

KENSINGTON

BICYCLE & PEDESTRIAN PRIORITY AREA PLAN

June 2024





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Prepared For:



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CHAPTER 1

INTRODUCTION



INTRODUCTION

Walking and Biking in Kensington

The Town of Kensington has a well-developed network of public infrastructure, businesses, restaurants, shops, parks, and community spaces that make it an attractive area for people walking and biking. Despite these assets there are significant challenges preventing the town from maximizing its full potential as a truly walkable and bikeable community.

Kensington's largest challenge is fragmentation. The CSX railroad line divides the town into northern and southern fragments, while Connecticut Avenue (MD 185) and University Boulevard (MD 193) create an east-west division. In order to walk, bike, or drive across town, residents and guests are funneled to limited crossing locations that can be uncomfortable and undesirable for people walking and biking.

The Town of Kensington applied to become a Bicycle and Pedestrian Priority Area (BPPA) as designated by the Maryland State Highway Administration (SHA) to help overcome these challenges and provide safe and accessible walking and biking opportunities for all of Kensington.

The Kensington town boundary and BPPA boundary are similar. The Kensington BPPA boundary includes the Ken-Gar neighborhood and University Boulevard (MD 193) between Perry Avenue and Drumm Avenue, while they are not included in the town boundary. Kensington is also a Montgomery County designated Bicycle and Pedestrian Priority Area (BiPPA), which has the same boundary as the state designation. The alignment of the state and county designations can streamline state and local planning goals.

Bicycle and Pedestrian Priority Area

SHA created BPPA designations through Maryland Code, Transportation 8-204, which is intended to emphasize planning for areas with a high potential of bicycling and walking. BPPAs facilitate the use of innovative bicycle and pedestrian treatments to improve safety for all users; align state and local planning goals; and apply a collaborative approach among state, local, and private stakeholders to overcome a wide range of bicycle and pedestrian travel impediments, regardless of facility ownership.

The Kensington BPPA Plan formally recognizes the Town of Kensington's commitment to improving safety and comfort for the people who walk or ride a bicycle.

Maryland Code, Transportation § 8-204

(c)(1) The Administration shall...

(ii) 1. If there is a State highway within the limits of an area that a local government has designated as a bicycle and pedestrian priority area, make a determination on whether the Administration should also designate the area as a bicycle and pedestrian priority area... and

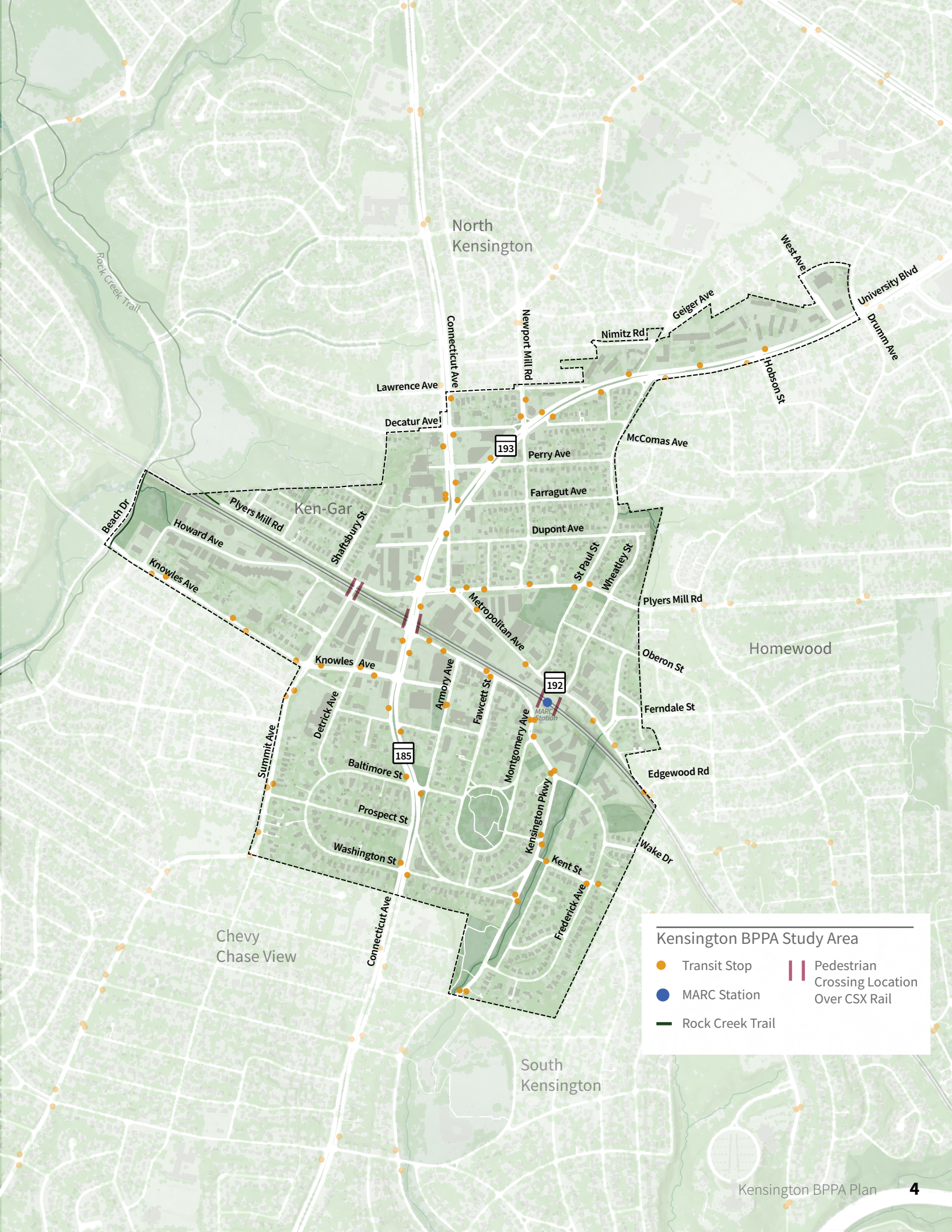
2. If the Administration and a local government each designate an area as a bicycle and pedestrian priority area, implement a plan developed in cooperation with the local government to increase safety and access for bicycle or pedestrian traffic.

(2) If there is no State highway within the limits of the bicycle and pedestrian priority area, the plan shall be developed by the local government.

(3) A plan for traffic management in a bicycle and pedestrian priority area shall provide for:

(i) Appropriate changes to the location, construction, geometrics, design, and maintenance of the State highway system to increase safety and access for bicycle or pedestrian traffic in the bicycle and pedestrian priority area; and

(ii) The appropriate use of traffic control devices including pedestrian control signals, traffic signals, stop signs, and speed bumps.



Kensington BPPA Study Area

- Transit Stop
- MARC Station
- Rock Creek Trail
- || Pedestrian Crossing Location Over CSX Rail

Kensington BPPA Process

The Kensington BPPA Plan is intended to provide future guidance and recommendations for improving facilities, comfort, access, and safety for people walking and biking in Kensington. The BPPA seeks to fulfill the following objectives:

- Improve bicycle and pedestrian facilities to enhance access and comfort along roadway segments and at intersections within the study area.
- Identify safety and operational conflicts between various modes of travel, especially between motorized vehicular traffic and more vulnerable bicyclists and pedestrians.
- Minimize utility and right-of-way impacts to facilitate speedier implementation of improvements.

The Kensington BPPA was developed in three phases: existing conditions, stakeholder and public engagement, and evaluation and recommendations.

First, the BPPA built upon previous planning efforts. Relevant plans, policies, and reports were reviewed to extract previous recommendations and guiding policies. Existing available geospatial and crash datasets were collected and analyzed to assess roadway, bicycle, and pedestrian facilities. Reported crashes within the Kensington BPPA boundary between 2017 and 2021 were analyzed for crash patterns. The existing conditions work, in combination with a stakeholder walking tour, generated a high-level list of challenges and opportunities.

Second, a stakeholder workshop and drop-in public engagement session were held. The workshop and engagement session reviewed existing conditions and generated solutions to address challenges and opportunities identified in the existing conditions phase. The workshop and engagement session included sketching and feedback activities.

Finally, the draft recommendations were developed based on the stakeholder workshop and public input event. A fatal flaws analysis was conducted to ensure the viability of the draft recommendations. The recommendations were prioritized based on timeframe of potential implementation.



Town of Kensington

The Town of Kensington is a small, incorporated town in Montgomery County, Maryland with a population of approximately 2,000 residents across 320 acres. Adjacent communities include Ken-Gar, Kensington Heights, and North Kensington. Kensington is a significant convergence point between Bethesda, Rockville, Silver Spring, and Wheaton, and includes major state highways such as Connecticut Avenue (MD 185), University Boulevard (MD 193), Metropolitan Avenue (MD 192), and Knowles Avenue (MD 547). Kensington is a hub of local and cut through activity for people driving, taking transit, walking, and biking.

The Connecticut Avenue and Howard Avenue intersection is the center point of the Kensington BPPA study area, which serves as the economic, residential, and transportation crossroad of the town.

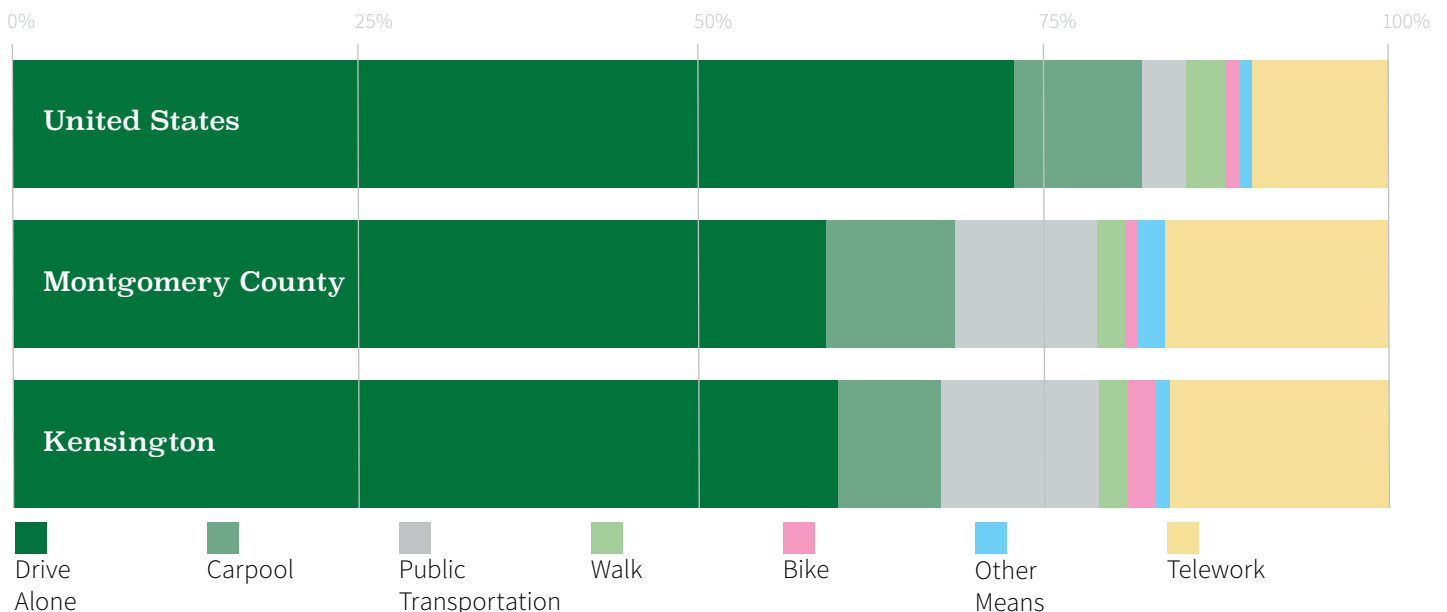
The study area includes the Kensington Train Station (serving passenger and freight trains); bus routes 4, 5, 33, 34, and 37 of the Montgomery County Ride-On system; and Metrobus Route L8. The train station sits on CSX railroad tracks, which is used by freight trains as well as Maryland Area Rail Commuter (MARC) and Amtrak passenger trains. The BPPA study area also connects with the National Capital Trail network immediately to the east (Sligo Creek Trail) and west (Rock Creek Trail).

Demographics of Kensington

The Town of Kensington is a first ring suburb outside of Washington, DC. It has the amenities of a large city and the traffic from outer ring suburbs traveling through Kensington going to/from DC. Connecticut Avenue (MD 185) attempts to balance being the center of a small-town historic commercial core while carrying an average of 40,000 cars per day.

