Purple Line stations are planned near the study area: one on University Boulevard west of Riggs Road and one near the intersection of University Boulevard and New Hampshire Avenue adjacent to the Takoma Langley Crossroads Transit Center. If pedestrian and bicycle access to these stops can be provided, it will dramatically improve public transportation access from the study area to other destinations in the Washington metropolitan area. The increased access provided by the Purple Line can trigger new opportunities to formalize path connections to University Plaza, Hechinger Plaza, and add a passage from the northwest section of the neighborhood to Holton Lane.

### ZONING REQUIREMENTS

The commercial area along University Boulevard is zoned Local Transit-Oriented-Core (LTO-C). This zoning designation requires that all new developments provide sidewalks that connect to adjacent multifamily housing.<sup>6</sup> There may be an opportunity to leverage this requirement to build connections between Hannon Street/18th Avenue and University Plaza and Hechinger Plaza as the shopping centers are redeveloped. Marc Kapastin, general counsel of the Quantum Properties stated, “We recommend that the lower triangular portion of the (Carole Highlands Elementary) school property should be incorporated into a mixed-use development of the Quantum Properties. This redevelopment would well and securely provide formalization of several of the existing impromptu challenging access paths to the school.”<sup>7</sup>

### SLIGO CREEK TRAIL

The Sligo Creek Trail is another asset in Carole Highlands that can offer more options for mobility with the installation of lighting, additional wayfinding signage to surrounding destinations, and the improvement of pedestrian access to the trail. Access can be improved by providing more connections to the trail from the interior of the Carole Highlands neighborhood through the Pepco right-of-way and by improving conditions where the trail crosses arterial roadways, particularly East West Highway and Riggs Road.



**Figure 34.** Purple Line construction along MD 193 (University Boulevard) has caused business disruption along the International Corridor, within and adjacent to Carole Highlands. (PHOTO BY M-NCPPC)

6 <https://library.municode.com/md>

7 Marc “Kap” Kapastin email to Michael Jackson (December 16, 2022).



## Constraints and Considerations

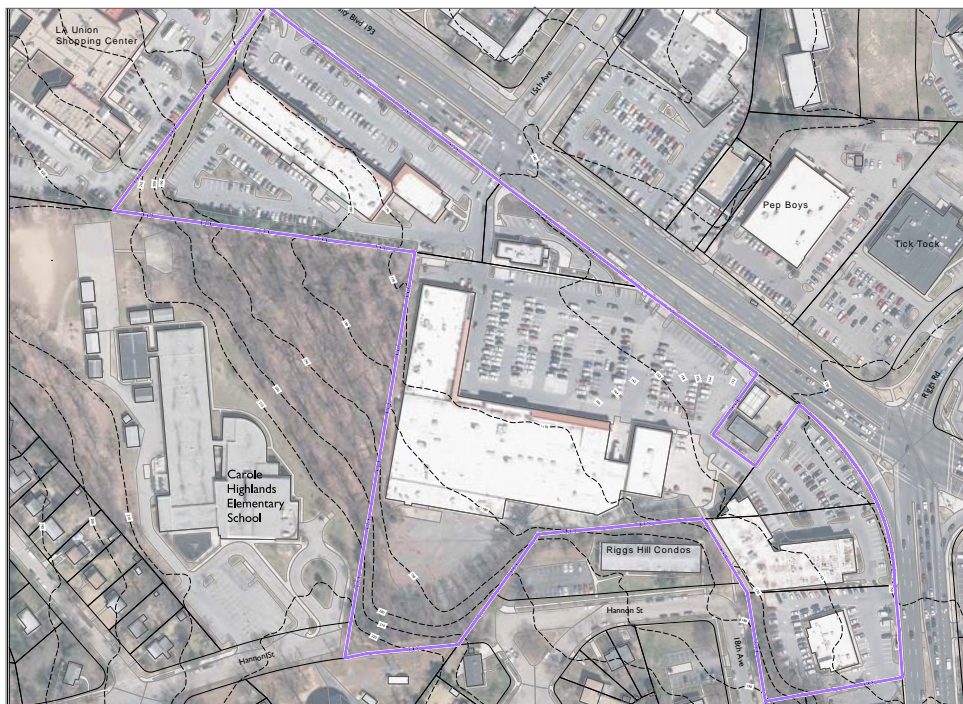
### COORDINATING WITH PROPERTY OWNERS TO BUILD NEW TRAIL CONNECTIONS

Building the new connections identified in this study will require Prince George’s County to coordinate with private property owners. A list of potential new connections and corresponding property owners is provided below.

- Connection from 15th Avenue to Holton Lane—Prince George’s County Board of Education and residential property owners at the end of 15th Avenue (**Figure 35**)
- Connection from Hannon Street/ 17th Avenue to Carole Highlands Elementary School—Quantum Companies
- Connections from Hannon Street/18th Avenue to University Hechinger Plaza, University Boulevard, and Riggs Road—Riggs Hill Condominiums, Quantum Companies (**Figures 36 and 40**)
- Connection from 18th Avenue to Riggs Road—Riggs Hill Condominiums
- Connections across and/or along the Pepco right-of-way



**Figure 35.** A proposed shared-use path would connect 15th Avenue to Holton Lane through the Board of Education property. (PHOTO BY M-NCPPC)



**Figure 36.** Quantum Properties land holdings is enclosed by a purple boundary line. (AERIAL PHOTOGRAPH BY QUANTUM PROPERTIES)



**Figure 37.** Southerly view of the Pepco right-of-way in the study area. (PHOTO BY M-NCPPC)

**PEPCO AND TRAIL DEVELOPMENT IN RIGHT-OF-WAY**

The Pepco right-of-way has been identified as a major constraint on developing essential connector trails within the Carole Highlands neighborhood. The location of the Pepco right-of-way limits pedestrian connectivity by dividing portions of the neighborhood. There are a variety of ways in which a collaboration with Pepco could prompt the creation of a safe pedestrian connection across their right-of-way.

Pepco previously resisted the construction of public trails within their overhead power line rights-of-way. In 2018 Pepco opened the

Montgomery County Powerline Trail, a 13-mile multi-use path that runs along much of the Pepco right-of-way that will eventually connect a major park and recreation center.

In 2020 Pepco launched the Sustainable Communities Grant Program, which provides municipalities, regional authorities, and nonprofits with up to \$10,000 for projects that focus on open space preservation, improvements to parks and recreation resources, and environmental conservation.



An eastbound view of University Boulevard at 15th Avenue in the study area. (PHOTO BY M-NCPPC)

## LIMITED STREET RIGHT-OF-WAY AND POTENTIAL HOMEOWNER OPPOSITION TO SIDEWALK CONSTRUCTION

Expanding existing sidewalks and constructing new ones requires consideration of the limits of the public right-of-way, motor vehicle access needs, and the impact on adjacent homeowners. Although there is often sufficient right-of-way on both sides of neighborhood streets to construct or widen a sidewalk<sup>8</sup> to meet the County's 5-foot minimum width standard, some homeowners may resist sidewalk construction adjacent to their property due to sidewalk maintenance requirements, perceived loss of yard space, loss of mature trees, or for other reasons. In addition, most streets within the study area are already too narrow to construct a sidewalk or separate pedestrian space, considering street curvature and traffic volumes. One exception may be 15th Avenue north of Elson Street, which is straight. See **Appendix F** for public right-of-way dimensions for key streets in the study area.

## LIMITED PUBLIC RIGHT-OF-WAY AND MOTOR VEHICLE CAPACITY NEEDS ON RIGGS ROAD AND UNIVERSITY BOULEVARD

Existing motor vehicle capacity conditions and public right-of-way limitations present a challenge to sidewalk expansion and bicycle facility construction on Riggs Road and University Boulevard. One solution is to reduce driving along these corridors by improving public transit service and pedestrian and bicycle access. Pedestrian and bicycle access improvements are planned on University Boulevard with construction of the Purple Line and will shift travel behaviors away from single-occupancy vehicles. Similar opportunities on Riggs Road may exist, such as narrowing the median, thus reallocating space to sidewalk expansion or the construction of shared-use paths. (**Figure 39**).



**Figure 38.** A bicyclist uses a sidewalk to ride along Riggs Road in the study area. (PHOTO BY M-NCPPC)



**Figure 39.** Median reduction presents an opportunity to convert the Riggs Road sidewalk into a shared-use path. (PHOTO BY M-NCPPC)

<sup>8</sup> Riggs Road is the exception to this rule. On the west side of Riggs Road, the distance between the edge of the right-of-way and the curb edge and is generally less than five feet. On the east side of Riggs Road, the distance between the edge of the curb and the edge of the right-of-way is generally over 10 feet.



**Figure 40.** The intersection of 18th Avenue and Hannon Street is the site of an informal pathway connection to the commercial International Corridor. (PHOTO BY M-NCPPC)

### **ENVIRONMENTAL PROTECTION CONCERNS IN THE PEPSCO RIGHT-OF-WAY**

The Carole Highlands Neighborhood Association prioritizes environmental protection of the Pepco right-of-way, which is a sanctuary for birds and other animals. The neighborhood association leads monthly nature hikes in the right-of-way and has worked with Pepco to decrease mowing and protect the right-of-way from invasive species. The neighborhood association prefers natural-surface trails in the Pepco right-of-way over paved shared-use paths.

### **TOPOGRAPHY, UTILITY POLES, AND MATURE TREES**

Topography, utility poles, and mature trees create challenges for sidewalk and path construction in the study area. Retaining walls may be needed along some segments due to slopes. In addition, mature trees may need to be cut down. Utility poles may need to be relocated, or the sidewalk may need to be routed around the pole.

There are steep slopes along the potential pathway connections from Hannon Street and 18th Avenue and at some locations along trail alignments within the Pepco right-of-way. To make these potential pathways more accessible, one solution is to build switchback trails. In addition, a pathway connection through the Pepco right-of-way to East West Highway would require the construction of a bridge over Sligo Creek that is estimated to be 100 feet long, at minimum.



# Section 8

Recommendations

This section includes recommendations to improve safe mobility in Carole Highlands. These recommendations are based on:

- The Carole Highlands Safe Mobility Study goals, which are to maximize safe mobility in Carole Highlands and enhance access and connectivity to the Purple Line, University Boulevard, and other important community-identified destinations
- A review of the policy and planning context, including location-specific recommendations from previous plans
- Public input gathered during stakeholder meetings, the Carole Highlands Community Walk Audit, and the online Carole Highlands Safe Mobility Project Community Input Survey
- Evaluation of existing demographics, travel behaviors, and land uses
- Evaluation of existing transportation infrastructure, circulation, and access
- Crash analysis and evaluation of traffic safety and personal security concerns reported by Carole Highlands residents
- Evaluation of opportunities, constraints, and considerations

The recommendations are divided into two sections: recommended access and connectivity projects and other project recommendations.

## Recommended Access and Connectivity Projects

Recommended access and connectivity projects, shown in **Map 11**, are the highest priority for enhancing access and connectivity to the Purple Line, University Boulevard, and other key destinations within the study area. The following access and connectivity projects are recommended:

1. Hannon Street and 18th Avenue to University Plaza and Hechinger Plaza shared-use path
2. The informal, Hannon Street connector unpaved path between 17th Avenue and Carole Highlands Elementary School converted to a shared-use path
3. 15th Avenue to Holton Lane shared-use path
4. Erskine Street (18th Avenue to 15th Avenue) sidewalk
5. Erskine Street/Drexel Street/18th Avenue intersection improvements

Each recommended access and connectivity project includes the following information:

- Map ID corresponding to the recommended project's location in **Map 11**
- Safety and access issues description
- Recommendation description
- Planning-level concept design
- Planning-level cost estimate
- Potential funding sources
- Implementation schedule with short-term, medium-term, and long-term actions

### METHODOLOGY USED TO DEVELOP PROBABLE COST OPINIONS

Opinions of probable cost were developed by identifying major pay items and establishing rough quantities to determine a rough order of magnitude cost. Additional pay items have been assigned approximate lump sum prices based on a percentage of the anticipated construction cost. Planning-level cost opinions include a 30% contingency to cover items that are undefined or are typically unknown early in the planning phase of a project. Unit costs are based on 2021 dollars and were assigned based on historical cost data from the MDOT SHA.

Cost opinions do not include easement and right-of-way acquisition; permitting, inspection, or construction management; engineering, surveying, geotechnical investigation, environmental documentation, special site remediation, escalation, or the cost for ongoing maintenance. The overall cost opinions are intended to be general and used only for planning purposes. Toole Design Group, LLC makes no guarantees or warranties regarding the cost estimate herein. Construction costs vary based on the ultimate project scope, actual site conditions and constraints, schedule, and economic conditions at the time of construction.



Map 11. Recommended Access and Connectivity Projects



## Hannon Street/18th Avenue to University/ Hechinger Plaza Shared-Use Path

Map ID 1

### ISSUES:

- Major pedestrian and bicycle desire line due to multifamily housing and nearby retail establishments and transit
- No pedestrian accommodation
- Existing, informal, unpaved trail (also called a goat trail or a goat path) is steep and laced with tree roots, which presents a tripping hazard (**Figure 20**)
- Personal security concerns

### RECOMMENDATIONS:

- Construct ADA-compliant shared-use path connections from the intersection of Hannon Street and 18th Avenue to Hechinger Plaza and University Plaza.
- Construct a sidewalk on the north side of Hannon Street and the east side of 18th Avenue to provide a continuous sidewalk connection to a shared-use path from the existing sidewalks on the north side of Hannon Street and the east side of 18th Street.
- Construct a curb ramp at Hannon Street and 18th Avenue to provide bicycle access to shared-use path connections.
- Address personal security concerns with lighting and other design elements, as specified in the concept design.

See **Figure 41** for the concept.

