




THE BICYCLE MASTER PLAN

THE MONTGOMERY COUNTY

BICYCLE MASTER PLAN

PUBLIC HEARING DRAFT | DECEMBER 2017

MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Contact

Montgomery County Planning Department (M-NCPPC)
8787 Georgia Ave
Silver Spring, MD 20910

MontgomeryPlanning.Org/BikePlan

Cover Photos

From left to right:

1. Michael Jackson
2. Montgomery County Planning Department
3. Lynn Ho
4. Scott Willets

Abstract

The Bicycle Master Plan contains the text and supporting maps and tables for a comprehensive amendment to the 1978 Master Plan of Bikeways, 2005 Countywide Bikeways Functional Master Plan and all bikeway recommendations in past functional plans, area master plans and sector plans, bringing Montgomery County in line with leading practices in bicycle planning. The plan is a key element in Montgomery County's Vision Zero Two-Year Action Plan to eliminate traffic-related fatalities and serious injuries.

This plan makes recommendations for a low-stress network of bikeways throughout Montgomery County. The goal of this system is to ensure cyclists of all ages and abilities are comfortable and safe riding to transit stations, employment centers, shops, public facilities and other destinations in Montgomery County.

A new classification system is proposed in the plan to evaluate cycling routes based on their level of separation from traffic. A new concept, the Breezeway Network, is recommended to create a high-capacity system of arterial bikeways between major activity centers. This network allows faster bicyclists to travel with less delay and is one in which all users – including slower moving bicyclists and pedestrians – can safely and comfortably coexist.

Long-term bicycle parking stations are recommended at all Metrorail Red Line and many MARC Brunswick Line, future Purple Line and Corridor Cities Transitway stations to encourage bicycling to transit.

In addition, this plan recommends capital, educational and outreach programs, and a legal and policy framework to encourage bicycling.

Source of copies
The Maryland-National Capital Park and Planning Commission
8787 Georgia Avenue
Silver Spring, MD 20910

Online at **montgomeryplanning.org/bikeplan**

EXECUTIVE SUMMARY

- The Bicycle Master Plan is a **comprehensive overhaul** of the 1978 Master Plan of Bikeways, 2005 Countywide Bikeways Functional Master Plan and all bikeway recommendations in past functional plans, area master plans and sector plans, bringing Montgomery County in line with leading practices in bicycle planning.

- To create a world-class bicycling community, this plan focuses on **four key goals**: 1) increasing bicycling rates in Montgomery County, 2) creating a highly-connected, convenient and low-stress bicycling network, 3) providing equal access to low-stress bicycling for all members of the community, and 4) improving the safety of bicycling.

- This plan recommends an **extensive network of low-stress bikeways** in Montgomery County. This will create an environment where people of all ages and bicycling abilities feel comfortable and safe riding bicycles to work, shop, transit, public facilities and other destinations in the county.

- A **new bikeway classification system** is proposed to organize bikeways based on their level of separation from traffic. The system ranges from trails, which are fully separated from traffic, to shared roads, where it is appropriate for bicycles and automobiles to share the same space.

- After applying the **Level of Traffic Stress** methodology to Montgomery County's road network, appropriate bikeway recommendations were selected to create a low-stress bicycling network. The 1,200-mile network of bikeways includes 635 miles of sidepaths, 189 miles of trails, 131 miles of bikeable shoulders, 101 miles of separated bike lanes and 50 miles of neighborhood greenways. More than one-quarter of this network currently exists.

- The plan uses a **data-driven approach** to assess the amount of discomfort that people feel when they bicycle close to traffic on roads in the county. Currently, 17 percent of potential bicycling trips can be made on a low-stress bicycling network in Montgomery County. This plan aims to increase this measure of low-stress connectivity to 65 percent by 2043.

- A new concept, the **Breezeway Network**, is recommended as a high-capacity network of arterial bikeways between major activity centers, enabling bicyclists to travel with fewer delays, and where all users – including slower moving bicyclists and pedestrians – can safely and comfortably coexist.

EXECUTIVE SUMMARY

- To complement the low-stress bicycling network, the plan recommends **abundant and secure bicycle parking**. These facilities include bicycle parking stations at all Metrorail Red Line stations and at the higher demand MARC, future Purple Line and Corridor Cities Transitway (CCT) stations. The plan also includes guidelines for short-term and long-term bicycle parking at commercial and multi-family residential developments.

- The innovative **Bicycle Facility Design Toolkit** is included to guide planners and designers on building high-quality bikeways and intersections.

- A strategic, thoughtful and effective **outreach program** was executed for the plan with traditional and new ways to engage with the community. This outreach included a stress-reducing coloring book to educate the public about bicycle facility types, a bicycling photo contest to collect real-world examples of bicycling in Montgomery County and multiple online maps for crowdsourced feedback and documenting of bicycling conditions.

- To encourage bicycling, the plan recommends bicycle-supportive **programs and a legal and policy framework**.

- The plan creates a **two-step approach to implementing** networks of **separated bike lanes** in urban areas of the county. In the first step, the county constructs low-cost separated bike lanes through retrofits to existing roads. Over time, these bikeways are upgraded as part of development approvals and county facility planning studies. These permanent designs will incorporate more aesthetically pleasing treatments and stormwater management, and increase the capacity of the bikeways.

- The plan creates a new approach to understanding **potential bicycle demand** by converting the regional travel demand model to a potential demand model for bicycling. This analysis was a primary factor in prioritizing bikeway recommendations.

- A **biennial monitoring report** will track progress in implementing the Bicycle Master Plan's vision. The report sets goals, objectives, metrics and targets that enable transparency and accountability in plan implementation.

- The plan is a key element in Montgomery County's **Vision Zero Action Plan** to eliminate traffic-related facilities and serious injuries by 2030.

CONTENTS

INTRODUCTION 9

Master Plan Purpose 13

Master Plan Framework 14

DEFINING THE VISION 17

The Vision 19

Goals, Objectives, Metrics and Targets 19

ACHIEVING THE VISION 35

Bikeways 37

Bicycle Parking 80

Bicycle-Supportive Programs 92

Bicycle-Supportive Legal and Policy Framework 103

IMPLEMENTING THE VISION 117

Encouraging A Strong Bicycling Community 118

Establishing A Bicycle Master Plan Implementation Task Force 120

Small Area Infrastructure Plans 120

Bikeway Design Standards 121

Implementation Mechanism 134

Implementing Separated Bike Lanes In Constrained Corridors 139

Prioritization 144

MONITORING THE VISION 191

OUTREACH 195

BIKEWAY RECOMMENDATIONS 223

APPENDIX

Appendix A: Detailed Monitoring Report
Appendix B: Bicycle Facility Design Toolkit
Appendix C: Issue Papers
Appendix D: Level of Traffic Stress Methodology
Appendix E: Bikeway Prioritization Methodology
Appendix F: Short-Term Bicycle Parking Supply Analysis
Appendix G: Bicycle Parking Recommendations at Transit Stations
Appendix H: Silver Spring to Glenmont Bikeway
Appendix I: Breezeway Network
Appendix J: Neighborhood Connectors
Appendix K: Bicycle Parking Guidelines



Photo: City of Calgary Bike Program

INTRO

The Bicycle Master Plan sets the stage for a cultural shift, encouraging people of all ages and bicycling abilities to meet their daily needs by bicycle. Cycling to work, stores, schools and transit or going for a leisurely ride on the weekend will be so embedded in our way of life that bicycling will be considered a mainstream mode of transportation.

The Bicycle Master Plan paves the way for safe, comfortable and accessible bicycling throughout Montgomery County. Appropriate bikeways are recommended in response to the amount of stress that traffic creates on each road. On busy roads, bicyclists will have dedicated space separated from traffic. On residential streets, they will be able to comfortably share the road. Between activity centers, people will be able to travel comfortably and efficiently on a "breezeway network," where faster moving bicyclists are able to travel with fewer delays, and where all users – including slower moving bicyclists and pedestrians – can safely and comfortably coexist.

Investing in bicycling is highly desirable for Montgomery County as it is a healthful, environmentally-friendly and cost-effective mode of transportation, an amenity for achieving a higher quality of life and a tool for economic development. With targeted investments, it is realistic to expect that much of the daily travel in Montgomery County can be made by bicycle, since half of all trips in the county are 3.5 miles or shorter, about a 20 to 25-minute bike ride for most people.

Creating this world-class bicycling community requires a commitment on many levels. Leading bicycling communities have integrated bicycle planning and implementation into their decision-making processes, established innovative bicycle facility design guidelines and made steady investments in bicycling infrastructure, block by block and curb by curb, to build their networks. In some ways, many of these communities have integrated bicycling so deeply into their transportation planning processes that a separate bicycle master plan is superfluous.

But there are significant obstacles to overcome. Foremost is a culture that has prioritized automobile travel over walking and bicycling, and mobility over safety for much of the past 70 years. Montgomery County has a road network where about 75 percent of the street mileage is comfortable for most people to bicycle on. But these streets largely represent "islands of connectivity" that are separated by arterial roads and environmental features, such that only about 17 percent of potential bicycling trips can be made on a comfortable bicycling network today.

An ideal plan vision reflects the unique priorities of its communities and sets goals that are served by clear and coherent strategies. The Bicycle Master Plan vision will be achieved through a robust network of low-stress bikeways and bicycle parking that prioritizes bicycling as a mode of travel for people of all ages and bicycling abilities. And it establishes policies and programs that integrate bicycling into decision-making at all levels.

The ultimate impact of a well-made plan is dependent on the degree to which it is implemented. The Montgomery County Bicycle Master Plan is the starting point for achieving this vision. It is up to the elected officials, department heads, staff, advocacy groups and committed citizens to make this plan a reality.

It's time to connect neighborhoods, protect bike lanes and treat bicycling with the same thoughtfulness and skill applied to roads and intersections for motor vehicles. Everyone deserves the opportunity for safe, convenient and direct ways of traveling by bicycle. This master plan advances that vision by taking bicycle planning to the next level.

> Not only is biking to work vastly healthier and cheaper than the alternative of cars or public transportation, but it also has far-reaching effects that extend past the individual level. People who cycle to work will relieve increasing healthcare costs. Less cars on the road means less traffic, less pollution and, most importantly, a more productive community for employers.
>
> **JIM YOUNG,** VICE PRESIDENT OF CORPORATE FACILITIES AND REAL ESTATE, MARRIOTT INTERNATIONAL

HOW TO BUILD A WORLD-CLASS BICYCLING COMMUNITY IN MONTGOMERY COUNTY



- Abundant and Secure Bicycle Parking
- Monitoring of Implementation
- Low-Stress Bicycle Network
- Bicycle-Supportive Legal and Policy Framework
- Cutting-Edge Bikeway Design Standards
- Breezeway Network



Community residents participate in a group bike ride. Photo: Lynn Ho.



MASTER PLAN PURPOSE

The Bicycle Master Plan sets forth a vision for Montgomery County as a world-class bicycling community, where people in all areas of the county have access to a comfortable, safe and connected bicycle network, and where bicycling is a viable transportation option that improves the quality of life.

The plan focuses on increasing bicycling among what surveys consistently reveal as a majority of the public who would like to bicycle more but are concerned for their safety. These people are less tolerant of riding close to traffic and require physical separation from the road to be comfortable riding on wider and faster streets. They represent about 50 percent of the population and, therefore, present the greatest opportunity to increase bicycling in Montgomery County.

MASTER PLAN FRAMEWORK

The Bicycle Master Plan is organized into four sections. These sections are described below.



Imagines a future that provides access to a comfortable, safe and connected bicycle network, and expresses that vision through the goals and objectives of the plan.



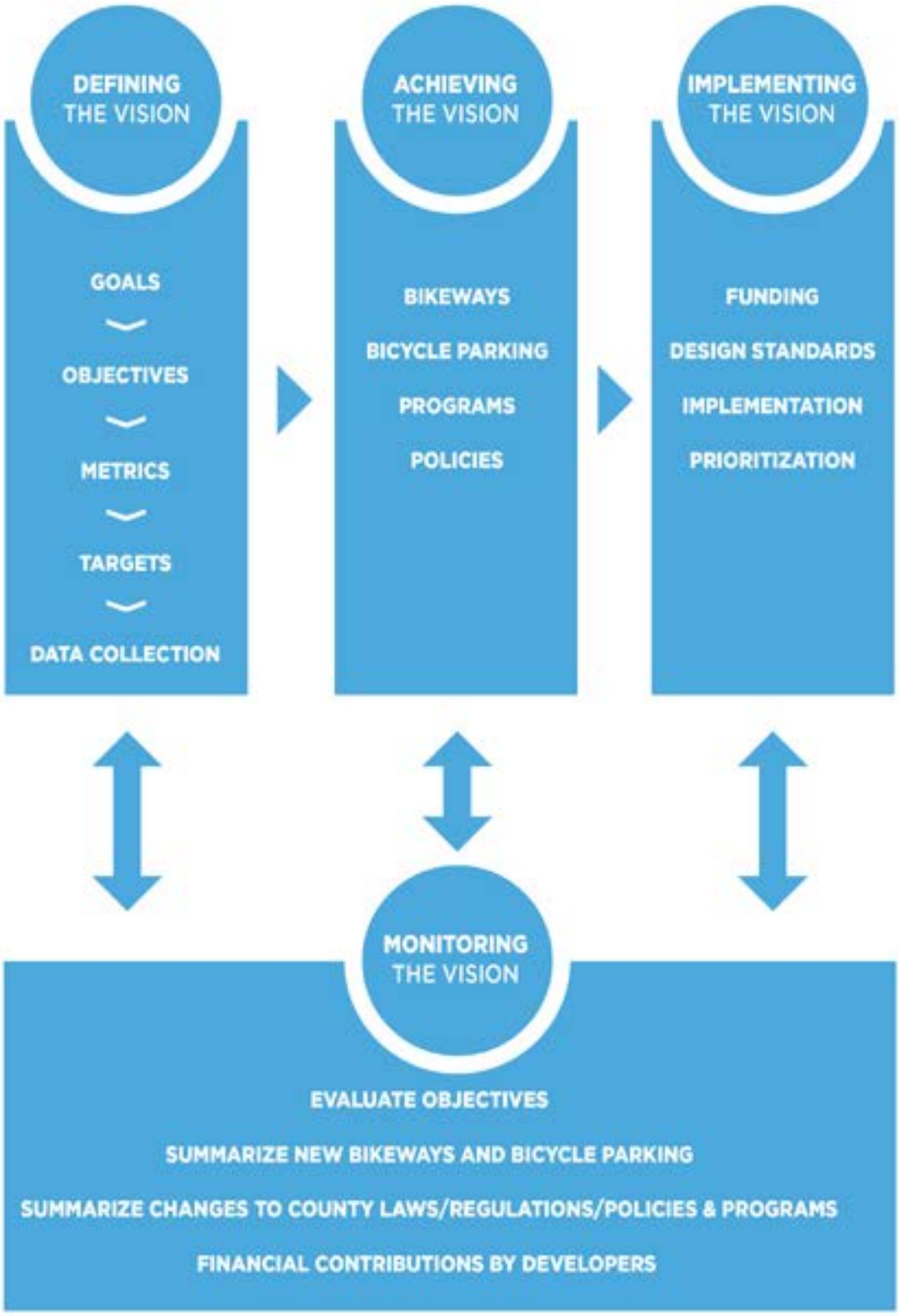
Presents specific actions that the government, property owners, stakeholders and the public can take to fulfill the vision. These actions include establishing bicycling-supportive infrastructure, programs and policies needed to make the vision a reality.



Explains how bicycling will be incorporated in all aspects of decision-making. Developing design standards to ensure high-quality bikeway design, leveraging public and private projects to incorporate the proposed bicycling network, and establishing funding mechanisms are some of the ways of implementing the recommendations in this plan.



Sets up an ongoing monitoring program to track how well the vision of the plan is fulfilled by regularly assessing progress in reaching the targets for each metric in the plan. This monitoring program supports the implementation of the plan by providing an ongoing assessment of how effective Montgomery County is in creating the bicycle environment envisioned in the plan.

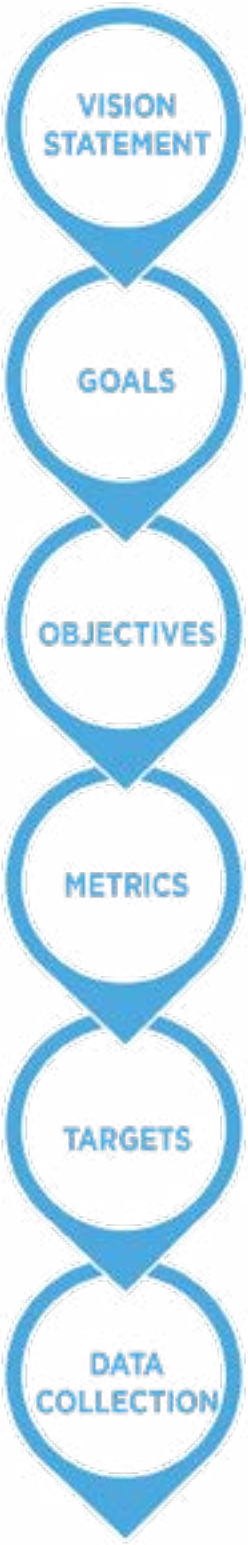

DEFINING THE VISION
GOALS
OBJECTIVES
METRICS
TARGETS
DATA COLLECTION
ACHIEVING THE VISION
BIKEWAYS
BICYCLE PARKING
PROGRAMS
POLICIES
IMPLEMENTING THE VISION
FUNDING
DESIGN STANDARDS
IMPLEMENTATION
PRIORITIZATION
MONITORING THE VISION
EVALUATE OBJECTIVES
SUMMARIZE NEW BIKEWAYS AND BICYCLE PARKING
SUMMARIZE CHANGES TO COUNTY LAWS/REGULATIONS/POLICIES & PROGRAMS
FINANCIAL CONTRIBUTIONS BY DEVELOPERS



DEFINING THE VISION

The Bicycle Master Plan begins by envisioning a future where all residents have access to a comfortable, safe and connected bicycle network, and expressing that vision through the goals and objectives of this plan.

Defining a vision for the Bicycle Master Plan does not simply mean stating the goals on paper. It also lays the foundation for a comprehensive monitoring program, which supports the implementation of the plan by providing an ongoing assessment of how effective Montgomery County is in meeting the plan's goals and objectives over the next 25 years. The components of the Bicycle Master Plan vision are clear and measurable.



The **vision statement** paints a clear picture of what the plan is intended to achieve. It is further explained through goals that identify the conditions needed to achieve the vision statement.

Goals are broad conditions that must be met to achieve the plan's vision. They are general and brief, and can always be improved. Goals do not prejudge a solution, but rather articulate the conditions that might lead to a particular solution. Each goal is described by one or more objectives that indicate the steps that need to be taken to advance that goal. Goals are only as effective as the objectives that shape them.

Objectives are specific conditions that must be met to advance a goal. They are achievable, measurable and time-specific. Objectives are effective when they show a meaningful change among different scenarios. They do not prejudge a solution, but rather articulate the conditions that might lead to a particular solution. Objectives are more likely to be assessed when they are carefully defined, avoid subjective interpretation and do not require substantial new data collection.

Metrics are the standards of measurement applied to objectives. They determine the data needed to assess how well the objectives are being met.

Targets are specific numbers in the objectives that are to be acheived.

Data Collection is the gathering of specific information required to assess each metric. It indicates the source of the data and whether the data is currently available, could be available with modifications to existing survey instruments or needs to be collected through a new survey.

THE VISION

Montgomery County will become a world-class bicycling community. Everyone in Montgomery County will be able to travel by bicycle on a comfortable, safe and connected bicycle network. Bicycling will become a viable transportation option and will elevate the quality of life in the county.






GOALS, OBJECTIVES, METRICS AND TARGETS

The vision is defined by four goals.

GOAL 1

Increase bicycling rates in Montgomery County.

GOAL 2

Create a highly-connected, convenient and low-stress bicycling network.

GOAL 3

Provide equal access to low-stress bicycling for all members of the community.

GOAL 4

Improve the safety of bicycling.



Photo: Michael Tercha/Chicago Tribune

GOAL 1

INCREASE BICYCLING RATES IN MONTGOMERY COUNTY

The most important measure of success for the Bicycle Master Plan is the extent to which the amount of bicycling increases in Montgomery County. Goal 1 evaluates how bicycling increases over time among different groups of people, destinations and trip types. Success in advancing this goal is largely driven by success in advancing the other three goals of the plan and, therefore, the recommendations for bikeways, bicycle parking, policies and programs.

1.1 OBJECTIVE

By 2043, 8 percent of commuter trips by Montgomery County residents will be by bicycle, up from 0.6 percent in 2016.

METRIC

Percentage of residents who commute by bicycle.

DATA REQUIREMENT (SOURCE)

- Method of transportation that people use for the longest distance segment of their trip to work (American Community Survey).

1.2 OBJECTIVE

By 2043, the percentage of people who commute by bicycle to a Montgomery County Transportation Management District (TMD) will be:

- TBD percent in the Silver Spring TMD.
- TBD percent in the Bethesda TMD.
- TBD percent in the Friendship Heights TMD.
- TBD percent in the North Bethesda TMD.
- TBD percent in the Greater Shady Grove TMD.
- TBD percent in the White Oak TMD.

METRIC

Percentage of commuters who bicycle to a Transportation Management District.

DATA REQUIREMENT (SOURCE)

- Number of respondents who bicycle to work by Transportation Management District (requires changes to the existing commuter survey).
- Number of respondents by Transportation Management District (commuter surveys).

Note: Montgomery County Commuter Services will be modifying the annual commuter survey to capture this information. Targets for the objective can be established once the baseline data is available.

1.3 OBJECTIVE

By 2043, the percentage of people who access a transit station by bicycle during the AM peak period will be:

- 10 percent for Red Line stations, up from 1.5 percent in 2016.
- TBD percent for Brunswick Line stations, up from TBD percent in 2016.
- TBD percent for Purple Line stations.
- TBD percent for Corridor Cities Transitway stations.

METRIC

Percentage of transit boardings during the AM peak period where the transportation mode of access is bicycle for the Metro Red Line, MARC Brunswick Line, Purple Line and Corridor Cities Transitway.

DATA REQUIREMENT (SOURCE)

- Number of boardings at each Red Line, Brunswick Line, Purple Line and Corridor Cities Transitway station by mode of transportation.

1.4 OBJECTIVE

By 2043, the percentage of public school students who bicycle to school will be:

- TBD percent for elementary schools.
- TBD percent for middle schools.
- TBD percent for high schools.

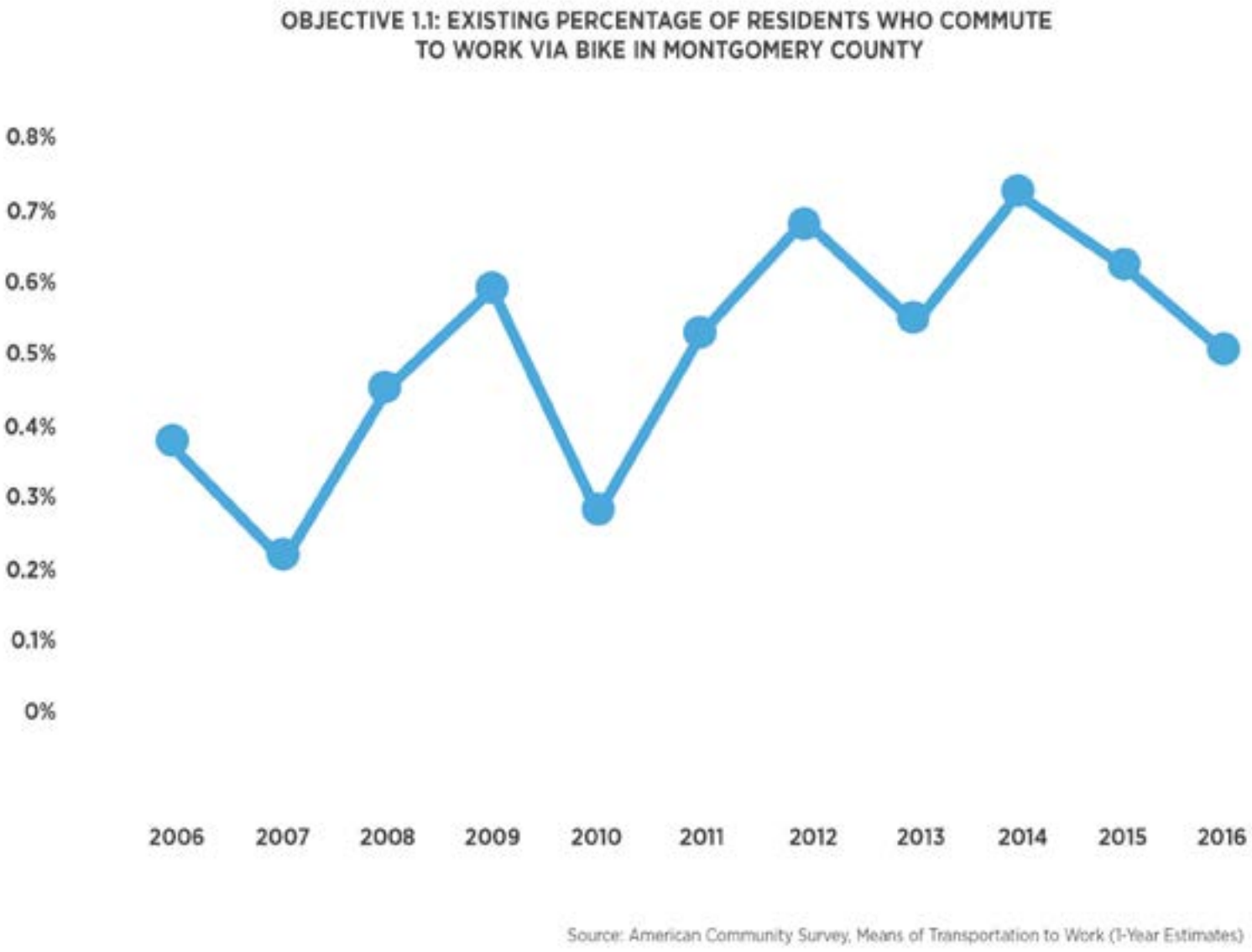
METRIC

Percentage of public school students who bicycle to elementary, middle and high schools.

DATA REQUIREMENT (SOURCE)

- The number of elementary, middle and high school students who bicycle to schools (requires new survey conducted by Montgomery County Public Schools).

Note: Montgomery County Public Schools does not yet collect data on bicycling to school. Targets for this objective can be established once the baseline data is available.



While bicycling represents only a small share of the trips to work by Montgomery County residents, it is growing. With the emergence of a robust bicycling network connecting people to jobs and transit, this number will continue to increase.



Montgomery County Planning Department Bicycle Stress Map

GOAL 2
CREATE A HIGHLY CONNECTED, CONVENIENT AND LOW-STRESS BICYCLING NETWORK

Bicycling can become a mainstream mode of transportation in Montgomery County if a low-stress network is developed that enables people to travel by bicycle to the places they want to go. While about 75 percent[3] of the roads in the county are already low-stress, they are often surrounded by high speed and high volume roads or difficult intersections, effectively creating islands of connectivity. Where feasible, reductions in traffic lanes and speeds can link these islands; where infeasible, bicycle infrastructure, such as sidepaths, separated bike lanes and conventional bike lanes, are needed to connect the network.

Simply providing a comfortable bicycling network is insufficient if people do not have a secure place to leave their bicycles when they get to their destinations. This goal also considers bicycle parking at major destinations, such as transit stations, commercial areas and public facilities, including schools, libraries and recreation centers.

[3] Based on a Level of Traffic Stress evaluation of all roads where it is legal to bicycle in Montgomery County.

2.1 OBJECTIVE

By 2043, 65 percent of potential bicycle trips will be able to be made on a low-stress bicycling network.

METRIC

Percentage of potential bicycle trips will be able to be made on a low-stress bicycling network.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Regional Travel Demand Model Trip table (M-NCPPC).
- Bicycle trip length decay function (MWCOG Household Travel Survey).
- Location of dwelling units (M-NCPPC).

Note: See Appendix D for a description of Level of Traffic Stress.

2.2 OBJECTIVE

By 2043, the level of low-stress connectivity to each transit service, defined as the percentage of dwelling units within two miles of each transit station that are connected to the transit station on a low-stress bicycling network, will be:

- 65 percent for Red Line stations, up from 10 percent in 2018.
- 60 percent for Brunswick Line stations, up from 12 percent in 2018.
- 70 percent for Purple Line stations, up from 4 percent in 2018.
- 70 percent for Corridor Cities Transitway stations, up from 0 percent in 2018.

METRIC

Percentage of dwelling units within 2 miles of each Red Line, Brunswick Line, Purple Line and Corridor Cities Transitway station that are connected to the transit station on a low-stress bicycling network.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Location of existing and planned Metrorail, MARC and Purple Line stations (M-NCPPC).
- Location of dwelling units (M-NCPPC).

2.3 OBJECTIVE

By 2043, the level of very low-stress connectivity to each public school, defined as the percentage of dwelling units within one mile of elementary schools, 1.5 miles of middle schools and 2 miles of high schools that are connected to the school on a very low-stress bicycling network, will be:

- 30 percent for elementary schools, up from 26 percent in 2018.
- 20 percent for middle schools, up from 11 percent in 2018.
- 15 percent for high schools, up from 6 percent in 2018.

METRIC

Percentage of dwelling units within one mile of elementary schools, 1.5 miles of middle schools and 2 miles of high schools that are connected to the schools on a very low-stress bicycling network.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Location of Montgomery County public schools (M-NCPPC).
- School boundaries (M-NCPPC).
- Location of dwelling units (M-NCPPC).

2.4 OBJECTIVE

By 2043, the level of low-stress connectivity to public libraries, recreation centers and regional / recreational parks, defined as the percentage of dwelling units within two miles of these public facilities that are connected to the public facility on a low-stress bicycling network, will be:

- 60 percent for public libraries, up from 34 percent in 2018.
- 40 percent for recreation centers, up from 27 percent in 2018.
- 40 percent for regional / recreational parks, up from 40 percent in 2018.

METRIC

Percentage of dwelling units within 2 miles of public libraries, recreation centers and regional / recreational parks that are connected to the public facility on a low-stress bicycling network.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Location of public libraries (M-NCPPC).
- Location of recreation centers (M-NCPPC).
- Location of regional and recreational parks (M-NCPPC).
- Location of dwelling units (M-NCPPC).

2.5 OBJECTIVE

By 2043, 11 Red Line stations, 5 Brunswick Line stations, 7 Purple Line stations and 3 Corridor Cities Transitway stations will have bicycle parking stations in Montgomery County.

METRIC

Number of rail stations in Montgomery County with a bicycle parking station.

DATA REQUIREMENT (SOURCE)

- Location of bicycling parking stations (M-NCPPC).

2.6 OBJECTIVE

By 2043, 100 percent of Montgomery County public schools will have one short-term bicycle parking space for every 20 students of planned capacity, with bicycle parking styles that are acceptable per the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines, 2nd Edition*.

METRIC

Percentage of Montgomery County public schools that have at least one short-term bicycle parking space for every 20 students of planned capacity, with bicycle parking styles that are acceptable per the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines, 2nd Edition.*

DATA REQUIREMENT (SOURCE)

- Number of bike racks at each Montgomery County public school (RackSpotter, www.rackspotter.com).
- Planned capacity at each Montgomery County public school (MCPS).

2.7 OBJECTIVE

By 2043, 40 percent of blocks in 19 Bicycle Pedestrian Priority Areas will have the number of short-term bicycle parking spaces required by the zoning code.

METRIC

Percentage of blocks in 19 bicycle pedestrian priority areas that have the number of short-term bicycle parking spaces required by the current zoning code.

DATA REQUIREMENT (SOURCE)

- Number and locations of bike racks in Montgomery County (RackSpotter, www.rackspotter.com).
- Short-term bicycle parking requirements by zoning category (Montgomery County Planning Department).
- Existing land use in commercial areas (Montgomery County Planning Department).

2.8 OBJECTIVE

By 2043, 100 percent of Montgomery County public libraries and recreation centers will have one short-term bicycle parking space per 8,000 square feet of floor area, with bicycle parking styles that are acceptable per the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines, 2nd Edition*.

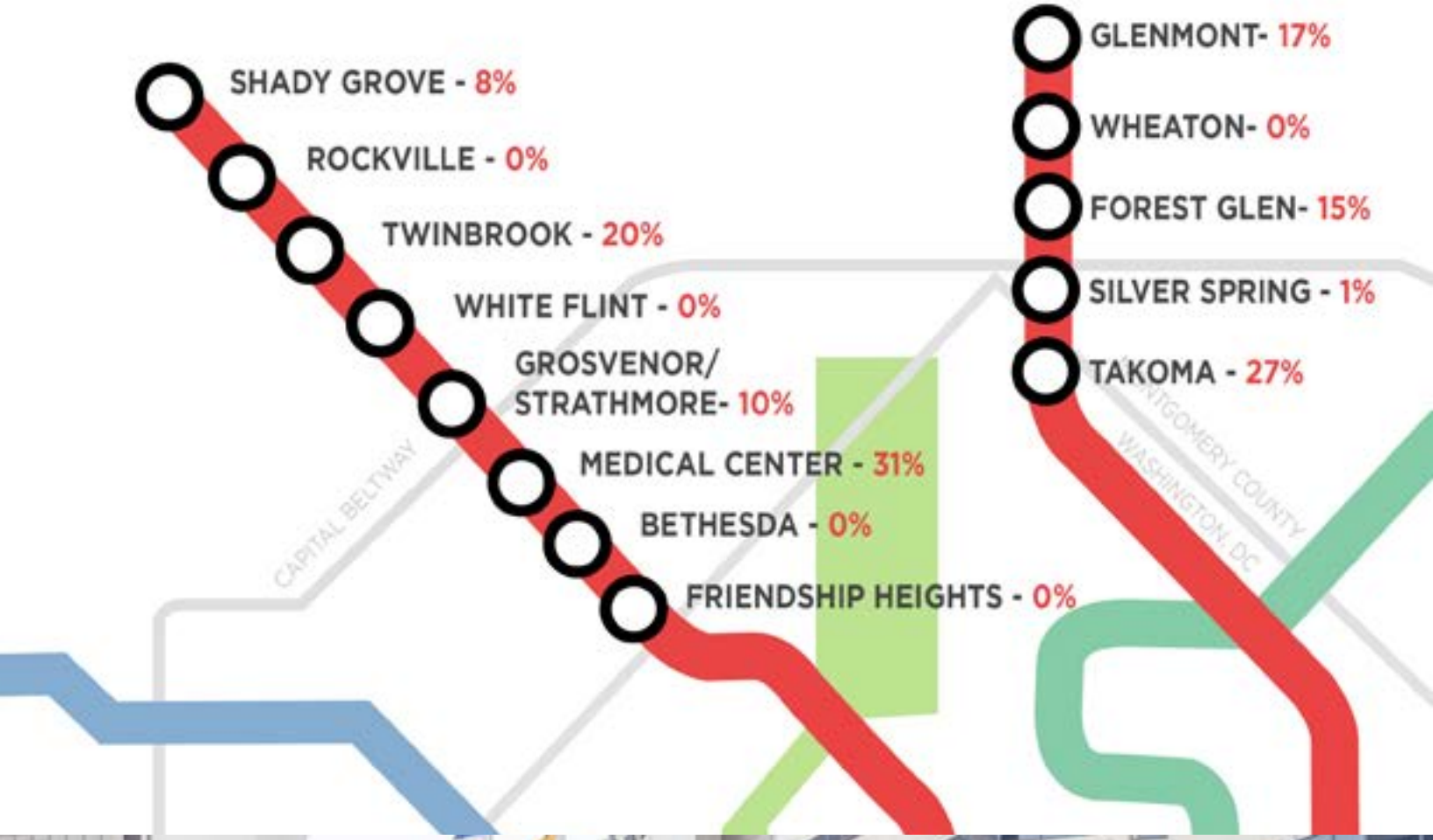
METRIC

Percentage of Montgomery County public libraries and recreation centers with at least one short-term bicycle parking space per 8,000 square feet of floor area, with bicycle parking styles that are acceptable per the standard in the Association of Pedestrian and Bicycle Professionals' *Bicycle Parking Guidelines, 2nd Edition*.

DATA REQUIREMENT (SOURCE)

- Number and locations of bike racks in Montgomery County (RackSpotter, www.rackspotter.com).
- Number and location of libraries and recreation centers (M-NCPPC).
- Square feet of floor area per library and recreation center (Montgomery County Department of General Services).

OBJECTIVE 2.2: EXISTING PERCENTAGE OF DWELLING UNITS WITHIN 2.0 MILES OF EACH RED LINE STATION THAT ARE CONNECTED TO THE STATION THROUGH A LOW-STRESS BICYCLING NETWORK







Bike Lane on Carroll Avenue, Takoma Park

GOAL 3

PROVIDE EQUAL ACCESS TO LOW-STRESS BICYCLING FOR ALL MEMBERS OF THE COMMUNITY

Equal access to low-stress bicycling for all members of the community, including people with incomes below the average median income for Montgomery County, is a critical aspect of a world-class bicycling network.

3.1 OBJECTIVE

By 2043, the percentage of bicycle trips that can be made on a low-stress bicycling network in US census tracts where the median income is below 60 percent of the county average median income will be the same as or greater than the county overall.

METRIC

Ratio of potential bicycle trips that can be made on a low-stress bicycling network in US census tracts where the median income is below 60 percent of the county average median income compared to the rest of the county.

DATA REQUIREMENT (SOURCE)

- Level of Traffic Stress Network (M-NCPPC).
- Regional Travel Demand Model Trip table (M-NCPPC).
- Bicycle trip length decay function (MWCOG Household Travel Survey).
- Location of dwelling units (M-NCPPC).
- Census tracts where the median income is below 60 percent of the county average median income (US Census).



GOAL 4

IMPROVE THE SAFETY OF BICYCLING

The intent of this goal is to make bicycling safe by eliminating serious injuries and fatalities. While safety can be improved by taking active measures to reduce travel speeds and providing separation from traffic, this goal will be evaluated by reactive metrics based on crash reports.

4.1 OBJECTIVE

By 2030, eliminate bicycling fatalities and serious injuries.

METRIC

The number of bicycing fatalities and serious injuries per year.

DATA REQUIREMENT (SOURCE)

- Bicycle crash reports (Montgomery County CountyStat).



Photo: Toole Design Group

ACHIEVING THE VISION

This section of the Bicycle Master Plan offers recommendations on how to achieve the plan's vision. It includes concrete actions that government, property owners, stakeholders and the public can take to fulfill the vision. Recommendation for a network of bikeways and bicycle parking, and bicycling-supportive programs and policies are included in this section.



Bicycle-supportive infrastructure focuses on a highly-connected and low-stress **bikeway network**. This network includes physical improvements on higher stress roads so that the 75 percent of roads and trails in Montgomery County that are already appropriate for people of all ages and bicycling abilities can be connected.

Bicycle-supportive infrastructure also includes abundant and secure **bicycle parking**, since many people will not ride a bicycle if they are concerned that their parked bicycle will be damaged or stolen. This infrastructure includes privately maintained bicycle parking spaces at residential and commercial buildings, and publicly maintained parking spaces at activity centers, such as transit stations, employment centers and commercial areas.

Bicycle programs encourage bicycling by identifying bicycle-supportive events, services, opportunities and projects. They include bikeway funding programs, the county's bikeshare program and a proposed BikeMontgomery outreach program.

Bicycle policies guide actions taken by the government that affect bicycling, including laws, policies, regulations, standards and guidelines. They include Montgomery County's context-sensitive road design standards and local land use laws.

> The more commuter options available in a development equates to a more attractive project for potential tenants and their employees. Bicycle facilities in a project provide a healthy, economic alternative to the single occupant vehicle."
>
> **ALAN H. GOTTLIEB**, CHIEF OPERATING OFFICER, LERNER ENTERPRISES

BIKEWAYS

Although many trips are short enough to be made by bicycle, most are made by private vehicles[1]. One barrier to bicycling is what is known as "traffic stress."[2] The concept of traffic stress is that people have a certain tolerance for bicycling near traffic, and if that tolerance is exceeded even for a short distance, they may be deterred from bicycling. In order to attract the broadest segment of the population to bicycle, Montgomery County will need to create a bicycling network that does not exceed most people's tolerance for traffic stress and does not require an excessive level of detour.

While currently about 75 percent of street mileage in Montgomery County is low-stress, these streets largely represent "islands of connectivity" that are separated by arterial roads and environmental features. The Bicycle Master Plan addresses Goal 2 and Goal 3 by recommending a network of low-stress bikeways to connect residential communities to the places that people want to go in Montgomery County, including transit stations, employment centers, stores, public facilities and other destinations.

Recent national surveys separate people into different traffic stress tolerance levels[3]. Those who tolerate a high level of traffic stress are comfortable bicycling on most streets, including major highways. These so-called "strong and fearless" bicyclists account for about 7 percent of the population. Those who tolerate a moderate level of traffic stress are comfortable bicycling on major highways and arterial roads with bike lanes. These "enthused and confident" bicyclists account for about 5 percent of the population. Those who tolerate a low level of traffic stress are comfortable on residential streets, trails and major highways / arterial roads with bikeways that are separated from traffic. These "interested but concerned" bicyclists account for about 51 percent of the population and include children. About 37 percent of the population is not interested in bicycling for various reasons.

THE FOUR TYPES OF TRANSPORTATION CYCLISTS



STRONG & FEARLESS

Very comfortable on non-residential streets without bike lanes.



ENTHUSED & CONFIDENT

Very comfortable on non-residential streets with bike lanes.



INTEREST BUT CONCERNED

Less than very comfortable on non-residential streets with or without bike lanes.



NO WAY, NO HOW

Everyone else.

[1] The median trip per the 2007 / 2008 regional household survey is 3.5 miles or less – about a 20 to 25-minute bike ride for most people.
[2] The concept of traffic stress is described and quantified in Mekuria, Maaza, Peter G. Furth, and Hilary Nixon, Low-Stress Bicycling and Network Connectivity, San Jose, CA: Mineta Transportation Institute, 2012. A modified version of the Level of Traffic Stress methodology used for the analysis in this master plan is available in Appendix D.
[3] Jennifer Dill and Nathan McNeil, "Revisiting the Four Types of Cyclists: Findings from a National Survey," Transportation Research Record: Journal of the Transportation Research Board, Volume 2587, 2017.

A low-stress bicycling network will increase both perceived and actual safety. When a separated bike lane is constructed in an urban environment, most people will perceive that they are safer bicycling in the bike lane, because it is separated from traffic. Perceived safety increases actual safety when it attracts greater bicycling. Due to the "safety in greater numbers" effect, motorists become more vigilant as they become conditioned to look for bicyclists.

To execute a network of low-stress bikeways that is appropriate for the diverse communities in Montgomery County, the Bicycle Master Plan is organized around five main types of bicycling trips:

- **Trips between activity centers** tend to be longer distance and, in the plan, will be centered on the Breezeway Network. This high-capacity, multispeed network of arterial bikeways enables faster bicyclists to comfortably, conveniently and safely travel with slower bicyclists and pedestrians.

- **Trips to activity centers** from suburban areas will typically be less than 3 miles and will focus on getting people from residential areas to commercial centers and transit stations on a network largely consisting of neighborhood greenways and sidepaths. This network will be complemented by abundant and secure bicycle parking at transit stations and commercial locations.

- **Trips within urban areas** will typically be less than 1 mile and will include travel to work, shopping, entertainment and transfers to transit stations on a network of separated bike lanes and trails. These trips will include bicycle parking at transit stations and commercial locations as well as the county's bikeshare program.

- **Trips to county facilities,** such as schools, libraries, recreation centers and parks, will focus on providing safe accommodation for children and, therefore, will require a very low level of traffic stress. These bikeways consist of a network of sidepaths, neighborhood greenways and trails in suburban areas, and separated bike lanes and trails in urban areas. These trips will include abundant and secure bicycle parking at all public facilities.

- **Recreational trips,** especially those in rural areas, will often include long-distance trips by individuals and groups where bikeable shoulders of consistent widths are particularly appealing.

BIKEWAY FACILITY CLASSIFICATIONS

A new bikeway facility classification system is proposed for Montgomery County as part of this plan. This system organizes bikeways into five facility classifications based on their level of separation from traffic. These five classifications are then subdivided into bikeway types and are explained on the following pages and in Appendix B.









Trails

Trails are paths that are located outside of the road right-of-way. They provide two-way travel designated for walking, bicycling, jogging and skating.

Trails are typically 10 feet wide, but can vary between 8 feet (in very constrained locations) and 14 feet wide (where usage is likely to be higher). On trails with very high levels of walking and bicycling, spaces for pedestrians and bicyclists are often separated to reduce conflicts and improve comfort. In these situations, trails can be widened to between 15 and 24 feet wide.

Trails include **off-street trails, stream valley park trails and neighborhood connectors.**

Photo: Capital Crescent Trail



Bethesda Trolley Trail

Off-Street Trails



Off-street trails are shared use paths located outside of the road right-of-way that provide two-way travel for people walking, bicycling and using other non-motorized modes.

Benefits

- Provide a bicycling environment suitable for all ages and abilities.
- Tend to have fewer at-grade crossings than other bikeways.

Typical Application

- Often located within existing or unused railroad rights-of-way or utility rights-of-way, land dedicated for planned but unbuilt "paper" streets and through public land.

Examples in Montgomery County

- Bethesda Trolley Trail
- Capital Crescent Trail



Rock Creek Trail

Stream Valley Park Trails



Stream valley park trails are shared use paths located within a Maryland-National Capital Park and Planning Commission (M-NCPPC) stream valley park that provide two-way travel for people walking, bicycling and using other non-motorized modes of transportation.

Benefits

- Provide a bicycling environment suitable for all ages and abilities.
- Tend to have fewer at-grade crossings than other bikeways.

Typical Application

- Located along stream valley parks.

Examples in Montgomery County

- Rock Creek Trail
- Sligo Creek Trail
- Matthew Henson Trail



A neighborhood connector on Hempstead Avenue

Neighborhood Connectors



Neighborhood connectors are short paths that provide critical connections in the residential walking and bicycling network. They create short-cuts and often bypass or minimize the amount of travel along higher-stress streets. In most instances, neighborhood connectors are owned by private entities, especially homeowner associations. About one-third of neighborhoods connectors are in the public right-of-way or owned by the Montgomery County Board of Education or the Maryland-National Capital Park and Planning Commission. Many neighborhood connectors need to be upgraded, by paving a dirt or a gravel surface, repaving a surface that has deteriorated over time or widening the pathway to meet the requirements of the Americans with Disabilities Act (ADA).

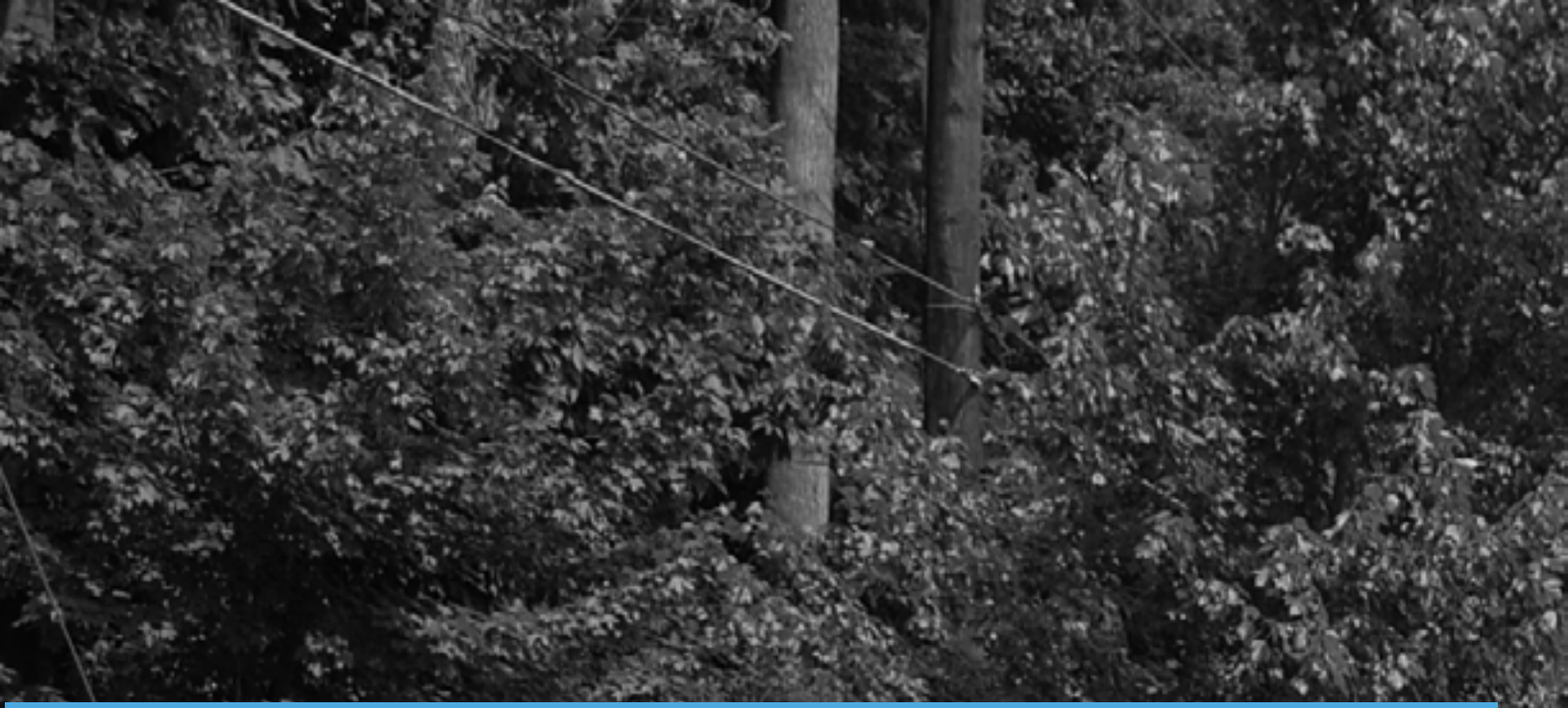
Benefits
- Provide a short path for walking and bicycling.

Typical Application
- Located within residential communities.

Examples in Montgomery County
- See Appendix J



Photo: Kenneth Woodard
Best Commuter Picture
Bicycle Master Plan Photo Contest









Separated Bikeways

Separated bikeways provide physical separation from traffic and **include sidepaths** and **separated bike lanes**.

In general, separated bike lanes are recommended in higher activity areas. Sidepaths are recommended in lower activity areas. Higher activity areas include those parts of the county zoned Commercial-Residential (CR), Life Sciences Center (LSC) or their floating zone equivalents, or that are located within 0.5 miles of a rail station. Areas that are zoned R-10, R-20, R-30 (multifamily residential zones) and RT (townhouse zones) are considered higher activity areas if they are adjacent to properties that are zoned CR, LSC or floating zones, or located near rail stations. All other areas of the county are considered lower activity areas.

TYPICAL APPLICATION

TRAFFIC LANES
3+ LANES

POSTED SPEED LIMIT
30 MPH OR FASTER

TRAFFIC
6,000+ VEHICLES PER DAY

ON-STREET PARKING TURNOVER
FREQUENT

BIKE LANE OBSTRUCTION
LIKELY TO BE FREQUENT

DESIGNATED AS TRUCK OR BUS ROUTE



Separated bike lanes on Woodglen Drive, North Bethesda



Sidepath on Key West Avenue in the Life Sciences Center

Sidepaths



Sidepaths are shared use paths located parallel to and within the road right-of-way. They provide two-way travel routes designated for walking, bicycling, jogging and skating. Sidepaths are typically 10 feet wide, but can vary between 8 feet (in areas with environmental or historic constraints) and 14 feet wide (where usage is likely to be higher). Sidepaths are separated from motorized traffic by a curb, a barrier or a landscaped panel.

Benefits

- More attractive to a wider range of bicyclists than striped bikeways on higher volume and higher speed roads.

Typical Application

- See page 46.
- Adjacent to the roadway.
- Recommended in lower activity areas (see page 64), with higher traffic volumes and speeds.

Examples in Montgomery County

- MacArthur Boulevard
- Key West Avenue
- Olney-Laytonsville Road
- Briggs Chaney Road



Separated Bike Lanes on Nebel Street, North Bethesda

Separated Bike Lanes



Separated bike lanes are exclusive bikeways that combine the user experience of a sidepath with the on-street infrastructure of a conventional bike lane. They are physically separated from motor vehicle traffic and distinct from the sidewalk. They operate one-way or two-way.

Separated bike lanes can provide different levels of separation, as discussed on pages 123 to 132.

Benefits

- More attractive to a wider range of bicyclists than striped bikeways on higher volume and higher speed roads.
- Eliminate the risk of a bicyclist being hit by an opening car door.
- Prevent motor vehicles from driving, stopping or waiting in the bikeway.
- Provide greater comfort to pedestrians.

Typical Application

- See page 46.
- Adjacent to the roadway.
- Recommended in higher activity areas (see page 64) with higher traffic volumes and speeds.

Examples in Montgomery County

- Woodglen Drive
- Nebel Street
- Spring Street





Striped Bikeways

Striped bikeways are designated spaces for bicycling that are distinguished from traffic lanes and shoulders by striping and pavement markings. Until a few years ago, **conventional bike lanes** were the gold standard of North American bicycle planning. Over the past few years, a variety of new bike lane types have arisen, including **buffered bike lanes** and **advisory bike lanes**. Collectively, this plan refers to the variety of bike lanes as striped bikeways.

While striped bikeways remain a useful tool to reduce traffic stress, they are insufficient to attract "interested but concerned" bicyclists in many environments because they do not provide sufficient separation from traffic and are often obstructed by motorized vehicles.

TYPICAL APPLICATION

TRAFFIC LANES
3 LANES OR FEWER

POSTED SPEED LIMIT
30 MPH OR SLOWER

TRAFFIC
9,000 VEHICLES PER DAY OR FEWER

ON-STREET PARKING TURNOVER
INFREQUENT

BIKE LANE OBSTRUCTION
LIKELY TO BE INFREQUENT

WHERE A SEPARATED BIKEWAY IS INFEASIBLE OR UNDESIRABLE



Bike Lanes on Battery Lane, Bethesda



Buffered bike lanes on East Capitol Street SE, Washington, DC

Buffered Bike Lanes



Buffered bike lanes are conventional bike lanes paired with a designated buffer space separating the bicycle lane from the adjacent vehicle travel lane and/or parking lane to increase the comfort of bicyclists.

Benefits

- Provide greater separation between motor vehicles and bicyclists.
- Provide space for one bicyclist to pass another without encroaching into the adjacent vehicle travel lane.
- Encourage bicyclists to ride outside of the door zone when the buffer is between parked cars and the bike lane.
- Provide a greater space for bicycling without making the bike lane appear so wide that it might be mistaken for a travel lane or a parking lane.
- Appeal to a wider cross-section of bicycle users.

Typical Application

- See page 50.
- Buffered bike lanes are recommended instead of separated bike lanes where it is desirable to place the bike lane between a travel lane and on-street parking or where blockage by parked vehicles is unlikely to be a problem.

Examples in Montgomery County

- None



Conventional bike lanes on Marinelli Road in White Flint

Conventional Bike Lanes



Conventional bike lanes (or simply bike lanes) are portions of the street that have been designated by striping, signage and pavement markings for the preferential or exclusive use of bicyclists. They are typically 5 to 6 feet wide in Montgomery County.

Climbing lanes include a conventional bike lane in the uphill direction and a shared lane in the downhill direction. These lanes are used to improve safety on hills where there is a higher speed differential between bicyclists and motor vehicles.