Kensington is transit rich due to its proximity to DC.; is a place where people are choosing less car-intensive lifestyles; and has the land use density and mix that promotes walking and biking for local discretionary travel. In comparison to national commute trends, Kensington has a lower proportion of residents who drive alone (60%) and a higher rate of taking public transportation (12%), biking (2%), and working from home (16%) (American Community Survey 2021).

The median age of Kensington residents is 41 years old, with 53% of the population between 20 and 65 years old. The town's racial makeup is 68% White, 7% Black, 7% Asian, and 18% some other race or two or more races. 15% of the population identifies as Hispanic/Latinx. The median household income in Kensington is \$132,000 (American Community Survey 2021).



Source: American Community Survey 2021

BUILDING ON PREVIOUS WORK

The Kensington BPPA Plan builds on previous studies of the Town of Kensington; state owned facilities in Kensington; and Montgomery County Bicycle, Pedestrian, and Vision Zero Plans. An objective of the Kensington BPPA Plan is to align state and local planning goals. The following plans and reports were reviewed to gather previous goals, recommendations, proposed projects, and strategies, and find alignment between past work and the Kensington BPPA Plan.

State

[Maryland Department of Transportation \(MDOT\) State Highway Administration \(SHA\) MD 185 Corridor Needs Analysis](#)

The MD 185 Corridor Needs Analysis report assessed the needs and recommended multimodal improvements along Connecticut Avenue (MD 185) between Chevy Chase and Kensington. The recommendations weigh the needs of pedestrians, bicyclists, and drivers in the context of the surrounding environment to overcome deficiencies and improve safety and travel conditions along the corridor. A portion of the corridor — between Washington Street and University Boulevard — falls within the Kensington BPPA. The report recommends a separated sidepath on the east side of Connecticut Avenue, reducing vehicular speeds, and strategies for improving comfort and safety for people walking and biking within the Kensington BPPA.

MDOT Maryland Transit Administration (MTA) Purple Line

MDOT MTA is constructing the Purple Line, a light rail line that will extend from Bethesda in Montgomery County to New Carrollton in Prince George's County, providing direct connections to the MARC; Amtrak; local bus services; and Metrorail Red, Green, and Orange lines. Notably, there is a proposed station in Chevy Chase at Connecticut Avenue about two miles south of Kensington.

[MDOT 2050 Maryland Statewide Bicycle & Pedestrian Master Plan](#)

The state's Bicycle and Pedestrian Plan delineates goals, objectives, strategies, and key initiatives aimed at establishing Maryland MDOT's vision to provide safe and convenient active transportation that supports equitable access for all. The plan includes four goal areas: equitable & sustainable communities, safety, process, and connections.

[MDOT SHA Context Driven – Access and Mobility for all Users](#)

In 2019, SHA introduced the Context Driven – Access and Mobility for all Users, a planning and design resource that offers practitioners guidelines focused on creating safe, accessible, and effective multimodal transportation systems. SHA developed a unique set of six context zones based on the distinctive land use characteristics of Maryland communities.

The Kensington BPPA lies in the Suburban Activity Center context zone (also characterized as the Traditional Town Center context zone), which is characterized by a medium to high diversity of uses. The main points of interest are clustered along historic Main Streets, supporting short trips and longer pass-through trips. A set of proven treatments are highlighted that typically address the unique needs of each context zone.

Proven treatments suitable within Suburban Activity Centers include continental crosswalk striping, narrow travel lanes, buffered bike lanes, mid-block crossings, Pedestrian Hybrid Beacons (PHB), the removal of free right turn lanes, and a speed limit of 35 MPH. Proven treatments suitable for Traditional Town Centers include curb extensions, continental crosswalks, rectangular rapid-flashing beacons (RRFB), mid-block crossing, and pedestrian-scale lighting.

Since the implementation of the Context Driven Guide, SHA has updated three crosswalks at the Knowles Avenue and Connecticut Avenue intersection with continental striping, and reduced the speed limit along University Boulevard within the Kensington BPPA study area.

County

[Montgomery County Vision Zero Action Plan](#)

Montgomery County's Vision Zero Action Plan commits to systematically update the roadway network to create complete, safe streets and build a culture of safety through purposeful campaigns and engagements to eliminate serious and fatal collisions by 2030. The plan identifies the High Injury Network (HIN), portions of which exist within the Kensington BPPA. Connecticut Avenue between Knowles Avenue and Washington Street, and University Boulevard from Decatur Avenue to Drumm Avenue are part of the HIN within the Kensington BPPA.

The county has also conducted predictive safety analysis across the county to identify locations that are at risk for severe and fatal crashes based on historical crashes and roadway characteristics. Within the Kensington BPPA, the Connecticut Avenue and Plyers Mill Road intersection is considered at-risk for pedestrian crashes after dark.

[Montgomery County Bicycle Master Plan](#)

Montgomery County's Bicycle Master Plan aims to invest in bicycling as a healthy, environmentally friendly, and cost-effective mode of transportation. The plan's goal is to enable and encourage people of all ages and bicycling abilities to achieve their daily errands and activities by bicycling. Within the Kensington BPPA, the plan recommends separated bike lanes, sidepaths, and an improved crossing over the CSX railroad tracks via St. Paul Street. The County prepared a Bike Master Plan Biennial Monitoring Report as a requirement of the Bike Master Plan to provide recommendations for implementing the vision of the plan and evaluating the progress made in the last two years in advancing the goals, objectives, and recommendations of the plan.

[Montgomery County Complete Streets Design Guide](#)

In 2021, Montgomery County Planning and the Maryland-National Capital Park and Planning Commission (M-NCPPC) adopted the Complete Streets Design Guide to support the creation of great roadways that are designed and operated to serve all roadway users, including people walking, biking, taking transit, and driving. The guide includes Complete Streets Design Guide Street types and suitable design features per street type for the corridor and within cross sections.

Within the Kensington BPPA, Connecticut Avenue is classified as a Town Center Boulevard, which is characterized by moderate-to high-intensity development, moderate to high volumes of personal vehicles, and moderate to high pedestrian and bicycle activity. Key street design features include elements such as slowing vehicle traffic, facilitating safe crossings and transit access for pedestrians, and providing visual cues to drivers of higher volumes of bicycle and pedestrian activity in the area.

[Montgomery County Pedestrian Master Plan](#)

Montgomery County's Pedestrian Master Plan was completed in October 2023, during the development of the Kensington BPPA Plan. The Pedestrian Master Plan is the County's first comprehensive vision to create safer, more comfortable experiences walking or rolling around the county, and to make getting around more convenient and accessible for every pedestrian. The plan includes detailed recommendations focused on design, policy, and programming; pedestrian and bicycle project prioritization; pedestrian shortcut identification; country sidepath identification; and Complete Streets design guide area type classifications.

Montgomery County Department of Transportation (MCDOT) Summit Avenue Extension

MCDOT is planning to extend Summit Avenue in Kensington. Summit Avenue currently exists from Plyers Mill Road to the north and the town boundary to the south. The facility is planned to be extended from Plyers Mill Road to Farragut Road, with improvements to Farragut Road and a reconfiguration of the Connecticut Avenue (MD 185)/University Boulevard (MD 193)/Farragut Road intersection. As of this plan publication, design of the Summit Avenue Extension is anticipated to occur in Fiscal Year (FY) 2027, and construction is anticipated to be completed in FY2031.

Montgomery County Planning Department - Kensington Sector Plan

Published in 2012, the Kensington Sector Plan presents the communities' vision and recommendations for the land use, zoning, urban design, transportation, environment, and community facilities. Most relevant to the Kensington BPPA Plan, the sector plan recommended reducing the speed of Connecticut Avenue to 30 miles per hour (MPH), from Knowles Avenue to Decatur Avenue to enhance pedestrian comfort and safety. The plan has since adopted and SHA has reduced the speed as suggested by the plan. The plan also recommended providing clear and bold signage for bicyclists and pedestrians.

MCDOT Connecticut Avenue Corridor Pedestrian and Bicycling Access and Safety Study

Released in 2022, the Connecticut Avenue Corridor Pedestrian and Bicycling Access and Safety Study is the most recent study of Connecticut Avenue within the Kensington BPPA. The study was created in response to changes in travel and commute patterns during the COVID-19 pandemic and sought to reimagine the corridor to improve walkability and bikeability in response to pandemic-induced changes. The study was funded through the Metropolitan Washington Council of Governments/Transportation Planning Board's (MWCOG/TPB) Transportation/Land-Use Connections (TLC) program.

The report explored multiple design alternatives along Connecticut Avenue and throughout Kensington, all of which are applicable to the Kensington BPPA Plan. The report settled on Initial Project Design recommendations and On-Going Project Development recommendations.

The initial project design recommendations include: 1) installing missing crosswalks and associated pedestrian signal equipment on Connecticut Avenue at Knowles Avenue and at Plyers Mill Road; 2) installing an appropriate signal device to provide a new crossing at Connecticut Avenue and Howard Avenue; 3) beginning efforts to plan and design for a pedestrian bridge adjacent to Connecticut Avenue over the CSX railroad tracks; and 4) pursuing neighborhood bikeways to connect neighboring communities and amenities.

The on-going project development recommendations include: 1) implementing pedestrian recall phasing at all signalized intersections; 2) improving safety at the Knowles Avenue and Detrick Avenue intersection; 3) narrowing Connecticut Avenue during repaving and restriping; 4) installing neighborhood greenways on Plyers Mill Road and Lexington Street; 4) developing a town-wide walking and biking wayfinding plan; and 5) studying North Kensington to assess transportation opportunities and challenges, particularly for those walking and biking.





Frederick Avenue &
Kensington Parkway

CHAPTER 2

EXISTING CONDITIONS



EXISTING ROADWAY FACILITIES

As Kensington exists today, people walking and biking face connectivity and safety challenges. The most significant challenge for bicycle and pedestrian access is the fractured connectivity of the community. The town is divided north and south by the CSX railroad, and east and west by Connecticut Avenue and University Boulevard. The fractured connectivity within the town is further magnified by the limited crossing opportunities between the north, east, south, and west sides of town.

Existing Environment

Pedestrians and bicyclists have only three options to cross the CSX railroad tracks: 1) an at-grade crossing at the Kensington Train Station; 2) Connecticut Avenue over the CSX bridge, which offers narrow sidewalks and no safety buffer from travel lanes; and 3) Summit Avenue. East-west connectivity has five signalized crossing locations along Connecticut Avenue (Washington Street; Knowles Avenue; Plyers Mill Road; University Boulevard/Farragut Avenue; and Lexington Street.); however, this requires crossing six lanes of a state road.

The existing sidewalk along Connecticut Avenue lacks a safety buffer between the sidewalk and travel lanes, which causes apprehension for many pedestrians, especially those with children. Connecticut Avenue currently has no separated bicycle facilities and cyclists must feel confident enough to share the road with vehicle traffic.

Several multi-level mixed-use developments in Kensington will soon place more pedestrians and cyclists onto the network. With these factors combined, the town is hearing increasing concern from the community with regards to safety for people walking, biking, taking transit, and driving.

Existing Roadway Network

Within the study area, SHA maintains Connecticut Avenue (MD 185), Knowles Avenue (MD 547), University Boulevard (MD 193), and Metropolitan Avenue (MD 192).

Montgomery County and the Town of Kensington maintain the remainder of roadways within the town. Road types can affect bicycle and pedestrian safety and level of service and comfort. Roads with higher speed or traffic volumes may be less comfortable for bicyclists and pedestrians. In addition, higher vehicle speeds can result in greater risk of crashes and more serious injuries when crashes occur.

Roadway Attributes

The Kensington BPPA has about 12 miles of local streets, minor collectors, and alleys making up more than 75% of the road miles in the study area.

