

NORTHERN GATEWAY
**Public Realm
Assessment**



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

JUNE 2021



Prepared by Nelson\Nygaard Consulting Associates Inc. for



The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department

This is an appendix to the Northern Gateway SPACs PAMC Project 30% Design and Engineering Report,
which can be found at pgplanning.org

June 2021

Table of Contents

- Introduction5
- Project description 6
 - Project Goals.....6**
 - Project Team and Stakeholders.....6**
 - Overview of the Study Area6**
- Community Profile..... 9
 - Population Description9**
 - Employment Conditions.....9**
 - Employment Destinations9**
- Transportation Infrastructure11
 - Roadway Network11**
 - Intersections12**
 - Movements and Connections.....12**
 - Existing And Proposed Transit Services 17**
- Public Realm Assessment 21
 - Accessibility 22**
 - Pleasurability 24**
 - Perceived Safety From Crime 25**
 - Perceived Safety From Traffic27**
- Alternatives & Recommendations..... 29
 - Modal Alternatives..... 29**
 - Recommendations..... 31**

Introduction

The Maryland-National Capital Park and Planning Commission (M-NCPPC), Prince George’s County Planning Department, Community Planning Division has initiated and funded a project through the Planning Assistance to Municipalities and Communities (PAMC) program to identify and design multimodal improvements along MD 193 MD 193 in Langley Park. Significant investment in a new transit rail line, the Purple Line, has begun and the alignment for the portion that will serve the Northern Gateway area will run along MD 193 (University Boulevard MD 193), also known as the International Corridor.

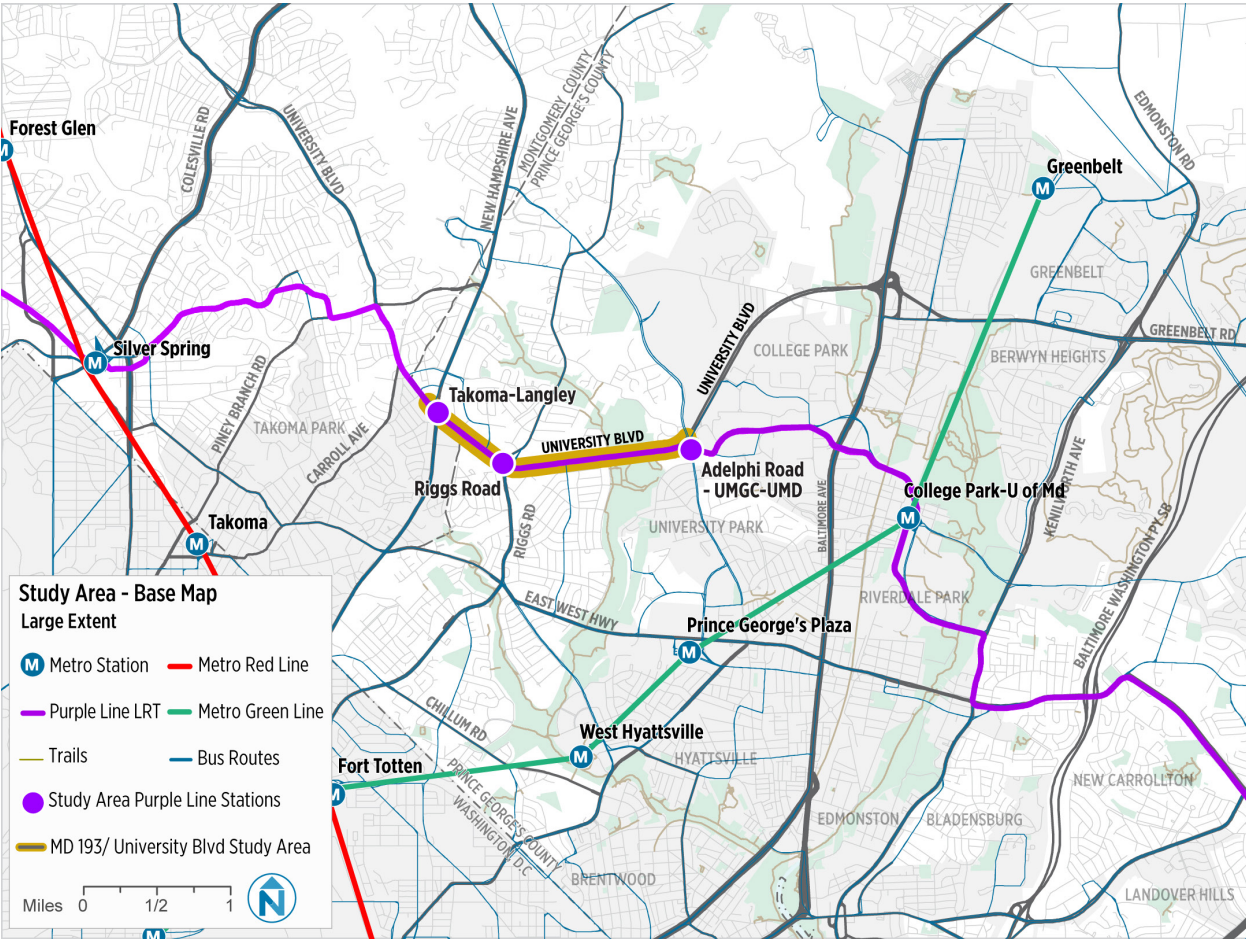
Through the PAMC program, the Northern Gateway Community Development Corporation (NGCDC) has requested that a plan be developed that balances the needs of diverse users—pedestrians, bicyclists, transit users, and motorists—to shape an environment that ensures access, safety, and enjoyment of an approximately two-mile section of MD 193 (University

Boulevard), which is currently an automobile-oriented environment. This project seeks to improve biking and pedestrian safety, better connect neighborhoods to the corridor, and enhance the public realm.

This Public Realm Assessment report describes the goals, current plans, and recommendations for the Northern Gateway SPACES Sidewalk and Streetscape Enhancements project specifically as it relates to the public realm outside of the roadway right-of-way (the strip of land over which a public roadway is built).

In order to assess the existing conditions of the corridor, an Irvine Minnesota Inventory was completed. The Irvine Minnesota Inventory is an audit tool for measuring built environment features that may be linked to active living. The inventory was developed at the University of California, Irvine (UCI), and refined and tested at UCI and at the University of Minnesota. The results are summarized in Section 7.

Figure 1. Study Area Corridor Within the Region



SOURCE: Find complete data sourcing in Appendix A

Project description

Project Goals

The goals of the MD 193 (University Boulevard) SPACES Sidewalk and Streetscape Improvements project are to:

1. Enhance the public realm to better accommodate and improve safety and mobility for pedestrians and bicyclists within the available Right-of-Way
2. Develop 30% Preliminary Design and Engineering Plans and Construction Cost Estimate

The 30% Preliminary Design and Engineering Plans and Estimate would be used to make the project eligible for Transportation Alternatives Program (TAP) or Better Utilizing Investments to Leverage Development (BUILD) funding for final design and construction.

Project Team and Stakeholders

All necessary project team members and stakeholders were identified at the initiation of the project and include:

Project Team:

- Northern Gateway CDC Staff
- M-NCPPC, Prince George's County Planning Department
- STV Incorporated (Design and Engineering)
- G.E. Fielder & Associates (Landscape Architecture)
- Nelson\Nygaard (Transportation Planning)

Stakeholders:

- Maryland State Highway Administration (SHA)
- Maryland Transit Administration (MTA)
- Maryland Department of Transportation (MDOT)
- Washington Metropolitan Area Transit Authority (WMATA)
- Prince George's County Department of Public Works and Transportation (DPW&T)

Overview of the Study Area

ABOUT THE NORTHERN GATEWAY

The Northern Gateway is a collection of unincorporated legacy communities in Council District 2 of Prince George's County founded to increase quality of life and spur economic

development in the area. District 2 is adjacent to the borders of the District of Columbia and Montgomery County. The portion of MD 193 (University Boulevard) through the Northern Gateway is also known as the International Corridor and is a vibrant, diverse retail strip of African-American, South and Central American, Asian, and African businesses that provide essential goods and services to area residents.

The Northern Gateway encompasses the neighborhoods of Adelphi, Avondale, Carole Highlands, Chillum, Hampshire Knolls, Langley Park, and Lewisdale. It is strategically located inside the Capital Beltway and features the Takoma Langley Crossroads Transit Center with three future Maryland Purple Line stations under construction at Takoma-Langley, Riggs Road, and Adelphi/Campus Drive UMGC-UMD. Figure 1 shows the Northern Gateway boundary.

In 2016, the County Council designated the Northern Gateway to provide a transformative opportunity for economic investment, community cohesiveness and combining of strengths of the existing neighborhoods. The Northern Gateway Community Development Corporation (NGCDC) membership is a collection of people, organizations, and businesses dedicated to making the Northern Gateway a great place to live and work with members including employees of local businesses and small business owners located in the Northern Gateway.

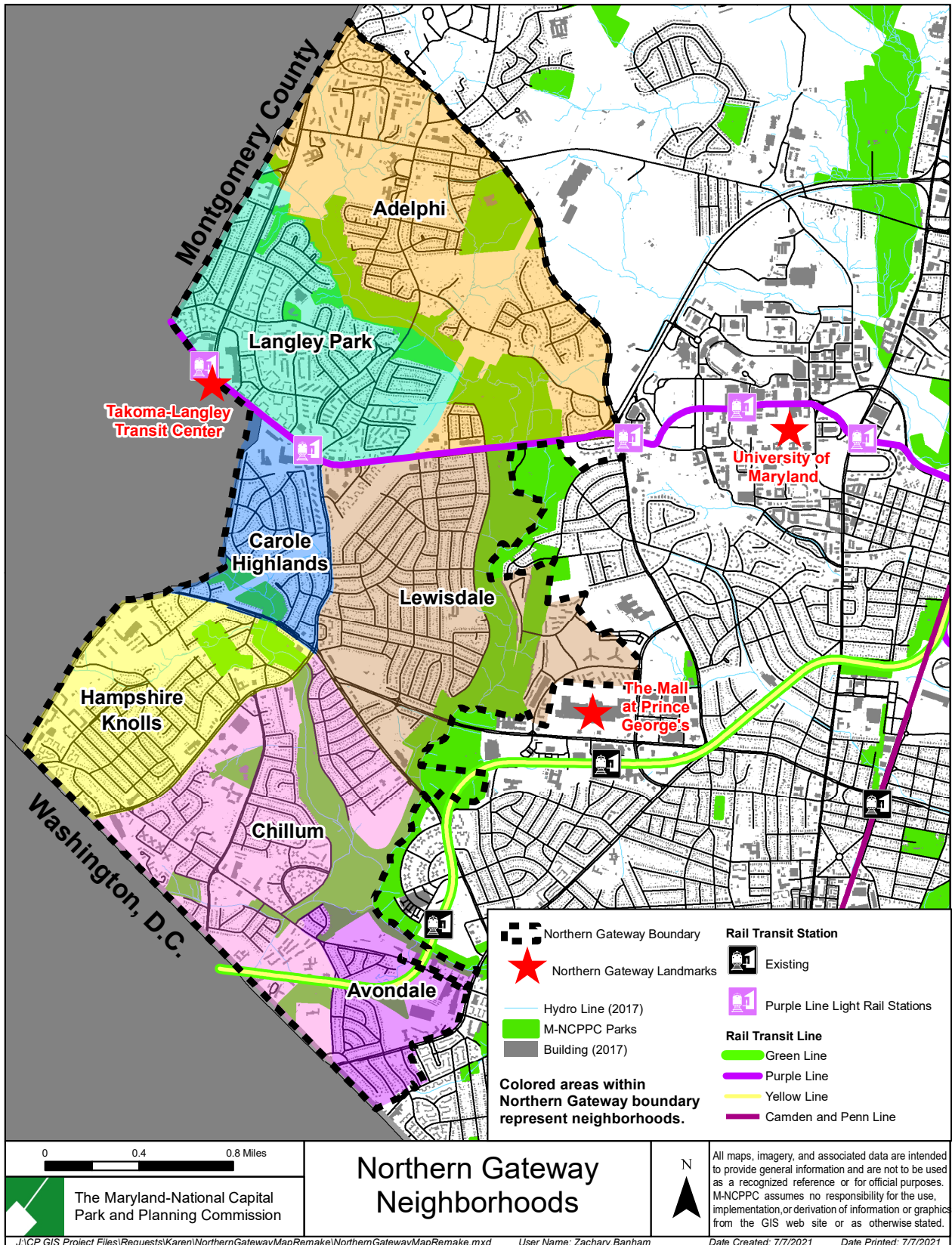
The NGCDC's mission is to strengthen the commercial corridor and revitalize the neighborhoods of the Northern Gateway. The goal is to do this through market-based activities intended to increase the quality of life for residents and the economic potential for small businesses in the community.