Benefits

- Increase bicyclist comfort and confidence on busy streets.
- Create separation between bicyclists and automobiles.
- Increase predictability of bicyclist and motorist positioning and interaction.
- Increase total capacities of streets carrying mixed bicycle and motor vehicle traffic.
- Visually remind motorists of bicyclists' right to bicycle in the street.

Typical Application

- See page 50.

Examples in Montgomery County

- Battery Lane
- Bonifant Road
- Dufief Mill Road
- Fairland Road
- Marinelli Road



Advisory bike lanes on Potomac Green Drive, Alexandria, Virginia

Advisory Bike Lanes



Advisory bike lanes are dashed bike lanes that allow motorists to temporarily enter the bike lane to provide oncoming traffic sufficient space to pass safely on narrow, unlaned roads in residential areas.

Benefits

- Require less space to implement than conventional bike lanes.
- Encourage motorists to safely pass bicyclists.
- Visually remind motorists of bicyclists' right bicycle in the street.
- Removing the center line reduces the speed of motor vehicles.

Typical Application

- Where there is insufficient space for conventional bike lanes and two lanes of traffic.
- Surrounding residential land uses.
- Number of travel lanes: un-laned, bi-directional streets.
- Street width: The un-laned two-way travel space should be 12 to 18 feet wide.
- Posted speed: 30 mph or less.
- Traffic: 2,000 to 4,000 vehicles per day.
- Parking: May be used on streets with or without on-street parking.

Examples in Montgomery County

- None



Contra-Flow bike lane on Cedar Avenue

Contra-Flow Bike Lanes



Contra-Flow bike lanes are bike lanes designed to allow bicyclists to ride in the opposite direction of motor vehicle traffic. They convert a one-way traffic street into a two-way street: one direction for motor vehicles and bikes, and the other for bikes only.

Benefits

- Enable bicyclists to travel against traffic on one-way streets.

Typical Application

- See page 50.
- One-way streets.

Examples in Montgomery County

- Cedar Street



Bikeable Shoulders

Bikeable shoulders are portions of the roadway that accommodate stopped or parked vehicles, emergency use, bicycles and motor scooters, and pedestrians where sidewalks do not exist.

Bikeable shoulders of at least 4 feet in width can improve comfort on some roadways for some bicyclists. They are most appropriate in rural locations in the county, often where posted speed limits are 40 mph and higher.

Bikeable shoulders do not create a low-stress environment on roads where the posted speed limit exceeds 30 mph.

Benefits

- Provide separation from traffic.
- Intended primarily for recreational bicyclists.

Typical Application

- Primarily found in rural locations.
- Posted speed limit: between 40 and 50 mph.

Examples in Montgomery County

- Clarksburg Road
- River Road
- New Hampshire Avenue from MD 198 to MD 108
- Norwood Road from MD 182 to MD 650


NORTH
121





Shared Roads

Shared roads are bikeways that share space with automobiles. They include **neighborhood greenways** in suburban areas, **shared streets** in urban areas and **priority shared lane markings** where there is insufficient space for a dedicated bikeway. Of course, all streets where bicycles share space with automobiles are de facto shared roads, but only some are master-planned.





Bell Street, Seattle, Washington (Photo: NACTO)

Shared Streets



Shared streets constitute an urban design approach where pedestrians, bicycles and motor vehicles can comfortably coexist. They prioritize pedestrian and bicycle movement by slowing vehicular speeds and communicating clearly through design features that motorists must yield to all other users. Motorists are considered "guests" in this environment.

Benefits

- Create conditions where pedestrians and bicyclists can walk or ride on the street, and cross at any location.

Typical Application

- Low traffic volume, low traffic speed and high pedestrian volume streets.

Examples in Montgomery County

- None



A neighborhood greenway on SE Lincoln Street in Portland, Oregon

Neighborhood Greenways



Neighborhood greenways are streets with low motorized traffic volumes and speeds, designed and designated to give walking and bicycling priority. They use signs, pavement markings and speed and volume management measures to discourage through trips by motor vehicles and create safe, convenient crossings of busy arterial streets.

Neighborhood greenways can incorporate several design elements:

- Traffic diverters at key intersections to reduce through motor vehicle traffic while permitting passage for through bicyclists.
- At two-way, stop-controlled intersections, priority assignment that favors the neighborhood greenway, so bicyclists can ride with few interruptions.
- Neighborhood traffic circles and mini-roundabouts at minor intersections to slow traffic but allow bicyclists to maintain momentum.
- Traffic-calming to lower motor traffic speeds.

Benefits

- Attractive to a wide range of bicyclists.
- Reduce the speed and volume of traffic.
- Prioritize walking and bicycling at minor street crossings.
- Improve safety and reduce delay for walking and bicycling at major street crossings.

Typical Application

- Posted speed limit is 25 mph or slower.
- Context: areas where through traffic can be diverted to parallel streets.
- Street pattern where a continuous route for bicycling is possible.

Examples in Montgomery County

- None

- Wayfinding signs to guide bicyclists along the route and to key destinations.
- Shared-lane markings (sharrows) where appropriate to alert drivers to the path bicyclists need to take on a shared roadway.
- Crossing improvements where the bikeway crosses major streets (including traffic signals, median refuges and curb extensions).



Market Street, San Francisco (Source: Toole Design Group)

Priority Shared Lane Markings



Priority shared lane markings communicate bicyclist priority within a shared lane and guide bicyclists to ride outside of the door zone. Colored backgrounds and more frequent spacing make priority shared lane markings more conspicuous than standard shared lane markings (also known as sharrows). This treatment does not improve most bicyclists' comfort in shared lanes with traffic.

The lane markings can be installed in limited instances on roadways where it is infeasible to install bicycle lanes, separated bike lanes or shared use paths, but where it is desirable to communicate the priority of bicyclists within a shared lane. Priority shared lane markings are only to be used as a retrofit on existing streets where implementing the desired bikeway is infeasible. They are not to be used on new streets.

Benefits

- Make bicyclists more conspicuous in locations where it is not possible to provide a low-stress bikeway.

Typical Application

- Narrow streets with high on-street parking turnover, typically those with ground-floor retail and dining, or on low-speed, low-volume frontage roads.
- Separated bike lane mixing zones where a protected intersection is not provided.

Examples in Montgomery County

- None



Photo: Scott Wilets
Best Recreation Picture
Bicycle Master Plan Photo Contest

GENERAL BIKEWAY APPLICATIONS

A countywide master plan cannot anticipate all opportunities to implement bikeways that might arise. The following table provides default bikeway recommendations for streets where the Bicycle Master Plan does not recommend a bikeway.

These default bikeways will be incorporated into transportation facility planning studies conducted by the Montgomery County Department of Transportation (MCDOT), the Maryland State Highway Administration and other government agencies where a bikeway recommendation does not exist. They will also be incorporated into development applications that include non-master planned streets. See Appendix B for a description of each bikeway facility.

The table on the next page recommends a default bikeway type based on the roadway functional classification and whether the area is planned to support higher or lower activities. Higher activity areas include those parts of the county that are zoned Commercial-Residential (CR), Life Sciences Center (LSC) or their floating zone equivalents, or that are located within 0.5 miles of a rail station. Areas that are zoned R-10, R-20, R-30 (multifamily residential zones) and RT (townhouse zones) are considered higher activity areas if they are adjacent to properties that are zoned CR, LSC or floating zones, or near rail stations. All other areas of the county are considered lower activity areas.



ROADWAY CLASSIFICATIONS	NUMBER OF LANES	HIGHER ACTIVITY AREAS	LOWER ACTIVITY AREAS
Controlled Major Highway	4+	Two-Way Separated Bike Lanes (Both Sides of Street)	Sidepath (Both Sides of Street)
		Great Seneca Hwy (South of Sam Eig Hwy)	Great Seneca Hwy (North of Longdraft Rd)
Major Highway*	4+	Two-Way Separated Bike Lanes (Both Sides of Street)	Sidepath
		Rockville Pike (White Flint)	Middlebrook Rd (South of Great Seneca Hwy)
Arterial*	5	Two-Way Separated Bike Lanes (Both Sides of Street)	Sidepath (Both Sides of Street)
		Darnestown Rd (East of Shady Grove Rd)	Bel Pre Rd (East of Connecticut Ave)
	2-4	One-Way Separated Bike Lanes (Both Sides of Street)	Sidepath (One Side of Street)
		Spring St (Silver Spring)	Wilson Ln (Bethesda)
Minor Arterial*	2-3	One-Way Separated Bike Lanes (Both Sides of Street)	Sidepath (One Side of Street)
		Few examples at this time	Few examples at this time
Country Arterials	Any	N/A	Bikeable Shoulders
			Dickerson Rd
Business District Street	2-3	One-Way Separated Bike Lanes (Both Sides of Street)	One-Way Separated Bike Lanes (Both Sides of Street)
		Marinelli St (White Flint)	Westbard Ave (Westbard)
Primary Residential	2	N/A	Sidepath, Bike Lanes (Buffered, Conventional, Advisory)
			Arctic Ave
Secondary Residential	Un-Laned	N/A	On-Road Bikeway
			Gelding Ln (Olney)
Tertiary Residential	Un-Laned	N/A	On-Road Bikeway
			Gelding Ct (Olney)
Utility Corridors	N/A	Trail	Trail

*Where space is available and does not substantially detract from the default bikeway, bike lanes or bikeable shoulder can be added in addition to the default bikeway.



Breezeway Network

Imagine county residents walking and bicycling on safe routes removed from fast-moving cars, trucks and buses, where bicyclists experience less delay, but where all users – including slower moving bicyclists and pedestrians – can safely and comfortably coexist. These special bikeways, called "breezeways," are an innovative concept for Montgomery County. Based on similar systems in London, Dubai and the Netherlands, the Breezeway Network takes the county to the next level in providing safe, separated routes for longer trips without having to worry about traffic or a bikeway too constricted for easy movement.

To accommodate the full range of cyclists, the Breezeway Network will not only provide a high level of comfort, but also a high level of convenience, safety and efficiency that is attractive and appropriate for bicyclists of all ages and abilities. It will prioritize higher speed bicycle travel between major activity centers, including central business districts, transit stations and job centers, since people are more likely to travel longer distances when the travel time for their trip is closer to that of traveling by automobile.

As a suburban jurisdiction with densifying but still widely spaced activity centers, Montgomery County is the perfect candidate for this network because it can enable people to travel quickly and efficiently between distant activity centers. Much like motorists rely upon higher speed roadways to connect distant activity centers, the Breezeway Network will enable cyclists and pedestrians to "breeze" quickly or leisurely along a protected and separate environment from a roadway without comprising each other's safety or efficiency. Once fully implemented, the Breezeway Network will make it feasible for cyclists and pedestrians to efficiently travel between activity centers.



The Breezeway Network corridors are the arterials of the bikeway network in that they are envisioned to carry a large number of bicyclists. While many trips on the Breezeway Network will be for longer, faster trips to central business districts (CBDs), transit stations, activity hubs and job centers, these corridors will also be used for shorter and slower trips. The Breezeway Network will comprise trails, sidepaths, separated bike lanes and neighborhood greenways. Local bikeways, including neighborhood greenways, sidepaths, bike lanes and low-volume / low-speed streets, will funnel bicycle traffic to the Breezeways.

Bikeway Types

Trails
Sidepaths
Separated Bike Lanes
Neighborhood Greenways



Visualization of cycle superhighway in London, England (London Cycling Design Standards, 2014)

Five Types of Breezeways:

1. Rail and utility corridors, such as the Capital Crescent Trail, which include grade-separated crossings of major roads.
2. Freeway trails, such as the Intercounty Connector Trail.
3. Modern major highways, such as Great Seneca Highway, that are characterized by wider rights-of-way and greater spacing between intersections and driveways.
4. Older major highways, such as Veirs Mill Road and University Boulevard, which could become Breezeways over time with a gradual consolidation of driveways and intersections.
5. Neighborhood greenways paralleling older major highways, such as Woodland Drive and Amherst Avenue between Downtown Silver Spring and Wheaton, that provide direct access to destinations, minimize the number of turns and stops, and facilitate safe and direct crossings of major roadways.

Bikeway Network Characteristics

Design Speed: The Breezeway Network will have a design speed of 20 miles per hour in lower activity areas and 12 mph in higher activity areas. Design speed is influenced by the pavement quality and bikeway curvature, among other conditions, and is not an endorsement of bicycling at high speeds in crowded locations.

Separation from Traffic: Providing fixed, continuous separation from traffic, such as curbs or concrete barriers, will increase the comfort of bicycling on the Breezeway Network. Sidepaths or trails that run parallel to a roadway will be separated from the roadway by at least 5 feet. Along high-speed roadways with speed limits of 35 mph or greater, separation greater than 5 feet is desirable to reduce the stress from riding close to traffic.



Separation Between Bicycling and Walking: Separation between pedestrians and bicyclists will increase comfort for users and allow faster users to travel with minimal delay, especially in areas with higher use. On trails and sidepaths in suburban areas, separate spaces for pedestrians and bicyclists can be adjacent to each other, although a buffer between them is preferred. In urban areas where separation is provided using sidewalks and separated bike lanes, busy areas will need to provide more pedestrian space with widened waiting areas and pedestrian refuge islands at intersections, wider sidewalks and dedicated space for those waiting at bus stops.



Minneapolis' Midtown Greenway delineates separate spaces for bicyclists and pedestrians.

Breezeways will feature adequate widths for side-by-side bicycle travel and passing, as well as adequate buffers from motor vehicle traffic.

- Trails and Sidepaths: The minimum bikeway width is 11 feet and the minimum pedestrian width is 5 feet. In areas with high pedestrian demand, the pedestrian width is 8 feet or more.
- Two-Way Separated Bike Lanes: the minimum bikeway width is 11 feet, excluding the gutter pan.
- One-Way Separated Bike Lanes: the minimum bikeway width is 8 feet, excluding the gutter pan.

Minimal Intersection Delay: Breezeways feature intuitive and safe intersection and driveway crossings that minimize delay for pedestrians and bicyclists. The crossings are developed to prioritize non-motorized travel by making it easier and safer to travel through intersections. Breezeway crossings include elements that both separate bicycle movements from motor vehicles and make bicyclists and pedestrians more visible to other road users. Crossings will:

- Slow motor vehicle traffic.
- Improve bicyclist and pedestrian visibility.
- Reduce bicyclist and pedestrian exposure.
- Reduce or eliminate conflicts.

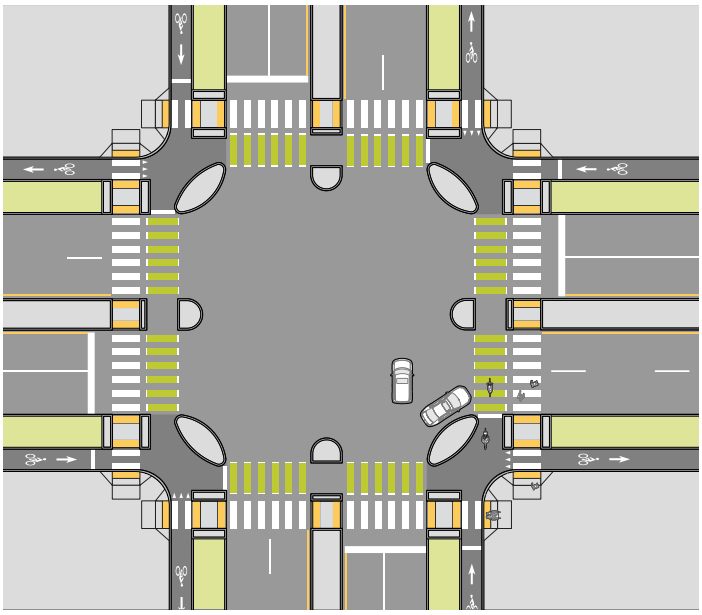
Treatments to facilitate these crossings may include:

- **Protected intersections** reduce the number of potential conflict points between bicyclists and motor vehicles, making these conflicts easier to mitigate.
- **Colored pavement** through intersections delineates bicyclist right-of-way and improves bicyclist visibility.
- **Bike signals** reduce conflicts by allowing bicycle and motor vehicle intersection movements to be separated. These signals have interim approval from the Federal Highway Administration (FHWA) and are in use in many jurisdictions around the country.
- **Leading pedestrian / bicycle intervals** at traffic signals reduce conflicts by allowing bicyclists to enter the intersection ahead of right-turning vehicles, establishing right-of-way and improving motor vehicle yielding.
- **Grade separation**, including underpasses and overpasses, eliminate potential conflicts with automobiles and minimize bicyclist delay by allowing bicyclists to cross over or under motor vehicle traffic without stopping.
- **Narrower curb** radii improve bicyclist visibility by requiring motorists to slow down while turning, widening their field of vision and making it more likely they will see bicyclists proceeding through the intersection.
- **Driveway consolidation** reduces conflicts between motor vehicles and bicyclists by limiting the number of conflict points a bicyclist must traverse.
- **Raised crosswalks** slow driver speeds when crossing the Breezeway from a side street. When motor vehicles travel slower, they have a wider field of vision and are more likely to see bicyclists.

Crossings of Interstates: Due to the high speed of traffic on most freeway on- and off-ramps, crossing freeway ramps is a major safety concern and impediment to both walking and bicycling. Potential approaches to improving crossings at interstates include:

- Traffic control at crossings, including signalized intersections.
- Grade-separated crossings.

Pavement Surface: Breezeways will feature high-quality construction, surface materials and maintenance practices that maximize surface smoothness and pavement life, minimizing potential for pavement cracking and buckling.



A protected intersection. Source: Toole Design Group



Rock Creek Trail Bridge over Veirs Mill Road near the City of Rockville

Specific construction requirements should be adapted to each location in a manner appropriate to local conditions and anticipated wear-and-tear. If maintenance, service or emergency vehicles will need to access the Breezeway, construction methods and materials should take that into account. During Breezeway design, pavement technologies to be investigated include, but are not limited to:

- Fine-grained asphalt and porous asphalt surface courses to reduce road noise.
- Thickened pavement courses to accommodate vehicular loading where necessary and lengthen pavement life.

- Appropriate slope for drainage.
- Special treatments for tree roots.
- Thickened aggregate base courses to accommodate vehicular loading where necessary and lengthen pavement life.
- High-modulus pavements to reduce pavement thickness.
- Higher asphalt content in asphalt base courses to increase durability and fatigue resistance.
- Structural enhancements for poor pavement subgrades to accommodate vehicular loading and lengthen pavement life.
- Perpetual pavement technologies to lengthen pavement life.
- Porous pavement to reduce ice-buildup and water spray from tires.

Breezeways will feature construction practices designed to result in high-quality pavement installation. These practices include improved subgrade preparation and testing, installation of pavements with appropriate lift thicknesses, rigorous asphalt temperature monitoring and thorough compaction for uniform density and smoothness.

Within the bikeway network, Breezeways are prioritized for maintenance in a manner similar to priority arterials within the roadway network. This priority applies to snow removal, resurfacing, sweeping and other general maintenance activities.

Street Infrastructure: In addition to separation from motor vehicle traffic, Breezeways will be free of obstructions, such as utility poles, trees or sign posts. Breezeways will also have corridor-long pedestrian-scale lighting. Lighting will provide continuous illumination along the travelway and immediate wayside areas. In residential areas or sensitive habitat areas, specialized lighting or screens may be required to avoid adverse impacts on the surroundings.

Branding and Wayfinding: Unique branding improves Breezeway Network legibility and helps the network express its own identity as a high-quality transportation option. There are many examples of how this branding might be handled, including using:

- Signage that distinguishes the Breezeway from the rest of the network.
- Pavement markings.
- Different colored surface treatments.

Transitions: Transitions between Breezeways and standard bicycle facilities will be direct, seamless and intuitive. See Appendix B for transitions between separated bike lanes and other bicycle facilities.

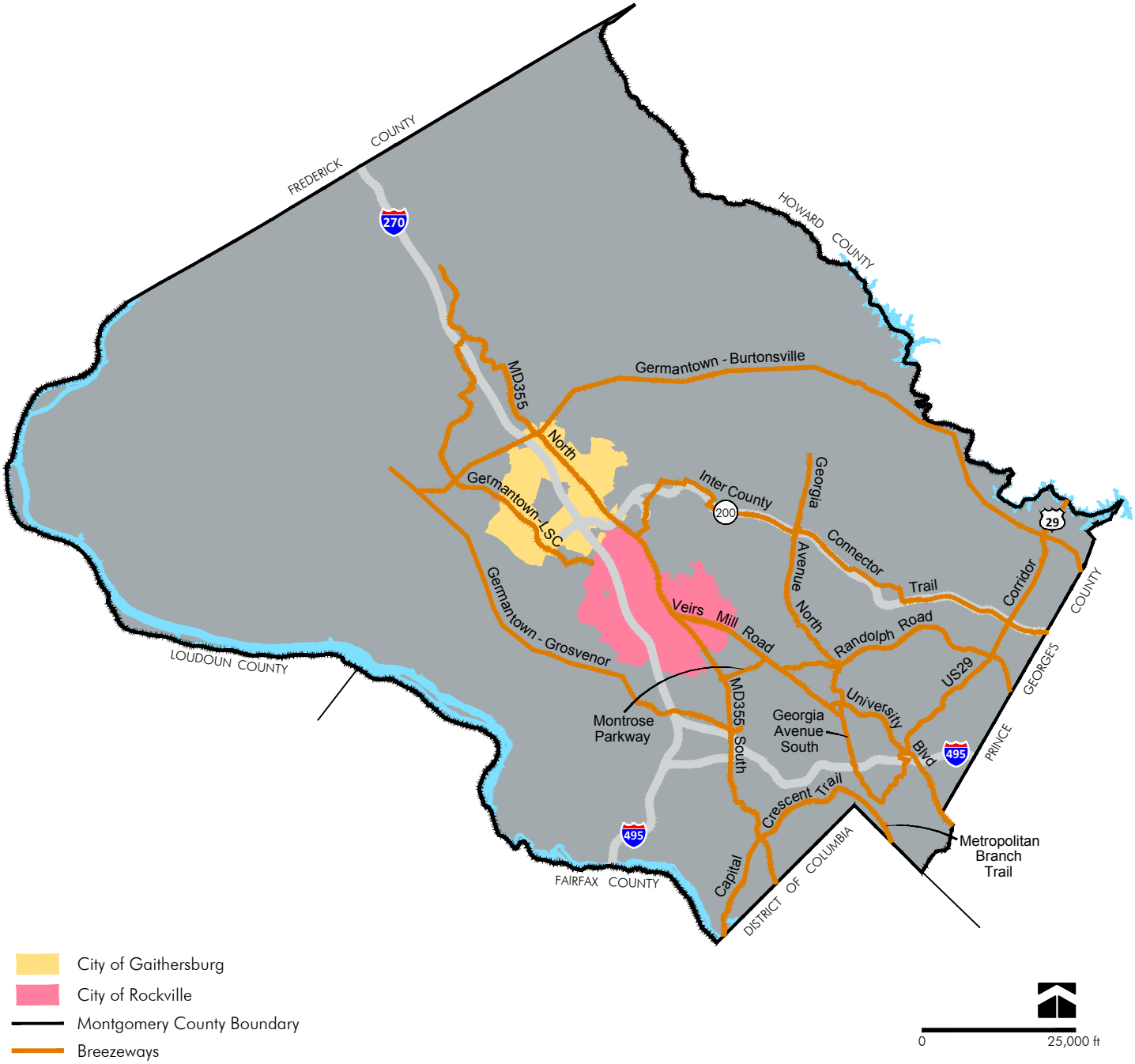
Policy Guidance

Implementing and maintaining the Breezeway Network may require adjusting several existing county and state policies and practices:

- Dedicated design guidelines should be adopted by MCDOT to codify minimum widths and other design standards. Newer intersection treatments may also need to be added to MCDOT's design standards.
- Maintenance practices and policies will need to be revised. New equipment will be required for sweeping, snow removal and emergency response on the county's separated bike lane network and growing trails network.
- A maintenance, snow removal and repaving schedule should be developed for Breezeways. This process may require revisions to the existing prioritization process for maintenance and snow removal. Snow removal laws may require careful attention to bikeways in residential areas where Breezeways run alongside the roadway, as these bikeways will need to be treated by Montgomery County.

Proposed Breezeway Network

Fourteen corridors are proposed for the Breezeway Network, as shown in the map below. A description of each Breezeway and its major infrastructure recommendations is provided on the following pages. See Appendix I for a detailed description of the bikeway recommendations for each Breezeway corridor.



Breezeway Corridors

CORRIDOR	FROM	TO	TYPOLOGY
Capital Crescent Trail	District of Columbia	Silver Spring Transit Center	Rail Corridor
Georgia Avenue North	Olney-Laytonsville Rd	Glenmont Metrorail Station	Older Major Highway
Georgia Avenue South	Glenmont Metrorail Station	Ellsworth Drive	Older Major Highway
Germantown - Grosvenor	Schaeffer Road	MD 355	Utility Corridor
Germantown - Burtonsville	Utility Corridor	Prince George's County	Utility Corridor
Germantown – Life Sciences Center	Middlebrook Road	City of Rockville	Modern Major Highway
Intercounty Connector Trail	MD 355	Prince George's County	Freeway
MD 355 North	Stringtown Road	City of Gaithersburg	Modern Major Highway
MD 355 South	City of Rockville	District of Columbia	Older Major Highway
Montrose Parkway	Rockville Pike	Veirs Mill Road	Modern Major Highway
Randolph Road	Veirs Mill Road	Columbia Pike	Older Major Highway
University Boulevard	Veirs Mill Road	Prince George's County	Older Major Highway
US 29	Howard County	Fenton Street	Freeway
Veirs Mill Road	City of Rockville	Georgia Avenue	Older Major Highway

Capital Crescent Trail

The Capital Crescent Trail is an off-road shared-use path along a rail corridor that forms a crescent between Georgetown and Silver Spring via Bethesda. Montgomery County purchased the Georgetown Branch right-of-way between the District of Columbia and the Metropolitan Branch just west of Silver Spring in 1988.

The Maryland-National Capital Park and Planning Commission (M-NCPPC) has jurisdiction over the portion between the District of Columbia and Woodmont Avenue in Bethesda, and the MCDOT has jurisdiction over the portion between Woodmont Avenue and Silver Spring. In 1990, the National Park Service acquired the part of Georgetown Branch reaching from Georgetown in the District of Columbia to Montgomery County.

The Capital Crescent Trail is currently paved with asphalt from Georgetown to Bethesda. It will be paved east of Bethesda and extended to the Silver Spring Transit Center as part of the Purple Line light rail project. Major infrastructure projects include:

- Widening the trail to 15 feet with 2-foot-wide shoulders between Massachusetts Avenue and Bethesda Avenue, with a 5-7-foot-wide walkway and an 8-10-foot-wide bikeway.
- Adding lighting along the trail between Bethesda Avenue and the Silver Spring Transit Center.
- Strongly considering trail lighting between River Road and Bethesda Avenue during the facility planning process.
- Studying an improved connection from the Capital Crescent Trail to MacArthur Boulevard.

Georgia Avenue North

The Georgia Avenue North Breezeway runs along the state highway between Olney-Laytonsville Road in Olney and the Glenmont Metrorail Station. It consists of trails, two-way separated bike lanes, sidepaths and neighborhood greenways on the west side of Georgia Avenue, extending along parallel streets where the detour is minimal. Major infrastructure projects include:

- Crossing at the Georgia Avenue-Randolph Road interchange.
- Crossing at the planned Norbeck Road interchange.

Georgia Avenue South

The Georgia Avenue South Breezeway runs along the state highway between the Glenmont Metrorail Station and Ellsworth Drive in Silver Spring. It consists of trails, two-way separated bike lanes, sidepaths and neighborhood greenways on the west side of Georgia Avenue, north of Arcola Avenue and on the east side of Georgia Avenue, south of Arcola Avenue. Major infrastructure projects include:

- Grade separated crossing of I-495 and I-495 ramps on the east side of Georgia Avenue.

Germantown – Grosvenor

The Germantown to Grosvenor Breezeway is a trail as it extends along an electrical transmission corridor between Schaeffer Road and Tuckerman Lane, and separated bike lanes along Tuckerman Lane to Rockville Pike. Major infrastructure along the power lines is to be determined by a PEPCO-Exelon facility planning study.

Germantown – Burtonsville

The Germantown to Burtonsville Breezeway is a trail that extends along an electrical transmission corridor between Germantown and Prince George's County. Major infrastructure projects include new crossings of these major roadways:

- Great Seneca Highway
- CSX railroad tracks
- Interstate-270
- Frederick Road
- Woodfield Road
- US 29

Additionally, pedestrian-scale lighting is recommended on trail portions of this corridor.

Germantown – Life Sciences Center

The Germantown – Life Sciences Center Breezeway connects Germantown Town Center to the Life Sciences Center and consists of separated bike lanes in Germantown and sidepaths along Great Seneca Highway and Key West Avenue. Major infrastructure projects include:

- New bridge on Dorsey Mill Road.

Additionally, pedestrian-scale lighting is recommended on trail portions of this corridor.

Intercounty Connector Trail

The Intercounty Connector Trail Breezeway connects Shady Grove to Prince George's County. It largely consists of a trail that parallels the Intercounty Connector, but includes sidepaths in locations where the trail diverts from the highway. Major infrastructure projects include:

- New crossing of MD 200.
- New bridge over Northwest Branch.
- New bridge over Paint Branch.
- New crossing of US 29.

Additionally, pedestrian-scale lighting is recommended on trail portions of this corridor.

MD 355 North

The MD 355 North Breezeway connects Clarksburg to the City of Gaithersburg. It consists of sidepaths along MD 355 and Observation Drive. Major infrastructure projects include:

- Extension of Observation Drive between Clarksburg and Germantown.

Additionally, pedestrian-scale lighting is recommended on trail portions of this corridor.

MD 355 South

The MD 355 North Breezeway connects the City of Rockville to Friendship Heights and consists of separated bike lanes, sidepaths and trails. Major infrastructure projects include:

- Widening the entire Bethesda Trolley Trail to as much as 23 feet, providing separated space for walking (5 to 8 feet) and bicycling (8 to 11 feet) with shoulders (2 feet each).
- Reconstructing Rockville Pike between the City of Rockville and Marinelli Road with two-way separated bike lanes on the west side.

Montrose Parkway

The Montrose Parkway Breezeway is a trail that will connect White Flint to Veirs Mill Road. Major infrastructure projects include:

- East of White Flint, Montrose Parkway is an unbuilt highway. While current plans include a 10-foot-wide shared use path, this dimension should be increased to reflect the importance of this bikeway within the proposed Breezeway network.

Additionally, pedestrian-scale lighting is recommended on trail portions of this corridor.

Randolph Road

The Randolph Road Breezeway connects Veirs Mill Road and White Oak, and will be composed exclusively of sidepaths. Major infrastructure projects include:

- New bridge over Northwest Branch.
- New bridge over Paint Branch.

University Boulevard

The University Boulevard Breezeway connects Wheaton to Takoma / Langley and White Oak and will be composed of separated bike lanes in urban and urbanizing areas, and sidepaths. Major infrastructure projects include:

- New bridge over Interstate-495.

US 29 Corridor

The US 29 Corridor Breezeway connects Howard County to Fenton Street and will be composed of separated bike lanes, sidepaths, neighborhood greenways and trails. Major infrastructure projects include:

- New bridge over Patuxent River.
- New bridge over Paint Branch.
- New bridge over Northwest Branch.[5]
- New bridge over I-495.

Veirs Mill Road

The Veirs Mill Road Breezeway connects the City of Rockville to Wheaton on the south side of the road. Major infrastructure projects include:

- New crossing of Rock Creek and Turkey Branch.

[5] Appropriate measures must be taken to minimize impacts to the former WSSC buildings. Any changes to the road cross section may require elevating the roadway out of the floodplain and reconstructing the stream channel upstream and downstream.

BIKEWAY RECOMMENDATIONS

The recommended bicycling network is organized based on geographic areas known as "policy areas," created as part of the county's subdivision staging policy. This is the standard categorization of geographic areas for transportation in Montgomery County.

Each policy area is accompanied by a map of recommended bikeways and a detailed table describing the bikeways starting on page 223. The policy area maps display the bicycle facility classification and whether the bikeway is existing or proposed. They also indicate where a bicycle parking station is proposed and whether grade separation between the bikeway and the intersecting street exists or is proposed. The policy area tables indicate the name of the road, where the road segment starts and ends, the bikeway facility classification and the bikeway type for that segment.

While the full bikeway network is extensive and unlikely to be constructed within the life of this plan, such a large network is recommended so that opportunities to implement the bikeway recommendations are not lost when unforeseen circumstances arise. A prioritized list of bikeways is included in the prioritization section of this plan.

Overall, the Bicycle Master Plan recommends about 1,200 miles of bikeways, of which slightly more than one-quarter currently exist. The largest category of bikeways comprises sidepaths (635 miles), followed by trails (189 miles), bikeable shoulders (131 miles), separated bike lanes (101 miles) and neighborhood greenways (50 miles).

A summary of the bikeway recommendations is shown in table on the next page.

Non-Master Planned Roads

Just like motorists and pedestrians, bicyclists travel on all roads where it is legal[6] to ride a bicycle to access their homes, jobs, shopping and other local destinations. While only a portion of roads in Montgomery County will be master-planned bikeways, all non-master-planned roads where it is legal to bicycle, will be designed with the understanding that people of all ages and bicycling abilities will bicycle on them.

[6] In Maryland, bicycles are permitted on all roadways except on expressways, unless on adjacent bicycle paths or ways approved by the MDOT / State Highway Administration, or on any other controlled access highway specifically prohibited with signs. However, on roads where the posted speed limit is more than 50 mph, bicycles may use the shoulder adjacent to a roadway and enter the roadway only if making or attempting to make a left turn; crossing through an intersection; or the shoulder is overlaid with a right turn lane, a merge lane, a bypass lane, or any other marking that breaks the continuity of the shoulder.

Summary of Bikeway Recommendations (Miles)

CATEGORY	BIKEWAY TYPE	EXISTING	PROPOSED	TOTAL
Trails	Off-Street Trails	124	65	189
	Stream Valley Park Trails	28	0	28
	Neighborhood Connectors	14	3	17
Separated Bikeways	Shared Use Paths	152	483	635
	Separated Bike Lanes	2	99	101
Striped Bikeways	Buffered Bike Lanes	0	7	7
	Conventional Bike Lanes	14	19	33
	Advisory Bike Lanes	0	0	0
	Contra-Flow Bike Lanes	0	5	5
Bikeable Shoulders	Bikeable Shoulders	0	131	131
Shared Roads	Neighborhood Greenways	0	50	50
	Shared Streets	0	1	1
	Priority Shared Lane Markings	0	5	5
Total		334	868	1,202

See detailed bikeway recommendations on page 223 or at mcatlas.org/bikeplan

Park Trails

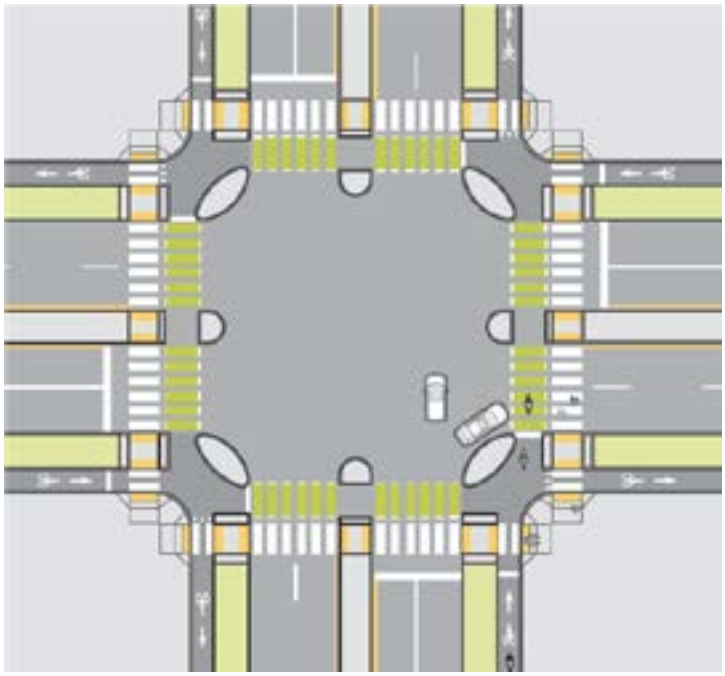
Park trails are the backbone of the existing bicycling network in many areas of Montgomery County. While trails such as the Matthew Henson Trail and Capital Crescent Trail are built to modern standards, older trails such as the Rock Creek Trail and the Sligo Creek Trail are sub-standard in design in some locations. It is challenging if not impossible to upgrade these trails in many locations due to steep slopes, proximity to streams and other environmental constraints. Where possible, the Montgomery County Department of Parks should upgrade park trails over time to standards set by the American Association of State Highway and Transportation Officials (AASHTO) and American with Disabilities Act (ADA) standards.



Crossings

There is increased potential for crashes between bicyclists and motorists at locations where bikeways cross intersections and driveways. However, since the operation of intersections, including traffic control and the provision of turn lanes, is considered outside of the scope of a master plan, only limited guidance on intersections is included in this plan.

Protected Intersections: Montgomery County should make protected intersections the preferred treatment at all intersections where at least one street is recommended to have a sidepath, separated bike lane, buffered bike lane or conventional bike lane. Protected intersections increase safety by reducing the speed of turning traffic, improving sightlines and designating space for all road users. They reduce conflict points between motor vehicles, pedestrians and bicyclists and can eliminate the remaining conflicts with signalization. There are several different configurations of protected intersections, many of which are illustrated in Appendix B.



A protected intersection with one-way separated bike lanes.

Trail Crossings: Montgomery County should upgrade all mid-block trail crossings where the roadway is three lanes or wider without a median or where the posted speed limit is 30 mph or faster. Potential approaches to improving mid-block crossings include:

- Traffic calming that removes traffic lanes and/or reduces the design speed of the road.
- Reducing conflicts by realigning the trail to an existing signalized intersection where the detour is minimal and convenient for bicyclists, providing a grade separated crossing, or adding new traffic signalization.
- Other improvements that improve the safety and comfort of the crossing.

M-NCPPC will develop a prioritized list of park trail crossings to improve as part of an ongoing study. MCDOT should consider developing a similar list for other trail crossings in the county.

Interstate Ramps: Due to the high speed of traffic on most freeway on- and off-ramps, crossing freeway ramps is a major safety concern and impediment to both walking and bicycling. Potential approaches to improving crossings at interstates include:

- Traffic control at the crossing, including full signalized intersections.
- Grade-separated crossings.

BICYCLE PARKING

The availability of secure and convenient bicycle parking is an important factor when considering making a trip by bicycle. No matter how well connected the bikeway network, many people will forgo bicycling if their destinations lack safe places to secure their bicycles. An adequate supply of bicycle parking encourages bicycling while reducing theft and improper use of trees and street furniture for bicycle parking.

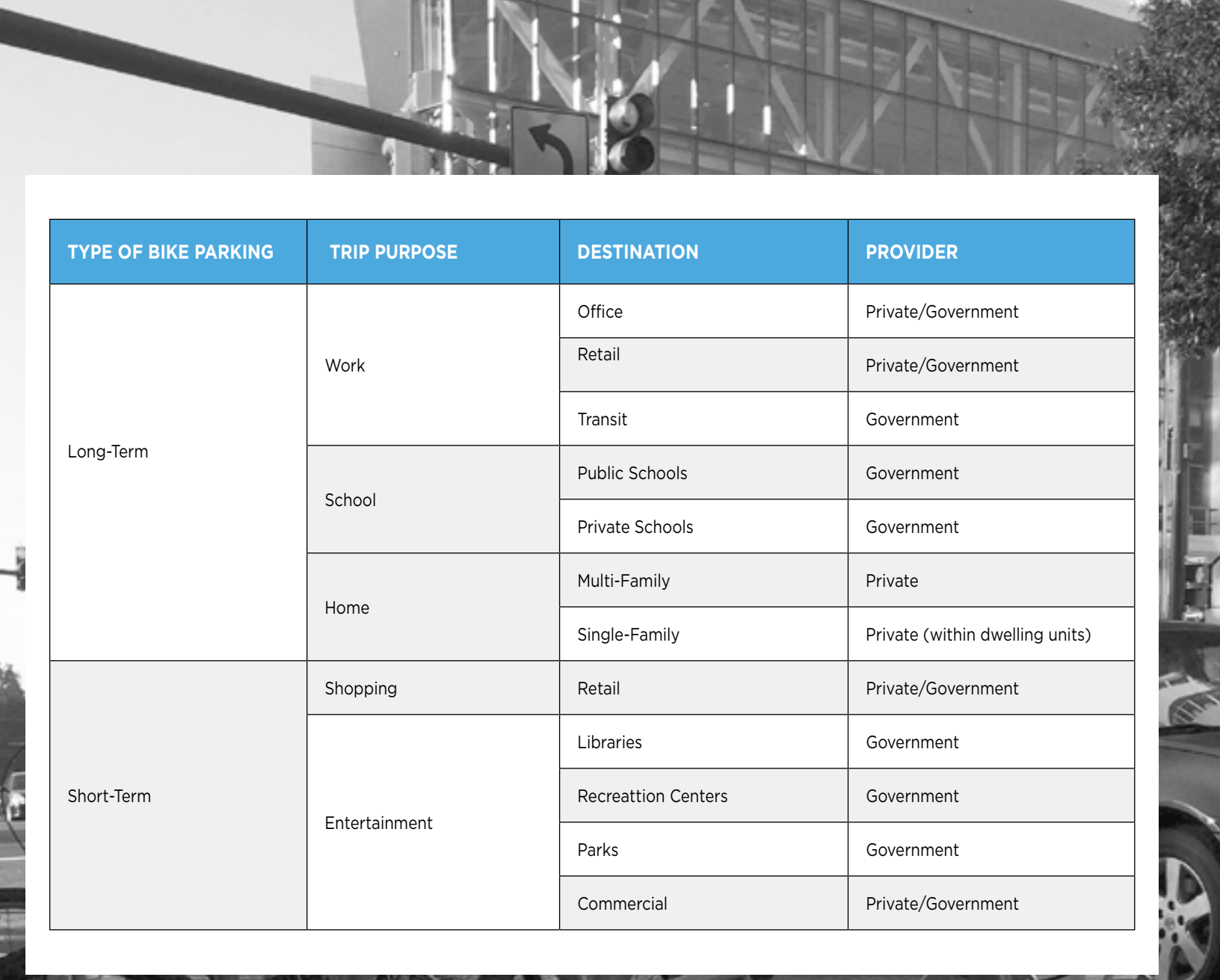
Whether traveling to work, school, shopping or home, people must feel confident that their bicycles will not be stolen or vandalized when stored. The length of time that a bicycle will be parked determines to a large extent the level of security that is needed. The longer the time period, the more secure the bicycle parking needs to be. Bicycle parking is a key component of the Bicycle Master Plan, as incorporated in several objectives of Goal 2.

In 2016, the Montgomery County Police Department's Second District reported 187 thefts of bicycles in Bethesda.

Bicycle parking can be implemented with a combination of public and private investments. The parking table on the next page identifies whether the private sector or government is the likely provider of bicycle parking, based on whether the parking is long-term or short-term, the trip purpose and the destination type. Trip purpose can influence the length of time that is needed and, therefore, the level of security. Destination type influences whether the private sector or government is the primary provider of the bicycle parking.

Appendix K provides bicycle parking guidelines for short-term and long-term bicycle parking.





TYPE OF BIKE PARKING	TRIP PURPOSE	DESTINATION	PROVIDER
Long-Term	Work	Office	Private/Government
		Retail	Private/Government
		Transit	Government
	School	Public Schools	Government
		Private Schools	Government
	Home	Multi-Family	Private
		Single-Family	Private (within dwelling units)
Short-Term	Shopping	Retail	Private/Government
	Entertainment	Libraries	Government
		Recreattion Centers	Government
		Parks	Government
		Commercial	Private/Government

Short-Term Bicycle Parking

Short-term bicycle parking is intended to provide **quick access** to briefly visited destinations, such as retail locations and civic facilities, and should be convenient and easy to use. It is typically located in highly visible locations, in front of building entrances and along streets and bikeways, and is available for public use. A common type of secure, short-term bicycle parking is an inverted-u rack.



Short-term bicycle parking in downtown Silver Spring. The inverted U-rack shown here is the preferred short-term parking facility because it provides two points of contact for securing a bicycle; on the frame and on the wheel.

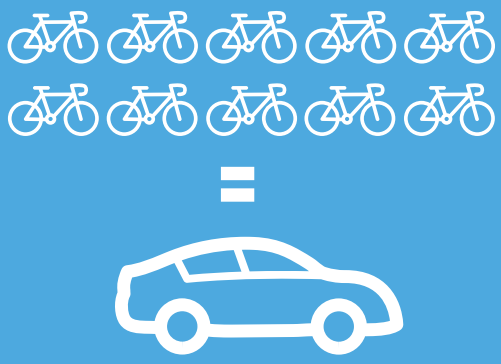
In Montgomery County, short-term bicycle parking is provided by the county government at public facilities, such as parks, libraries, recreational centers and other government services, and sometimes in front of commercial buildings where there is a bicycle parking shortage. As new buildings are constructed by the private sector, owners of these properties are required to install short-term bicycle parking to meet the requirements of the zoning code.

The current standards in the Montgomery County zoning code require short-term bike parking at a prescribed rate per unit (such as square feet) of development, but such requirements have not always been in place. As a result, there is a deficit of short-term bicycle parking in most areas of Montgomery County. New developments must conform to the 2014 changes to the zoning code, which requires more short-term bicycle parking.

One of the many advantages of bicycle parking is that it takes significantly less space than parking for cars. Up to 10 bicycles can fit in the same space that is needed to park one automobile.

An evaluation of short-term bicycle parking can be found in the Monitoring the Vision section of this plan, as well as Appendix F. Programs and policies to increase the number and quality of bike parking can be found on pages 100, 111 and 114.

ROUGHLY 10 BICYCLE PARKING SPACES CAN OCCUPY THE SAME SPACE AS PARKING FOR ONE AUTOMOBILE





Bike corrals can fit 10 bicycles in the spaces of one automobile parking space, as shown in this temporary installation in downtown Silver Spring.

Long-Term Bicycle Parking

Long-term bicycle parking is intended to provide sheltered and secure bicycle storage for residents, students, employees and long-term visitors who are leaving their bicycles for several hours or longer. It is typically provided in a fixed, safe and weather-protected setting, including bike stations, bike rooms or cages inside buildings and stand-alone bike lockers.

In Montgomery County, long-term bicycle parking is provided by the public sector at schools and transit stations. The private sector is responsible for providing long-term bicycle parking in retail settings, office buildings and multi-family housing per the requirements in the zoning code.

There are five types of bicycle parking in residential and commercial buildings:

A **bicycle room located on the ground** floor of a commercial or residential building is the preferred form of long-term bicycle parking because it provides:

- Highly secure bicycle storage in an enclosed facility.
- Direct access to the street or sidewalk.
- Little or no conflict with automobiles.

A **bicycle room located in the parking garage** of a commercial or residential building is the second-best form of long-term bicycle parking because it provides:

- Highly secure bicycle storage within an enclosed facility.
- Indirect access to the street or sidewalk through a parking garage.
- Reduced conflict with automobiles as cyclists navigate through the parking garage.



A bicycle room with stacked bike racks

A **bicycle cage** located in the parking garage of a commercial or residential building is the third best form of long-term bicycle parking because it provides:

- Secure bicycle storage in a facility typically constructed of chain-link fencing, which can be cut and leaves bicycles vulnerable to vandalism and theft.
- Indirect access to the street or sidewalk through a parking garage.
- Some conflict with automobiles as cyclists navigate through the parking garage.



A bike cage in downtown Silver Spring

A secure, locked **bicycle locker** is the fourth best form of long-term bicycle parking because it provides:

- Highly secure bicycle storage in an enclosed box.
- Direct or indirect access to the street or sidewalk depending on whether it is located in a parking garage or at street level.
- Varying amount of conflict with automobiles, depending on whether the locker is located in a parking garage or at street level.
- An inefficient use of space.

Bicycle racks located in a parking garage of a commercial or a residential building are the least preferred form of long-term bicycle parking because they provide:

- Less secure bicycle storage because bicycles are vulnerable to vandalism and theft.
- Indirect access to the street or sidewalk through a parking garage.
- Some conflict with automobiles as cyclists navigate through the parking garage.

As with short-term bicycle parking, there is also a deficit of long-term bicycle parking. While new developments must conform to the 2014 changes to the zoning code, requiring more long-term bicycle parking, many older commercial and multi-family residential buildings offer little or no secure bike parking. While no data exists on long-term bicycle parking at commercial and residential buildings, the Washington Metropolitan Area Transit Authority (WMATA) provides some long-term bicycle parking at Metrorail stations in the form of bike lockers.

Bicycle Parking Stations

Progressive transit agencies and local governments across the country are investing in long-term bicycle parking stations within or directly adjacent to transit stations to increase transit ridership at a fraction of the cost of operating local bus service or constructing and operating parking garages. Secure bicycle parking stations can expand the use of bicycling to transit by attracting people who:

- Live beyond a 10-minute walk of the transit station and outside of the bikeshare service area.
- Are uncomfortable locking their bicycles to a standard inverted u-rack for an extended periods.

Bicyclists in Montgomery County currently have a few options when they arrive at a transit station. They can leave their bicycles at existing bike lockers and bike racks, or bring their bicycles onto Metrorail cars outside of peak periods.

Secure bicycle parking stations could offer transit riders another means to store their bicycles. These enclosed and covered facilities offer high-volume and high-security bicycle parking. Additionally, many bicycle parking stations offer services such as bicycle repair, bicycle rental, bicycle retail, food service, showers and changing rooms, lockers for personal belongings and bicycling information.

Due to capacity issues, most transit operators place limits on bringing bicycles onto buses and rail cars. For example, only folding bikes are allowed on the trains of the MARC Brunswick Line, a commuter service that operates during peak periods only, though MARC is now including bike-only cars on some trips. WMATA permits up to two bicycles per car on Metrorail during weekends and weekdays, except between rush hours of 7 and 10 a.m. and 4 and 7 p.m. All Metrobus and Ride On buses can accommodate bicycles on the front of the vehicles.

Bicycle parking stations can be located in a variety of environments, including dense urban environments, such as the Union Station Metrorail Station in Washington, DC and in suburban areas, such as the Kramer Station in Austin, Texas.

Good locations for bicycle parking are directly adjacent to and visible from station entrances and can be easily monitored by station managers or cameras. These locations are advantageous because they are easy for bicyclists to find and generally more secure than spaces that are tucked away from view. Bicycle parking facilities provided on the paid side of fare gates may be an effective means to deter theft.



An urban bicycle parking station directly adjacent to the Union Station Metrorail Station in Washington, DC



A suburban bicycle parking station at Kramer Station in Austin, Texas

Bicycle Parking Recommendations At Transit Stations

Long-term bicycle parking is recommended at all WMATA Metrorail Red Line stations and at the higher demand MARC, future Purple Line and Corridor Cities Transitway (CCT) stations to increase the numbers of bicyclists traveling to these transit hubs. The following table summarizes the recommended amount of bicycle parking spaces to be provided directly adjacent to each transit station.

Long-term bicycle parking is recommended to be provided in bicycle parking stations. Short-term bicycle parking is recommended to be provided by inverted "U" racks in a covered location. The methodology used to calculate bicycle parking is based on setting a goal for bicycle access and is described in Appendix G. Actual demand may be higher or lower based on factors such as the build-out of the bicycling network and whether bicyclists park their bicycles at transit stations for reasons other than transit access.

Planned stations where detailed engineering has not yet begun, including the proposed White Flint MARC station and the Corridor Cities Transitway Phase 2 stations, are each recommended to have a minimum of 20 long-term spaces and 6 short-term spaces. As ridership estimates become available, these recommendations will be updated.

STATION	LONG-TERM (MIN)		SHORT-TERM (MIN)		RECOMMENDED LOCATION
	# OF SPACES	SQUARE FEET	# OF SPACES	SQUARE FEET	
Barnesville	0	0	10	200	Station parking lot.
Bethesda (North)	100	1,100	50	1,200	WMATA property at Wisconsin Ave level and at bus loop level.
Bethesda (South)	330	3,600	130	3,100	Within the Apex Building site and adjacent to the Capital Crescent Trail.
Boyds	20	200	10	200	Station parking lot.
Connecticut Avenue	20	200	10	200	Gas station site on east side of Connecticut Ave adjacent to Purple Line station.
Dale Drive	0	0	10	200	Adjacent to station.
DANAC	0	0	20	500	Adjacent to station.
Dickerson	0	0	10	200	Station parking lot.
Forest Glen	300	3,200	100	2,400	Redevelopment of WMATA surface parking lot.
Friendship Heights	200	2,200	50	1,200	Redevelopment of 2 Wisconsin Cir (ultimate); Wisconsin Cir retail (interim).
Germantown	30	300	10	200	Station parking lot.
Glenmont	400	4,300	150	3,600	Both sides of the station on WMATA property.
Grosvenor	350	3,800	100	2,400	Redevelopment of WMATA parking lot.
Kensington	30	300	10	200	Station parking lot.