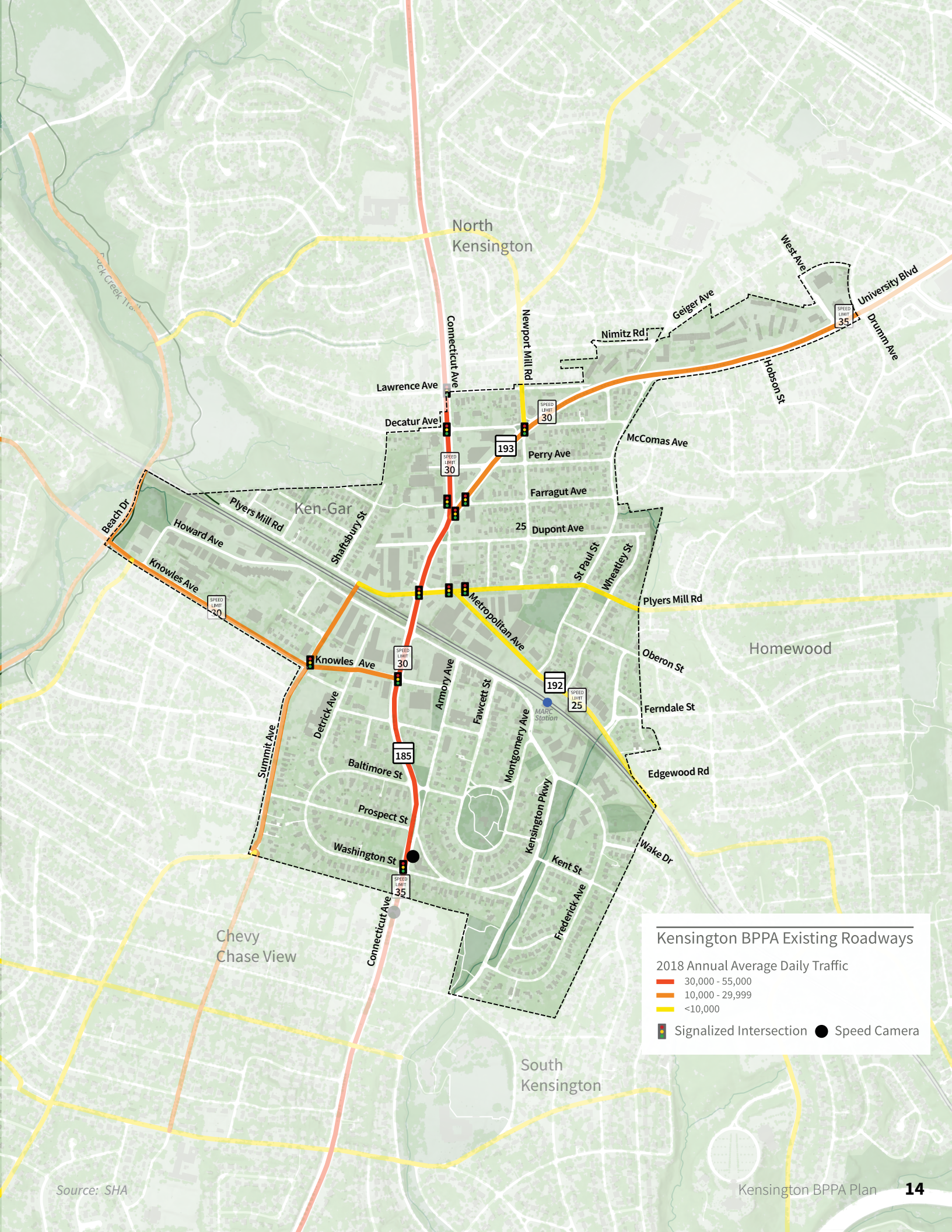
The roadways maintained by SHA in the Kensington BPPA make up about 25% of the lane miles but carry significantly higher traffic volumes than local roads. The SHA maintained roads in are more likely to carry through traffic — vehicle trips that do not originate in Kensington, but only pass through the town.

Roadway Ownership and Facility Type

The SHA maintained roadways in the study area have posted speed limits ranging from 25 MPH to 35 MPH. Posted speed limits on county maintained roadways within the Kensington BPPA are 25 MPH while all town owned roads changed speed limits to 20 MPH in July 2022. One speed camera exists on Connecticut Ave just north of Washington Street for northbound traffic heading into Kensington.

Significant traffic volumes travel through Kensington on an average daily basis as noted in the map on page 14. Two critical convergence points occur in the study area: 1) the Connecticut Avenue and University Avenue intersection merges two high volume state roadways and 2) the Connecticut Avenue and Plyers Mill Road intersection is a critical access point. Metropolitan Avenue and Concord Street intersect with Plyers Mill Road just east of the Connecticut Avenue/Plyers Mill Road intersection and the two closely spaced intersections operate as a system. The two converging intersections carry high traffic volumes in comparison to the surrounding roadways.

Nine signalized intersections exist on state owned facilities and stop controlled intersections exist throughout most of the remaining intersections in the study area.



Kensington BPPA Existing Roadways

2018 Annual Average Daily Traffic

- 30,000 - 55,000
- 10,000 - 29,999
- <10,000

■ Signalized Intersection ● Speed Camera

EXISTING BICYCLE CONDITIONS

Limited bicycle facilities currently exist within the Kensington BPPA, although there are no separated bicycle facilities. Connecticut Avenue currently has sharrow markings on the outer travel lane. Sharrows indicate that a person bicycling can use the full lane and the lane is shared by people driving and biking. A signed bicycle route along Plyers Mill Rd connects to the Rock Creek Trail, as well as a bicycle route entry point along Brainard Avenue. The Bicycle Level of Traffic Stress along Connecticut Avenue and University Boulevard is rated the highest stress level.

Bicycle Level of Traffic Stress

In 2018, the Montgomery County Planning Department adopted the Bicycle Level of Traffic Stress (LTS) methodology in the Montgomery County Bicycle Master Plan to quantify the amount of discomfort that people feel when they travel closely to vehicular and pedestrian traffic. The Secretary's Office (MDOT TSO) conducted similar work in 2022 and developed a Bicycle Level of Traffic Stress map for the entire state. The MDOT bicycle LTS includes additional LTS scoring levels, providing more granular details of stress tolerance along road segments within Kensington.

The lower level of traffic stress (LTS 1) is comfortable for cyclists of all ages and abilities. The higher level of traffic stress (LTS 4) is only comfortable for strong and fearless cyclists, people who feel comfortable regardless of the number of traffic lanes, vehicular speed, volume, and other factors. Some bicyclists travel along LTS 4 routes if it is the most direct route despite feeling uncomfortable.

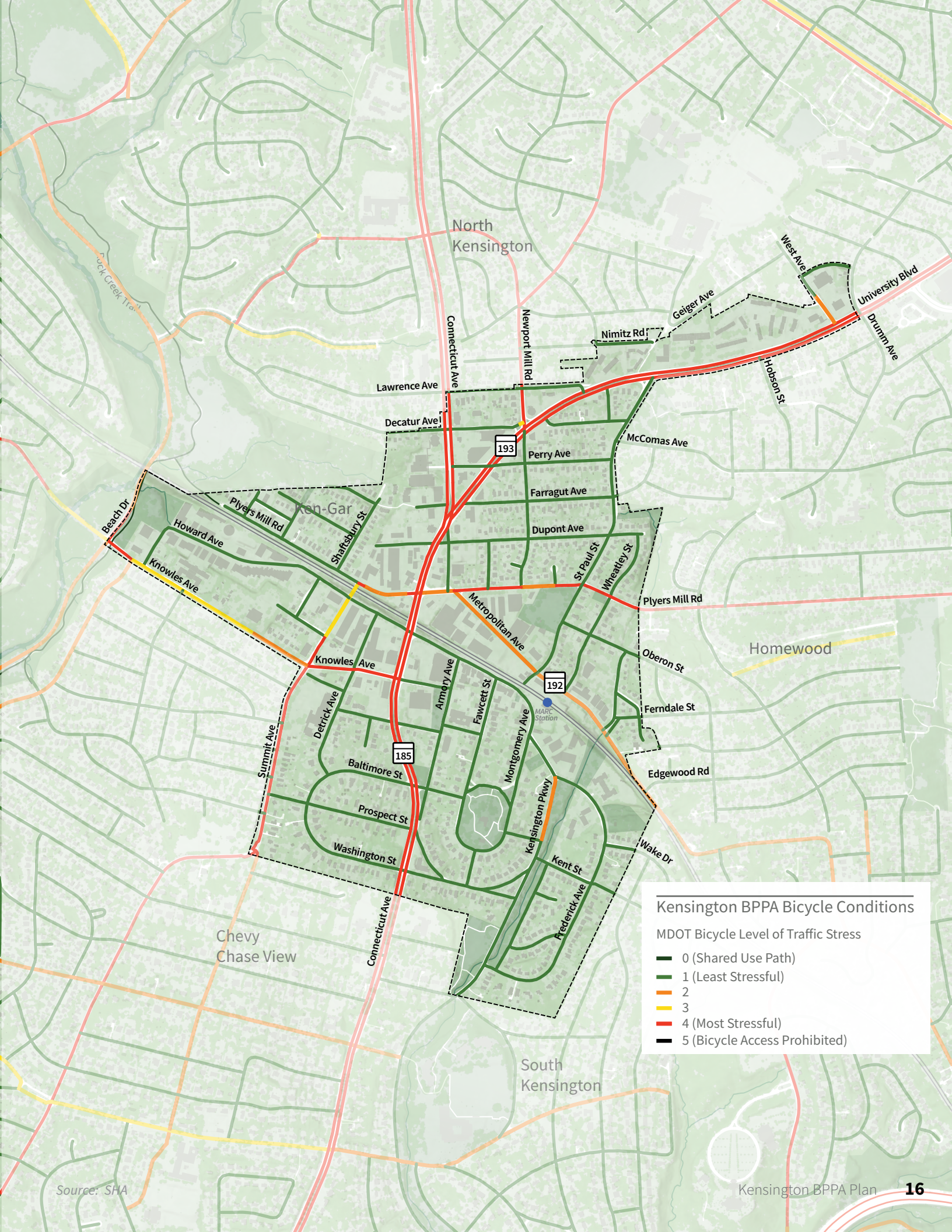
An existing high stress level is a sign that improved bicycle infrastructure is necessary to create conditions where more people feel comfortable riding. It could also indicate opportunities to create comfortable routes adjacent to state facilities. Factors that contribute to the grading of stress includes number of traffic lanes, vehicular speeds and volume, frequency of on-street parking turnover, presence of a bike facility, presence and length of right-turn lanes, turn lane configurations, width and speed limit of the cross street at unsignalized crossings, and presence of median refuge.

Along Connecticut Avenue (MD 185), the LTS is graded at a LTS 4, due to the number of lanes, high travel speeds and traffic volumes, lack of dedicated bicycle facilities, and several high-volume turning movements and intersections.

Kensington residents and visitors will often ride on the sidewalk, as riding with traffic can feel extremely stressful and unsafe along Connecticut Avenue and University Boulevard.



Plyers Mill Road & Concord Street



Kensington BPPA Bicycle Conditions

MDOT Bicycle Level of Traffic Stress

- 0 (Shared Use Path)
- 1 (Least Stressful)
- 2
- 3
- 4 (Most Stressful)
- 5 (Bicycle Access Prohibited)

EXISTING PEDESTRIAN FACILITIES

Sidewalks are the primary existing pedestrian facilities along state roadways within the Kensington BPPA. Pedestrian facilities along state roadways within the Kensington BPPA are generally undesirable for people walking based on the Pedestrian Level of Comfort (PLOC) rating. Local and county streets are generally more comfortable though there are many locations that lack sidewalks on both sides of the street.

State Roadways

Pedestrian crossing opportunities along Connecticut Avenue exist at signalized intersections, but crosswalks are not present on all approaches. Signalized intersections along Connecticut Avenue are spaced about 800' – 1,000' apart, which is twice the distance of best practices for safely spacing good pedestrian accessibility.