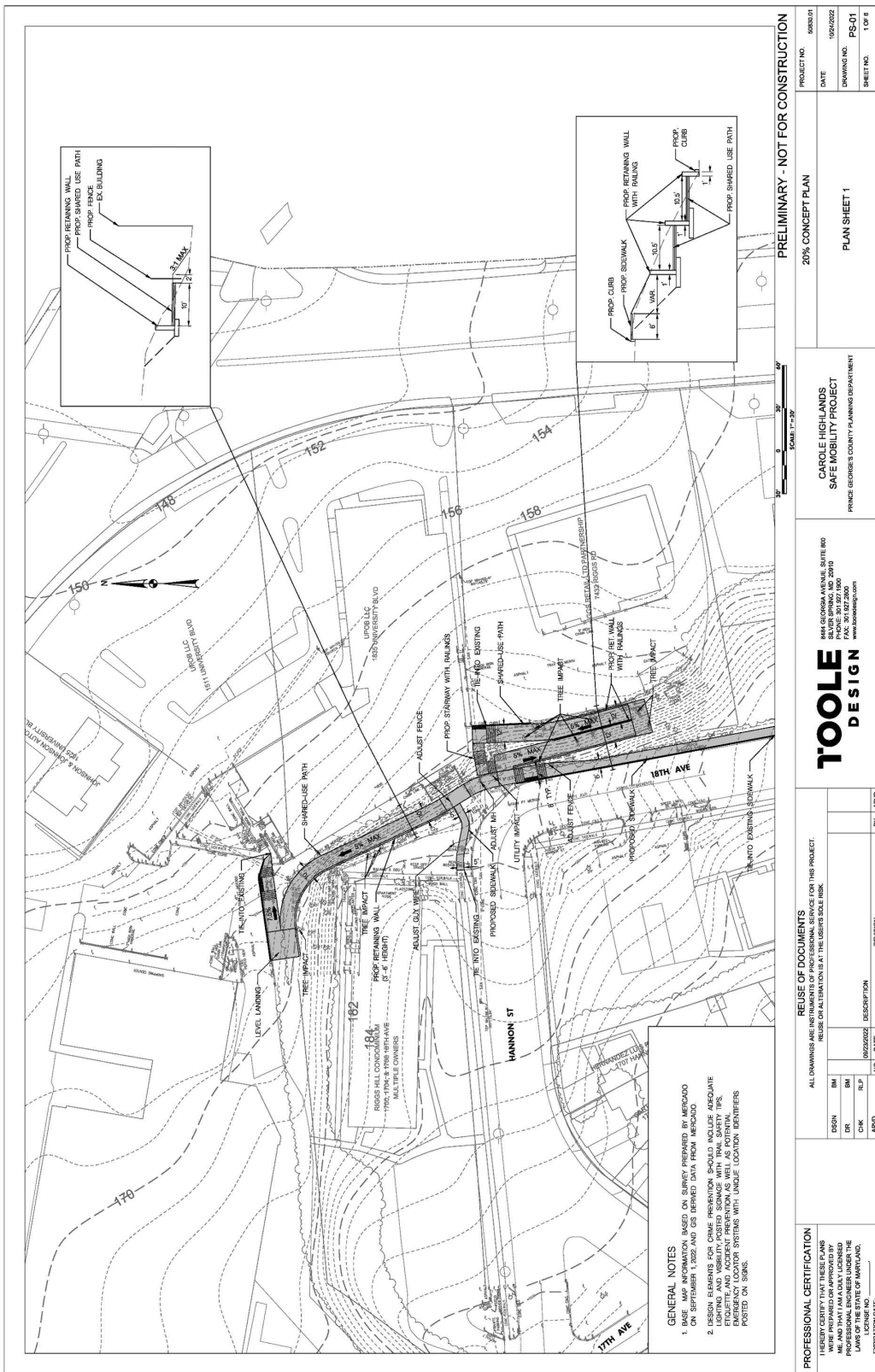
### PLANNING-LEVEL COST ESTIMATE:

- \$861,337

### POTENTIAL FUNDING SOURCES:

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Program
- Reconnecting Communities Program (RCP)
- Transportation Alternatives Program (TAP)

Implementation Schedule		
Short-Term	Medium-Term	Long-Term
<ul style="list-style-type: none"> <li>• Solicit feedback on concept design from Riggs Hill Condominiums, Hechinger Plaza, University Plaza, and Carole Highlands community members.</li> <li>• Identify a funding source or apply for grant funding.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop 30% design</li> <li>• Develop subsequent levels of design: 60%, 90%, 100%</li> <li>• Acquire right-of-way or easement</li> <li>• Obtain environmental permits</li> </ul>	<ul style="list-style-type: none"> <li>• Construct project</li> </ul>



**Figure 41.** Hannon Street and 18th Avenue to University Plaza and Hechinger Plaza shared-use concept. (CONCEPTUAL ILLUSTRATION BY TOOLE DESIGN)

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 EXPIRATION DATE: \_\_\_\_\_

**REUSE OF DOCUMENTS**  
 ALL DRAWINGS ARE THE PROPERTY OF TOOLE DESIGN. REUSE OR ALTERATION IS AT THE USER'S SOLE RISK.

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DESIGN	BM			
DR	BM			
CHK	RLP			
APPROVED	NO.	DATE	REVISION	BY

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**CAROLE HIGHLANDS SAFE MOBILITY PROJECT**  
 PRINCE GEORGE'S COUNTY PLANNING DEPARTMENT

**PRELIMINARY - NOT FOR CONSTRUCTION**  
 20% CONCEPT PLAN  
 PLAN SHEET 1  
 1 OF 4

PROJECT NO. 8082610  
 DATE 10/2/2022  
 DRAWING NO. PS-01  
 SHEET NO. 1 OF 4

## Hannon Street/17th Ave to the Carole Highlands Elementary School Informal, Unpaved Path

Map ID 2

### ISSUES:

- No formal pedestrian accommodation for Carole Highlands Elementary School; only a major pedestrian desire line
- The existing desire line supports high foot traffic, but is narrow not easily accessible, and tree roots along the desire line pose hazardous conditions, such as tripping over roots, especially in inclement weather
- No lighting
- Personal security concerns as people experiencing homelessness occupy an area in the northeast corner of the school property and the site of other reported illegal activities

### RECOMMENDATIONS:

- Construct an ADA-compliant shared-use path connection.
- Construct sidewalk on south side of Hannon Street to 16th Avenue (not shown in concept).
- Install lighting and other design elements as specified in concept design.
- Consider incorporating the northeast corner of the Carole Highlands Elementary School property—currently occupied by people experiencing homelessness and the site of other illicit activity—into an adjacent mixed-use redevelopment, an idea proposed by Quantum Properties. Quantum Properties is the owner and operator of Hechinger Plaza, University Plaza, and University Plaza West. See **Figure 42** for the concept.

### PLANNING-LEVEL COST ESTIMATE:

- \$176,590

### POTENTIAL FUNDING SOURCES:

- RAISE
- RCP
- TAP

Implementation Schedule		
Short-Term	Medium-Term	Long-Term
<ul style="list-style-type: none"> <li>• Solicit feedback on concept design from Hechinger Plaza, Carole Highlands Elementary School, Prince George's County Public Schools, residential property owners at Hannon Street and 17th Avenue, and other Carole Highlands community members.</li> <li>• Identify funding source or apply for grant funding.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop 30% design</li> <li>• Develop subsequent levels of design: 60%, 90%, 100%</li> <li>• Acquire right-of-way or easement</li> <li>• Obtain environmental permits</li> </ul>	<ul style="list-style-type: none"> <li>• Construct project</li> </ul>

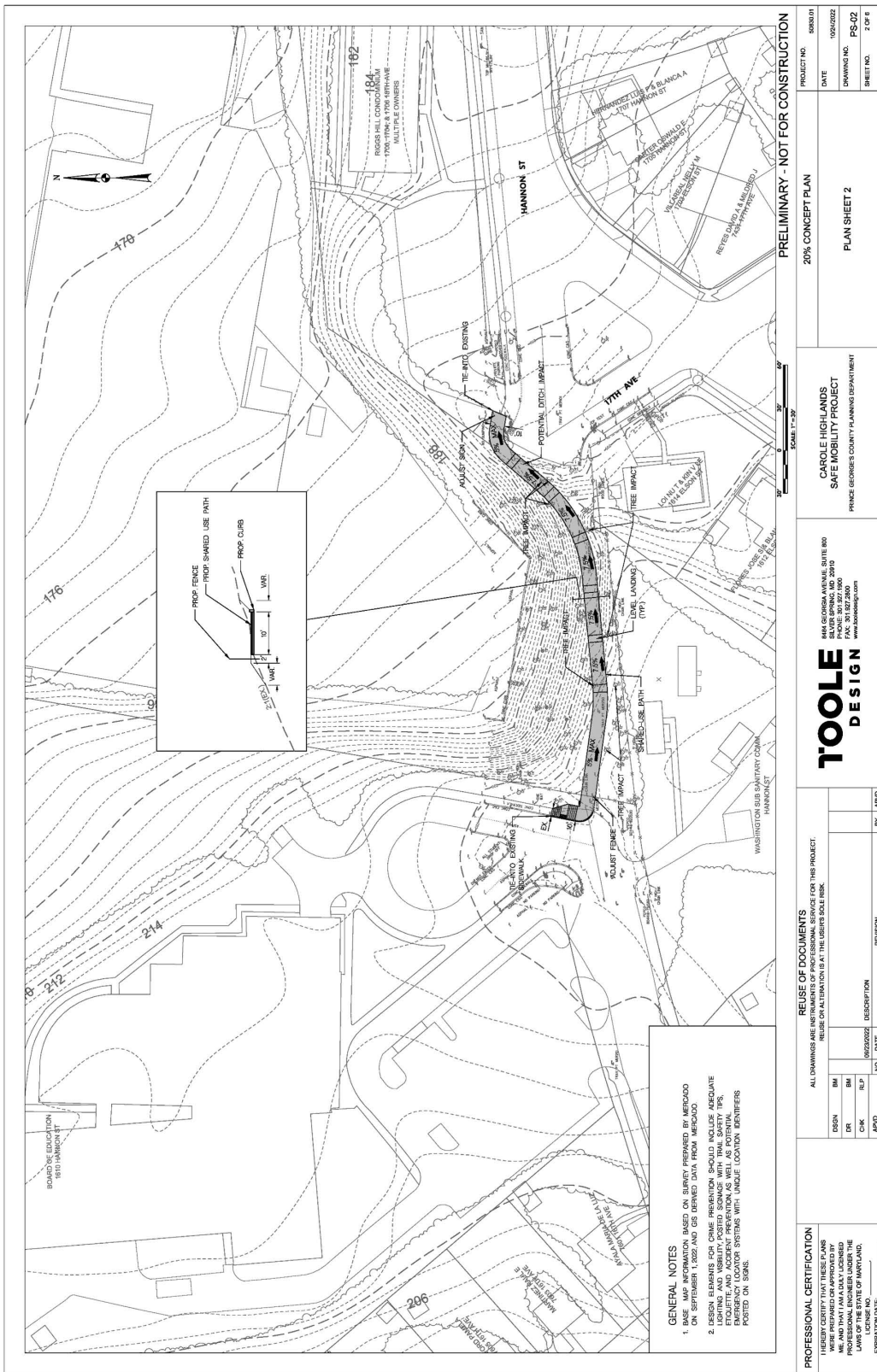


Figure 42. Hannon Street and 17th Avenue to Carole Highlands Elementary School shared use path concept. (CONCEPTUAL ILLUSTRATION BY TOOLE DESIGN)

## 15th Ave to Holton Lane Shared Use Path

Map ID 3

### ISSUES:

- Major pedestrian and bicycle desire line due to nearby retail establishments and transit
- No pedestrian accommodation
- Personal security concerns

### RECOMMENDATIONS:

- Construct ADA-compliant shared-use path connection.
- Address personal security concerns with lighting and other design elements, as specified in concept design. See **Figure 43** for the concept.

### PLANNING-LEVEL COST ESTIMATE:

- \$296,660

### POTENTIAL FUNDING SOURCES:

- RAISE
- RCP
- TAP

Implementation Schedule		
Short-Term	Medium-Term	Long-Term
<ul style="list-style-type: none"><li>• Solicit feedback on concept design from Carole Highlands Elementary School, Prince George's County Public Schools, residential property owners at the end of 15th Avenue, and other Carole Highlands community members.</li><li>• Identify funding source or apply for grant funding.</li></ul>	<ul style="list-style-type: none"><li>• Complete topographical survey</li><li>• Develop 30% design</li><li>• Develop subsequent levels of design: 60%, 90%, 100%</li><li>• Acquire right-of-way or easement</li><li>• Obtain environmental permits</li></ul>	<ul style="list-style-type: none"><li>• Construct project</li></ul>



## Erskine Street (15th Ave to 18th Ave) Sidewalk and Shared Lane Markings

Map ID 4

### ISSUES:

- Significant pedestrian and bicycle desire line due to Erskine Street being Carole Highlands' only through street connection between Riggs Road and New Hampshire Avenue
- No pedestrian or bicycle accommodation (**Figure 44**)
- Relatively high motor vehicle volumes and concern about motor vehicle speeds

### RECOMMENDATIONS:

- Construct a sidewalk on the south side of Erskine Street. Maintenance of mature trees should be a consideration in sidewalk design.
- Mark high-visibility crosswalks at intersecting streets.
- Mark parking lane edge lines (not shown in concept).
- Install shared lane markings and bicycle wayfinding signage at 15th Avenue and 18th Avenue to facilitate connection to Sligo Trail (not shown in concept).

See **Figure 45**, **Figure 46**, and **Figure 47** for the concept. Additional recommendations for Erskine Street, not included in the concept, are provided.

### PLANNING-LEVEL COST ESTIMATE:

- \$411,734<sup>9</sup>

### POTENTIAL FUNDING SOURCES:

- RAISE
- RCP
- TAP

Implementation Schedule		
Short-Term	Medium-Term	Long-Term
<ul style="list-style-type: none"> <li>• Solicit feedback on concept design from residential property owners on Erskine and other Carole Highlands community members.</li> <li>• Identify funding source or apply for grant funding.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete topographical survey</li> <li>• Develop 30% design</li> <li>• Develop subsequent levels of design: 60%, 90%, 100%</li> <li>• Acquire right-of-way or easement</li> <li>• Obtain environmental permits</li> </ul>	<ul style="list-style-type: none"> <li>• Construct project</li> </ul>

<sup>9</sup> Cost estimate includes sidewalk on south side of Erskine Street between 16th Place and 18th Avenue. This sidewalk is shown in Figures 45-47 on pages 82-84.