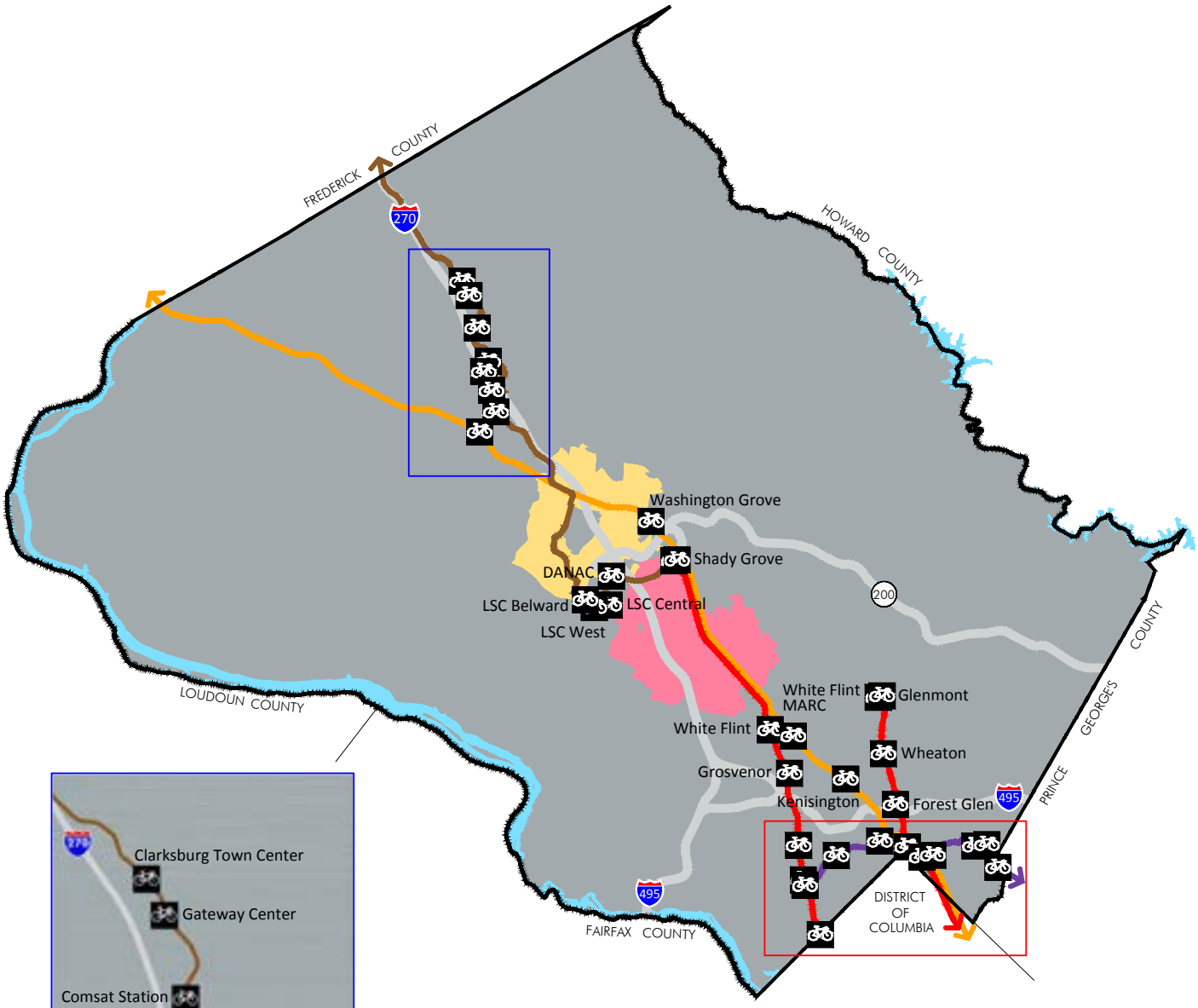
STATION	LONG-TERM		SHORT-TERM		RECOMMENDED LOCATION
	# OF SPACES	SQUARE FEET	# OF SPACES	SQUARE FEET	
Long Branch	30	300	10	200	Redevelopment of Giant Shopping Center site.
LSC Belward	80	900	20	500	Belward Farm site.
LSC Central	60	600	20	500	Hospital site.
LSC West	90	1,000	10	200	PSTA redevelopment site.
Lyttonsville	50	500	10	200	On MTA property along Brookeville Rd, adjacent to proposed pedestrian bridge.
Manchester Place	0	0	10	200	Station parking lot.
Medical Center	200	2,200	50	1,200	Station entrance.
Piney Branch Road	10	100	10	200	Redevelopment of northeast corner of University Blvd and Piney Branch Rd.
Shady Grove	330	3,600	110	2,600	Both sides of the station on WMATA property.
Silver Spring	600	6,500	170	4,100	Beneath Purple Line tracks or station or within WMATA joint development site.
Silver Spring Library	40	400	10	200	At the Silver Spring Library or Wayne Ave garage.
Takoma / Langley	20	200	10	200	Redevelopment of shopping center on west side of University Blvd.
Washington Grove	10	100	10	200	Station parking lot.
Wheaton	400	4,300	100	2,400	Adjacent to the bus loop or as part of redevelopment of the bus loop site.
White Flint (Metrorail)	250	2,700	50	1,200	WMATA property adjacent to existing or proposed station entrance.
White Flint (MARC)	20	200	10	200	Station entrance.
Woodside	20	200	10	200	Redevelopment of shopping center site.
TOTAL	**3,990**	**43,000**	**1,290**	**30,300**	

Notes:

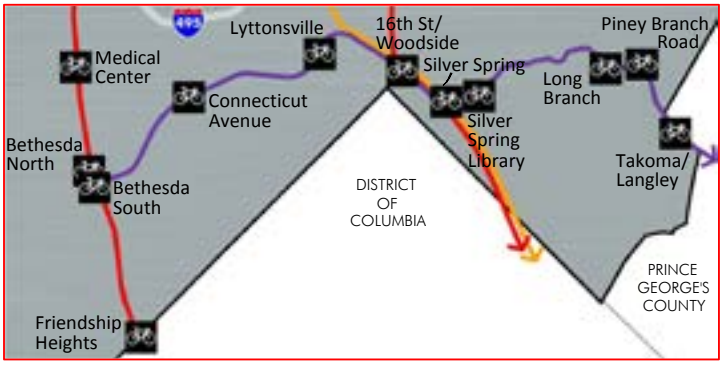
1. Long-term bicycle parking stations will be located directly adjacent to transit station.

2. Friendship Heights recommendations only include Montgomery County demand and should be adjusted if DC demand is to be considered.

Long-Term Bicycle Parking Stations







City of Gaithersburg
City of Rockville
Montgomery County Boundary
Bicycle Parking Stations

Corridor Cities Transitway
MARC Brunswick Line
Purple Line
Red Line

0 25,000 ft


Bike & Ride
M
metro

BICYCLE-SUPPORTIVE PROGRAMS

This section describes the existing and recommended bicycle-supportive programs that have the greatest potential for advancing the goals of the Bicycle Master Plan. Each program description is aligned with a goal of the Bicycle Master Plan using the following symbols:

GOALS



Increase bicycling rates in Montgomery County.



Create a highly connected, convenient and low-stress bicycling network.



Provide equal access to low-stress bicycling for all members of the community.



Improve the safety of bicycling.

Summary of Bicycle-Supportive Programs

The table on the next page summarizes the existing, expanded and new bicycle-supportive programs recommended in this plan and identifies the Bicycle Master Plan goals supported by each program.

PROGRAMS	GOAL 1: INCREASE BICYCLING RATES	GOAL 2: LOW-STRESS CONNECTIVITY	GOAL 3: EQUITY	GOAL 4: SAFETY
EXISTING PROGRAMS				
1.1 Facility Planning – Transportation	X	X		X
1.2 Stand-Alone Capital Projects	X	X		X
1.3 Bikeshare	X		X	
1.4 Montgomery County Bicycle Action Group	X	X		X
1.5 Safe Routes to School	X	X		X
1.6 Transportation Improvements for Schools	X	X		X
1.7 Neighborhood Traffic Calming Program	X	X		X
1.8 Pedestrian Safety Program	X	X		X
1.9 Bicycle Pedestrian Priority Areas Program	X	X		X
RECOMMENDED EXPANDED PROGRAMS				
2.1 Bikeways Program – Minor Projects	X	X		X
2.2 Roadway and Bikeway Related Maintenance	X			X
2.3 Snow Removal / Wind / Rain Storms	X			X
2.4 Resurfacing: Primary/Arterial AND Sidewalk & Curb Replacement	X	X		X
RECOMMENDED NEW PROGRAMS				
3.1 BikeMontgomery Outreach Program	X		X	
3.2 Bicycle Master Plan Monitoring Report	X	X	X	X
3.3 Neighborhood Greenway Program	X	X		X
3.4 Bicycle Parking Program	X	X		
3.5 Public School Bicycle Education	X			X
3.6 Bicycle Facility Education	X			X
3.7 Bicycle Count Program	X			X
3.8 Countywide Wayfinding Plan	X	X		

Existing Bicycle-Supportive Programs

The following existing bicycle-supportive programs have the greatest potential for advancing the goals of the Bicycle Master Plan.

1.1 Facility Planning – Transportation



Facility planning studies are conducted prior to the establishment of stand-alone transportation projects in Montgomery County's Capital Improvements Program. Phase I facility planning studies determine the purpose and need of the project; identify community, economic, social, environmental and historic impacts; and provide a recommended concept design.

At the completion of Phase I, the Transportation, Infrastructure, Energy and Environment (T&E) Committee of the County Council determines if the project advances to a more detailed Phase II facility planning study. Phase II studies provide preliminary engineering designs to show more detailed features of the project and refine the impact analysis and cost estimates. At the completion of Phase II, the County Executive and County Council hold project-specific public hearings to determine if the proposal merits consideration in the Capital Improvements Program as a funded stand-alone project.

Lead Agency: Montgomery County Department of Transportation

1.2 Stand-Alone Capital Projects



If upon completion of a Phase II facility planning study the County Council decides to fund a bicycle project, it becomes a stand-alone project in the Capital Improvement Program. Existing bicycle projects include the Capital Crescent Trail east of Bethesda, Falls Road East Side Hiker/ Biker Path, Frederick Road Bike Path and Metropolitan Branch Trail.

Lead Agency: Montgomery County Department of Transportation

1.3 Bikeshare



This program administers and operates bikeshare in Montgomery County. More than 50 bikeshare docks are currently provided by Capital Bikeshare within Bethesda, Chevy Chase Lake, Friendship Heights, Life Sciences Center, Rockville, Shady Grove, Silver Spring, Takoma Park and Wheaton. Free memberships are available for those who meet income eligibility requirements under a program called MCLiberty. Montgomery County is also piloting a dockless bikeshare program. The program employs a Bikeshare Program Manager.

Lead Agency: Montgomery County Department of Transportation

1.4 Montgomery County Bicycle Action Group



The Montgomery County Bicycle Action Group (MCBAG) was created in 1996 to engage citizens interested in bicycling issues. The group meets monthly and advises the Montgomery County Department of Transportation on current issues, programs and projects relating to bicycling in the county.

Lead Agency: Montgomery County Department of Transportation

1.5 Safe Routes to School Program



The Safe Routes to School program aims to increase walking and bicycling to school through engineering, education, enforcement and encouragement. The program employs a Safe Routes to School coordinator.

Lead Agency: Montgomery County Department of Transportation

1.6 Transportation Improvements for Schools Program



This program provides transportation improvements, such as intersection modifications, sidewalks, traffic signals and streetlights, necessary for safe pedestrian and vehicular circulation for schools identified in the Montgomery County Public Schools (MCPS) Capital Program.

Lead Agency: Montgomery County Department of Transportation

1.7 Neighborhood Traffic Calming Program



This program provides for the planning, design and construction of physical traffic control features in residential neighborhoods. Traffic calming features, such as traffic circles and islands, curb extensions, speed humps, physical and painted lane narrowing devices, are used to maintain and improve the safety and livability of residential neighborhoods by addressing issues of aggressive driving and excessive speeds and volumes. Traffic calming is an integral part of the neighborhood greenways proposed in the Bicycle Master Plan.

Lead Agency: Montgomery County Department of Transportation

1.8 Pedestrian Safety Program



Improving safety for pedestrians and bicycles is the goal of this program. Methods include constructing and installing new crosswalks, pedestrian refuge islands, sidewalks, bus pull-off areas, fencing to channel pedestrians to safer crossing locations, bicycle signs and markings, relocating, adding or eliminating bus stops, accessible pedestrian signals or warning beacons, and improving signage. The program supports the construction of street improvements around schools identified in the Safe Routes to School program. It audits pedestrian safety in high incidence areas and implements identified physical improvements, as well as oversees educational and outreach programs.

Lead Agency: Montgomery County Department of Transportation

1.9 Bicycle Pedestrian Priority Areas Program



This program is dedicated to the design and construction of bicycle and pedestrian capital improvements in the county's 31 Bicycle-Pedestrian Priority Areas (BiPPAs) identified in master plans and by Council resolution. Implementation of projects in the Silver Spring Central Business District BiPPA began in fiscal year 2016. Implementation of projects in the Grosvenor, Glenmont, Wheaton CBD, Veirs Mill Road/Randolph Road, Flower Avenue/Piney Branch Road, Piney Branch Road/University Boulevard and Takoma-Langley Crossroads BiPPAs began in fiscal year 2017.

Justification: The Tier 1 bikeways recommended in the prioritization section of this plan are focused on substantially implementing networks of separated bike lanes in seven of the county's Bicycle Pedestrian Priority Areas (Bethesda CBD, Friendship Heights CBD, Life Sciences Center, Silver Spring CBD, Wheaton CBD, White Flint and White Oak) within five years of approval of this plan. The Montgomery County Department of Transportation will need additional funding to hire staff and construct these bikeways within this timeframe.

Lead Agency: Montgomery County Department of Transportation

Recommended Expanded Bicycle-Supportive Programs

Existing bicycle-supportive programs recommended for expansion are discussed in this section. Recommended actions to expand existing programs are listed below along with a justification statement for each recommendation.

2.1 Bikeways Program – Minor Projects



Under the annual bikeways program, bikeways, trails and wayfinding signs that cost less than $1 million are planned, designed and constructed. The program's current implementation schedule includes construction of shared use paths on Rockville Pike at Strathmore (FY18-20), Washington Grove Connector (FY21-22) and Emory Lane (FY21-22). The program employs a bikeways coordinator.

The program should be expanded to fund new neighborhood connectors and upgrade and maintain existing neighborhood connectors. These efforts should be included in the project description form (PDF) for the program. See page 44 and Appendix J for more information on neighborhood connectors.

Justification: Neighborhood connectors provide direct connections to residential streets, but are often poorly maintained. They provide much needed linkages between low-stress traffic streets, thereby allowing bicyclists to avoid higher stress streets.

Lead Agency: Montgomery County Department of Transportation

2.2 Roadway and Bikeway Related Maintenance



The roadway and related maintenance program provides mowing, roadside vegetation clearing, street cleaning and other maintenance activities. It should be expanded to include debris removal and trimming or removing overgrown vegetation from bikeways. Priorities may include bikeways in commercial areas, surrounding transit stations and major connections between activity centers. While bikeway debris clearance should primarily be a government function, use of volunteers as part of an "Adopt a Bikeway" program could be part of this effort.

Justification: Ensuring clear and navigable bikeways improves safety and accessibility.

Lead Agency: Montgomery County Department of Transportation

2.3 Snow Removal / Wind / Rain Storms



The snow removal / wind / rain storms program includes the removal of storm debris within rights-of-way and snow from county roadways. This program includes plowing and applying salt and sand, equipment preparation and clean-up from snow storms, and wind and rain storm cleanup. It should be expanded to include snow removal from bikeways. Priorities may include bikeways in commercial areas, surrounding transit stations and major connections between activity centers. The program should authorize the purchase of specialized equipment to plow separated bike lanes, which in some cases are too narrow for conventional plowing vehicles.

Justification: Snow is an impediment to safe bicycling. Furthermore, during snow storms, people are sometimes more willing to walk or bike than they are willing to drive. Ensuring clear and navigable bikeways improves accessibility and safety.

Lead Agency: Montgomery County Department of Transportation

2.4 Resurfacing: Primary/Arterial AND Sidewalk & Curb Replacement



While Montgomery County has programs to resurface roads and sidewalks, there is no current program focused on repaving bikeways. Both the resurfacing: primary / arterial and the sidewalk and curb replacement programs should be expanded to include bikeways. Resurfacing: primary / arterial would repave bikeways within the road (striped bikeways, separated bikeways, bikeable shoulders, shared roads). The sidewalk & curb replacement program would repave bikeways outside of the road (trails, separated bikeways).

Justification: The quality of the bikeway surface degrades over time and needs to be resurfaced on occasion.

Lead Agency: Montgomery County Department of Transportation

Recommended New Bicycle-Supportive Programs

New bicycle-supportive programs are recommended in this section along with a justification statement for each recommendation.

3.1 BikeMontgomery Outreach Program



The BikeMontgomery Outreach Program encourages more people to bicycle in Montgomery County through community engagement and community building. Its efforts include organizing a Bicycle Ambassador program, maintaining an online bicycling forum, holding bicycling events, such as bike rodeos and thematic bike rides, and conducting tours of new bicycle infrastructure.

Justification: Similar programs, such as the DC Bike Ambassador program and BikeArlington, have helped to expand bicycling in their respective jurisdictions by encouraging communities that strongly support bicycling.

Lead Agency: Montgomery County Department of Transportation

3.2 Bicycle Master Plan Monitoring Report



The Bicycle Master Plan Monitoring Report is a biennial evaluation presented to the County Council. This future document would track the progress of advancing the Bicycle Master Plan's goals and objectives, and summarize new bicycle infrastructure and changes to county bicycling programs and policies. This report would also document available bicycle count data.

Justification: Provides transparent and accountable implementation of the Bicycle Master Plan. Similar monitoring reports are used to evaluate the implementation of plan recommendations for White Flint, the Great Seneca Science Corridor and Shady Grove.

Lead Agency: Montgomery County Planning Department

Supporting Agencies: Montgomery County Department of Transportation, Public Schools, Police Department

3.3 Neighborhood Greenway Program



The program implements the neighborhood greenways recommended in the Bicycle Master Plan. This effort includes marketing the community-wide benefits of neighborhood greenways and developing a toolkit of treatments. Barriers to implementing successful neighborhood greenways are assessed and remedied through legislative and regulatory means. The program oversees construction of the network, including wayfinding and integration into local maps.

Justification: Neighborhood greenways are a cost-effective way to providing low-stress bicycle networks through residential communities. The Tier 1 bikeways recommended in the prioritization section of this plan include neighborhood greenways that feed into seven Bicycle Pedestrian Priority Areas (Bethesda CBD, Friendship Heights CBD, Life Sciences Center, Silver Spring CBD, Wheaton CBD, White Flint and White Oak) and are recommended to be completed within five years of approval of this plan. The Montgomery County Department of Transportation will need additional funding to hire staff and construct these bikeways.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Planning Department

3.4 Bicycle Parking Program



The Bicycle Parking Program increases the supply of short-term and long-term bicycle parking, and replaces substandard bike racks with those that conform to industry standards. It will include a bicycle parking implementation plan focused on commercial areas, transit stations, schools, recreation centers, libraries, other public facilities and multi-family dwelling units. The program will maintain a geospatial inventory of public and private short-term and long-term bicycle parking, and a continuous assessment of bicycle parking shortages based on the analysis in Appendix F. Requests for bike racks in certain locations will be tracked through a website. County inspectors will be trained to ensure bicycle parking is installed correctly and coordinate bicycle valet parking for special events in the county. The program will be led by a bicycle parking coordinator.

Justification: Montgomery County has a shortage of bicycle parking, as shown in Appendix F. When people cannot park their bicycles, they are discouraged from bicycling for non-recreational trips. Providing additional bike parking will increase bicycling and will reduce theft and improper use of trees and other street infrastructure for bicycle parking.

Lead Agency: Montgomery County Department of Transportation

Supporting Agencies: Montgomery County Department of General Services, Department of Parks and Department of Permitting Services

3.5 Public School Bicycle Education



The Public School Bicycle Education program incorporates bicycle training and safety curricula into the Montgomery County public school system, including elementary, middle and high schools, similar to the program that the District of Columbia has implemented for second graders.

Justification: Many adults are deterred from bicycling because they did not learn how to ride a bicycle as a child or have not been educated in bicycle safety. Additionally, children are great advocates for supporting bicycling. Learning the rules of the road as children better prepares students to be safer drivers in the future.

Lead Agency: Montgomery County Public Schools

Supportive Agency: Montgomery County Department of Transportation, Police Department

3.6 Bicycle Facility Education



The Bicycle Facility Education program educates motorists, pedestrians and bicyclists on the safe use of new bikeways. Among other benefits, this program would create public service announcements, provide information and conduct onsite trainings so that all roadways users know how to safely navigate new bicycle infrastructure.

Justification: Public outreach is needed to educate members of the public on the appropriate use of new forms of bicycle infrastructure. It will also educate pedestrians and motorists on how to interact with these new bikeways.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Police Department

3.7 Bicycle Count Program



The Bicycle Count Program conducts pre- and post-implementation studies of new bicycle infrastructure projects to track the frequency at which they are being used. Under this program, permanent bicycle counters are installed at key locations to track the growth of bicycling over time. Annual counts of bicyclists are collected at multiple locations and counts at locations of high crash rates are monitored. Data collected from this initiative will be posted online.

Justification: Enables a data-driven process that tracks bicycling trends in Montgomery County and provides a measure of exposure to support the county's Vision Zero program.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Department of Parks, Planning Department

3.8 Countywide Wayfinding Plan



The Countywide Wayfinding Plan directs bicyclists to major destinations, including commercial areas, transit stations and major public facilities, through signage and visual markers. This plan would identify key destinations, low-stress routes and a consistent, legible and branded protocol for communicating those elements to bicyclists. The plan will be updated every few years.

Justification: With an emerging bicycling network that is not fully connected, wayfinding is needed to direct bicyclists to low-stress bikeways.

Lead Agency: Montgomery County Department of Transportation

BICYCLE-SUPPORTIVE LEGAL AND POLICY FRAMEWORK

This section describes the existing and recommended bicycle-supportive laws, regulations and policies that have the greatest potential for advancing the goals of the Bicycle Master Plan. Each element in this framework is aligned with one or more goals of the Bicycle Master Plan, signified in the list below by the following symbols:

GOALS



Increase bicycling rates in Montgomery County.



Create a highly connected, convenient and low-stress bicycling network.



Provide equal access to low-stress bicycling for all members of the community.



Improve the safety of bicycling.

Summary of Bicycle-Supportive Legal and Policy Framework

This table summarizes the existing and recommended bicycle-supportive laws, regulations and policies recommended in this plan and identifies the Bicycle Master Plan goals supported by them.

PROGRAMS	GOAL 1: INCREASE BICYCLING RATES	GOAL 2: LOW-STRESS CONNECTIVITY	GOAL 3: EQUITY	GOAL 4: SAFETY
EXISTING LEGAL AND POLICY FRAMEWORK				
1.1 Vision Zero				X
1.2 Road Code Urban Areas	X	X		
1.3 Local Land Use Laws	X	X		
RECOMMENDED LAWS, REGULATIONS AND POLICIES				
Roadway Laws and Policies				
2.1 Authorize Lower Posted Speed Limits	X	X		X
2.2 Repeal the Mandatory Use Law				X
2.3 Conduct a "Rules of the Road" Assessment				X
2.4 Replace the State's Marked Bike Lane Policy	X			X
2.5 Develop a County Policy on E-Bikes	X			X
Roadway Laws and Policies				
2.6 Establish Level of Traffic Stress Targets	X			X
2.7 Update Context Sensitive Road Design Standards	X	X		X
2.8 Compare all Designed Projects to Best Practices	X	X		X
2.9 Make Separated Bikeways the Preferred Bikeway Facility	X	X		X
2.10 Make Protected Intersections the Preferred Intersection Type	X	X		X
2.11 Consolidate Driveways along Master-Planned Bikeways		X		X

PROGRAMS	GOAL 1: INCREASE BICYCLING RATES	GOAL 2: LOW-STRESS CONNECTIVITY	GOAL 3: EQUITY	GOAL 4: SAFETY
2.12 Develop a Shared Lane Marking Policy	X			X
2.13 Develop Bicycle Parking Standards for County Facilities	X	X		
2.14 Reassess Road Code Urban Area Boundaries	X			X
2.15 Develop Standards for Trail Crossings at Major Roads	X			X
Maintenance				
2.16 Develop Protocols for Bicycle Facility Closures and Detours	X			X
Other				
2.17 Establish Vision Zero Collision Review Team				X
2.18 Provide Open Access to Crash Data				X
2.19 Update the Zoning Code		X		
2.20 Revise the Bicycle to School Policy	X			

Existing Legal and Policy Framework

The following existing laws, regulations and policies have the greatest potential for advancing the goals of the Bicycle Master Plan.

1.1 Vision Zero

Montgomery County has adopted a policy of zero transportation-related fatalities and serious injuries by 2030. To move toward that vision, the county has released a two-year Vision Zero action plan that includes a set of activities to be undertaken. A 10-year action plan is expected to be released in late 2019. Specific Vision Zero items related to this master plan include evaluating trail crossings and intersections, expanding the low-stress bicycling network and updating county road design standards, among others.

Lead Agency: Montgomery County Department of Transportation

1.2 Urban Road Code Areas



The Montgomery County Code specifies maximum standards for lane widths (10 to 11 feet) and curb radii (15 feet) on urban roads, as well as speed limits when they are not already predetermined in a specific master plan. Narrower streets and curb radii improve bicycling by slowing the speed of traffic and by providing space for bikeways. Lower speed limits create a lower-stress environment for bicyclists and pedestrians.

Lead Agency: Montgomery County Department of Transportation

1.3 Local Land Use Laws



The Maryland-National Capital Park and Planning Commission (M-NCPPC) reviews all development proposals and site plans for consistency with master plans and zoning code requirements. Property owners may be required to dedicate land for transportation facilities, construct bikeways on the site and along the frontage of the property, and/or provide bicycle parking, showers and changing facilities.

Lead Agency: Montgomery County Planning Department

Recommended Laws, Regulations and Policies

The following new bicycle-supportive laws, regulations and policies are likely to have the greatest effect on advancing the goals of the Bicycle Master Plan.

2.1 Authorize Lower Posted Speed Limits



Petition the Maryland General Assembly to lower the default speed limit to 25 mph on all highways in a business district and undivided highways in a residential district in Montgomery County. Reduce the lowest possible speed limit to 10 mph on shared streets and 15 mph on neighborhood greenways in Montgomery County.

Justification: Lower automobile speeds reduce both the number of crashes by increasing the likelihood that motorists will successfully yield at conflict points and lessen the severity of crashes.

Lead Agencies: Montgomery County Government

2.2 Repeal the Mandatory Use Law



Advocate for the repeal of Section 21-1205.1(b)(2) of the Maryland Code's Transportation Article, which requires bicyclists to ride in marked bicycle lanes.

Justification: There is a legacy of poor bicycle lane design in Montgomery County (and much of the country), including narrow bicycle lanes, bicycle lanes that end short of intersections and bicycle lanes that are placed to the right of right-turning traffic. Until safe bicycle facilities are ubiquitous in Montgomery County, bicyclists should have the right to decide where it is safe to bicycle.

Lead Agencies: Montgomery County Government

2.3 Conduct a "Rules of the Road" Assessment



Conduct an analysis of state and county laws, policies and regulations to identify gaps and inconsistencies in the legal framework supporting bicycling. Address those gaps and inconsistencies through changes to legislation, policies and regulations.

Justification: State and county laws, policies and regulations are unclear and often inconsistent.

Lead Agencies: Montgomery County Department of Transportation, Planning Department and Police Department, and Maryland State Highway Administration

2.4 Replace the State's Marked Bike Lane Policy



Pursue replacement of the Maryland State Highway Administration's marked bike lane policy with one that is consistent with achieving a low-stress bicycling network.

Justification: The state's marked bike lane policy[7] requires that all road projects involving widening or new construction include the installation of conventional bike lanes. In addition, the policy considers installing conventional bike lanes as part of all activities that disturb the paved roadway area, disturb the adjacent curb or adjust lane striping. **While conventional bike lanes are appropriate in some locations, they are a poor use of the public right-of-way when implemented on roads with four or more lanes of traffic, a 30 mph or faster posted speed limit, or a road that is traveled by more than 6,000 vehicles per day, because few people will be comfortable using them.** In many instances, a sidepath or separated bike lane would be the more appropriate, less stressful facility. Additional flexibility in design is needed with the marked bike lane policy.

Lead Agencies: Montgomery County Government

2.5 Develop a County Policy on E-Bikes



Electric bicycles (e-bikes) are the fastest growing market for bicycles in the United States and a consistent policy regarding this type of transportation is needed in Montgomery County.

Justification: E-bikes make bicycling a viable transportation option for more people, reduce barriers for people who travel longer distances, carry heavy loads or passengers, or face other challenges that might preclude using a traditional bicycle to make a trip. At the same time, e-bikes also raise fears among some people that trails and other bikeways will become speedways. Currently, e-bikes are not permitted on county park trails, but are permitted on National Park Service trails and other shared use paths. The updated policy should establish context-sensitive regulations that are intuitive and consistent.

Lead Agencies: Montgomery County Government

2.6 Establish Level of Traffic Stress Targets



Establish Level of Traffic Stress targets, including a "low" level of traffic stress countywide and a "very low" level of traffic stress within the vicinity of schools, libraries, parks and recreation centers on all roads where it is legal to ride a bicycle.

Justification: A "low" level of traffic stress is appropriate for most adults and a "very low" level of traffic stress is appropriate for most children.

Lead Agencies: Montgomery County Department of Transportation, Planning Department

[7] Bicycle Policy & Design Guidelines, Maryland State Highway Administration, January 2015.

2.7 Update Context-Sensitive Road Design Standards



Montgomery County's context-sensitive road design standards need to be updated to include all bicycle facility types outlined in the Bicycle Facility Toolkit in Appendix B. These types include separated bike lanes, buffered bike lanes, advisory bike lanes, neighborhood greenways, shared streets and protected intersections. Obsolete bikeways, such as wide outside lanes, should be removed from the standards. Out-of-date bikeway applications, including conventional bike lanes on major highways, arterials and minor arterials, should likewise be removed from the standards.

Justification: Montgomery County road design standards are inconsistent with the recommendations in this plan.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Planning Department

2.8 Compare all Designed Projects to Best Practices



Several capital projects that include bicycle and pedestrian elements were designed years ago and do not reflect best practices. These efforts include the Falls Road and Seven Locks Road Hiker / Biker projects. The Montgomery County Department of Transportation should review and upgrade the design for bikeway projects that have been designed, but have not yet been implemented. The agency should compare current designs to best practices for bikeways.

Justification: Many capital projects with bicycle elements have completed designs that no longer reflect best practices. Montgomery County should revisit these designs rather than proceed with projects that will need to be upgraded later at a higher cost.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Planning Department

2.9 Make Separated Bikeways the Preferred Bikeway Facility



Establish separated bikeways (separated bike lanes and sidepaths) as the preferred bicycle facility classification in Montgomery County's context-sensitive road design standards. This classification applies to roads with four or more lanes of traffic, traffic speeds of 30 mph or faster, with traffic volumes anticipated to exceed 6,000 vehicles per day and on commercial streets with on-street parking.

Justification: Separated bikeways, including separated bike lanes and sidepaths, encourage bicycling on roads with high traffic volumes, high speeds and in commercial areas.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Planning Department

2.10 Make Protected Intersections the Preferred Intersection Type



Revise Montgomery County's context-sensitive road design standards to make protected intersections the preferred type of intersection treatment at all intersections where at least one street is recommended to have a sidepath, separated bike lane, buffered bike lane or conventional bike lane.

Justification: Protected intersections improve safety for all modes of transportation by slowing traffic and consolidating conflicts to a single point so that remaining minimal conflicts can be mitigated.

Lead Agency: Montgomery County Department of Transportation

Supporting Agency: Montgomery County Planning Department

2.11 Consolidate Driveways along Master-Planned Bikeways



Develop policies to encourage greater consolidation of driveways as part of facility planning and development approvals along master-planned bikeways.

Justification: Driveways create a conflict area between bicyclists and motorists, and stronger policies are needed to require greater driveway consolidation.

Lead Agency: Montgomery County Government

2.12 Develop a Shared Lane Marking Policy



Develop a policy for the use of shared lane markings, also known as sharrows, that indicates when these pavement markings are appropriate. This policy could include low-volume and low-speed streets, such as neighborhood greenways, where sharrows reinforce bicyclists' right to bicycle in the center of the lane and can serve a wayfinding function.

Additionally, the sharrow policy could also be used on an interim basis on streets that are master-planned for other bicycle facilities and serve a critical network function in connecting major destinations, but where implementation of the master-planned bicycle facility may take several years to be completed.

Justification: Montgomery County does not have a policy that specifies when it is appropriate to use shared lane markings. The current implementation of sharrows is confusing to both motorists and bicyclists, as it is not uniformly applied throughout the county.

Lead Agency: Montgomery County Department of Transportation

2.13 Develop Bicycle Parking Standards for County Facilities



Establish short-term bicycle rack standards for use at county facilities based on those outlined in the Association of Pedestrian and Bicycle Professionals *Bicycle Parking Guidelines, 2nd Edition.*

Justification: Public buildings should model best practices in the use of bicycling parking. However, Montgomery County continues to install substandard short-term bicycle parking racks at county facilities.

Lead Agency: Montgomery County Department of General Services

2.14 Reassess Road Code Urban Area Boundaries



The road code urban area designation, identified through master plans and County Council resolution, reduces the design speed of roads by narrowing traffic lanes and reducing turning radii and speed limits. Assess the existing road code urban area boundaries to determine if additional areas should be classified as urban based on existing zoning and proximity to major existing and planned transit stations.

Justification: There are several areas in Montgomery County that are not currently designated as urban, even though they are governed by mixed-use or high density residential zoning that will likely generate high levels of walking and bicycling. Over time, designating additional areas as urban will help to encourage more walking and bicycling, as narrower traffic lanes and slower speeds create a safer and more comfortable walking and bicycling environment. Narrowing traffic lanes can also provide additional space for bicycle and pedestrian infrastructure.

Lead Agency: Montgomery County Planning Department

2.15 Develop Standards for Trail Crossings at Major Roads



Establish a policy of improving trail crossings of roads with three or more lanes of traffic or a posted speed limit of 30 mph or greater. Improvements to trail crossings could be made in a variety of ways, including:

- Traffic calming that removes traffic lanes and / or reduces the design speed of the road,
- Reducing conflicts by realigning the trail to an existing signalized intersection, providing a grade separated crossing, or adding new traffic signalization, and / or
- Other improvements that increase the safety and comfort of the crossing.

Justification: The low-stress bicycling experience that trails provide is interrupted where trails cross high speed or multilane roads.

Lead Agencies: Montgomery County Department of Transportation, Department of Parks

Supporting Agency: Montgomery County Planning Department

2.16 Develop Protocols for Bicycle Facility Closures and Detours



Develop a protocol for bikeway closures and detours to ensure that comparable bikeways are provided to the extent possible, adequate signing is supplied to communicate the detour to bicyclists and the public is given adequate notice of the detour. When a public right-of-way occupancy permit authorizes blockage of a sidewalk or bikeway, the holder of the permit should be required to provide safe accommodation for pedestrians and bicyclists using the same traffic control practices that would be applied when a motor vehicle lane is closed.

Justification: Adequate bicycle and pedestrian facilities should be maintained when bikeway and pedestrian closures and detours are needed.

Lead Agency: Montgomery County Department of Transportation

2.17 Establish Vision Zero Collision Review Team



Form a multi-disciplinary, multi-agency collision review team to analyze and respond to every fatal crash in Montgomery County. This team should identify the causes of the fatality and recommend appropriate street design changes, policy changes and other actions. The team should monitor whether the changes have been addressed, determine the causes of the fatality and recommend additional changes if the causes have not been sufficiently addressed. A publicly available report should be issued for every fatal crash.

Justification: A multi-disciplinary team is needed to identify the causes of a fatal crash, including failure to follow the rules of the road and road design. This team is also recommended in the Vision Zero Two-Year Action Plan.

Lead Agency: Montgomery County Department of Transportation, CountyStat, Maryland State Highway Administration, Montgomery County Planning Department

2.18 Provide Open Access to Crash Data



Publish online, once per quarter, the following data related to each fatal and serious injury crash that occurred in the preceding quarter, including:

- Date and time of the crash.
- Type of motor vehicle or motor vehicles involved in the crash.
- Location and coordinates of the crash.
- Number of fatalities or injuries that result from the crash, disaggregated by fatality or serious injury and mode of transportation.
- Available demographic information about the person or persons involved in the crash.
- Human factors that contributed to the crash, such as intoxication, inattention or distraction, speeding or failure to yield.
- Road design factors, such as infrequently spaced safe crossings, road design speed, number of lanes, etc.

Justification: Accurate, complete, and accessible data will help Montgomery County implement its Vision Zero initiative by identifying high priority locations for safety improvements, analyzing the impacts of street design features, creating more accurate benchmarks for measuring safety improvements over time, promoting transparency and ensuring the public's ready access to important safety information. This data is also recommended in the Vision Zero Two-Year Action Plan.

Lead Agency: Montgomery County Police Department, CountyStat

2.19 Update the Zoning Code



Amend the Montgomery County Zoning Ordinance to improve the bicycle parking and end-of-trip bicycle facility requirements.

Justification: While the zoning code revisions in 2014 introduced major improvements for the provision of bicycle parking, showers and changing rooms, additional updates are needed to clarify existing requirements and to meet industry best practices, including requirements to:

- Incentivize bicycle rooms as the preferred form of long-term bicycle parking in residential and commercial buildings.
- Disallow bicycle lockers and bicycle racks as long-term bicycle parking in residential and commercial buildings.
- Identify performance standards for stacked bike racks.
- Provide repair station requirements in the long-term bicycle parking section of the code.
- Provide a portion of long-term bicycle parking to accommodate larger bicycles, including tandems, bicycles with trailers and cargo bikes.

Justification: Higher-quality bicycle parking encourages more bicycling.

Lead Agency: Montgomery County Planning Department

2.20 Revise the Bicycle to School Policy



Description: Develop a countywide policy that permits children to bicycle to school.

Justification: School principals retain the authority to determine when students can bicycle to school and many prohibit bicycling due to safety concerns.

Lead Agency: Montgomery County Public Schools



Photo: Lynn Ho
Best Family Picture
Bicycle Master Plan Photo Contest



IMPLEMENTING THE VISION

Developing a plan for a world-class bicycling community is the starting point. Taking the vision of the Bicycle Master Plan to reality will require a transformation in how Montgomery County incorporates bicycling into all aspects of its decision-making. The five main components of the implementation strategy are to:

1. Encourage a strong bicycling community.
2. Establish a task force to oversee implementation of the Bicycle Master Plan.
3. Develop small area infrastructure plans that serve as a bridge between the master plan and its implementation in areas of the county with significant development potential.
4. Upgrade design standards to reflect best practices.
5. Update mechanisms for implementation, bringing together public and private entities to create a high-quality bicycling network.
6. Prioritize the recommendations of the Bicycle Master Plan.

ENCOURAGING A STRONG BICYCLING COMMUNITY

Creating a world-class bicycling community requires more than building a bicycling network. The network needs to be promoted and supported by a vibrant bicycling culture. A world-class bicycle plan reaches beyond infrastructure to address programmatic elements and foster a culture of bicycling.

Montgomery County government can help by establishing a BikeMontgomery Outreach Program, described on page 99 of this plan. Indicators of a healthy bicycling culture can include high profile public events, popular and festive group rides, places with a reputation as a bicycling destinations or simply a common acceptance among most people that bicycling is a normal, practical and useful mode of transportation.





The Washington Area Bicyclist Association's Celebrate the Silver Spring Circle! in 2017 was supported in part by the Montgomery County Planning Department and Department of Transportation.

ESTABLISHING A BICYCLE MASTER PLAN IMPLEMENTATION TASK FORCE

Upon approval of the Bicycle Master Plan, the County Executive will establish a Bicycle Master Plan Implementation Task Force to guide implementation of the recommendations in the plan. This staff-level task force will include representatives of the Montgomery County Department of Transportation (Director's Office, Traffic Engineering, Transportation Engineering), Maryland State Highway Administration, Planning Department (Development Review, Bicycle Planning), Department of Parks, Department of General Services, Department of Permitting Services and CountyStat. This task force will meet regularly to discuss ways to encourage bicycling and facilitate implementation of the Bicycle Master Plan. It will be jointly chaired by staff of the Montgomery County Department of Transportation and Planning Department, and will report annually to the Montgomery County Council about the progress of the plan.

SMALL AREA INFRASTRUCTURE PLANS

The Bicycle Master Plan offers a high-level vision for a network of low-stress bikeways and bicycle storage facilities that will make Montgomery County a premier location for bicycle-based transportation and recreation. Although this plan provides many recommendations intended to accomplish this vision, it recognizes that a countywide planning effort cannot anticipate the site-specific complexities associated with each recommendation, including potential impacts on private property, traffic flow and environmental resources.

To facilitate the implementation of this plan's recommendations, the Montgomery County Department of Transportation and Montgomery County Planning Department will collaborate to create a series of small area infrastructure plans for areas of the county with high development potential. These communities include, but are not limited to, downtown Bethesda, downtown Silver Spring, Germantown, the Life Sciences Center, Rock Spring, Twinbrook, Wheaton central business district, White Flint and White Flint 2. It is anticipated that the cost of these studies will be recouped through greater construction of the bikeway network by developers as the county is able to provide developers with greater direction in designing and building bikeways.

The small area infrastructure plans will consider previous planning efforts, including the Bicycle Pedestrian Priority Area studies completed by the Montgomery County Department of Transportation and may incorporate recommendations from those studies.

The Montgomery County Planning Board may approve additional locations as appropriate for the development of small area infrastructure plans. Such plans will provide interim designs, where appropriate, and permanent designs for the bicycle facilities recommended in the Bicycle Master Plan. An interim design option will include a bikeway network that is likely to be implemented through public or private efforts, within the next five years. The permanent design option will outline what is possible during a longer period, when facility planning projects are implemented and developments are constructed.

In creating small area infrastructure plans for these areas, Montgomery County Department of Transportation and Planning Department staff will consider site-specific challenges associated with implementing the Bicycle Master Plan's recommendations and settle on preferred design options. This process will be particularly helpful in areas recommended for separated bike lanes, which can be designed in many different configurations. While a small area sketch plan is not intended to provide the only acceptable option for meeting the recommendations of the larger plan, it will offer both public and private developers a starting point for designing projects in conformance with those recommendations.

The Bicycle Master Plan envisions all small area infrastructure plans completed within three years of the plan's adoption by the Maryland-National Capital Park and Planning Commission. Each small area sketch plan must be approved by the Montgomery County Planning Board before it is considered complete.

BIKEWAY DESIGN STANDARDS

Bicycle facilities must be high-quality to attract bicyclists of all ages and bicycling abilities. For example, bike lanes designed without gutter seams, separated bikeways wide enough to accommodate expected bicycle volumes and off-street bikeways constructed with materials that will not degrade quickly as they age, are all critical to ensuring the development of a world-class bicycling network. To achieve the vision of the Bicycle Master Plan, Montgomery County will continue to update its Context-Sensitive Road Design Standards to ensure that it is delivering a high-quality product.

Trails and Sidepaths

Trails and sidepaths will continue to be the backbone of a low-stress bicycling network in most areas of Montgomery County, due to existing investments and compatibility with surrounding land uses. Unfortunately, there is a legacy of poor design of trails and sidepaths throughout the United States and these bikeways often do not create a high-quality bicycling environment. To improve the quality of new and existing trails and sidepaths, Montgomery County must revise its design standards to accommodate:

- **Design Speed:** Trails and sidepaths will be designed to enable a design speed of 12 mph in higher activity areas and 20 mph in lower areas (see page 64 for a description of these areas). Note that design speed is influenced by the pavement quality and bikeway curvature, among other conditions, and is not an endorsement of bicycling 20 mph in crowded locations.
- **Bikeway Width:** A bicycling network that allows people of all ages and bicycling abilities to use trails and sidepaths safely and conveniently requires constructing bikeways that are sufficiently wide to enable side-by-side bicycling and passing. Trails and sidepaths will be a minimum of 10 feet wide, although 8 feet is acceptable in areas with an environmental or historic constraint. A width of 11 feet enables two people to bicycle side-by-side while being passed by another bicyclist. A 14-foot-wide path is recommended on high volume trails and sidepaths. Trails of between 19 and 23 feet wide are recommended on the Breezeway Network and where a high level of existing or anticipated walking and bicycling makes it desirable to separate walking and bicycling. See Appendix B for additional design details.
- **Surface Quality:** Sidepaths in Montgomery County are plagued by degrading pavement, including pavement cracking and buckling due to the growth of tree roots. Sidepaths will be designed to withstand such root growth and vehicle loading since maintenance trucks will use them on occasion. These requirements may result in different designs for subgrade and pavement thicknesses based on soil conditions. According to the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities, shared use paths, at a minimum, should

have a total pavement depth of 6 inches, including the surface course and the base course (typically an aggregate rock base) placed over a compacted subgrade. There may be other ways to reduce pavement cracking and evolving best practices should always be considered.

- **Intersections:** The design of sidepaths and trails will consider traffic control or grade separation at all mid-block crossings. Bicyclists (and pedestrians) should not be required to travel an unreasable distance to get to a safe crossing location.
- **Driveways:** Driveways must be consolidated to the extent possible as part of development approvals and capital projects. On properties where driveways remain, property developers must improve sightlines for all users, reduce the speed of traffic and provide visual cues to motorists to look for pedestrians and bicyclists. Montgomery County will consider greater use of raised crossings along all minor street crossings and high-volume driveways.
- **Pedestrian/Bicycle-Scale Lighting:** Lighting is essential to provide safe and secure walking and bicycling facilities, and will help increase use of bikeways during the evening, especially during winter months when the sun sets earlier. While bicycle lights help with safety, they are insufficient to create a secure environment and are not typically used by pedestrians who will share these spaces.
- **Buffer from Traffic:** A minimum 5-foot-wide buffer is needed from vehicular traffic. Wider buffers are appropriate along roads with higher design speeds.
- **Obstructions:** Sidepaths must be direct and free from obstructions.



Pavement cracking is common on sidepaths

Separated Bike Lanes

Jurisdictions across the United States are using different approaches to implement separated bike lanes. Many are constructing these bikeways as interim / low-cost retrofits of existing rights-of-way using flexible delineator posts and paint, while others are constructing more permanent forms of separation, such as curb-separated bike lanes, that represent a permanent design standard. Although interim separation types can be easier to implement, agencies have raised concerns about their maintenance costs and aesthetics, noting that some of these separation types provide less protection from adjacent automobile traffic than more permanent solutions, which can be more aesthetically pleasing, although they often carry a higher cost.

Interim Separated Bike Lanes

As with many jurisdictions, Montgomery County is focusing its efforts at building a network of separated bike lanes as quickly as possible to provide responsiveness to public demands for improved bicycling and allow ongoing evaluation of new approaches to bikeways. Interim separated bike lanes address separation from traffic using flexible delineator posts, planters, parking stops, concrete barriers or rigid bollards, and are shown on the following pages. These projects substantially improve the comfort of bicycling by reducing traffic stress and make bicycling accessible to a greater segment of the population.

Responding to the strong desire to implement a network of bikeways as quickly as possible, these projects tend to employ interim designs that are low cost and may need to be upgraded over time to incorporate urban design and stormwater management opportunities and to achieve the lowest stress possible. Three features of interim separated bike lanes are discussed below.

Separated Bike Lane Widths

Interim separated bike lanes will have the following widths:

- One-way separated bike lanes: 5 feet at a minimum, exclusive of shy distances.
- Two-way separated bike lanes: 8 feet at a minimum, exclusive of shy distances.

Intersections

While the ultimate objective is to implement protected intersections as part of separated bike lane projects, this will not be feasible with all interim projects. Bike boxes and two-stage turn queue boxes are ways to improve intersections in the interim until full protected intersections can be implemented. Bike lane drops are inappropriate for interim separated bike lanes.

Separation from Traffic

Interim separated bike lanes address separation from traffic using flexible delineator posts, planters, parking stops, concrete barriers or rigid bollards, and are shown on the following pages. These forms of separation help to reduce the stress of bicycling, and can be improved over time as funding becomes available.



Interim separated bike lanes on Nebel Street in White Flint can be upgraded over time by new development or county projects



Paint and flexible delineator posts provide separation from traffic for these bike lanes in Washington, DC. Photo: Toole Design Group

INTERIM SEPARATION TYPE

Flexible Delineator Posts

LEVEL OF COMFORT/PROTECTION

- May not offer a high level of comfort to some riders due to lack of continuous separation.
- May be less suitable for young children due to the permeability of the separation.

AESTHETICS

- Less attractive than some other separation types. Multiple options for post types (color, shape, etc.).

CONSIDERATIONS

- Maintenance/ durability issues. May require closer spacing if parking encroachment is an issue.
- Easily accommodate emergency vehicle access.
- Fewest storm water/ drainage implications.

CAPITAL COSTS - Low, easy to install and remove

OPERATING COSTS - Low to medium (depending on frequency of damage).



Parking stops provide separation from traffic for these bike lanes in Washington, DC.

INTERIM SEPARATION TYPE

Parking Stops/ Precast Concrete Surface-Mounted Medians

LEVEL OF COMFORT/PROTECTION

- May not offer a high level of comfort due to limited height.
- Low profile reduces risks of pedal strikes.

AESTHETICS

- Can be less attractive than some other separation types.
- Multiple options (color, pattern, etc.) for parking stop and precast concrete median types.

CONSIDERATIONS

- Require minimal buffer space. Highly durable.
- Can create tripping hazards and access issues when adjacent to on-street parking.
- May need additional vertical objects or on-street parking to increase comfort of bicyclists.
- Low impact on storm water drainage.

CAPITAL COST - Low to medium

OPERATING COST - Low



Parked cars provide separation from traffic for this bike lane in Silver Spring, MD.

INTERIM SEPARATION TYPE

Parked Cars

LEVEL OF COMFORT/PROTECTION

- Moderate comfort due to potential for cars to be parked too close to the bikeway.

AESTHETICS

- Can be less attractive than some other separation types.

CONSIDERATIONS

- Separation from traffic should be at least 3 feet wide.

CAPITAL COST - Low to medium

OPERATING COST - Low



Planters provide separation from traffic for these separated bike lanes in Vancouver, British Columbia, Canada.

INTERIM SEPARATION TYPE

Planter Boxes

LEVEL OF COMFORT/PROTECTION

- High comfort due to heft of planters and consistent wall of separation from traffic.

AESTHETICS

- Provides enhancement to streetscape with plantings. Multiple options for planter choice (size, color, shape, etc.).

CONSIDERATIONS

- Higher long-term maintenance costs (landscaping) than other types of separation.
- May not be appropriate for higher-speed roadways.
- Additional bike lane width required to provide offset from vertical obstruction.
- Lower impact on drainage if placed with spaces between planter boxes.

CAPITAL COST - Low to medium

OPERATING COST - Medium to high



Concrete barriers provide separation from traffic on this bike lane in Vancouver, British Columbia, Canada.

INTERIM SEPARATION TYPE

Concrete Barriers

LEVEL OF COMFORT/PROTECTION

- High level of protection due to consistent wall and heft of separation.

AESTHETICS

- Lower aesthetic quality, though can be constructed with small planter area on top or decorative inset panels on sides.
- May require a crash cushion at ends.

CONSIDERATIONS

- Potential drainage and maintenance vehicle access issues.
- Incompatible with on-street parking.
- Additional bike lane width required to provide offset from vertical obstruction.
- Lower impact on drainage if placed with spaces between barriers.

CAPITAL COST - Medium

OPERATING COST - Low



Rigid bollards provide separation from traffic for these bike lanes. Photo: People for Bikes

INTERIM SEPARATION TYPE

Rigid Bollards

LEVEL OF COMFORT/PROTECTION

- High level of comfort due to very durable nature of bollards.
- Without additional low vertical separation (for example, a curb), may be less suitable for young children.

AESTHETICS

- Can add to aesthetic of streetscape in bollard choice and integrates with existing or desired design.

CONSIDERATIONS

- May not be appropriate on higher speed roadways.
- May require closer spacing if parking encroachment is an issue.
- Low impact on storm water drainage.

CAPITAL COST - Medium

OPERATING COST - Low

Permanent Separated Bike Lanes

Permanent separated bike lanes create bicycling environments that are appropriate for people of all ages and bicycling abilities. They expand the capacity of the bicycling network by implementing wide bike lanes that enable passing and incorporate more aesthetically pleasing treatments and stormwater management.

Separated Bike Lane Widths

Permanent separated bike lanes will have the following widths:

- One-way separated bike lanes: 6.5 feet at a minimum (8.0 ft preferred), exclusive of shy distances.
- Two-way separated bike lanes: 10 feet at aminimum (11 ft preferred), exclusive of shy distances.

Intersections

Permanent separated bike lanes will reduce conflicts at intersections with protected intersections and mitigate the remaining conflicts.

Separation from Traffic

Permanent separation provides a high level of protection and often has greater potential for placemaking, quality aesthetics and integration with stormwater management. Examples of permanent separation include raised medians and raised separated bike lanes at an intermediate level, and are shown on the following pages. Each of these separation types provides an increasingly higher level of comfort for bicycling, separation from traffic and opportunity for improved aesthetics within the streetscape. Permanent separation can reduce maintenance costs associated with temporary separation and improve durability and bicyclists' safety on higher volume roadways.



Separated bike lanes on Maine Ave in Washington, DC



Raised medians provide separation from traffic for these bike lanes. Photo: Toole Design Grouo

PERMANENT SEPARATION TYPE

Raised Medians

LEVEL OF COMFORT/PROTECTION

- High level of comfort due to durability of median, potentially enhanced with plantings that provide additional height and sense of separation.

AESTHETICS

- With plantings, can add to streetscape aesthetic.
- Plantings will require additional maintenance.

CONSIDERATIONS

- Passenger unloading and pedestrian pass-through areas needed to accommodate on-street parking.
- Opportunity to incorporate green storm water infrastructure.
- High impact on storm water drainage; must be considered in design.

CAPITAL COST - High

OPERATING COST - Low to high (depending on plantings).



A landscaped buffer will provide separation from traffic on this separated bike lane at an intermediate level between the street and sidewalk in Vancouver, British Columbia, Canada.

PERMANENT SEPARATION TYPE

Raised Lane

LEVEL OF COMFORT/PROTECTION

- High level of comfort due to grade separation from automobiles.
- Adequate separation from pedestrians needed when at sidewalk level to ensure bicyclist and pedestrian comfort.

AESTHETICS

- Choice of pavement types for bike lane, buffers and sidewalk materials can enhance streetscape aesthetic.

CONSIDERATIONS

- Transitions at intersections, driveways and pedestrian crossings require additional consideration.
- Greater flexibility for curb reveal and drainage.
- May necessitate moving utility locations.

CAPITAL COST - High

OPERATING COST - Low

Phasing Separated Bike Lane Implementation

While Montgomery County should strive to implement permanent separated bike lanes, there are many cases where this will not be feasible in the short-term. Interim separated bike lanes can offer substantial benefits over the status quo.

Interim separated bike lanes will be implemented when:

- Project constraints, such as available right-of-way or funding, do not allow implementation of a permanent design in the short term.
- Interim separation will be upgraded in the future by private development or large-scale capital projects.
- There is a need to test design effectiveness over the short term or to quickly respond to significantly increased bicycle ridership, public demand or other issues.

Permanent separated bike lanes will be implemented when:

- Private developers are required to implement frontage improvements or internal road as part of their projects.
- The bikeway will be along a new or reconstructed road that will be constructed by public agencies or private developers.
- The bikeway will be constructed as part of a larger capital road or bicycle project.

Striped Bikeways

The Montgomery County Department of Transportation and the Maryland State Highway Administration install striped bikeways on roads through repaving projects when a lane diet (narrowing lanes) or road diet (removing lanes) is feasible. The Bicycle Master Plan supports striped bikeways where they are recommended in the bikeways section of this plan and on primary residential streets or other non-commercial streets. Striped bikeways are also recommended where the posted speed limit does not exceed 30 mph, where there are no more than three lanes of traffic, where traffic volumes do not exceed 6,000 vehicles per day and in non-commercial areas.

This plan endorses installing temporary striped bikeways as part of street resurfacing projects, where the striped bikeway is extended to the intersection, because they can reduce traffic stress by narrowing the road and providing a designated space for bicycling. Where striped bikeways are temporarily installed, the space can later be repurposed to install a master-planned recommended bikeway or achieve another county purpose.

IMPLEMENTATION MECHANISM

Montgomery County's bicycling network will be implemented through a number of mechanisms:

- Montgomery Country Capital Improvements Program
- Montgomery County Planning Board's approval of development
- Public facility projects undertaken by the Montgomery County Department of Transportation, Maryland State Highway Administration and other agencies

Implementation Through Capital Improvements Program

One way that bicycle facilities are implemented in Montgomery County is through the capital improvements program. Montgomery County's capital budget provides the spending authority that county agencies need to implement projects. This six-year program for construction projects and improvements is comprehensively amended on even-numbered years and with less substantial adjustments during odd-numbered years.

The capital budget includes funding for several programs that improve bicycling, described in the programs section of this plan. Major funding programs include stand-alone projects, such as construction of new roads that include bikeways, stand-alone bikeway projects added to existing roads and facility planning projects that enable preliminary engineering of projects which include bikeways.

A typical facility planning process should include the components below. The first three components are included in most facility planning studies. This master plan recommends a new, fourth component:

1. **Review of master plan recommendations:** The starting point for any facility planning study should be to implement the master plan-recommended bikeway along the study corridor.

2. **Determine if space is sufficient to implement a master-planned bikeway:** One of the initial considerations facing designers is whether the master-planned bikeway fits within the existing right-of-way without excessive impacts to the surrounding community. If the master-planned bikeway fits, the project should begin with more detailed design following the master plan recommendation. If the master-planned bikeway does not fit, designers need to consider whether it is feasible to expand the existing right-of-way or repurpose space used within the existing right-of-way to accommodate the master-planned bikeway.

3. **Expand or repurpose the right-of-way:** In determining whether existing space can be repurposed, designers should consider road diets and lane diets. If sufficient space can be repurposed from existing elements in the roadway, the project should begin with more detailed design following the master plan recommendation. If sufficient space within the existing right-of-way cannot be repurposed, additional right-of-way may need to be purchased. If neither option is desirable, designers need to consider interim solutions.