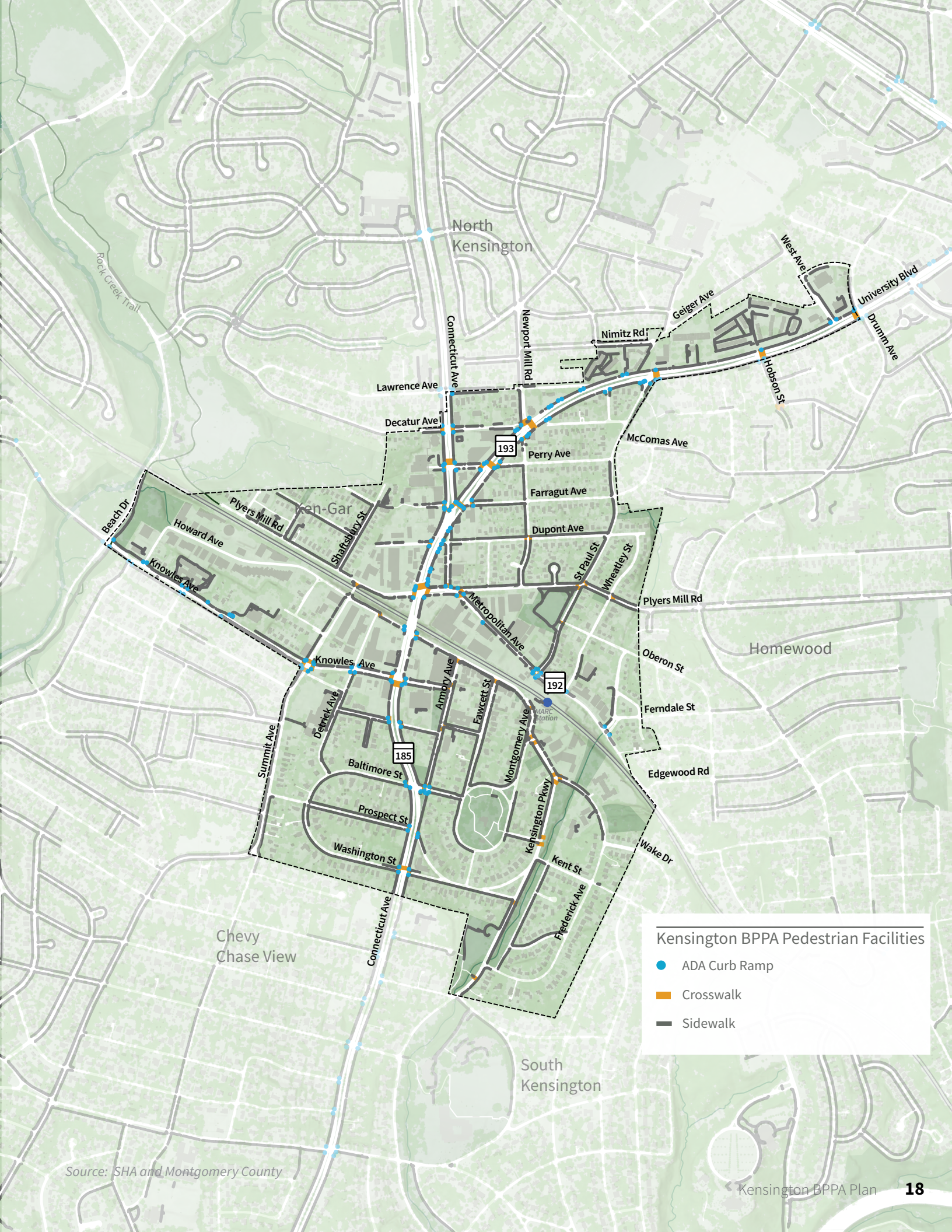
University Boulevard has multiple crosswalks with pedestrian crossing signage at unsignalized intersections or approaches (e.g., Perry Avenue, Newport Mill Road, St. Paul Street, Hobson Street, and Drumm Avenue) but no support treatments, such as Pedestrian Hybrid Beacons (PHB), accompany the

crosswalks. The crosswalks are spaced between 500' and 1,200' apart. Due to the three stage crossing at the University Boulevard and Connecticut Avenue intersection, it takes seven minutes to traverse the three crosswalks from the northwest corner to the southeast corner of the intersection.

Knowles Avenue has sidewalks, but crossing is limited to signalized intersections at Summit Avenue or Connecticut Avenue, spaced about 750' apart. The Detrick Avenue intersection is a key access point to the retail plaza on the northern block of Knowles Avenue, but no pedestrian crossing amenities exist. The curvature of the road and the building frontage also reduces visibility for people driving and walking.



Connecticut Avenue &
University Boulevard



Kensington BPPA Pedestrian Facilities

- ADA Curb Ramp
- Crosswalk
- Sidewalk

Source: SHA and Montgomery County

Pedestrian Level of Comfort

In 2018, the Montgomery County Planning Department created the Pedestrian Level of Comfort (PLOC). PLOC is a rating system designed to score the level of comfort or uncomfortability a pedestrian may feel when traveling along a path. PLOC helps identify locations in the existing walking network that are uncomfortable due to insufficient or incomplete sidewalks and crossings, and to quantify how different investments will increase connectivity.

Comfort differs from safety. Safety focuses on planning and designing facilities that reduce conflicts or the severity of conflicts among modes. Comfort describes facilities that are enjoyable and comfortable for people of all ages (e.g., provide shade, reduce noise from adjacent traffic, provide a sense of boundary or separation from nearby automobiles). When a street receives a relatively poor score, it is a sign that change is needed to make people more comfortable and potentially attract more pedestrians.

In the photo below along Connecticut Avenue, the sidewalk is relatively narrow, has no buffer from traffic or tree canopy, and is adjacent to at least four lanes of automobile traffic.

Factors such as pathway width, buffer from traffic, number of lanes to cross, traffic speed, presence of crosswalk markings, and availability of median islands affect comfort levels.

A pedestrian facility can receive one of four scores:

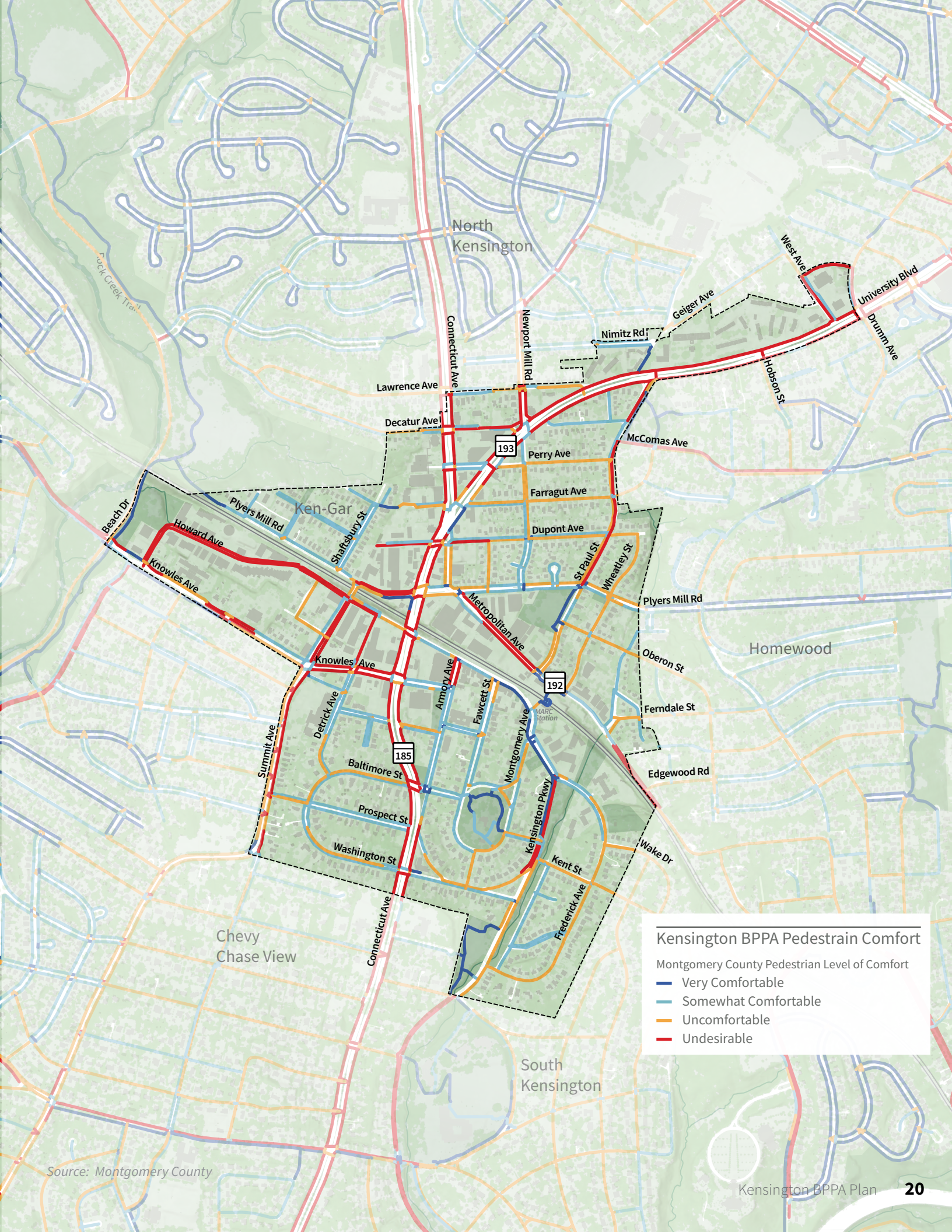
- Very comfortable (level 1)
- Somewhat comfortable (level 2)
- Somewhat uncomfortable (level 3)
- Undesirable (level 4)

The sidewalk network within the study area is largely undesirable along Connecticut Avenue and the intersecting roadways in the central core of the town and of the BPPA, and somewhat comfortable on local residential roads.

State facilities within the study area are primarily all rated as undesirable. Most state facility sidewalks are adjacent to the curb with little or no buffer. With up to six lanes of traffic parallel to a person walking, pedestrian comfort is very low along Connecticut Avenue, University Boulevard, Knowles Avenue, and Metropolitan Avenue.



Connecticut Avenue
Bridge



Kensington BPPA Pedestrian Comfort

Montgomery County Pedestrian Level of Comfort

- Very Comfortable
- Somewhat Comfortable
- Uncomfortable
- Undesirable

Source: Montgomery County

CRASH HISTORY

Within the Kensington BPPA, crashes¹ occurring between 2017 and 2021 were analyzed. Crash data was provided by SHA. Fortunately, no crashes from the dataset were fatal, but pedestrians were more likely to be severely injured when involved in a crash compared to other modes.

Crash Summary

Within the Kensington BPPA between 2017 and 2021, 292 crashes occurred, of which 11 involved pedestrians and six involved bicyclists. The majority of crashes, 61%, did not result in an injury. One hundred and fourteen (114) crashes resulted in an injury and were analyzed for further insights. Of the injury crashes, 98 were vehicle only, six were bicycle-involved, and ten were pedestrian-involved.

No crashes resulted in fatalities, six crashes resulted in a severe injury, of which 50% involved a pedestrian. A map of reported crash locations and of bicycle- and pedestrian-involved crashes is shown on page 22. Annual crash trends (page 24) show a drop in collisions in 2020, which is likely due to the COVID-19 pandemic's impact on travel patterns.

Although most injury crashes occurred during daytime hours with daylight conditions, bicycle- or pedestrian-involved crashes that occurred at night or during dark conditions resulted in high rates of serious injury. Most bicycle- or pedestrian-related injury crashes involved a person 20 years old and younger.

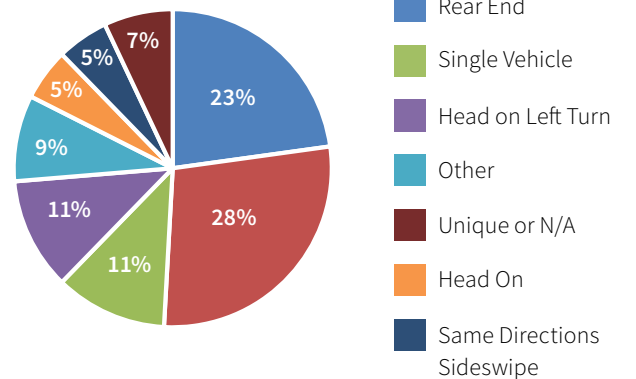
Approximately 59% of pedestrian and bicycle-involved injury crashes occurred as the pedestrian or bicyclist was crossing or entering an intersection. Of the pedestrian-involved crashes that resulted in a severe injury, all took place at crosswalks across University Boulevard.

Collision Type

The most frequent collision type that resulted in an injury crash were straight movement angle collisions and rear end crashes. Angle collisions typically occur at intersections or driveways where movements conflict. For example, a vehicle is proceeding straight through an intersection and collides with another vehicle proceeding straight crossing the intersection. Most straight movement angle collisions that resulted in an injury or serious injury occurred at unsignalized intersections.