**Figure 44.** There are no sidewalks on Erskine Street Between 15th Avenue and 16th Place. A sidewalk exists on the north side of Erskine Street Between 16th Place and 18th Avenue. (PHOTO BY M-NCPPC)

Erskine Street (15th Ave to 18th Ave)  
Sidewalk and Shared Lane Markings

Map ID 4

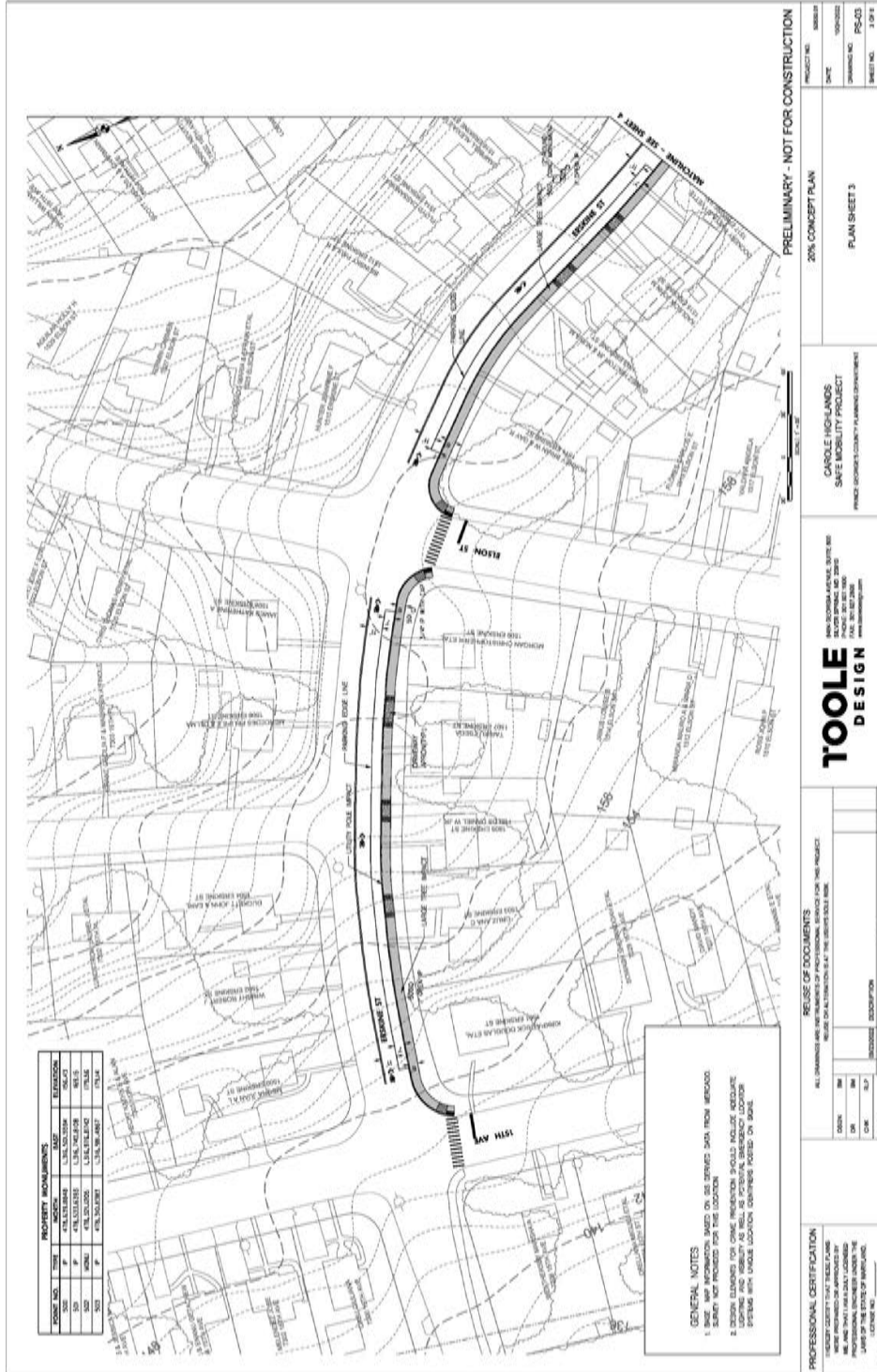


Figure 45. Part 1: Erskine Street sidewalk and shared lane markings concept—15th Avenue to Delmont Lane. (CONCEPTUAL ILLUSTRATION BY TOOLE DESIGN)

Erskine Street (15th Ave to 18th Ave)  
Sidewalk and Shared Lane Markings

Map ID 4

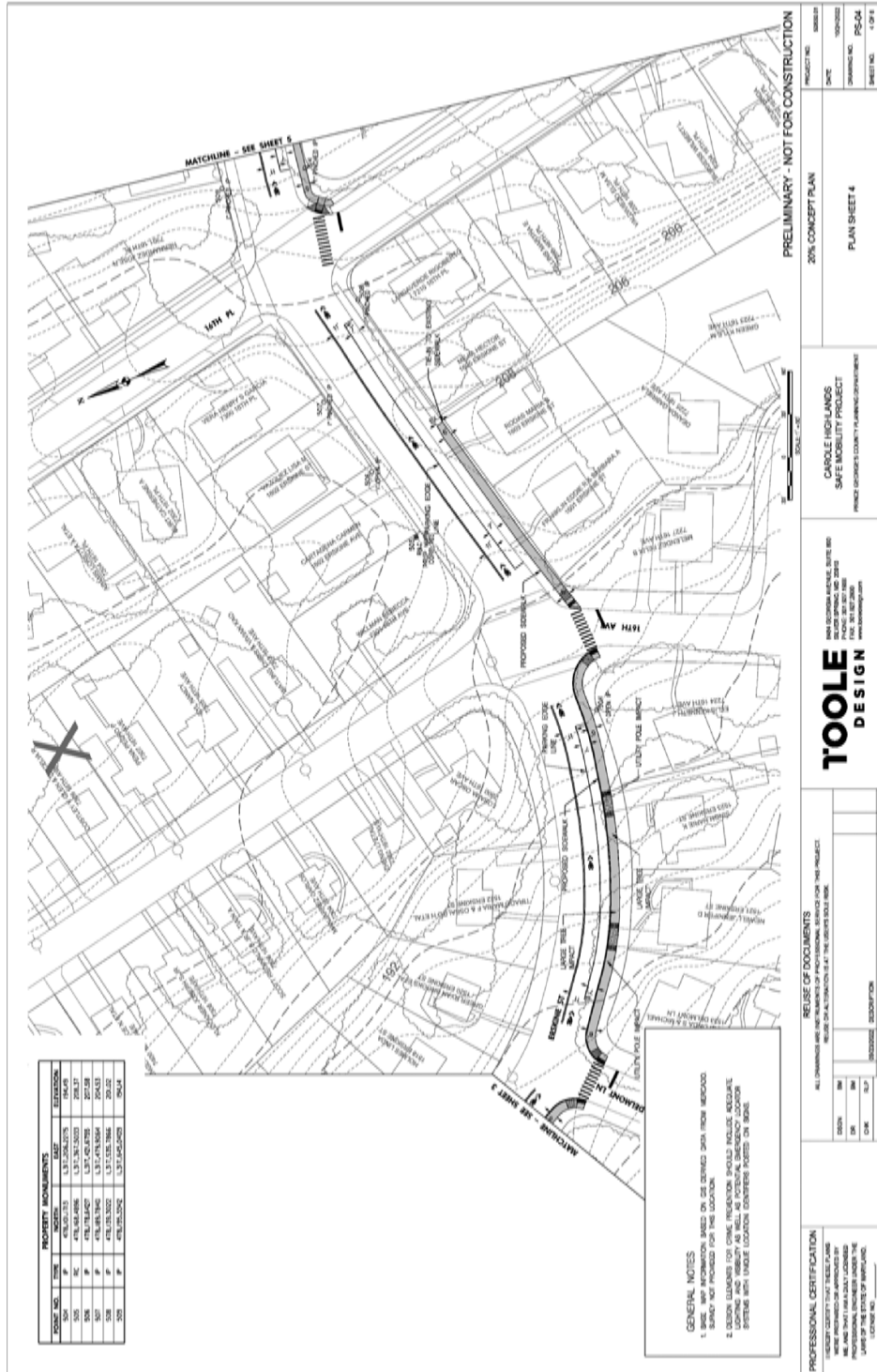


Figure 46. Part 2: Erskine Street sidewalk concept—Delmont Lane to 16th Place. (CONCEPTUAL ILLUSTRATION BY TOOLE DESIGN)

Erskine Street (15th Ave to 18th Ave)  
Sidewalk and Shared Lane Markings

Map ID 4

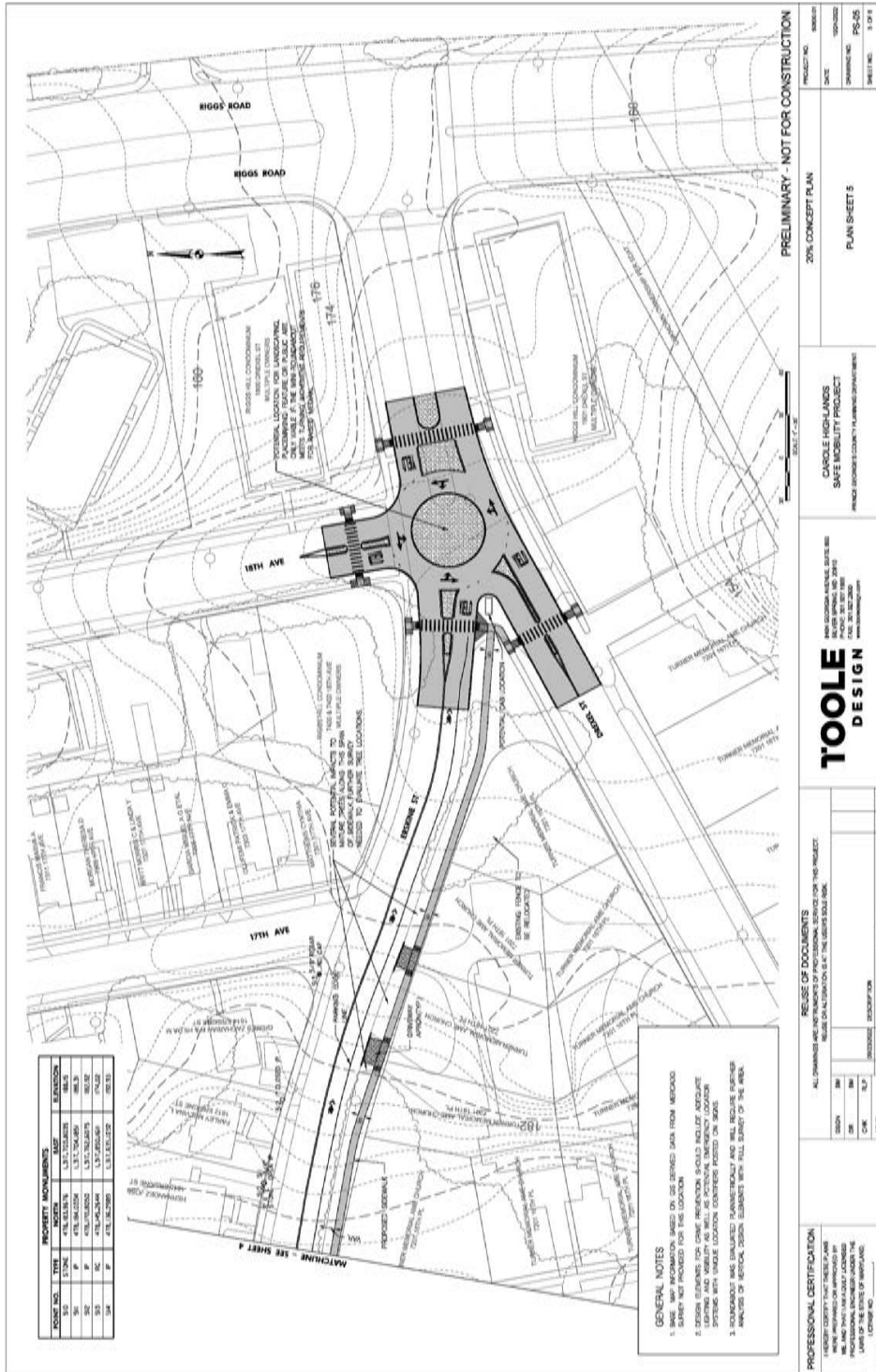


Figure 47. Part 3: Erskine Street/Drexel Street/18th Avenue intersection improvements concept (and Erskine Street sidewalk concept—16th Place to 18th Avenue. (CONCEPTUAL ILLUSTRATION BY TOOLE DESIGN))



**Figure 48.** Study area participants would like a bicycle repair station along Sligo Creek Trail.  
(PHOTO BY M-NCPPC)



**Figure 49.** Bicycle repair station signage.  
(PHOTO BY M-NCPPC)



**Figure 50.** Bicycle repair station identification.  
(PHOTO BY M-NCPPC)

# Erskine Street/Drexel Street/18th Avenue Intersection Improvements

Map ID 4

**ISSUES:**

- Confusing skewed intersection where three streets converge
- No marked crosswalks between the north side of Erskine Street/Drexel Street and sidewalks on the south side of Erskine Street and south side of Drexel Street
- Relatively high motor vehicle speeds and volume
- High motor vehicle crash location, include recent KSI
- Missing detectable warning surfaces for 18th Avenue crossing

**RECOMMENDATIONS:**

- Construct a mini roundabout to slow vehicle speeds, organize traffic movement, and reduce turn conflicts (**Figure 52**).
- Install marked high-visibility crosswalks on all legs.
- Install detectable warning surfaces to support 18th Avenue crossing.

**PLANNING-LEVEL COST ESTIMATE:**

- \$537,515<sup>10</sup>

**POTENTIAL FUNDING SOURCES:**

- RAISE
- RCP
- Safer Streets and Road for All (SS4A) Grant Program
- TAP
- Maryland Highway Safety Office Grants

Implementation Schedule		
Short-Term	Medium-Term	Long-Term
<ul style="list-style-type: none"> <li>• Solicit feedback on concept design from the Carole Highlands Neighborhood Association, Turner Memorial AME Church,, nearby property owners, and other community members.</li> <li>• Identify funding source or apply for grant funding.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete topographical survey</li> <li>• Develop 30% design</li> <li>• Develop subsequent levels of design: 60%, 90%, 100%</li> <li>• Acquire right-of-way or easement</li> <li>• Obtain environmental permits</li> </ul>	<ul style="list-style-type: none"> <li>• Construct project</li> </ul>

10 Cost estimate for the Erskine Street/Drexel Street/18th Avenue intersection improvements does not include sidewalk on the south side of Erskine Street between 16th Place and 18th Avenue. The cost of this sidewalk segment is included in the cost estimate for the Erskine Street sidewalk.



**Figure 51.** The Erskine/Drexel Street/18th Avenue intersection lacks a traffic-calming mini-roundabout. (PHOTO BY M-NCPPC)



**Figure 52.** By comparison, construction of a mini roundabout at the Erskine/Drexel Street/18th Avenue intersection can slow motor vehicle speeds, organize traffic movement, and reduce turn conflicts. (PHOTO BY TOOLE DESIGN GROUP)

## Other Recommended Projects

Other recommended projects are shown in **Map 12** and listed in **Table 2**. These projects are also important for improving safe mobility and access in Carole Highlands. Each recommendation includes:

- A Map ID corresponding to the recommendation's location on the map
- Location description
- Safety and access issues description
- Recommendation description
- Recommendation level

The three potential recommendation levels are described below.

### **MAINTENANCE LEVEL**

Example project types include:

- Mill/overlay with new pavement marking
- ADA upgrades

At this level, there should be no utility relocation except for minor structure adjustments (such as valve and utility access hole lid adjustments). At this level, there should be no need to acquire fee-simple right-of-way, temporary or permanent easements.

### **MID-LEVEL ROAD IMPROVEMENT**

Example project types include:

- Minor curb modifications and pavement elevation modifications related to traffic calming (such as a speed table)
- Locations for rapid rectangular flashing beacon (RRFB)
- Creation of new sidewalk (where some grade change is required)

At this level, there may be a need for minor utility relocations (such as water house, sewer house and gas house connection modifications and electric utility pole guy wire relocation). At this level, there may be a need for temporary or permanent easements, but typically no fee-simple acquisitions.

### **MAJOR ROADWAY IMPROVEMENT**

Example project types include:

- Roundabouts
- Traffic signal improvements

Photo examples of selected treatment options are provided in **Figures 52, 57, and 58**.