4. **Interim solutions for bikeways:** Interim solutions should identify a moderate stress bikeway along the corridor and a low-stress bikeway on a parallel route where possible. Over the long-term,

designers should revisit the corridor to determine whether it becomes feasible to implement a low-stress bikeway along the road because additional right-of-way is available, fewer lanes are needed or some other reason.

Extensive public outreach is needed during project implementation as well as early coordination with project stakeholders, such as the Maryland State Highway Administration and Maryland-National Capital Park and Planning Commission.

Facility Planning Process

Facility planning for transportation projects, including bikeways, serves as the transition between the master plan and a stand-alone project within the county's Capital Improvements Program (CIP).

During the first phase of facility planning, the Montgomery County Department of Transportation (MCDOT) performs a rigorous investigation into critical project elements, including purpose and need, usage forecasts, traffic impacts, community impacts, public participation, cost estimates and sources of funding.

Based on these factors, MCDOT determines if the project has the merits to advance to the second phase when 35 percent construction plans are developed. The plans should show the specific alignment and detailed features of the project so property and environmental impacts and costs can be more accurately assessed. MCDOT then submits the project for a "mandatory referral" review by the Montgomery County Planning Board, which provides advisory comments on the project. Public testimony is considering during the mandatory referral hearing.

Once the Planning Board review is completed, the County Council and County Executive hold project-specific public hearings to determine whether the proposed facility has the merits to advance in the capital improvements program as a fully funded stand-alone project and begin final design and construction. Public testimony is considered during these hearings.

Implementation Through Development Approvals

Like many jurisdictions, Montgomery County supplements its capital projects by requiring the construction of bikeways through the development approval process. Developers are required to construct bicycle facilities within and along the frontage of their projects, as required by applicable master plans and local law. This private construction can result in substantial contributions to the bicycling network, such as long segments of on-road bikeways adjacent to larger-scale development projects. Other advantages to requiring developers to implement bicycle network improvements as part of their development projects include:

1. Reducing costs for Montgomery County by requiring construction by the private sector.
2. Encouraging the construction of bicycle facilities when adjoining properties that have frontage along the same master-plan bikeway redevelop.
3. Reducing future impacts to the community resulting from separate construction projects.
4. Avoiding the difficulty of constructing a bikeway in the public right-of-way, where a property owner perceives the space to be privately owned.

For smaller development projects, constructing incremental bicycling improvements at the time of development is desirable as long as it does not result in unsafe conditions. In cases where the Planning Department and MCDOT staff determine that the project is unsafe, the developer must pay a *pro rata* share of the proposed bikeway or protected intersections construction costs to an appropriate capital improvements project. To determine the amount of the contribution, the developer must prepare a concept plan (30 percent engineering design / horizontal alignment) for the proposed bikeway or protected intersection for approval by MCDOT on county roads and MDOT / SHA on state roads.[8] The applicant's financial contribution to the future construction of the bikeway or protected intersections can be credited toward the applicable development impact taxes, pursuant to the Montgomery County Code.

In addition, where staff determines that construction of a bikeway or protected intersection at the time of development is not desirable, the developer must facilitate future implementation of the bikeway or protected intersection by dedicating land or establishing other necessary easements to accommodate the future bikeway or protected intersection and ensuring that utilities, stormwater management facilities, streetscape improvements, landscaping and other features do not conflict with the future implementation of the permanent bikeway. For on-road striped bikeways, the developer must also pave shoulders that will be delineated with pavement markings. **If the minimum right-of-way recommended in a master plan is insufficient to accommodate the bicycle improvement, additional dedication or easements will be required to implement the bicycle improvement.** The small area infrastructure plans, described above, will help facilitate this process and limit conflicts between proposed bicycle facilities and new development.

The Bicycle Master Plan recommends many types of bicycle facilities throughout Montgomery County (see Appendix B). Where the plan recommends the following bikeways within a proposed private development or along a development's frontage on a public-right-of-way, the development must conform to the following standards, as applicable.

Trails

- Construct all trails internal to the project.
- Construct all trails along the project's right-of-way frontage.

Separated Bikeways

- Construct all separated bikeways (separated bike lanes and sidepaths) internal to the project.
- Construct all sidepaths along the project's right-of-way frontage.
- Upgrade all existing, interim separated bike lanes to permanent separated bike lanes, as discussed in the Bikeways Design Standards section of this plan.
- Construct new permanent separated bike lanes along the project's right-of-way frontage where there are logical end points for the bikeway, such as intersections, intersecting bikeways, pedestrian connections or other locations to be determined by the Montgomery County Department of Transportation.
- Lay the groundwork for future implementation (see sidebar below) of separated bike lanes along the project's right-of-way frontage where there are not logical end points for the bikeway, as determined by the Montgomery County Planning Board. In this case, the developer must make a financial contribution to make up for the difference in cost between laying the groundwork for future implementation of the bikeway and full implementation of the bikeway. This financial contribution will be used by the Montgomery County Department of Transportation to implement bikeway projects within the vicinity of the right-of-way frontage of the development project.

[8] The Montgomery County Department of Transportation and the Maryland State Highway Administration make the final decision in the design and implementation of bikeways through the development review process and capital improvements program.

Striped Bikeways

- Construct all bikeways internal to the project.
- Widen pavement to provide space for striped bikeways.
- Construct new striped bikeways along the project's right-of-way frontage where there are logical termini for the bikeway, such as intersections, intersecting bikeways, pedestrian connections or other locations to be determined by the Montgomery County Department of Transportation.
- Lay the groundwork for future implementation (see sidebar below) of striped bikeways along the project's right-of-way frontage where there are not logical termini for the bikeway, as determined by the Montgomery County Department of Transportation.

Bikeable Shoulders

- Construct all bikeable shoulders along the project's right-of-way frontage.

Shared Roads

- Construct all bikeways internal to the project.
- Construct all bikeways along the project's right-of-way frontage in consultation with the Montgomery County Department of Transportation.

Protected Intersections

- Dedicate right-of-way and implement protected intersection improvements at all portions of the intersection on the project's right-of-way frontage where at least one street is recommended to have a sidepath, separated bike lane, buffered bike lane or conventional bike lane.

Laying the Groundwork for Future Implementation of Bikeways

The Montgomery County Planning Department and Department of Transportation may determine that it is not desirable to require a developer to fully implement a master-planned bikeway or protected intersection on the property's right-of-way frontage because there are no logical end points to do so. In this case the developer will be required to enable the future implementation of the bikeway or protected intersection by dedicating land to the future bikeway or establishing easements where the future bikeway or protected intersection will go. In addition, the developer will ensure utilities, streetscape improvements and landscaping do not conflict with the future construction of the bikeway or protected intersection. Utilities and major streetscape elements, such as trees, will be located in such a way as to avoid the need for removal and reconstruction when the bicycle facility is implemented. For striped bikeways, this preparation includes paving shoulders that will be later marked with bike lanes. The prioritized small area infrastructure plans described above will help facilitate this process and limit conflicts between proposed bicycle facilities and new development.

Additional Requirements

A countywide plan such as the Bicycle Master Plan cannot anticipate all opportunities to implement bikeways that might arise. To ensure adequate bicycle facilities throughout the county, all developers must conform to the following standards:

- Developers with projects on non-master planned streets must implement the general bikeway application on page 65.
- When a development project has frontage on a street paralleling a major highway or arterial road and there is a gap in the street grid parallel to the major highway or arterial road, the developer must extend the street grid to the extent possible.
- Developers constructing dead-end streets must link these streets with trails to the extent possible.
- The sidepath and separated bike lane recommendations in this plan often recommend the side of the road where the bikeway is envisioned and whether separated bike lanes are envisioned to be one-way or two-way. For those bikeways that are listed as "Side TBD" in the bikeway table, the side of the road and the bikeway configuration will be determined by the Montgomery County Department of Transportation and Planning Department staff during a small area sketch plan study, a facility planning study or the development review process, whichever comes first.

Implementation Through Public Facility Projects

While the capital improvements program and the development approval process are the major mechanisms for implementing bikeways, other county projects offer the ability to realize these projects. Schools, libraries, recreation centers and other public facilities are important destinations that can benefit from and contribute to bicycling in Montgomery County. While it is preferable that master-planned bikeways are implemented as part of these county projects, at a minimum, the right-of-way for the bikeway must be provided to accommodate future improvements to infrastructure, streetscapes and bike facilities within the dedicated space.

All county public facility projects must ensure that utilities, streetscape improvements and landscaping do not conflict with the future implementation of the bikeway network. As with development approvals, utilities and major streetscape elements, such as trees, must be located in such a way as to avoid the need for removal and reconstruction when a bicycle facility is later implemented.

Public facility projects must also consider how people access and circulate on bicycles within the site. This accommodation not only includes the provision of very low stress bikeways that are appropriate for people of all ages and bicycling abilities, but also secure bicycle storage for people using the public facility.

IMPLEMENTING SEPARATED BIKE LANES IN CONSTRAINED CORRIDORS

In much of Montgomery County, street right-of-way is limited and there are often competing demands on using the available space. For this reason, building the county's planned network of separated bike lanes will require tough choices and trade-offs along the way. Guidance on designing separated bike lanes in constrained corridors is needed because in most cases, limited rights-of-way mean that installing a separated bike lane will require narrowing or reconfiguring an existing element of the streetscape, be it a travel lane, a street buffer or another element. While each element has unique considerations that inform its importance and design along a particular corridor, the interplay between streetscape elements can change the utility and effectiveness of the separated bike lane.

A context-sensitive evaluation of each location is required to determine the priority of streetscape elements without compromising any user's safety or inhibiting the street's function within the multimodal transportation network. Developing general guidance on priority streetscape elements based on the local context of the street under consideration will save county planners time in performing each individual context-sensitive evaluation and help ensure consistent application.

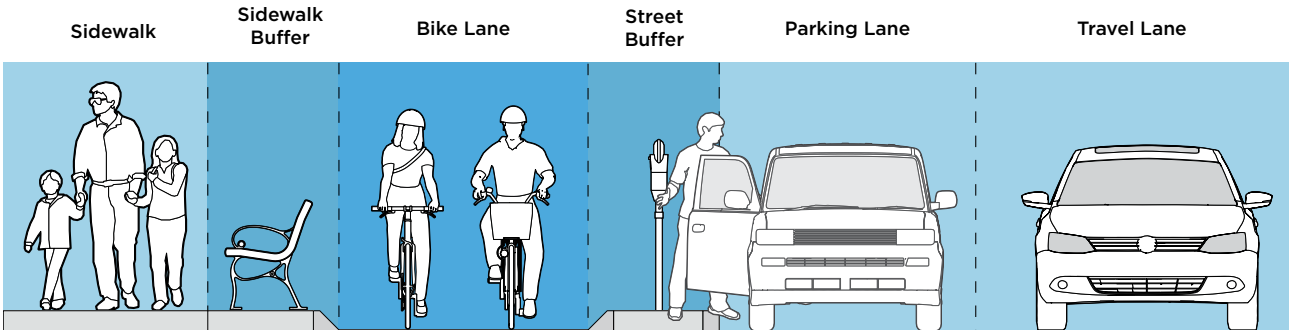
Above all, the following guidance is shaped by the central consideration that the installation of a separated bike lane should not detract from the safety and comfort of those walking. Fortunately, if designed appropriately, separated bike lanes can enhance the walking experience by providing greater separation between bicyclists and pedestrians, and pedestrians and motor vehicles, improving the aesthetic of the overall streetscape (if street trees and beautification are part of the design) and calming traffic (if lane narrowing or curb radii improvements are part of the design).

Designing Separated Bike Lanes In Constrained Corridors

Designing a separated bike lane in a constrained corridor involves reallocating space from one or more streetscape zones and installing a bicycle facility that is appropriate in type and width to the corridor. The following section discusses where the space can be reallocated to make room for the appropriate bicycle facility.

Starting at the building faces and moving toward the street centerline, the zones are as described below.

- **Sidewalk:** The area designated for pedestrian travel.
- **Sidewalk Buffer:** The area located between the separated bike lane and the sidewalk. Its presence helps to discourage encroachment between bicyclists and pedestrians.
- **Separated Bike Lane:** The bicyclist operating space located between the street buffer and sidewalk buffer.
- **Street Buffer:** The area situated between the separated bike lane and motor vehicle traffic. In general, the faster the speed of traffic, the wider the street buffer needs to be in order to create a low-stress bicycling experience.
- **Parking Lane:** Paved areas adjacent to the street curb where motor vehicles can be stored when not in use.
- **Travel Lane:** Paved area of a street that carries automobile traffic through a corridor.



Zones of a separated bike lane street

Narrowing Travel Lanes: When looking for space to install a separated bike lane, narrowing the vehicular travel lanes should be considered first, regardless of the corridor's context. Montgomery County Code specifies the maximum travel lane widths in urban areas and many streets have lanes that are wider than the standard minimum. Specifically, Section 49-32 of the Montgomery County Code sets the maximum lane width as 10 feet for travel lanes in urban areas, although the outside travel lane should be no wider than 11 feet, including the gutter pan or when adjacent to on-street parking. This legislation is supported by the American Association of State Highway and Transportation Officials (AASHTO) Green Book, which specifies 10-foot travel lanes on roadways with speed limits below 45 mph.

Research indicates that 10-11-foot travel lanes on urban and suburban arterials do not have a negative effect on safety or vehicular capacity.[9] Narrowing roadways has a traffic calming effect that makes traffic conditions safer for all users, including drivers. The width available for a separated bike lane resulting from the lane diet depends on how wide and how many travel lanes currently exist. As an example, on a four-lane road with 12-foot-wide lanes, narrowing the lanes to 10- and 11-foot widths provides 6 feet that could be reallocated for a separated bike lane.

Eliminating On-Street Parking: Depending on parking lane width, removing one on-street parking lane can provide 7 or more feet for separated bike lanes.

Eliminating Travel Lanes: If a road has more travel lanes than necessary based on traffic volume, the lanes can be removed to provide space for separated bike lanes. There are other instances when travel lane removal should be considered due to the safety or operational benefits of fewer lanes.

Narrowing or Eliminating the Sidewalk Buffer: The space separating the sidewalk from the separated bike lane, which may hold landscaping or street furniture, can be minimized or removed to provide space for the bicycle facility.

Narrowing the Street Buffer: In general, the recommended street buffer width is 6 feet. In constrained conditions, street buffers may be narrowed to 2 feet.

Narrowing Separated Bike Lanes to Minimum Widths: While the ideal width for separated bike lanes is a function of expected peak hour use, in constrained circumstances, there are minimum recommended widths. For one-way separated bike lanes adjacent to curbs, lanes should be at least 5 feet wide. A width of 4 feet is allowed for short sections if vertical separation, such as curbs or planters, is not directly adjacent to the bike lane.

For a two-way separated bike lane, a minimum width of 8 feet is recommended. On constrained corridors with steep grades, wider bike lanes may be provided in the uphill roadway direction to enable faster moving bicyclists to pass slower ones. See Appendix B for more information about separated bike lanes widths.

Narrowing the Sidewalk: If the sidewalk is wider than necessary to accommodate current and planned pedestrian demand, it can be narrowed to provide space for a separated bike lane. Minimum sidewalk width in an urban context is 5 feet. As described below, this minimum sidewalk width is almost always the last resort, as bicycle facilities should enhance and not compromise the quality of the pedestrian environment.

9 Potts, Ingird B., Douglas W. Harwood, and Karen R. Richard. "Relationship of Lane Width to Safety on Urban and Suburban Arterials." Transportation Research Record, Issues 2023 (2007): 63-82.

Defining Street Types

This section presents four different street types and recommends a hierarchy that can help planners consider where to repurpose space for separated bike lanes in a constrained urban environment. When identifying space for separated bike lanes on these corridors, planners should use the table below.

Traffic Priority: These streets carry significant traffic volumes and are major regional travel arteries. Roads that fall into this street type include Georgia Avenue and Colesville Road in Montgomery County.

Sidewalk Café Priority: These are streets with continuous ground-floor retail where outdoor seating and the pedestrian environment are particularly important. One example of this type of street is Woodmont Avenue between Elm Street and Bethesda Avenue in Montgomery County. On these streets, sidewalks and sidewalk buffers should not be narrowed. These streets require ample pedestrian space as an essential part of their public realm, facilitating commerce and social exchange.

On-Street Parking Priority: These streets have a high demand for on-street parking and limited or no off-street short-term parking options located within one or two blocks. One example of this type of street is Cordell Avenue from Old Georgetown Road to Wisconsin Avenue in Montgomery County. On these streets, on-street parking should remain part of the street design. Land uses on these streets require on-street parking to be successful.

Bikeway Priority: These are streets identified as priorities in the Bicycle Master Plan. They connect major destinations where no low-stress bikeway alternatives currently exist within three blocks. An example street is Bradley Boulevard between Wisconsin Avenue and Glenbrook Road in Montgomery County.

	TRAFFIC PRIORITY	SIDEWALK CAFÉ PRIORITY	ON-STREET PARKING PRIORITY	BIKEWAY PRIORITY
Narrowing travel lanes to minimum widths	1	1	1	1
Eliminating on-street parking	2(b)	3(e)	N/A	2
Narrowing or eliminating the sidewalk buffer	3	N/A	3	4
Narrowing the street buffer	4(c)	4	4	5
Narrowing the separated bike lane	5	5	5	6
Narrowing the sidewalk (a)	6	N/A	6	7
Eliminating travel lanes	7(d)	2	2	3

Notes
(a) Narrowing the sidewalk is only appropriate in areas where current or projected pedestrian volumes are low.
(b) Vehicles searching for parking and entering or exiting parking spaces slow through traffic and create vehicular conflicts. The main function of these streets is not affected by parking removal.
(c) On traffic priority streets, higher traffic speeds and volumes make the street buffer very important for bicyclist comfort, especially if there is no on-street parking.
(d) This action may only be considered as a last resort because lane removal may create operational issues for the street.
(e) This action may have an adverse effect on retail businesses, but nearby off-street parking may be able to accommodate the short- and long-term parking need.



Vancouver, British Columbia

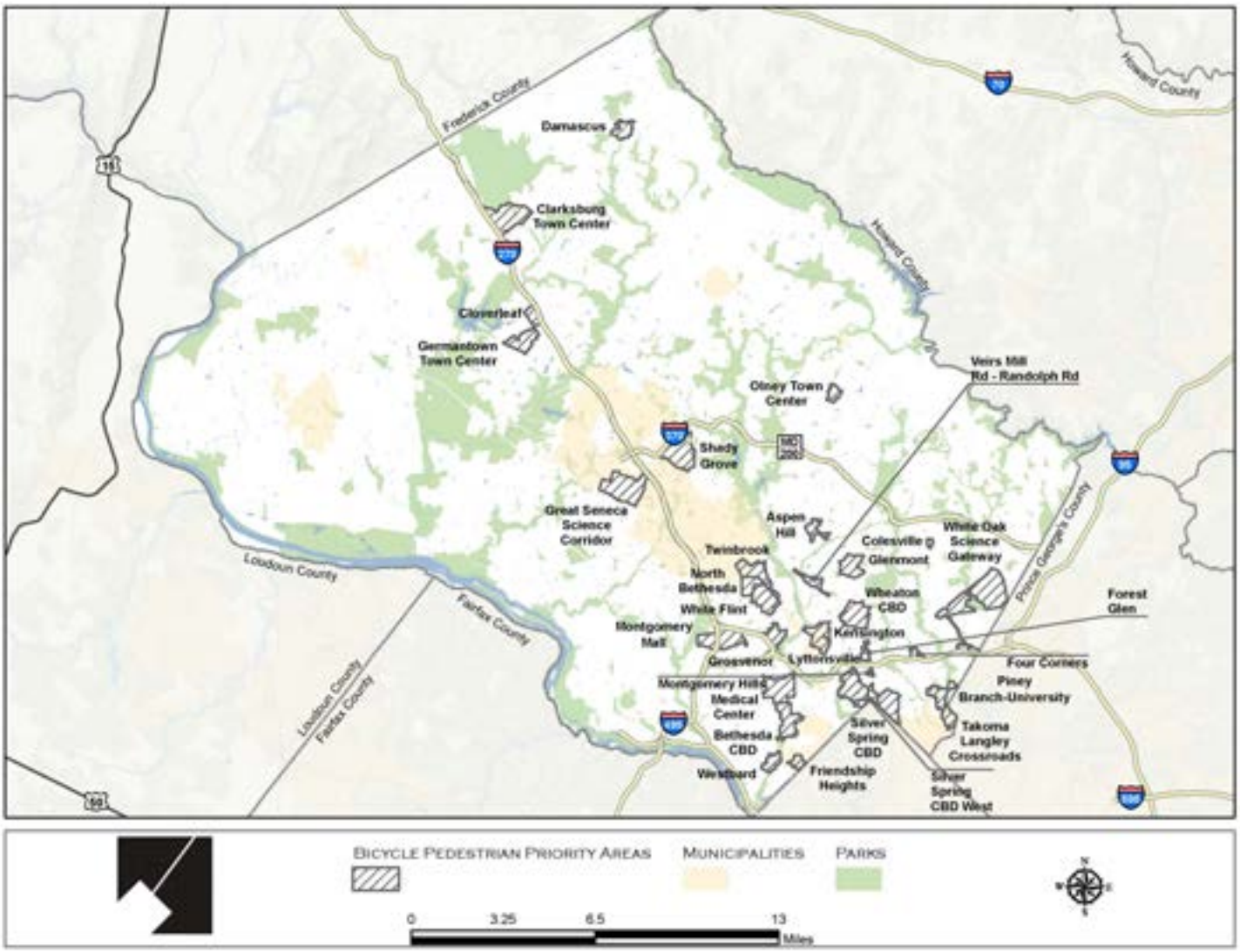
PRIORITIZATION

The network of bikeways and bicycle parking stations recommended in the Bicycle Master Plan is extensive and it is likely to be only partially completed during the 25-year life of this plan. Such a large network is proposed so that opportunities to implement the preferred bicycling network are not lost when unforeseen circumstances arise. However it is important to identify bikeway network priorities because funding for implementation is limited.

The approach to prioritizing the bicycling network is based on reaching the targets established for each metric in the Goals, Objectives, Metrics and Targets section of this plan. The priorities focus on increasing bicycling in the county as quickly as possible, by focusing initial efforts on constructing networks of bikeways in places that the Montgomery County Council has designated as Bicycle Pedestrian Priority Areas (BPPA)[11] and completing connections between major activity centers. Also prioritized are missing gaps in the existing low-stress bicycling network and low-cost bikeways, such as neighborhood greenways, which will funnel bicyclists to the BPPAs. This prioritization should be reassessed every few years based on available resources and lessons learned during the implementation process.

A summary of the process used to develop the bikeway recommendations is included in Appendix E.

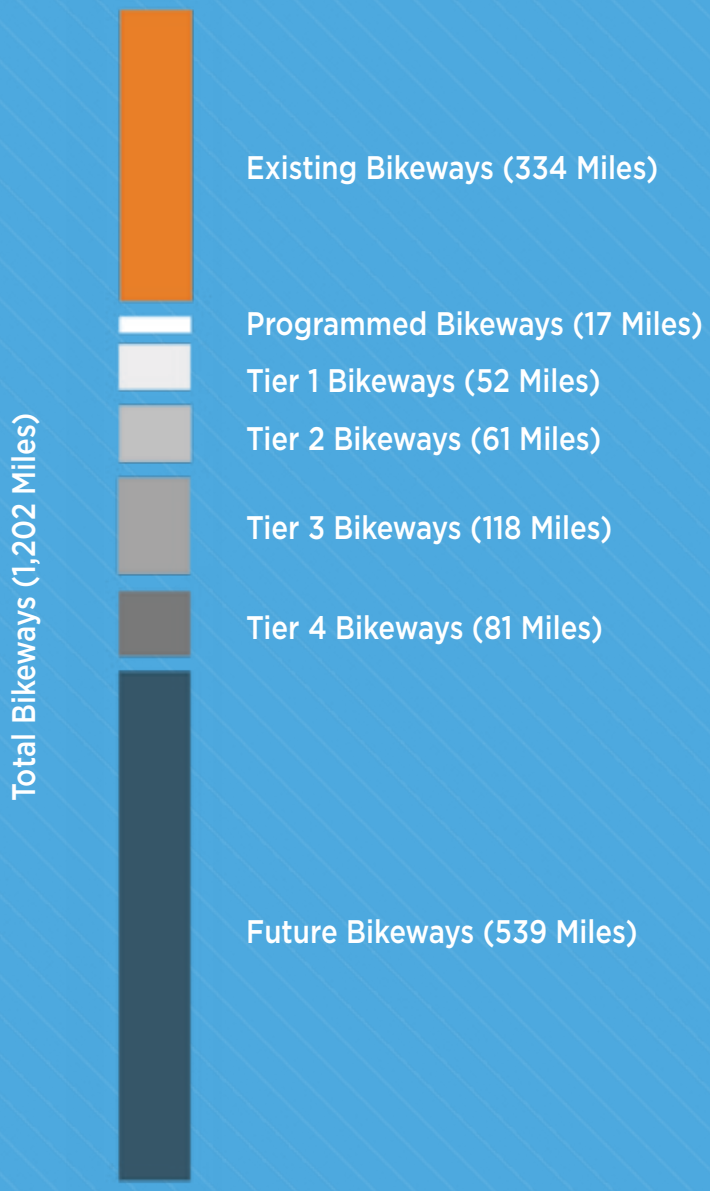
Bicycle Pedestrian Priority Areas



[11] Montgomery County has designated 31 areas as Bicycle Pedestrian Priority Areas. These locations have higher existing or anticipated levels of walking and bicycling and are prioritized for improvements to walking and bicycling.

Prioritization of Bikeways

The figure below shows how the proposed bicycle network would be built out. Currently about 334 miles of the recommended bikeway network exists. Within the 25-year life of this plan, an additional 329 miles would be constructed, including bikeways that are currently programmed in the county's capital budget and projects prioritized in one of four tiers. Approximately 45 percent of the recommended bikeway network would be constructed beyond the 25-year life of this plan.

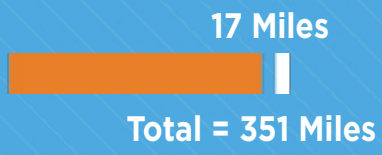


To meet the aggressive timeframe for implementing Tier 1 bikeway projects, Montgomery County will need to program additional funds for the Bicycle Pedestrian Priority Areas program and create a new Neighborhood Greenway program. Even with additional funding, several Tier 1 projects, such as Rockville Pike in White Flint, will require substantial dedication from development approvals before they can be implemented.

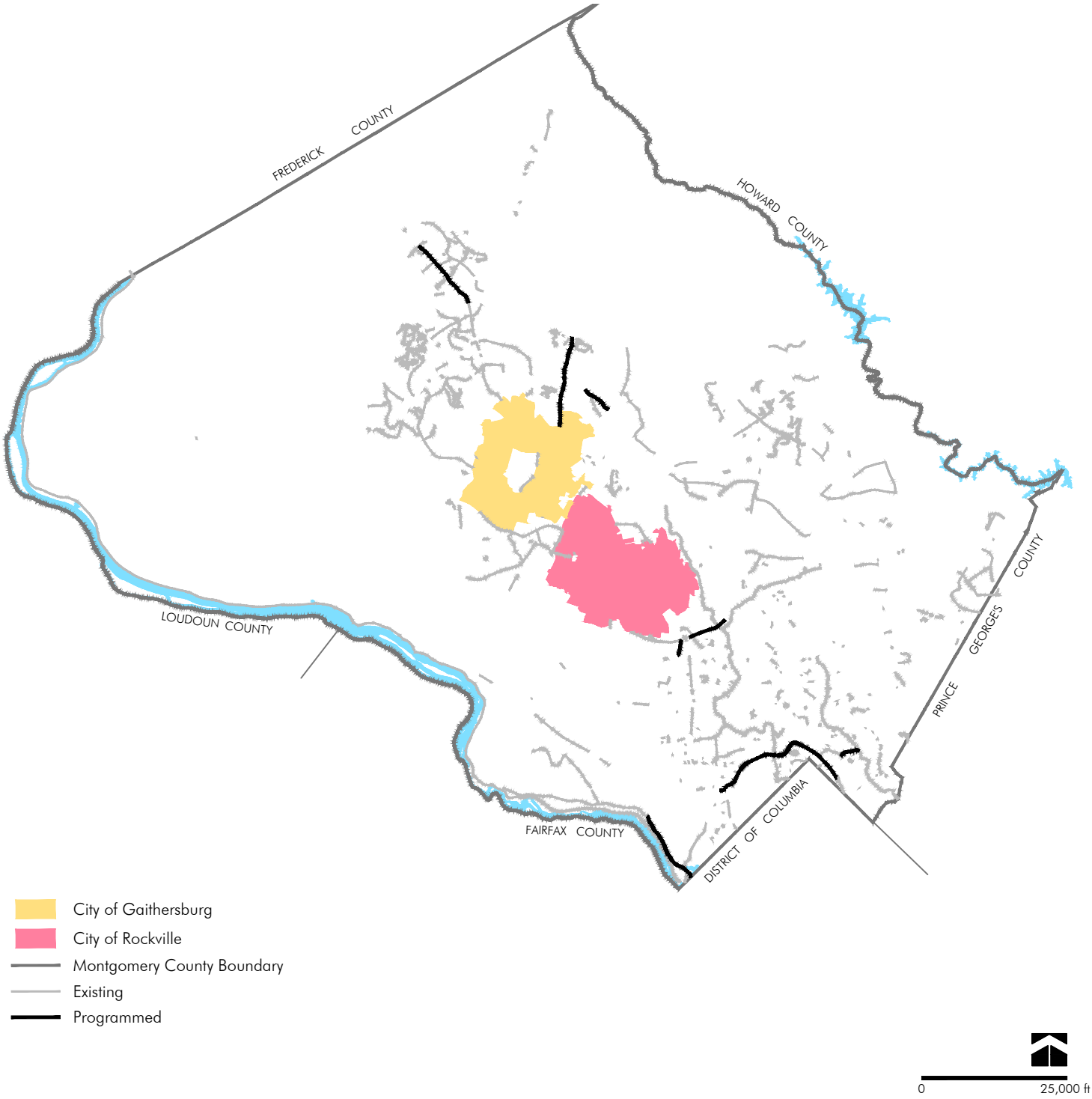
It is envisioned that most separated bike lane projects will be initially implemented with interim construction (see pages 123 to 129), supplemented (and/or upgraded) by permanent separated bike lane construction (pages 130 to 132) as part of stand-alone facility planning projects by the Montgomery County Department of Transportation and development approvals.

Programmed Bikeways

Programmed bikeways include those that are completely or partially funded in the county's capital improvements budget and are components of the recommended low-stress bicycling network. The list of programmed bikeways shown below are recommended in existing master plans and are largely funded to be completed within 6 years. A full list of funded projects is available at montgomerycountymd.gov/OMB



STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Capital Crescent Trail (Surface Route)	Woodmont Ave	Elm Street Park	Separated Bike Lanes	Bethesda CBD	0.3
Capital Crescent Trail Breeze-way	Elm St Park	Silver Spring Transit Center	Off-Street Trail	Multiple	4.8
Frederick Rd	Stringtown Rd	Brink Rd	Sidepath	Clarksburg	2.5
Goshen Rd	Warfield Rd	Girard St	Sidepath and Conven-tional Bike Lanes	Montgomery Village/Air-park	3.1
MacArthur Blvd	Goldsboro Rd	District of Columbia	Sidepath and Bikeable Shoulders	Bethesda/Chevy Chase (West)	2.5
Montrose Pkwy Breezeway	Randolph Rd	Veirs Mill Rd	Sidepath	Multiple	1.3
Old Georgetown Rd (south)	Towne Rd	Old Georgetown Rd	Sidepath	White Flint	0.3
Silver Spring Green Trail	Cedar St	Sligo Creek Pkwy	Sidepath	Silver Spring/Takoma Park (East)	0.7
Snouffer School Rd	Centerway Dr	Stweet Autumn Dr	Sidepath	Montgomery Village/Air-park	1.0
Towne Rd (East)	Montrose Pkwy	Old Georgetown Rd	Separated Bike Lanes	White Flint	0.3


FREDERICK COUNTY
HOWARD COUNTY
LOUDOUN COUNTY
PRINCE GEORGES COUNTY
FAIRFAX COUNTY
DISTRICT OF COLUMBIA
City of Gaithersburg
City of Rockville
Montgomery County Boundary
Existing
Programmed
0
25,000 ft

Tier 1 Bikeway Projects

Tier 1 projects are recommended to be substantially completed within five years of approval of the Bicycle Master Plan. These projects include:

- Bikeways located in seven Bicycle Pedestrian Priority Areas (Bethesda CBD, Friendship Heights CBD, Life Sciences Center, Silver Spring CBD, Wheaton CBD, White Flint and White Oak).
- Neighborhood greenways feeding into these BPPA areas (such as the Edgemoor Lane neighborhood greenway).
- Bikeways with high demand that are included in the capital improvements program (such as the Montrose Parkway East project).
- Other county priorities (such as the Germantown – Grosvenor Breezeway, aka the PEPCO Trail).

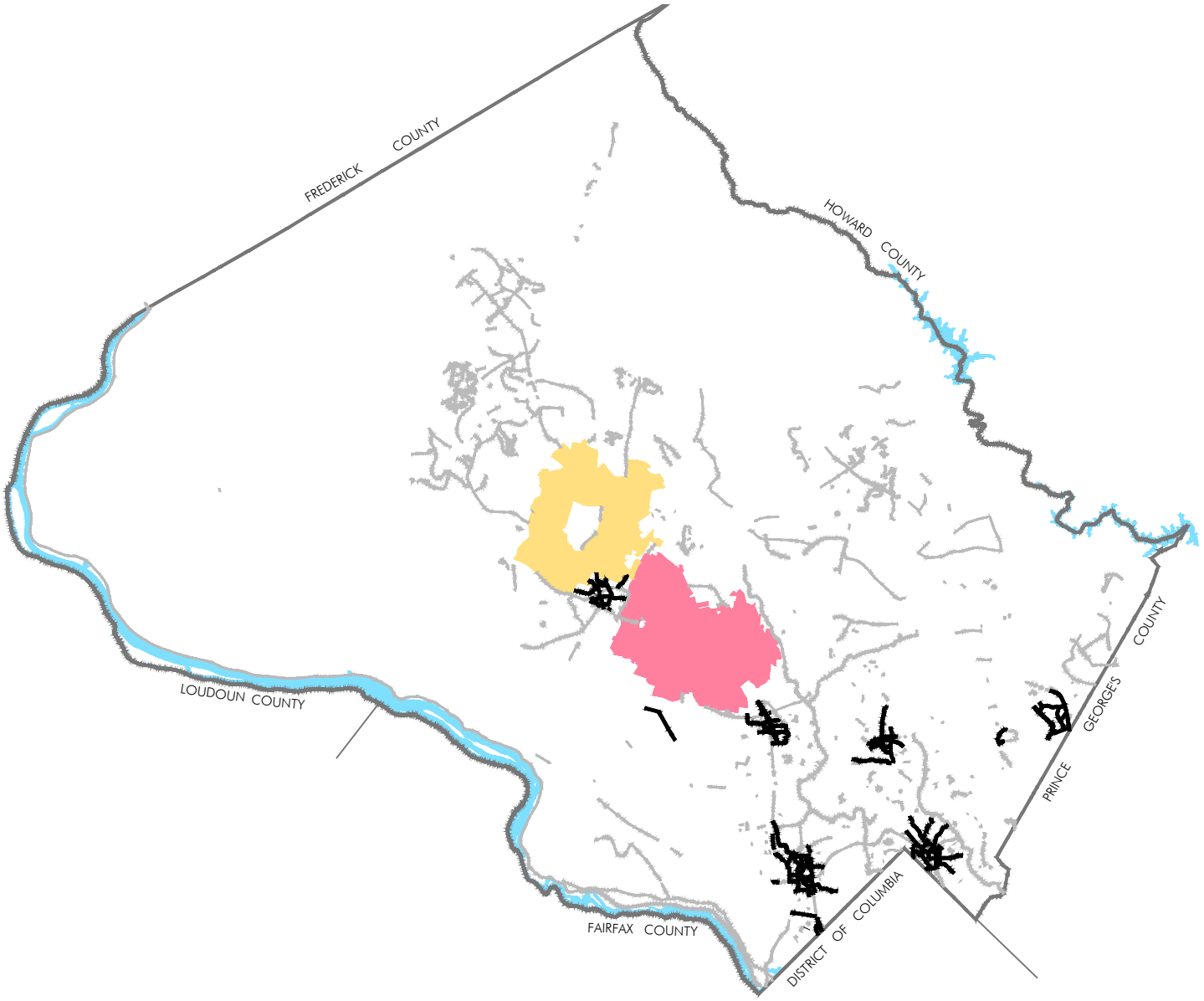
Projects that should be implemented immediately in Tier 1 are shown below and include those that are likely to have the highest demand due to their location around Metro stations and high-density areas. All other Tier 1 bikeways are shown on the following pages.

52 Miles



Total = 403 Miles

STREET	FROM	TO	BIKEWAY	LENGTH (MI)
2nd Ave/Wayne Ave	Spring St	Georgia Ave	Separated Bike Lanes	0.5
Arlington Rd	Old Georgetown Rd	Bradley Blvd	Separated Bike Lanes	0.7
Bethesda Trolley Trail Upgrades	Battery Ln	Rugby Ave	Off-Street Trail	0.1
Broadbirch Dr	Tech Rd	Cherry Hill Rd	Separated Bike Lanes	0.7
Capital Crescent Trail Breezeway	Woodmont Ave	Elm Street Park	Off-Street Trail	0.2
Capital Crescent Trail Breezeway	Elm Street Park	Silver Spring Transit Center	Add Lighting	4.8
Cherry Hill Rd	Columbia Pike	Prince George's County	Separated Bike Lanes	1.4
Edgemoor La	Exeter Rd	Arlington Rd	Neighborhood Greenway	0.2
Edgemoor La	Arlington Rd	Bethesda Metrorail Station	Separated Bike Lanes	0.2
Fenton St	Planning Dept Parking Lot	Cameron St	Separated Bike Lanes	0.2
Fenton St	Cameron St	Wayne Ave	Separated Bike Lanes	0.3
Fenton St	Wayne Ave	King St	Separated Bike Lanes	0.6
Friendship Blvd	N Park Ave	District of Columbia	Separated Bike Lanes	0.3
Georgia Ave South Breezeway	Blueridge Ave	University Blvd	Separated Bike Lanes	0.1
Georgia Ave South Breezeway	University Blvd	Windham Ln	Separated Bike Lanes	0.7
Grandview Ave	Blueridge Ave	University Blvd	Separated Bike Lanes	0.1
Grandview Ave	University Blvd	Reedie Dr	Separated Bike Lanes	0.2
Marinelli Rd	Executive Blvd	Woodglen Dr	Separated Bike Lanes	0.2
Marinelli Rd	Woodglen Dr	Nebel St	Separated Bike Lanes	0.4
MD 355 Breezeway Upgrade	NIH Property Line	Battery Ln	Off-Street Trail	0.1
MD 355 Breezeway Upgrade	Battery Ln	Srathmore Ave	Separated Bike Lanes	1.0
Medical Center Dr Ext (Inner)	Great Seneca Hwy	Key West Ave	Separated Bike Lanes	0.4
Medical Center Dr Ext (Both Sides)	Key West Ave	Great Seneca Hwy	Separated Bike Lanes	0.9
Montgomery Ave	Wisconsin Ave	East-West Hwy	Separated Bike Lanes	0.2
Montgomery La	Woodmont Ave	Wisconsin Ave	Separated Bike Lanes	0.1
Woodmont Ave	Strathmore Ave	Wisconsin Ave	Separated Bike Lanes	0.1


FREDERICK COUNTY
HOWARD COUNTY
LOUDOUN COUNTY
PRINCE GEORGES COUNTY
FAIRFAX COUNTY
DISTRICT OF COLUMBIA
City of Gaithersburg
City of Rockville
Montgomery County Boundary
Existing & Programmed
Tier 1
0
25,000 ft

Tier 1 Bikeways

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
13th St / Burlington Ave	District of Columbia	Fenton St	Separated Bike Lanes	Silver Spring CBD	0.3
16th St	Spring St	District of Columbia	Separated Bike Lanes	Silver Spring CBD	0.3
2nd Ave	Spring St	Colesville Rd	Separated Bike Lanes	Silver Spring CBD	0.3
46th St - Connecticut Ave	46th St	Connecticut Ave	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.9
Alton Pkwy - Edgevale Rd	Georgia Ave	Sligo Creek Trail	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.6
Arlington Rd	Old Georgetown Rd	Bradley Blvd	Separated Bike Lanes	Bethesda CBD	0.7
Battery La	Old Georgetown Rd	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.3
Battery La / Exeter Rd	Old Georgetown Rd	Elm St	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.6
Belward Campus Dr (North Side)	Muddy Branch Rd	Great Seneca Hwy	Separated Bike Lanes	R&D Village	0.7
Bethesda - Somerset Neighborhood Greenway	Bradley Blvd	Norwood Rd	Off-Street Trail	Bethesda CBD	0.2
Bethesda Trolley Trail	Battery La	Rugby Ave	Off-Street Trail	Bethesda CBD	0.1
Blackwell Rd	Darnestown Rd	Shady Grove Rd	Separated Bike Lanes	R&D Village	1.1
Blueridge Ave	Grandview Ave	Taber St	Separated Bike Lanes / Neighborhood Greenway	Wheaton CBD	0.5
Bradley Blvd	Fairfax Rd	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.5
Broadbirch Dr	Tech Rd	Cherry Hill Rd	Separated Bike Lanes	White Oak	0.7
Broschart Rd (East Side)	Key West Ave	Darnestown Rd	Separated Bike Lanes	R&D Village	0.5
Cameron St	2nd Ave	Spring St	Separated Bike Lanes	Silver Spring CBD	0.3
Capital Crescent Trail Breezeway	Woodmont Ave	Elm Street Park	Off-Street Trail	Bethesda CBD	0.2
Cheltenham Dr	Wisconsin Ave	Tilbury St	Separated Bike Lanes	Bethesda CBD	0.1
Cherry Hill Rd	Columbia Pike	Prince George's County	Separated Bike Lanes	White Oak	1.4
Colesville Rd (North Side)	East-West Hwy	Wayne Ave	Separated Bike Lanes	Silver Spring CBD	0.1
Colesville Rd (South Side)	16th St	East-West Hwy	Sidepath	Silver Spring CBD	0.1
Colesville Rd (South Side)	East-West Hwy	Wayne Ave	Separated Bike Lanes	Silver Spring CBD	0.2

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Cornish Rd / Elm St	Bradley Blvd	Arlington Rd	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.5
Custer Rd / Grant St / Park La	Sonoma Rd	Battery La	Neighborhood Greenway	Bethesda/Chevy Chase (East)	1.0
Decoverly Dr (North / West)	Great Seneca Hwy	City of Gaithersburg	Separated Bike Lanes	R&D Village	0.5
Diamondback Dr (East Side)	City of Gaithersburg	Decoverly Dr	Sidepath	R&D Village	0.5
Diamondback Dr (East Side)	Decoverly Dr	Key West Ave	Separated Bike Lanes	R&D Village	0.2
Dixon Ave	Wayne Ave	Georgia Ave	Separated Bike Lanes	Silver Spring CBD	0.3
Dorset Ave	Little Falls Pkwy	Wisconsin Ave	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.8
Douglas Ave / McComas Ave / Windham La	St Paul St	Georgia Ave	Neighborhood Greenway	Kensington/Wheaton, Wheaton CBD	1.2
East Ave / Upton Dr	Upton Dr	University Blvd	Neighborhood Greenway	Wheaton CBD, Kensington / Wheaton CBD	0.2
East-West Hwy	16th St	Colesville Rd	Separated Bike Lanes	Silver Spring CBD	0.2
East-West Hwy	Colesville Rd	Georgia Ave	Separated Bike Lanes	Silver Spring CBD	0.5
Edgemoor La	Exeter Rd	Arlington Rd	Neighborhood Greenway	Bethesda/Chevy Chase (East), Bethesda CBD	0.2
Edgemoor La	Arlington Rd	Bethesda Metrorail Station	Separated Bike Lanes	Bethesda CBD	0.2
Edson La	Woodglen Dr	Rockville Pike	Separated Bike Lanes	White Flint	0.2
Ellsworth Dr	Fenton St	Georgia Ave	Sidepath	Silver Spring CBD	0.2
Elm St Park - Bradley La	Elm St	Bradley La	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.4
Executive Blvd	Old Georgetown Rd	Nicholson La	Separated Bike Lanes	White Flint	0.3
FDA Blvd (North Side)	Cherry Hill Rd	FDA Gate	Separated Bike Lanes	White Oak	0.8
Fenton St	Planning Department Parking Lot	Cameron St	Separated Bike Lanes	Silver Spring CBD	0.2
Fenton St	Cameron St	Wayne Ave	Separated Bike Lanes	Silver Spring CBD	0.3
Fenton St	Wayne Ave	King St	Separated Bike Lanes	Silver Spring CBD	0.6
Fenton St - Piney Branch Rd	Fenton St	Piney Branch Rd	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.6
Friendship Blvd	N Park Ave	District of Columbia	Separated Bike Lanes	Friendship Heights	0.3
Georgia Ave South Breezeway	Georgia Ave	Arcola Ave	Neighborhood Greenway	Kensington/Wheaton	0.7

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Georgia Ave South Breezeway	Arcola Ave	Blueridge Ave	Separated Bike Lanes	Kensington/Wheaton, Wheaton CBD	0.3
Georgia Ave South Breezeway	Blueridge Ave	University Blvd	Separated Bike Lanes	Wheaton CBD	0.1
Georgia Ave South Breezeway	University Blvd	Windham La	Separated Bike Lanes	Wheaton CBD	0.7
Georgia Ave South Breezeway	Columbia Blvd	Spring St	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.8
Germantown - Grosvenor Breezeway	Falls Rd	Tuckerman La	Off-Street Trail	Potomac	1.4
Germantown - Life Sciences Center Breezeway	Sam Eig Hwy	Darnestown Rd	Sidepath	R&D Village	0.5
Grandview Ave	Arcola Ave	Blueridge Ave	Neighborhood Greenway	Kensington/Wheaton, Wheaton CBD	0.3
Grandview Ave	Blueridge Ave	University Blvd	Separated Bike Lanes	Wheaton CBD	0.1
Grandview Ave	University Blvd	Reedie Dr	Separated Bike Lanes	Wheaton CBD	0.2
Great Seneca Hwy (West Side)	Key West Ave	Darnestown Rd	Sidepath	R&D Village	0.5
Industrial Pkwy (North Side)	Columbia Pike	FDA Blvd	Separated Bike Lanes	White Oak	1.0
Industrial Pkwy (South Side)	Columbia Pike	FDA Blvd	Separated Bike Lanes	White Oak	1.0
Jefferson St / Executive Blvd	City of Rockville	Old Georgetown Rd	Separated Bike Lanes	North Bethesda	0.6
Jones Bridge Rd (South Side)	Glenbrook Pkwy	Maryland Ave	Sidepath	Bethesda/Chevy Chase (East)	0.0
Kensington Blvd	Galt Ave	Grandview Ave	Sidepath	Wheaton CBD	0.3
Kensington Blvd / Galt Ave	Kensington Blvd	Upton Dr	Neighborhood Greenway	Wheaton CBD	0.1
Leland St	Wisconsin Ave	46th St	Separated Bike Lanes	Bethesda CBD	0.1
Lockwood Dr / Stewart La	Old Columbia Pike	White Oak Park Drwy	Conventional Bike Lanes	White Oak	0.1
Lockwood Dr	White Oak Park Drwy	New Hampshire Ave	Sidepath	White Oak	0.2
Marinelli Rd	Executive Blvd	Woodglen Dr	Separated Bike Lanes	White Flint	0.2
Marinelli Rd	Woodglen Dr	Nebel St	Separated Bike Lanes	White Flint	0.4
Maryland Ave / Pearl St	Jones Bridge Rd	Sleaford Rd	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.5
MD 355 South Breezeway	City of Rockville	Marinelli Rd	Separated Bike Lanes	North Bethesda, White Flint	0.9
MD 355 South Breezeway	Rockville Pike	Woodglen Dr	Separated Bike Lanes	White Flint	0.0

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
MD 355 South Breezeway	Marinelli Rd	Edson La	Separated Bike Lanes	White Flint	0.2
MD 355 South Breezeway	Charles St	Cedar La	Sidepath	Bethesda/Chevy Chase (East)	0.2
MD 355 South Breezeway	Cedar La	South of Lincoln St	Sidepath	Bethesda/Chevy Chase (East)	0.5
MD 355 South Breezeway	Old Georgetown Rd	NIH Perimeter	Off-Street Trail	Bethesda/Chevy Chase (East)	0.7
MD 355 South Breezeway	NIH Property Line	Battery La	Off-Street Trail	Bethesda CBD	0.1
MD 355 South Breezeway	Bethesda Trolley Trail	Woodmont Ave	Separated Bike Lanes	Bethesda CBD	0.2
MD 355 South Breezeway	Battery Ln	Old Georgetown Rd	Separated Bike Lanes	Bethesda CBD	0.5
MD 355 South Breezeway	Old Georgetown Rd	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.5
MD 355 South Breezeway	Woodmont Ave	Bradley Blvd	Priority Shared Lane Markings	Bethesda CBD	0.2
MD 355 South Breezeway	Strathmore Ave	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.1
MD 355 South Breezeway	Bradley Blvd	Nottingham St	Sidepath	Bethesda/Chevy Chase (East)	0.1
MD 355 South Breezeway	Oliver St	District of Columbia	Separated Bike Lanes	Friendship Heights	0.4
Medical Center Dr (Outer Side)	Great Seneca Hwy	Broschart Rd	Separated Bike Lanes	R&D Village	0.1
Medical Center Dr Ext (Inner Side)	Great Seneca Hwy	Key West Ave	Separated Bike Lanes	R&D Village	0.4
Medical Center Dr Ext (Outer Side)	Key West Ave	Great Seneca Hwy	Separated Bike Lanes	R&D Village	0.5
Montgomery Ave	Wisconsin Ave	East-West Hwy	Separated Bike Lanes	Bethesda CBD	0.2
Montgomery La	Woodmont Ave	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.1
Montrose Pkwy Breezeway	Rockville Pike	Randolph Rd	Sidepath	White Flint	0.0
Nebel St	Randolph Rd	Nicholson Ln	Separated Bike Lanes	White Flint	0.2
Nebel St Ext	Nicholson Ln	Rockville Pike	Separated Bike Lanes	White Flint	0.7
Nicholson Ln	Old Georgetown Rd	Rockville Pike	Separated Bike Lanes	White Flint	0.5
Nicholson Ln	Rockville Pike	Nebel St	Separated Bike Lanes	White Flint	0.4
Norfolk Ave	Rugby Ave	Woodmont Ave	Shared Street	Bethesda CBD	0.3
Norfolk Ave	Woodmont Ave	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.1

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Old Georgetown Rd	Rockville Pike	Nebel St	Separated Bike Lanes	White Flint	0.3
Old Georgetown Rd (South Side)	Rockville Pike	Towne Rd	Separated Bike Lanes	White Flint	0.3
Old Georgetown Rd	Woodmont Ave	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.1
Omega Dr	Fields Rd	Key West Ave	Separated Bike Lanes	R&D Village	0.5
Pearl St	Sleaford Rd	East West Hwy	Separated Bike Lanes / Neighborhood Greenway	Bethesda CBD	0.2
Pearl St	East West Hwy	Montgomery Ave	Separated Bike Lanes	Bethesda CBD	0.1
Pearl St	Montgomery Ave	Capital Crescent Trail	Shared Street	Bethesda CBD	0.1
Plum Orchard Dr	Broadbirch Dr	Cherry Hill Rd	Separated Bike Lanes	White Oak	0.6
Prichard Rd	Georgia Ave	Amherst Ave	Separated Bike Lanes	Wheaton CBD	0.2
Reedie Dr	Veirs Mill Rd	Georgia Ave	Shared Street	Wheaton CBD	0.1
Reedie Dr	Georgia Ave	Amherst Ave	Separated Bike Lanes	Wheaton CBD	0.1
Rockville Pike (East Side)	City of Rockville	Bou Ave	Separated Bike Lanes	North Bethesda	0.2
Rockville Pike (East Side)	Bou Ave	Edson La	Separated Bike Lanes	North Bethesda, White Flint	1.2
Rockville Pike (West Side)	Marinelli Rd	Edson La	Separated Bike Lanes	White Flint	0.5
Rosedale Ave	Wisconsin Ave	Neighborhood Connector	Neighborhood Greenway	Bethesda CBD, Bethesda/ Chevy Chase (East)	0.2
S Park Ave / Montgomery Ave Greenway	Friendship Blvd	Belmont Ave Trail	Separated Bike Lanes	Friendship Heights	0.2
Silver Spring - Glenmont Bikeway	16th St	Spring St	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.5
Silver Spring Ave	Georgia Ave	Grove St	Priority Shared Lane Markings	Silver Spring CBD	0.3
Silver Spring Ave	Grove St	Piney Branch Rd	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.7
Sleaford Rd	Tilbury St	Capital Crescent Trail	Neighborhood Greenway	Bethesda CBD, Bethesda/ Chevy Chase (East)	0.5
Spring St	16th St	2nd Ave	Separated Bike Lanes	Silver Spring CBD	0.1
St Elmo Ave	Woodmont Ave	Old Georgetown Rd	Conventional Bike Lanes	Bethesda CBD	0.1
Street B-5	Plum Orchard Dr	FDA Blvd	Separated Bike Lanes	White Oak	0.4
Tech Rd	Columbia Pike	Industrial Pkwy	Separated Bike Lanes	White Oak	0.3

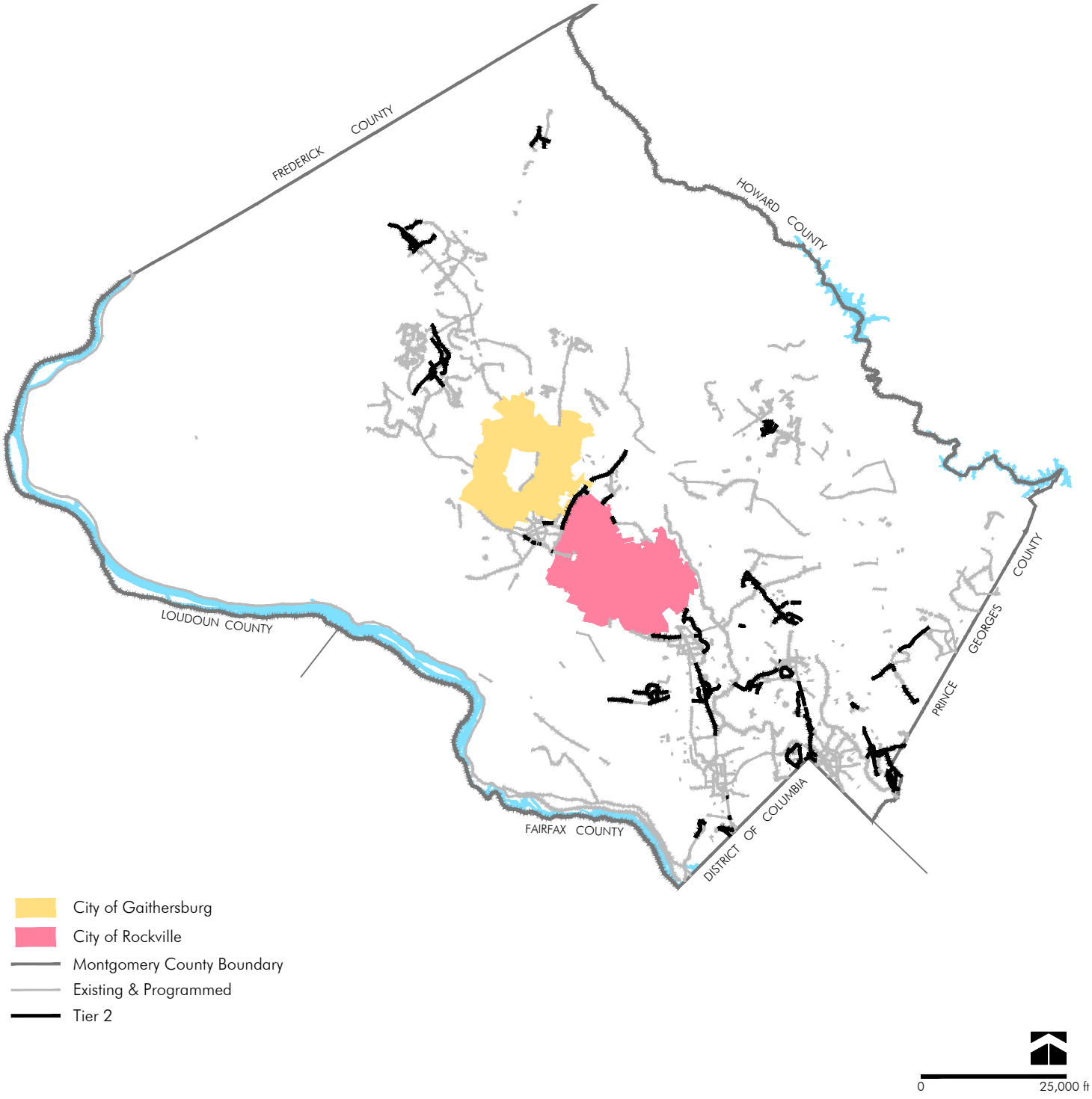
STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Tilbury St	Rosedale Ave	Sleaford Rd	Neighborhood Greenway	Bethesda CBD	0.3
Towne Rd (West Side)	Rockville Pike	Montrose Pkwy	Separated Bike Lanes	North Bethesda	0.2
Traville Gateway Dr Ext	Darnestown Rd	Medical Center Dr	Separated Bike Lanes	R&D Village	0.1
University Blvd	Valley View Ave	Veirs Mill Rd	Separated Bike Lanes	Wheaton CBD	0.3
University Blvd Breezeway	Valley View Ave	Amherst Ave	Separated Bike Lanes	Wheaton CBD	0.4
University Blvd Breezeway	Amherst Ave	Dayton St	Sidepath	Wheaton CBD	0.4
US 29 Corridor Breezeway	Stewart La	Lockwood Dr	Separated Bike Lanes / Sidepath	White Oak	0.5
US 29 Corridor Breezeway	White Oak Park Drwy	Lockwood Dr	Sidepath	White Oak	0.1
US 29 Corridor Breezeway	Sligo Creek Trail	Spring St	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.7
US 29 Corridor Breezeway	Spring St	Fenton St	Separated Bike Lanes	Silver Spring CBD	0.2
Veirs Mill Rd Breezeway	Reedie Dr	Georgia Ave	Separated Bike Lanes	Wheaton CBD	0.2
Wayne Ave	Colesville Rd	Fenton St	Separated Bike Lanes	Silver Spring CBD	0.3
Wayne Ave	Fenton St	Cedar St	Separated Bike Lanes	Silver Spring CBD	0.2
Wayne Ave - Philadelphia Ave	Wayne Ave	Philadelphia Ave	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.8
Wheaton Plaza Entrance	University Blvd	Wheaton Plaza Ring Rd	Separated Bike Lanes	Wheaton CBD	0.1
Wheaton Plaza Entrance	Veirs Mill Rd	Wheaton Plaza Ring Rd	Separated Bike Lanes	Wheaton CBD	0.1
Willard Ave Trail	Willard Ave	Western Ave	Off-Street Trail	Bethesda/Chevy Chase (East)	0.0
Woodmont Ave	Battery Ln	Wisconsin Ave	Separated Bike Lanes	Bethesda CBD	0.1
Veirs Mill Rd Breezeway	College View Ave	Reedie Dr	Separated Bike Lanes	Wheaton CBD	0.4
Willard Ave Trail	Willard Ave	Western Ave	Off-Street Trail	Friendship Heights	0.5

Tier 2 Bikeway Projects

Tier 2 projects are recommended to be substantially completed within 10 years of approval of the Bicycle Master Plan. These projects include:

- Bikeways located in the remaining Bicycle Pedestrian Priority Areas.