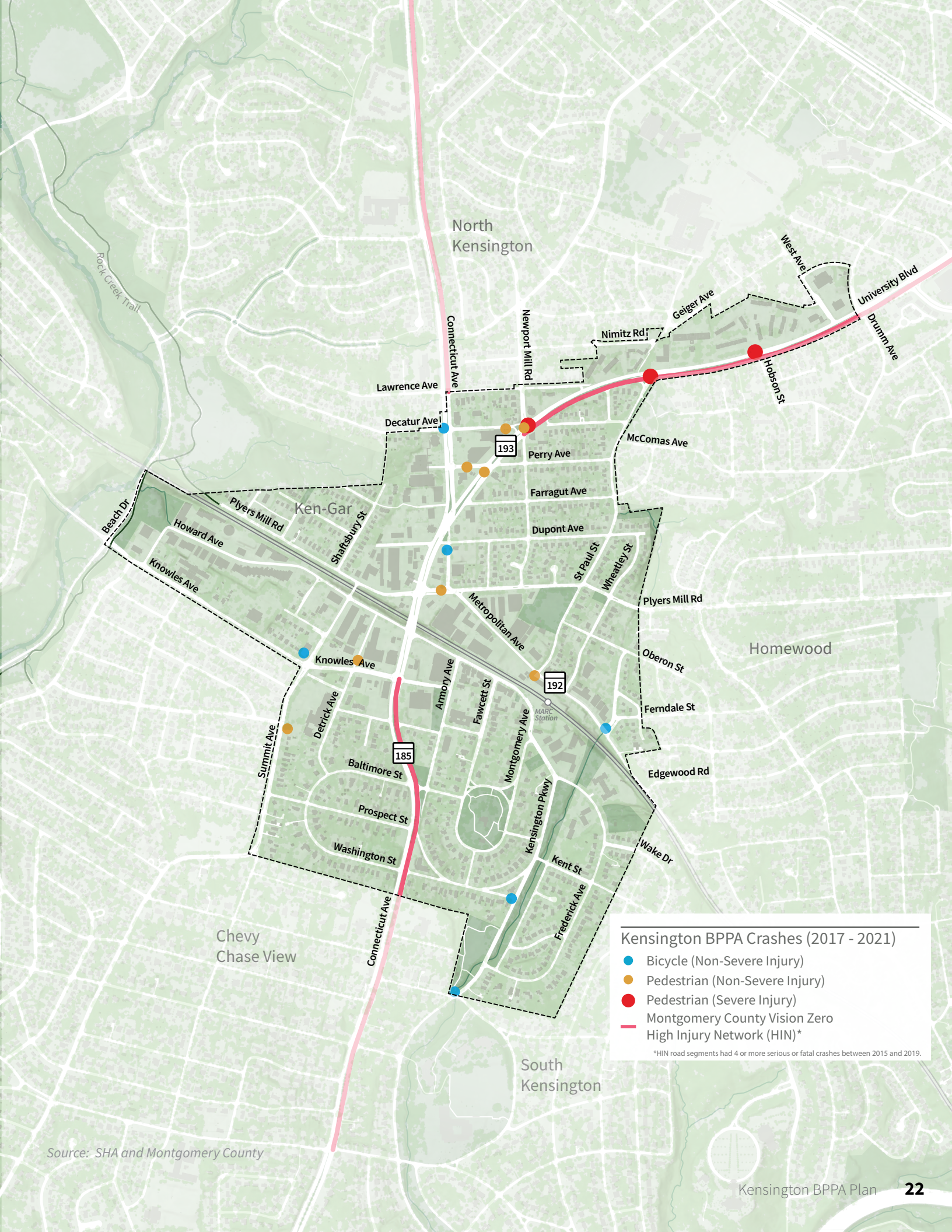
Rear end collisions typically occur at approaches to intersections when vehicles stop or slow down and can also be influenced by speeding, distraction, or unsafe driving maneuvers like following too closely.

Kensington BPPA Crash Type for Injury Crashes



Source: SHA

1: Crash data [was downloaded](#) and compiled from police crash reports approved and submitted to the Maryland Department of State Police (MDSP) through the Automated Crash Reporting System (ACRS). Additional crash detail was reviewed through Montgomery County's Vision Zero [Open Data portal](#).



Kensington BPPA Crashes (2017 - 2021)

- Bicycle (Non-Severe Injury)
- Pedestrian (Non-Severe Injury)
- Pedestrian (Severe Injury)
- Montgomery County Vision Zero High Injury Network (HIN)*

*HIN road segments had 4 or more serious or fatal crashes between 2015 and 2019.

Source: SHA and Montgomery County

Time of Day and Lighting Conditions

Of injury crashes within the dataset, most occurred during daytime hours with daylight conditions. But bicycle or pedestrian-involved crashes that occurred during non-daytime hours and dark conditions resulted in higher rates of serious injury for people walking and biking.

Approximately 71% of bicycle and pedestrian injury crashes occurred between the hours of 12 PM and 6 PM compared to approximately 60% of vehicle-only injury crashes during the same time period.

Three bicycle and pedestrian crashes occurred during the evening and overnight hours between 8 PM and 6 AM, of which two resulted in serious injuries. Of the two night time serious injury bicycle and pedestrian crashes, one had street lighting, and the other street lighting was unknown at the time of crash.

Twelve bicycle- and pedestrian-related crashes occurred during daylight conditions, of which one crash resulted in a serious injury.

Driver and Bicyclist/ Pedestrian Age

Two senior living facilities have opened in Kensington in the past three years, further highlighting the need for safe walking and biking conditions, particularly for vulnerable age populations.

More than a third of injury crashes involved a driver from the higher-risk age groups of older drivers 65 years old and above (28%) and young drivers 20 years and under (9%). An additional 2% of all crashes involved a driver from both older driver and young driver age groups.

Approximately 59% of all bicycle- and pedestrian-related crashes involved a bicyclist or pedestrian 20 years old and younger. Approximately 12% of all bicycle- and pedestrian-related crashes involved a senior bicyclist or pedestrian 65 years old and older.

Movements Prior to Bicycle/ Pedestrian Crashes

Understanding the movement prior to a crash can provide insight to location issues and how to address the issue. The crash dataset included the movement of each party member prior to the crash.

The majority of bicycle and pedestrian-related crashes occurred as a bicyclist or pedestrian crossed or entered an intersection (59%), followed by a pedestrian or bicyclist crossing or entering the roadway not at an intersection (18%).

Approximately 12% of all bicycle- and pedestrian-related crashes occurred after a bicyclist or pedestrian was walking or riding with traffic and for 12% the position of the bicyclist or pedestrian was unknown.

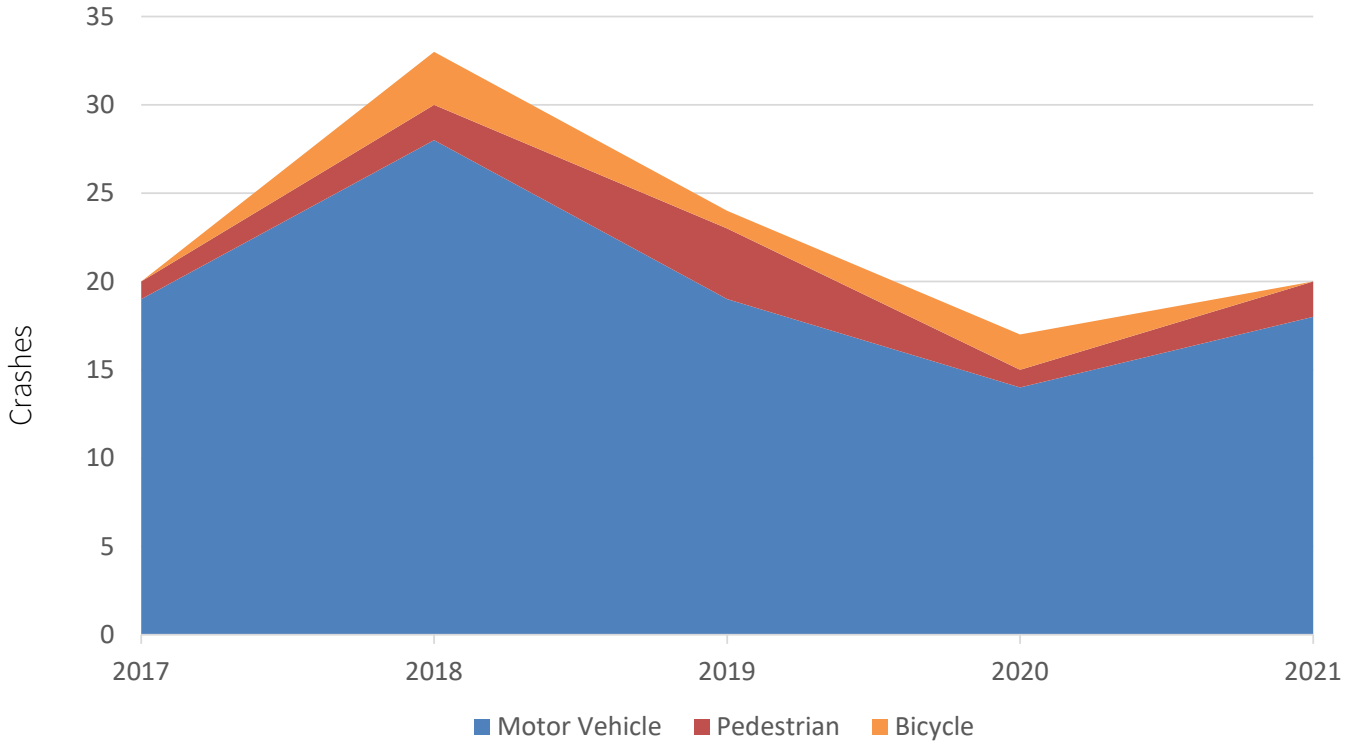
Severe Injury Pedestrian Crashes

The bar chart on page 24 presents injury level of bicycle- and pedestrian-related crashes. All but one bicycle- and pedestrian-related crash resulted in an injury of some degree.

Half of the total severe crashes in the dataset, regardless of mode, involved a pedestrian. All of the severe injury pedestrian crashes occurred along University Boulevard.

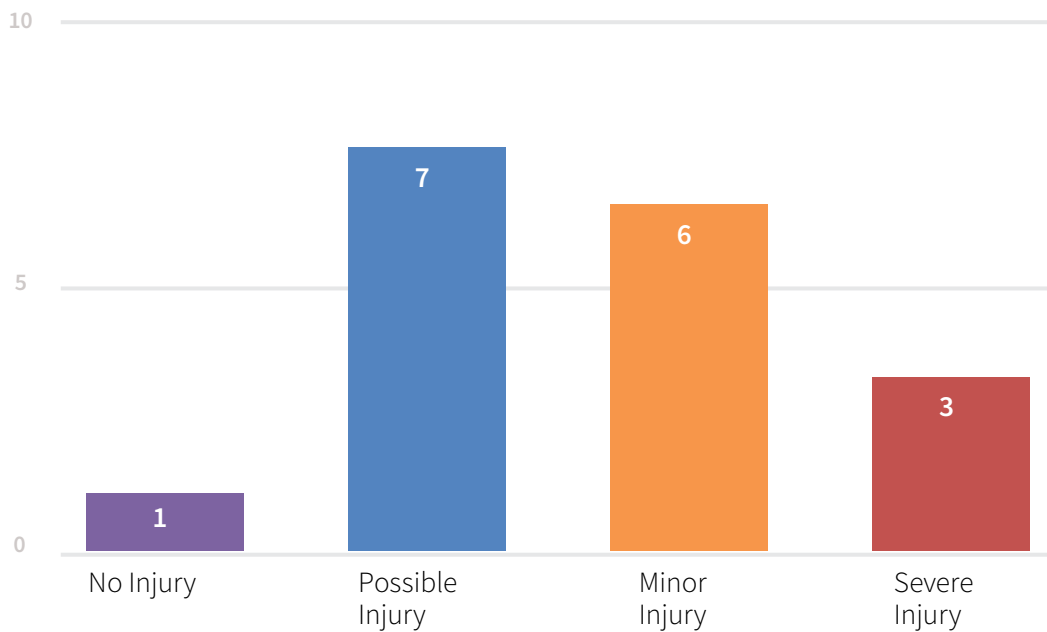
Of the severe injury pedestrian crashes along University Boulevard, two occurred at an unsignalized marked crosswalk. Additionally, all three severe injury pedestrian crashes involved a young person under 20 years old or an elderly person over 65 years old.

Kensington BPPA All Injury Crashes by Mode



Source: SHA

Kensington BPPA Bicycle and Pedestrian Crash Injury Level



Source: SHA

EXISTING CONDITIONS SUMMARY

The existing conditions assessment, including reviewing previous area plans and a stakeholder walking tour, generated a list of challenges and opportunities. The table below provides an overview of the issues faced by people walking and biking in Kensington and ways to consider addressing those challenges. The initial list of challenges and opportunities shaped the stakeholder workshop and public engagement session.