With the combined effort of the County, M-NCPPC, and NGCDC, the University Boulevard corridor has sought to enable redevelopment while retaining local businesses and residents. New investment in the Purple Line provides the opportunity to link the corridor to a greater network of improved access and circulation, in addition to integration of streetscape and the public realm.

STUDY AREA

The study area (Map 1) for this Public Realm Assessment is the two-mile corridor of University

Figure 2. Northern Gateway Boundary



Boulevard (MD 193) between New Hampshire Avenue (MD 650) and Adelphi Road. The study area is eight miles northeast of downtown Washington, D.C., 32 miles from downtown Baltimore, and two miles from the University of Maryland, College Park (UMD). University Boulevard is a four- to six-lane divided highway and serves as a primary connection between eastern Montgomery County and Northern Prince George's County. Within the study area, the average daily traffic volumes range from 38,880 vehicles within the western section at New Hampshire Avenue to 29,680 vehicles daily in the eastern section close to Adelphi Road.

PREVIOUS PLANNING

There have been many planning efforts in recent years that include the Northern Gateway, and these efforts range from the *Plan Prince George's 2035* to the local Greater Chillum Community Study in 2015. Additionally, within the Purple Line planning and development process there have been several studies including the Purple Line Bicycle Study and the Purple Line Corridor Access Study. A listing of these plans is included below, and a summary of these plans has been included as Appendix A.

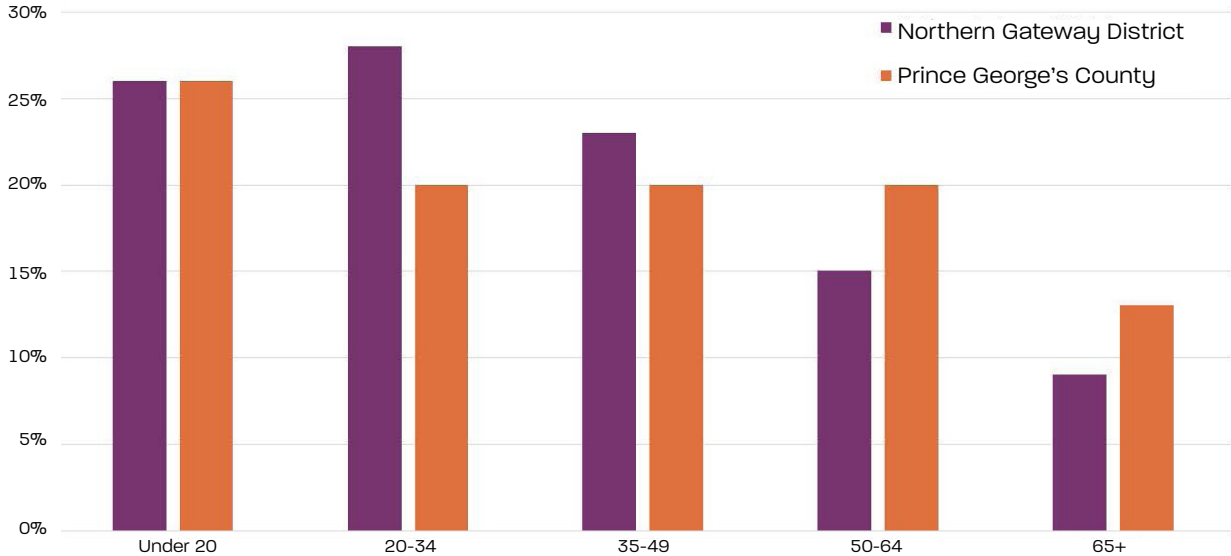
- *Plan Prince George's 2035 Approved General Plan* (2014)

- *Prince George's Approved Countywide Transportation Master Plan* (2009)
- *Approved Takoma/Langley Crossroads Approved Sector Plan* (2009) – Prince George's County
- *Takoma/Langley Crossroads Sector Plan* (2012) – Montgomery County
- *Greater Chillum Community Study* (2015)
- *Langley Park-College Park-Greenbelt Approved Master Plan* (1989) *Approved Historic Sites and Districts Plan* (2010)
- *New Hampshire Avenue Corridor Concept Plan* (2007)
- *Purple Line Corridor Access Study* (2011)
- *Purple Line Bicycle Access and Bicycle Hub Location Study* (2010)

The primary takeaway from these previous plans was that the existing Northern Gateway transportation infrastructure does not support the variety of transportation choices by the community, and it has a fragmented and incomplete active transportation network. Many of the recommendations of these plans are included in the succeeding sections and build upon addressing the deficient multimodal network with primary goals of destination-point connectivity, as well as ensuring that future development supports and respects existing neighborhoods.

Community Profile

Figure 3. Northern Gateway Community Age



SOURCE: American Community Survey 5 year & 1 year estimates, 2018

Population Description

The Northern Gateway is a vibrant mix of retail, residential developments, and commercial office space. The area encompasses the neighborhoods of Adelphi, Avondale, Carole Highlands, Chillum, Hampshire Knolls, Langley Park, and Lewisdale, and represents a diverse community formed of varied nationalities and ethnicities. As of 2018, the combined population of the Northern Gateway was more than 80,000.

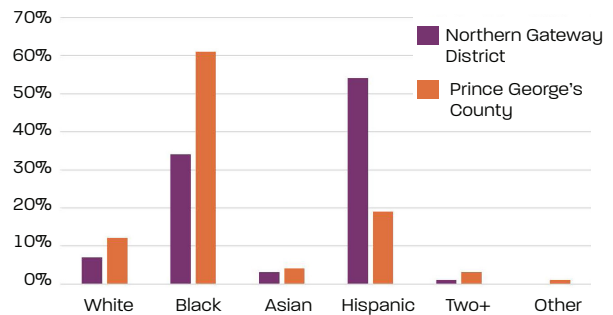
The community is predominantly composed of residents under 50 years of age with a median age of 32.4, highlighted in Figure 3. Young adults between 20 and 34, are the largest age group in the study area, comprising 28 percent of the population.

Proximity to the University of Maryland is largely attributable for the area's young demographics.

The Northern Gateway community is composed of primarily a Hispanic (54 percent) and Black (34 percent) population. The community has a higher Hispanic population and a lower Black population than the County as a whole.

Although the Northern Gateway boasts a high percentage of young adults, only 63.1 percent (35,000) of adults are high school graduates, which is considerably lower than Prince George's County's 86.1 percent rate.

Figure 4. Northern Gateway Community Race and Ethnicity



SOURCE: American Community Survey 5 year & 1 year estimates, 2018

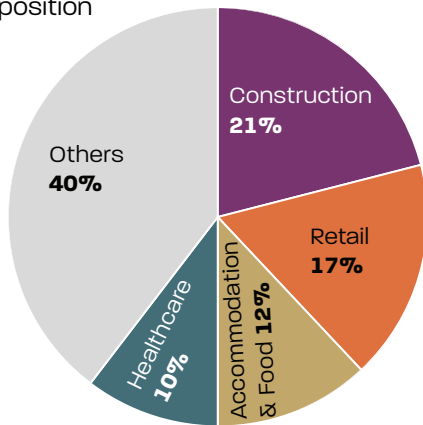
The study area has a median household income of \$59,707, which is significantly lower than the Prince George's County median of \$84,920. Again, this is likely influenced by the large number of college students living in the Northern Gateway who are not employed full time.

Employment Conditions

The Northern Gateway is a significant commercial and retail employment center, the majority of which are locally owned small businesses. As such, Northern Gateway employs residents from not only the local communities but also the entire Washington, D.C.

metropolitan area. According to the Bureau of Labor Statistics, there are 515 business establishments in the 20783 ZIP code, which contains the Northern Gateway study area, as well as surrounding neighborhoods. Construction and retail business are the largest categories in the study area. has a job density of approximately 2,240 jobs per square mile compared to more than 30,000 jobs per square mile in the densest areas of Prince George’s County and a County average of 666 jobs per square mile.

Figure 5. Northern Gateway Business Composition

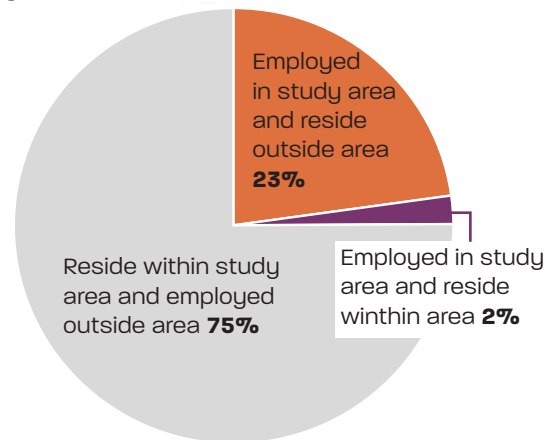


SOURCE: Census Bureau Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (Census Bureau, 2018)

Employment Destinations

Residents in the Northern Gateway commute to a variety of locations inside the Capital Beltway. According to the Census Bureau Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics, there are approximately 13,200 employed residents in the 20783

Figure 6. Northern Gateway Resident Employment Location (Census Bureau, 2018)



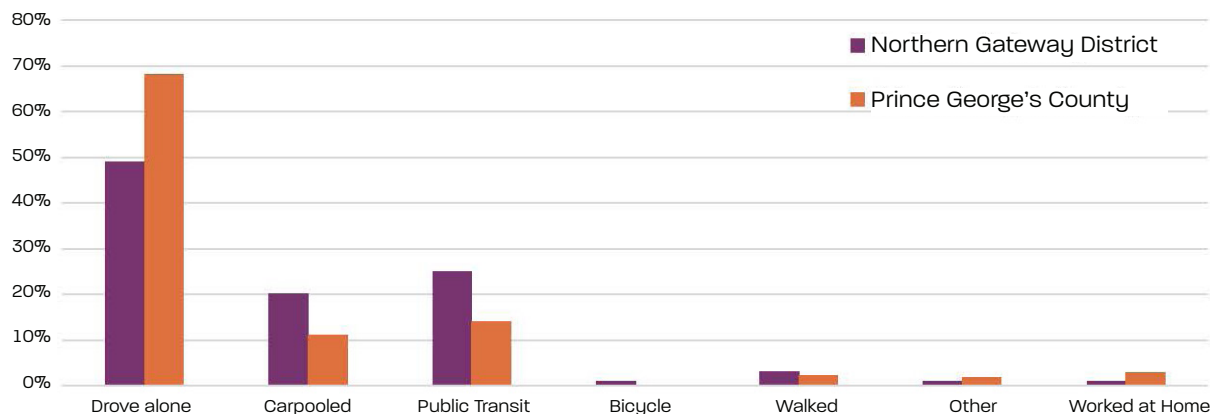
SOURCE: Census Bureau Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (Census Bureau, 2018)

ZIP code. Of those residents, 12,800 are employed outside of the ZIP code, while only 400 are employed and live in the same ZIP code. The other 3,895 employees of the zip code reside outside of the study area. Figure 6 shows the employment destinations.

MODE SHARE AND TRAVEL HABITS

Workers living in the study area travel to work in a variety of ways, although almost half drive to work alone, while 25 percent travel by transit (The Shuttle-UM transports students between UMD’s main campus and the University Boulevard corridor). Compared to the study area, more Prince George’s County residents commute to work by driving alone (68.2 percent) while less carpool or less utilize public transit. The comparison of commuter mode share to Prince George’s County is shown in Figure 7.