FREDERICK COUNTY
HOWARD COUNTY
LOUDOUN COUNTY
PRINCE GEORGES COUNTY
FAIRFAX COUNTY
DISTRICT OF COLUMBIA
City of Gaithersburg
City of Rockville
Montgomery County Boundary
Existing & Programmed
Tier 2
0
25,000 ft

Tier 2 Bikeways

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
16th St	Georgia Ave	Spring St	Separated Bike Lanes	Silver Spring/Takoma Park (West)	0.8
Anne St	University Blvd	Glenside Dr	Neighborhood Greenway	Takoma/Langley	0.3
Arliss St	Flower Ave	Piney Branch Rd	Separated Bike Lanes	Long Branch Sector Plan	0.3
Aspen Hill Rd	Connecticut Ave	Georgia Ave	Separated Bike Lanes	Aspen Hill	0.3
Bradley Ln	Wisconsin Ave	West Ave	Separated Bike Lanes	Bethesda CBD	0.1
Century Blvd	Aircraft Dr	Middlebrook Rd	Priority Shared Lane Markings	Germantown Town Center	0.4
Century Blvd	Middlebrook Rd	Wisteria Dr	Priority Shared Lane Markings	Germantown Town Center	0.2
Clarksburg Rd	Frederick Rd	Gateway Center Dr	Sidepath and Conventional Bike Lanes	Clarksburg Town Center	0.2
Colie Dr	Randolph Rd	Havard St	Sidepath	Kensington/Wheaton	0.2
Connecticut Ave (East Side)	Georgia Ave	Aspen Hill Rd	Separated Bike Lanes	Aspen Hill	0.3
Connecticut Ave (East Side)	Aspen Hill Rd	Independence St	Separated Bike Lanes	Aspen Hill	0.3
Connecticut Ave (West Side)	Farragut Ave	Knowles Ave	Separated Bike Lanes	Kensington/Wheaton	0.3
Crystal Rock Dr	Germantown Rd	Middlebrook Rd	Sidepath	Germantown West	0.4
Crystal Rock Dr (East Side)	Father Hurley Blvd	Cloverleaf Dr	Separated Bike Lanes	Germantown Town Center	0.3
Crystal Rock Dr (East Side)	Cloverleaf Dr	Aircraft Dr	Separated Bike Lanes	Germantown Town Center	0.3
Crystal Rock Dr (East Side)	Aircraft Dr	Germantown Rd	Separated Bike Lanes	Germantown Town Center	0.4
Darnestown Rd (North Side)	Key West Ave	City of Rockville	Sidepath	R&D Village	0.4
Democracy Blvd	Seven Locks Rd	Westlake Dr	Sidepath	Potomac	0.7
Democracy Blvd	Westlake Dr	Ferwood Rd	Sidepath	North Bethesda, Potomac	0.3
Democracy Blvd	Fernwood Rd	Old Georgetown Rd	Sidepath	North Bethesda	0.6
Denley Rd	Randolph Rd	Georgia Ave	Neighborhood Greenway	Glenmont, Kensington/Wheaton	0.5
East-West Hwy	Sundale Dr	16th St	Sidepath	Silver Spring/Takoma Park (West)	0.4
Flower - University	Flower Ave	University Blvd	Neighborhood Greenway	Long Branch Sector Plan	0.5

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Flower Ave	Arliss St	Piney Branch Rd	Separated Bike Lanes	Long Branch Sector Plan	0.2
Franklin Ave - Arliss St	Franklin Ave	Arliss St	Neighborhood Greenway	Long Branch Sector Plan, Silver Spring/Takoma Park (East)	0.8
Frederick Rd	Comus Rd	Snowden Farm Pkwy	Sidepath and Bikeable Shoulders	Clarksburg Town Center	0.5
Frederick Rd	Snowden Farm Pkwy	Stringtown Rd	Sidepath	Clarksburg Town Center	0.7
Georgia Ave - Forest Glen Rd	Georgia Ave	Forest Glen Rd	Neighborhood Greenway	Kensington/Wheaton	0.9
Georgia Ave (East Side)	Wendy Ln	Hewitt Ave	Sidepath	Aspen Hill	0.2
Georgia Ave (West Side)	Lansdowne Way	16th St	Separated Bike Lanes	Silver Spring/Takoma Park (West)	0.4
Georgia Ave North Breezeway	Olney-Laytonsville Rd	Queen Mary Dr	Separated Bike Lanes	Olney	0.4
Georgia Ave North Breezeway	Connecticut Ave	Wendy La	Sidepath	Aspen Hill	0.4
Georgia Ave North Breezeway	Wendy La	Matthew Henson Trail	Neighborhood Greenway	Aspen Hill	0.4
Georgia Ave North Breezeway	Matthew Henson Trail	Georgia Ave	Neighborhood Greenway	Glenmont, Kensington/ Wheaton	1.8
Georgia Ave South Breezeway	Windham Ln	Forest Glen Rd	Neighborhood Greenway	Kensington/Wheaton	1.1
Georgia Ave South Breezeway	Woodland Dr	Georgia Ave	Sidepath	Kensington/Wheaton	0.1
Georgia Ave South Breezeway	Forest Glen Rd	Woodland Dr	Off-Street Trail	Kensington/Wheaton, Silver Spring/Takoma Park (West)	0.4
Georgia Ave South Breezeway	I-495 Bridge (East Side)	Spring St	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.2
Germantown - Life Sciences Center Breezeway	Century Blvd	Germantown Rd	Separated Bike Lanes	Germantown Town Center	0.1
Germantown - Life Sciences Center Breezeway	Dorsey Mill Rd	Aircraft Rd	Separated Bike Lanes	Germantown Town Center, Germantown West	1.4
Germantown Rd	Father Hurley Blvd	Middlebrook Rd	Sidepath	Germantown Town Center, Germantown West	1.1
Germantown Rd (South Side)	Crystal Rock Dr	Aircraft Dr	Sidepath	Germantown West	0.1
Glenallan Ave (South Side)	Georgia Ave	Layhill Rd	Separated Bike Lanes	Glenmont	0.3
Glenallan Ave (South Side)	Layhill Rd	Randolph Rd	Separated Bike Lanes	Glenmont	0.3
Glenside / Erskine	Carroll Ave	New Hampshire Ave	Neighborhood Greenway	Takoma/Langley	0.6
Glenside / Erskine	New Hampshire Ave	Prince George's County	Neighborhood Greenway	Takoma/Langley	0.2
Greenwood Ave	Piney Branch Rd	Wabash Ave	Neighborhood Greenway	Long Branch Sector Plan	0.3

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Greenwood Ave	Wabash Ave	Division St	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.5
Grosvenor La	Bethesda Trolley Trail	Rockville Pike	Sidepath	Grosvenor, North Bethesda	0.5
Grosvenor Pl	Tuckerman La	Grosvenor La	Sidepath	Grosvenor	0.5
Grubb Rd	Lyttonsville Rd	District of Columbia	Separated Bike Lanes	Silver Spring/Takoma Park (West)	0.3
Grubb Rd / Lyttonsville Rd	Brookville Rd	Lyttonsville Pl	Separated Bike Lanes	Silver Spring/Takoma Park (West)	0.1
Grubb Rd / Lyttonsville Rd	Lyttonsville Pl	East West Hwy	Separated Bike Lanes	Silver Spring/Takoma Park (West)	0.4
High Corner St / Lewis Dr	Ridge Rd	Main St	Separated Bike Lanes	Damascus	0.2
Hillcrest Rd / Appomattox Ave	Georgia Ave	Spartan Rd	Separated Bike Lanes	Olney	0.2
Holton La	Wildwood Dr	New Hampshire Ave	Neighborhood Greenway	Takoma/Langley	0.1
Howard Ave / Montgomery Ave	Connecticut Ave	Kensington Pkwy	Sidepath	Kensington/Wheaton	0.1
Intercounty Connector Trail Breezeway	MD 200 Ramp	Midcounty Hwy	Sidepath	Derwood	0.9
Intercounty Connector Trail Breezeway	Needwood Rd (South)	Shady Grove Access Rd	Sidepath	Shady Grove Metro Station	0.5
Knowles Ave	Rock Creek Trail	Summit Ave	Sidepath	Kensington/Wheaton	0.4
Layhill Rd (West Side)	Glenallan Ave	Georgia Ave	Separated Bike Lanes	Glenmont	0.2
Lyttonsville Rd / Michigan Ave	Pennsylvania Ave	Lyttonsville Pl	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.3
Main St	Lewis Dr	Woodfield Rd	Separated Bike Lanes	Damascus	0.2
Main St	Woodfield Rd	Howard Chapel Dr	Sidepath	Damascus	0.2
MD 355 North Breezeway	Shady Grove Rd	City of Rockville	Sidepath	Shady Grove Metro Station	0.3
MD 355 North Breezeway	City of Rockville	Paramount Dr	Separated Bike Lanes / Sidepath	Shady Grove Metro Station	0.8
MD 355 North Breezeway	Paramount Dr	East Gude Dr	Sidepath	Derwood	0.5
MD 355 South Breezeway	Bradley Blvd	Oliver St	Sidepath	Bethesda/Chevy Chase (East)	0.1
Middlebrook Rd (West Side)	Locbury Dr	Century Blvd	Separated Bike Lanes	Germantown Town Center	0.2
Middlebrook Rd (West)	Century Blvd	Germantown Rd	Separated Bike Lanes	Germantown Town Center	0.1
Montrose Ave	Tuckerman La	End of Montrose Ave	Sidepath	Grosvenor, North Bethesda	0.5

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Montrose Rd	Montrose Pkwy	Towne Rd	Sidepath	North Bethesda	1.0
Morningwood Dr	Olney #1	Georgia Ave	Sidepath	Olney	0.2
New Hampshire Ave (East Side)	Lockwood Dr	Powder Mill Rd	Separated Bike Lanes / Sidepath	White Oak	0.9
New Hampshire Ave (East Side)	Powder Mill Rd	Prince George's County	Separated Bike Lanes	White Oak	0.1
New Hampshire Ave (East Side)	Sligo Creek Pkwy	Ethan Allen Ave	Sidepath	Silver Spring/Takoma Park (East)	0.1
New Hampshire Ave (West Side)	University Blvd	Glenside Dr	Separated Bike Lanes	Takoma/Langley	0.5
New Hampshire Ave (West Side)	Glenside Dr	Sligo Creek Pkwy	Sidepath	Takoma/Langley	0.1
Olney #2	Appomattox Ave	Spartan Rd	Separated Bike Lanes	Olney	0.3
Olney #6	Olney-Laytonsville Rd	Georgia Ave	Off-Street Trail	Olney	0.1
Olney-Sandy Spring Rd (North Side)	Georgia Ave	Spartan Rd	Sidepath	Olney	0.2
Parklawn Dr	Twinbrook Pkwy	Randolph Rd	Sidepath	North Bethesda, Twinbrook	0.9
Parklawn Dr / Nicholson La	Randolph Rd	Nebel St	Sidepath	North Bethesda, White Flint	0.8
Piney Branch Rd	Sligo Creek Pkwy	Flower Ave	Sidepath	Long Branch Sector Plan, Silver Spring/Takoma Park (East)	0.2
Piney Branch Rd	Flower Ave	University Blvd	Separated Bike Lanes	Long Branch Sector Plan	0.5
Piney Branch Rd	University Blvd	Carroll Ave	Separated Bike Lanes	Long Branch Sector Plan	0.3
Piney Branch Rd	Carroll Ave	Prince George's County	Sidepath	Silver Spring/Takoma Park (East)	0.5
Plyers Mill Rd	Lexington Ave Ext	St Paul St	Sidepath	Kensington/Wheaton	0.1
Plyers Mill Rd	Summit Ave	Lexington Ave Ext	Separated Bike Lanes	Kensington/Wheaton	0.3
Porter Rd / Sundale Dr / Washington Ave	Michigan Ave	Grubb Rd	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.8
Powder Mill Rd	New Hampshire Ave	Prince George's County	Sidepath	White Oak	0.2
Queen Mary Dr	Olney Elementary School	Georgia Ave	Sidepath	Olney	0.1
Randolph Rd	Nebel St	Parklawn Dr	Sidepath	North Bethesda	0.2
Ridge Rd	Woodfield Rd	Beall Ave	Sidepath	Damascus	0.1

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Ridge Rd	Beall Ave	Main St	Separated Bike Lanes	Damascus	0.3
Ridge Rd	Main St	Bethesda Church Rd	Separated Bike Lanes	Damascus	0.3
River Rd (West Side)	Westbard Ave Ext	Capital Crescent Trail	Sidepath	Bethesda/Chevy Chase (West)	0.2
Rock Spring Dr	Fernwood Rd	Old Georgetown Rd	Separated Bike Lanes	North Bethesda	0.6
Rockledge Dr	Westlake Ter	Rockledge Blvd	Separated Bike Lanes	North Bethesda	0.6
Rockledge Dr	Rockledge Dr	Democracy Blvd	Separated Bike Lanes	North Bethesda	0.5
Rockville Pike	Grosvenor La	Cedar La	Sidepath	Bethesda/Chevy Chase (East), Kensington/Wheaton	1.2
Rockville Pike	Strathmore Ave	Grosvenor La	Sidepath	Grosvenor, North Bethesda	0.9
Rockville Pike (East Side)	Edson Ln	Strathmore Ave	Sidepath	North Bethesda, White Flint	0.4
Shady Grove Rd (East Side)	Oakmont Ave	Crabbs Branch Way	Sidepath	Shady Grove Metro Station	0.3
Shady Grove Rd (East Side)	City of Gaithersburg	Frederick Rd	Sidepath	Shady Grove Metro Station	0.1
Shady Grove Rd (East Side)	Frederick Rd	Key West Ave	Sidepath	Rockville City, Shady Grove Metro Station	1.5
Shady Grove Rd (South Side)	Crabbs Branch Way	Shady Grove Access Rd	Sidepath	Shady Grove Metro Station	0.4
Silver Spring - Glenmont Neighborhood Greenway	Darcy Forest Dr	Georgia Ave	Sidepath	Kensington/Wheaton	0.1
Snowden Farm Pkwy	Frederick Rd	Clarksburg Rd	Sidepath	Clarksburg Town Center	0.6
Spartan Rd	Georgia Ave	Olney-Sandy Spring Rd	Separated Bike Lanes	Olney	0.3
Spartan Rd	Olney-Sandy Spring Rd	Appomattox Ave	Separated Bike Lanes	Olney	0.2
St Paul St	Metropolitan Ave	Montgomery Ave	Priority Shared Lane Markings / Off-Street Trail	Kensington/Wheaton	0.4
Strathmore Hall St	Tuckerman La	End of Montrose Ave	Sidepath	Grosvenor	0.0
Strathmore Trail	Strathmore Ave	Tuckerman La	Off-Street Trail	Grosvenor	0.1
Street A-251	Frederick Rd	Stringtown Rd	Sidepath	Clarksburg Town Center	0.7
Street B-2	Diamondback Dr	Omega Dr	Separated Bike Lanes	R&D Village	0.3
Street B-2	Georgia Ave	Randolph Rd	Separated Bike Lanes	Glenmont	0.2

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Stringtown Rd (East Side)	Snowden Farm Pkwy	Gateway Center Dr	Sidepath	Clarksburg	1.0
Summit Ave / Farragut Ave	Connecticut Ave	Plyers Mill Rd	Separated Bike Lanes	Kensington/Wheaton	0.2
Summit Ave / Farragut Ave	Plyers Mill Rd	Knowles Ave	Separated Bike Lanes	Kensington/Wheaton	0.2
Summit Hills Bikeway	Spencer Rd	16th St	Sidepath or Separated Bike Lanes	Silver Spring/Takoma Park (West)	0.2
Tuckerman La	Rockville Pike	Rockville Pike	Separated Bike Lanes	Grosvenor	0.7
Twinbrook Pkwy (East Side)	Halpine Rd	Parklawn Dr	Separated Bike Lanes	Twinbrook	0.3
Twinbrook Pkwy (East Side)	Parklawn Dr	City of Rockville	Separated Bike Lanes	Twinbrook	0.1
University Blvd	Connecticut Ave	Decatur Ave	Separated Bike Lanes	Kensington/Wheaton	0.2
University Blvd	Decatur Ave	Valley View Ave	Sidepath	Kensington/Wheaton, Wheaton CBD	0.7
University Blvd (West Side)	Lorain Ave	Franklin Ave	Sidepath	Kensington/Wheaton	0.2
University Blvd (West Side)	Carroll Ave	Prince George's County	Separated Bike Lanes	Takoma/Langley	0.6
University Blvd Breezeway	Lorain St	Lexington Ave	Sidepath	Kensington/Wheaton	0.3
University Blvd Breezeway	Piney Branch Rd	Carroll Ave	Separated Bike Lanes	Long Branch Sector Plan	0.4
University Blvd Breezeway	Carroll Ave	Prince George's County	Separated Bike Lanes	Silver Spring/Takoma Park (East)	0.1
US 29 Corridor Breezeway	New Hampshire Ave	Columbia Pike	Sidepath	White Oak	0.8
US 29 Corridor Breezeway	Tech Rd	Stewart La	Sidepath	Fairland/Colesville, White Oak	1.3
Walter Johnson Rd	Bowman Mill Dr	Middlebrook Rd	Sidepath / Off-Street Trail	Germantown Town Center	0.3
Weller Rd / Briggs Rd	Flack St	Layhill Rd	Neighborhood Greenway / Sidepath	Glenmont	0.8
Westbard Ave	River Rd	Westbard Cir	Separated Bike Lanes	Bethesda/Chevy Chase (West)	0.3
Westbard Ave	Westbard Cir	Massachusetts Ave	Sidepath	Bethesda/Chevy Chase (West)	0.3
Westlake Ter / Fernwood Rd	Rockledge Dr	Democracy Blvd	Separated Bike Lanes	North Bethesda	0.4
Westlake Ter / Fernwood Rd	Westlake Dr	Rockledge Dr	Separated Bike Lanes	North Bethesda, Potomac	0.5
Wheaton Plaza Ring Road	Wheaton Plaza Ring Road	Wheaton Plaza Ring Road	Separated Bike Lanes	Wheaton CBD	1.1
Wildwood Dr	Carroll Ave	Glenside Dr	Neighborhood Greenway	Takoma/Langley	0.6

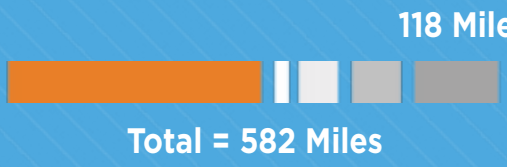
STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Willard Ave	Willard Ave Trail	Wisconsin Ave	Separated Bike Lanes	Friendship Heights	0.5
Wisteria Dr (East Side)	Father Hurley Blvd	Germantown Rd	Separated Bike Lanes	Germantown Town Center	0.1
Wisteria Dr (East Side)	Germantown Rd	Crystal Rock Dr	Separated Bike Lanes	Germantown Town Center	0.2
Wisteria Dr (East Side)	Crystal Rock Dr	Great Seneca Hwy	Separated Bike Lanes	Germantown West	0.3
Woodfield Rd	Main St	Bethesda Church Rd	Sidepath	Damascus	0.3

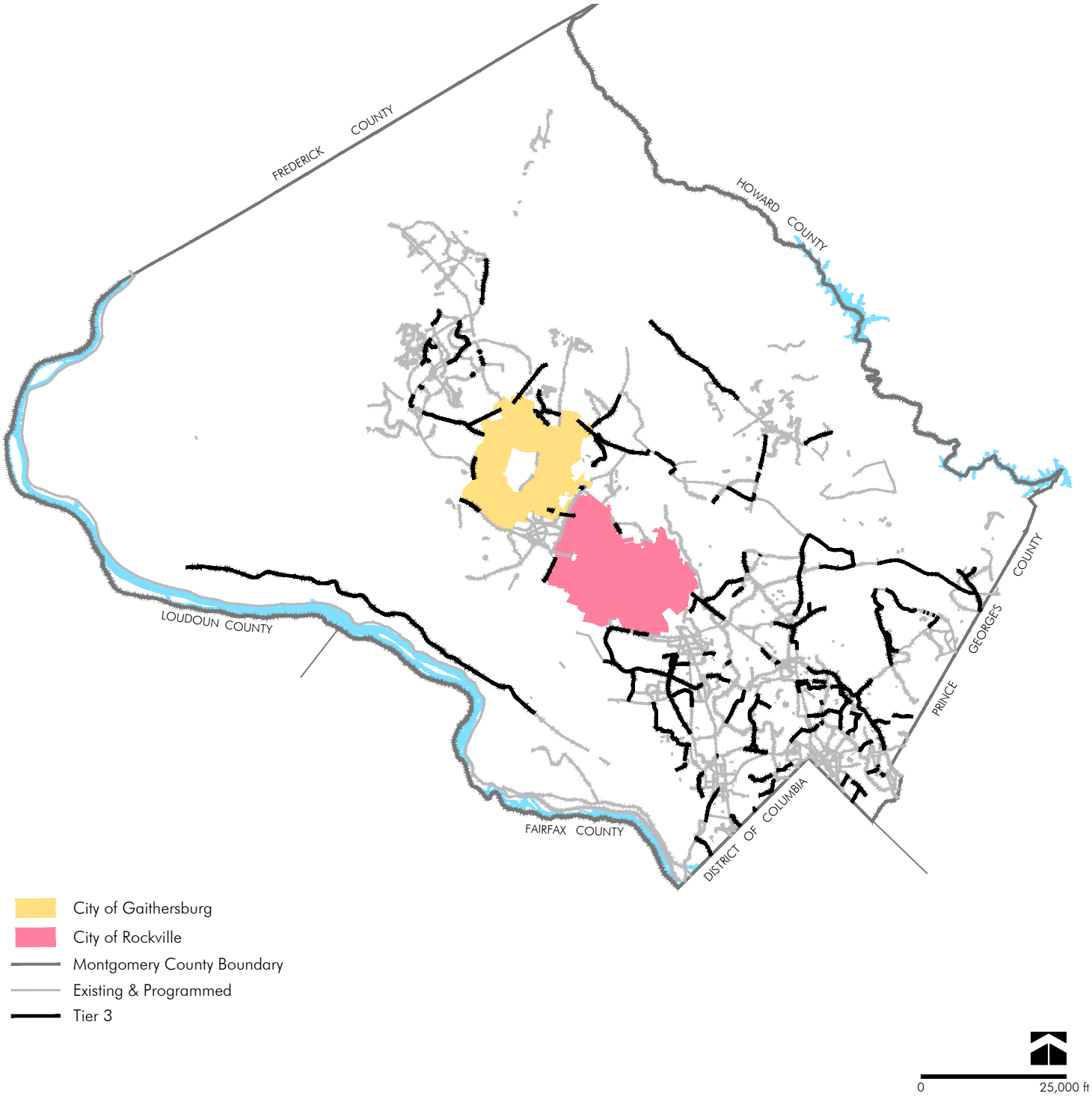


Tier 3 Bikeways

Tier 3 projects are recommended to be substantially completed within 20 years of approval of the Bicycle Master Plan. These projects include:

- Remaining neighborhood greenways.
- Highest demand bikeways located outside of the Bicycle Pedestrian Priority Areas.
- High demand recreational bicycling routes.




FREDERICK COUNTY
HOWARD COUNTY
LOUDOUN COUNTY
PRINCE GEORGES COUNTY
FAIRFAX COUNTY
DISTRICT OF COLUMBIA
City of Gaithersburg
City of Rockville
Montgomery County Boundary
Existing & Programmed
Tier 3
0
25,000 ft

Tier 3 Bikeways

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Aberdeen / Garfield	Sonoma Rd	Bradley Blvd	Neighborhood Greenway	Bethesda/Chevy Chase (East), Bethesda/Chevy Chase (West)	1.0
Amity Dr	Washington Grove Ln	Piedmont Crossing LP Trail	Sidepath	Derwood	0.9
Aspen Hill Rd	Veirs Mill Rd	Artic Ave	Sidepath	Aspen Hill	0.4
Aspen Hill Rd	Artic Ave	Parkland Dr	Sidepath	Aspen Hill	0.9
Aspen Hill Rd	Parkland Dr	Connecticut Ave	Sidepath	Aspen Hill	0.4
Briggs Chaney Rd (North Side)	Old Columbia Pike	ICC Trail	Sidepath	Fairland/Colesville	1.1
Briggs Chaney Rd (South Side)	Old Columbia Pike	Prince George's County	Sidepath	Fairland/Colesville	0.6
Brookville Rd	Stewart Ln	Seminary Rd	Sidepath	Silver Spring/Takoma Park (West)	0.6
Brookville Rd / Rock Creek Trail	Beach Dr	Brookville Rd	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.9
Brunett Ave	University Blvd	Sligo Creek Parkway	Neighborhood Greenway	Kensington/Wheaton, Silver Spring/Takoma Park (West)	1.0
Capital Crescent Trail Breezeway	River Rd	Woodmont Ave	Off-Street Trail	Bethesda CBD, Bethesda/Chevy Chase (East)	1.2
Castle Blvd	Castle Ridge Cir	Briggs Chaney Rd	Separated Bike Lanes	Fairland/Colesville	0.5
Christopher Ave	Montgomery Village Ave	City of Gaithersburg	Separated Bike Lanes	Montgomery Village/Airpark	0.2
Clopper Rd (West)	Germantown Rd	Great Seneca Hwy	Sidepath	Germantown West	0.1
Clopper Rd	Great Seneca Hwy	Mateny Rd	Sidepath and Bikeable Shoulders	Germantown West	0.5
Clopper Rd	Mateny Rd	City of Gaithersburg	Sidepath and Bikeable Shoulders	Germantown West, North Potomac	1.7
College View Dr / Trail	Veirs Mill Rd	Veirs Mill Rd	Neighborhood Greenway	Kensington/Wheaton	0.6
Connecticut Ave (East Side)	Bel Pre Rd	Georgia Ave	Sidepath	Aspen Hill	0.0
Connecticut Ave / Rock Creek	Connecticut Ave	Beach Dr	Neighborhood Greenway	Bethesda/Chevy Chase (East)	1.0
Corridor Cities Transitway Trail	Omega Dr	King Farm Blvd	Off-Street Trail	Gaithersburg City, Rockville City	0.5
Darnestown Rd	Quince Orchard Rd	Tschiffely Square Rd	Separated Bike Lanes and Conventional Bike Lanes	North Potomac	0.3
Darnestown Rd	Tschiffely Square Rd	Main St	Sidepath and Conventional Bike Lanes	North Potomac	0.4

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Dawson Farm Rd	Germantown Rd	Great Seneca Hwy	Sidepath	Germantown West	0.2
Edson La	Old Georgetown Rd	Woodglen Dr	Sidepath	North Bethesda	0.5
Emory La	Holly Ridge Rd	Muncaster Mill Rd	Sidepath	Olney	0.3
Father Hurley Blvd (West Side)	Wisteria Dr	Crystal Rock Dr	Sidepath	Germantown West	0.9
Fernwood Rd	Democracy Blvd	Marywood Rd	Sidepath	Bethesda/Chevy Chase (West), North Bethesda	0.9
Fernwood Rd - Grant St	Fernwood Rd	Grant St	Neighborhood Greenway	Bethesda/Chevy Chase (East), Bethesda/Chevy Chase (West)	1.6
Fields Rd	Sam Eig Hwy	City of Gaithersburg	Sidepath	R&D Village	0.2
Forest Glen Rd	Georgia Ave	Brunett Ave	Sidepath	Kensington/Wheaton	1.1
Four Corners	University Blvd	Colesville Rd	Neighborhood Greenway	Kensington/Wheaton	0.8
Franklin Ave	University Blvd	End of Franklin Ave	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.6
Frederick Rd (East Side)	O'Neill Dr	Shady Grove Rd	Sidepath	Derwood	0.1
Garret Park Rd	Schuylkill Rd	Rock Creek Trail	Sidepath	Kensington/Wheaton, North Bethesda	0.2
Georgia Ave - Sligo Creek Trail	Georgia Ave	Sligo Creek Trail	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.4
Georgia Ave - University Blvd	Georgia Ave	University Blvd	Neighborhood Greenway	Kensington/Wheaton	1.7
Georgia Ave (East Side)	Randolph Rd	Mason St	Sidepath	Kensington/Wheaton	0.2
Georgia Ave (East Side)	Mason St	Henderson Ave	Sidepath	Kensington/Wheaton	0.3
Georgia Ave North Breezeway	Bel Pre Rd	Connecticut Ave	Sidepath	Aspen Hill	0.7
Georgia Ave North Breezeway	Queen Mary Dr	Emory La	Sidepath	Olney	1.4
Georgia Ave South Breezeway	Randolph Rd	Mason St	Sidepath	Kensington/Wheaton	0.2
Germantown - Burtonsville Breezeway	Clopper Rd	Frederick Rd	Off-Street Trail	North Potomac	1.2
Germantown - Burtonsville Breezeway	Frederick Rd	Montgomery Village Ave	Off-Street Trail	Montgomery Village/Airpark	1.7
Germantown - Grosvenor Breezeway	Angus Pl	Old Georgetown Rd	Separated Bike Lanes	North Bethesda, Potomac	1.9
Germantown - Grosvenor Breezeway	Old Georgetown Rd	Rockville Pike	Sidepath	Grosvenor, North Bethesda	1.2
Germantown - Grosvenor Breezeway	Utility Corridor #1	Angus Pl	Separated Bike Lanes	Potomac	0.4

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Germantown - Life Sciences Center Breezeway	Observation Dr	Century Blvd	Separated Bike Lanes	Germantown East, Germantown West	0.5
Germantown Rd	Aircraft Dr	Seneca Meadows Pkwy	Sidepath	Germantown Town Center, Germantown West	0.7
Germantown Rd (North Side)	Clopper Rd	Father Hurley Blvd	Sidepath	Germantown West	0.3
Germantown Rd (North Side)	Seneca Meadows Pkwy	Observation Dr	Sidepath	Germantown East	0.3
Glen Mill Rd	Darnestown Rd	Valley Dr	Sidepath	R&D Village	0.9
Glenbrook Rd	Battery La	Bradley Blvd	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.9
Grant Ave	Piney Branch Rd	Ethan Allen Ave	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.7
Henderson Ave	Georgia Ave	Trail	Sidepath	Kensington/Wheaton	0.2
Hesketh - Kirkside	Wisconsin Ave	Western Ave	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.5
Independence St	Parkland Dr	Connecticut Ave	Sidepath	Aspen Hill	0.4
Intercounty Connector Trail Breezeway	Shady Grove Rd	Muncaster Mill Rd	Sidepath	Derwood	0.9
Intercounty Connector Trail Breezeway	Muncaster Mill Rd	Beach Dr	Sidepath	Rural East (East)	0.3
Intercounty Connector Trail Breezeway	Muncaster Rd	Needwood Rd	Sidepath and Bikeable Shoulders	Rural East (East), Derwood	0.8
Intercounty Connector Trail Breezeway	Emory La	Georgia Ave	Off-Street Trail	Olney	1.2
Intercounty Connector Trail Breezeway	ICC Trail	Notley Rd	Sidepath	Cloverly	0.8
Intercounty Connector Trail Breezeway	Layhill Rd	Bonifant Rd	Off-Street Trail	Aspen Hill	0.8
Intercounty Connector Trail Breezeway	Bonifant Rd	New Hampshire Ave	Sidepath	Cloverly	0.4
Intercounty Connector Trail Breezeway	New Hampshire Ave	Briggs Chaney Rd	Off-Street Trail	Cloverly, Fairland/Colesville	3.5
Jackson Rd - Columbia Pike	Jackson Rd	Columbia Pike	Neighborhood Greenway	Fairland/Colesville	0.9
Jones Bridge Rd	Connecticut Ave	Jones Mill Rd	Sidepath	Chevy Chase Lake Master Plan	0.6
Jones Bridge Rd (North Side)	Wisconsin Ave	Connecticut Ave	Sidepath	Bethesda/Chevy Chase (East), Chevy Chase Lake Master Plan	0.2
Kenilworth / Montgomery	Kensington Pkwy	Jones Bridge Rd	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.3
Kennebec Ave	Sligo Creek Trail	Long Branch Trail	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.4
Kensington Pkwy	Rock Creek Trail	Husted Drwy	Sidepath	Kensington/Wheaton, Bethesda/Chevy Chase (East)	0.4

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Kensington Pkwy	Husted Drwy	Connecticut Ave	Separated Bike Lanes	Bethesda/Chevy Chase (East)	0.4
Kensington Pkwy	Montgomery Ave	Rock Creek Trail	Sidepath	Kensington/Wheaton	1.3
Kent St	Kensington Pkwy	Stonebrook Dr	Neighborhood Greenway	Kensington/Wheaton	0.5
Layhill Rd	Park Vista Dr	Matthew Henson Trail	Sidepath and Conventional Bike Lanes	Aspen Hill	1.5
Layhill Rd	Matthew Henson Trail	Briggs Rd	Sidepath and Conventional Bike Lanes	Kensington/Wheaton	0.8
Layhill Rd (East Side)	Saddlebrook Connector	Glenallan Ave	Sidepath and Conventional Bike Lanes	Kensington/Wheaton	0.5
Linden La / Seminary Rd	Brookville Rd	Georgia Ave	Separated Bike Lanes / Sidepath	Silver Spring/Takoma Park (West)	0.3
Long Branch Trail	Maplewood Ave	Carroll Ave	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.2
Longdraft Rd	Birdsong La	Quince Orchard Rd	Sidepath	North Potomac	0.7
Lost Knife Rd	Montgomery Village Ave	Odendhal Ave	Separated Bike Lanes	Montgomery Village/Airpark	0.5
Luxmanor	Tilden La	Tuckerman La	Neighborhood Greenway	North Bethesda	0.7
Maple Ave	Grant Ave	District of Columbia	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.5
Massachusetts / Baltimore Ave	Massachusetts Ave	District of Columbia	Neighborhood Greenway / Sidepath	Bethesda/Chevy Chase (East), Bethesda/Chevy Chase (West)	0.9
Matthew Henson Trail Ext	Alderton Rd	Notley Rd	Off-Street Trail	Fairland/Colesville, Kensington / Wheaton, Aspen Hill	1.1
MD 355 North Breezeway	Observation Dr	Scenery Dr	Sidepath	Germantown East	0.1
MD 355 North Breezeway	Ridge Rd	Germantown Rd	Sidepath	Germantown East, Germantown Town Center	1.1
MD 355 North Breezeway	Germantown Rd	City of Gaithersburg	Sidepath	Germantown East	0.4
MD 355 North Breezeway	Waters Discovery La	Dorsey Mill Rd	Sidepath	Germantown East	0.1
MD 355 North Breezeway	West Gude Dr	Mannakee St	Separated Bike Lanes	Derwood	0.4
MD 355 South Breezeway	Rossmore Dr	Fleming St	Sidepath	North Bethesda	0.4
MD 355 South Breezeway	Tuckerman Ln	I-270 Spur	Priority Shared Lane Markings	North Bethesda	0.1
Melrose St / Nevada Ave	Brookville Rd	Western Ave	Neighborhood Greenway	Bethesda/Chevy Chase (East)	0.2
Midcounty Hwy	Montgomery Village Ave	Goshen Rd	Sidepath and Bikeable Shoulders	Montgomery Village/Airpark	0.6

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Midcounty Hwy	Goshen Rd	Washington Grove Ln	Sidepath and Bikeable Shoulders	Montgomery Village/Airpark, Gaithersburg City	0.8
Midcounty Hwy	Washington Grove Ln	Shady Grove Rd	Sidepath and Bikeable Shoulders	Derwood	1.0
Middlebrook Rd	I-270	Observation Dr	Sidepath	Germantown East	0.2
Middlebrook Rd (West Side)	Father Hurley Blvd	Locbury Dr	Sidepath	Germantown Town Center	0.2
Middlevale La / Garden Gate Rd	Briggs Rd	Randolph Rd	Sidepath	Kensington/Wheaton	0.4
Montgomery Village Ave (East Side)	Stedwick Rd	Midcounty Hwy	Sidepath	Montgomery Village/Airpark, Gaithersburg City	0.7
Montgomery Village Ave (East Side)	Midcounty Hwy	City of Gaithersburg	Sidepath	Montgomery Village/Airpark	0.3
Montrose Rd	Falls Rd	Montrose Rd	Sidepath	North Bethesda, Potomac	1.1
New Hampshire Ave (East Side)	Eldrid Dr	Jackson Rd	Sidepath	Fairland/Colesville	0.8
New Hampshire Ave (West Side)	Jackson Rd	Columbia Pike	Sidepath	Fairland/Colesville	0.8
New Hampshire Ave (West Side)	Columbia Pike	Lockwood Dr	Sidepath	White Oak	0.3
Nicholson Ct / Wyaconda Rd	Nebel St Ext	Schuylkill Rd	Separated Bike Lanes / Off-Street Trail	North Bethesda, White Flint	0.4
Oakview Dr	Northwest Branch Trail	New Hampshire Ave	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.7
Observation Dr (West Side)	Shakespeare Blvd	Germantown Rd	Sidepath	Germantown East	0.1
Old Georgetown Rd	Nicholson Ln	Tuckerman La	Sidepath	North Bethesda	0.7
Old Georgetown Rd (East Side)	Tuckerman La	Cheshire Dr	Separated Bike Lanes / Sidepath	North Bethesda	0.9
Old Georgetown Rd	Cheshire Dr	Charles St	Sidepath	North Bethesda, Bethesda/Chevy Chase (East)	1.2
Olney-Laytonsville Rd	Town of Laytonsville	Fieldcrest Rd	Bikeable Shoulders	Rural East (East)	1.3
Olney-Laytonsville Rd	Fieldcrest Rd	Wickham Rd	Bikeable Shoulders	Rural East (East)	1.7
Olney-Laytonsville Rd	Wickham Rd	Olney Mill Rd	Bikeable Shoulders	Rural East (East)	1.0
Olney-Sandy Spring Rd	Dr. Bird Rd	Brooke Rd	Sidepath	Olney	1.0
Piedmont Crossing LP Trail	Amity Dr	Crabbs Branch Way	Off-Street Trail	Derwood	0.4
Randolph Rd - New Hampshire Ave	Randolph Rd	New Hampshire Ave	Neighborhood Greenway	Fairland/Colesville	1.0
Randolph Rd Breezeway	Denley Rd	Georgia Ave	Sidepath	Kensington/Wheaton	0.7

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Randolph Rd Breezeway	Georgia Ave	Glenallan Rd	Sidepath	Kensington/Wheaton	0.3
Randolph Rd Breezeway	Glenallan Rd	Kemp Mill Rd	Sidepath	Kensington/Wheaton	0.9
Randolph Rd Breezeway	Fairland Rd	Columbia Pike	Sidepath	Fairland/Colesville	1.4
Ridge Rd	Little Seneca Pkwy	Snowden Farm Pkwy	Sidepath	Clarksburg	1.1
Ridge Rd	Midcounty Hwy	Brink Rd	Sidepath	Clarksburg	0.4
River Rd	Willard Rd	Gary Rd	Bikeable Shoulders	Rural West, Potomac	13.3
Rock Creek - Grubb Rd	Rock Creek Trail	Grubb Rd	Neighborhood Greenway	Silver Spring/Takoma Park (West)	0.6
Rossmore Dr	Old Georgetown Rd	Bethesda Trolley Trail	Neighborhood Greenway	North Bethesda	0.8
Seven Locks Rd	Montrose Rd	Tuckerman La	Sidepath and Bikeable Shoulders	Potomac	1.2
Silver Spring - Glenmont Neighborhood Greenway	Windham La	Forest Glen Rd	Sidepath	Kensington/Wheaton	0.4
Strathmore Ave	Strathmore Trail	Kenilworth Ave	Sidepath	North Bethesda	0.4
Strathmore Ave - Weymouth St	Strathmore Ave	Weymouth St	Neighborhood Greenway	North Bethesda	0.5
Summit Ave / Cedar La	Knowles Ave	Rock Creek Trail	Sidepath	Kensington/Wheaton	1.3
Takoma Ave	Gist Ave	Metropolitan Branch Trail	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.4
Tilden Ln	Danville Dr	Old Georgetown Rd	Sidepath	North Bethesda	0.5
Trail	Henderson Ave	Arcola Ave	Off-Street Trail	Kensington/Wheaton	0.2
Twinbrook - Veirs Mill Rd Connector	Veirs Mill Rd	Rock Creek Mill Rd	Off-Street Trail	North Bethesda	0.6
University Blvd Breezeway	Dayton St	Arcola Ave	Sidepath	Kensington/Wheaton	0.9
University Blvd Breezeway	Arcola Ave	Lorain St	Sidepath	Kensington/Wheaton	1.1
University Blvd Breezeway	Lexington Dr	Franklin Ave	Sidepath	Kensington/Wheaton, Silver Spring/Takoma Park (East)	0.7
University Blvd Breezeway	Franklin Ave	Piney Branch Rd	Sidepath / Separated Bike Lanes	Silver Spring/Takoma Park (East), Long Branch Sector Plan	1.0
US 29 Corridor Breezeway	Cherry Hill Rd	Tech Rd	Sidepath	Fairland/Colesville	0.5
US 29 Corridor Breezeway	Lockwood Dr	Southwood Ave	Sidepath	Kensington/Wheaton, White Oak	0.7

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
US 29 Corridor Breezeway	Southwood Ave	University Blvd	Sidepath / Neighborhood Greenway	Kensington/Wheaton	0.5
US 29 Corridor Breezeway	University Blvd	Franklin Ave	Neighborhood Greenway / Off-Street Trail	Silver Spring/Takoma Park (East)	0.9
US 29 Corridor Breezeway	Caroline Ave	Worth Ave	Sidepath	Silver Spring/Takoma Park (East)	0.2
US 29 Corridor Breezeway	Franklin Ave	Sligo Creek Pkwy	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.1
Veirs Mill Rd Breezeway	Twinbrook Pkwy	Aspen Hill Rd	Sidepath	North Bethesda	0.5
Veirs Mill Rd Breezeway	Aspen Hill Rd	Montrose Pkwy	Sidepath	Aspen Hill	0.9
Washington Grove La	Emory Grove Rd	Amity Dr	Sidepath	Derwood	0.2
Waters Landing Dr	Father Hurley Blvd	Crystal Rock Dr	Sidepath	Germantown West	0.4
Wayne Ave	Cedar St	Whitney St	Sidepath	Silver Spring/Takoma Park (East)	0.6
Westlake Dr	Tuckerman La	Democracy Blvd	Sidepath	Potomac	1.1
Windham La	Georgia Ave	Sligo Creek Trail	Neighborhood Greenway	Kensington/Wheaton, Wheaton CBD	0.8
Wolf Dr	New Hampshire Ave	Kara La	Sidepath	Fairland/Colesville	0.1
Woodfield Rd	Airpark Rd	Muncaster Mill Rd	Sidepath	Montgomery Village/Airpark	0.6
Woodfield Rd	Muncaster Mill Rd	Emory Grove Rd	Sidepath	Montgomery Village/Airpark	0.8

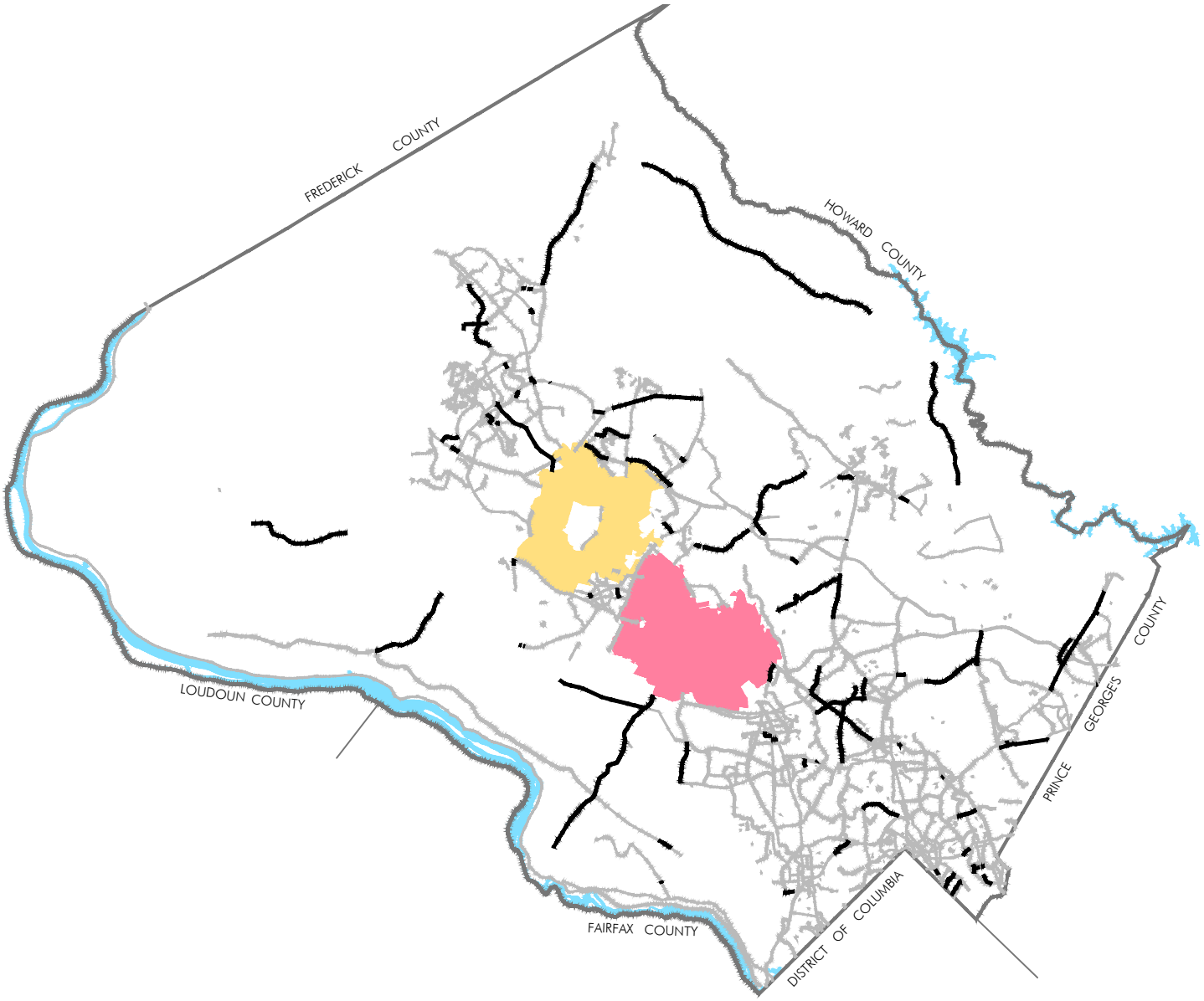


Tier 4 Bikeway Projects

Tier 4 projects are recommended to be substantially completed within 25 years of approval of the Bicycle Master Plan. These projects include:

- All remaining bikeways that are recommended for completion within the 25-year life of the plan.
- Several heavily-used recreational bicycling routes.