Challenge	Opportunity
Connecticut Avenue and University Boulevard are auto-oriented with minimal separation of modes and undesirable pedestrian environment.	Develop recommendations to create a safer and more comfortable pedestrian environment including traffic calming and separating pedestrians from traffic.
Connecticut Avenue and University Boulevard are auto-oriented with no separate bicycle facilities and stressful bicycling environment.	Develop recommendations to create a safer and less stressful bicycling environment including traffic calming and separating bicyclists from traffic.
Poor and limited non-auto crossing over CSX railroad.	Develop recommendations to improve railroad track crossing.
Limited crossings along Connecticut Avenue.	Develop recommendations to improve existing crossings and evaluate opportunities for additional crossings.
University Avenue uncontrolled crosswalks do not meet current best practices and severe pedestrian injuries have occurred at these crossings.	Develop recommendations to improve existing crossings and evaluate opportunities for additional crossings.
Connecticut Avenue and University Boulevard intersection has poor pedestrian accessibility and circulation.	Develop pedestrian-scale reconfiguration with improved crossing opportunities and streetscape improvements.
Plyers Mill Road and Connecticut Avenue intersection has pedestrian circulation and lighting concerns.	Develop pedestrian-scale streetscape and lighting improvements and circulation improvements.
Limited bicycle and pedestrian wayfinding signage.	Develop recommendations to add wayfinding signage.
59% of bicycle- and pedestrian-related crashes occurred after a person biking/walking crossed or entered an intersection.	Develop countermeasures to improve accessibility and safety like protected signal phases.
Pedestrian crossing limitations and visibility concerns at Knowles Avenue & Detrick Avenue.	Develop recommendations to increase safety and accessibility between neighborhood and retail plaza.



CHAPTER 3

ENGAGEMENT ACTIVITIES

STAKEHOLDER AND PUBLIC ENGAGEMENT

The Kensington BPPA stakeholder and public engagement activities took place on June 1, 2023, at the Kensington Town Office. The activities included a two-hour stakeholder workshop followed by a two-hour public engagement session.

Stakeholder Workshop

The stakeholder workshop was attended by representatives from Maryland State Highway Administration (SHA), the Town of Kensington, Montgomery County Planning, Montgomery County Department of Transportation (MCDOT), and consulting team members from RK&K and Fehr & Peers. The stakeholder workshop included the following:

- an overview of the BPPA program
- review of existing conditions and relevant plans
- the list of initial challenges and opportunities
- a walking tour
- stations for sketching solutions

The walking tour took attendees along the Connecticut Avenue corridor for informal field observations and to identify opportunities for improvement.

The workshop included six activity stations, five focused on a specific challenge and one station focused on area-wide needs. Stakeholders and consultants collaborated on identifying roadway geometric and operational recommendations to align state and local bicycle and pedestrian planning.

The stations addressed the following challenges and opportunities:

- Connecticut Avenue and Plyers Mill Road intersection: pedestrian circulation, lighting concerns, and connection to Metropolitan Avenue intersection.
- Connecticut Avenue and University Boulevard intersection: pedestrian circulation and accessibility.
- Knowles Avenue and Detrick Avenue intersection: pedestrian crossing and visibility.
- University Boulevard Pedestrian Crossings: uncontrolled pedestrian crosswalks.
- Railroad Crossing: pedestrian and bicycle crossing opportunities.

- Kensington BPPA Area Wide Needs: bicycle facilities, pedestrian comfort and crossings, wayfinding, safer intersections, and area-wide context improvements.

At the end of the stakeholder workshop, members of the public were invited to provide feedback.

Public Engagement Session

Community members had the opportunity to review and comment on the geometric and operational improvement recommendations stakeholders developed earlier in the workshop through a dot voting exercise. The public could upvote or downvote improvements to show agreement or disagreement and suggest adjustments to the improvement recommendations.

The feedback from community members was added to the opportunities and challenges identified by the consultant team and was incorporated into the final improvement recommendations.

Additional Outreach

In addition to the workshop and public engagement session, project team members were invited to attend an Urban Land Institute (ULI) Technical Advisory Panel (TAP) session to provide input and feedback around the Summit Avenue extension. The ULI TAP session primarily focused on the economic development and mobility opportunities through the future Summit Avenue extension, but attendees provided additional feedback regarding pedestrian and bicycle connectivity, safety, and facilities.

Members of the Ken-Gar Neighborhood Association were in attendance and provided further vital feedback about specific needs to enhance pedestrian and bicycle safety and access between the Ken-Gar neighborhood and Kensington.





Midblock Crossing along
Howard Avenue

WORKSHOP OUTCOMES

In addition to the challenges and opportunities summarized in the existing conditions section, stakeholders and community members identified additional concerns and solutions as described below. The total combined list of challenges and opportunities was used to generate the draft recommendations for the Kensington BPPA Plan.

Challenge	Opportunity
Concern regarding the proposed Knowles Avenue sidepath.	Recommend Montgomery County assess feasibility of alternative bike route to the proposed bicycle facilities on the south side of Knowles Avenue (MD 547).
Limited bicycle amenities within the BPPA boundary.	Explore bike rack siting within BPPA boundary.
Pedestrian crossing limitations and visibility concerns at Knowles Avenue & Detrick Avenue.	Knowles Avenue at Detrick Avenue was ranked as a high priority in the public session. Based on the current intersection geometry, the crossing could potentially be “marked” with minimal appurtenances.
Expand bicycle facilities on local and county owned roads.	Greenway facilities primarily involve low-cost improvements to emphasize the pedestrian and bicycling populations. These improvements could be coordinated through MCDOT on their respective neighborhood streets, Plyers Mill Road and Lexington Street.
MARC station not currently meeting all passenger rail needs of residents, and public session attendees expressed a desire to access the forthcoming Connecticut Avenue Purple Line station via bicycle from Kensington.	Connect the MARC station to the forthcoming Connecticut Avenue Purple Line station with a bicycle route along Kensington Parkway.
Limited multimodal connectivity, specifically walking and biking to access transit.	Town of Kensington to consider collaborating with transit partners to support more transit service and support bicycle racks on buses.
Resident concern regarding forthcoming development and alignment with walkability and bikability of town.	Town of Kensington to consider reviewing new developments/development review for bicycle and pedestrian amenities (e.g., bike racks, connecting foot paths).
Limited pedestrian and bicycle crossing opportunities over CSX railroad line.	Explore long-term inventive solutions that look beyond typical solutions, such as building a deck over the rail line to reconnect land and provide green space.

CHAPTER 4

EVALUATION & RECOMMENDATIONS



Kensington BPPA Recommendations

- Short-Term: 3 - 5 Years
- Long-Term: 5+ Years
- # Location Specific Recommendation
- Linear Recommendation (e.g., roadway or sidewalk segment)

Areawide Recommendation
6 9 22



SHORT- & LONG-TERM RECOMMENDATIONS

Short- and long-term recommendations within the Kensington BPPA are included below. Short-term recommendations are potentially feasible within 3 - 5 years and displayed in blue on the adjacent map. Long-term recommendations, displayed in orange on the map, are potentially feasible beyond five years and would need an additional study. A more detailed description of each recommendation is included in Appendix A. Policy and context recommendations are included in Figure 4 and on page 40, and are envisioned in the next ten years and beyond or are policy oriented.

The recommendations were developed through the following process: assessment of existing conditions; development of initial challenges and opportunities; refinement based on project team feedback; stakeholder and public input; development of draft recommendations based on engagement input; refinement of recommendations based on project team input and fatal flaw analysis; and development of final recommendations.

Short-Term

- 1** Upgrade uncontrolled pedestrian crossings along state facilities with Pedestrian Hybrid Beacon (PHB) or Rectangular Rapid Flashing Beacon (RRFB)¹ and pedestrian-scale lighting. See Figure 1 on page 37.
- 2** Enhance pedestrian crossings at Connecticut Avenue and Plyers Mill Road, University Boulevard and Lexington Street, and Connecticut Avenue and Perry Avenue with complete crosswalks, pedestrian signal operations, and lighting.
- 3** Assess feasibility of protected pedestrian crossing opportunity at Knowles Avenue and Detrick Avenue.
- 4** Install safety enhancements at MARC Train Station such as railway gate arms and flashers, and real-time arrival displays.
- 5** Enhance pedestrian crossing at Connecticut Avenue and Knowles Avenue. See Figure 2 on page 37.
- 6** Assess locations for bike rack siting within BPPA boundary.
- 7** Assess feasibility of alternative bike route to the proposed sidepath along Knowles Avenue.
- 8** Install neighborhood greenways along Plyers Mill Road² and Lexington Street.
- 9** Assess and implement wayfinding signage within Kensington BPPA.
- 10** Re-envision the future intersection of Connecticut Avenue, University Boulevard, and Summit Avenue extension to ensure safe pedestrian accommodations.
- 11** Connect the MARC station to the forthcoming Connecticut Avenue Purple Line station with a bicycle route along Kensington Parkway.
- 12** Install two-way protected cycletrack along the eastern/southern side of University Boulevard within the BPPA.

Long-Term

- 13** Narrow travel lanes along Connecticut Avenue during repaving and restriping to accommodate long-term recommendation #21.
- 14** Increase pedestrian crossing opportunities along state facilities by installing a crossing at least every 600' where feasible. See map on page 35 for location recommendations.
- 15** Fill sidewalk gaps within Kensington BPPA. See map on page 35 for recommendation locations.
- 16** Upgrade Plyers Mill Road and Metropolitan Avenue intersection with improved channelization and access control, and design with appropriate speed reduction and pedestrian safety features. See Figure 3 on page 38.
- 17** Add separated pedestrian and bicycle bridges on both sides of Connecticut Avenue over CSX railroad.
- 18** Assess feasibility of an additional grade separated pedestrian crossing over railroad line near Antique Row.
- 19** Enhance Kensington Parkway bicycle route (recommendation #11) with bicycle facilities and traffic calming.
- 20** Within Kensington BPPA, enhance pedestrian safety at intersections by tightening curb radii to reduce speeds and increase yielding to pedestrians and bicyclists. See map on page 35 for recommendation locations.
- 21** Re-purpose additional space along the eastern side of Connecticut Avenue for a shared-use path and streetscaping. Connect the shared-used path to the two-way cycletrack along University Boulevard.
- 22** Implement high quality lighting throughout the BPPA, including well-designed pedestrian-scale lighting, upgrading existing lights, and infilling dark spots.
- 23** Widen and buffer sidewalk along the east side of Summit Avenue between Brookfield Drive and Knowles Avenue to increase pedestrian comfort.

1: RRFBs should only be used on roadways with a single travel lane in each direction.

2: A neighborhood greenway is recommended if traffic calming measures can effectively manage traffic volumes and traffic speeds to an appropriate threshold.

KENSINGTON BPPA RECOMMENDATION DRAFT CONCEPTS

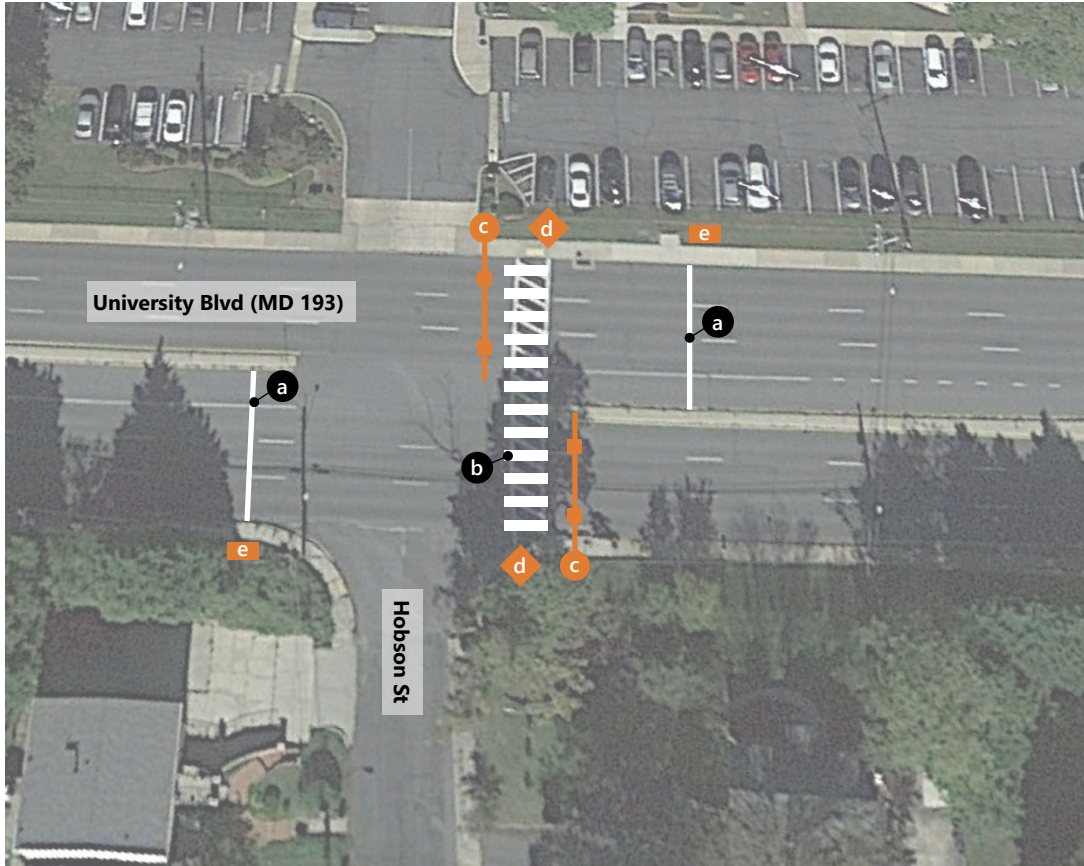


FIGURE 1

Uncontrolled Pedestrian Crossing Enhancements

- a Advanced Stop Bar
- b High Visibility Crosswalk
- c Pedestrian Hybrid Beacon
- d Pedestrian Crossing Sign
- e "Stop Here on Red" Sign