Figure 7. Northern Gateway Commuter Mode Share (2017 American Community Survey)



SOURCE: American Community Survey 5 year & 1 year estimates, 2018

Transportation Infrastructure

Roadway Network

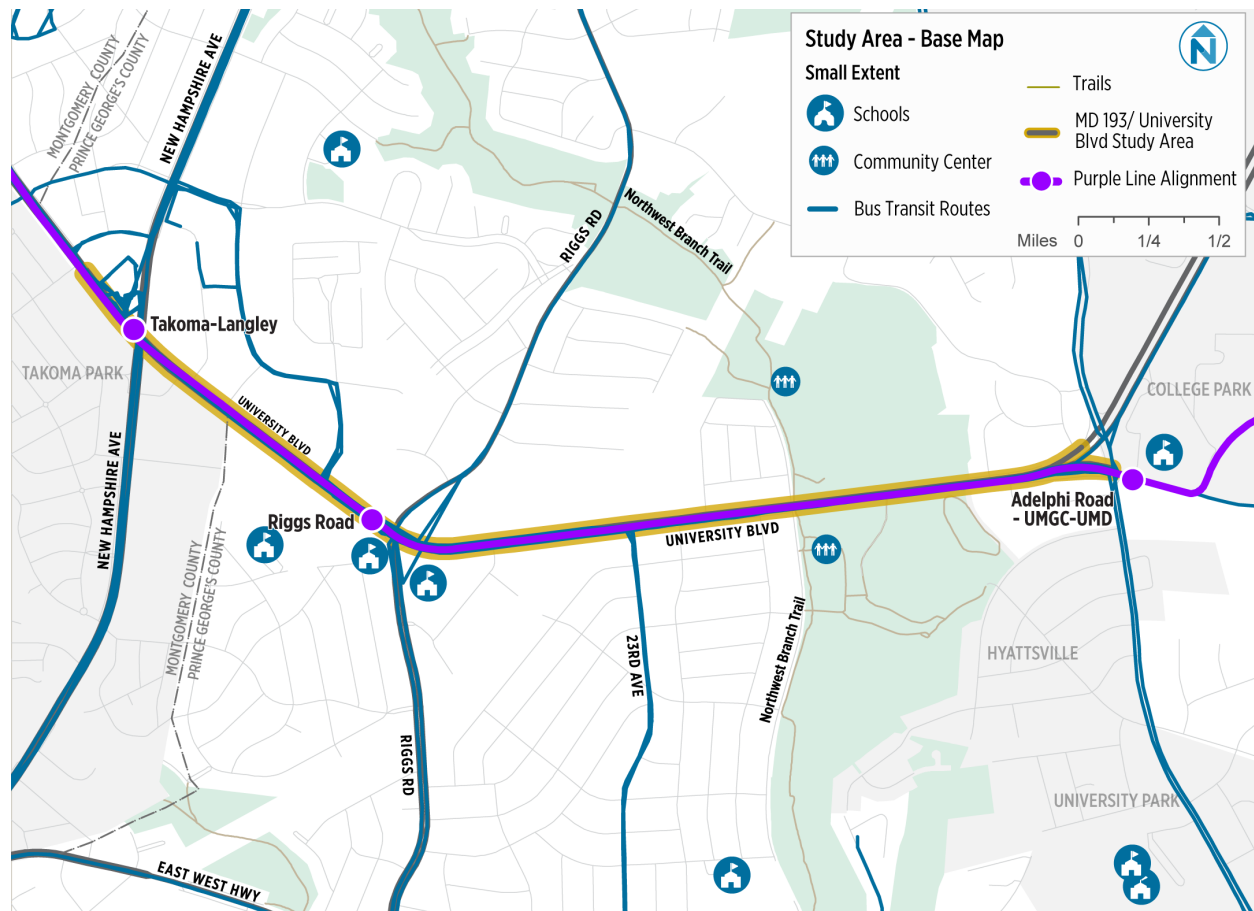
Key roadways within the study area are shown in Figure 8 and include:

MD 193 (University Boulevard) is the study area's principal west-east arterial road and features 39,992 average annual daily traffic (AADT) within the study area (eastbound of New Hampshire Avenue) and 29,802 AADT westbound of Adelphi Road. The roadway has a varied width of 48-72 feet, four to six lanes, and is posted at 35 mph. University Boulevard through the study area is access restricted with an 18-foot center median, left-turn and right-turn pocket lanes, and a median fence between 14th Street and New Hampshire Avenue (MD 650) to deter mid-block pedestrian crossing. The roadway has curbs and no on-street parking is allowed.

Upon completion of the Purple Line, the roadway will be reduced to four lanes with turn lane pockets and five-foot bicycle lanes in both directions of travel. The reduction in the number of travel lanes is a result of Purple Line infrastructure along University Boulevard. The proposed future roadway plans are shown in Figure 9.

MD 650 (New Hampshire Avenue) is a principal north-south arterial on the western boundary of the study area with 38,501 AADT, a 72-foot width with six lanes, posted at 35 mph, curbs, and no on-street parking. New Hampshire Avenue through the study area has an eight-foot center median, left-turn and right-turn pocket lanes, and a median fence on the approaches to University Boulevard to deter mid-block pedestrian crossing.

Figure 4. Study Area Roadways



Once the Purple Line is constructed the roadway will have the same cross section as the existing conditions with the east and westbound slip lanes from University Boulevard (MD 193) being removed.

MD 212 (Riggs Road) is a minor arterial bisecting the study area north to south, with 20,232 AADT, is 72 feet wide with six lanes, divided by an 18-foot median, and has a posted 35 mph south of University Boulevard. North of University Boulevard, the posted speed limit is 30 mph with a 36-foot wide section.

Once the Purple Line is constructed the roadway will retain the same cross section but the eastbound and westbound slip lanes from University Boulevard will be removed.

Intersections

The two key signalized intersections within the study area are listed below with their existing facilities.

1. University Boulevard/MD 193 at New Hampshire Avenue/MD 650

The intersection has pedestrian crosswalks on all four approaches with pedestrian push buttons and countdown signals. All quadrants have right-turn slip lanes which are unsignalized and controlled by “Yield” signs only. University Boulevard (MD 193) in both eastbound and westbound directions have a single left-turn lane, three through lanes, and a single right-turn slip lane. MD 650 in the northbound direction has double left-turn lanes with three through lanes and a single right-turn slip lane. The southbound direction is configured with a single left-turn lane with three through lanes and a single right-turn slip lane.

2. University Boulevard/ 193 at Riggs Road/MD 212

The intersection has pedestrian crosswalks on all four approaches with pedestrian push buttons and countdown signals. The right-turn slip lanes to and from eastbound University Boulevard

(MD 193) are unsignalized and controlled by “Yield” signs only. University Boulevard (MD 193) in the eastbound direction has a single left-turn lane, two through lanes, and right-turn slip lane. University Boulevard (MD 193) in the westbound direction has a single left-turn lane, two through lanes, and shared through/right turn lane. MD 212 in the northbound direction has double left-turn lanes with a single through lane and a single right-turn slip lane. The southbound direction is configured with a single left-turn lane with one through lane and a shared through/right-turn lane.

Movements and Connections

With the existing street network, as shown in Figure 8, alternative routes within the study area are very limited. MD 650 (New Hampshire Avenue) and MD 212 (Riggs Road) are already heavily used as the primary north-south connections and MD 193 (University Boulevard) is the only east-west roadway within the area. MD 410 (East-West Highway) provides an alternative east-west connection but is a mile south of University Boulevard and the Northern Gateway communities and does not provide immediate community connections.

The limited connectivity within the existing network presents the need for additional connections as future development scenarios are considered within the Northern Gateway. Traffic for all trips, local and through traffic, is focused on the three arterials of MD 193, MD 650, and MD 212 with limited connectivity to the commercial and residential communities. Future growth of the roadway network within the study area, such as a more defined grid pattern, would provide enhanced connectivity among the different land uses for all modes—vehicles, pedestrians and bicycles. Additional connections should be considered when redevelopment occurs throughout the corridor and can be facilitated through the development review process.

Pedestrian and Bicyclist Assessment

PEDESTRIAN INFRASTRUCTURE

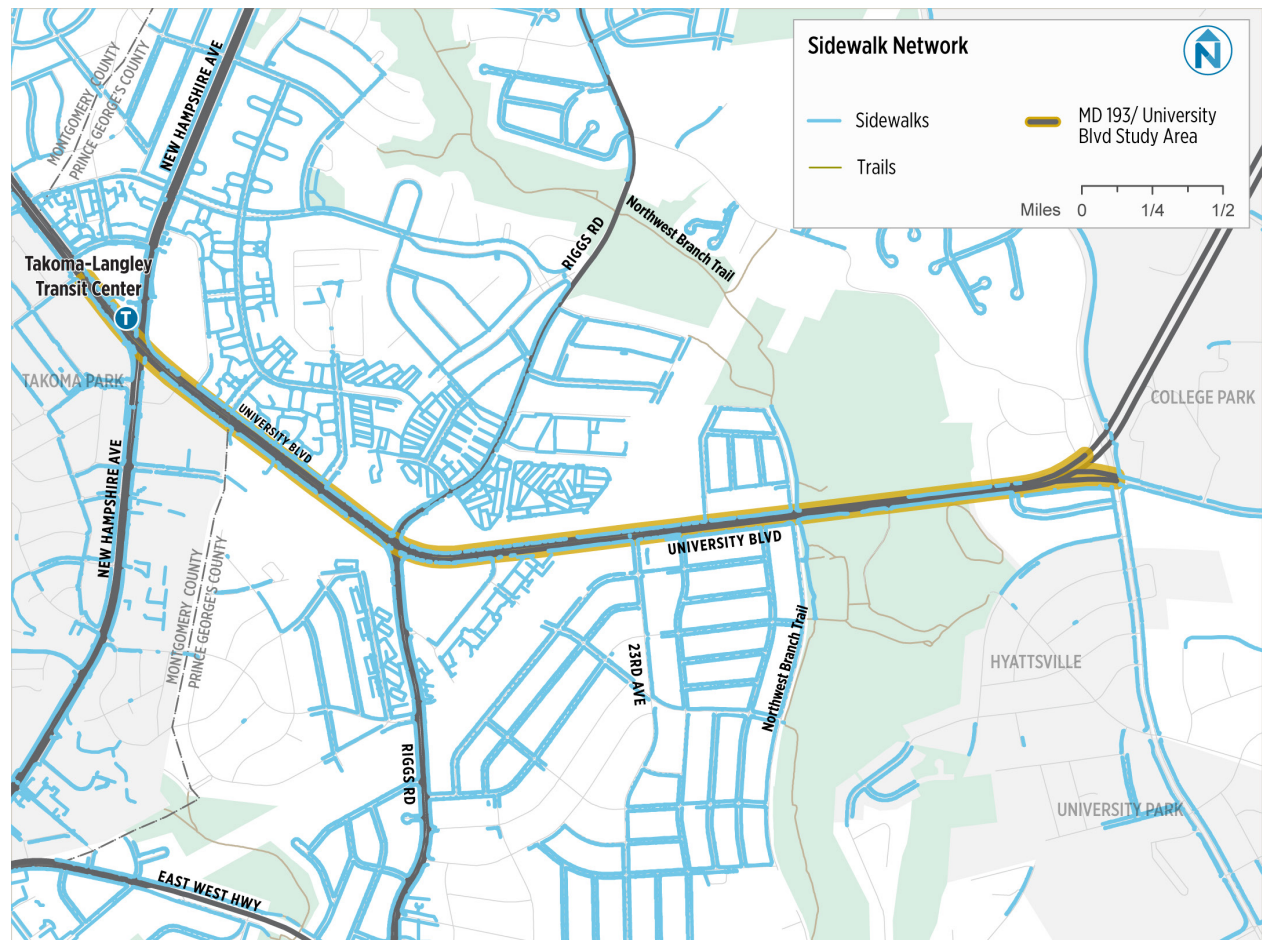
Sidewalk coverage along the University Boulevard corridor within the Northern Gateway is not comprehensive, and sidewalk gaps exist along University Boulevard. Sidewalk coverage within the neighborhoods is also inconsistent from street to street and limits pedestrian access to and from the corridor. Major intersections feature clearly demarcated crosswalks, with pedestrian push buttons and signal indicators, but can feature long wait and short cross times. Figure 11 illustrates how sidewalk conditions widely vary along the corridor with functional inadequacies, including obstructions, varied width, and poor maintenance, leading to an overall **uncomfortable** pedestrian environment. Figure 12 shows the sidewalk network within the study area.

Between New Hampshire Avenue and Riggs Road,

both sides of University Boulevard are dominated by commercial properties in a series of plazas. While the sidewalk environment is predominantly connected along University Boulevard, the pedestrian connections to, and within, the commercial plazas are largely nonexistent or extremely deficient with no direct connections. The lack of sidewalks within the parking lots limits basic pedestrian movements, encumbers access to single-structure dining options within parking lots and spawns dangerous interactions between pedestrians, automobiles, and bicyclists.

A number of crosswalks connect the north and south sides of the corridor; **the largest is** at the intersection of University Boulevard and New Hampshire Avenue where significant pedestrian volume exists between the Takoma-Langley Crossroads Transit Center and the surrounding businesses. However, the size of the intersection leads to long crossing lengths with no refuge islands to provide pedestrian safety. All four quadrants include right-turn slip lanes, which are unsignaled and

Figure 5. Study Area Sidewalk Network (Montgomery County and Prince George's County GIS Data)



SOURCE: Find complete data sourcing in Appendix A



NELSONNYGAARD

Commercial Plaza Connections



PHOTOS BY NELSONINNYGAARD

Slip lane crosswalk at University Boulevard and New Hampshire Avenue.

Despite pedestrian crosswalks present along the corridor, the distance between them ranges from 330 feet to 2,100 feet because of the length of blocks. This equates to limited crossing opportunities for pedestrians and leads to non-compliance and mid-block crossings. Median fencing was installed along University Boulevard approaching New Hampshire Avenue to deter these mid-block crossings.