FREDERICK COUNTY
HOWARD COUNTY
LOUDOUN COUNTY
PRINCE GEORGES COUNTY
FAIRFAX COUNTY
DISTRICT OF COLUMBIA
City of Gaithersburg
City of Rockville
Montgomery County Boundary
Existing & Programmed
Tier 4
0
25,000 ft

Tier 4 Bikeways

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Baltimore Ave	Philadelphia Ave	District of Columbia	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.4
Bowie Mill Rd	Muncaster Mill Rd	Cashell Rd	Sidepath	Rural East (East), Olney	2.4
Bradley Blvd	Wilson La	Fairfax Rd	Sidepath and Conventional Bike Lanes	Bethesda/Chevy Chase (East)	0.3
Briggs Rd	Layhill Rd	Middlevale La	Sidepath	Kensington/Wheaton	0.3
Cedar Ave	District of Columbia	Philadelphia Ave	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.4
Centerway Rd	Montgomery Village Ave	Goshen Rd	Sidepath	Montgomery Village/Airpark	0.7
City Hall Parking Lot	Philadelphia Ave	Grant Ave	Off-Street Trail	Silver Spring/Takoma Park (East)	0.1
Clopper Rd (East)	Kingsview Rd	Germantown Rd	Sidepath	Germantown West	0.3
Connecticut Ave	Manor Rd	Chevy Chase Lake Dr	Separated Bike Lanes	Chevy Chase Lake Master Plan	0.2
Connecticut Ave (West Side)	Randolph Rd	Veirs Mill Rd	Sidepath / Contra-Flow Bike Lane	Kensington/Wheaton	0.4
Connecticut Ave (West Side)	Veirs Mill Rd	Denfeld Ave	Sidepath	Kensington/Wheaton	0.9
Connecticut Ave (West Side)	Denfeld Ave	Farragut Ave	Sidepath	Kensington/Wheaton	0.5
Connecticut Ave (West Side)	Laird Pl	Newdale Rd	Sidepath	Chevy Chase Lake Master Plan	0.0
Corridor Cities Transitway Trail	Century Blvd	City of Gaithersburg	Off-Street Trail	Germantown Town Center, Germantown West, North Potomac	2.8
Crabbs Branch Way (East)	Northern Terminus	Shady Grove Rd	Sidepath	Derwood	0.4
Crystal Rock Dr	Middlebrook Rd	Bowman Mill Dr Ext	Sidepath	Germantown West	0.2
Dalewood Dr / Dean Rd	Weller Rd	Randolph Rd	Neighborhood Greenway	Kensington/Wheaton	0.4
Damascus Rd	Stanley Hills Way	Georgia Ave	Bikeable Shoulders	Damascus, Rural East (West), Rural East (East)	8.4
Dennis Ave	Douglas Ave	Edgewood Ave	Sidepath	Kensington/Wheaton	0.1
Dr. Bird Rd	Olney-Sandy Spring Rd	Norwood Rd	Sidepath	Rural East (East)	0.3
Emory Grove Rd	Goshen Rd	Strawberry Knoll Rd	Sidepath	Montgomery Village/Airpark	0.3
Emory Grove Rd	Strawberry Knoll Rd	Woodfield Rd	Sidepath	Montgomery Village/Airpark	0.9
Emory Grove Rd	Woodfield Rd	Washington Grove Ln	Sidepath	Montgomery Village/Airpark	0.4

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Executive Blvd	Marinelli Rd	Woodglen Dr	Separated Bike Lanes	White Flint	0.3
Fairland Rd	Old Columbia Pike	Briggs Chaney Rd	Sidepath	Fairland/Colesville	0.2
Falls Rd	Dunster Rd	River Rd	Bikeable Shoulders	Potomac	3.8
Falls Rd	River Rd	MacArthur Blvd	Bikeable Shoulders	Potomac	2.0
Flower Ave	Carroll Ave	Sligo Creek Trail	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.4
Forest Glen / Linden	Seminary Rd	Darcy Forest Dr	Sidepath	Kensington/Wheaton	0.2
Franklin Ave	Worth Ave	University Blvd	Sidepath	Silver Spring/Takoma Park (East)	0.6
Frederick Rd (West Side)	Shakespeare Blvd	Germantown Rd	Sidepath	Germantown East	0.2
Georgia Ave North Breezeway	Emory La	Norbeck Rd	Sidepath	Olney	0.2
Georgia Ave North Breezeway	Norbeck Rd	Connecticut Ave	Sidepath	Aspen Hill	1.2
Germantown - Burtonsville Breezeway	Montgomery Village Ave	Woodfield Rd	Off-Street Trail	Montgomery Village/Airpark	2.7
Germantown - Grosvenor Breezeway	Piney Meetinghouse Rd	Falls Rd	Off-Street Trail	Potomac, Rural West	2.6
Germantown - Life Sciences Center Breezeway	Germantown Rd	Crystal Rock Dr	Separated Bike Lanes	Germantown Town Center	0.2
Germantown - Life Sciences Center Breezeway	Cyrstal Rock Dr	Great Seneca Hwy	Sidepath	Germantown West	0.1
Germantown Rd (North Side)	Frederick Rd	Scenery Dr	Sidepath	Germantown East	0.1
Goldenrod La	Germantown Rd	Observation Dr	Sidepath	Germantown East	0.2
Greencastle Rd	Old Columbia Pike	Greencastle Ridge Ter	Sidepath and Conventional Bike Lanes	Fairland/Colesville	0.1
Hathaway Dr / Valleywood Dr	Flack St	Randolph Rd	Sidepath / Off-Street Trail	Kensington/Wheaton	0.5
Hopkins Rd	Clopper Rd	Father Hurley Blvd	Sidepath	Germantown West	0.6
Johns Hopkins Dr (West) Side	Belward Campus Dr	Key West Ave	Separated Bike Lanes	R&D Village	0.1
Kenilworth Ave	Montrose Ave	Oxford St	Neighborhood Greenway	North Bethesda	0.1
Kenilworth Pkwy / Montrose Ave / Oxford St	Montrose Ave	Oxford St	Neighborhood Greenway	North Bethesda	0.1
Little Seneca Pkwy	Snowden Farm Pkwy	Ridge Rd	Sidepath	Clarksburg	0.3
Little Seneca Pkwy (North Side)	Broadway Ave	Observation Dr Ext	Sidepath	Clarksburg	0.4

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Little Seneca Pkwy (North Side)	Observation Dr Ext	Frederick Rd	Sidepath	Clarksburg	0.3
Manor Rd	Connecticut Ave	Jones Bridge Rd	Sidepath	Chevy Chase Lake Master Plan	0.4
Maple Ave	Kennebec Ave	Hilltop Rd	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.3
Maplewood Ave	Maple Ave	Long Branch Pkwy	Neighborhood Greenway	Silver Spring/Takoma Park (East)	0.3
MD 355 North Breezeway	Little Seneca Pkwy	Dorsey Mill Rd	Sidepath	Clarksburg, Germantown East	0.9
Metropolitan Branch Trail (Ultimate)	King St	Fenton St	Off-Street Trail	Silver Spring CBD	0.2
Midcounty Hwy	Great Seneca Creek	Montgomery Village Ave	Sidepath	Montgomery Village/Airpark, Gaithersburg City	0.8
Montgomery Village Ave (East Side)	Stewartown Rd	Stedwick Rd	Sidepath	Montgomery Village/Airpark	0.2
Morningwood Dr	Headwaters Rd	Olney #1	Sidepath	Olney	0.5
Muncaster Mill Rd	Bowie Mill Rd	ICC Trail	Sidepath and Bikeable Shoulders	Rural East (East)	0.5
Muncaster Mill Rd	Avery Rd	Emory Ln	Sidepath and Bikeable Shoulders	Olney	0.3
Needwood Rd	Redland Rd	ICC Trail	Sidepath	Derwood, Rural East (East)	1.8
Neighborhood Connector	Reedie Dr	University Blvd	Neighborhood Connector	Wheaton CBD	0.1
New Hampshire Ave	Georgia Ave	Olney-Sandy Spring Rd	Bikeable Shoulders	Rural East (East)	4.0
New Hampshire Ave - FDA Blvd Connector	New Hampshire Ave	FDA Blvd	Off-Street Trail	White Oak	1.4
New Hampshire Ave (East Side)	ICC Trail	Wolf Dr	Sidepath	Fairland/Colesville	0.2
New Hampshire Ave (West Side)	ICC Trail	Randolph Rd	Sidepath	Fairland/Colesville	0.8
Newdale Rd	Terminus	Connecticut Ave	Sidepath	Chevy Chase Lake Master Plan	0.1
Norbeck Rd (North)	Bauer Dr	Muncaster Mill Rd	Neighborhood Greenway	Aspen Hill	2.2
Norbeck Rd (North)	Muncaster Mill Rd	Georgia Ave	Sidepath	Olney	0.2
Observation Dr Ext (West Side)	Roberts Tavern Dr	Little Seneca Pkwy	Sidepath	Clarksburg	1.3
Old Columbia Pike	Briggs Chaney Rd	Fairland Rd	Sidepath and Conventional Bike Lanes	Fairland/Colesville	0.7
Parkland Dr	Independence St	Veirs Mill Rd	Sidepath	Aspen Hill	0.8
Persimmon Tree Rd	Eggert Rd	MacArthur Blvd	Sidepath	Potomac	0.1

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
Piney Branch Rd	Philadelphia Ave	Ray Dr	Sidepath	Silver Spring/Takoma Park (East)	0.2
Piney Branch Rd	Silver Spring Ave	Sligo Creek Pkwy	Sidepath	Silver Spring/Takoma Park (East)	0.3
Quince Orchard Rd	Darnestown Rd	Dufief Mill Rd	Sidepath	North Potomac	0.2
Randolph Rd	Rock Creek Trail	Veirs Mill Rd	Sidepath	Kensington/Wheaton	0.4
Randolph Rd Breezeway	Veirs Mill Rd	Connecticut Ave	Sidepath	Kensington/Wheaton	0.5
Randolph Rd Breezeway	Connecticut Ave	Denley Rd	Sidepath	Kensington/Wheaton	0.7
Randolph Rd Breezeway	Kemp Mill Rd	New Hampshire Ave	Sidepath	Fairland/Colesville	1.7
Ridge Rd	Bethesda Church Rd	Valley Park Dr	Sidepath	Damascus	0.8
Ridge Rd	Valley Park Dr	Sweepstakes Rd	Sidepath	Damascus	0.9
Ridge Rd	Sweepstakes Rd	Skylark Rd	Sidepath	Clarksburg, Damascus, Rural East (West)	2.2
River Rd	Bradley Blvd	Seven Locks Rd	Sidepath	Potomac	0.4
Security Ln	Rockville Pike	Woodglen Dr	Separated Bike Lanes	White Flint	0.2
Seminary Rd	Forest Glen Rd	2nd Ave	Conventional Bike Lanes	Kensington/Wheaton, Silver Spring/Takoma Park (West)	0.7
Seneca Rd	Darnestown Rd	River Rd	Bikeable Shoulders	Rural West	2.8
Seven Locks Rd	Tuckerman La	Democracy Blvd	Sidepath and Bikeable Shoulders	Potomac	1.2
Sidepath	Little Seneca Pkwy	Black Hills Regional park	Sidepath	Clarksburg	0.2
Snouffer School Rd	Sweet Autumn Dr	Woodfield Rd	Sidepath	Montgomery Village/Air-park	0.2
Snowden Farm Pkwy	Little Seneca Pkwy	Ridge Rd	Sidepath	Clarksburg	0.2
Stedwick Rd	Watkins Mill Rd	Montgomery Village Ave	Sidepath	Montgomery Village/Air-park	0.3
Stewartown Rd Ext	Watkins Mill Rd	Montgomery Village Ave	Sidepath	Montgomery Village/Air-park	0.3
Street B-25	Ridge Rd	Seneca Meadows Pkwy	Separated Bike Lanes	Germantown Town Center	0.2
Trail	Stoneybrook Dr	Linden La	Off-Street Trail	Kensington/Wheaton	0.4
Travilah Rd	Darnestown Rd	Dufief Mill Rd	Sidepath	Rural West	0.1
Twinbrook Pkwy (East Side)	Veirs Mill Rd	Halpine Rd	Sidepath	North Bethesda	0.5

STREET	FROM	TO	BIKEWAY	POLICY AREA	LENGTH (MI)
US 29 Corridor Breezeway	Blackburn Rd	Briggs Chaney Rd	Sidepath	Fairland/Colesville	1.7
US 29 Corridor Breezeway	Blackburn Rd	Briggs Chaney Rd	Sidepath	Fairland/Colesville	1.7
US 29 Corridor Breezeway	Briggs Chaney Rd	Tech Rd	Sidepath	Fairland/Colesville	1.6
Veirs Mill Rd Breezeway	Montrose Pkwy	Randolph Rd	Separated Bike Lanes / Sidepath	Kensington/Wheaton	0.6
Veirs Mill Rd Breezeway	Randolph Rd	Connecticut Ave	Sidepath	Kensington/Wheaton	0.5
Veirs Mill Rd Breezeway	Connecticut Ave	Newport Mill Rd	Sidepath	Kensington/Wheaton	0.7
Veirs Mill Rd Breezeway	Newport Mill Rd	College View Dr	Separated Bike Lanes / Sidepath	Kensington/Wheaton	0.4
Weymouth St	Montrose Ave	Knowles Ave	Sidepath	North Bethesda	0.0
White Oak - FDA Connector	Lockwood Dr	FDA	Off-Street Trail	White Oak	0.1
Whites Ferry Rd	Town of Poolesville	Darnestown Rd	Bikeable Shoulders	Rural West	3.1


Broschart & Blackwell Rd
capital bikes
Local Stations & Bike Ro
capital bikeshare

Prioritization of Bicycle Parking Stations

The table below prioritizes implementation of the bicycle parking stations into four tiers (Tier 1, Tier 2, Tier 3 and Tier 4) based on anticipated demand (see Appendix G for a description of how demand was assessed). All bicycle parking stations are recommended to be completed during the life of this plan, although some are contingent upon development approvals, which may occur beyond the life of this master plan. Construction of bicycle parking stations will be a cooperative effort between Montgomery County, transit agencies and private development, depending on a number of factors, including development opportunities, funding sources and property ownership. **Operation of the Bethesda South and Silver Spring bicycling stations are recommended to coincide with operation of the Purple Line.**

Prioritization of Bicycle Parking Stations

STATION	TRANSIT CORRIDOR	MINIMUM NUMBER OF SPACES	
		LONG-TERM	SHORT-TERM
TIER 1			
Bethesda South	Red Line, Purple Line	330	130
Forest Glen	Red Line	300	100
Glenmont	Red Line	400	150
Shady Grove	Red Line, CCT	330	110
Silver Spring	Red Line, Purple Line	600	170
Wheaton	Red Line	400	100
White Flint	Red Line	250	50
TIER 2			
Bethesda North	Red Line	100	50
Friendship Heights	Red Line	200	50
Germantown	MARC	30	10
Grosvenor	Red Line	350	100
Medical Center	Red Line	200	50
Silver Spring Library	Purple Line	20	10
TIER 3			
Connecticut Avenue	Purple Line	20	10
Kensington	MARC	30	10

STATION	TRANSIT CORRIDOR	MINIMUM NUMBER OF SPACES	
		LONG-TERM	SHORT-TERM
LSC Belward	CCT	80	20
LSC Central	CCT	60	20
LSC West	CCT	90	10
Takoma / Langley	Purple Line	20	10
White Flint (proposed)	MARC	20	10
TIER 4			
Boyds	MARC	20	10
Long Branch	Purple Line	30	10
Lyttonsville	Purple Line	50	10
Piney Branch Road	Purple Line	10	10
Washington Grove	MARC	10	10
Woodside	Purple Line	20	10



Caption: A bicycle parking station in Boulder, Colorado. Photo: Matt Johnson

Prioritization of Bicycle Supportive Programs

The table below identifies target dates for initiating bicycle supportive programs.

Prioritization of Bicycle Supportive Programs

PROGRAM	TARGET
1.9 Bicycle Pedestrian Priority Areas	Immediately
2.1 Bikeways Program – Minor Projects	Immediately
2.2 Roadway and Bikeway Related Maintenance	Three years after plan approval
2.3 Snow Removal / Wind / Rain Storms	Three years after plan approval
2.4 Resurfacing: Primary/Arterial AND Sidewalk & Curb Replacement	Three years after plan approval
3.1 BikeMontgomery Outreach Program	Three years after plan approval
3.2 Bicycle Master Plan Monitoring Report	Ongoing
3.3 Neighborhood Greenway Program	Immediately
3.4 Bicycle Parking Program	Two years after plan approval
3.5 Public School Bicycle Education	Three years after plan approval
3.6 Bicycle Facility Education	Immediately
3.7 Bicycle Count Program	One year after plan approval
3.8 Countywide Wayfinding Plan	Three years after plan approval

Prioritization of Bicycle Supportive Laws, Regulations and Policies

The table below identifies target dates for changes to laws, regulations and policies.

Prioritization of Bicycle Supportive Laws, Regulations and Policies

LAW, REGULATION AND POLICY	TARGET COMPLETION
ROADWAY LAWS AND POLICIES	
2.1 Authorize Lower Posted Speed Limits	Ongoing
2.2 Repeal the Mandatory Use Law	Ongoing
2.3 Conduct a "Rules of the Road" Assessment	Two years after plan approval
2.4 Replace the State's Marked Bike Lane Policy	Ongoing
2.5 Develop a County Policy on E-Bikes	Two years after plan approval
DESIGN STANDARDS AND PRACTICES	
2.6 Establish Level of Traffic Stress Targets	One year after plan approval
2.7 Update Context Sensitive Road Design Standards	11/1/2019 (Per Vision Zero Action Plan)
2.8 Review all Designed Projects Against Best Practices	One year after plan approval
2.9 Make Separated Bikeways the Preferred Bikeway Facility Type	One year after plan approval
2.10 Make Protected Intersections the Preferred Intersection Type	One year after plan approval
2.11 Consolidate Driveways along Master-Planned Bikeways	Two years after plan approval
2.12 Develop a Shared Lane Marking Policy	Two years after plan approval
2.13 Develop Bicycle Parking Standards for County Facilities	One year after plan approval
2.14 Reassess Road Code Urban Area Boundaries	One year after plan approval
2.15 Establish Standards for Trail Crossings at Major Roads	One year after plan approval

LAW, REGULATION AND POLICY	TARGET COMPLETION
MAINTENANCE	
2.16 Develop Protocols for Bicycle Facility Closures and Detours	Two years after plan approval
OTHER	
2.17 Establish Vision Zero Collision Review Team	12/15/2017
2.18 Provide Open Access to Crash Data	One year after plan approval
2.19 Update the Zoning Code	One year after plan approval
2.20 Revise the Bicycle to School Policy	Two years after plan approval



Photo: Scott Wilets
Best Other Category
Bicycle Master Plan Photo Contest


CITY OF VANCOUVER
GREENEST CITY 2020
12:03
BICYCLES TODAY
1371
THIS YEAR
18477
Bike Trips on both East and West Sides of the Burrard Bridge
BIKE VANCOUVER

MONITORING THE VISION

A biennial monitoring program led by the Montgomery County Planning Department will track how well the vision of the plan is being fulfilled through the goals and objectives, and enable transparency and accountability in plan implementation. The monitoring template in this section reflects each of the plan's objectives and includes target values for the plan to achieve in 2033 and 2043, 15 and 25 years after the plan is adopted. The report will be reviewed by the Planning Board and approved by the County Council.

A template for a detailed biennial monitoring report is provided in Appendix A.

OBJECTIVE	METRIC		EXISTING	TARGET		FULL BUILD
			2018	2033	2043	
GOAL 1: INCREASE BICYCLING RATES IN MONTGOMERY COUNTY						
1.1	Percentage of residents who commute by bicycle.		0.5% (2016)	4%	8%	12%
1.2	Percentage of commuters who bicycle to a Transportation Management District.	Bethesda	Data Not Yet Surveyed	Data Not Yet Surveyed	Data Not Yet Surveyed	Data Not Yet Surveyed
		Friendship Heights				
		North Bethesda				
		Shady Grove				
		Silver Spring				
		White Oak				
1.3	Percentage of AM peak period transit boardings where the transportation mode of access is bicycle in Montgomery County.	Red Line	1.6% (2016)	6%	10%	15%
		Brunswick Line	TBD	TBD	TBD	TBD
		Purple Line (planned)	n/a	TBD	TBD	TBD
		Corridor Cities Transitway (planned)	n/a	TBD	TBD	TBD
1.4	Percentage of public school students who bicycle to elementary, middle and high school.	Elementary Schools	Data Not Yet Surveyed	Data Not Yet Surveyed	Data Not Yet Surveyed	Data Not Yet Surveyed
		Middle Schools				
		High Schools				
GOAL 2: CREATE A HIGHLY-CONNECTED, CONVENIENT AND LOW-STRESS BICYCLING NETWORK						
2.1	Percentage of potential bicycle trips will be able to be made on a low-stress bicycling network.		17%	35%	65%	85%
2.2	Percentage of dwelling units within 2 miles of each Red Line, Brunswick Line, Purple Line and Corridor Cities Transitway station in Montgomery County that are connected to the transit station on a low-stress bicycling network.	Red Line	10%	35%	65%	80%
		Brunswick Line	12%	35%	60%	75%
		Purple Line	4%	35%	70%	75%
		Corridor Cities Transitway	0%	35%	70%	75%
2.3	Percentage of dwelling units within one mile of elementary schools, 1.5 miles of middle schools and 2 miles of high that are connected to the transit station on a very low-stress bicycling network.	Elementary Schools	26%	30%	30%	60%
		Middle Schools	11%	15%	20%	50%
		High Schools	6%	10%	15%	30%

OBJECTIVE	METRIC		EXISTING	TARGET		FULL BUILD
			2018	2033	2043	
2.4	Percentage of dwelling units within 2 miles of public libraries, recreation centers and regional / recreational parks that are connected to the transit station on a low-stress bicycling network.	Public Libraries	8%	35%	60%	85%
		Recreation Centers	13%	25%	40%	75%
		Recreational and Regional Parks	13%	25%	40%	75%
2.5	Number of rail stations in Montgomery County with a bicycle parking station.	Red Line	0	8	11	11
		MARC Brunswick Line	0	4	5	5
		Purple Line	0	5	7	7
		Corridor Cities Transitway	0	3	3	3
2.6	Percentage of Montgomery County public schools with at least one short-term bicycle parking space for every 20 students of planned capacity, with acceptable bicycle parking styles.	Elementary Schools	0%	100%	100%	100%
		Middle Schools	0%	100%	100%	100%
		High Schools	0%	100%	100%	100%
2.7	Percentage of blocks in 19 Bicycle-Pedestrian Priority Areas with sufficient bicycle parking.		15%	40%	60%	80%
2.8	Percentage of Montgomery County public facilities with at least one short-term bicycle parking space for every 10,000 square feet of floor area, with acceptable bicycle parking styles.	Public Libraries	11%	100%	100%	100%
		Recreation Centers	15%	100%	100%	100%
GOAL 3: PROVIDE EQUAL ACCESS TO LOW-STRESS BICYCLING FOR ALL MEMBERS OF THE COMMUNITY						
3.1	Ratio of potential bicycle trips that can be made on a low-stress bicycle network in areas where the median income is below 60 percent of the County average median income compared to the rest of the county.		57%	N/A	95%	90%
GOAL 4: IMPROVE THE SAFETY OF BICYCLING						
4.1	The number of bicycling fatalities and serious injuries per year.		20 (2016)	0	0	0

In addition, the monitoring report will summarize:

- New bikeways and bicycling parking
- Changes to county laws / regulations / policies and programs.
- Financial contributions by developers for future bikeway projects.



Photo Lynn Ho
Best Kid Picture
Bicycle Master Plan Photo Contest

OUTREACH

Conducting a long-term master plan can be demanding. Keeping the public engaged in the planning effort for more than two years can be difficult. How do you ensure your stakeholders are actively involved after the initial rush of outreach efforts winds down? How do you keep your plan's outreach exciting and relevant while also building support with the bicycling community?

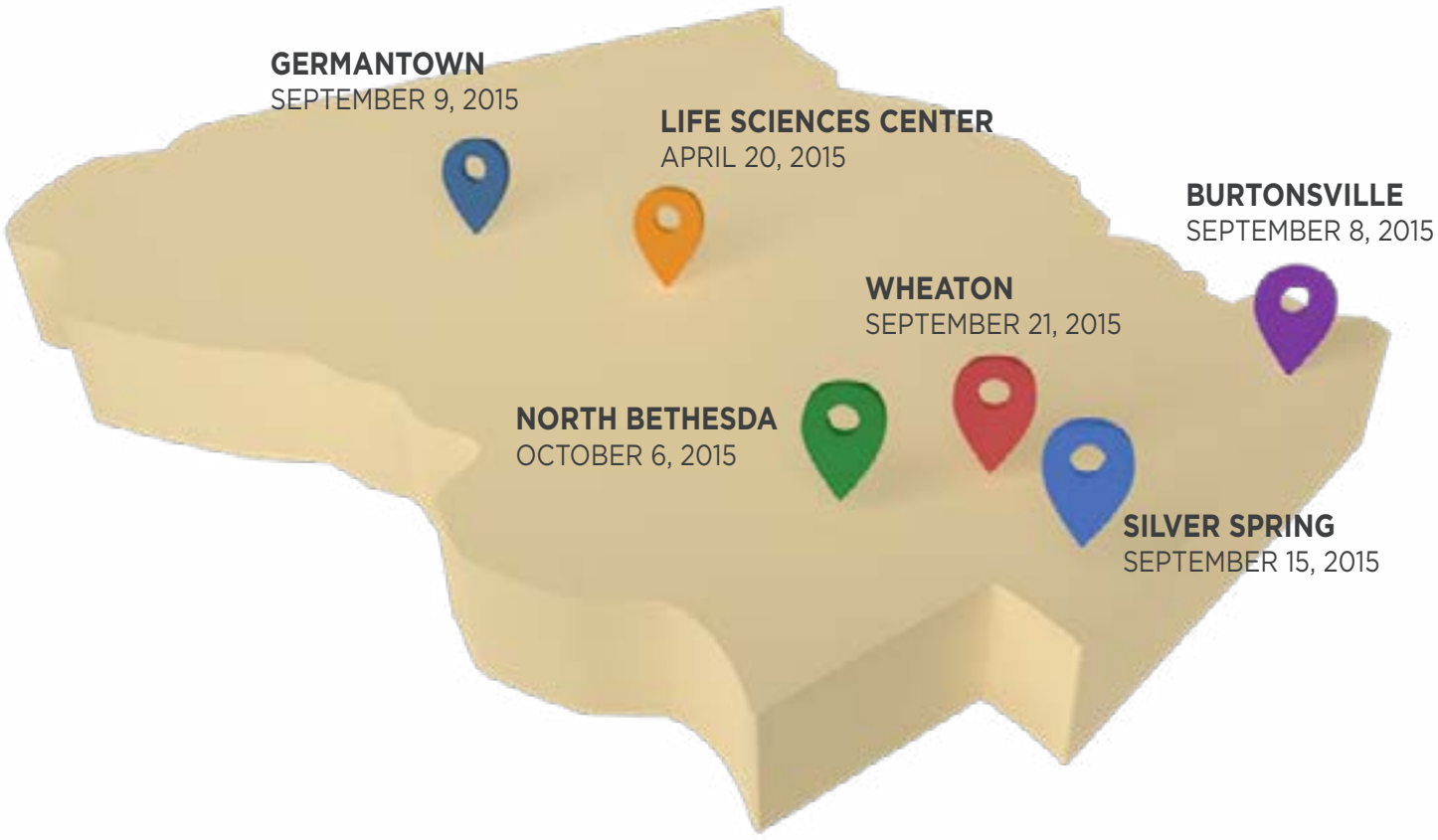
The outreach program for the Bicycle Master Plan has been strategic, thoughtful and effective in its comprehensive approach to innovative community engagement. By implementing a strategic communication plan, staff followed a "road map" focused on audience, messaging and deliverables in order to create a strong and consistent brand for the plan.

The resulting feedback from stakeholders and media exposure showed the communication plan worked. The following pages outline the tools used to achieve the communication goals for the Bicycle Master Plan.

COMMUNITY MEETINGS

Public meetings are an important way to engage broad cross section of community members in a master plan. They allow staff to engage directly with the public, explain concepts that are difficult to convey on paper and allow for informative conversations among planners and residents. When you conduct a countywide effort such as the Bicycle Master Plan, one or two meetings are insufficient. In 2015, the Bicycle Master Plan team conducted six public meetings in different areas of the county to engage a broader cross section of the public. In 2017, five public meetings were held to discuss the preliminary recommendations of the plan.

Kick-off Meetings



Preliminary Bikeway Recommendations

Five public meetings to review the preliminary bikeway recommendations for the Bicycle Master Plan were held in June 2017.

Each event consisted of an open house and informal discussion from 4 to 7 p.m. when attendees met with Planning Department staff to review and discuss the bikeway recommendations. The open house was followed by a bikeway recommendations presentation and a question-and-answer session.





COMMUNITY EVENTS

Community events enabled the public to engage with the Bicycle Master Plan team in informal settings. From community-led bike rides that allowed the public to identify bicycling concerns in their neighborhoods to Park(ing) Day where the staff demonstrated bicycle corrals and separated bike lanes, the events were fun and informative for planners and county residents.

Great MoCo Bike Summits

The annual Great MoCo Bike Summit provided a fantastic opportunity to update the community on the progress of the Bicycle Master Plan. In 2015, the Planning Department created a gigantic wall map of Montgomery County. Attendees wrote their thoughts and concerns about bicycling on the map. This document was the foundation for the online, GIS-based Cycling Concerns Feedback Map where comments were collected electronically. Bike summits were held in Silver Spring (2015) and Rockville (2016), when the planning team continued to inform the public about the Bicycle Master Plan.

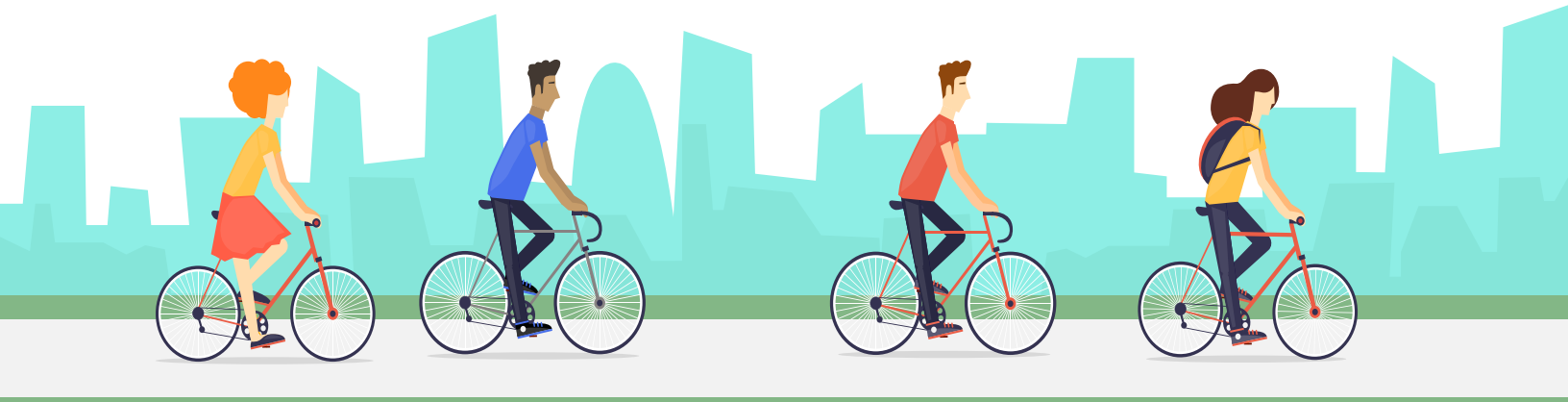








Community Bike Rides



The planning team wanted to "ride the talk" so they held community bike rides that toured various areas of Montgomery County.

OLNEY

SATURDAY, MAY 7, 2016

BURTONSVILLE/ FAIRLAND

SATURDAY, JULY 24, 2016

COLESVILLE

SUNDAY, OCTOBER 30, 2016

WHEATON

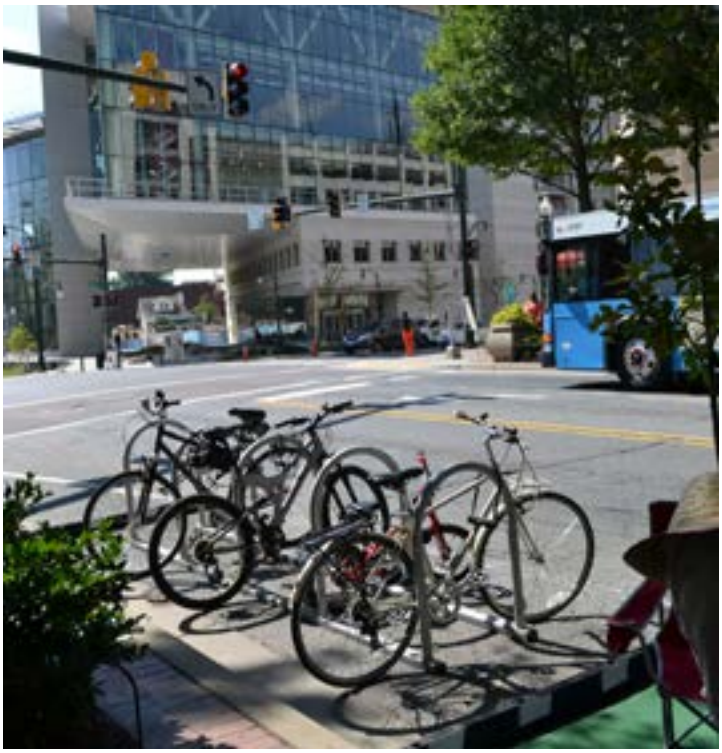
SATURDAY, JUNE 17, 2017



The Wheaton Community Bike Ride

Park(ing) Day

In 2015, 2016 and 2017, the Bicycle Master Plan team took to downtown Silver Spring to transform parking spaces into educational and interactive displays of bicycle concepts. In 2015, the team chose to feature the benefits of bicycle parking and, in 2016, the team created a simulated separated bike lane using stationary bicycles and potted plants (pictured right). In 2017, the team featured poster-sized pages from their low-stress coloring book (see page 218 for more details).



Photos: (clockwise from top right) Bike corral in 2015, simulated separated bike lane in 2016, low-stress coloring book in 2017





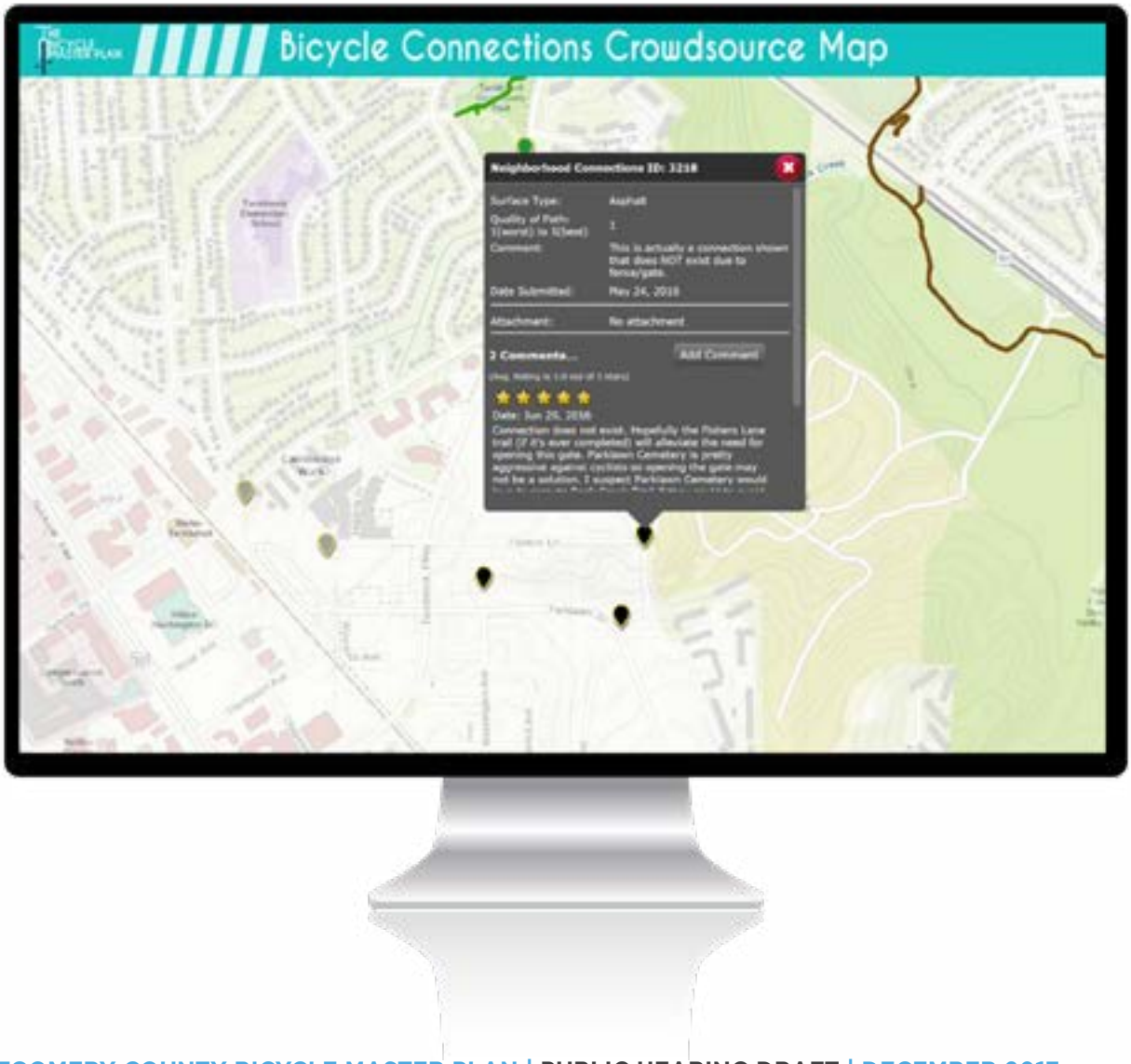

BURGER
IT'S LIKE TO RIDE IN A
ED BIKE LANE!
PROTECTED BIKE LANES OR CYCLE TRACKS) PROVIDE A SAFER,
RIDE YOUR BICYCLE. THESE BIKEWAYS PROVIDE A LOW-STRESS
NG PHYSICAL SEPARATION FROM BOTH MOTOR VEHICLES AND

ONLINE OUTREACH

Online tools enable the Planning Department to engage members of the community who are unable or unwilling to attend public meetings and events. These methods include digital feedback maps, such as the Cycling Concerns Feedback Map and the Bikeway ReactMap, crowd sourcing maps, such as the Cycling Connections Map, and online tools, such as the Bicycle Stress Map.

Cycling Connections

Neighborhood connectiors are small bikeways that are vital for community connectivity but are often so short that they do not show up in county maps. To increase the number of neighborhood connectors in its database, the Planning Department created a crowdsource map and asked the public to identify locations of neighborhood connections. Nearly 200 comments indicating possible locations were received in 2016.



Media Coverage

While the Bicycle Master Plan will create a long-term vision for bicycling in Montgomery County, it is also a chance to build a strong bicycling community. Events such as the photo contest and the low-stress coloring book create fun opportunities to engage the public and to encourage them to sign up for our newsletter, while providing valuable information about in Montgomery County that is included in the plan.

If done well, the project could do more than make life easier for cyclists: It could ease traffic, cut carbon emissions and spur economic growth by drawing residents and visitors to newly accessible areas.

- Washington Post Editorial, June 21, 2015

NOTABLE PAPERS

"HANDY 'STRESS MAP' HELPS CYCLISTS AVOID THE SCARIEST OF STREETS"
-Wired, April 26, 2017

"NEW MAP SHOWS SPOTS WHERE BICYCLISTS STRESS OUT DUE TO DANGER LEVEL"
-Washington Post, April 7, 2016

"WITH MORE PEOPLE BIKING, LOCAL GOVERNMENTS ARE TRYING TO MAKE IT EASIER"
-WTOP, August 13, 2015

"COUNTY PLANNERS TO APPLY BICYCLING STRESS TEST"
-Bethesda Magazine, May 21, 2015

NOTABLE BLOGS

"KEEPING A BIKE PLAN IN HIGH GEAR: MONTGOMERY COUNTY'S PUBLIC ENGAGEMENT PLAN"
-American Planning Association, May 2017

"CLOSING GAPS IN LOW-STRESS NETWORKS TO BRING BICYCLING TO MORE PEOPLE"
-Mobility Lab, June 20, 2017

"MONTGOMERY COUNTY AIMS TO BECOME A MODEL CYCLING COMMUNITY"
-Greater, Greater Washington, June 2, 2015

"THIS MAP SHOWS MONTGOMERY COUNTY'S PROPOSED BIKEWAYS"
-Technically DC, June 14, 2017

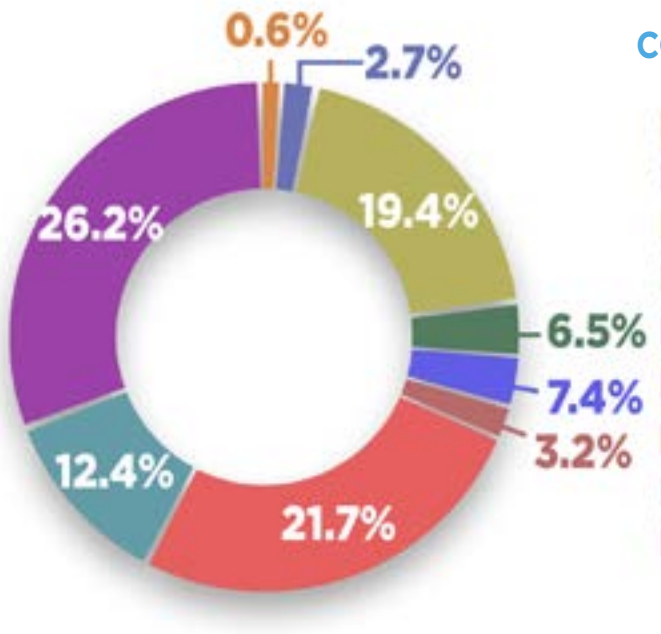
"CYCLING STRESS MAP HELPS BIKERS AVOID TRICKY STREETS"
-Curbed, April 28, 2017

Cycling Concerns Feedback Map

In September and October 2015, Montgomery County residents were invited to share their concerns and ideas, and provide comments on the **Cycling Concerns Feedback Map**, an interactive tool for communicating with the public.

1,896 TOTAL COMMENTS

1,191 UNIQUE POINTS OF INTEREST



COMMENTS BY THE NUMBERS

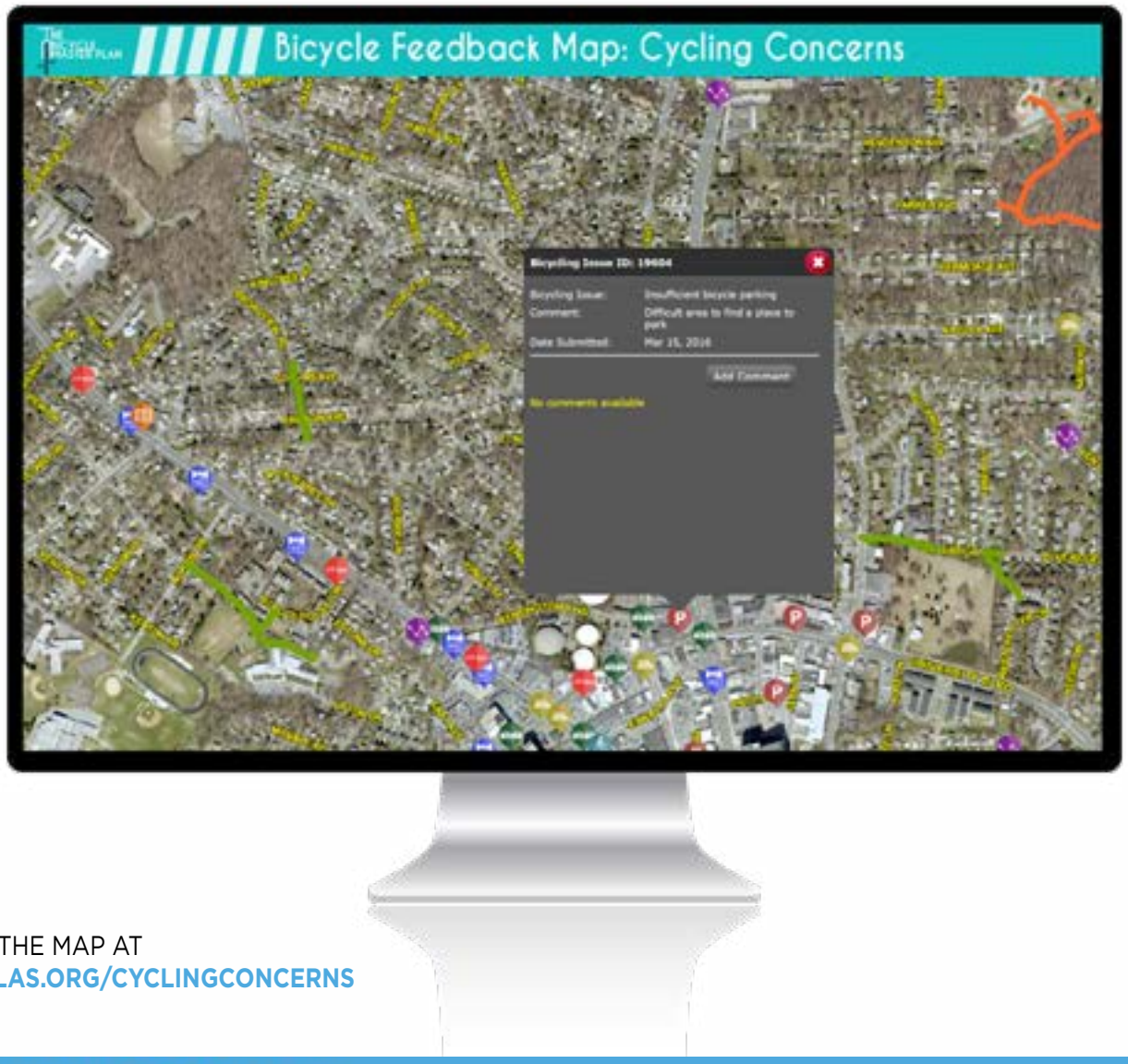
- **BICYCLE-SAFE GRATE NEEDED** (12 COMMENTS)
- **CARS BLOCK BIKEWAY** (51 COMMENTS)
- **DIFFICULT CROSSING** (367 COMMENTS)
- **HIGH TRAFFIC VOLUME** (123 COMMENTS)
- **EXCESSIVE SPEED** (140 COMMENTS)
- **INSUFFICIENT BICYCLE PARKING** (60 COMMENTS)
- **OTHER CONCERNS** (411 COMMENTS)
- **POOR PAVEMENT** (236 COMMENTS)
- **POOR / NO CONNECTION** (496 COMMENTS)

TOP 12 POLICY AREAS WITH THE MOST CONCERNS

SILVER SPRING/TAKOMA PARK: 296
BETHESDA/CHEVY CHASE: 272
KENSINGTON/WHEATON: 233
BETHESDA CBD: 138
SILVER SPRING CBD: 126
RURAL EAST: 101
OLNEY: 95
NORTH BETHESDA: 86
ASPEN HILL: 63
FAIRLAND/COLESVILLE: 62
WHITE OAK: 56
ROCKVILLE CITY: 51

TOP 10 STREETS & ROADS WITH THE MOST CONCERNS

MACARTHUR BLVD: 29
CAPITAL CRESCENT TRAIL: 28
WOODMONT AVENUE: 24
GEORGIA AVENUE: 22
NEW HAMPSHIRE AVENUE: 20
VEIRS MILL ROAD: 18
GEORGETOWN BRANCH TRAIL: 18
COLESVILLE ROAD: 16
BEACH DRIVE: 16
WAYNE AVENUE: 14



VIEW THE MAP AT
MCATLAS.ORG/CYCLINGCONCERNS

TYPES OF CONCERNS

- Difficult Crossing
- Poor/No Connection
- Excessive Speed
- High Traffic Volume
- Insufficient Bicycle Parking
- Bicycle-Safe Grate Needed
- Cars Block Bikeway
- Poor Pavement
- Other

EXISTING BIKEWAYS

- Bike Lanes
- Separated Bike Lanes
- Shared Use Paths
- Hard Surface Park Trails

Bicycle Stress Map

> The map provides a **data-driven approach** to understanding bicycle connectivity by linking the traffic stress evaluation to the goals, objectives and performance metrics outlined in the county's Bicycle Master Plan.
>
> - American Planning Association (APA)



» MCATLAS.ORG/BIKESTRESS

The **Bicycle Stress Map** is a publicly accessible tool located on the Montgomery County Planning Department website at www.mcatlas.org/bikestress. It shows the stress levels encountered when bicycling in different areas of Montgomery County, from very low stress (appropriate for children) to very high stress (appropriate for only about one percent of adults). Videos linked to the map explain the experience of bicycling in areas with different traffic stress conditions.

The Bicycle Stress Map was launched in April 2016 and has been widely embraced for highlighting how difficult it is for the average person to travel by bicycle in Montgomery County. While most adults can bicycle on 75 percent of the road miles in the county, only about 17 percent of trips can be completed on a low-stress bicycling network.

3,500+ MILES

of roads and trails were assigned a level of traffic stress during the creation of the map by Montgomery County Planning Department staff. Project team members used a combination of online resources as well as site visits to evaluate the conditions of the roads.

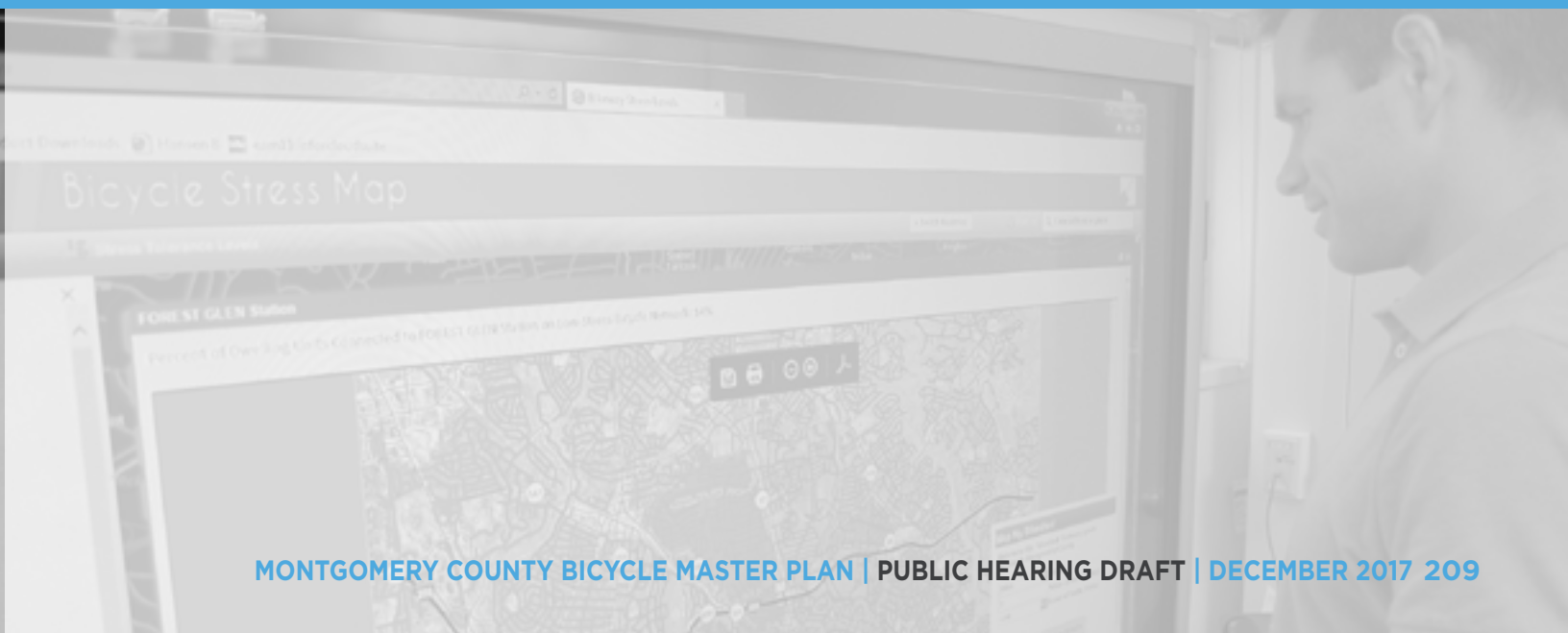


AMERICAN PLANNING ASSOCIATION

2017 NATIONAL ACHIEVEMENT AWARD TRANSPORTATION PLANNING | GOLD

AMERICAN PLANNING ASSOCIATION - NATIONAL CAPITAL AREA CHAPTER

2016 AWARD FOR AN OUTSTANDING IMPLEMENTATION TOOL



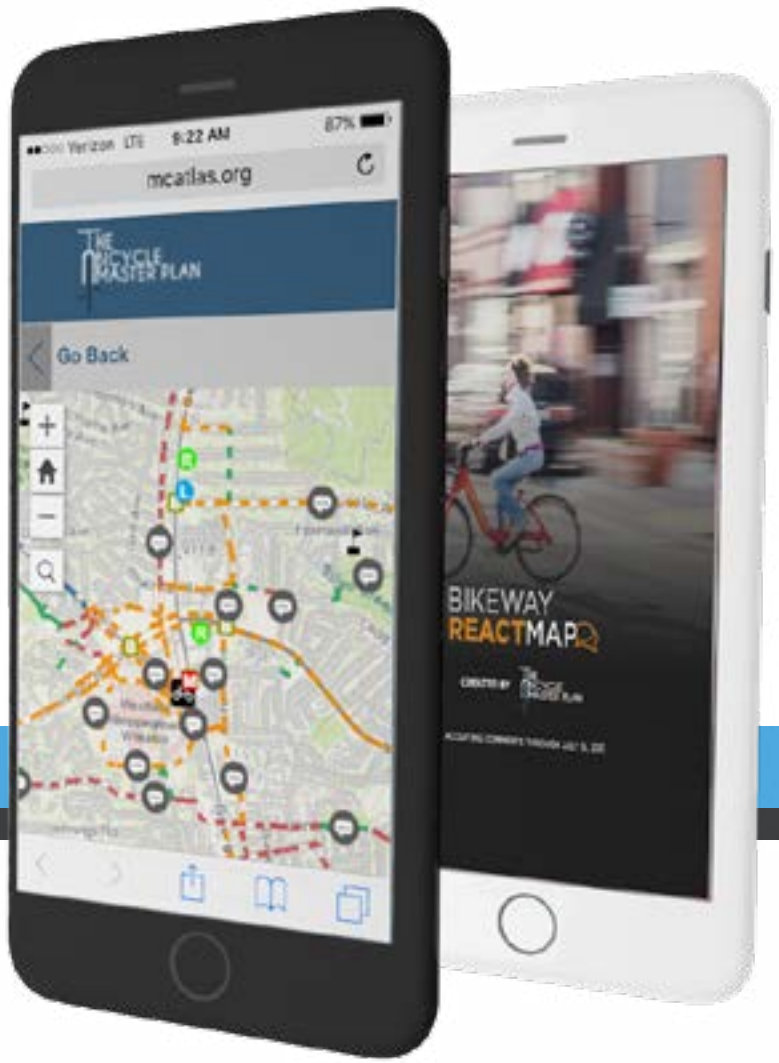
Bikeway ReactMap

The Bikeway ReactMap encouraged the public to comment on the Bicycle Master Plan's preliminary bikeway recommendations. Users could view the map legend, review a brief description of bikeway facility types and add comments about the bikeway recommendations.

1,489 TOTAL COMMENTS

4,699 TOTAL PAGE VIEWS

» MCATLAS.ORG/BIKEREACT



TOP 11 LOCATIONS WITH MOST COMMENTS

Woodmont Avenue and Bethesda Avenue	12
Bethesda Trolley Trail Crossing Tuckerman Lane	10
Proposed New Bridge over I-495 at Colesville Road	9
Grosvenor Lane East of MD 355	9
Woodmont Ave Between Elm Street and Bethesda Avenue	8
Proposed Trail along I-495 between Stoneybrook Drive and Linden Lane	8
Stoneybrook Drive between Capitol View Avenue and Kent Street	6
Capital Crescent Trail at Little Falls Parkway	7
Oakview Drive at Northwest Branch Trail	6
Maple Avenue at DC line	6
Fenton Street south of Silver Spring Avenue	6



TOP 10 POLICY AREAS WITH MOST COMMENTS

Kensington/Wheaton	251
Silver Spring/Takoma Park	187
Bethesda/Chevy Chase	173
North Bethesda	85
Silver Spring CBD	82
Bethesda CBD	80
Fairland/Colesville	78
Rural East	85
Rural West	52
Aspen Hill	49

TOP 13 STREETS AND TRAILS WITH MOST COMMENTS

Fenton Street	42
Capital Crescent Trail	33
Old Georgetown Road	26
Bethesda Trolley Trail	26
Capitol View Avenue	25
Beach Drive	20
New Hampshire Avenue	19
Intercounty Connector Trail	18
Carroll Avenue	17
Randolph Road	16
Rockville Pike	16
Maple Avenue	16
Woodmont Avenue	16

Social Media

To reach as many stakeholders as possible, the Bicycle Master Plan team launched a Twitter account and communicated information through the Planning Department's Facebook account. Posts about updates on the plan, videos and photos provided a forum that extended beyond community meetings and press releases.

TWITTER | @MCBIKEPLAN
500+ Followers

E-LETTER
800+ Subscribers



Video



BICYCLE MASTER PLAN PROMO

2015 MarCom Awards
Platinum Award Winner



BICYCLE STRESS MAP RELEASE



PARK(ING) DAY 2016



PRELIMINARY BIKEWAY RECOMMENDATIONS MEETING

VIDEOS CAN BE VIEWED AT YOUTUBE.COM/MONTGOMERYPLANNING


WABA
BIKE
SAVE
LONGER



COMMUNITY ADVISORY GROUP

In 2016, the Planning Board appointed a diverse 21-member community advisory group to provide advice to the Bicycle Master Plan team. This group includes eight members representativing different geographic areas of Montgomery County, as well as 13 representatives of community organizations and interest groups.

16 MEETINGS

INNOVATIVE OUTREACH

While the Bicycle Master Plan will create a long-term vision for bicycling in Montgomery County, it is also a chance to build a strong bicycling community. Outreach tools such as the photo contest and the low-stress coloring book create fun opportunities to engage the public and encourage them to sign up for our newsletter, while providing valuable information about the progress of the plan.



Photo Contest

In September and October 2016, the Planning Department held the bicycle photo contest to engage the public and choose images for the **Bicycle Master Plan** and other planning documents. The public voted on the winners using an online poll.

61 PHOTOS SUBMITTED

400+ VOTES

5 WINNING SELECTIONS

Photo: Winning Recreational Bicycling Photo By Scott Wilets

Coloring Book

A 34-page coloring book, *Enjoy the Ride*, was made available online to the public in fall 2017 to present the types of bikeways included in the draft Bicycle Master Plan. Since the goal of the plan is to create a low-stress bicycle network that will let people of all ages and abilities feel comfortable riding a bike, the book seemed fitting, since coloring has also been shown to be a stress-relieving activity. Each black-and-white page depicts a different type of bikeway, such as a neighborhood greenway, a separated bike lane and a trail. The community was invited to post their completed illustrations online to Facebook, Twitter or Instagram using hashtag #lowstressbiking.





Transit Ads

WASHINGTON METROPOLIATAN AREA TRANSIT AUTHORITY (WMATA) DISPLAYS

The plan used a mix of English and Spanish outreach at key Metrorail stations and bus stops to reach a wide audience.