Map 12. Other Recommended Projects



**Table 2.** Other Recommended Projects

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
1	Erskine St and 17th Ave	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Missing detectable warning surfaces.</li> <li>• Relatively high motor vehicle volumes and concern about motor vehicle speeds.</li> </ul>	<ul style="list-style-type: none"> <li>• Install detectable warning surfaces.</li> <li>• Install curb extensions into 17th Street to shorten pedestrian crossing distances and discourage motorists from making high-speed turns. (Can be installed with flex posts as an interim measure.)</li> </ul>	Maintenance
2	Erskine St and 16th Pl	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Key pedestrian route to Carole Highlands Elementary School.</li> <li>• Missing crosswalks on south and west sides of intersection.</li> <li>• Relatively high motor vehicle volumes and concern about motor vehicle speeds.</li> </ul>	<ul style="list-style-type: none"> <li>• Install high-visibility marked crosswalks on the south and west sides of the intersection.</li> <li>• Install curbed pedestrian refuge islands to narrow motor vehicle travel lanes and support Erskine Street crossings. (Will require restricting parking on Erskine approaches to allow for taper. Can be installed with flex posts as an interim measure.) See <b>Figure 40</b> on page 72 for example.</li> <li>• Install curb extensions into 16th Place to shorten pedestrian crossing distances and discourage motorists from making high-speed turns. (Can be installed with flex posts as an interim measure. See <b>Figure 56</b> on page 101.)</li> </ul>	Mid
3	Erskine St and 16th Ave	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Key pedestrian route to Carole Highlands Elementary School.</li> <li>• Missing crosswalk on south side of intersection.</li> <li>• Relatively high motor vehicle volumes and concern about motor vehicle speeds.</li> </ul>	<ul style="list-style-type: none"> <li>• Install high-visibility marked crosswalks on the south side of the intersection.</li> <li>• Install curbed pedestrian refuge islands to narrow motor vehicle travel lanes and support Erskine Street crossings. (Will require restricting parking on Erskine approaches to allow for taper. Can be installed with flex posts as an interim measure.)</li> <li>• Install curb extensions into 16th Avenue to shorten pedestrian crossing distances and discourage motorists from making high-speed turns. (Can be installed with flex posts as an interim measure.)</li> </ul>	Mid
4	Erskine St and Elson St	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Relatively high motor vehicle volumes and concern about motor vehicle speeds.</li> </ul>	<ul style="list-style-type: none"> <li>• Install curbed median islands to narrow motor vehicle travel lanes. (Will require restricting parking on Erskine Street approaches to allow for taper. Can be installed with flex posts as an interim measure.)</li> <li>• Install curb extensions into Elson Street to shorten pedestrian crossing distances and discourage motorists from making high-speed turns. (Can be installed with flex posts as an interim measure.)</li> </ul>	Mid

**Table 2.** Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
5	Erskine St and 15th Ave	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Key pedestrian route to Carole Highlands Elementary School.</li> <li>• Relatively high motor vehicle volumes and concern about motor vehicle speeds.</li> <li>• Recent motor vehicle crashes.</li> </ul>	<ul style="list-style-type: none"> <li>• Install mini-roundabout.</li> <li>• If proposed pedestrian facilities on Erskine Street and 15th Avenue are constructed, install high-visibility crosswalks on all legs.</li> </ul>	Mid
6	Drexel St (15th Ave to 18th Ave)	Segment	<ul style="list-style-type: none"> <li>• Key access route for Sligo Trail.</li> <li>• Key potential student bicycling and walking route to Carole Highlands Elementary School.</li> <li>• No pedestrian accommodation.</li> <li>• Concern about motor vehicle speeds.</li> </ul>	<p><b>15th Avenue to 16th Place</b></p> <ul style="list-style-type: none"> <li>• Convert to 20-mph yield street with 12-foot-wide travel lane and 8-foot-wide parking lane on one side (see <b>Figure 53</b>). Use excess street space to install sidewalk or protected pedestrian space. (Yield streets are like other local streets except that they feature a single, narrow travel lane that requires vehicles traveling in opposite directions to yield to one another to pass. See <b>Figures 53</b> and <b>58</b> for yield street and protected pedestrian space examples.)</li> <li>• Conduct further evaluation, using a design vehicle, to address horizontal curvature, refine lane widths, and determine location of potential parking restrictions.</li> <li>• Coordinate with the Prince George's County Fire and Emergency Medical Services Department (Fire/EMS) to ensure design meets access needs for fire and EMS vehicles.</li> <li>• Install high-visibility crosswalks and ADA-compliant ramps where new sidewalks or protected pedestrian spaces intersect streets.</li> <li>• If yield street is implemented, evaluate motor vehicle speed to determine if additional traffic calming measures (e.g., speed humps) are needed to ensure motor vehicle operating speeds of 20 mph or less.</li> <li>• If yield street is not implemented, install speed humps to support 20-mph design speed.</li> </ul> <p><b>16th Place to 18th Avenue</b></p> <ul style="list-style-type: none"> <li>• Install speed humps.</li> </ul> <p><b>15th Avenue to 18th Avenue</b></p> <ul style="list-style-type: none"> <li>• Install shared lane markings and bicycle wayfinding signage at intersections with 15th Avenue and 18th Avenue to facilitate connection to Sligo Creek Trail.</li> </ul>	Mid

**Table 2.** Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
7	15th Ave (Drexel St to terminus north of Hannon St)	Segment	<ul style="list-style-type: none"> <li>• Key access route for Sligo Trail.</li> <li>• No pedestrian accommodation.</li> <li>• Concern about motor vehicle speeds.</li> </ul>	<ul style="list-style-type: none"> <li>• Convert to 20 mph yield street (such as a street too narrow for two motor vehicles traveling in opposite directions to pass each other without one vehicle yielding its right-of-way to the other vehicle) with 12-foot-wide travel lane and 8-foot-wide parking lane on one side. Use excess street space to install sidewalk or protected pedestrian space.</li> <li>• Conduct further evaluation, using a design vehicle, to address horizontal curvature, refine lane widths, and determine location of potential parking restrictions.</li> <li>• Coordinate with the Prince George's County Fire and Emergency Medical Services Department (Fire/EMS) to ensure design meets access needs for fire and EMS vehicles.</li> <li>• Install a high-visibility crosswalk and ADA-compliant ramps to connect the new sidewalk/protected pedestrian space to the existing sidewalk on the north side of Hannon Street.</li> <li>• If yield street implemented, evaluate motor vehicle speed to determine if additional traffic calming measures (e.g., speed humps) are needed to ensure motor vehicle operating speeds of 20 mph or less.</li> <li>• If yield street not implemented, install speed humps to support 20 mph design speed.</li> </ul>	Mid
8	18th Ave (Erskine St to Hannon St)	Segment	<ul style="list-style-type: none"> <li>• Significant pedestrian and bicycle route due to concentration of multifamily housing.</li> <li>• No bicycle accommodation.</li> </ul>	<ul style="list-style-type: none"> <li>• Install shared lane markings.</li> </ul>	Maintenance

**Table 2.** Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
9	Elson St (15th Ave to 1603 Elson St)	Segment	<ul style="list-style-type: none"> <li>No pedestrian accommodation.</li> <li>Concern about motor vehicle speed.</li> </ul>	<p><b>Drexel Street to 16th Avenue</b></p> <ul style="list-style-type: none"> <li>Convert to 20 mph yield street with 12-foot-wide travel lane and 8-foot-wide parking lane on one side. Use excess street space to install sidewalk or protected pedestrian lane.</li> <li>Conduct further evaluation, using a design vehicle, to address horizontal curvature, refine lane widths, and determine location of potential parking restrictions.</li> <li>Coordinate with the Prince George's County Fire/EMS to ensure design meets access needs for fire and EMS vehicles.</li> <li>Install high-visibility crosswalks and ADA compliant ramps where new sidewalks or protected pedestrian spaces intersect streets.</li> <li>If yield street implemented, evaluate motor vehicle speed to determine if additional traffic calming measures (e.g., speed humps) are needed to ensure motor vehicle operating speeds of 20 mph or less.</li> <li>If yield street not implemented, install speed humps to support 20 mph design speed.</li> </ul> <p><b>16th Avenue to 1603 Elson Street</b></p> <ul style="list-style-type: none"> <li>Install sidewalk or protected pedestrian space on the south side of the street.</li> </ul>	Mid
10	Elson St and 16th Pl (curb ramp on west side of Elson St)	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>Missing detectable warning surface.</li> </ul>	<ul style="list-style-type: none"> <li>Install high-visibility crosswalks and ADA-compliant ramps where new sidewalks or protected pedestrian spaces intersect streets.</li> </ul>	Maintenance
11	16th Ave and Elson St	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>Key pedestrian route to Carole Highlands Elementary School.</li> </ul>	<ul style="list-style-type: none"> <li>If yield street not implemented, install speed humps to support 20 mph design speed.</li> </ul>	Maintenance

**Table 2.** Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
12	16th Ave (Drexel St to 15th Ave)	Segment	<ul style="list-style-type: none"> <li>• Key pedestrian route to Carole Highlands Elementary School.</li> <li>• No pedestrian accommodation except for the sidewalk on the east side of the street between Elson Street and Hannon Street.</li> <li>• Concern about motor vehicle speeds.</li> </ul>	<p><b>Drexel Street to Elson Street</b></p> <ul style="list-style-type: none"> <li>• Convert to 20-mph yield street with 12-foot-wide travel lane and 8-foot-wide parking lane on one side. Use excess street space to install sidewalk or protected pedestrian lane on west side of street.</li> <li>• Conduct further evaluation, using a design vehicle, to address horizontal curvature, refine lane widths, and determine location of potential parking restrictions.</li> <li>• Coordinate with the Prince George's County Fire and Emergency Medical Services Department (Fire/EMS) to ensure design meets access needs for fire and EMS vehicles.</li> <li>• Install high-visibility crosswalks and ADA compliant ramps where new sidewalks or protected pedestrian spaces intersect streets.</li> <li>• If yield street implemented, evaluate motor to determine if additional traffic calming measures (e.g., speed humps) are needed to ensure motor vehicle operating speeds of 20 mph or less.</li> <li>• If yield street not implemented, install speed humps to support 20-mph design speed.</li> </ul> <p><b>Elson Street to 15th Avenue</b></p> <ul style="list-style-type: none"> <li>• Install speed humps.</li> </ul>	Mid

**Table 2.** Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
13	East West Highway (Riggs Rd to Kentland Ave)	Segment	<ul style="list-style-type: none"> <li>• Significant bicycle desire line due to retail establishments, bus stops, and Sligo Creek Trail.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• High crash corridor for pedestrian or bicycle crashes, including two recent KSI crashes.</li> </ul>	<ul style="list-style-type: none"> <li>• Explore construction of separated bike lanes or shared use path connecting to existing bike lanes in Montgomery County.</li> <li>• The bikeway may be a combination of on-road and off-road facilities.</li> <li>• Sections of off-road sidepath could be constructed by expanding the sidewalk or constructing the sidepath in the existing grass area behind the face of curb.</li> <li>• Parking removal may be necessary to install the bike lane or shared use path.</li> <li>• Due to the steepness and length of the hill from Sligo Creek to New Hampshire Avenue, the type of bicycle accommodation selected, and design features included in it, are critical. The design should moderate downhill bicycling speeds and make uphill bicycling more comfortable by providing separation from traffic. In addition, bicycle facilities should be wide enough to enable cyclists on faster moving electric assist bicycles to pass cyclists on slower moving unassisted bicycles.</li> </ul>	Major
14	East West Highway and Riggs Rd	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Major pedestrian crossing location due to nearby bus stops, retail establishments, and multi-family housing.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• Slip lane designs facilitate high speed motor vehicle turns and reduce yielding at slip lane crosswalks.</li> <li>• High pedestrian and bicycle crash location.</li> <li>• High motor vehicle crash location, including 15 KSI crashes.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct traffic study to determine if one or more slip lanes can be removed and/or whether the third eastbound through lane can be removed.</li> <li>• For slip lanes that cannot be removed, redesign slip lanes to improve motor vehicle yielding at crosswalks, (e.g., by adjusting the angle at which the slip intersects the cross-street to 50-70 degrees, preferably 70 degrees), reducing slip lane width, and/or installing a raised crosswalk.</li> <li>• If a third eastbound slip lane can be removed, widen pork-chop islands on the south side of the intersection to reduce pedestrian crossing distance across East West Highway.</li> </ul>	Major

**Table 2.** Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
15	East West Highway (mid-block crossing 250 feet west of Riggs Rd)	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Significant pedestrian crossing location due to existing marked crosswalk and adjacent bus stops and retail.</li> <li>• Uncontrolled, multi-lane pedestrian crossing.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• High pedestrian and bicycle crash location.</li> </ul>	<ul style="list-style-type: none"> <li>• Install pedestrian hybrid beacon.</li> <li>• Install advance stop lines and coordinated "Stop Here on Red" (R10-6 or R10-6a) signage.*</li> </ul> <p>*The alpha-numeric sign designations refer to the nomenclature of the Maryland Manual of Uniform Traffic Control Devices (MUTCD).</p>	Major
16	East West Highway and Chillum Manor Rd	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Significant pedestrian desire line due to adjacent bus stops.</li> <li>• Uncontrolled, unmarked crossing with multiple lanes in each direction.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• High motor vehicle crash location, including five KSI crashes near intersection.</li> </ul>	<ul style="list-style-type: none"> <li>• Install pedestrian hybrid beacon.</li> <li>• Install advance stop lines and coordinated "Stop Here on Red" (R10-6 or R10-6a) signage.</li> <li>• Adjust bus stop locations to align with new crosswalk.</li> </ul>	Major
17	East West Highway and Sligo Creek Trail	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Major pedestrian and bicycle crossing location due to Sligo Creek Trail.</li> <li>• Uncontrolled crossing with multiple lanes in each direction. Existing flashing yellow beacon not sufficiently effective at encouraging motorist yielding.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• Lack of awareness of Sligo Creek Trail and key destinations that can be accessed via the Sligo Creek Trail (e.g., West Hyattsville Metro Station).</li> </ul>	<ul style="list-style-type: none"> <li>• Install bicycle and pedestrian signal heads (<b>Figure 54</b> and <b>55</b>) with approval from the operational agencies.</li> <li>• Install advance stop lines and coordinated "Stop Here on Red" (R10-6 or R10-6a) signage.</li> <li>• Install green (D-3) street name signs at this location. Signs oriented to motorists should include the words "Sligo Creek Trail" along with, ideally, pictographs of both a pedestrian and a bicyclist. Signs oriented to trail users should indicate the street name, "MD 410 (East West Hwy)." See <b>Figure 56</b>.</li> <li>• The Prince George's Department of Parks and Recreation will install new wayfinding signage at this location to address the navigational needs for Sligo Creek Trail users, including those using either of the pedestrian bridges over Sligo Creek, which provide local linkage for the neighborhoods along the service roads.</li> <li>• There is a need for a mast arm-mounted D-3 street name sign that reads, "Sligo Creek Trail" over MD 410 (East West Hwy) at the Sligo Creek Trail intersection, visible to motorists traveling in both directions of MD 410 (<b>Figure 57</b>).</li> </ul>	Major