Commercial entrances from University Boulevard are plentiful along the two-mile corridor with a total of 83 entrances and driveways, and an average of one driveway every 120 feet. Many properties and parcels have more than one access point, often adjacent to the neighboring parcel's access. This abundance of driveways disrupts the sidewalk continuity and creates multiple areas of conflict along the corridor.

Upon completion of the Purple Line construction, the existing sidewalk gaps along University Boulevard would be closed to provide a continuous sidewalk on both north and south sides of the roadway. New signalized intersections would also be constructed at the intersections of MD 193 and 14th Street, MD 193 and Guilford Road, and MD 193 and 24th Avenue. These new intersections reduce the distance between pedestrian crosswalks, but many distances remain at 1,000 feet or greater.



Sidewalk Obstruction along MD 193 (University Boulevard)

BICYCLE INFRASTRUCTURE AND FACILITIES

Dedicated bicycle lanes are limited to the eastern section of the University Boulevard corridor, east of West Park Drive to Adelphi Road in both the eastbound and westbound directions. There are no other bicycle facilities along the corridor. However, the Northwest Branch Trail runs through Northwest Branch Stream Valley Park, located within the eastern half of the corridor; the Northwest Branch also features connections with the Northeast Branch, Anacostia River, and Sligo Creek trails. Figure 17 shows the study area bicycle facilities.

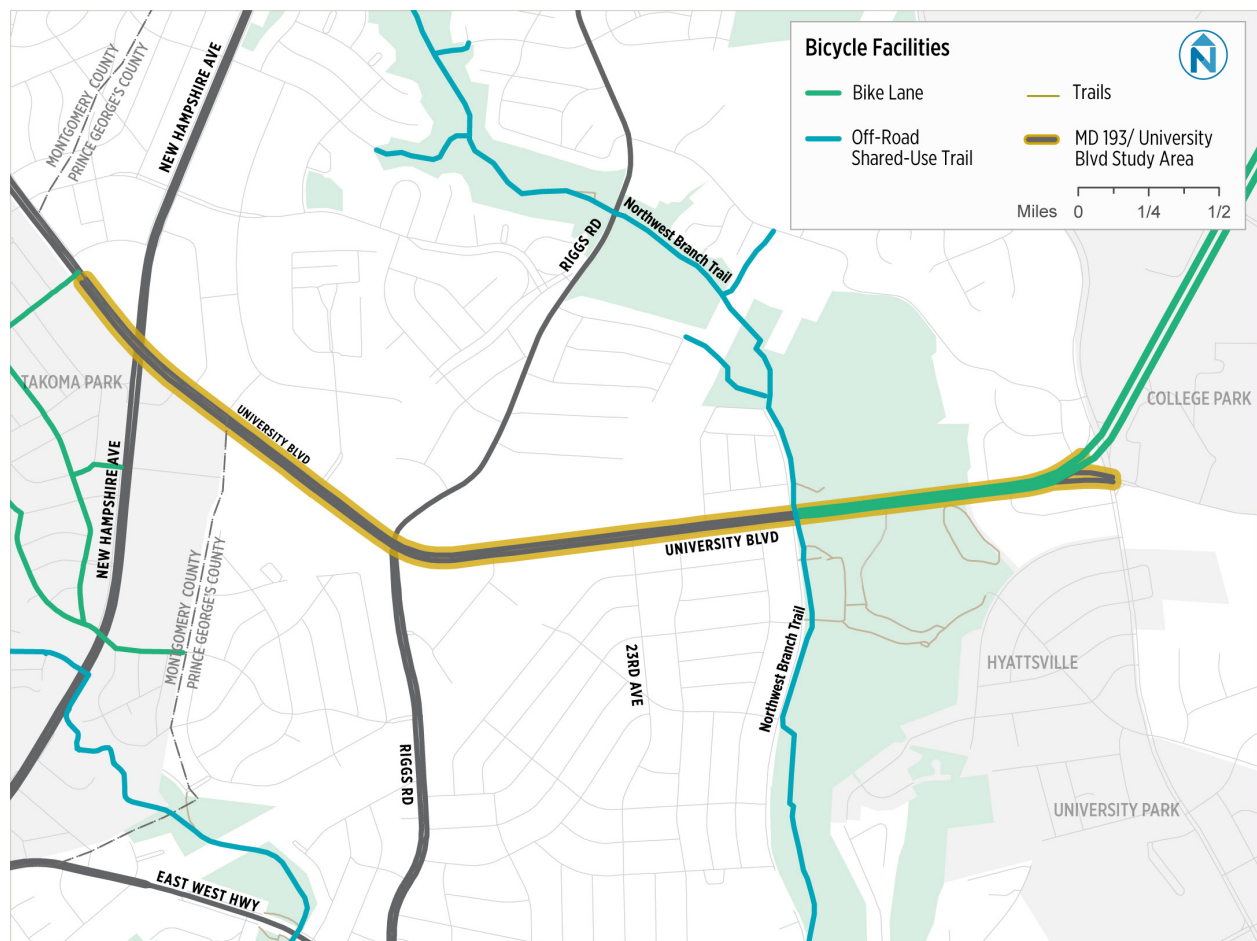
The future bicycle facility network as outlined in the Countywide Master Plan of Transportation includes

on-street bike lane facilities as well as expansion of the hard-surface trails.

Aside from the bicycle facilities at the Takoma-Langley Crossroads Transit Center, which includes bike racks, limited bicycle infrastructure is present within the Northern Gateway area. While bike rack usage data is unavailable, the covered bike racks inside the Transit Center were close to capacity during a site visit.

Upon completion of the Purple Line construction, a five-foot on-street bicycle lane in both the eastbound and westbound directions of University Boulevard will be completed from New Hampshire Avenue to Adelphi Road.

Figure 6. Study Area Bicycle Facilities (Prince George's County)



SOURCE: Find complete data sourcing in Appendix A

Existing And Proposed Transit Services

Within the study area, there are a number of local and regional transit options serving the community. Figure 19 shows a map of all bus routes adjacent to the Northern Gateway corridor.

SHUTTLE-UM

Shuttle-UM is a shuttle service provided by the University of Maryland from campus to communities throughout Prince George's and Montgomery Counties. The university's Black Student Union started the service in 1972 to give students a safe way to travel at night; shuttle service was later adopted and expanded by the University of Maryland-College Park. Today there are 23 Shuttle-UM routes in operation, with two serving the study area, including the 111 and 118 routes. Most shuttles, including those that serve Prince George's Plaza, are only open to students, faculty, and staff with valid identification. City of College Park residents are eligible to receive

complimentary bus passes for the UM-Shuttle system.

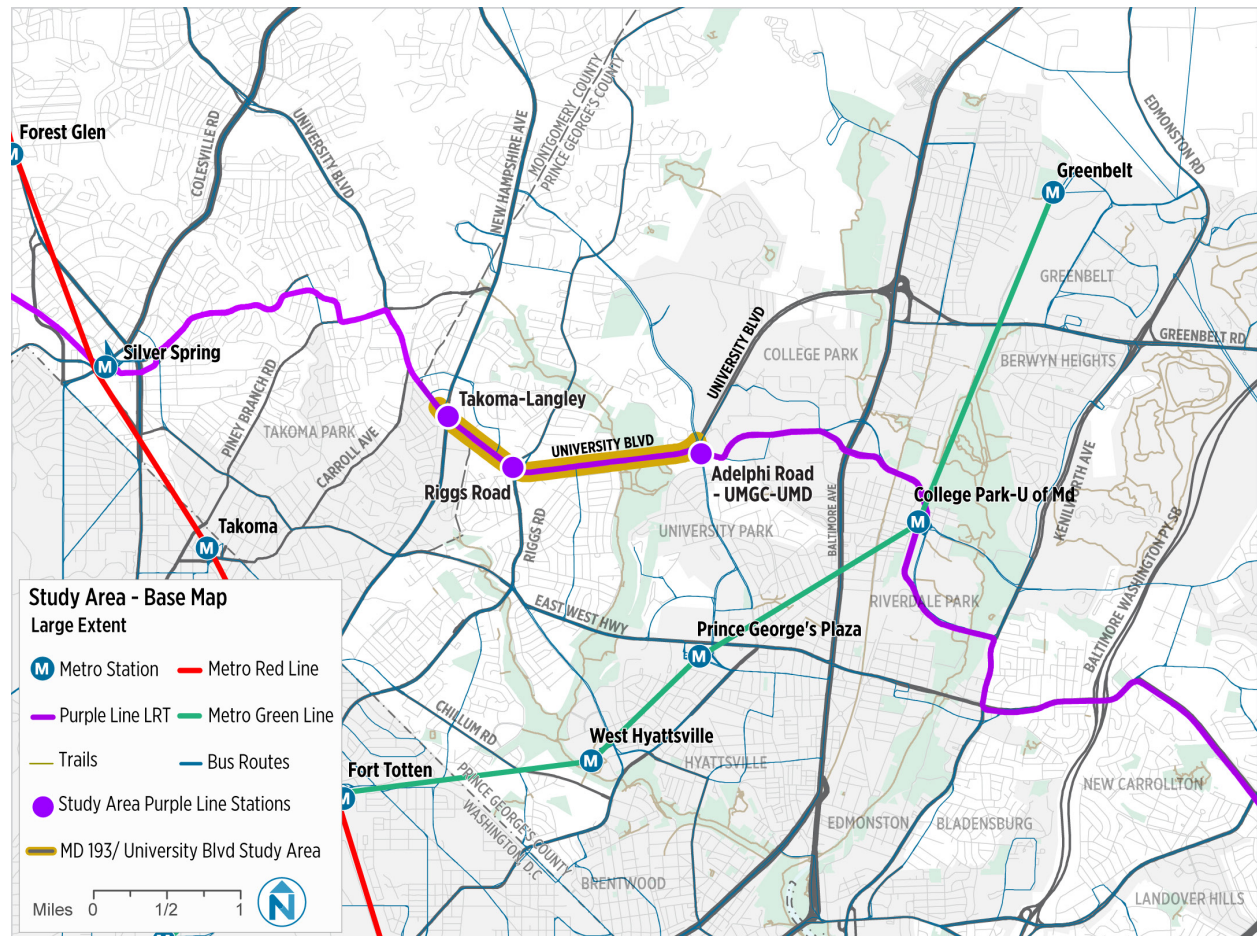
Shuttle-UM 111 Silver Spring provides local service from the University of Maryland campus to Silver Spring via University Boulevard from 6:20 a.m. to 10:20 p.m. on weekdays throughout the year. It runs at 30-minute intervals during peak periods and up to 90-minute intervals throughout off-peak periods. This route is open to students from any university in the Washington, D.C., area.

Shuttle-UM 118 Gold provides local service from the University of Maryland to Graduate Hills during evening hours, providing service to campus accommodations. It runs at 20-25-minute headways from 5:35 p.m. to 2:25 a.m. daily with lower frequency on weekends after midnight.