AD RUN SCHEDULE

Ads ran in 2017

SHADY GROVE
7/3 - 7/30

WHITE FLINT
6/5 - 7/23

GROSVENOR-STRATHMORE
6/5 - 7/30

MEDICAL CENTER
6/5 - 7/30

BETHESDA
6/5 - 7/30

FRIENDSHIP HEIGHTS
6/5 - 7/23

SILVER SPRING
7/3-7/30

WHEATON
6/5 - 7/30

GLENMONT
6/5 - 7/6





Above: Artwork for the WMATA advertising campaign.

Right: The advertisement placed on the platform at the Shady Grove Metro Station.

BUS SHELTERS

AD LOCATIONS

Ads ran from June 5 to July 2, 2017

- MONTGOMERY VILLAGE
- WHITE OAK
- ASPEN HILL
- VEIRS MILL RD.
- LONG BRANCH





Above: Artwork for the bus shelter advertising campaign.

Left: The advertisement placed on bus shelter at the corner of University Boulevard and Piney Branch Road.

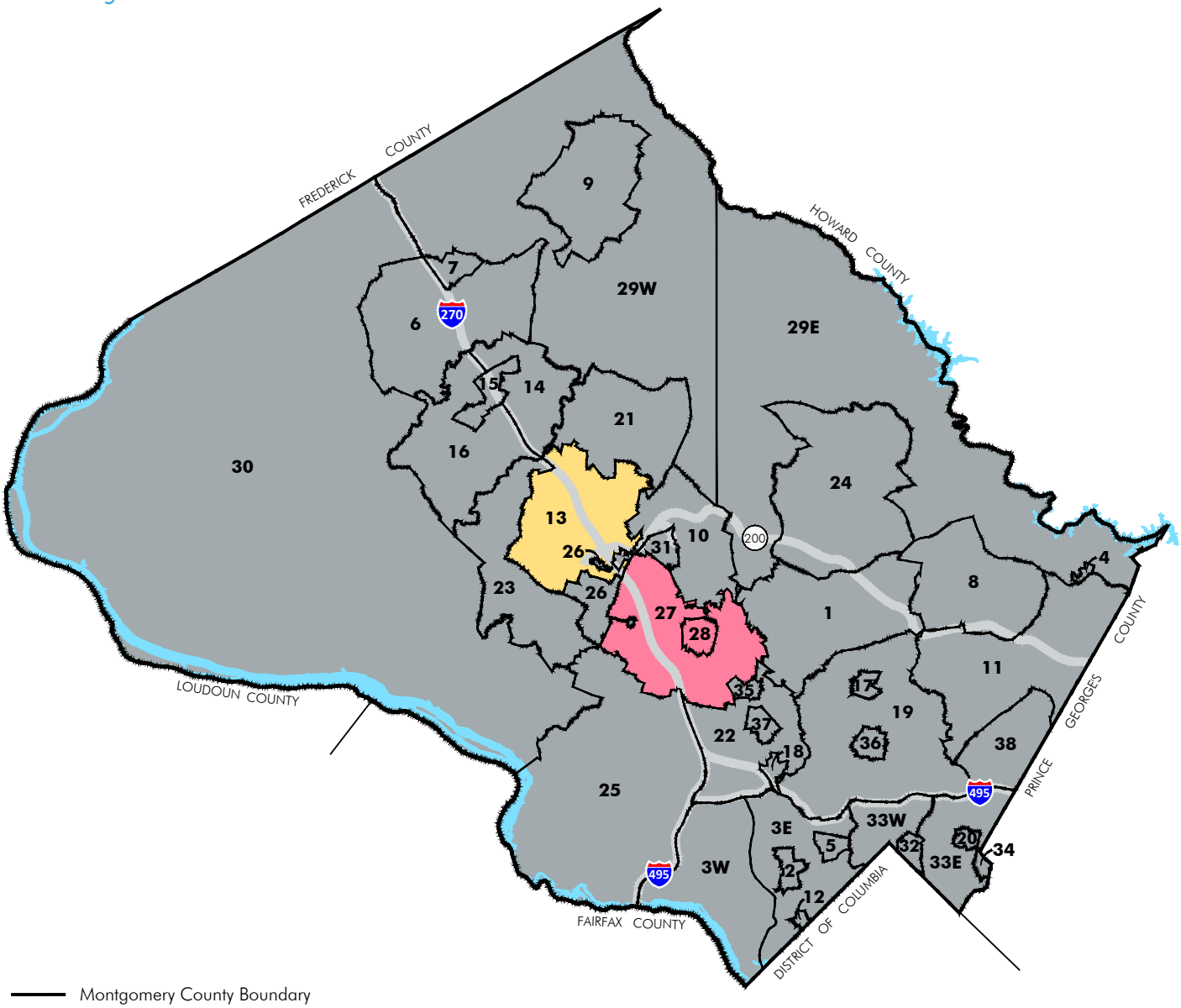


BIKEWAY RECOMMENDATIONS

The following section provides a detailed look at bikeway recommendations for each of the county's policy areas.



Policy Area Overview



Montgomery County Boundary

City of Gaithersburg

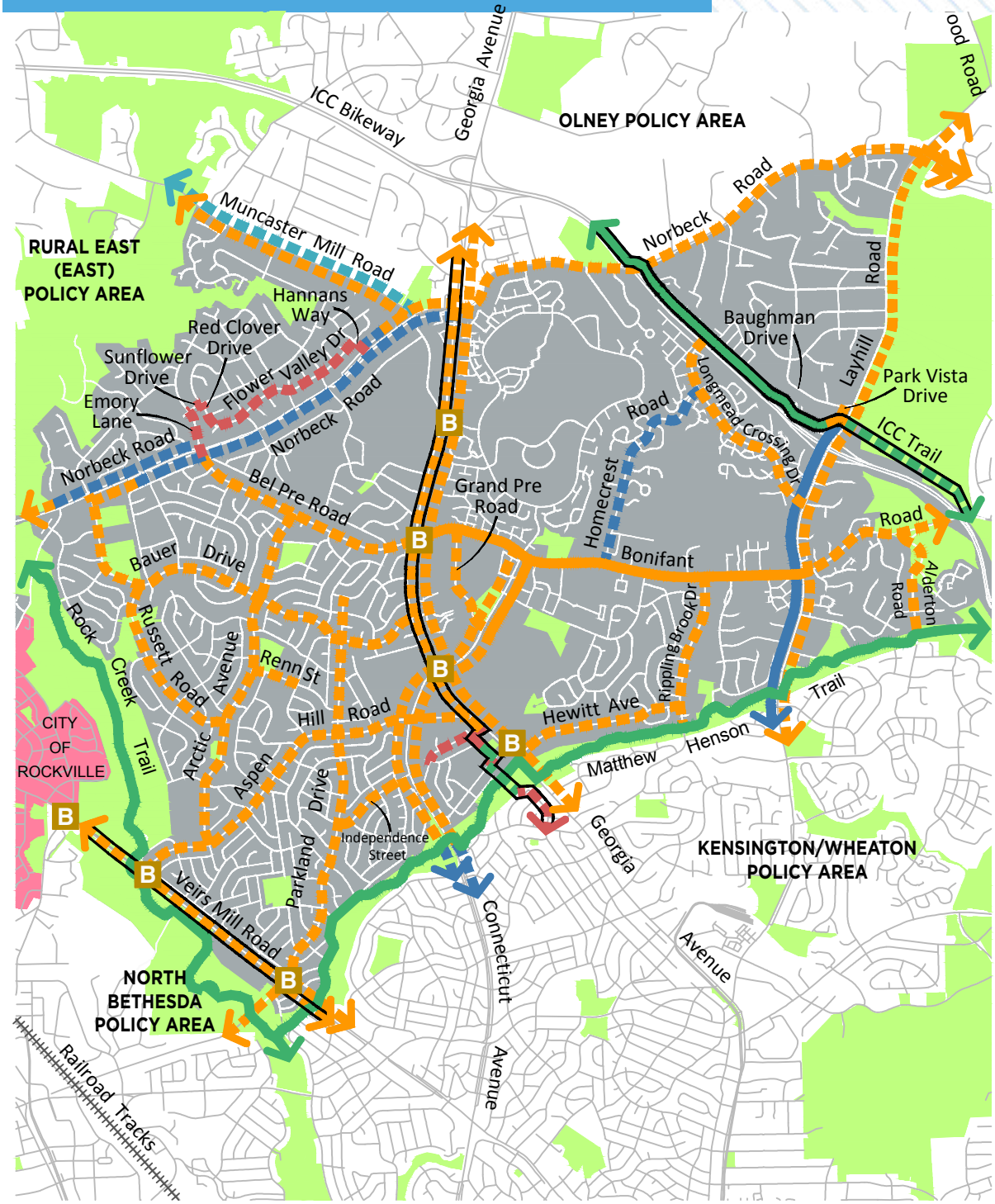
City of Rockville

1	Aspen Hill	**13**	Gaithersburg City	**27**	Rockville City
2	Bethesda CBD	**14**	Germantown East	**28**	Rockville Town Center
3E	Bethesda/Chevy Chase (East)	**15**	Germantown Town Center	**29E**	Rural East (East)
3W	Bethesda/Chevy Chase (West)	**16**	Germantown West	**29W**	Rural East (West)
4	Burtonsville Town Center	**17**	Glenmont	**30**	Rural West
5	Chevy Chase Lake	**18**	Grosvenor	**31**	Shady Grove Metro Station
6	Clarksburg	**19**	Kensington/Wheaton	**32**	Silver Spring CBD
7	Clarksburg Town Center	**20**	Long Branch	**33E**	Silver Spring/Takoma Park (East)
8	Cloverly	**21**	Montgomery Village/Airpark	**33W**	Silver Spring/Takoma Park (West)
9	Damascus	**22**	North Bethesda	**34**	Takoma/Langley
10	Derwood	**23**	North Potomac	**35**	Twinbrook
11	Fairland/Colesville	**24**	Olney	**36**	Wheaton CBD
12	Friendship Heights	**25**	Potomac	**37**	White Flint
		26	R&D Village	**38**	White Oak

0 25,000 ft

Recommendations can be viewed at MCAtlas.org/bikeplan

ASPEN HILL



Policy Area
Parkland
City of Rockville
B Bus Rapid Transit Station (Proposed)
Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways
		Bikeable Shoulders
		Shared Roads

Note: White lines represent non-master planned bikeways

0 4000'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GEORGIA AVE NORTH BREEZEWAY				
Georgia Ave Access Road	Norbeck Rd	Bel Pre Rd	Separated Bikeway	Sidepath (West Side)
Georgia Ave	Bel Pre Rd	Wendy La	Separated Bikeway	Sidepath (West Side)
Wendy La	Loyola St	Georgia Ave	Shared Road	Neighborhood Greenway
Loyola St	Wendy La	Harmony Hill Neighborhood Park	Shared Road	Neighborhood Greenway
Harmony Hills NP Trail	Loyola St	Loyola St	Trail	Off-Street Trail
Loyola St	Harmony Hill Neighborhood Park	Ralph Rd	Shared Road	Neighborhood Greenway
Ralph Rd	Kilburn La	Loyola St	Shared Road	Neighborhood Greenway
Trail	Kilburn La	Matthew Henson Trail	Trail	Off-Street Trail
VEIRS MILL RD BREEZEWAY				
Veirs Mill Rd	Rock Creek Trail	Matthew Henson Trail	Separated Bikeway	Sidepath (South Side)
MONTROSE PARKWAY BREEZEWAY				
Montrose Parkway	Rock Creek	Veirs Mill Rd	Separated Bikeway	Sidepath (North Side)
INTERCOUNTY CONNECTOR TRAIL BREEZEWAY				
Intercounty Connector Trail	Norbeck Rd	Park Vista Ct	Trail	Off-Street Trail
Park Vista Dr	Intercounty Connector Trail	Layhill Rd	Separated Bikeway	Sidepath (North Side)
Intercounty Connector Trail	Layhill Rd	Bonifant Rd	Trail	Off-Street Trail
NORBECK RD NORTH BIKEWAY				
Norbeck Rd	City of Rockville	End of Access Rd	Separated Bikeway	Sidepath (South Side)
Norbeck Rd Access Road	End of Access Rd	Emory La	Shared Road	Contra-Flow Bike Lane
Emory La	Norbeck Rd	Sunflower Dr	Shared Road	Neighborhood Greenway
Sunflower Dr	Emory La	Red Clover Dr	Shared Road	Neighborhood Greenway
Red Clover Dr	Sunflower Dr	Flower Valley Dr	Shared Road	Neighborhood Greenway
Flower Valley Dr	Red Clover Dr	Hannans Way	Shared Road	Neighborhood Greenway

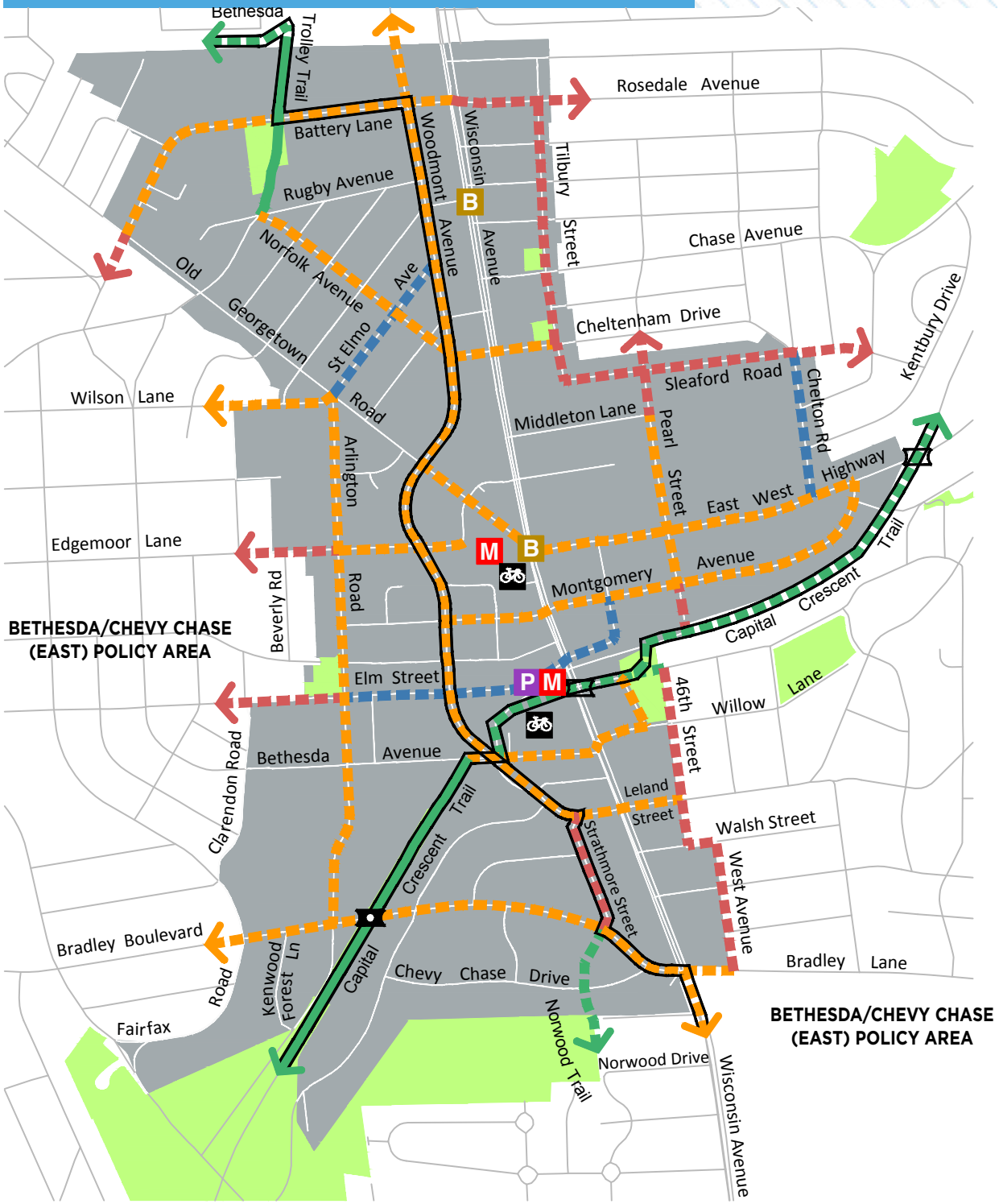
BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Hannans Way	Flower Valley Dr	Norbeck Rd	Shared Road	Neighborhood Greenway
Norbeck Rd Access Road	Hannans Way	End of Access Rd	Shared Road	Contra-Flow Bike Lane
Norbeck Rd	Norbeck Rd Access Road	Layhill Rd	Separated Bikeway	Sidepath (North Side)
NORBECK RD SOUTH BIKEWAY				
Norbeck Rd	Bauer Dr	Norbeck Rd Access Road	Separated Bikeway	Sidepath (South Side)
Norbeck Rd Service Road	400' West Of Nadine Dr	Georgia Ave	Shared Road	Contra-Flow Bike Lane
CONNECTICUT AVE WEST BIKEWAY				
Connecticut Ave	Grand Pre Rd	Georgia Ave	Separated Bikeway	Separated Bike Lanes (West Side)
Connecticut Ave	Georgia Ave	Aspen Hill Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Connecticut Ave	Aspen Hill Rd	Independence St	Separated Bikeway	Sidepath (West Side)
Connecticut Ave	Independence St	Matthew Henson Trail	Separated Bikeway	Sidepath (West Side)
CONNECTICUT AVE EAST BIKEWAY				
Connecticut Ave	Bel Pre Rd	Grand Pre Rd	Separated Bikeway	Sidepath (East Side)
Connecticut Ave	Grand Pre Rd	Georgia Ave	Separated Bikeway	Sidepath (East Side)
Connecticut Ave	Georgia Ave	Aspen Hill Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Connecticut Ave	Aspen Hill Rd	Independence St	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Connecticut Ave	Independence St	Matthew Henson Trail	Separated Bikeway	Sidepath (East Side)
ADDITIONAL RECOMMENDATIONS				
Alderton Rd	Bonifant Rd	Matthew Henson Trail	Separated Bikeway	Sidepath (East Side)
Arctic Ave	Bel Pre Rd	Aspen Hill Rd	Separated Bikeway	Sidepath (Side TBD)
Aspen Hill Rd	Veirs Mill Rd	Connecticut Ave	Separated Bikeway	Sidepath (North Side)
	Connecticut Ave	Georgia Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Bauer Dr	Norbeck Rd	Marianna Dr	Separated Bikeway	Sidepath (Side TBD)
Bel Pre Rd	Norbeck Rd	Layhill Rd	Separated Bikeway	Sidepath (South Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Bonifant Rd	Layhill Rd	Intercounty Connector Trail	Separated Bikeway	Sidepath (South Side)
	Intercounty Connector Trail	Pebblestone Dr	Separated Bikeway	Sidepath (South Side)
Georgia Ave	Norbeck Rd	Matthew Henson Trail	Separated Bikeway	Sidepath (East Side)
Grand Pre Rd	Bel Pre Rd	Connecticut Ave	Separated Bikeway	Sidepath (Side TBD)
Heathfield Rd	Parkland Dr	Georgia Ave	Separated Bikeway	Sidepath (Side TBD)
Hewitt Ave	Georgia Ave	Rippling Brook Dr	Separated Bikeway	Sidepath (Side TBD)
Homecrest Rd	Longmead Crossing Dr	Bel Pre Rd	Striped Bikeway	Conventional Bike Lanes
Independence St	Parkland Dr	Connecticut Ave	Separated Bikeway	Sidepath (Side TBD)
Layhill Rd	Norbeck Rd	Baughman Dr	Separated Bikeway	Sidepath (East Side)
	Baughman Dr	Park Vista Dr	Separated Bikeway	Sidepath (Both Sides)
	Park Vista Dr	Matthew Henson Trail	Separated Bikeway and Striped Bikeway	Sidepath (East Side) and Conventional Bike Lanes
Longmead Crossing Dr	Intercounty Connector Trail	Layhill Rd	Separated Bikeway	Sidepath (North Side)
Marianna Dr	Bauer Dr	Parkland Dr	Separated Bikeway	Sidepath (Side TBD)
Matthew Henson Trail	Rock Creek Trail	Alderton Rd	Trail	Stream Valley Park Trail
	Alderton Rd	Fairland / Colesville Policy Area	Trail	Stream Valley Park Trail
Matthew Henson Trail Connector	Rippling Brook Dr	Matthew Henson Trail	Trail	Off-Street Trail
Muncaster Mill Rd	North Branch Rock Creek	Norbeck Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Palmira La	Aspen Hill Shopping Center	Wendy La	Shared Road	Neighborhood Greenway
Parkland Dr	Chesterfield Rd	Marianna Dr	Separated Bikeway	Sidepath (Side TBD)
	Marianna Dr	Veirs Mill Rd	Separated Bikeway	Sidepath (Side TBD)
Renn St	Artic Ave	Marianna Dr	Separated Bikeway	Sidepath (Side TBD)
Rippling Brook Dr	Bel Pre Rd	Matthew Henson Trail	Separated Bikeway	Sidepath (East Side)
Rock Creek Trail	Avery Rd	Veirs Mill Rd Trail Connector	Trail	Stream Valley Park Trail
Russett Rd	Bauer Dr	Artic Ave	Separated Bikeway	Sidepath (East Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Veirs Mill Rd	Parkland Dr	Matthew Henson Trail	Separated Bikeway	Sidepath (North Side)
Wendy La	Palmira La	Loyola St	Shared Road	Neighborhood Greenway

THIS PAGE INTENTIONALLY LEFT BLANK

BETHESDA CBD



Policy Area
Parkland
M Metrorail Station
B Bus Rapid Transit Station (Proposed)
P Purple Line Station (Proposed)
Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways
		Shared Roads
		Grade Separated Crossing
		Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 1000'

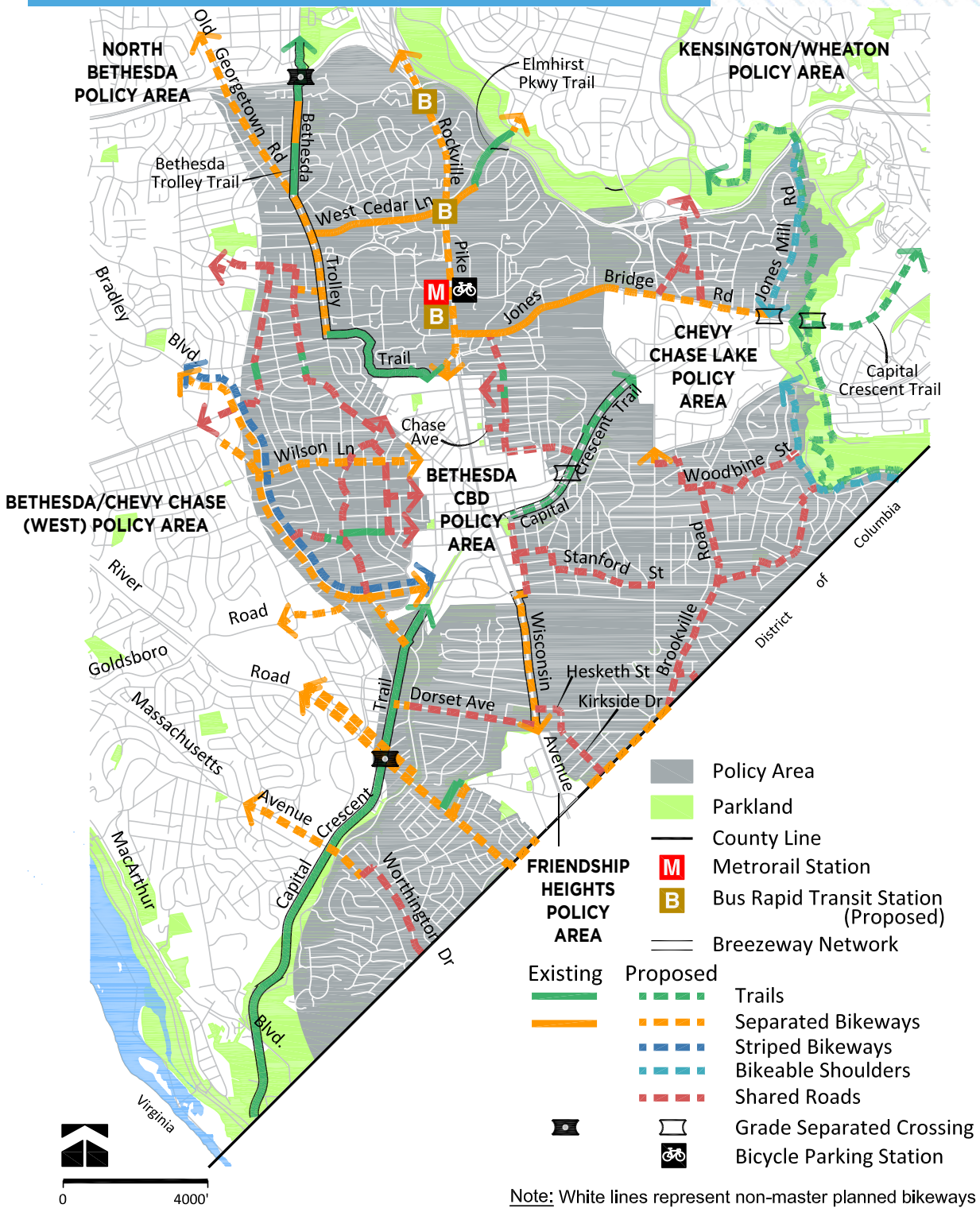
STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
CAPITAL CRESCENT TRAIL BREEZEWAY				
Capital Crescent Trail	Kenwood Forest La	Woodmont Ave	Trail	Off-Street Trail
Capital Crescent Trail (Tunnel Route)	Woodmont Ave	47th St	Trail	Off-Street Trail
Capital Crescent Trail	47th St	Pearl St	Trail	Off-Street Trail
MD 355 SOUTH BREEZEWAY				
Bethesda Trolley Trail	NIH Property Line	Battery La	Trail	Off-Street Trail
Battery La	Bethesda Trolley Trail	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Woodmont Ave	Battery La	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes*
ADDITIONAL RECOMMENDATIONS				
46th St	Elm St	Walsh Ave	Shared Road	Neighborhood Greenway
Arlington Rd	Old Georgetown Rd	Bradley Blvd	Separated Bikeway	Separated Bike Lanes*
Battery La	Old Georgetown Rd	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes(Two-Way, Side TBD)
Bethesda Trolley Trail	Battery La	Rugby Ave	Trail	Off-Street Trail
Bradley Blvd	Fairfax Rd	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes(Two-Way, East Side)
Bradley La	Wisconsin Ave	West Ave	Separated Bikeway	Separated Bike Lanes(Two-Way, North Side)
Capital Crescent Trail (Surface Route)	Woodmont Ave	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
	Wisconsin Ave	47th St	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
	Willow La	Elm St	Separated Bikeway	Sidepath (East Side)
Cheltenham Dr	Wisconsin Ave	Tilbury St	Separated Bikeway	Separated Bike Lanes
Chelton Rd	Sleaford Rd	East-West Hwy	Striped Bikeway	Conventional Bike Lanes
East-West Hwy	Wisconsin Ave	Montgomery Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, Side TBD)
Edgemoor La	Beverly Rd	Arlington Rd	Shared Road	Neighborhood Greenway
	Arlington Rd	Bethesda Metrorail Station	Separated Bikeway	Separated Bike Lanes (two-way, south side)

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Elm St	Clarendon Rd	Arlington Rd	Shared Road	Neighborhood Greenway
	Arlington Rd	Wisconsin Ave	Stripted Bikeway	Conventional Bike Lanes
Leland St	Wisconsin Ave	46th St	Separated Bikeway	Separated Bike Lanes
Montgomery Ave	Wisconsin Ave	East-West Hwy	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Montgomery La	Woodmont Ave	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Neighborhood Connector	Chevy Chase Dr	Bethesda-Chevy Chase (East) Policy Area	Trail	Neighborhood Connector
Norfolk Ave	Rugby Ave	Woodmont Ave	Shared Road	Shared Street*
	Woodmont Ave	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Boh Sides)
Old Georgetown Rd	Woodmont Ave	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, Side TBD)
Pearl St	Sleaford Rd	Middleton La	Shared Road	Neighborhood Greenway
	Middleton La	Montgomery Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Montgomery Ave	Capital Crescent Trail	Shared Road	Shared Street
Rosedale Ave	Wisconsin Ave	Tilbury St	Shared Road	Neighborhood Greenway
Sleaford Rd	Tilbury St	Chelton Rd	Shared Road	Neighborhood Greenway
St Elmo Ave	Woodmont Ave	Old Georgetown Rd	Striped Bikeway	Conventional Bike Lanes or Separated Bike Lanes
Strathmore St	Woodmont Ave	Bradley Blvd	Shared Road	Priority Shared Lanes
Trail	Bradley Blvd	Chevy Chase Dr	Trail	Neighborhood Connector
Tilbury St	Rosedale Ave	Sleaford Rd	Shared Road	Neighborhood Greenway
Walsh St	46th St	West Ave	Shared Road	Neighborhood Greenway
West Ave	Walsh Ave	Bradley La	Shared Road	Neighborhood Greenway
Waverly St	Wisconsin Ave	East-West Hwy	Striped Bikeway	Conventional Bike Lanes
Wilson La	Cordell Ave	Old Georgetown Rd	Separated Bikeway	Sidepath (North Side)
Woodmont Ave	Bethesda-Chevy Chase (East) Policy Area	Battery La	Separated Bikeway	Sidepath (West Side)

** See the Bethesda Downtown Plan*

THIS PAGE INTENTIONALLY LEFT BLANK

BETHESDA -CHEVY CHASE (EAST)



Note: White lines represent non-master planned bikeways

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 SOUTH BREEZEWAY				
Bethesda Trolley Trail	I-495	Charles St	Trail	Off-Street Trail
	Charles St	South of Lincoln St	Separated Bikeway	Sidepath (East Side)
	Old Georgetown Rd	NIH Property Line	Trail	Off-Street Trail
SEE BETHESDA CBD POLICY AREA				
Wisconsin Ave	Bradley Blvd	Dorset Ave	Separated Bikeway	Sidepath (East Side)
	Dorset Ave	Oliver St	Separated Bikeway	Sidepath (East Side)
CAPITAL CRESCENT TRAIL BREEZEWAY				
Capital Crescent Trail	River Rd	Kenwood Forest La	Trail	Off-Street Trail
SEE BETHESDA CBD POLICY AREA				
Capital Crescent Trail	Pearl St	End of Newdale Rd	Trail	Off-Street Trail
BROOKVILLE RD - BEACH DR NEIGHBORHOOD GREENWAY				
Cummings La	Brookville Rd	Brennon La	Shared Road	Neighborhood Greenway
Brennon La	Cummings La	Shepherd St	Shared Road	Neighborhood Greenway
Shepherd St	Brennon La	Turner La	Shared Road	Neighborhood Greenway
Pomander La	Turner La	Leland St	Shared Road	Neighborhood Greenway
Leland St	Pomander La	Beach Dr	Shared Road	Neighborhood Greenway
CAPITAL CRESCENT TRAIL - BRADLEY LA NEIGHBORHOOD GREENWAY				
46th St	Elm St	Walsh St	Shared Road	Neighborhood Greenway
Walsh St	46th St	West Ave	Shared Road	Neighborhood Greenway
West Ave	Walsh St	Bradley La	Shared Road	Neighborhood Greenway
CONNECTICUT AVE - BEACH DR NEIGHBORHOOD GREENWAY				
Blackthorn St	Connecticut Ave	Glendale Rd	Shared Road	Neighborhood Greenway
Glendale Rd	Blackthorn St	Woodbine St	Shared Road	Neighborhood Greenway

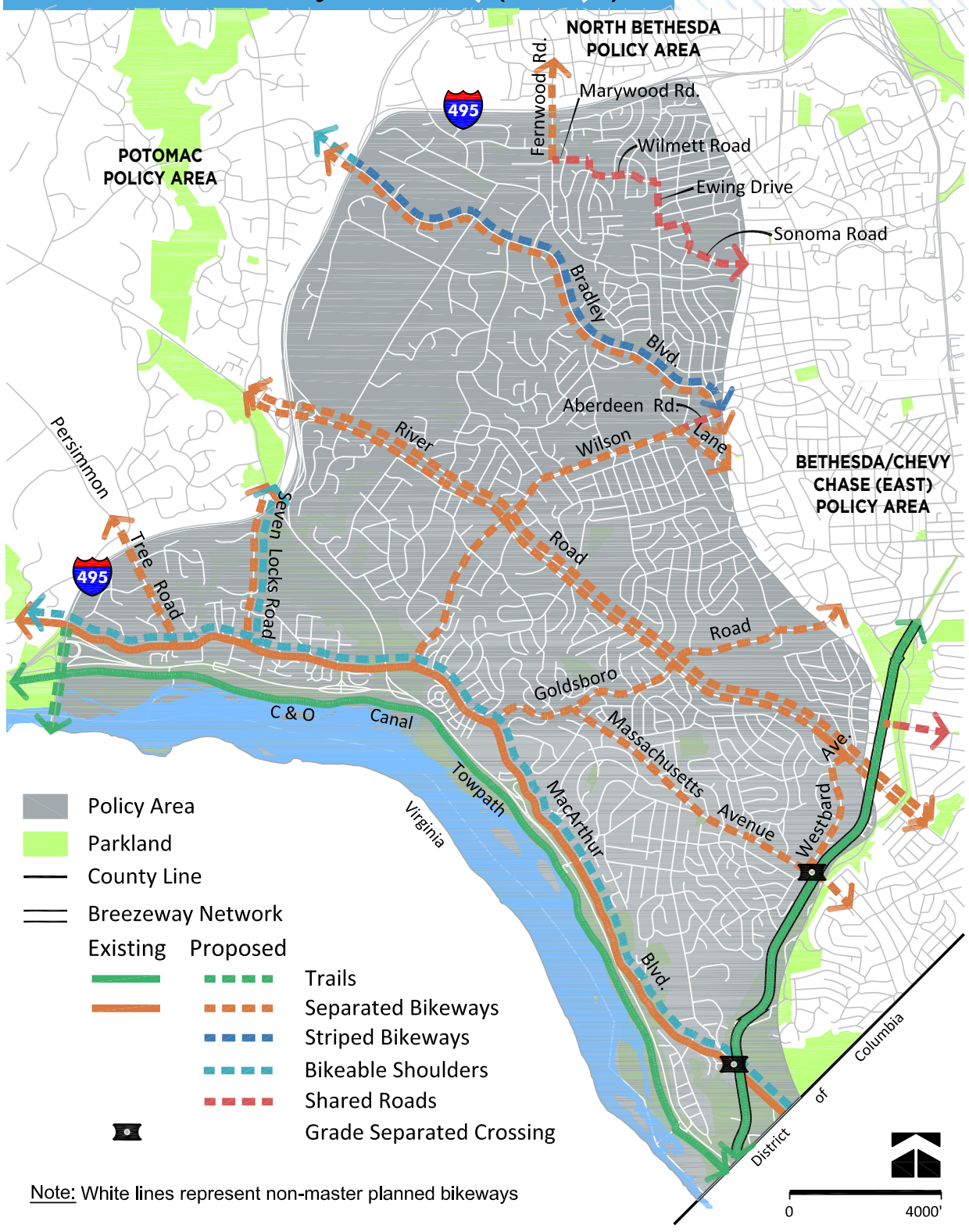
STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Woodbine St	Glendale Rd	Beach Dr	Shared Road	Neighborhood Greenway
JONES BRIDGE RD - EAST-WEST HIGHWAY NEIGHBORHOOD GREENWAY				
Maryland Ave	Jones Bridge Rd	Chelsea La	Shared Road	Neighborhood Greenway
Neighborhood Connector	Chelsea La	Maple Ave	Trail	Neighborhood Connector
Maryland Ave	Maple Ave	Chase Ave	Shared Road	Neighborhood Greenway
Pearl St	Chase Ave	Sleaford Rd	Shared Road	Neighborhood Greenway
MASSACHUSETTS AVE BIKEWAY				
Massachusetts Ave	Capital Crescent Trail	Baltimore Ave	Separated Bikeway	Sidepath (North Side)
Baltimore Ave	Massachusetts Ave	Worthington Dr	Shared Road	Neighborhood Greenway
Worthington Dr	Baltimore Ave	District of Columbia	Shared Road	Neighborhood Greenway
FERNWOOD RD - BATTERY LA NEIGHBORHOOD GREENWAY				
Grant St	Sonoma Rd	Roosevelt St	Shared Road	Neighborhood Greenway
Neighborhood Connector	Roosevelt St	Northfield Rd	Trail	Neighborhood Connector
Moorland La	Northfield Rd	Custer Rd	Shared Road	Neighborhood Greenway
Custer Rd	Moorland La	Lambeth Rd	Shared Road	Neighborhood Greenway
Park La	Lambeth Rd	Battery La	Shared Road	Neighborhood Greenway
WISCONSIN AVE - CONNECTICUT AVE NEIGHBORHOOD GREENWAY				
Leland St	46th St	East Ave	Shared Road	Neighborhood Greenway
East Ave	Leland St	Stanford St	Shared Road	Neighborhood Greenway
Standford St	East Ave	Rosemary St	Shared Road	Neighborhood Greenway
Rosemary St	Standford St	Connecticut Ave	Shared Road	Neighborhood Greenway
SONOMA RD - BRADLEY BLVD NEIGHBORHOOD GREENWAY				
Oneida La	Sonoma Rd	Greentree Rd	Shared Road	Neighborhood Greenway
Garfield St	Greentree Rd	Roosevelt St	Shared Road	Neighborhood Greenway

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Neighborhood Connector	Roosevelt St	Northfield Rd	Trail	Neighborhood Connector
Garfield St	Northfield Rd	Huntington Pkwy	Shared Road	Neighborhood Greenway
Aberdeen Pl	Huntington Pkwy	Aberdeen Rd	Shared Road	Neighborhood Greenway
Aberdeen Rd	Aberdeen Pl	Bradley Blvd	Shared Road	Neighborhood Greenway
ADDITIONAL RECOMMENDATIONS				
Battery La	Wilson La	Old Georgetown Rd	Shared Road	Neighborhood Greenway
Beach Dr	East West Hwy	District of Columbia	Bikeable Shoulders	Bikeable Shoulders
Bradley Blvd	Aberdeen Rd	Fairfax Rd	Separated Bikeway and Striped Bikeway	Sidepath (East Side) and Conventional Bike Lanes
Brookville Rd	Woodbine St	Western Ave	Shared Road	Priority Shared Lane Markings
Cedar La	Rockville Pike	Elmhirst Pkwy Trail	Separated Bikeway	Sidepath (North Side)
Chase Ave	Tilbury St	Pearl St	Shared Road	Neighborhood Greenway
Connecticut Ave	East-West Hwy	Blackthorn St	Separated Bikeway	Sidepath (East Side)
Cornish Rd	Bradley Blvd	Burling Rd	Shared Road	Neighborhood Greenway
Dorset Ave	Capital Crescent Trail	Little Falls Trail	Separated Bikeway	Sidepath (South Side)
	Little Falls Trail	Wisconsin Ave	Shared Road	Neighborhood Greenway
East Melrose St	Brookville Rd	Nevada Ave	Shared Road	Neighborhood Greenway
Edgemoor La	Exeter Rd	Beverly Rd	Shared Road	Neighborhood Greenway
Elm St	Exfair Rd	Clarendon Rd	Shared Road	Neighborhood Greenway
Elmhirst Pkwy Trail	Cedar La	Cedar La	Trail	Off-Street Trail
Exeter Rd	Wilson La	Elm St	Shared Road	Neighborhood Greenway
Glenbrook Rd	Battery La	Bradley Blvd	Shared Road	Neighborhood Greenway
Glenbrook Rd	Bradley Blvd	Little Falls Pkwy	Separated Bikeway	Sidepath (West Side)
Greentree Rd	Grant Ave	Old Georgetown Rd	Separated Bikeway	Sidepath (South Side)
Hesketh St	Wisconsin Ave	Kirkside Dr	Shared Road	Neighborhood Greenway

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Jones Bridge Rd	Wisconsin Ave	Glenbrook Pkwy	Separated Bikeway	Sidepath (North Side)
	Glenbrook Pkwy	Maryland Ave	Separated Bikeway	Sidepath (Both Sides)
	Maryland Ave	Columbia Country Club	Separated Bikeway	Sidepath (South Side)
Jones Mill Rd	Beach Dr	Jones Bridge Rd	Bikeable Shoulders	Bikeable Shoulders
Kenilworth Drwy	Kensington Pkwy	Montgomery Ave	Shared Road	Neighborhood Greenway
Kensington Pkwy	I-495	Husted Drwy	Separated Bikeway	Sidepath (East Side)
	Husted Drwy	Connecticut Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Kirkside Dr	Hesketh St	District of Columbia	Shared Road	Neighborhood Greenway
Little Falls Pkwy	Glenbrook Rd	Capital Crescent Trail	Separated Bikeway	Sidepath (West Side)
Montgomery Ave	Kenilworth Drwy	Jones Bridge Rd	Shared Road	Neighborhood Greenway
Neighborhood Connector	Bethesda CBD Policy Area	Norwood Rd	Trail	Neighborhood Connector
Nevada Ave	East Melrose St	Western Ave	Shared Road	Neighborhood Greenway
Old Georgetown Rd	I-495	Charles St	Separated Bikeway	Sidepath (East Side)
River Rd	Capital Crescent Trail	Little Falls Pkwy	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (East Side)
	Little Falls Pkwy	District of Columbia	Separated Bikeway	Sidepath (East Side)
Rock Creek Trail	Stoneybrook Dr	Rock Creek	Trail	Stream Valley Park Trail
Rockville Pike	I-495	Cedar La	Separated Bikeway	Sidepath (East Side)
	Cedar La	Woodmont Ave	Separated Bikeway	Sidepath (West Side)
Rosedale Ave	Tilbury St	Neighborhood Connector	Shared Road	Neighborhood Greenway
Sleaford Rd	Chelton Rd	Kentbury Dr	Shared Road	Neighborhood Greenway
Sonoma Rd	Hempstead Ave	Grant St	Shared Road	Neighborhood Greenway
W Cedar La	Bethesda Trolley Trail	Rockville Pike	Separated Bikeway	Sidepath (South Side)
Western Ave	River Rd	Cortland Rd	Separated Bikeway	Sidepath (North Side)

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Western Ave	Western Grove Urban Park	Kirkside Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
	Kirkside Dr	Chevy Chase Cir	Separated Bikeway	Sidepath (North Side)
	Chevy Chase Cir	Brookville Rd	Separated Bikeway	Sidepath (North Side)
Willard Ave	River Rd	Willard Ave Trail	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Willard Ave Trail	River Rd	Willard Ave	Trail	Off-Street Trail
Wilson La	Bradley Blvd	Cordell Ave	Separated Bikeway	Sidepath (North Side)
Wisconsin Ave	Dorset Ave	Oliver St	Separated Bikeway	Sidepath (West Side)
Woodmont Ave	Rockville Pike	Bethesda CBD Policy Area	Separated Bikeway	Sidepath (West Side)

BETHESDA -CHEVY CHASE (WEST)



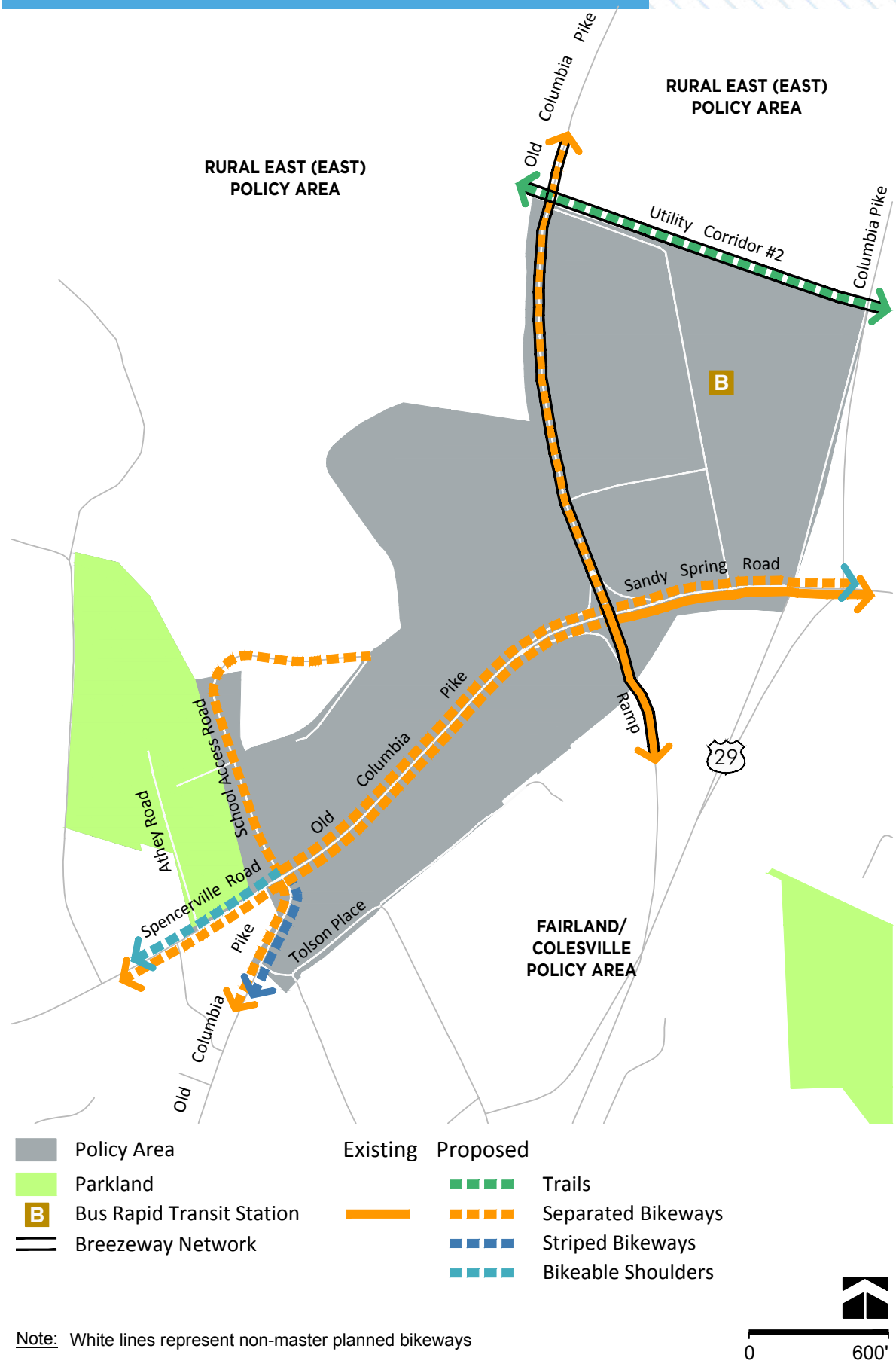
Note: White lines represent non-master planned bikeways

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
CAPITAL CRESCENT TRAIL BREEZEWAY				
Capital Crescent Trail	District of Columbia	River Rd	Trail	Off-Street Trail
FERNWOOD RD - BATTERY LA NEIGHBORHOOD GREENWAY				
Marywood Rd	Fernwood Rd	Kirkdale Rd	Shared Road	Neighborhood Greenway
Kirkdale Rd	Marywood Rd	Wilmett Rd	Shared Road	Neighborhood Greenway
Wilmett Rd	Kirkdale Rd	Ewing Dr	Shared Road	Neighborhood Greenway
Ewing Dr	Wilmett Rd	Johnson Ave	Shared Road	Neighborhood Greenway
Johnson Ave	Ewing Dr	Lindale Dr	Shared Road	Neighborhood Greenway
Lindale Dr	Johnson Ave	Sonoma Rd	Shared Road	Neighborhood Greenway
Sonoma Rd	Lindale Dr	Hempstead Ave	Shared Road	Neighborhood Greenway
ADDITIONAL RECOMMENDATIONS				
Aberdeen Rd	Wilson La	Bradley Blvd	Shared Road	Neighborhood Greenway
Bradley Blvd	I-495	Aberdeen Rd	Separated Bikeway and Striped Bikeway	Sidepath (East Side) and Conventional Bike Lanes
C&O Canal Towpath	I-495	District of Columbia	Trail	Off-Street Trail
Fernwood Rd	I-495	Marywood Rd	Separated Bikeway	Sidepath (East Side)
Goldsboro Rd	MacArthur Blvd	Bradley Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
I-495	Virginia	Mac Arthur Blvd	Trail	Off-Street Trail
MacArthur Blvd	I-495	District of Columbia	Separated Bikeway and Bike-able Shoulders	Sidepath (West Side) and Bikeable Shoulders
Massachusetts Ave	Goldsboro Rd	Capital Crescent Trail	Separated Bikeway	Sidepath (North Side)
Persimmon Tree Rd	I-495	MacArthur Blvd	Separated Bikeway	Sidepath (West Side)
River Rd	I-495	Westbard Ave Ext	Separated Bikeway	Sidepath (Both Sides)
	Westbard Ave Ext	Capital Crescent Trail	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (East Side)
Seven Locks Rd	I-495	Mac Arthur Blvd	Separated Bikeway and Bike-able Shoulders	Sidepath (East Side) and Bikeable Shoulders

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Westbard Ave	River Rd	Westbard Cir	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Westbard Cir	Massachusetts Ave	Separated Bikeway	Sidepath (West Side)
Wilson La	MacArthur Blvd	Bradley Blvd	Separated Bikeway	Sidepath (North Side)

THIS PAGE INTENTIONALLY LEFT BLANK

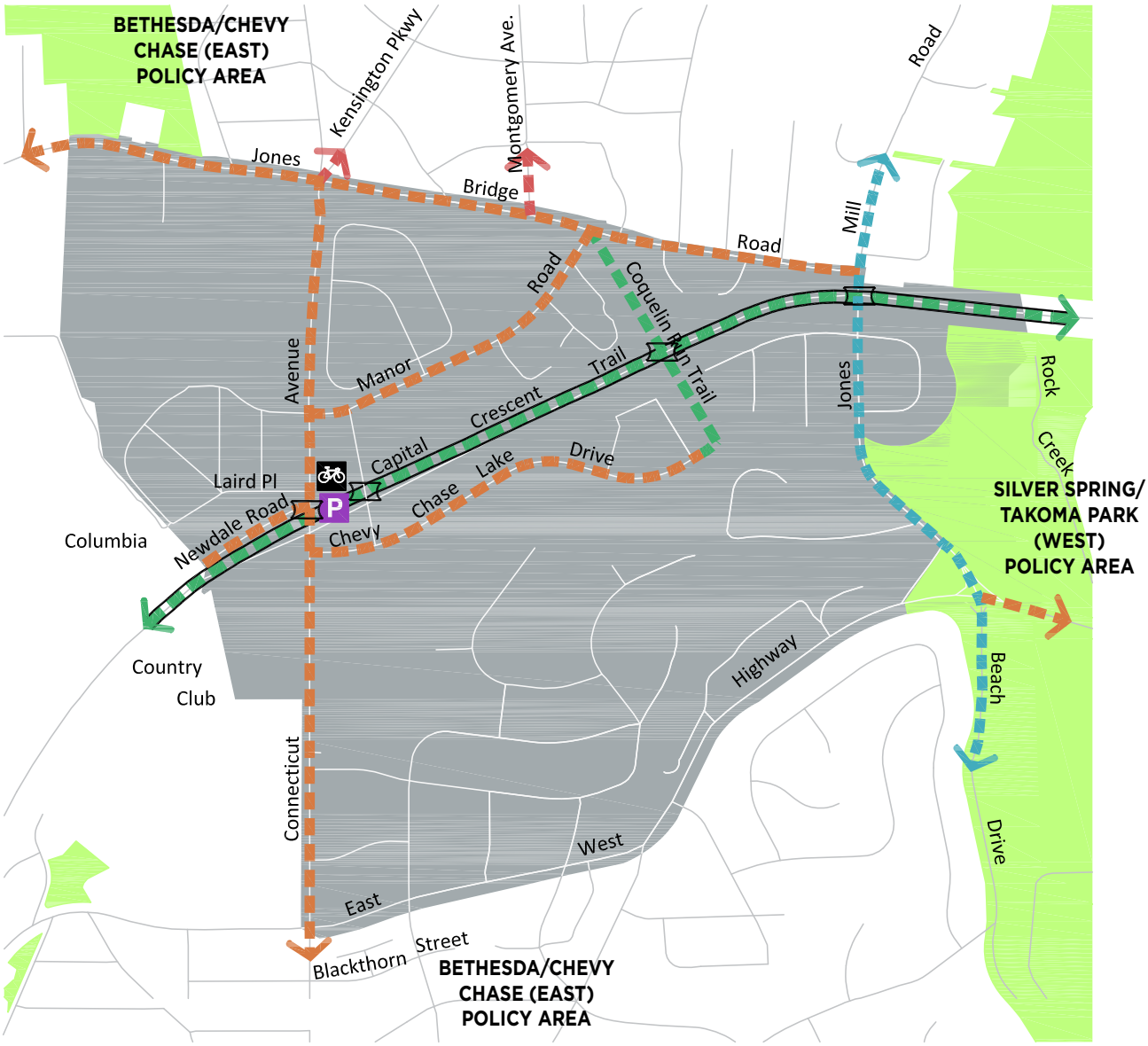
BURTONSVILLE TOWN CENTER



Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
US 29 CORRIDOR BREEZEWAY				
Old Columbia Pike	Utility Corridor #2	Sandy Spring Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Columbia Pike Ramp	Sandy Spring Rd	Fairland / Colesville Policy Area	Separated Bikeway	Sidepath (West Side)
ADDITIONAL RECOMMENDATIONS				
Old Columbia Pike	Sandy Spring Rd	School Access Rd	Separated Bikeway	Sidepath (South Side) and Separated Bike Lanes (North Side)
Old Columbia Pike	Spencerville Rd	Tolson Pl	Separated Bikeway and Striped Bikeway	Sidepath (West Side) and Conventional Bike Lanes
Sandy Spring Rd	Old Columbia Pike	Columbia Pike	Separated Bikeway	Sidepath (South Side) and Separated Bike Lanes (North
School Access Rd	Burtonsville ES	Old Columbia Pike	Separated Bikeway	Sidepath (West Side)