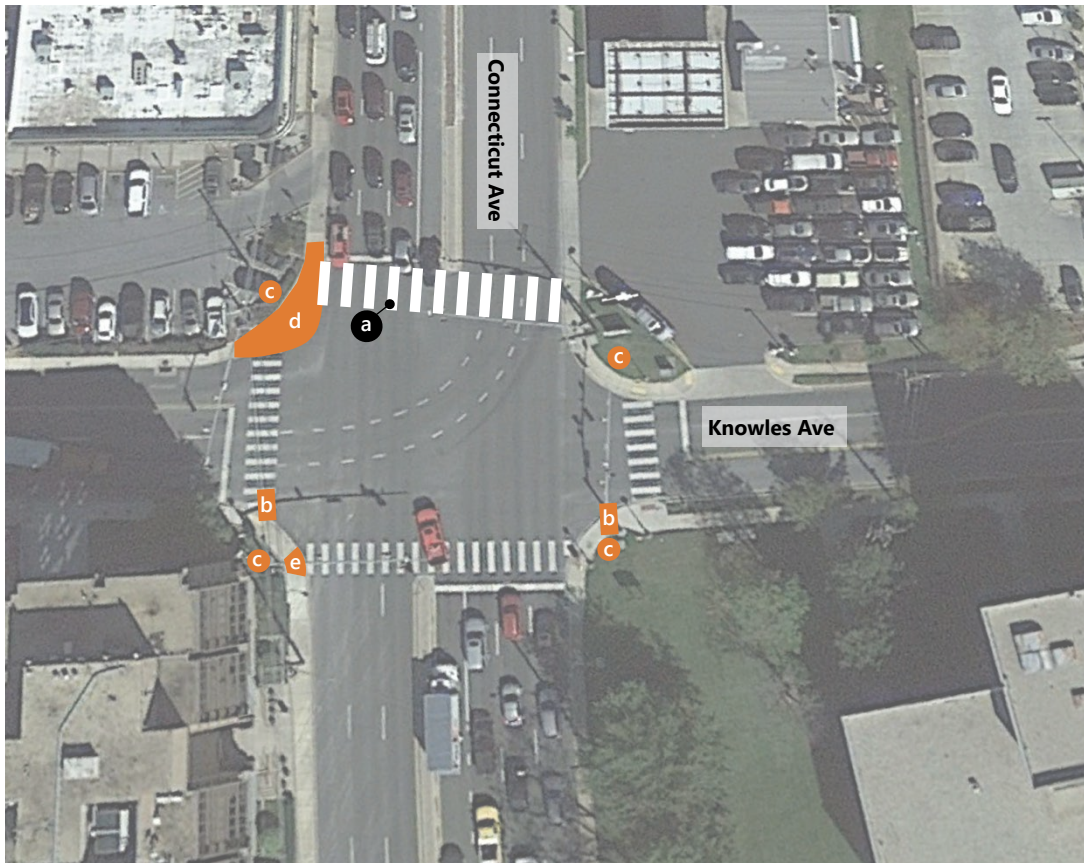


FIGURE 2

Connecticut Ave & Knowles Ave Pedestrian Enhancements

- a High Visibility Crosswalk
- b "No Right Turn on Red" Blank Out Sign for Southbound and Eastbound Approaches
- c Update Signal with Pedestrian Phase
- d Tighten Curb Radii
- e Truncated Dome Flush with Street

1: Future curb radii narrowing may affect turning buses and should be considered in design and implementation decisions.

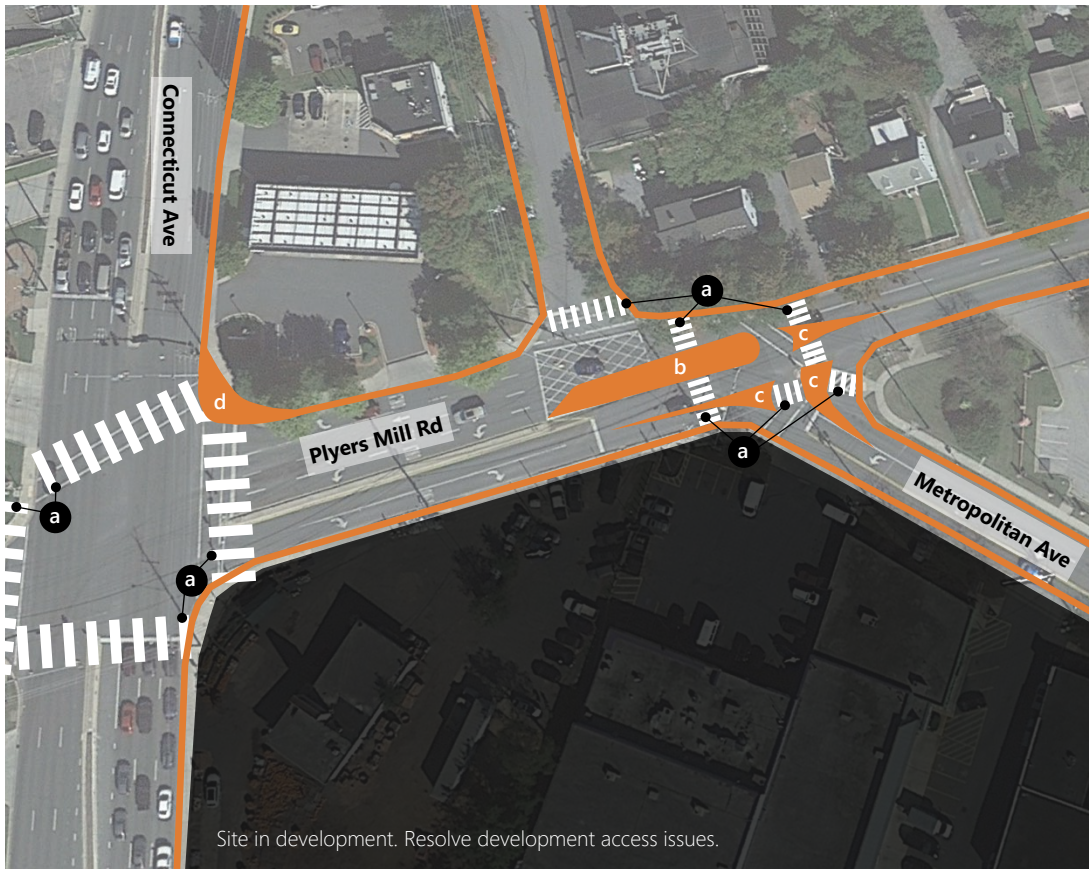


FIGURE 3

Plyers Mill Rd and Metropolitan Ave Roundabout

- a High Visibility Crosswalk
- b Channelization Median
- c Pedestrian Refuge Island
- d Tighten Curb Radii



FIGURE 4

Kensington Multimodal Context

- Existing Roadway Network
- Pedestrian Scale Grid Modification
- Proposed Summit Ave Extension
- Placemaking and Pedestrian/ Bicycle Destination Opportunity Sites
- Existing Traffic Signals
- Traffic Signals Spaced for Urban Context

Kensington BPPA Bicycle Network

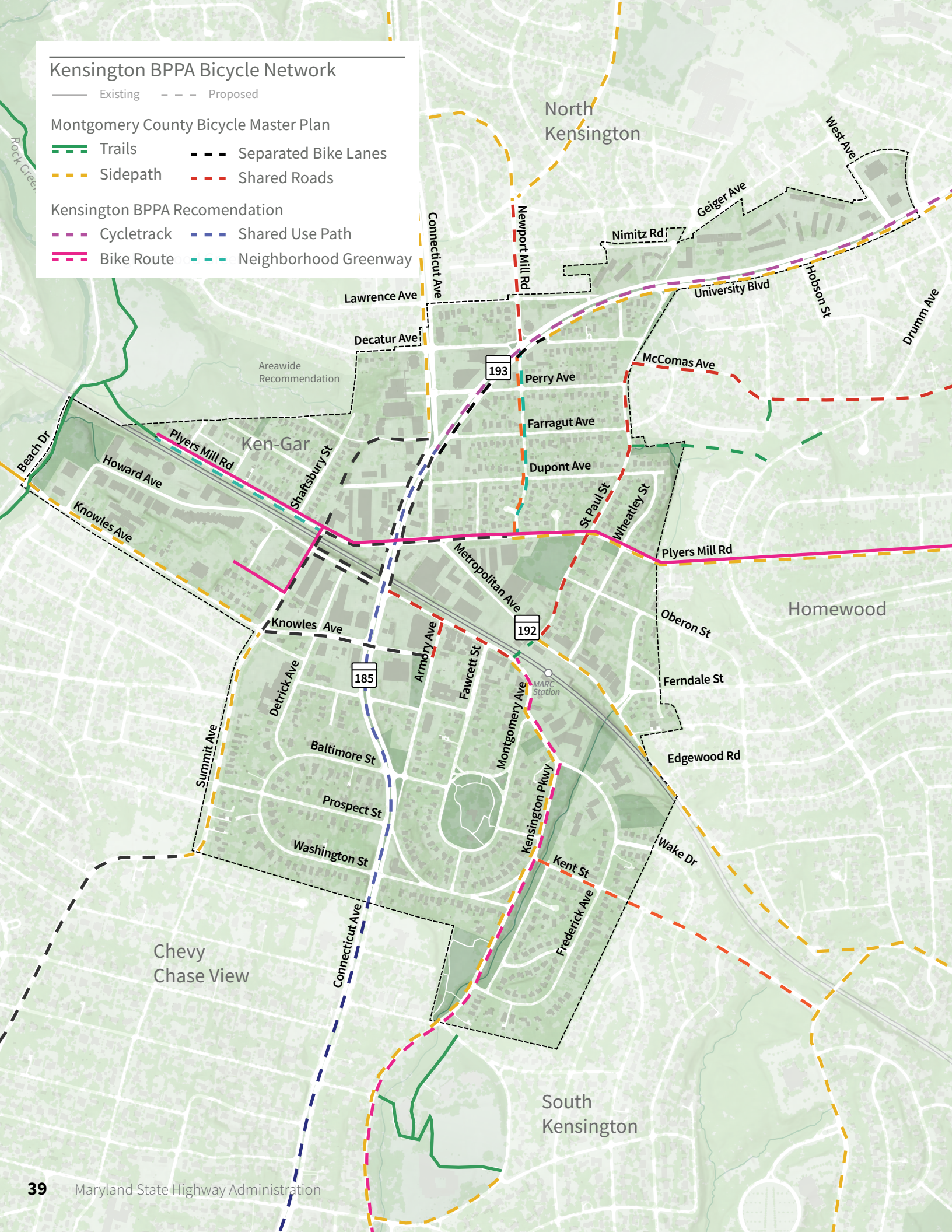
— Existing - - - Proposed

Montgomery County Bicycle Master Plan

- Trails
- - - Sidepath
- - - Separated Bike Lanes
- - - Shared Roads

Kensington BPPA Recommendation

- - - Cycletrack
- - - Shared Use Path
- - - Bike Route
- - - Neighborhood Greenway



EXISTING & PROPOSED BICYCLE NETWORK

The Bicycle Network map on page 39 provides an overview of proposed bicycle facilities from relevant plans and reports like the Montgomery County Bicycle Master Plan. Additionally, recommendations from the BPPA Plan (#2, #11, and #20) are included.