METROBUS

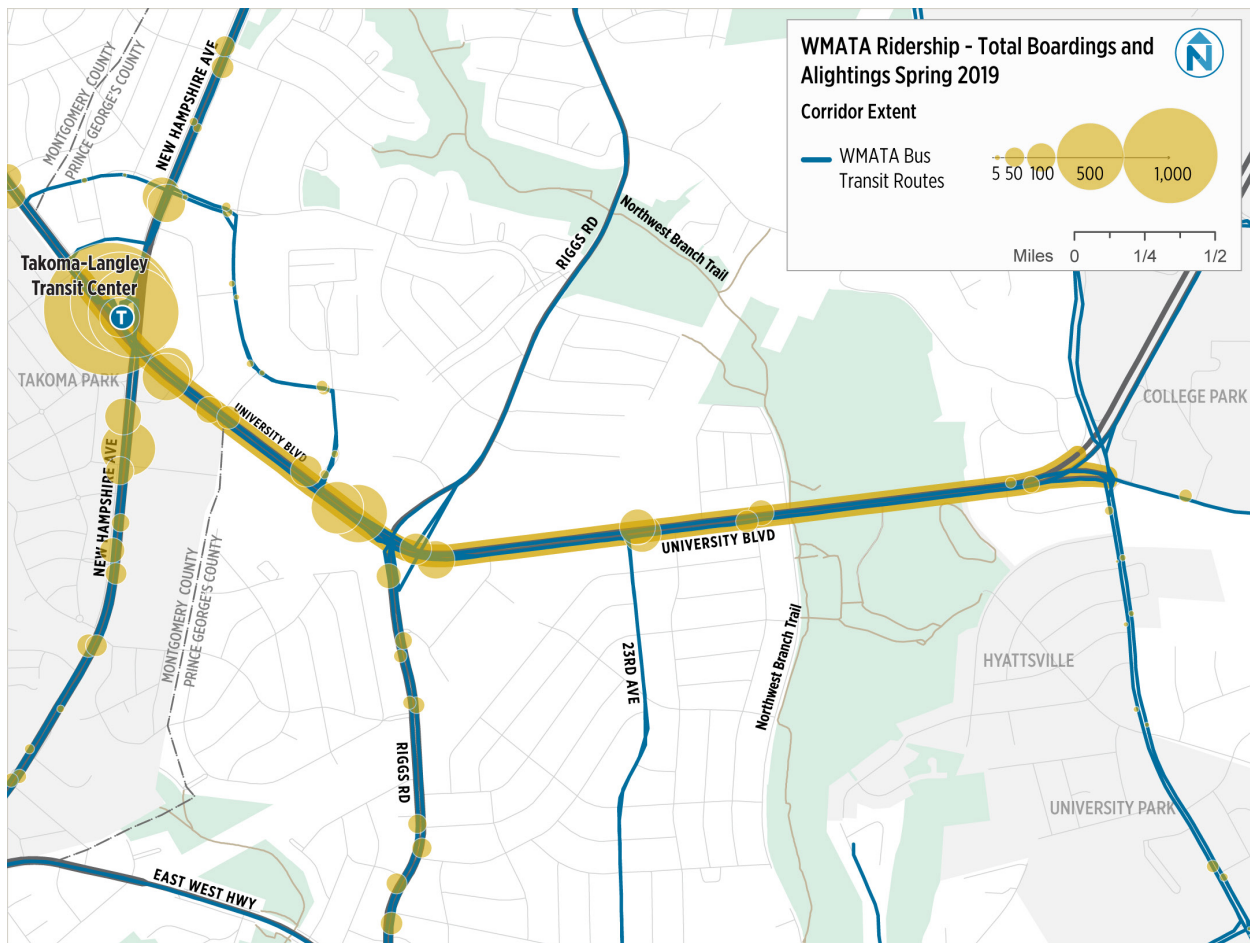
Seven Metrobus, the local bus service provided by WMATA, routes serve the study area. Figure 20 highlights activity data within the Northern Gateway area as sourced from the service provider's most recent data.

Figure 7. All transit Routes within a Two-Mile radius of the Study Area



SOURCE: Find complete data sourcing in Appendix A

Figure 8. WMATA Bus Ridership



SOURCE: Find complete data sourcing in Appendix A

Metrobus C2/4 Prince George’s Plaza/Greenbelt-Twinbrook provides local service between Prince George’s Plaza (C4) and Greenbelt (C2) and the Twinbrook Metro Station in Rockville via University Boulevard and Riggs Road. On weekdays, it runs from 4:22 a.m. to 1:32 a.m. at 10- to 21-minute headways during rush hour and 30-minute headways during the rest of the day. On Saturdays, it runs from 4:50 a.m. to 2:17 a.m. at 24-minute headways, and on Sundays from 5:55 a.m. to 1:59 a.m. at 15-minute headways.

In 2017, the C2/C4 line had a combined average weekday ridership of 9,615, making it the most heavily used Metrobus line in Maryland and one of the busiest in the region. The C2/C4 has been identified as part of Metro’s Priority Corridor Network.

Metrobus F8 Langley Park - Cheverly provides local service between the Takoma-Langley Crossroads Transit Center and Cheverly, passing through the study area via University Boulevard. On weekdays, it runs from 5:35 a.m. to 8:40 p.m. at 30-minute

headways during rush hour, 60-minute headways during the day, and 30-minute headways at night. On Saturdays, it runs from 5:42 a.m. to 9:22 p.m. at 60-minute headways. On Sundays, it runs from 9:55 a.m. to 7:51 p.m. at 60-minute headways. In 2017, the F8 had an average weekday ridership of 1,250.

Metrobus J4 College Park – Bethesda provides Metro Extra service between College Park and Bethesda passing through the study area via University Boulevard. On weekdays, it runs from 6:10 a.m. to 9:04 a.m. and 3:24 p.m. to 7:27 p.m. at 25-minute headways during the peak periods and does not run on weekends. In 2017, the J4 had an average weekday ridership of 888.

Metrobus R1/2 Riggs Road provides local service between Calverton and Fort Totten Station via MD 212 (Riggs Road). The R2 service runs at 15- to 20-minute headways during the peak periods and 35 minutes during off-peak periods between 5:10 a.m. and 11:30 p.m. The R1 operates only on weekdays and

Figure 9. The Bus Route 18 Ridership (The Bus, Prince George’s County)



SOURCE: Find complete data sourcing in Appendix A

directionally southbound in the morning peak period and northbound in the afternoon peak period. The service runs at 20-minute headways from 4:35 a.m. to 9.12 a.m. and 3:43 p.m. to 7:01 p.m. In 2017, the R1/2 had an average weekday ridership of 3,568.

THEBUS

TheBus is Prince George’s County’s local bus service, operated by the Prince George’s County DPW&T. It operates 27 routes throughout the County, including Route 18 within the study area, which is shown in Figure 21.

TheBus 18 Addison Road-Langley Park provides local service between Langley Park and Seat Pleasant, passing through the study area via University Boulevard. On weekdays, it runs between 5:30 a.m. and 8:30 p.m., servicing stations every 35 minutes during rush hour and every 70 minutes during the day. It does not run on weekends. Spring 2019 data from Prince George’s County shows that average weekday ridership is 2,800.

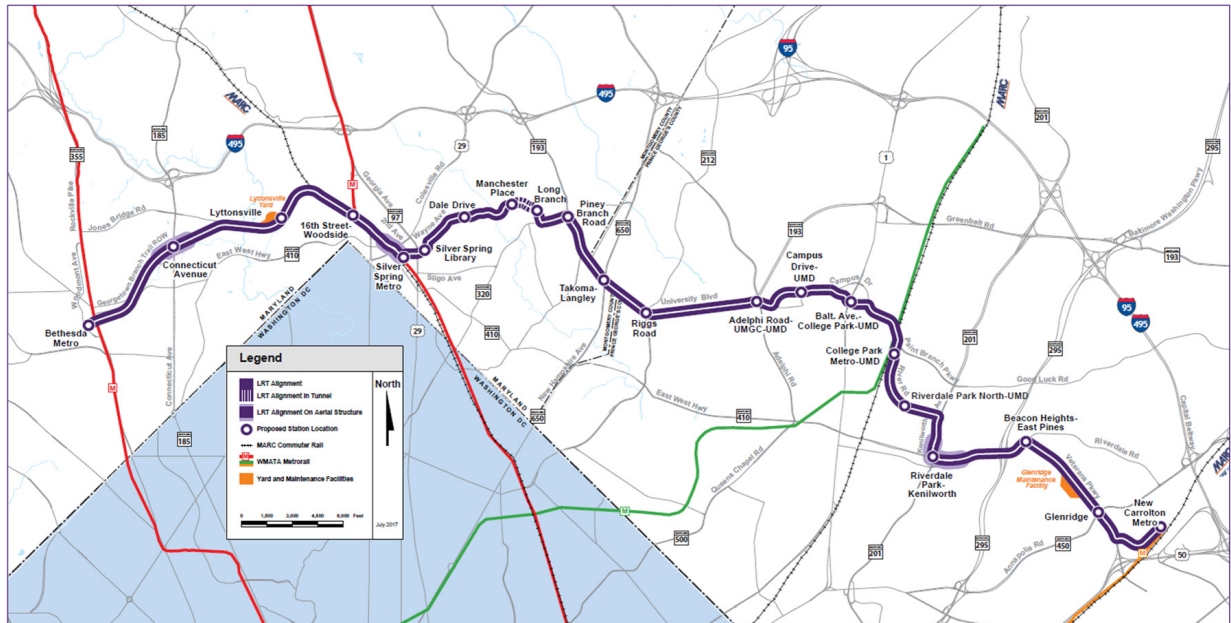
PURPLE LINE LIGHT RAIL

The Purple Line is a 16-mile light rail line that will extend from Bethesda in Montgomery County to New Carrollton in Prince George’s County. It will provide a direct connection to the Metrorail Red, Green and Orange Lines at Bethesda, Silver Spring, College Park, and New Carrollton. The Purple Line will also connect to MARC, Amtrak, and local bus services.

The alignment through the Northern Gateway is along University Boulevard at roadway level in exclusive center running lanes with three station locations – Takoma-Langley, Riggs Road and Adelphi Road-UMGC/UMD. Figure 22 shows the Purple Line alignment and station locations. Each station will have the following features:

- Center platforms
- West and east platform access
- ADA-compliant curb ramps, entrances; lifts, ticketing/fare vending areas, platforms,

Figure 10. Purple Line Alignment



SOURCE: Maryland Transit Administration

elevators, and signageTrackway crosswalk

- Bike storage
- Ticket vending machine
- Connections to transit

In addition, the Purple Line has initiated a Purple Line Art-In-Transit Program with a mission to make public art an integral element of the transit project and to further enhance the Purple Line’s high-quality stations, aesthetic treatments, and landscape designs. Public art will be incorporated into all station designs as well as other project structures including bridges, fencing, and lighting.

The Purple Line is owned by the Maryland Department of Transportation Maryland Transit Administration (MDOT MTA) and construction within the Northern Gateway began in fall 2019.

METRORAIL

Metrorail, operated by WMATA, does not directly serve the Northern Gateway corridor, but three stations provide nearby access. Prince George’s Plaza and College Park are both served by the Green and Yellow Lines and Takoma provides access to the Red Line.

MARYLAND AREA COMMUTER RAIL (MARC)

The Maryland Area Commuter Rail (MARC) provides commuter rail service to Washington, D.C., and Baltimore via the Camden Line, one of three lines in the system. While MARC does not directly serve the study area, the College Park MARC Station, located adjacent to the College Park-U of MD Metro Station, is approximately two miles away. In June 2017, the Camden Line had an average weekday ridership of 4,684, which is almost identical to the previous year’s ridership.¹ The MARC station provides opportunities for enhanced transit access.

1 MTA Average Weekday Ridership, <https://opendata.maryland.gov/dataset/GOPI-Resource-MM-MTA-Average-Weekday-Ridership/t2jw-tiu2>

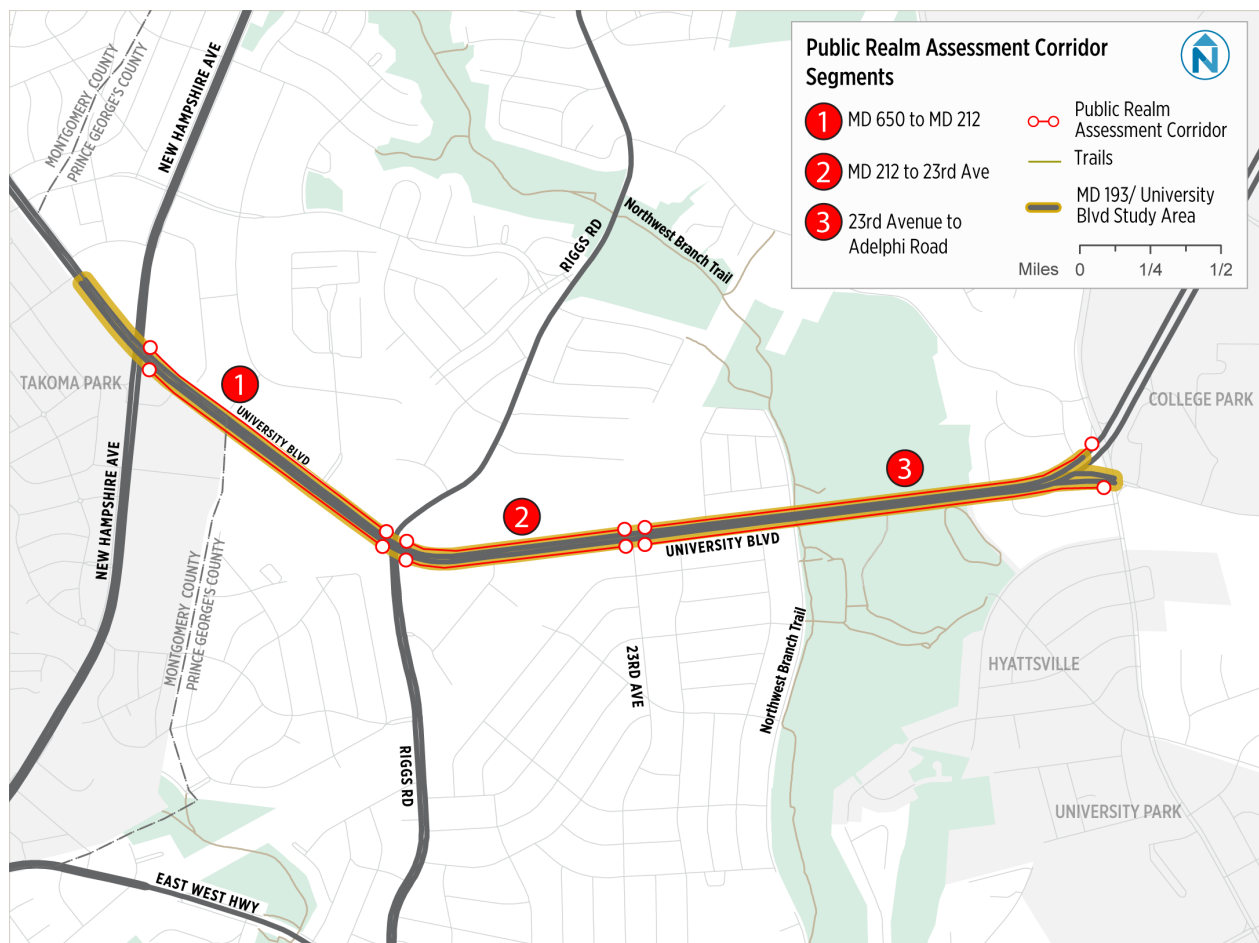
Public Realm Assessment

In July 2019, using the Irvine Minnesota Inventory tool, the University Boulevard corridor was surveyed between MD 650 (New Hampshire Avenue) and Adelphi Road. The Irvine Minnesota Inventory was designed to measure a wide range of built environment features that are potentially linked to active living, especially walking. One goal in developing the inventory was to include numerous built environment features not covered in other available audit instruments, such as the characteristics of streets, alleys, urban form, and architecture (vertical mixed use, porches, garage doors); multiple land-use categories, nearby nature (woods, ponds, agricultural land); and characteristics of views.