Table 2. Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
18	East West Highway and Fairview Ave/ Linden Ave	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Significant pedestrian desire line due to bus stops.</li> <li>• Uncontrolled, unmarked crossing with multiple lanes in each direction.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• Recent pedestrian or bicycle crashes.</li> </ul>	<ul style="list-style-type: none"> <li>• Install high-visibility crosswalk supported by rectangular rapid flashing beacon, curb extensions, and pedestrian crossing island.</li> <li>• Install advance yield markings and coordinated "Yield Here for Pedestrians" (R1-5) signage.</li> </ul>	Major
19	Pedestrian/ bicycle bridge across Sligo Creek on north side of East West Highway	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Although the worn-out temporary plywood ramps at this location were recently removed and replaced, the replacements were not designed correctly.</li> </ul>	<ul style="list-style-type: none"> <li>• Replace the replacement ramps with well-designed ramps that are permanent and durable.</li> </ul>	Maintenance
20	Intersection of Sligo Trail and trail spur to Sligo Creek Pkwy.	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Lack of wayfinding signage.</li> </ul>	<ul style="list-style-type: none"> <li>• M-NCPPC Department of Parks and Recreation will install new wayfinding signage at this location to address the navigational needs for Sligo Creek Trail users.</li> </ul>	Maintenance
21	Riggs Rd (East West Highway to University Blvd)	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Significant bicycle desire line due to nearby retail establishments, bus stops, University of Maryland, and Northwest Branch Trail. (Desire line will be enhanced by future Purple Line and planned protected bike lanes on University Boulevard.)</li> <li>• High motor vehicle speeds and volumes.</li> <li>• High crash corridor for pedestrian or bicycle crashes, including seven recent KSI crashes.</li> </ul>	<ul style="list-style-type: none"> <li>• Explore construction of protected bike lanes or shared use path.</li> <li>• Most critical section is between Chapman Street and University Boulevard.</li> <li>• The bikeway may be a combination of on-road and off-road facilities.</li> <li>• Consider creating space for a bikeway by reducing Riggs Road to a 5-lane section or narrowing the median.</li> <li>• If a bikeway is constructed, install wayfinding signage at key decision points (e.g., Chapman Street, Drexel Street).</li> </ul>	Major
22	Riggs Rd and Amherst Rd	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Significant pedestrian crossing location due to nearby multi-family housing and bus stops.</li> <li>• Uncontrolled, unmarked, multi-lane pedestrian crossing.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• Recent pedestrian or bicycle crashes, including two KSI crashes.</li> </ul>	<ul style="list-style-type: none"> <li>• Install pedestrian hybrid beacon.</li> <li>• Install advance stop lines and coordinated "Stop Here on Red" (R10-6 or R10-6a) signage.</li> <li>• Shift southbound bus stop north to Amherst Road to encourage bus riders to use pedestrian hybrid beacon supported crossing.</li> </ul>	Major

**Table 2.** Other Recommended Projects (continued)

Map ID	Location	Type	Issues	Recommendations	Recommendation Level
23	Riggs Rd and Drexel St (west side of Riggs Rd)	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Significant pedestrian crossing location due to nearby multi-family housing and bus stops.</li> <li>• Crossing is used by families that live in Lewisdale to access Carole Highlands Elementary School.</li> <li>• No marked crosswalk on the north side of the signalized intersection.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• Recent pedestrian or bicycle crashes, including one KSI crash.</li> </ul>	<ul style="list-style-type: none"> <li>• Install high-visibility marked crosswalk with ADA ramps on the north leg of the intersection.</li> <li>• Consider locating a crossing guard at this intersection during school arrival and dismissal hours.</li> </ul>	Mid
24	Riggs Rd and Drexel St (east side of Riggs Rd)	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Significant pedestrian crossing location due to nearby retail establishments, multi-family housing, and bus stop.</li> <li>• Uncontrolled, unmarked, multi-lane pedestrian crossing.</li> <li>• High motor vehicle speeds and volumes.</li> <li>• Recent pedestrian or bicycle crashes, including one KSI crash.</li> </ul>	<ul style="list-style-type: none"> <li>• Install pedestrian hybrid beacon.</li> <li>• Install advance stop lines and coordinated “Stop Here on Red” (R10-6 or R10-61) signage.</li> <li>• Shift southbound bus stop north to Drexel Street (east side of Riggs Road) to align with the proposed crossing.</li> </ul>	Major
25	Crosby Rd and Amherst Rd	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>• Missing detectable warning surfaces.</li> </ul>	<ul style="list-style-type: none"> <li>• Reconstruct existing ramps with detectable warning surfaces.</li> </ul>	Maintenance

**Table 2.** Other Recommended Projects (continued)

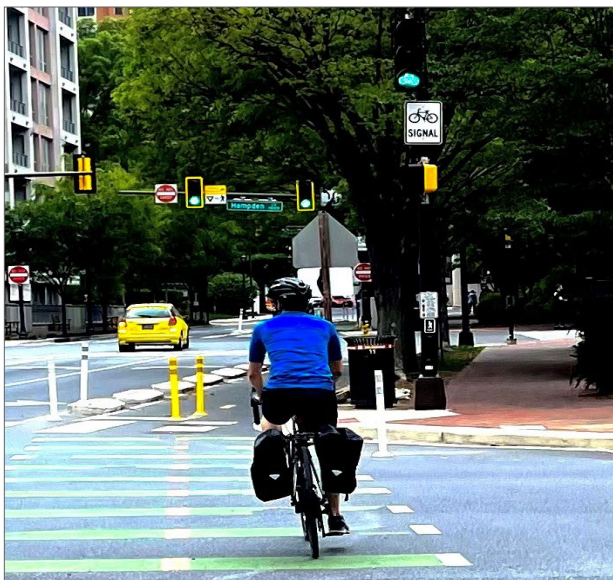
Map ID	Location	Type	Issues	Recommendations	Recommendation Level
26	17th Ave and Avalon Pl	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>Missing sidewalk segment on north side of Avalon Place near intersection.</li> </ul>	<ul style="list-style-type: none"> <li>Construct a sidewalk to address an existing gap.</li> </ul>	Mid
27	17th Ave and Amherst Rd	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>Skewed intersection with a long pedestrian crossing across Amherst Road.</li> <li>Intersection angle facilitates high-speed turns.</li> <li>Missing detectable warning surfaces</li> </ul>	<ul style="list-style-type: none"> <li>Install triangular curbed pedestrian crossing island to support Amherst Road crossing and encourage slower left turns from northbound 17th Avenue. (Crossing island can be constructed with flex posts as an interim measure.)</li> <li>Add stop bar next to existing STOP sign.</li> <li>Reconstruct curb ramps with detectable warning surfaces.</li> </ul>	Mid
28	Intersection of trail spur and Sligo Creek Parkway/ Drexel St	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>Lack of wayfinding signage.</li> </ul>	<ul style="list-style-type: none"> <li>Install wayfinding signage to indicate that spur trail provides access to the Sligo Creek Trail.</li> </ul>	Maintenance
29	Driveway entrances to University Plaza West and Hechinger Plaza Shopping Center	Intersection, Crossing, or Spot	<ul style="list-style-type: none"> <li>Missing detectable warning surfaces.</li> </ul>	<ul style="list-style-type: none"> <li>Install detectable warning surfaces.</li> </ul>	Maintenance



**Figure 53.** A yield street accommodates sidewalks on Walnut Street in northwest D.C. (PHOTO BY TOOLE DESIGN GROUP)



**Figure 54.** Bicycle and pedestrian signal heads queue riders and pedestrians at a signalized intersection in New York City. (PHOTO BY M-NCPPC)



**Figure 55.** Bicycle and pedestrian signal heads direct cyclists in Bethesda, Maryland. (PHOTO BY M-NCPPC)



**Figure 56.** Flex posts shorten pedestrian crossing distances at 13th and Upshur Streets in northwest D.C. (PHOTO BY M-NCPPC)



**Figure 57.** A shared-use path and roadway street name sign, such as this one in Minnesota, makes uncontrolled crosswalks more visible to motorists. (PHOTO BY M-NCPPC)



**Figure 58.** A protected pedestrian lane in Silver Spring directs walkers along a street without sidewalks. (PHOTO BY TOOLE DESIGN GROUP)



**Figure 59.** A pedestrian crossing island at a Franklin Avenue intersection in Silver Spring, MD. (PHOTO BY TOOLE DESIGN GROUP)



**Figure 60.** A mast arm-mounted street name sign improves recognition of a shared-use path intersection in Herndon, VA. (PHOTO BY M-NCPPC)



# Section 9

Appendices

**PARTICIPANTS**

Michael Jackson	Karina Navas	Adam Dodgshon
Judith Howerton	Daniel Hartmann	Mussie Tewolde
Jim Elliott	Will Capers	Erv Beckert
Diane Lambert	Terry Johnson	Bob Patten
Renee White	Ayden Cohen	

**AGENDA**

- Introductions
- Goals and Context
- Scope and Schedule
- Stakeholder Outreach
- Next Steps
- Administrative Issues

**GOALS AND CONTEXT**

- The project management team’s consensus was that the initial goal of the study was sufficient, as it was community-centric and broad enough to encompass everything surrounding the project.
- Question for attendees: What else is it important to know about the impetus for this project or neighborhood/project context?
- Karina Navas noted that the area in general has a lot of pedestrian accidents and given the lack of connectivity and infrastructure, there is no incentive to walk around.
- Renee White shared that the Carole Highlands Neighborhood Association meetings focus on the walking path of getting to the future Purple Line and the future impact of the Purple Line on pedestrian routes in the neighborhood. In addition, the president of the neighborhood association observed that many streets within the study area lack sidewalks, so what are ways to make things accessible when the Purple Line finally opens?
- Adam Dodgshon emphasized that this project was deliberately called “safe mobility” rather than “pedestrian access” due to the potential with the Purple Line. He also recommended activation of the street, or placemaking, to bring traffic calming elements to the street. Traffic solutions, along with pedestrian solutions. Erv Beckert noted that University Boulevard is one of the most dangerous roads in the state for pedestrians, as more pedestrians have been killed there than any road in the state of Maryland. Whatever it takes to make the road safer and highlight the presence of other modes of transportation besides the automobile is useful.
- Will Capers noted the importance of a context-sensitive approach and discussing the process with citizens and community members.



**OVERVIEW OF SCOPE AND TASKS**

- 0** Project management
- 1** Kick-off meeting
- 2** Refine schedule
- 3** Team site visit/walking audit
- 4** Plan review and existing conditions report
  - Mussie Tewolde expressed curiosity about studies previously done in the study area (specifically University Boulevard, given its notoriety). It could be beneficial to collect the data and then compare that data to other jurisdictions to see where their numbers fall. Are there any planning/design efforts that made a difference in the other counties? Look at the trends in the incidents as well.
  - Erv Beckert expressed concern regarding pedestrian temptation to cross streets unsafely due to the lack of pedestrian facilities nearby. Most of the fatalities occur in the middle of the block, justifying the need for better venues for pedestrians. Erv Beckert also asked if this study will trigger future projects.
- 5** Preparation for Community Walk Audit and debrief
  - Judith Howerton – The county has a hierarchical review process, so it is important to note that the review process could take up to six weeks. With that in mind, we must determine if the current due dates/timeline mean a final, reviewed deliverable or not. Also mentioned the need to plan how early we want to start planning/reaching out to people for the community walk audit so they can ensure it works for their schedule.
  - Dan Hartmann - They have an internal process for how they prepare for community meetings. The question is how much do we want to prepare vs the county? They have designers, web staff, etc., that can help develop some of the materials, we would just need to give them the content.
- 6** Community Walk Audit and debrief
- 7** Prepare draft report
  - Will Capers - design will be more conceptual in nature
- 8** Review of study and presentation materials
- 9** Final draft presentation to the community
  - First review of documents must be presented as a Microsoft Word document
- 10** Refine report
- 11** Final report

## **STAKEHOLDER OUTREACH:**

Who are the key stakeholder groups?

- Carole Highlands Neighborhood Association
- Lewisdale Condos
- State Highway Administration
- Commercial owners and tenants along University Boulevard
- Governmental, Regulatory and External Affairs (GREA) for Pepco Holdings
- Bob Patten suggested a citizen activist, although he might be a part of the neighborhood association already

## **ISSUES RAISED**

- Scheduling/review time

## **NEXT STEPS**

- Confirm a bi-weekly time for project meetings
- Refine a project schedule
- Reach out to appropriate parties about data/information needs
- Begin plan review and existing conditions analysis
- Schedule site visit with core project management team



The study team participates in a Community Walk Audit in Carole Highlands. (PHOTO BY M-NCPPC)

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# Stop 1

## Hannon Street and 18th Avenue

### OBSERVATIONS

- Participants observed missing sidewalk on the east side of 18th Avenue and north side of Hannon Street.
- Participants observed the informal trail connecting the intersection of 18th Avenue and Hannon Street to the south side of the 1835 University Plaza shopping center at University Boulevard/Riggs Road.
- Participants discussed the feasibility of formalizing the trail as an ADA and bike-friendly connection.
- Participants discussed personal security concerns related to the informal trail.
- Renee White observed crime scene tape at the site.
- Participants observed another goat trail connecting the intersection of 18th Avenue and Hannon Street to the west side of the 1835 University Plaza shopping center that is now blocked by a fence that was installed due to safety concerns associated with a generator on the adjacent Riggs Hill Condominium property.
- Participants observed and accessed Carole Highlands Elementary School from Hannon Street.
- Participants walked the informal trail at the end of Hannon Street that is frequently used to access the school.
- The trail is 250 feet and 2 inches in length.
- Renee White observed illegal dumping, people experiencing homelessness in the woods surrounding the trail, and potential security concerns at night given the absence of lighting along the trail.
- Renee White noted that in past years, the Carole Highlands Elementary School principal closed the gate adjacent to the school property, but reopened it due to complaints from community members that need access to the school.
- Michael Jackson observed the need for wayfinding signage to help people understand how to get to the school.
- Participants observed the absence of a sidewalk on the south side of Hannon Street at the intersection of 16th Avenue as one approaches the school and leading up the street to school property, where the sidewalk begins, adjacent to the informal trail.
- Participants observed students walking in the roadway on Hannon Street between 16th Avenue and 15th Avenue.
- Participants observed that the street widths of Elson Street (35 feet) and 15th Avenue may trigger speeding and noted the extra space could be used for a sidewalk or separate walking area in the roadway.

### 1835 University Plaza Shopping Center Access

# Stop 2

## 18th Avenue/Drexel Street and Erskine Street

### OBSERVATIONS

- Speeding is a major concern on Erskine Street, which is used as a short cut between New Hampshire Avenue and Riggs Road.
- Renee White recalled a speed enforcement and awareness event on Erskine Street that resulted in a high number of moving violations and other traffic infractions for non-compliance.
- Michael Jackson proposed adding wayfinding signage to navigate Carole Highlands and surrounding areas.
- Participants discussed the traffic-calming potential of installing a roundabout or other structure at 18th Avenue/Drexel Street/Erskine Street intersection.
- Participants observed the potential of decreasing street widths and repurposing the space for traffic calming Placemaking elements or a bike station, as wider street widths trigger speeding vehicles.
- Participants observed the absence of a sidewalk on the south side of Erskine Street, next to Turner Memorial AME church, the absence of crosswalk markings, and significant lack of accessibility.
- Riggs Road between Drexel Street and Chapman Road
- Participants observed the potential of constructing a shared-use path along the east side of Riggs Road between Chapman Road and Drexel Street to facilitate east-west bike travel between Chapman Road in Lewisdale and the Drexel Street/Erskine Street corridor in Carole Highlands by reducing the width of the median and shifting northbound lanes.

### OBSERVATIONS

- Participants discussed the potential of building a shared-use path along the Pepco right-of-way between Riggs Road and East West Highway.
- Participants noted the potential use of the Turner Memorial AME Church parking lot, adjacent to the Pepco right-of-way, (which the church closed due to loitering and illegal dumping.
- Participants observed trash in Pepco right-of-way.