At this time, only a handful of trails within or near the study area exist. Implementation of bicycle facilities within the area will be a crucial step in transforming Kensington into a walkable and bikeable community. The proposed Bicycle Network can further inform location and siting of bicycle wayfinding signage and bicycle racks.

POLICY & CONTEXT RECOMMENDATIONS

Policy and context recommendations are longer term (10+ years) in nature or policy oriented. These recommendations help the Town of Kensington work toward realizing the true potential as a walkable and bikeable community. The pursuit of these policy and context recommendations will need to be championed by the Town of Kensington, but will require continued coordination and partnership with SHA and other transit partners.

Kensington has the opportunity to write a new narrative for a walkable and bikeable future; a future that makes Kensington more than a confluence of major roadways, but a destination where people want to live, work, walk, and roll. Moving toward a connected multimodal pedestrian-scale grid and context is a transformative step toward achieving this vision.

Multimodal Grid & Context	Town of Kensington to create a policy objective that prioritizes placemaking and safety, especially for people walking and biking, over the movement of vehicles, particularly pass-through traffic. Policy objective describes long-term vision of Kensington and the desired environmental context and land use goals necessary to be a truly walkable and bikeable community. Policy elements could include a re-envisioned roadway grid network, increased density of connecting streets, and signalized intersections. See Figure 4 on page 38.
Development Coordination with Bicycle and Pedestrian Amenities	Town of Kensington and transit partners to add bicycle and pedestrian amenities (e.g., bike racks, connecting foot paths) as features to consider during new developments/development review.
Pedestrian and Bicycle Access to Transit	Town of Kensington to consider enhanced collaboration with transit partners that support walkable and bikeable transit access and connection points.
Railroad Crossing	Town of Kensington to explore re-connecting town across the CSX railroad to overcome current north-south fragmentation. Consider aspirational ideas such as building a deck over the CSX rail from Ken-Gar neighborhood to Armory Avenue and repurpose space to facilitate non-auto connectivity potentially as green space.

APPENDIX



APPENDIX A: RECOMMENDATION DETAILS

Bicycle and pedestrian recommendations within Kensington are broken into short-term, long-term, and policy and context recommendations. Short-term recommendations are potentially feasible within 3 - 5 years. Long-term recommendations are potentially feasible beyond five years and would need an additional study. Policy and context recommendations are envisioned in the next ten years and beyond. A description of each short- and long-term recommendation and policy and context recommendation is included in the following table.

TABLE 1: KENSINGTON BPPA RECOMMENDATION DETAILS

MAP ID	RECOMMENDATION	DESCRIPTION
SHORT-TERM: 3 - 5 YEARS		
1	Uncontrolled Crossing Treatments & Lighting	Upgrade uncontrolled pedestrian crossings within Kensington BPPA along state facilities to meet best practices by considering Pedestrian Hybrid Beacons (PHB), Rectangular Rapid Flashing Beacons (RRFB), and other treatments where appropriate. Prioritize installation based on crash history and community feedback. Install PHBs at three uncontrolled crossings on University Blvd: Perry Ave, Hobson St, and Drumm Ave; and an RRFB at the uncontrolled crossing on Knowles Ave at the Kensington Park Library; and an RRFB at one uncontrolled crossing on Metropolitan Ave at Wheatley St. Increase pedestrian-scale lighting near University Blvd (MD 193) crossings: Perry Ave, Hobson St, and Drumm Ave - SHA and Town of Kensington to determine cost share.
2	Pedestrian Intersection Improvements	Coordinate with SHA to install missing crosswalks, associated pedestrian signal equipment, and high quality pedestrian-scale lighting at Connecticut Ave (MD 185) and Plyers Mill Rd, University Blvd (MD 193) and Lexington St, and Connecticut Ave (MD 185) and Perry Ave. SHA and Town of Kensington to determine cost share of lighting improvements.
3	Knowles Ave (MD 547) and Detrick Ave Intersection Improvement	Conduct signal warrant and operations analysis to assess the feasibility of a signal at Knowles Ave (MD 547) and Detrick Ave and consider treatments to reduce blocking the box such as roadway markings and signage. If a signal is infeasible, consider other crossing enhancements like a Pedestrian Hybrid Beacon (PHB), Rectangular Rapid Flashing Beacon (RRFB), four-way-stop, or roundabout. Knowles Avenue at Detrick Avenue was also ranked as a high priority in public response. In the meantime, based on the current intersection geometrics, the crossing could potentially be “marked” with minimal appurtenances.
4	Existing At-Grade Railroad Crossing Improvement	The Town of Kensington views this crossing as a critical location for people walking and biking. Collaborate with Secretary ‘s Office of Maryland, the MDOT Office of Rail and Intermodal Freight, and the Maryland Transit Administration (MTA) on improvements such as adding railway gate arms and flashers to the current at-grade crossing of CSX at train platform. Coordinate with MTA as they are currently updating their Maryland Area Rail Commuter (MARC) master plan: MARC Growth and Transformation Plan. To reduce incidents of train patrons running for trains, augment these crossing treatments with appropriate shelters on both sides of the tracks and realtime arrival information for the MARC train.
5	Connecticut Ave (MD 185) and Knowles Ave Intersection Improvements	Add pedestrian safety enhancements, including restricting right turn on red for the southbound and eastbound approaches, high-visibility crosswalk on the northern leg, and appropriate pedestrian phasing (e.g., LPI). Coordinate with SHA to install missing crosswalks and associated pedestrian signal equipment on Connecticut Ave (MD 185) at Knowles Ave.

MAP ID	RECOMMENDATION	DESCRIPTION
6	Bicycle Rack Siting	Explore bike rack siting within BPPA boundary.
7	Knowles Ave (MD 547) Bicycle Route	Recommend Montgomery County assess feasibility of alternative bike route to the proposed sidepath bicycle facilities on the south side of Knowles Ave (MD 547).
8	Install Neighborhood Greenways	Install neighborhood greenway facilities, which primarily involve low-cost improvements to emphasize pedestrian and bicycling populations. These improvements could be coordinated through SHA and MCDOT on their respective neighborhood streets, Plyers Mill Road and Lexington Street. A neighborhood greenway is recommended on Plyers Mill Road if traffic calming measures can effectively manage traffic volumes and traffic speeds to an appropriate threshold.
9	Implement Wayfinding	Develop a wayfinding system and implement wayfinding signage within BPPA. As a complementary design tool, wayfinding systems can help extend the reach of the active transportation network by conveying the available walking and biking routes and their respective distances. Developing a town-wide walking and biking wayfinding system may further encourage residents and visitors to complete their trip(s) without using an automobile. Utilize existing and proposed Bicycle Network map on page 39 to identify signage locations.
10	Summit Ave Extension - Intersection Considerations	Re-envison the Connecticut Ave (MD 185) & University Blvd (MD 193) intersection as part of the Summit Ave extension to ensure safe and comfortable bicycle and pedestrian circulation. Explore final design (four or five approach intersection) with the goal of making downtown into more of an Urban Center. Currently it takes a pedestrian 7 minutes to cross the three stage intersection, and this time burden could be exasperated with the addition of Summit Ave to the intersection.
11	Kensington Parkway Bicycle Route	Connect the MARC station to the forthcoming Connecticut Ave Purple Line station with a signed and marked bicycle route along Kensington Parkway. Public feedback at the workshop indicated the MARC station is not meeting current passenger rail needs and residents expressed a desire to access the forthcoming Purple Line station via bicycle.
LONG-TERM: 5+ YEARS		
12	University Blvd (MD 193) Bicycle Facilities	Install separated or protected bike facilities, such as a cycletrack, with firm/hard barriers (curbs, bollards, etc.) and incorporate maintenance/replacement of firm/hard barriers.
13	Connecticut Ave (MD 185) Lane Narrowing & Speed Reduction	Reconfigure roadway through lane narrowing. Narrowing could be accomplished during a corridor repaving and restriping project and therefore should be coordinated with SHA District Three. First, restripe vehicle travel lanes to 10' to create a striped buffer and reduce speed to 25 MPH. See recommendation 21 for second phase of roadway reconfiguration.
14	Protected Pedestrian Crossing Opportunities	Increase and improve pedestrian crossing opportunities along state facilities by aligning with SHA Context Driven Guide and Montgomery County Complete Street Design guidelines. These guidelines define that safe crossings should occur every 600', which within the Kensington segment of Connecticut Ave (MD 185) would include enhanced crossings at Howard Ave and Dupont Ave. Re-examine the traffic signal operations in future traffic operations analysis, and consider prohibiting right-turn-on red at intersections of concern. Consider implementation of pedestrian recall phasing for all signals within the Town of Kensington's context as a suburban, transit-oriented environment.

**TABLE 1: KENSINGTON BPPA RECOMMENDATION
DETAILS CONTINUED**

MAP ID	RECOMMENDATION	DESCRIPTION
LONG-TERM: 5+ YEARS		
15	Fill Sidewalk Gaps	Fill all sidewalk gaps within Kensington BPPA, such as along Metropolitan Ave between Kensington Pkwy and Edgewood Rd, Howard Ave between Summit Ave and Knowles Ave, and Plyers Mill Rd between Summit Ave and Connecticut Ave.
16	Connecticut Ave (MD 185) and Plyers Mill Rd (MD 192) Intersection Improvements	Upgrade the current intersection configuration at Metropolitan Ave (MD 192), Plyers Mill Rd, and Connecticut Ave (MD 185) with improved channelization and access control, and design with appropriate speed reduction and pedestrian safety features (e.g., avoid slip lanes as to reduce vehicle speeds, incorporate lane splitter pedestrian islands, use automated enforcement speed camera etc.).
17	Pedestrian and Bicycle Bridge Parallel to Connecticut Ave	Add separated pedestrian and bicycle bridges on both sides of Connecticut Avenue over CSX railroad tracks.
18	Additional Railroad Crossing Feasibility	Conduct a feasibility study of adding an additional separated railroad crossing over the CSX tracks between Armory Ave and Fawcett St with a potential connection to the path along Modena Reserve.
19	Kensington Parkway Bicycle Route	Enhance the safety and comfort along the Kensington Parkway bike route (recommendation #11) between the MARC station and the forthcoming Connecticut Ave Purple Line station. Assess feasibility of a side path, as proposed in the Montgomery County Bicycle Master Plan, or bicycle lanes, with traffic calming strategies.
20	Safe Intersections	Within the BPPA boundary, tighten curb turn radii to reduce speeds and increase yielding to pedestrians/bicyclists specifically at signalized intersections along Connecticut Ave (e.g., Knowles Ave, Plyers Mill Rd, Farragut Ave, Lexington St).
21	Roadway Reconfiguration Along Connecticut Ave (MD 185)	Once Connecticut Ave lanes have been narrowed (recommendation #13) install trees and streetscaping for traffic calming, and implement separated bicycle facilities such as a shared-used path along the eastern side of Connecticut Ave. Ensure connectivity to bicycle facilities along University Blvd (MD 193).
22	Lighting Improvements	Implement high quality lighting, including well-design pedestrian-scale lighting throughout the Kensington BPPA. Explore opportunities to upgrade Pepco-owned lights with low-maintenance, durable, energy efficient technology to improve visibility, and infill light can be added to improve the uniformity of lighting and eliminate dark spots.
23	Summit Ave Sidewalk Widening	Widen and buffer sidewalk along Summit Avenue between Brookfield and Knowles Avenue to increase pedestrian comfort. Town of Kensington to work in partnership with MCDOT to address this community concern.

RECOMMENDATION	DESCRIPTION
POLICY & CONTEXT	
Multimodal Grid & Context	Town of Kensington to create a policy objective that prioritizes placemaking and safety, especially for cyclists and pedestrians, over the movement of vehicles, particularly pass-through traffic. Policy objective describes the long-term vision of Kensington and the desired environmental context and land use goals necessary to be a truly walkable and bikeable community. Policy elements could include revitalized roadway grid network, increased density of connecting streets, and signalized intersections.
Development Review Bicycle and Pedestrian Amenities	Town of Kensington and transit partners to add bicycle and pedestrian amenities (e.g., bike racks, connecting foot paths) as features to consider during new developments/development review.
Pedestrian and Bicycle Access to Transit	Town of Kensington to consider enhanced collaboration with transit partners that support walkable and bikeable transit access and connection points. Town to coordinate with MCDOT, MTA, and MARC.
Railroad Crossing & Greenspace	Town of Kensington to explore re-connecting town across the CSX railroad to overcome current north-south fragmentation. Consider aspirational ideas such as building a deck over the CSX rail from Ken-Gar neighborhood to Armory Ave and repurpose space to facilitate non-auto connectivity potentially as green space.