The corridor was divided into three segments, and each segment was observed on the north and south sides of the roadway (Figure 23.).

- 1a. North side of MD 193: MD 650 to MD 212
- 1b. South side of MD 193: MD 650 to MD 212
- 2a. North side of MD 193: MD 212 to 23rd Avenue
- 2b. South side of MD 193: MD 212 to 23rd Avenue
- 3a. North side of MD 193: 23rd Avenue to Adelphi Road
- 3b. South side of MD 193: 23rd Avenue to Adelphi Road

Figure 11. Public Realm Assessment Corridor Segments



The assessment surveys 160 different factors relating to features in the built environment that may affect physical activity. The tool focuses on four primary categories and focus on bicycle and pedestrian safety, walkability, and streetscape enhancements, which include:

- Accessibility
- Pleasurability
- Perceived safety from traffic
- Perceived safety from crime

These four categories each address the seven criteria outlined by M-NCPPC Planning Department staff at the outset of the study:

- Building form and height
- Quality and safety of intersections, the presence of traffic calming features
- Connectivity
- Presence, quality and access to hard- and soft-scape public spaces
- Form, streetscape, continuity, and enclosure (setbacks, street width, building heights)
- Pedestrian and bike amenities
- Diversity of land-use mix

The results of the survey are summarized below with the inventory data sheets included as Appendix B.

Accessibility

Many factors affect accessibility, including mobility, the quality and affordability of transportation options, transportation connectivity and infrastructure, and land use patterns.

Existing conditions

The corridor is not a pedestrian-friendly street as highlighted in Figure 24. It is a two-way street and although there are sidewalks on both sides of the corridor, there are gaps of missing sidewalk and areas of diminished width due to obstacles (utility poles or fire hydrants) or simply reduced width. Throughout most of the corridor there are not any exclusive on-street or off-street bicycle facilities although there are “Share the Roads” signs along University Boulevard. The only segment within the study area that has a designated lane is a 3,000-foot section between West Park Drive and Adelphi Road in both the eastbound and westbound directions. This segment will be incorporated into the new bicycle lane along University Boulevard being constructed as part of the Purple Line project. Adjacent to the corridor, the Northwest Branch Trail provides north-south



NELSONNYGAARD

Sidewalk Obstructions along University Boulevard

pedestrian and bicycle connections to communities.

Throughout the residential neighborhoods within the Northern Gateway, there is a well-connected network with low-speed and low-trafficked roadways. Pedestrian facilities in the neighborhoods are well established; however, the connections between them are inhibited by barriers that include arterial roadways, utility corridors, and ecological features. There are few pedestrian access points or cut-through points that increase pedestrian accessibility, but many communities are blocked by barriers caused by the Northwest Branch Anacostia River, commercial properties, or residential culs-de-sac. The only roadway with traffic calming features is 23rd Avenue, which has speed humps at its intersections with Fordham Street, Chapman Road, and Lewisdale Drive.

Land use is a strong indicator of accessibility. Mixed-use developments can enhance economic vitality and increase the number of people on the street with improved perceived safety. It promotes active transportation and creates a walkable environment that reduces traffic and associated air pollution. While there are multiple land uses within the assessment area and multiple tenants within a



PHOTOS BY NELSONNYGAARD

Commercial uses along University Boulevard.



Multifamily residential uses along University Boulevard.



NELSONNYGAARD

property, there is little mix of different use types. Commercial and retail land uses are predominant in the western and central parts of the corridor, while the eastern portion has natural features, recreational facilities, open spaces, and undeveloped land. Generally, the buildings in the study area have some vertical mixed use (combine different uses within the same building) but most are single story buildings. In addition, horizontal connection of land uses is limited for vehicles and pedestrians, which limits inter-parcel access, increases the number of driveways, and increases the number of turning movements along the corridor. Examples are shown in Figure 25.

Pleasurability

Existing conditions

Most of the buildings within the corridor are three to four stories, with pockets of lower-story buildings in the southwest and southeast segments. Overall, most of the buildings in the corridor are in a moderate to good condition, with a few exceptions in the northeast corner of the corridor that are in poor condition. Surveyors noted that the existing architecture has no remarkable or distinctive design and the corridor is generally perceived as uninviting. There are a few open spaces and plazas, but not all are identified as accessible to public.

The eastern section of the corridor comprises natural features including the Northwest Branch Trail, the University Hills Pond Park, the Adelphi Manor Community Park, and the Lake Manor Community

Park. These natural features add to the pleasurability of the corridor. In general, pedestrians walking along the corridor have sparse tree coverage with better coverage within the western segment, but overall sunshade is limited for pedestrian activity.

The streetscape comprises the following and are shown in Figure 26:

- Buildings with large setbacks
- Buildings with blank walls or non-engaging ground floor level
- Buildings with bars on the windows
- Multiple driveways

Community identifiers in the form of banners, signage, or monuments are not present along the corridor, meaning that demarcation of special places and events is missing. Street furniture in the corridor consists of benches, ledges/retaining walls, and limited bus stop seating. There is no visible art or murals along the corridor.

The majority of the sidewalks are in a moderate to good condition but vary in width along the corridor with many obstructions in the form of utility poles, sign poles, or fire hydrants (as highlighted in Figure 11.). The sidewalks do not have any special paving patterns. Some sidewalks within the western and central segments of the corridor have green buffers that provide space between the sidewalk and roadway, creating additional level of comfort for pedestrians.

The corridor has limited distinctive or interesting



NELSONINNYGAARD

open views with the primary open spaces being in the eastern segment of the corridor at the crossing of the Anacostia River. However, throughout the study area there are both indoor and outdoor spaces that encourage people to socialize in the form of restaurants, coffee shops, and convenience stores. Restrooms are easily accessible throughout the corridor at the numerous fast-food restaurants and public buildings.

Perceived Safety From Crime

Existing conditions

Throughout the corridor there are several bars/night clubs, liquor stores, and check cashing stores that can contribute to perceptions of unsafety, particularly during the evening hours. However, it is noted that only a few buildings have bars on their windows.

While there is graffiti on some buildings in the western and eastern corners of the corridor, they are isolated occurrences. There are few visible dumpsters along the street frontage with most commercial trash collection occurring from the rear of the parcels. There is visible litter throughout the corridor primarily within the western segment where there are more food-related businesses and limited trash receptacles.

There are streetlights along the roadway and in public spaces, but the spacing and level of lighting is not at a pedestrian scale, diminishing the level of personal security. In general, the corridor feels inconvenient for

walking with low safety perceptions especially during non-daylight hours.

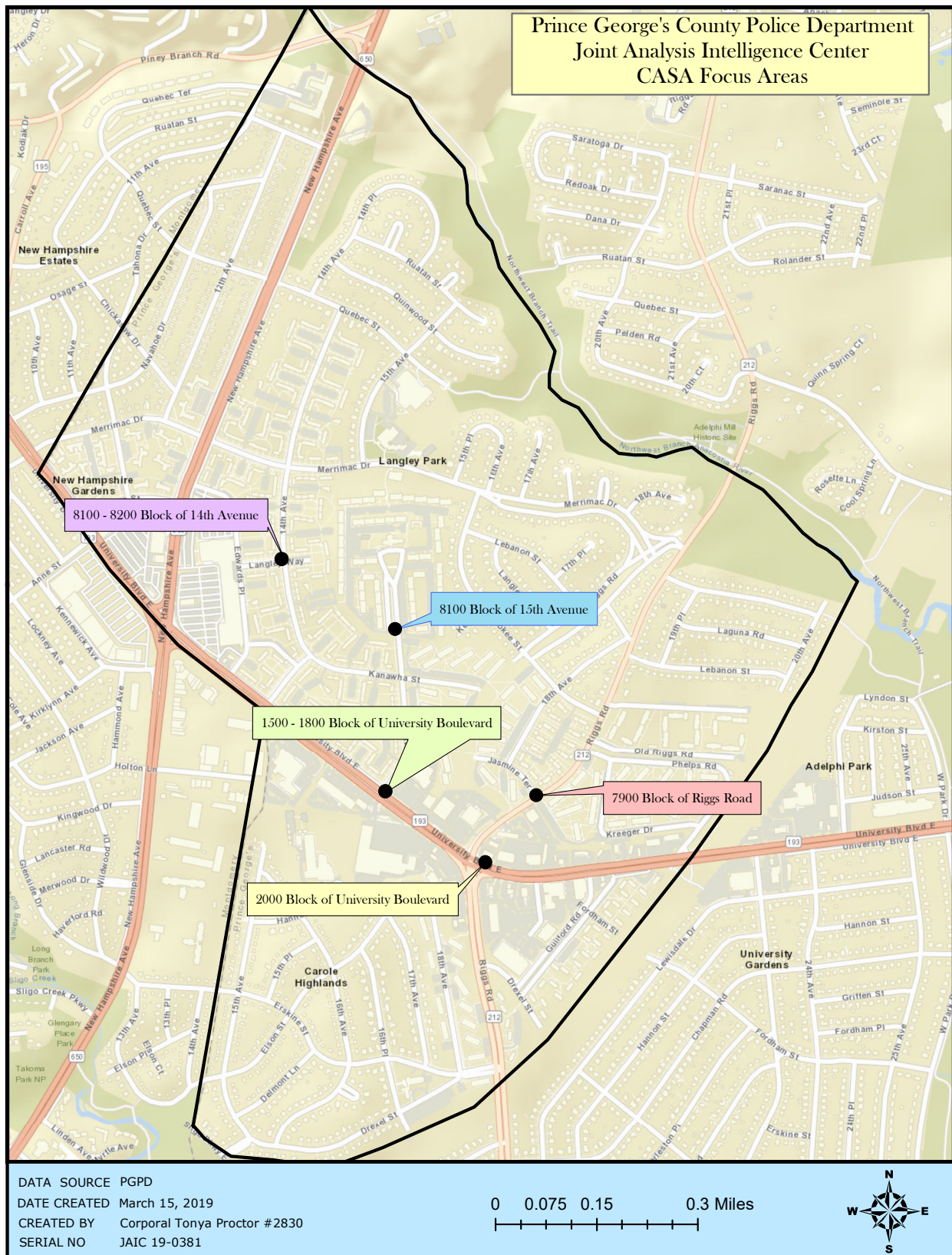
Hot Spots Crime Analysis

In its Byrne Criminal Justice Innovation (BCJI) planning grant proposal, CASA de Maryland identified the entire Langley Park neighborhood as a crime hot spot. This was based on the work of the Transforming Neighborhoods Initiative (TNI), which designated all of Langley Park as a crime hot spot with the poorest statistical crime profile in Prince George's County. There had been no further analysis of crime data to zero in on hot spots until the BCJI planning grant allowed Howard University to undertake further study and surveys.

Howard University in 2015 identified high levels of crime appearing on the major thoroughfares of New Hampshire Avenue, Riggs Road, and University Boulevard. In addition, several points of particularly high crime stand out as "super hotspot" just to the east of Riggs Road on University Boulevard, with several other points of high crime along University Boulevard and Riggs Road near that intersection.