### 18th Avenue/ Drexel Street/ Erskine Street

### Pepco Right-of-Way

## Stop 3

### East West Highway and East West Highway Service Road

#### OBSERVATIONS

- Participants discussed making improvements at the intersection of the Sligo Creek Trail and East West Highway to facilitate safe crossing at East West Highway and improve orientation for trail users.
- Participants discussed the need for maintenance at sidepath bridge over Sligo Creek.
- Participants discussed the potential of improving bicycle connectivity on East West Highway between Riggs Road and New Hampshire Avenue.
- Participants discussed installing a marked crosswalk at the intersection of East West Highway and Linden Avenue/Fairview Avenue, where bus stops exist along East West Highway.

#### East West Highway/ East West Highway Service Road

## Stop 4

### Eastern Terminus of Holton Lane

#### OBSERVATIONS

- Participants discussed the potential of installing a shared use path from the end of Holton Lane to Carole Highlands.
- Renee White observed a bar/lounge across the parking lot from the fence that currently surrounds Carole Highlands on the north side and raised concerns about potential safety issues for the school.
- Participants discussed the need to maintain fencing around the school property, but the potential of providing a shared use path to the end 15th Avenue.
- Renee White discussed soliciting critical feedback from residents that live on 15th Avenue regarding the use of vehicles to navigate Carole Highlands versus safe walking options.

#### Eastern Terminus of Holton Lane

#### ADDITIONAL INFORMATION SHARED

- Community events are often held at residents' homes or virtually.
- Potential opposition from residents who perceive new sidewalks as a maintenance burden and a reduction of their yard space.

## Appendix C: Community Walk Audit

6.25.2022

### **PARTICIPANTS**

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**Barbara Franklin**  
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### **AGENDA**

The Carole Highlands Community Walk Audit was divided into three parts: a pre-walk audit meeting, walking tours along two routes, and a walk audit debrief meeting. One walking tour covered the Drexel Street/Erskine Street/18th Avenue intersection, Riggs Road, the Pepco right-of-way, and points in between. The other walking tour covered 16th Place, Elson Street, Hannon Street, 18th Avenue, and points in between.

Observations made during the walking tours occasionally referenced locations in the study area that were not part of the tour. The debrief meeting addressed locations on the walking tours and locations not covered by the tours. The minutes below are organized by location and topic.



## LOCATION OBSERVATIONS

### 18th Avenue

- Participants observed several goat trails that lead to Riggs Road from 18th Avenue via breaks in fencing.
- Concern was expressed that owner of the fence—possibly Riggs Hill Condominiums—may make future repairs, blocking trail access.

### 18th Avenue and Hannon Street

- The goat path behind the building that leads to Hechinger Plaza is a vital, daily connection. A resident reported that she used the goat path to access stores and the C4 and C6 bus lines.
- The previous access point has been fenced off by Riggs Hill Condos, causing people to go around, using a steeper, less accessible path.
- The resident recently encountered a woman who had fallen on the steeper path referenced. The resident was unable to help the person up from the fall and went to a neighbor to help the person recover from the fall.
- The resident has asked her partner to see if they can get something installed on the goat trail (such as rocks to create makeshift stairs, so the path is easier to walk on. The resident finds the current state of the path difficult and dangerous.
- There are security concerns surrounding this and other goat paths near the 18th Avenue and Hannon Street intersection.
- Support from Riggs Hill Condos is necessary to advance these path improvements.
- The neighborhood association contacted Riggs Hill Condominiums attempting to improve the goat trail connections without success.



**Figure A1.** A fence separates an informal trail from the Carole Highlands school grounds. (PHOTO BY M-NCPPC)

## Trail from Hannon Street/ 17th Avenue to Carole Highlands Elementary School

- Snow and ice make the trail treacherous.
- Aging caregivers often use this trail to take kids to school, posing a risk of them slipping or falling on the path in treacherous conditions.
- Due to the absence of lighting, an assault in a nearby parking lot, and a homicide that occurred in the woods surrounding the trail, there are personal security concerns. In the past, the woods surrounding the trail were the site of an encampment for people experiencing homelessness.
- The principal of Carole Highlands Elementary School faces the challenge of keeping students safe while providing easy access to the school. The principal once closed a gate that offers access to the school via the trail at 17th Street and Hannon Avenue. The principal reopened the trail following complaints from parents and caregivers regarding lack of access.

## Connection from 15th Avenue to Holton Lane

- Michael Jackson observed the benefit of a connection from the Holton Lane terminus to 15th Avenue. This connection is supported by many neighbors on 15th Avenue because of a post office and other amenities on Holton Lane, while other neighbors hold concerns regarding those most impacted by a new connection (neighbors that reside at the end of the street).
- There was a connection from 15th Avenue/Hannon Street westward, but it is closed.



**Figure A2.** An informal goat trail connects Hannon Street to Carole Highlands Elementary School. (PHOTO BY M-NCPPC)

## 15th Avenue

- 15th Avenue is one of the widest streets in the neighborhood; is a major thoroughfare for school traffic.
- Both width and slope of 15th Avenue contribute to motor vehicle speeding.
- There are reports of school bus drivers speeding and failing to come to a stop at intersections.
- There is high pedestrian traffic on 15th Avenue, yet the street lacks a sidewalk.
- Michael Jackson observed the benefit of traffic-calming tools on 15th Avenue.

## Elson Street

- There is no sidewalk on the southeast side of Elson Street between 16th Avenue and 17th Avenue and there are no sidewalks on Elson Street south of 16th Avenue.

## Elson Street and 16th Avenue

- Participants observed the benefit of a 4-way stop.

## Drexel Street

- High motor vehicle speeds are reported on Drexel Street due in part to the street's slope.
- Drexel Street is used as a short cut to Erskine Street.
- The neighborhood association tried unsuccessfully to get speed humps installed on Drexel Street, but a petition is necessary.
- Drexel Street is narrow, causing drivers who park on the street to close their side view mirrors to prevent sideswiping by passing cars.
- Though there are many families with children and dog walkers, there are no sidewalks on Drexel Street.
- The curve and slope of Drexel Street, the narrow width, and number of parked cars along the street make it difficult for pedestrians and drivers to see one another.

## Drexel Street and 16th Place

- There are concerns regarding high motor vehicle speeds and vehicles failing to yield due to the absence of crosswalks across Drexel Street.

## Erskine Street

- Erskine Street—a shortcut between Riggs Road and New Hampshire Avenue—urgently needs sidewalks because of the higher motor vehicle speeds and volumes.
- There are missing sidewalks on the south side of Erskine Street between 18th Avenue and 16th Place and on both sides of the street west of 16th Place.

## Erskine Street and 16th Place

- Motor vehicle speeds and vehicles that fail to yield create challenges when crossing Erskine Street, so a raised crosswalk may improve safe crossing.

## Erskine Street, Drexel Street, and 18th Avenue

- This location—the site of Turner Memorial AME church—is an unusual intersection at which three streets intersect yet there are no marked crosswalks across Erskine Street or Drexel Street.
- This intersection is frequented by people at Carole Highlands Elementary School.
- It was observed that stop signs are routinely ignored.
- Observed the benefit of traffic-calming elements, such as placemaking installations, art, planters, or a roundabout like other tools in adjacent neighborhoods.

## Drexel Street and Riggs Road

- There is no marked crosswalk on the north side of Drexel Street as it crosses Riggs Road, yet there are bus stops at the north side crossing, which tempts pedestrians to cross Riggs Road outside of marked crosswalks.

## Riggs Road

- The vegetation along the sidewalk on Riggs Road is overgrown in some areas.
- There is no infrastructure for cyclists along Riggs Road.
- Observed the prioritization of cars given the number of vehicle lanes, the potential benefit of an east-west bicycle connection across Riggs Road, and wider sidewalks.
- There is little to no buffer between the sidewalk and the street.
- The walking tour group observed a mail carrier attempting to cross Riggs Road in the middle of the block, and indication of the lack of safe crossings on Riggs Road.

## Pepco right-of-way

- The Pepco right-of-way divides Carole Highlands on the northwest side from Park Lawn/Riggs Park Estates on the southeast side of the right-of-way.
- One participant noted the monthly nature/bird walks through the Pepco field.
- The neighborhood association prioritizes the environmental protection of the field and has collaborated with Pepco on how to reduce mowing while protecting the field from invasive plant species.
- Preference for natural surface trail connections within the Pepco right-of-way over paved surface trails.

## East West Highway and Riggs Road

- The walking tour group observed the need for pedestrian safety improvements.

## East West Highway

- The group observed the need for bicycle access improvements along East West Highway.
- There are reported challenges with runoff and flooding of houses on the service road along the north side of East West Highway.

## East West Highway and Sligo Trail

- Walking tour participant Jeff Cronin suggested the prioritization of access and safety improvements—such as a High-Intensity Activated crosswalk (HAWK)—at Sligo Creek Trail where it crosses East Highway.
- Participants observed the need for a bicycle repair stand on Sligo Creek Trail.

## GENERAL COMMENTS

Councilmember Taveras's priorities are sidewalk construction and repair, daylighting at intersections, marked crosswalks at large intersections, traffic calming, and speed humps.

A participant suggests a meeting with CASA shortly after election day, which is July 19.

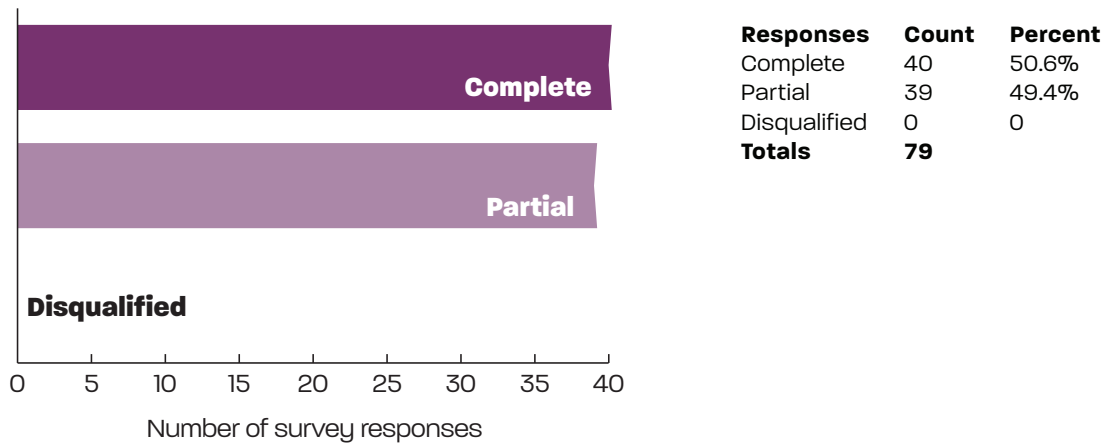


Sligo Creek Trail at the Takoma Park boundary line in the study area.  
(PHOTO BY M-NCPPC)

## Appendix D: Carole Highlands Safe Mobility Study Summary Results

### PEDESTRIAN, BICYCLE, AND MOTOR VEHICLE ACCESS AND SAFETY IMPROVEMENTS SURVEY RESPONSE STATISTICS

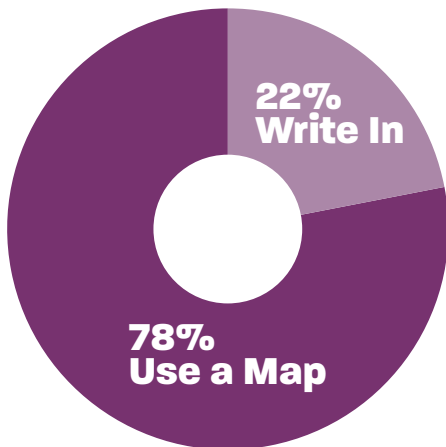
Respondents were asked where they would like to see pedestrian, bicycle, and motor vehicle access and safety improved in the study area. **Figure A3** illustrates the response rate of the survey.



**Figure A3.** Response rate of the Pedestrian, Bicycle, and Motor Vehicle Access and Safety Improvements Survey.

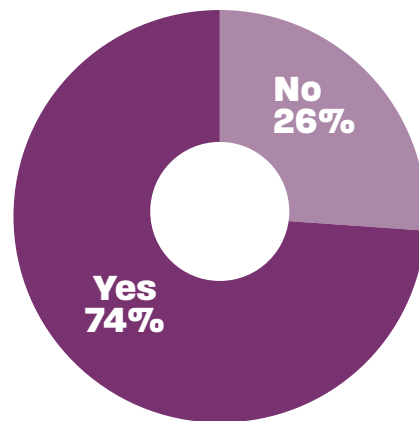
Respondents were asked if they prefer to respond in writing or by indicating locations map.

Response Method	Count	Percent
Describe locations in writing	9	22.5%
Show locations on a map	31	77.5%
<b>Totals</b>	<b>40</b>	



**Figure A4.** Preferred survey response method by participants.

Most respondents are interested in receiving email updates on the Carole Highlands Safe Mobility Study.



**Figure A5.** Percentage of respondents that plan to remain engaged with the Carole Highlands Safe Mobility Study.

PEDESTRIAN ACCESS AND SAFETY IMPROVEMENTS SURVEY RESPONSES



- Key Destinations**
- Church
  - Commercial
  - Multifamily Residential
  - School
  - Future Purple Line Station

Participants clicked corresponding locations on an interactive map illustrating desired improvements in the study area.

The red color on the map indicates the locations most often identified by survey respondents desiring **pedestrian** safety improvements.

The orange, yellow, green, and blue colors indicate locations less frequently identified in descending order from orange to blue.