Survey respondents also identified hotspots where they had witnessed crimes. These locations overlapped with the places identified in crime statistics and police service call data that the research team analyzed. In their survey responses, Langley Park residents and police officers identified additional specific hot spots, including a gathering place at 1414 Kanawha Street, the Tick Tock Liquor Store at the

Figure 12. PGCPD CASA Crime Focus Area





NELSONINNYGAARD

Pedestrian Crossing Mid-block along University Boulevard (MD 193)

intersection of University Boulevard and Riggs Road (1820 University Boulevard., E.), the soccer field near CASA's Multicultural Center at 8151 15th Avenue and the McDonald's Restaurant in Langley Park Plaza, 7911 New Hampshire Avenue near University Boulevard.

CASA intends to address all these hotspots through an implementation grant, but priority will be given to the commercial areas on University Boulevard where they believe significant progress can be made in partnership with local small businesses and the police department. The implementation strategies include improved community-police relations, increased access to social and economic opportunities, and the elimination of crime hot spots. In addition, because of its role as vital multiservice center and an anchor institution for the community, special priority will be given to eradicating the conditions that are conducive to crime in close proximity to CASA's headquarters.

Major Findings – Crime and its Drivers

Howard University's study of service calls and crime show that crime was high in 2010, with some crimes peaking in 2012 and then becoming slightly less prevalent by 2015. Overall, crime has decreased over the six-year period; however, levels of crime and calls for service, including assaults, rapes, burglaries, and thefts have remained high. These crimes are not distributed evenly throughout Langley Park; they are disproportionately high at specific hotspots. For all crimes reported over the five-year period, clusters of crime appear on the major thoroughfares that border

Langley Park, specifically on New Hampshire Avenue, Riggs Road, and University Boulevard. These locations account for 60 percent of all crime in the Langley Park area (1,100 out of 1,818) reported over the 2011 to 2015 period.

Several points of especially high crime stand out super hotspots: to the east of Riggs Road on University Boulevard, where high incidences of crime were identified near the intersection of University Boulevard and Riggs Road. University Boulevard, Riggs Road, and 15th Avenue were the locations with the highest concentrations of crime reported from 2011 to 2015. These hotspots will receive the focus of CASA's BCJI implementation and are highlighted in Figure 27.

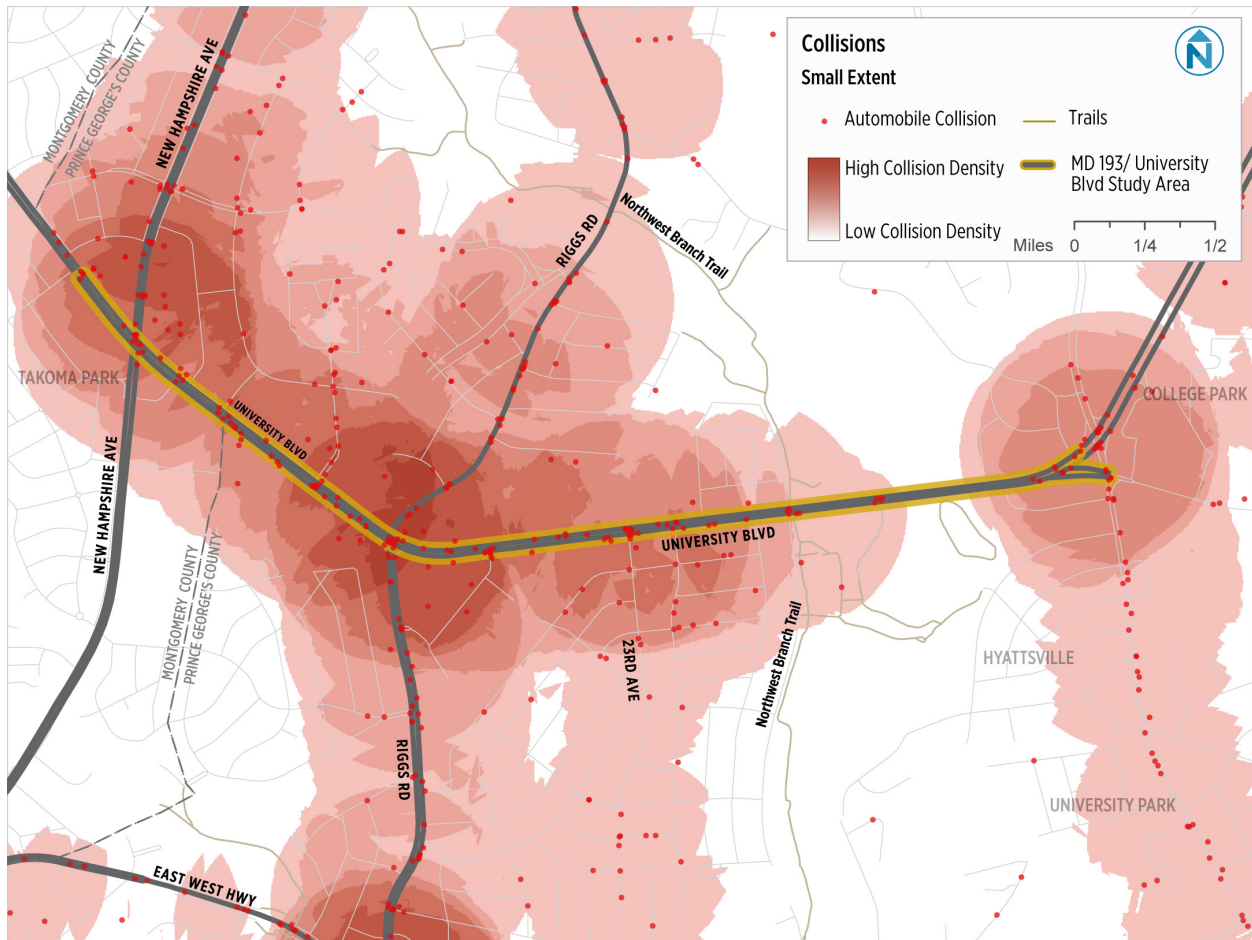
Disorderly conduct, often related to alcohol consumption, continues to attract frequent police intervention especially at street segment hotspots as well as the super hotspots. This has led to new County legislation to hold landlords accountable for illicit and illegal activity in the units they own and lease to others.

Perceived Safety From Traffic

Existing conditions

The corridor has neighborhood entry signs that help orient individuals entering the corridor, but these are at a vehicular level and not pedestrian scale (no pedestrian signage directing to the transit center). All pedestrian crossings are demarcated with white painted lines or zebra crossings but curb-cuts over

Figure 13. Collision Heatmap for Corridor



SOURCE: Find complete data sourcing in Appendix A

the sidewalk are not demarcated. These demarcations are in generally good condition. Midblock crossings at intersections are not present along the corridor. Observations of people along the corridor crossing midblock and standing in travel lanes were noted, as shown in Figure 28. Along the approaches to the MD 193/MD 650 intersection, median fencing has been installed to deter mid-block pedestrian crossings. Despite the pedestrian facilities and crossings, the corridor generally feels unsafe and inconvenient to pedestrians crossing the roadway.

The pedestrian crossings along the corridor consist of traffic signals, stop and yield signs, and are fully signed with pedestrian crossing signs. Although there is a bicycle lane in the eastern extent of the corridor, there is an absence of bicycle facilities in the rest of the corridor.

The posted speed along the corridor is 35 miles per hour but with long block distances and limited sidewalks buffers, the vehicular speeds are higher.

Collision data was provided from MDOT for the 10-year period of 2009 to 2018. Figure 29 shows total crashes have remained relatively steady since 2009, ranging from 165 to 209 annually with the anomaly of 2015 where crashes dipped to 147. These numbers include all crash types and all modes. The heatmap in Figure 30 clearly shows that the crash hotspots occur at the major intersections of New Hampshire Avenue, Riggs Road, and Adelphi Road. In 2018, there were a total of 298 crashes within the corridor including two fatalities and 61 injuries, 13 involved pedestrians and 1 involved bicycles

Alternatives & Recommendations

Modal Alternatives

Given the existing demands of the Northern Gateway, the pending Purple Line construction, and the future development potential, it is necessary to take advantage of all existing facilities and possible alternatives to distribute transportation demand wherever possible, practical, and viable.

VEHICULAR ALTERNATIVES

As expected, there is a large volume of vehicular traffic on MD 193 (University Boulevard), which has neither origin nor destination along the corridor itself. University Boulevard serves as an important east-west arterial but does create a major and imposing barrier between the north and south sides of the area.

It is unlikely that these vehicles could be shifted to alternate routes; however, it would be possible to change the dynamic of the roadway throughout the area to create more of a town center boulevard environment. This may be achieved, in part, through land and streetscaping, road diets, enhanced pedestrian and bicycle facilities such as protected bicycle lanes, bicycle boulevards, and completed sidewalks.

TRANSIT ALTERNATIVES

The development in 2012 of the Takoma-Langley Crossroads Sector Plan by Montgomery County prioritized transit use within the area and provided dependable services to attract not only transit-dependent riders, but so-called “choice riders” – travelers who have the personal resources to own and operate a private vehicle but who choose to ride transit routinely or occasionally. The 2009 Takoma-Langley Crossroads Approved Sector Plan by Prince George’s County recommended the creation of a transportation demand management district (TDMD) for the Crossroads area.

This sector plan was approved with the goal to provide for transit-oriented development (TOD) consistent with the Montgomery County general plan, as well as provide for the development at the planned Purple Line station at Takoma-Langley Crossroads.

Available census travel data show 25 percent of the workers living with the Northern Gateway commute by transit to destinations primarily outside of the area. Observations have highlighted the need for transit amenities to be enhanced in the study area, such as



NACTO

Bicycle Boulevard Signage and Striping

expanding stop areas for greater depth and better shelter facilities, signage, and route information.

The construction of the Purple Line will provide a direct east-west connection linking the Northern Gateway to Metrorail and commuter rail stations, enabling further employment and opportunities for area residents.

BICYCLE ALTERNATIVES

Existing bicycle facilities within the area are almost non-existent, which is reflected in the low bicycle ridership locally. The heavy traffic volumes along MD 193 are not conducive to bicycle travel and pose a deterrent to travel within and along the corridor.

Research has shown that bicycle facilities within commercial areas have positive effects on retail and food service sales and should be encouraged and accommodated. Although a bicycle lane is the typical accommodation on such corridors and a five-foot bicycle lane has been proposed as part of the Purple Line project, the feasibility of bicycle boulevards within the Northern Gateway should be considered to connect the neighborhoods to University Boulevard. These concepts typically apply to roadways with lower traffic volumes and could be explored for the internal roadways such as 23rd Avenue, Erskine Street, and 14th Street. To be a suitable community greenway, speeds must be lowered to enable the comfortable shared use of a single lane for both bicycle and vehicular use. This typically means applying traffic calming techniques that would result in speeds of 11 to 15 miles per hour. Such speeds would not



NELSONNYGAARD

Example of Pedestrian Connection between Commercial Properties (MD 193 east of MD 650)

significantly diminish corridor vehicle throughput capacity, and would provide additional options to residents, commuters, and commercial visitors. Figure 31 shows an example of bicycle boulevard signage and striping from the NACTO Urban Bikeway Design Guide.

The viability of a multi-use trail parallel to University Boulevard to connect the existing trails to the east, the residential and commercial destinations, and the Takoma-Langley Crossroads Transit Center should be explored.

PEDESTRIAN ALTERNATIVES

Pedestrians are vital to the health, safety and prosperity of the Northern Gateway. Sidewalks within the study area are comprehensive and enable connections between the predominant destinations along the corridor. However, there are existing constraints that inhibit pedestrian access in and around the communities adjacent to the corridor. These constraints are primarily due to the lack of connections to the commercial properties where pedestrian facilities are non-existent. Connections between commercial properties provide more opportunities to park once as well as promoting

a more walkable community. Figure 32 shows an example of cross-property connections along University Boulevard (MD 193) just east of MD 650.

PARKING AND TRANSPORTATION DEMAND MANAGEMENT ALTERNATIVES

Commercial properties have free, adjacent off-street parking supply. As potential land-use development scenarios are envisioned, alternatives to building additional parking will need to be encouraged, as well as the promotion of Transportation Demand Management (the application of strategies and policies to reduce travel demand, or to redistribute this demand in space or time).

The encouragement and acceptance from property owners and employers for shared parking agreements and incentives for employees to use alternative transportation throughout the area will be crucial. Improving the parking supply at a minimal cost could be accomplished through wayfinding to parking locations, the promotion of a “park once” environment, and encouraging the use of the Purple Line. However, the parking requirements of retail anchors and major office tenants in the study area could be an obstacle.