## BICYCLE ACCESS AND SAFETY IMPROVEMENTS SURVEY RESPONSES







MOTOR VEHICLE ACCESS AND SAFETY IMPROVEMENTS SURVEY RESPONSES



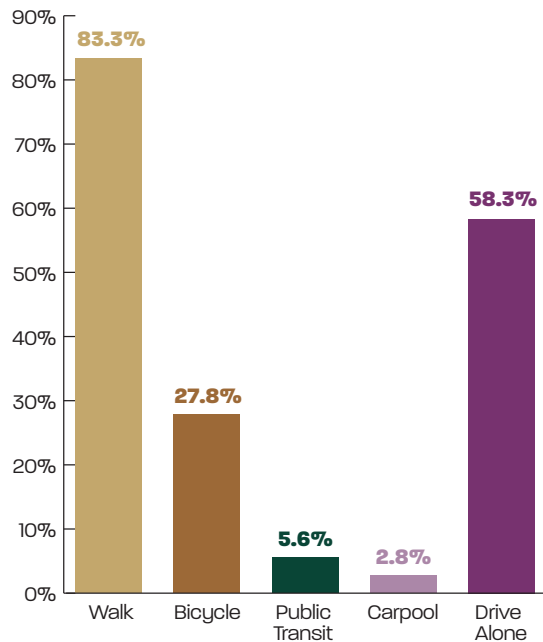
## ADDITIONAL RESPONSES FROM THE PEDESTRIAN, BICYCLE, AND MOTOR VEHICLE ACCESS AND SAFETY IMPROVEMENTS SURVEY



Response ID	Response
12	Might it be possible to create a bike trail beneath the power lines that run between Drexel Street and Crosby Road?
17	The sidewalks on either side of Riggs Road are in poor condition; probably not ADA compatible; crumbling in some places. Thanks for conducting this survey.
19	En el parking lot De la Iglesia Turner, Memora es un lugar que no hay mucha luz y los focos que tienen allí no funcionan. Es una área bien oscura durante la noche. Si hay más luz podemos caminar con más seguridad y se puede ver si hay algún peligro. (Translation: In the parking lot of the Turner Memorial Church, it is a place where there is not much light and the spotlights there do not work. If there is more light, we can walk safely, and you can see if there is any danger).
21	Necesitamos conectividad con la línea morada. (Translation: We need connection with the Purple Line.)
23	I would like a permanent stop sign ticket camera at 15th Ave and Erskine intersection. This is a VERY dangerous location. I've almost been hit numerous times when walking my dog.
26	Add speed bumps to 16th Ave, between Elson and Erskine please. Make a path across from intersection of Hannon St and 18th Ave.
30	We need to slow down the drivers in the neighborhood and somehow get them to stop at the stop signs. Trim trees or plants from blocking stop signs everywhere in the neighborhood.
37	We need sidewalks and protected bike lanes to ensure that pedestrians and bicyclists are safe from motor vehicle traffic. Speeders and folks running stop signs are just going to get worse as traffic increases due to purple line construction/opening. We need to protect our community members and our children from dangerous motor vehicle operators.
39	The more sidewalks in the neighborhood, the better.
49	Sidewalks!
50	I believe all the streets in Carole Highlands should have a sidewalk on at least one side of the street for safety. Drexel Rd is particularly hazardous.
57	Speed bumps on 15th Ave. Flashing 4-way stop signs at Erskine and 15th and Erskine and 16th. Flashing stop sign at Hannon and 15th, people leaving the school after dropping off and picking up just make that left turn without stopping!
58	We desperately need safety bumps (like MoCo has just blocks away) to slow down traffic. I would also welcome sidewalks to protect pedestrians.
59	Our neighborhood receives heavy use from non-neighborhood residents for (1) cut-through (i.e., using Erskine to cut-through from New Hampshire to Riggs, (2) heavy auto and bus traffic for Carole Highlands ES, and (3) regular and special events at the Turner Memorial Church. Improved pedestrian and bike safety is needed.
60	People in cars go at high speeds down Erskine and 15th Ave without fully stopping. This is a route to the elementary school. Buses also go too fast. I want to see speed bumps installed like they do down by Hillwood Park. Considering moving because of safety issues in this area.
62	Speed bumps and sidewalks are needed along Drexel St. and 15th Ave. It is a hill down from Riggs and is often used as an alternative to Erskine St. connecting Riggs and New Hampshire. Maybe pedestrians walking the road and cars going too fast.
65	I like the flashing stop sign!
66	I would like the county to reconsider the routing of school buses to Carole Highlands. Currently, they speed down 16th Avenue, which is a narrow residential street with parking on both sides. Erskine would seem to be a safer and more appropriate bus route.
68	It is well past time for sidewalks in the parts of Carole Highlands that don't have them. It's almost impossible to navigate the neighborhood on foot, in particular because Erskine has no sidewalks, so you can't safely travel across the neighborhood. Sidewalks are essential if people are going to be able to, for instance, walk along Erskine to Riggs to walk up to the Purple Line station.
77	I do not want sidewalks. Trees would have to be cut down and our yards made smaller. I do not want people from Langley Park having easy access to our neighborhood.
79	Get rid of the signs: they don't work, and they make the neighborhood look trashy. Get rid of the speed bumps: they don't work and are bad for the environment. On Erskine, get rid of the stop signs. They don't work and are bad for the environment. Solve the problem of people shortcutting through the neighborhood by making Erskine one-way between 16th Place and 17th Avenue.

**SURVEY RESPONDENT STATISTICAL DATA**

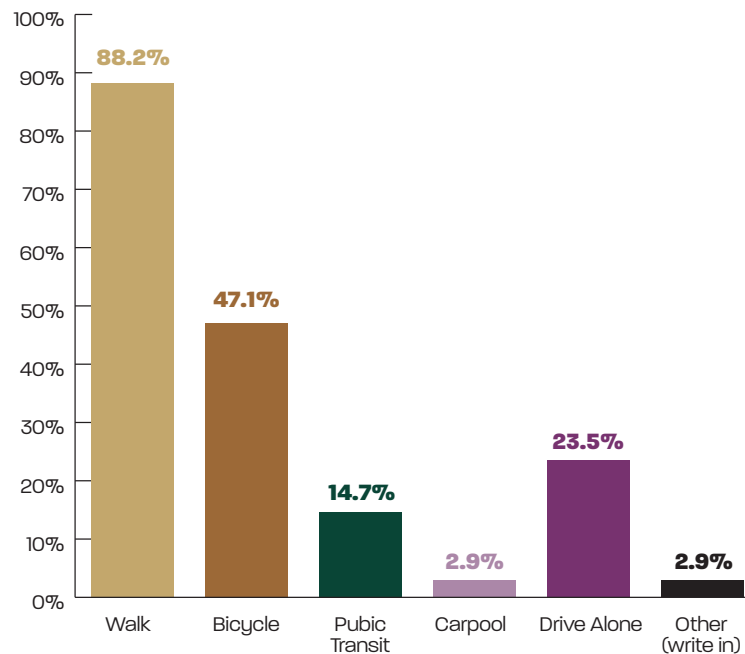
Respondents ranked the top two ways they **currently** travel between destinations within Carole Highlands.



Travel Method	Count	Percent
Walk	30	83.3%
Bicycle	10	27.8%
Public transit	2	5.6%
Carpool	1	2.8%
Drive alone	21	58.3%
Other	0	

**Figure A6.** Current travel methods within the study area.

Respondents ranked the top two ways they **prefer** to travel between destinations within Carole Highlands.



Preferred Method	Count	Percent
Walk	30	88.2%
Bicycle	16	47.1%
Public transit	5	14.7%
Carpool	1	2.9%
Drive alone	8	23.5%
Other	1	2.9%

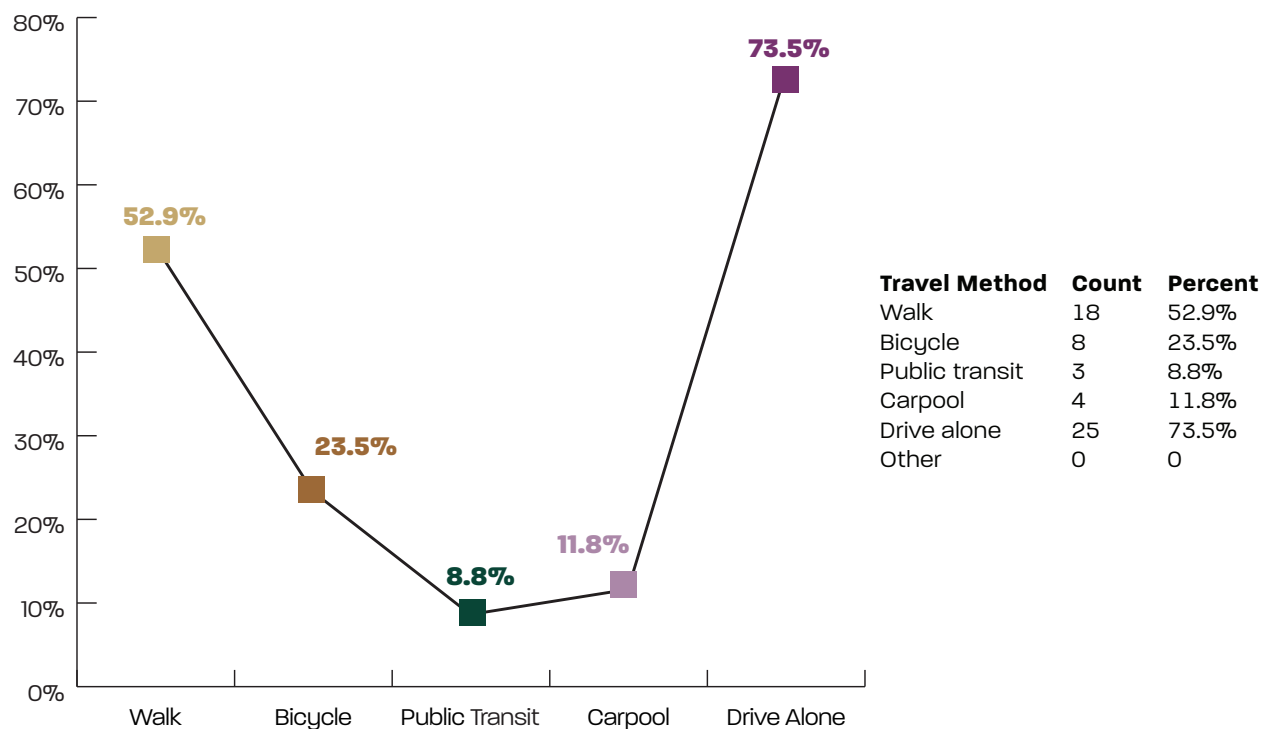
**Figure A7.** Preferred travel methods within the study area.

## SURVEY RESPONDENT STATISTICAL DATA

Respondents were asked, if a **preferred** method of traveling between destinations within Carole Highlands differs from a **current** method of travel, what should change for a respondent to choose the preferred method of travel?

Response ID	Response
17	I'd take the bus to metro more if service were just a bit better. The K9 express bus stops for Carole Highlands on Erskine. Improving frequency on that, the K6, and the 16 would be great.
19	En mi vecindario prefiero caminar y no manejar. (In my neighborhood I prefer to walk and not drive.)
23	I'd like to bike. Probably just the space between walkers and bikers on the paths would need to be widened.
26	Sidewalks
30	Sidewalks and slowing traffic down
37	We need sidewalks
44	need bike lanes
57	I would need a bike path
58	None — I prefer to walk or bike
60	I would like to feel more comfortable walking for everyone.
62	Sidewalks. And something to slow the speed of cars.
65	speed bumps! sidewalks!
79	Prohibit street parking on Erskine and put bike lanes on both sides.

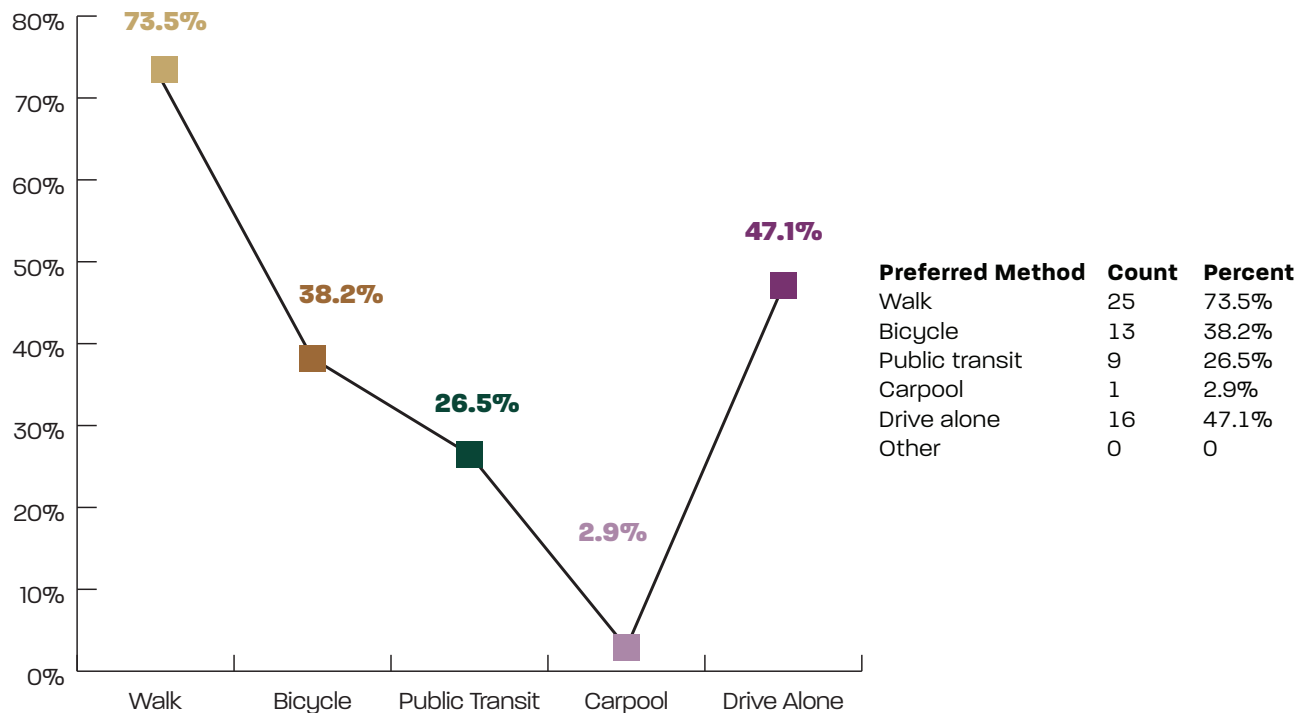
Respondents ranked the top two ways they **currently** travel between destinations within Carole Highlands and destinations in adjacent areas.



**Figure A8.** Current travel methods within the study area and adjacent areas.

**SURVEY RESPONDENT STATISTICAL DATA**

Respondents ranked the top two ways they **prefer** to travel between destinations within Carole Highlands and destinations in adjacent areas.



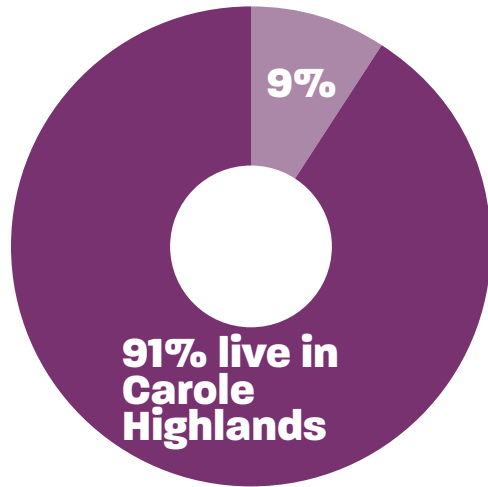
**Figure A9.** Preferred travel methods within the study area and adjacent areas.

Respondents were asked, if a **preferred** method of traveling between destinations within Carole Highlands and to destinations in adjacent areas differs from a **current** method of travel, what should change for a respondent to choose the preferred method of travel?

Response ID	Response
37	Need sidewalks and better access to public transit.
44	Finish Purple Line.
57	Bike lanes.
58	I always feel unsafe as a pedestrian walking along New Hampshire Ave—the cars drive so fast. I also feel unsafe walking in Carole Highlands because of the lack of sidewalks.
60	I don't feel comfortable crossing New Hampshire to continue on the Silgo Trail and to cross at Erskine/ Garland. The light doesn't seem long enough for normal walking speed. Feel stuck within Carole Highlands neighborhood.
62	Sidewalks and speed bumps. I do not feel safe walking the street.
65	Purple line! Bike lanes, especially on New Hampshire Ave.
68	Sidewalks inside Carole Highlands in the places that don't have them, especially on Erskine in the PG County parts.
79	Prohibit parking on Erskine and add bike lanes.