Recommendations

With the forthcoming Purple Line along University Boulevard, it is envisioned that the Northern Gateway will have a diverse, coordinated transportation network that supports its position as one of Prince George's County's Local Transit Centers. The multimodal network will provide residents, employees, shoppers, and visitors a variety of transportation options, including walking, bicycling, bus service, light rail, and driving.

The tables within Appendix C highlight the recommendations proposed for further evaluation. Included within the summary tables are the proposed Purple Line project improvements as well as recommendations from previous plans. The recommendations have been divided into the five primary categories focusing on corridor and overall areas. Photos illustrating best practices for the categories are shown below.

PEDESTRIAN FACILITIES

- Sidewalk conditions
 - › Five-foot width minimum
 - › Continuation across driveways
 - › Removal of obstacles
- Crossing locations
 - › Enhanced high-visibility crossing
 - › Increased frequency along the corridor
- Inter-parcel connections
- Pedestrian amenities
 - › Pedestrian-scale lighting
 - › Pedestrian wayfinding signage

BICYCLE FACILITIES

- Continuous bike lane with buffer
 - › Five-foot width with two- to three-foot buffer
 - › Painted bike lane through intersections
- Off-street bicycle facility
- Bicycle amenities
 - › Bicycle racks
 - › Wayfinding signage
 - › Bikeshare network
- Bicycle connections to the Corridor
 - › Creation of bicycle boulevards to adjacent neighborhoods

PUBLIC ENVIRONMENT

- Landscaped buffers
- Installation of landscape features
 - › Large trees
 - › Bioswales
 - › Rain gardens
- Relocation of overhead wires
 - › Use of rear alleys/rear of properties for utilities
 - › Potential for moving overhead wires below grade
- Adequate trash receptacles and management
 - › Provision of amenities at trash stops, benches, public art.

TRANSIT FACILITIES

- Transit stop amenities
 - › Enlarged waiting areas
 - › Provision of benches, shelters and lighting
- Transit stop access
 - › Five-foot sidewalks
 - › Removal of sidewalk obstacles
- Real-time traveler information
 - › Provision of information at transit stops
 - › Creation of mobile app for real-time information

PARKING FACILITIES AND TRANSPORTATION DEMAND MANAGEMENT (TDM)

- Encourage and permit shared parking agreements
 - › Provide allowances for retail and office to share parking facilities
- Unbundling of parking costs from housing/commercial space costs
- Establishment of a Transportation Management Association
 - › Coordination between residents, property owners, and businesses
 - › Promotion and encouragement of transportation options to/from and within the corridor.



NELSONNYGAARD

Pedestrian access through parking lot



NELSONNYGAARD

Raised crosswalks

Recommendation	Location	Incorporated in previous plans	Implementation Notes
PEDESTRIAN FACILITIES			
Five-foot continuous sidewalk width	Corridor wide	MDOT MTA Purple Line	Five feet exclusive of other amenities or utilities should be ensured as per MDOT MTA Purple Line plans
Sidewalk continuation across driveways (i.e., sidewalks do not ramp down)	Corridor wide	Not included	Sidewalks maintained at grade
Relocation of fixed objects within sidewalk	Corridor wide	Included in MDOT MTA Purple Line Included in Takoma/Langley Crossroads Sector Plan (2012) Montgomery County	Walkways must be clear of fixed objects in coordination with ADA accessibility guidelines
Mitigation of construction impacts	Corridor wide	Not included	Provision of a temporary sidewalk that affords a safe and convenient passage
Provision of crossing locations to accommodate desire lines Over-sized crosswalk and HAWK pedestrian signal at Takoma-Langley Purple Line station	Corridor wide	Not included in MDOT MTA Purple Line Included in Purple Line Corridor Access Study (2011)	Existing distances between crossings extend to more than 2,000 feet. Spacing to be a minimum of 200 feet but less than 500 feet
Removal of right-turn slip lanes	Corridor wide	Partially included in MDOT MTA Purple Line	Engineering analysis to ensure pedestrian conflicts are minimized
Parcel sidewalk connections	Corridor wide	Not Included	Connections from the sidewalk to buildings are limited and desire trails seen by "goat" paths
Inter-parcel pedestrian connections	Corridor wide	Not included	Pedestrian connections between parcels are limited
Pedestrian connections across power line corridors	Across power line corridor	Not Included in MDOT MTA Purple Line Greater Chillum Community Study (2015)	Formalization of existing dirt paths to connect communities and existing trails
Pedestrian scale lighting	Corridor wide	Not included	Lighting provides wayfinding and safety
Pedestrian-scale wayfinding signage	Corridor wide	Not included in MDOT MTA Purple Line Included in Takoma/Langley Crossroads Sector Plan (2012) Montgomery County. Included in Purple Line Corridor Access Study (2011) Included in Greater Chillum Community Study (2015)	Wayfinding signage enables greater pedestrian activity and provides a level of comfort to pedestrians.
Place crosswalks on all legs of each intersection where appropriate, and high-visibility crosswalks on University Boulevard	Corridor wide	High-visibility crosswalks included as part of MDOT MTA Purple Line	Need to ensure high-visibility implementation.



Neighborhood bicycle boulevard.

NACTO



Protected bicycle lane

NACTO

Recommendation	Location	Incorporated in previous plans	Implementation Notes
BICYCLE FACILITIES			
Five feet continuous on-street bike lane with buffer	1. MD 193 2. MD 650 3. MD 212	MDOT MTA Purple Line and County Transportation Plan (2009) Takoma/Langley Crossroads Approved Sector Plan (2009) - Prince George's County Purple Line Corridor Access Study (2011)	Three-foot buffer not provided but preferred Cross-section as shown in Takoma Park/Langley Crossroads Sector Plan (2009) - Prince George's County, 2009 (Page 37 of Plan)
Off-street bicycle facility	Corridor wide on both MD 193 and MD 650	Included within County Master Plan of Transportation (2009) Included in Takoma/Langley Crossroads Sector Plan (2012), Montgomery County Included in Purple Line Corridor Access Study (2011)	Sidewalks maintained at grade Cross-section as shown in Takoma Park/Langley Crossroads Sector Plan (2009) Prince George's County, 2009 (Page 37 of Plan)
Green bike boxes at signalized intersections	Corridor wide	Not included	Per county design guide
Green painted bicycle lanes across potential conflict points	Corridor wide	Not included	Per OOTS guidelines
Provision of bicycle amenities (i.e., bicycle racks)	Corridor wide	Included at proposed stations Included in Purple Line Bicycle Study (2010)	Additional racks required at local destinations/buildings
Bicycle wayfinding signage	Corridor wide	Not included	Direction to destinations and facilities
Bicycle boulevards on community streets to connect to Corridor	Area wide (i.e., Erskine St., 23rd Ave., Glenside Dr.,)	Not included in MDOT MTA Purple Line Included in Purple Line Corridor Access Study (2011)	Small, low-speed streets that are "optimized" for bicycle traffic through pavement markings, physical guides, and traffic control. Bike boulevards can help provide a seamless, high-quality bicycling experience from residential neighborhoods to destinations within the area.
Explore the introduction of Capital Bikeshare to the area	Area wide	Not included	Bike sharing can serve as a "last-mile" connection to destinations just beyond walking distance from the corridor, as well as a travel option for short trips within the area.
Bike station at the Takoma-Langley Crossroads transit center, with secure, covered parking and repair facilities.	Takoma-Langley Crossroads transit center	Not included in MDOT MTA Purple Line Included in Purple Line Bicycle Study (2010) Included in Purple Line Corridor Access Study (2011)	Provides secure parking for regular and transient bicycle commuters.



Sidewalk buffer



Streetscape trash amenities



Median landscape treatments

PHOTOS BY NACTO

Recommendation	Location	Incorporated in previous plans	Implementation Notes
PUBLIC ENVIRONMENT			
Landscape buffers and street trees between the sidewalk and the curb.	Corridor wide	Partially included in MDOT MTA Purple Line Included in Takoma/Langley Crossroads Sector Plan (2012) - Montgomery County	This protects pedestrians from traffic, making them more comfortable, makes streets more aesthetically pleasing, adds shade, and reduces the heat island effect.
Design streets to provide sufficient soil volume to support large canopy trees.	Corridor wide	Not included	Canopy trees can retain a large amount of rainwater and keep it from becoming runoff. Evaporation of water from these trees helps to cleanse the air and cool the area reducing the urban heat island effect. Canopy trees have additional benefits in slowing traffic, encouraging a stronger sense of place, and creating a cooler and more enjoyable walking environment.
Permit and encourage permeable materials in street zones without heavy vehicle traffic.	Corridor wide	Not included	Typical zones where such materials are acceptable and viable include sidewalks, amenity zones, parking lanes, bicycle lanes, and medians and dividers.
Allow and encourage the installation of landscape features such as bioswales, rain gardens or infiltration pits to capture and retain stormwater runoff.	Corridor wide	Not included	Such features can contribute to the overall beauty and functionality of the place. Need to ensure that maintenance agreements or strategies are firmly in place.
Relocation of overhead wires to alleys, rear of properties, or below grade.	Corridor wide	Included in Takoma/Langley Crossroads Sector Plan (2012) Montgomery County	Can be undertaken on corridor sections during Purple Line construction, roadway construction or redevelopment.
Provide for adequate trash receptacles at transit stops and throughout the corridor.	Transit stops and corridor wide	Not included	To be placed at transit stops and public places.



Shared-use parking facilities



NACTO

Bus stop amenities



NYC DOT

Real-time transit information

Recommendation	Location	Incorporated in previous plans	Implementation Notes
TRANSIT FACILITIES			
Improve transit stops whenever and wherever possible including widening sidewalks, planning or relocating landscaping to improve boarding and alighting, introducing additional shelters, benches and waiting facilities, and providing real-time information to travelers at transit stops and, via mobile applications, before they arrive	Corridor wide	Partially included in MDOT MTA Purple Line Included in Takoma/Langley Crossroads Approved Sector Plan (2009) - Prince George's County	Needs to include bus stops and not only Purple Line stations
Ensure adequate lighting and shade so that transit stops feel safe and are generally comfortable during all times of day and throughout the year	Corridor wide	Partially included in MDOT MTA Purple Line	Needs to include bus stops and not only Purple Line stations
As demand warrants, reserve on/off-street parking spaces near well-used transit stops for use by car share providers and services.	Corridor wide	Not included	
Provide real-time traveler information for all travel options at decision or transfer points, such as the transit center, LRT stops major bus stops, or bikeshare stations.	Area wide	Not included	Information should include rail and bus service, bike or car share availability, and taxi services, as well as walking or biking directions to nearby destinations.
PARKING FACILITIES AND TRANSPORTATION DEMAND MANAGEMENT (TDM)			
Permit and encourage shared parking, particularly among complementary uses such as retail and office.	Corridor wide	Not included	Public facilities, such as the library and recreation center should lead by example in sharing parking.
Require that property owners and developers unbundle or separate the cost of parking from the costs of housing or commercial space	Corridor wide	Not included	Would require zoning policy changes.
Wherever practical, provide and encourage on-street parking on both public and private streets.	Corridor wide	Not included	Parking slows traffic on streets and provides a buffer to pedestrians.
Establish a Transportation Management Association to support, advance, and coordinate the efforts of property owners and tenants to promote and improve transportation options other than driving.	Corridor wide	Not included in MDOT MTA Purple Line Included in Takoma/Langley Crossroads Approved Sector Plan (2009) Prince George's County	The Northern Gateway CDC can serve as the TMA for the area.
Work with developers to incorporate TDM measures	Area wide	Not included	Include designated carpool, covered secure bicycle parking, and car share spaces, contributions to bike share expansion.

Next Steps

Further analysis and evaluation will be undertaken to understand the feasibility of the recommendations to be taken through to the next step of the project, which is the further development of the 30% Design and Engineering Plans to final design.

Appendix A

Data Sources

Study Area Corridor within the Region

Prince George's County Planning Department, Transportation 2017 Ln, Line, November 13, 2018, [https://gisdata.pcpplanning.org/opendata/download.asp?FileName=/data/Shapefile/Transportation 2017 Ln.zip](https://gisdata.pcpplanning.org/opendata/download.asp?FileName=/data/Shapefile/Transportation%202017%20Ln.zip)

Study Area Roadways

Prince George's County Planning Department, Transportation 2017 Ln, Line, November 13, 2018, <https://gisdata.pcpplanning.org/opendata/download.asp?FileName=/data/Shapefile/Transportation 2017 Ln.zip>

Montgomery County Planning Department, Purple Line, Line, August 23, 2017, [https://mcpplanning.org/opendata/Shapefile/Purple Line.zip](https://mcpplanning.org/opendata/Shapefile/Purple%20Line.zip)

Appendix A

Data Sources

Complete data sources are available online at <https://bit.ly/SpacesAppA>.



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

www.pgplanning.org