## SURVEY RESPONDENT DEMOGRAPHIC DATA

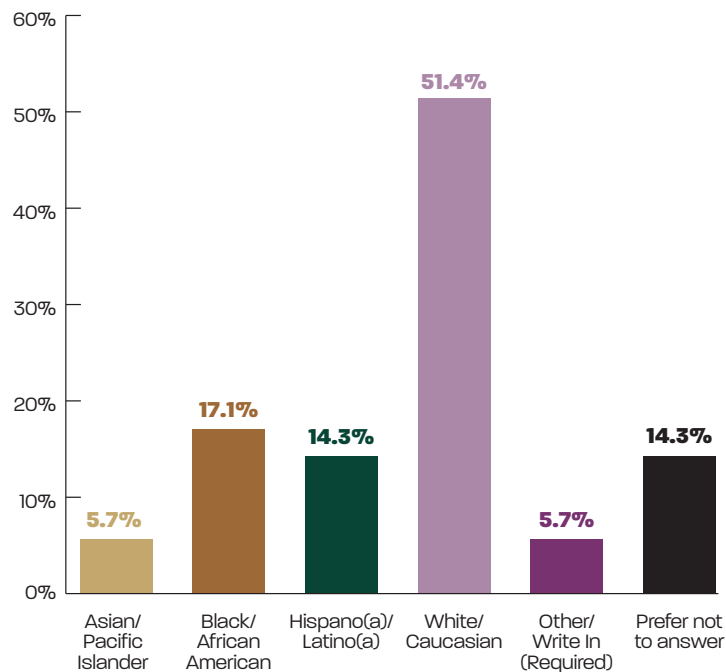
Most survey respondents live in Carole Highlands.



Study Area Resident	Count	Percent
Yes	31	91.2%
No	3	8.8%
<b>Totals</b>	<b>34</b>	

**Figure A10.** Percentage of respondents that identify as a Carole Highlands resident.

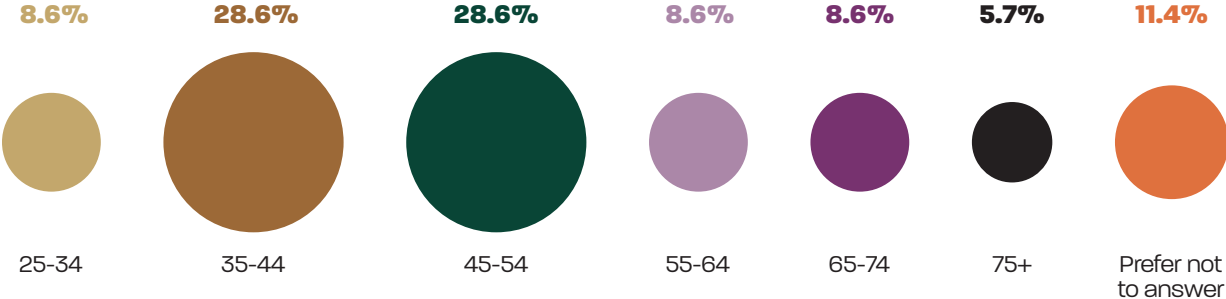
The respondent pool reflects a broad demographic.



Race/Ethnicity	Count	Percent
Asian/Pacific Islander	2	5.7%
Black/African American	6	17.1%
Hispano(a)/Latino(a)	5	14.3%
White/Caucasian	18	51.4%
Other (Write In)	2	5.7%
Guyanese	1	
Why?	1	
Prefer not to answer	5	14.3%

**Figure A11.** Respondents identified by race/ethnicity.

**SURVEY RESPONDENT DEMOGRAPHIC DATA**



**Figure A12.** Respondents identified by age.

## Appendix E: Key Plan Recommendations from Previous Plans

### RECOMMENDATIONS FOR EXISTING STREETS

Plan or Study	Relevant Recommendations
<b>MD 193 (University Boulevard)</b>	
Countywide Master Plan of Transportation (2009)	<ul style="list-style-type: none"> <li>Provide continuous pedestrian and bicycle accommodation along MD 193 with either a wide sidewalk or side path for pedestrians and recreational cyclists, and wide curb lanes, bike lanes, or shoulders for on-road bicyclists.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Install separated bike lanes.</li> <li>Provide minimum 10-foot sidewalks along University Boulevard at the platform location.</li> <li>Enhance street lighting.</li> </ul>
Takoma/Langley Crossroads Sector Plan (2012)	<ul style="list-style-type: none"> <li>Install a cycle track west of New Hampshire Avenue.</li> </ul>
SPACEs Sidewalk and Safety Improvements Study (2021)	<ul style="list-style-type: none"> <li>Install buffered bike lanes.</li> <li>Install 5-foot sidewalks with landscape buffers.</li> <li>Continue sidewalks across driveways.</li> <li>Provide parcel and inter-parcel pedestrian connections.</li> <li>At intersections, install high-viability crosswalks on all legs and leading pedestrian intervals (LPIs) and No Right Turn on Red (NRTOR); eliminate free right turns.</li> <li>Consolidate driveways.</li> <li>Install mid-block crossing with High-Intensity Activated crosswalk (HAWK) beacon between 14th Avenue and 15th Avenue.</li> <li>Install pedestrian-scale lighting.</li> </ul>
<b>MD 193 (University Boulevard) and MD 212 (Riggs Road)</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Provide a cycle track and sidewalks.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Widen and extend the median noses further into the intersection to create pedestrian refuge areas.</li> <li>Provide yield lines for right turning vehicles.</li> <li>Provide cross-hatching with high intensity paint for crosswalks.</li> <li>Use unique color paint for crosswalks to facilitate wayfinding to the Purple Line station.</li> <li>Provide wide crosswalks on the west leg of the intersection with Riggs Road to the platform.</li> </ul>
SPACEs Sidewalk and Safety Improvements Study (2021)	<ul style="list-style-type: none"> <li>Eliminate the free right turn on southeast corner.</li> </ul>
Vision Zero Action Plan (2019)	<ul style="list-style-type: none"> <li>This segment was identified as part of the High Injury Network, with many pedestrian and bicycle crashes.</li> </ul>
<b>MD 212 (Riggs Road)</b>	
Countywide Master Plan of Transportation (2009)	<ul style="list-style-type: none"> <li>Provide continuous sidewalks and on-road bicycle accommodation along this corridor.</li> </ul>
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed shared use roadway.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Install bike lanes.</li> <li>Implement traffic calming.</li> <li>Enhance street lighting.</li> </ul>
Greater Chillum Community Study (2015)	<ul style="list-style-type: none"> <li>Improve pedestrian access across Riggs Road for residents in Park Lawn and Riggs Park Estates.</li> </ul>
<b>MD 410 (East West Highway)</b>	
Countywide Master Plan of Transportation (2009)	<ul style="list-style-type: none"> <li>Continuous facilities for pedestrians and bicyclists are needed along this corridor.</li> </ul>
<b>Erskine Street</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed shared use roadway.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Upgrade intersections with new Americans with Disabilities Act (ADA) sidewalk ramps.</li> <li>Upgrade driveway entrances with ADA standard aprons.</li> <li>Provide cross-hatching with high intensity paint for crosswalks.</li> <li>Reconstruct existing narrow sidewalk (less than 4-feet wide) or construct missing sidewalk links with 5-foot sidewalk and vegetated buffer—both sides.</li> <li>Install “share the road” signage and shared lane markings.</li> <li>Enhance street lighting.</li> </ul>



## RECOMMENDATIONS FOR EXISTING STREETS

Plan or Study	Relevant Recommendations
<b>Drexel Street</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed shared use roadway.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Upgrade intersections with new ADA sidewalk ramps.</li> <li>Upgrade driveway entrances with ADA standard aprons.</li> <li>Provide cross-hatching with high intensity paint for crosswalks.</li> <li>Reconstruct existing narrow sidewalk (less than 4-foot wide) or construct 5-foot sidewalk and vegetative buffer—both sides.</li> <li>Install “share the road” signage and shared lane markings.</li> <li>Enhance street lighting.</li> </ul>
<b>Elson Street</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed shared use roadway.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Upgrade intersections with new ADA sidewalk ramps.</li> <li>Upgrade driveway entrances with ADA standard aprons.</li> <li>Provide cross-hatching with high intensity paint for crosswalks.</li> <li>Reconstruct existing narrow sidewalk (less than 4-foot wide) or construct 5-foot sidewalk and vegetative buffer—both sides.</li> <li>Install “share the road” signage and shared lane markings.</li> </ul>
<b>15th Avenue</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed shared use roadway.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Upgrade intersections with new ADA sidewalk ramps.</li> <li>Upgrade driveway entrances with ADA standard aprons.</li> <li>Provide cross-hatching with high intensity paint for crosswalks.</li> <li>Reconstruct existing narrow sidewalk (less than 4-foot wide) or construct 5-foot sidewalk and vegetative buffer—both sides.</li> <li>Install shared use paths from 15th Avenue north of 16th Avenue to Holton Lane.</li> <li>Install “share the road” signage and shared lane markings</li> <li>Enhance street lighting.</li> </ul>
<b>16th Avenue</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed shared use roadway.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Upgrade intersections with new ADA sidewalk ramps.</li> <li>Upgrade driveway entrances with ADA standard aprons.</li> <li>Provide cross-hatching with high intensity paint for crosswalks.</li> <li>Reconstruct existing narrow sidewalk (less than 4-foot wide) or construct 5-foot sidewalk and vegetative buffer—both sides.</li> <li>Install “share the road” signage and shared lane markings.</li> </ul>
<b>Hannon Street</b>	
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Upgrade intersections with new ADA sidewalk ramps.</li> <li>Provide cross-hatching with high intensity paint for crosswalks.</li> <li>Install “share the road” signage and shared lane markings.</li> </ul>
<b>18th Avenue</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed shared use roadway.</li> </ul>
Takoma/Langley Crossroads Sector Plan: Prince George’s County (2009)	<ul style="list-style-type: none"> <li>Shared use roadway</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Reconstruct existing narrow sidewalks (less than 4-foot wide) or construct 5-foot sidewalk and vegetative buffer.</li> <li>18th Avenue south of Hannon Street (east side)</li> <li>Install “share the road” signage and shared lane markings.</li> </ul>

## PROPOSED CONNECTIONS

Plan or Study	Relevant Recommendations
<b>Pepco right-of-way</b>	
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Install new shared use paths to provide connections across the Pepco right-of-way to link Carole Highlands to University Boulevard and Riggs Road.</li> </ul>
Greater Chillum Community Study (2015)	<ul style="list-style-type: none"> <li>Create pedestrian connection across high-tension wire easement between community sections.</li> <li>Improve the edges of the high-tension wire easement, particularly in high-visibility areas near major roadways.</li> </ul>
<b>Hannon Street (Carole Highlands Elementary School to 17th Avenue)</b>	
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Extend as a new roadway or shared use path.</li> </ul>
<b>15th Avenue to Holton Lane</b>	
Takoma/Langlely Crossroads Sector Plan: Prince George's County (2009)	<ul style="list-style-type: none"> <li>Indicated as planned trail.</li> </ul>
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed hard surface trail.</li> </ul>
<b>18th Avenue and Hannon Street to Hechinger Plaza</b>	
Purple Line Bicycle Hub Location Study (2010)	<ul style="list-style-type: none"> <li>Proposed hard surface trail.</li> </ul>
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Construct a fenced shared path with steps to University Boulevard or Riggs Road.</li> </ul>
<b>18th Avenue to Riggs Road</b>	
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Reconstruct existing narrow sidewalk (less than 4-foot wide) or construct missing sidewalk links with 5-foot sidewalk and vegetative buffer.</li> <li>18th Avenue to Riggs Road (adjacent to multifamily housing).</li> </ul>

## WAYFINDING AND PLACEMAKING

Plan or Study	Relevant Recommendations
Purple Line Corridor Access Study (2011)	<ul style="list-style-type: none"> <li>Install bilingual wayfinding signs along pedestrian and bicycle routes to various destinations such as the Purple Line station, Carole Highlands Elementary School, and the Sligo Creek Trail.</li> </ul>
Greater Chillum Community Study (2015)	<ul style="list-style-type: none"> <li>Create signage for community sections to create a stronger sense of identity for residents.</li> </ul>
SPACES Sidewalk and Safety Improvements Study (2021)	<ul style="list-style-type: none"> <li>Install pedestrian-scale wayfinding signage.</li> <li>Install public art at the intersection of University Boulevard and Riggs Road.</li> </ul>

2015 GREATER CHILLUM COMMUNITY STUDY



Figure A13. Existing and Proposed Bikeways from the 2015 Greater Chillum Community Study

## Appendix F: Public Right-of-Way Dimensions for Key Streets

### PROPOSED CONNECTIONS

Block	Right-of-way width <sup>11</sup>	Curb to curb street width	Curb to edge of right-of-way width (north side)	Curb to edge of right-of-way width (south side)
<b>Erskine Street</b>				
16 <sup>th</sup> Pl to 16 <sup>th</sup> Ave	58.5 feet	34.5 feet	8.5 feet	13.5 feet
16th Ave to Delmont Ln	61.0 feet	36.0 feet	10.5 feet	14.0 feet
Delmont Ln to Elson St	60.0 feet	35.5 feet	11.0 feet	14.0 feet
Elson St to 15th Pl	61.5 feet	35.0 feet	11.0 feet	13.0 feet
5th Pl to 15th Ave	61.5 feet	35.5 feet	10.0 feet	14.0 feet
<b>Drexel Street</b>				
16 <sup>th</sup> Pl to 16 <sup>th</sup> Ave	53.0 feet	29.5 feet	12.0 feet	13.5 feet
15 <sup>th</sup> Ave to Sligo Pkwy	79.5 feet	55.0 feet	12.5 feet	11.5 feet
<b>15th Avenue</b>				
Drexel St to Delmont Ln	59.0 feet	35.0 feet	12.5 feet	10.5 feet
Delmont Ln to Elson St	63.0 feet	34.0 feet	11.5 feet	14.2 feet
Elson St to Erskine St	54.5 feet	33.0 feet	12.0 feet	6.0 feet
Erskine St to Hannon St	62.0 feet	34.0 feet	12.5 feet	13.0 feet
Hannon St to 16 <sup>th</sup> Ave	63.0 feet	36.0 feet	12.0 feet	14.0 feet
<b>Elson Street</b>				
15 <sup>th</sup> Ave to Erskine St	54.0 feet	34.5 feet	5.5 feet	12.5 feet
Erskine St to 16 <sup>th</sup> Ave	59.0 feet	33.5 feet	12.5 feet	10.5 feet
<b>16th Avenue</b>				
Drexel St to Elson St	48.0 feet	26.0 feet	6.0 feet	16.0 feet
Elson St to Erskine St	53.0 feet	25.0 feet	15.0 feet	12.5 feet
<b>Riggs Road</b>				
University Blvd to Drexel St	102.0 feet	83.0 feet	4.0 feet	13.5 feet
Drexel St to Erskine St	102.0 feet	81.5 feet	5.0 feet	11.5 feet
Erskine St to Crosby Rd <sup>12</sup>	99.0 feet	83.0 feet	4.0 feet	10.0 feet
Beechwood Rd to Avalon Pl	114.0 feet	82.0 feet	2.0 feet	31.5 feet

11 Measurements are to the nearest half foot. Measurements were made using PGAtlas's measuring tool, the property layer, and the latest aerial imagery.

12 Adjacent Pepco right-of-way.

# Acknowledgments

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