CHEVY CHASE LAKE



Policy Area
Parkland
P Purple Line Station (Proposed)
Breezeway Network

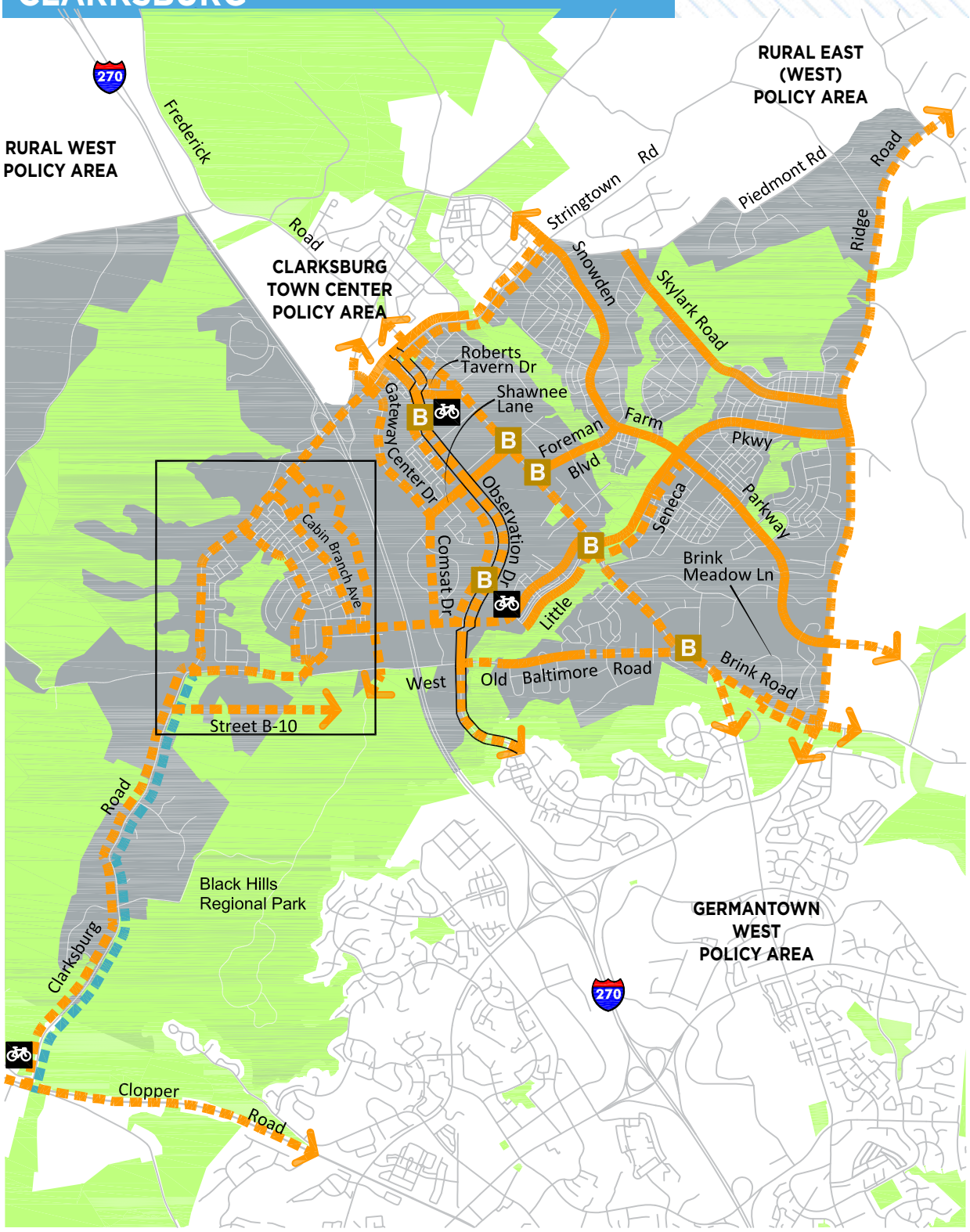
Existing	Proposed	
		Trails
		Separated Bikeways
		Bikeable Shoulders
		Shared Roads
		Grade Separated Crossing
		Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 1000'

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
CAPITAL CRESCENT TRAIL BREEZEWAY				
Capital Crescent Trail	End of Newdale Rd	Rock Creek	Trail	Off-Street Trail
ADDITIONAL RECOMMENDATIONS				
Chevy Chase Lake Dr	Connecticut Ave	Coquelin Run Trail	Separated Bikeway	Sidepath (North Side)
Connecticut Ave	Jones Bridge Rd	Manor Rd	Separated Bikeway	Sidepath (East Side)
	Manor Rd	Laird Pl	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
	Laird Pl	Newdale Rd	Separated Bikeway	Separated Bike Lanes (Two-Way,East Side), Sidepath (West Side)
	Newdale Rd	Chevy Chase Lake Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
	Chevy Chase Lake Dr	East West Hwy	Separated Bikeway	Sidepath (East Side)
Coquelin Run Trail	Jones Bridge Rd	Chevy Chase Lake Dr	Trail	Off-Street Trail
East West Hwy	Beach Dr	Rock Creek	Separated Bikeway	Sidepath (North Side)
Jones Bridge Rd	Columbia Country Club	Jones Mill Rd	Separated Bikeway	Sidepath (South Side)
Jones Mill Rd	Jones Bridge Rd	East West Hwy	Bikeable Shoulders	Bikeable Shoulders
Manor Rd	Connecticut Ave	Jones Bridge Rd	Separated Bikeway	Sidepath (South Side)
Newdale Rd	Terminus	Connecticut Ave	Separated Bikeway	Sidepath (South Side)

CLARKSBURG



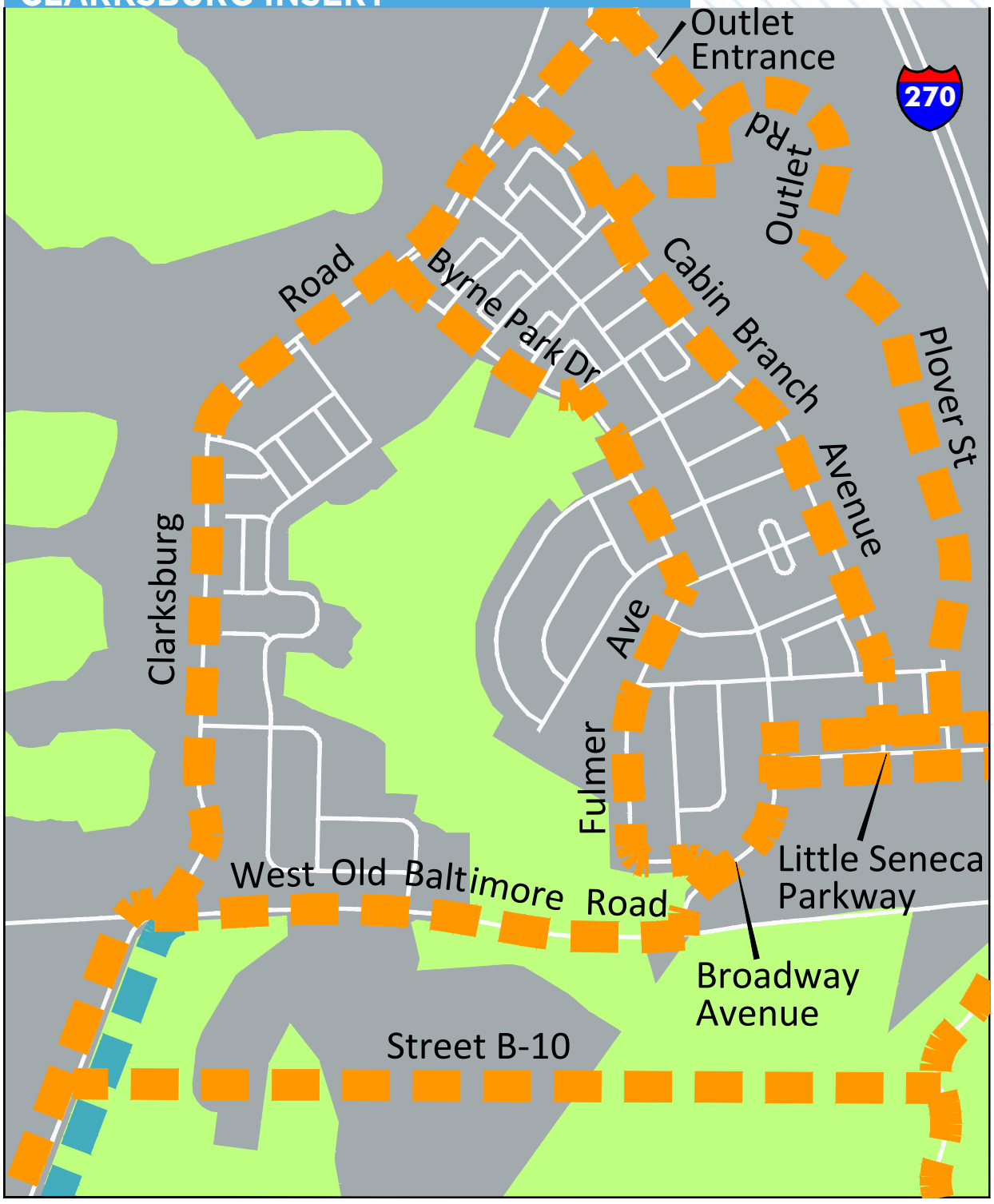
Policy Area
Parkland
B Bus Rapid Transit Station (Proposed)
Breezeway Network

Existing
Proposed
Separated Bikeways
Bikeable Shoulders
Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 4000'

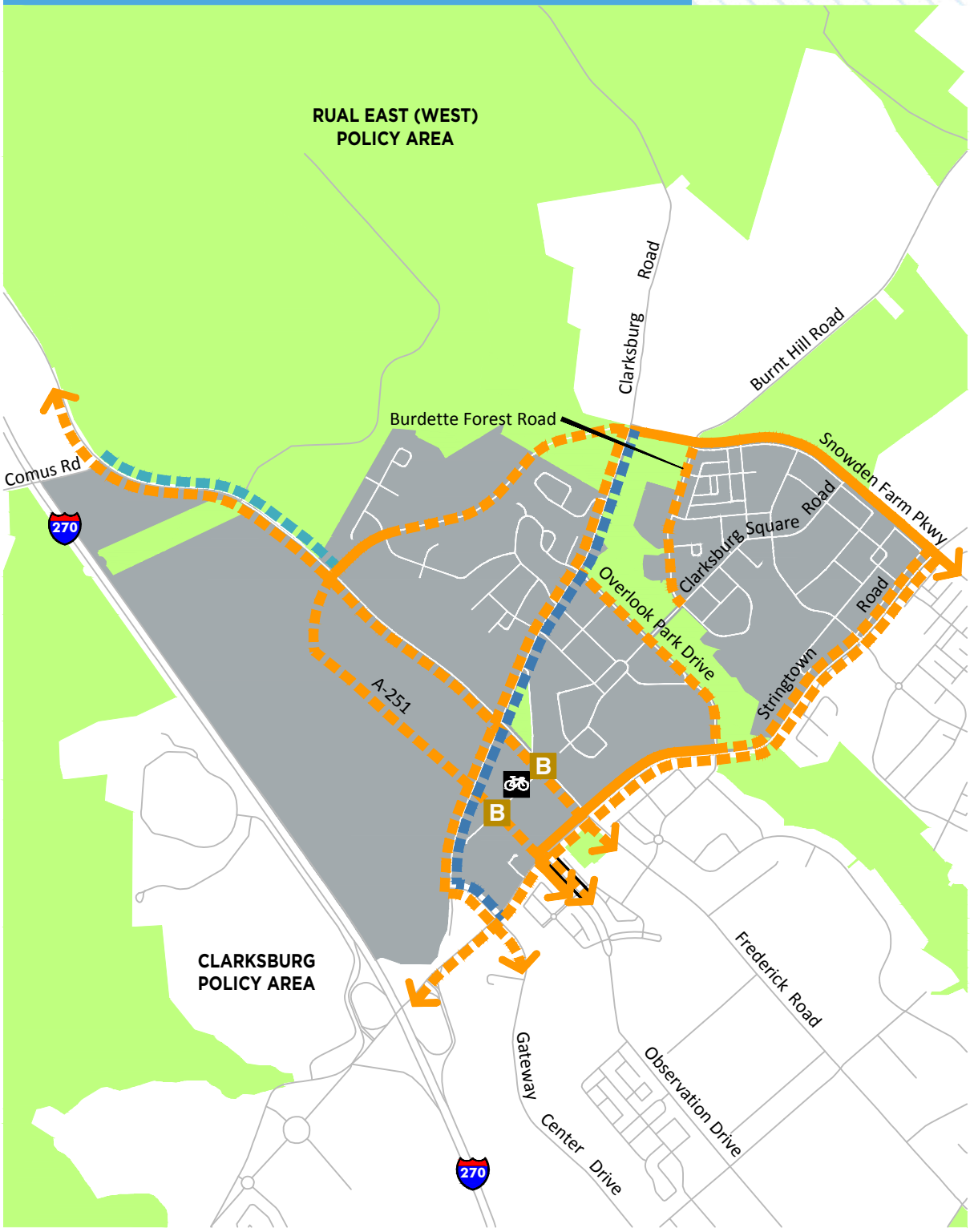
CLARKSBURG INSERT



BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 NORTH BREEZEWAY				
Observation Dr Ext	Stringtown Rd	Little Seneca Creek	Separated Bikeway	Sidepath (Side TBD)
ADDITIONAL RECOMMENDATIONS				
Barnesville Rd	Boyds MARC Station	Clopper Rd	Separated Bikeway	Sidepath (South Side)
Brink Rd	Frederick Rd	Brink Meadow La	Separated Bikeway	Sidepath (South Side)
	Brink Meadow La	Ridge Rd	Separated Bikeway	Sidepath (Both Sides)
Broadway Ave	Little Seneca Pkwy	West Old Baltimore Rd	Separated Bikeway	Sidepath (West Side)
Byrne Park Dr	Clarksburg Rd	Fulmer Ave	Separated Bikeway	Sidepath (West Side)
Cabin Branch Ave	Clarksburg Rd	Tribute Pkwy	Separated Bikeway	Sidepath (East Side)
	Tribute Pkwy	Little Seneca Pkwy	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Clarksburg Outlet Entrance	Clarksburg Rd	Outlet Rd	Separated Bikeway	Separated Bike Lanes (Side TBD)
Clarksburg Rd	Gateway Center Dr	West Old Baltimore Rd	Separated Bikeway	Sidepath (East Side)
	West Old Baltimore Rd	Ten Mile Creek	Separated Bikeway and Bike-able Shoulders	Sidepath (East Side) and Bikeable Shoulders
Clopper Rd	Clarksburg Rd	Little Seneca Creek	Separated Bikeway	Sidepath (East Side)
Comsat Dr	Shawnee La	Little Seneca Pkwy	Separated Bikeway	Separated Bike Lanes (Side TBD)
Foreman Blvd	Frederick Rd	Snowden Farm Pkwy	Separated Bikeway	Sidepath (South Side)
Frederick Rd	Stringtown Rd	Brink Rd	Separated Bikeway	Sidepath (West Side)
Fulmer Ave	Bryne Park Ave	Broadway Ave	Separated Bikeway	Sidepath (West Side)
Gateway Center Dr	Stringtown Rd	Shawnee La	Separated Bikeway	Sidepath (East Side)
Little Seneca Pkwy	Broadway Ave	Snowden Farm Pkwy	Separated Bikeway	Sidepath (Both Sides)
Little Seneca Pkwy	Snowden Farm Pkwy	Ridge Rd	Separated Bikeway	Sidepath (North Side)
Observation Dr	Stringtown Rd	Roberts Tavern Dr	Separated Bikeway	Sidepath (Both Sides)
Outlet Rd	Cabin Branch Ave	Plover St	Separated Bikeway	Sidepath (South Side)
Plover St	Outlet Rd	Little Seneca Pkwy	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Ridge Rd	Kings Valley Rd	Brink Rd	Separated Bikeway	Sidepath (West Side)
Roberts Tavern Dr	Observation Dr	Frederick Rd	Separated Bikeway	Sidepath (Both Sides)
Shawnee La	Gateway Center Dr	Frederick Rd	Separated Bikeway	Sidepath (South Side)
Sidepath	Little Seneca Pkwy	Black Hills Regional park	Separated Bikeway	Sidepath (Side TBD)
Skylark Rd	Piedmont Rd	Ridge Rd	Separated Bikeway	Sidepath (South Side)
Snowden Farm Pkwy	Stringtown Rd	Ridge Rd	Separated Bikeway	Sidepath (South Side)
Street B-10	Clarksburg Rd	Black Hills Regional Park	Separated Bikeway	Sidepath (Side TBD)
Stringtown Rd	Snowden Farm Pkwy	Gateway Center Dr	Separated Bikeway	Sidepath (Both Sides)
West Old Baltimore Rd	Observation Dr	Frederick Rd	Separated Bikeway	Sidepath (South Side)
West Old Baltimore Rd	Clarksburg Rd	Broadway Ave	Separated Bikeway	Sidepath (North Side)

CLARKSBURG TOWN CENTER



Policy Area
Parkland
B Bus Rapid Transit Station (Proposed)
Breezeway Network

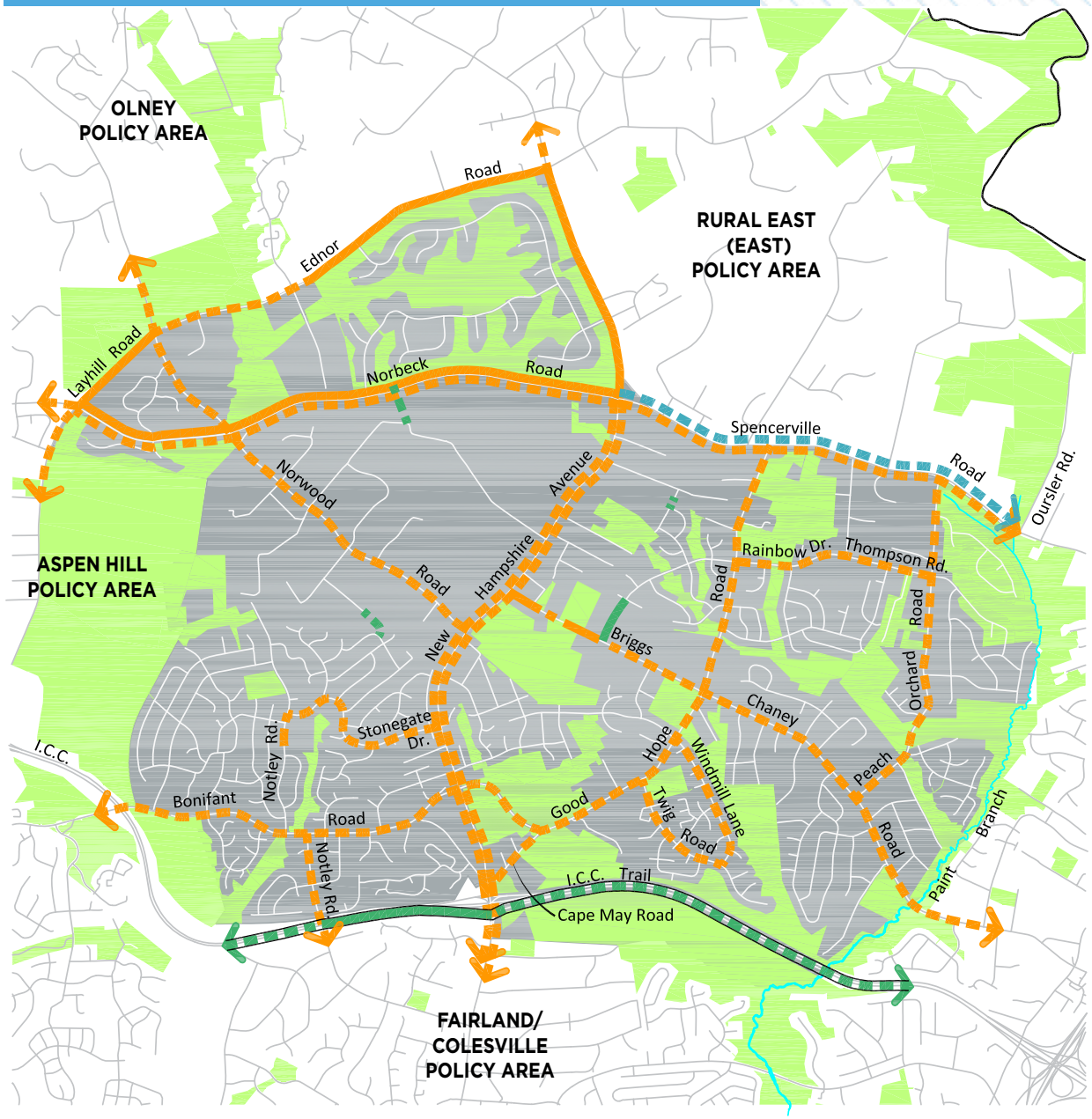
Existing
Proposed
Separated Bikeways
Striped Bikeways
Bikeable Shoulders
Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 1600'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Burdette Forest Rd	Snowden Farm Pkwy	Clarksburg Square Rd	Separated Bikeway	Sidepath (West Side)
Clarksburg Rd	Snowden Farm Rd	Gateway Center Dr	Separated Bikeway and Striped Bikeway	Sidepath (East Side) and Conventional Bike Lanes
Frederick Rd	Comus Rd	Snowden Farm Pkwy	Separated Bikeway and Bike-able Shoulders	Sidepath (West Side) and Bikeable Shoulders
	Snowden Farm Pkwy	Stringtown Rd	Separated Bikeway	Sidepath (East Side)
Gateway Center Dr	Clarksburg Rd	Stringtown Rd	Separated Bikeway and Striped Bikeway	Sidepath (East Side) and Conventional Bike Lanes
Overlook Park Dr	Clarksburg Rd	Stringtown Rd	Separated Bikeway	Sidepath (East Side)
Snowden Farm Pkwy	Frederick Rd	Stringtown Rd	Separated Bikeway	Sidepath (South Side)
Street A-251	Frederick Rd	Stringtown Rd	Separated Bikeway	Sidepath (Side TBD)
Stringtown Rd	Snowden Farm Pkwy	Gateway Center Dr	Separated Bikeway	Sidepath (Both Sides)

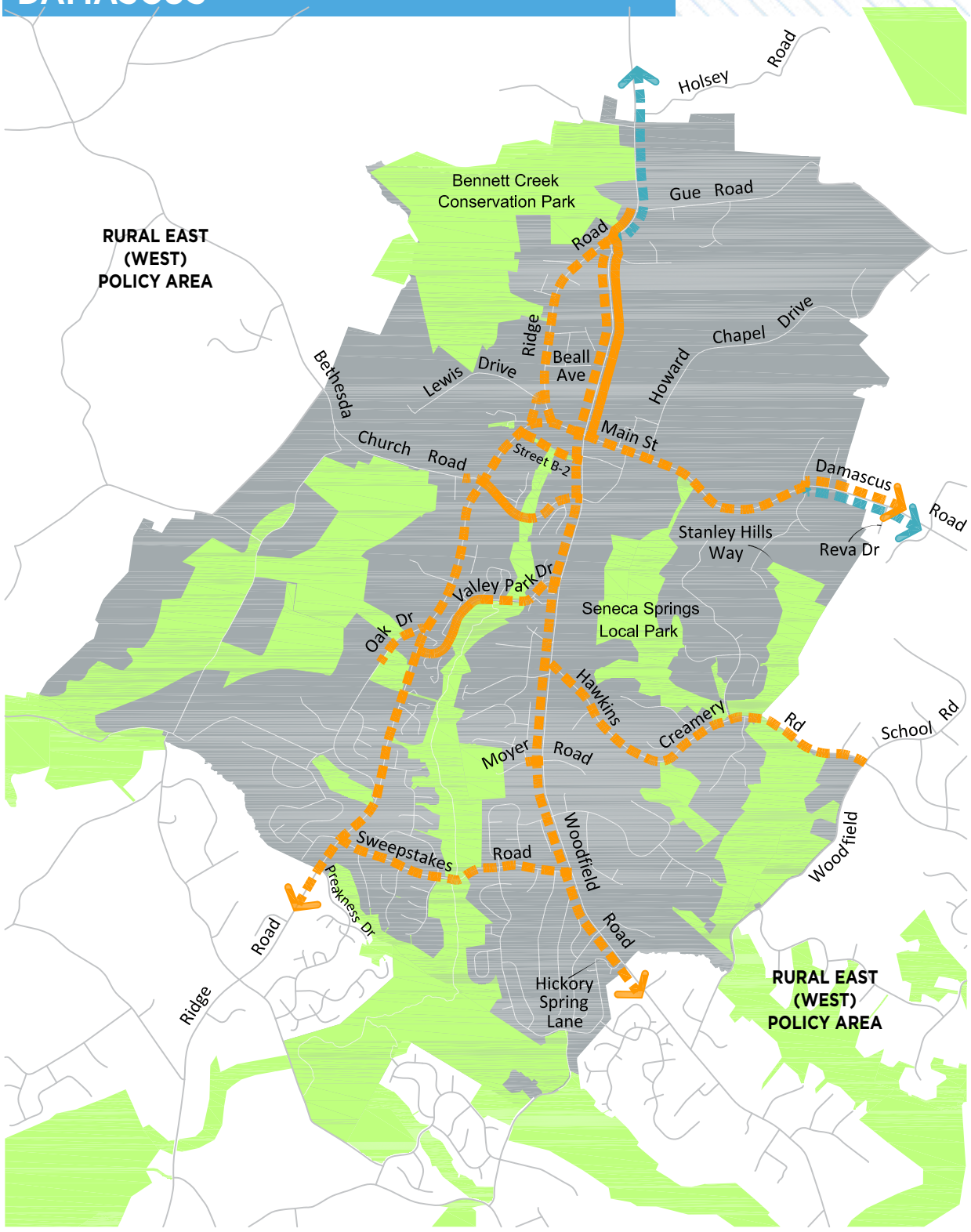
CLOVERLY



Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
INTERCOUNTY CONNECTOR TRAIL BREEZEWAY				
Bonifant Rd	Intercounty Connector Trail	Notley Rd	Separated Bikeway	Sidepath (South Side)
Notley Rd	Bonifant Rd	Intercounty Connector	Separated Bikeway	Sidepath (East Side)
SEE FAIRLAND-COLESVILLE POLICY AREA				
Intercounty Connector Trail	New Hampshire Ave	Fairland-Colesville Policy Area	Trail	Off-Street Trail
ADDITIONAL RECOMMENDATIONS				
Bonifant Rd	Intercounty Connector Trail	New Hampshire Ave	Separated Bikeway	Sidepath (South Side)
Briggs Chaney Rd	New Hampshire Ave	Paint Branch	Separated Bikeway	Sidepath (North Side)
Cape May Rd	Good Hope Rd	New Hampshire Ave	Separated Bikeway	Sidepath (South Side)
Ednor Rd	New Hampshire Ave	Norwood Rd	Separated Bikeway	Sidepath (East Side)
Good Hope Rd	New Hampshire Ave	Spencerville Rd	Separated Bikeway	Sidepath (East Side)
Layhill Rd	Norwood Rd	Norbeck Rd	Separated Bikeway	Sidepath (East Side)
New Hampshire Ave	Ednor Rd	Norbeck Rd	Separated Bikeway	Sidepath (West Side)
	Norbeck Rd	Intercounty Connector Trail	Separated Bikeway	Sidepath (Both Sides)
Norbeck Rd	Layhill Rd	New Hampshire Ave	Separated Bikeway	Sidepath (Both Sides)
Norwood Rd	Layhill Rd	New Hampshire Ave	Separated Bikeway	Sidepath (East Side)
Notley Rd	Stonegate Dr	Stonegate Elementary School	Separated Bikeway	Sidepath (East Side)
Peach Orchard Rd	Spencerville Rd	Briggs Chaney Rd	Separated Bikeway	Sidepath (Side TBD)
Rainbow Dr	Good Hope Rd	Thompson Rd	Separated Bikeway	Sidepath (South Side)
Spencerville Rd	New Hampshire Ave	Oursler Rd	Separated Bikeway and Bikeable Shoulder	Sidepath (North Side) and Bikeable Shoulder
Stonegate Dr	Notley Rd	New Hampshire Ave	Separated Bikeway	Sidepath (Side TBD)
Thompson Rd	Rainbow Dr	Peachtree Rd	Separated Bikeway	Sidepath (South Side)
Twig Rd	Good Hope Rd	Windmill La	Separated Bikeway	Sidepath (Side TBD)
Windmill La	Good Hope Rd	Twig Rd	Separated Bikeway	Sidepath (Side TBD)

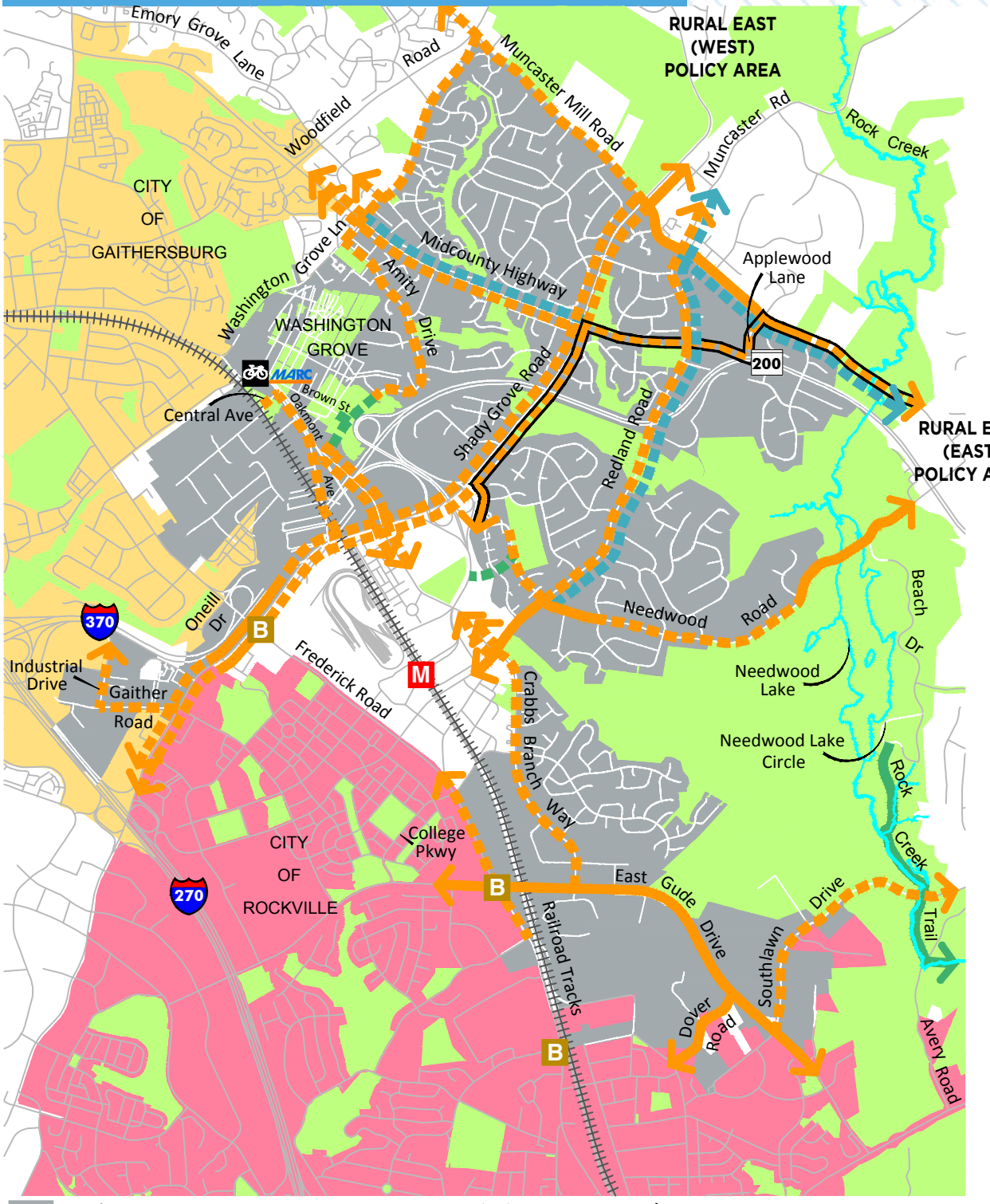
DAMASCUS



Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Bethesda Church Rd	Damascus Elementary School	Ridge Rd	Separated Bikeway	Sidepath (North Side)
	Ridge Rd	Woodfield Rd	Separated Bikeway	Sidepath (South Side)
Damascus Rd	Howard Chapel Dr	Stanley Hills Way	Separated Bikeway	Sidepath (South Side)
	Stanley Hills Way	Reva Dr	Separated Bikeway and Bikeable Shoulders	Sidepath (South Side) and Bikeable Shoulders
Hawkins Creamery Rd	Woodfield Rd	Woodfield School Rd	Separated Bikeway	Sidepath (Side TBD)
High Corner St	Ridge Rd	Lewis Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Lewis Dr	High Corner St	Main St	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Main St	Lewis Dr	Woodfield Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
	Woodfield Rd	Howard Chapel Dr	Separated Bikeway	Sidepath (South Side)
Moyer Rd	Clearspring Elementary School	Woodfield Rd	Separated Bikeway	Sidepath or Separated Bike Lanes (South Side)
Oak Dr	Ridge Rd	John T Baker Middle School	Separated Bikeway	Sidepath (West Side)
Ridge Rd	Rural East Policy Area	Gue Rd	Bikeable Shoulders	Bikeable Shoulders
	Gue Rd	Woodfield Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (East Side) and Bikeable Shoulders
	Woodfield Rd	Main St	Separated Bikeway	Sidepath (East Side)
	Beall Ave	Main St	Separated Bikeway	Separated Bike Lanes (East Side)
Ridge Rd	Main St	Bethesda Church Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
	Bethesda Church Rd	Oak Dr	Separated Bikeway	Sidepath (East Side)
	Oak Dr	Preakness Dr	Separated Bikeway	Sidepath (West Side)
Street B-2	Ridge Rd	Woodfield Rd	Separated Bikeway	Sidepath (South Side)
Sweepstakes Rd	Ridge Rd	Woodfield Rd	Separated Bikeway	Sidepath (South Side)
Valley Park Dr	Ridge Rd	Woodfield Rd	Separated Bikeway	Sidepath (North Side)
Woodfield Rd	Ridge Rd	Beall Ave	Separated Bikeway	Sidepath (Both Sides)
	Beall Ave	Main St	Separated Bikeway	Sidepath (East Side) and Separated Bike Lanes (West Side)
	Main St	Hickory Spring La	Separated Bikeway	Sidepath (West Side)

DERWOOD



- Policy Area
- Parkland
- City of Gaithersburg
- City of Rockville
- M Metro Rail Station
- B Bus Rapid Transit Station (Proposed)
- MARC MARC Station
- Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Bikeable Shoulders
		Shared Roads
		Bicycle Parking Station

Note: White lines represent non-master planned bikeways

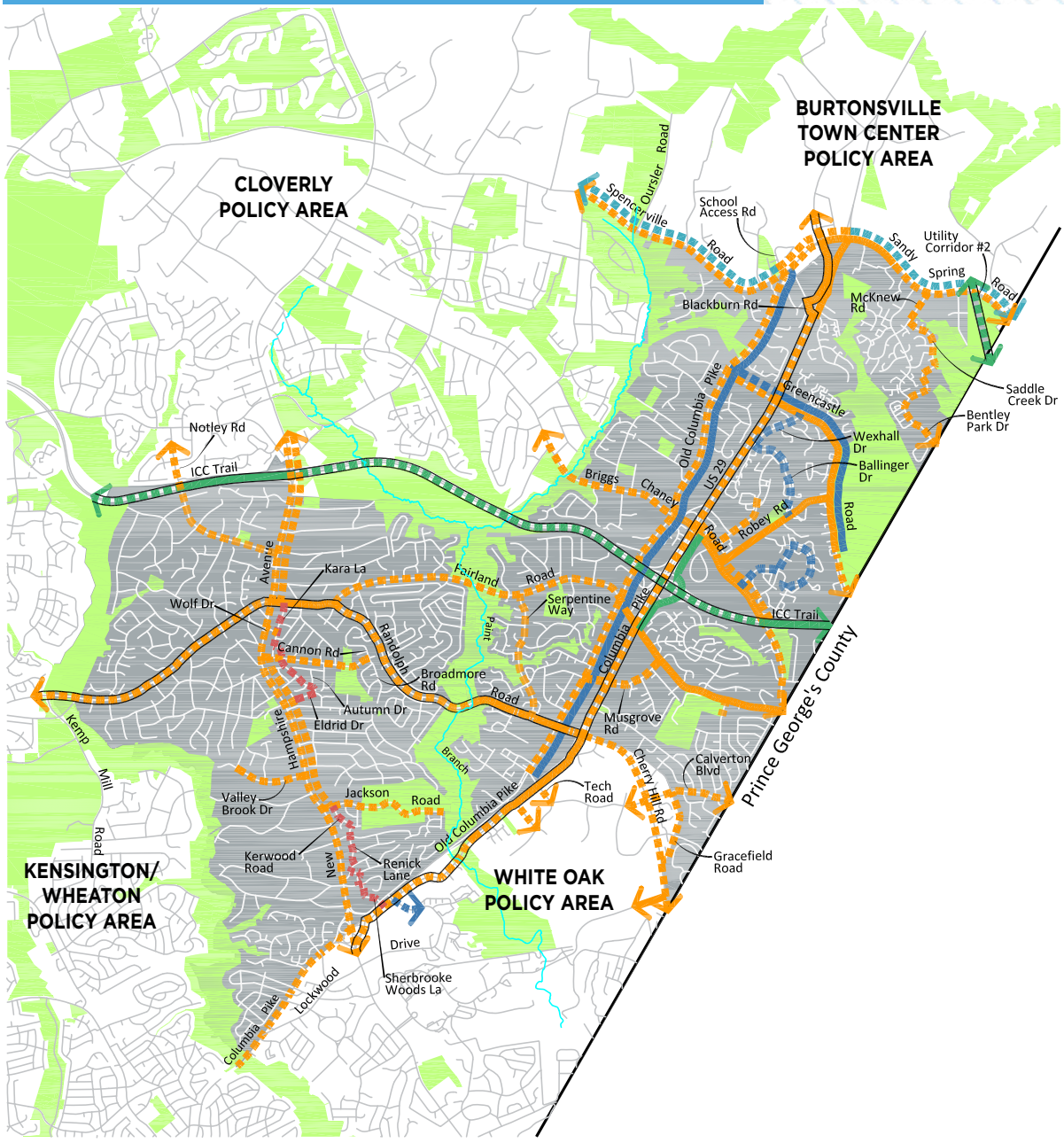
0 3400'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
INTERCOUNTY CONNECTOR TRAIL BREEZEWAY				
Shady Grove Rd	Shady Grove Access Rd	Midcounty Hwy	Separated Bikeway	Sidepath (South Side)
Midcounty Hwy	Shady Grove Rd	Applewood La	Separated Bikeway	Sidepath (Side TBD)
Applewood La	Midcounty Hwy	Muncaster Mill Rd	Separated Bikeway	Sidepath (East Side)
Muncaster Mill Rd	Applewood La	Rock Creek	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
ADDITIONAL RECOMMENDATIONS				
Amity Dr	Washington Grove La	Piedmont Crossing LP Trail	Separated Bikeway	Sidepath (North Side)
Crabbs Branch Way	Redland Rd	East Gude Dr	Separated Bikeway	Sidepath (West Side)
Crabbs Branch Way	Northern Terminus	Shady Grove Rd	Separated Bikeway	Sidepath (Both Sides)
East Gude Dr	Frederick Ave	Southlawn La	Separated Bikeway	Sidepath (West Side)
Frederick Rd	O'Neill Dr	Shady Grove Rd	Separated Bikeway	Sidepath (Both Sides)
Frederick Rd	Paramount Dr	College Pkwy	Separated Bikeway	Sidepath (East Side)
Gaither Rd	Industrial Dr	Shady Grove Rd	Separated Bikeway	Sidepath (Side TBD)
Industrial Dr	City of Gaithersburg	Gaither Rd	Separated Bikeway	Sidepath (Side TBD)
Midcounty Hwy	Washington Grove La	Shady Grove Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (Sde TBD) and Bikeable Shoulders
Muncaster Mill Rd	Woodfield Rd	Muncaster Rd	Separated Bikeway	Sidepath (West Side)
Muncaster Mill Rd	Muncaster Rd	Rock Creek	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Needwood Rd	Keyport Ter	Redland Rd	Separated Bikeway	Sidepath (East Side)
	Redland Rd	Beach Dr	Separated Bikeway	Sidepath (South Side)
Oakmont Ave	Central Ave	Shady Grove Rd	Separated Bikeway	Sidepath (East Side)
Piedmont Crossing LP Trail	Amity Dr	Crabbs Branch Way	Trail	Off-Street Trail
Piedmont Crossing LP Trail	Brown St	Crabbs Branch Way	Trail	Off-Street Trail
Redland Rd	Muncaster Mill Rd	Needwood Rd (North)	Separated Bikeway and Bikeable Shoulders	Sidepath (North Side) and Bikeable Shoulders
	Needwood Rd (North)	Needwood Rd (South)	Separated Bikeway and Bikeable Shoulders	Sidepath (North Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Rock Creek Trail	Needwood Lake Cir	Avery Rd	Trail	Stream Valley Park Trail
Shady Grove Rd	City of Rockville	Muncaster Mill Rd	Separated Bikeway	Sidepath (Both Sides)
Southlawn La	Rock Creek Trail	East Gude Dr	Separated Bikeway	Sidepath (Side TBD)
Washington Grove La	Mineral Springs Dr	Emory Grove Rd	Separated Bikeway	Sidepath (West Side)

THIS PAGE INTENTIONALLY LEFT BLANK

FAIRLAND-COLESVILLE



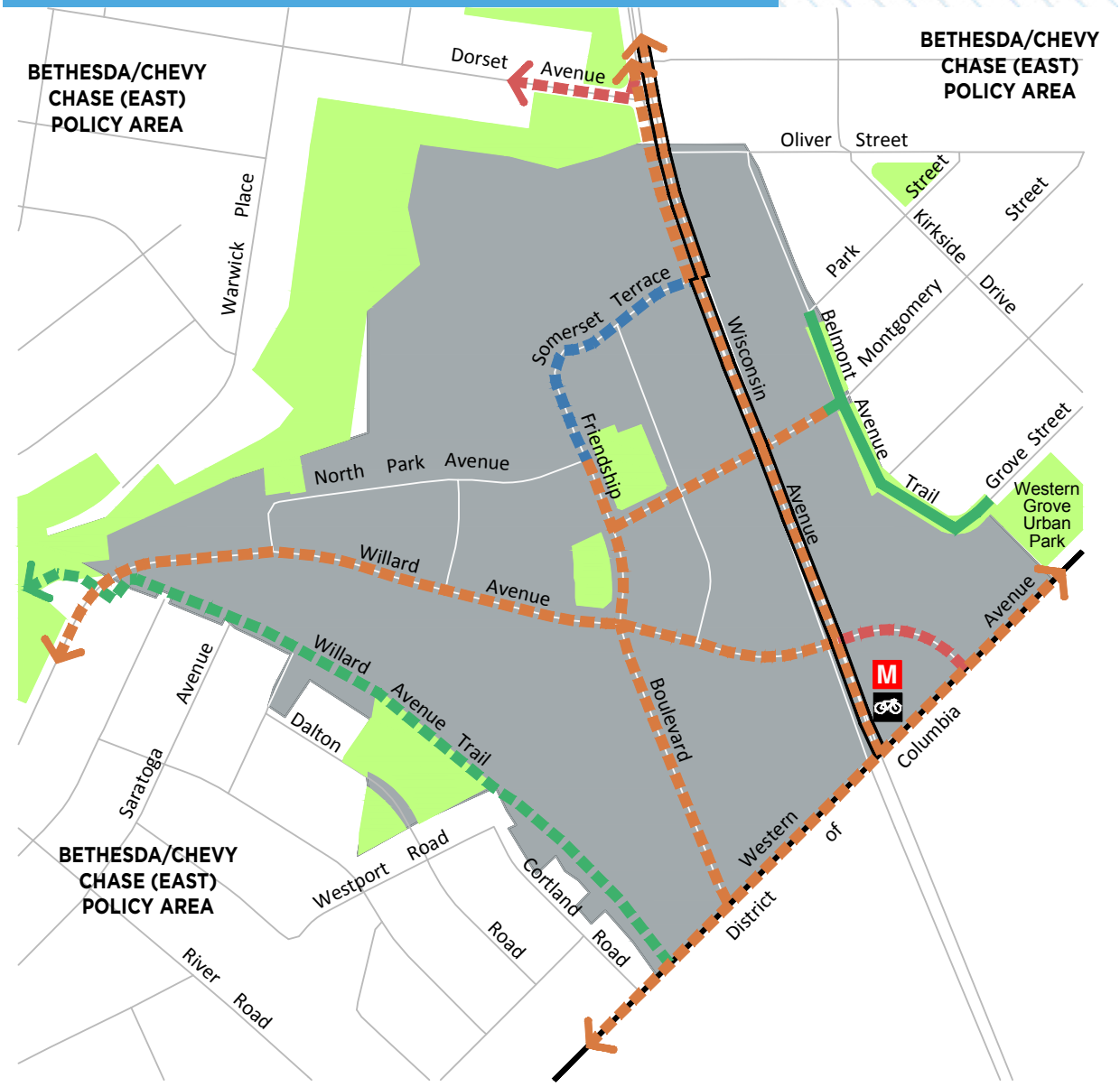
Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
INTERCOUNTY CONNECTOR TRAIL BREEZEWAY				
Intercounty Connector Trail	Notley Rd	New Hampshire Ave	Trail	Off-Street Trail
SEE CLOVERLY POLICY AREA				
Intercounty Connector Trail	Cloverly Policy Area	Prince George's County	Trail	Off-Street Trail
US 29 CORRIDOR BREEZEWAY				
Columbia Pike	Burtonsville Town Center Policy Area	Blackburn Rd	Separated Bikeway	Sidepath (West Side)
Columbia Pike	Blackburn Rd	Tech Rd	Separated Bikeway	Sidepath (East Side)
Tech Rd	Columbia Pike	Old Columbia Pike	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
GERMANTOWN - BURTONSVILLE BREEZEWAY				
Utility Corridor #2	Sandy Spring Rd	Prince George's County	Trail	Off-Street Trail
RANDOLPH RD BREEZEWAY				
Randolph Rd	Kemp Mill Rd	Fairland Rd	Separated Bikeway	Sidepath (North Side)
Randolph Rd	Fairland Rd	Columbia Pike	Separated Bikeway	Sidepath (South Side)
COLESVILLE - WHITE OAK NEIGHBORHOOD GREENWAY				
Kara La	Randolph Rd	Autumn Dr	Shared Road	Neighborhood Greenway
Autumn Dr	Kara La	Eldrid Dr	Shared Road	Neighborhood Greenway
Eldrid Dr	Autumn Dr Trail	New Hampshire Ave	Shared Road	Neighborhood Greenway
New Hampshire Ave	Eldrid Dr	Jackson Rd	Separated Bikeway	Sidepath (East Side)
Kerwood Rd	Jackson Rd	Renick La	Shared Road	Neighborhood Greenway
Renick La	Kerwood Rd	Tracy Dr	Shared Road	Neighborhood Greenway
Tracy Dr	Renick La	Kathryn Rd	Shared Road	Neighborhood Greenway
Katryn Rd	Tracy Dr	Neighborhood Connector	Shared Road	Neighborhood Greenway
Neighborhood Connector	Katryn Rd	Heartfields Dr	Trail	Neighborhood Connector
Heartfields Dr	Neighborhood Connector	Sherbrooke Woods La	Shared Road	Neighborhood Greenway

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Sherbrooke Woods La	Heartfields Dr	Milestone Dr	Shared Road	Neighborhood Greenway
Milestone Dr	Sherbrooke Woods La	Stewart La	Separated Bikeway	Sidepath (West Side)
Stewart La	Milestone Dr	Columbia Pike	Separated Bikeway	Sidepath (Side TBD)
ADDITIONAL RECOMMENDATIONS				
Aston Manor Dr	Briggs Chaney Rd	Sheffield Manor Dr	Striped Bikeway	Buffered Bike Lanes
Ballinger Dr	Wexhall Dr	Robey Rd	Striped Bikeway	Buffered Bike Lanes
Bentley Park Dr	Saddle Creek Dr	Prince George's County	Separated Bikeway	Sidepath (East Side)
Blackburn Rd	Columbia Pike SB Ramp	Columbia Pike	Separated Bikeway	Sidepath (North Side)
Briggs Chaney Rd	Paint Branch	Old Columbia Pike	Separated Bikeway	Sidepath (North Side)
	Old Columbia Pike	ICC Trail	Separated Bikeway	Sidepath (Both Sides)
	Intercounty Connector Trail	Prince George's County	Separated Bikeway	Sidepath (South Side)
Calverton Blvd	Gracefield Rd	Prince George's County	Separated Bikeway	Sidepath (South Side)
Cannon Rd	New Hampshire Ave	Broadmore Rd	Separated Bikeway	Sidepath (South Side)
Castle Blvd	Castle Ridge Cir	Briggs Chaney Rd	Separated Bikeway	Separated Bike Lanes
Columbia Pike	Sandy Spring Rd	Blackburn Rd	Separated Bikeway	Sidepath (East Side)
Columbia Pike	Tech Rd	Rachel Carson Greenway	Separated Bikeway	Sidepath (West Side)
Fairland Rd	Randolph Rd	Briggs Chaney Rd	Separated Bikeway	Sidepath (South Side)
Galway Dr	Fairland Rd	Kilkerny St	Separated Bikeway	Sidepath (West Side)
Gateshead Manor Way	Briggs Chaney Rd	Aston Manor Dr	Striped Bikeway	Buffered Bike Lanes
Greencastle Rd	Old Columbia Pike	Greencastle Ridge Ter	Separated Bikeway and Striped Bikeway	Sidepath (West Side) and Conventional Bike Lanes
	Greencastle Ridge Ter	Prince George's County	Separated Bikeway	Sidepath (West Side)
Jackson Rd	New Hampshire Ave	Paint Branch Trail	Separated Bikeway	Sidepath (North Side)
Matthew Henson Trail	Aspen Hill Policy Area	Notley Rd	Trail	Off-Street Trail
McKnew Rd	Sandy Spring Rd	Saddle Creek Dr	Separated Bikeway	Sidepath (East Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Musgrove Rd	Old Columbia Pike	Fairland Rd	Separated Bikeway	Sidepath (South Side)
New Hampshire Ave	Intercounty Connector Trail	Wolf Dr	Separated Bikeway	Sidepath (Both Sides)
New Hampshire Ave	Wolf Dr	Columbia Pike	Separated Bikeway	Sidepath (West Side)
Notley Rd	Intercounty Connector Trail	New Hampshire Ave	Separated Bikeway	Sidepath (East Side)
Old Columbia Pike	Tolson Pl	Tech Rd	Separated Bikeway and Striped Bikeway	Sidepath (West Side) and Conventional Bike Lanes
Old Columbia Pike	Tech Rd	Stewart La	Separated Bikeway	Sidepath (East Side)
Robey Rd	Greencastle Rd	Briggs Chaney Rd	Separated Bikeway	Sidepath (West Side)
Saddle Creek Dr	McKnew Rd	Bentley Park Dr	Separated Bikeway	Sidepath (East Side)
Sandy Spring Rd	Old Columbia Pike	Columbia Pike Ramp	Separated Bikeway	Sidepath (South Side) and Separated Bike Lanes (North Side)
	Columbia Pike Ramp	Prince George's County	Separated Bikeway and Bikeable Shoulders	Sidepath (South Side) and Bikeable Shoulder
Serpentine Way	Fairland Rd	Randolph Rd	Separated Bikeway	Sidepath (West Side)
Sheffield Manor Dr	Aston Manor Dr	Shady Knoll Dr	Striped Bikeway	Buffered Bike Lanes
Spencerville Rd	Oursler Rd	School Access Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (North Side) and Bikeable Shoulder
Tech Rd	Old Columbia Pike	Columbia Pike	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Valley Brook Dr	Springbrook High School	New Hampshire Ave	Separated Bikeway	Sidepath (South Side)
Wexhall Dr	Greencastle Blvd	Ballinger Dr	Striped Bikeway	Buffered Bike Lanes
Wolf Dr	New Hampshire Ave	Kara La	Separated Bikeway	Sidepath (North Side)

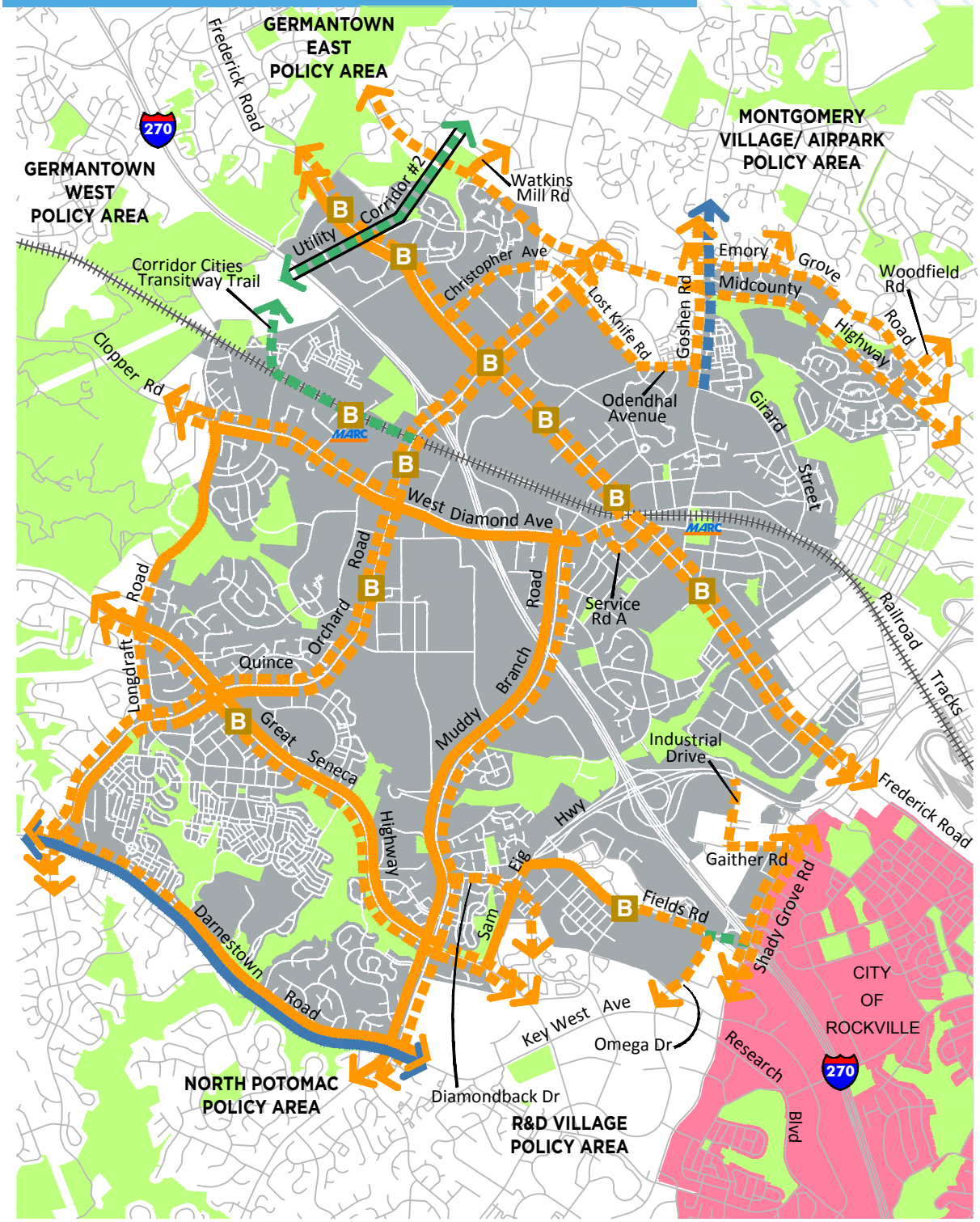
FRIENDSHIP HEIGHTS CBD



Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 SOUTH BREEZEWAY				
Wisconsin Ave	Oliver Street	District of Columbia	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
ADDITIONAL RECOMMENDATIONS				
Belmont Ave Trail	Park St	Grove St	Trail	Off-Street Trail
Friendship Blvd	Somerset Ter	N Park Ave	Striped Bikeway	Conventional Bike Lanes
	N Park Ave	District of Columbia	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Montgomery St Trail	Montgomery St	Belmont Ave Trail	Trail	Off-Street Trail
Neighborhood Connector	Montgomery St	Center St	Trail	Neighborhood Connector
S Park Ave / Montgomery St	Friendship Blvd	Montgomery St Trail	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Somerset Ter	Wisconsin Ave	Friendship Blvd	Striped Bikeway	Conventional Bike Lanes
Western Ave	Cortland Rd	Western Grove Urban Park	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Willard Ave	Willard Ave Trail	Wisconsin Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Willard Ave Trail	Willard Ave	District of Columbia	Trail	Off-Street Trail
Wisconsin Ave	Oliver St	Somerset Ter	Separated Bikeway	Sidepath (West Side)
Wisconsin Cir	Wisconsin Ave	District of Columbia	Shared Road	Priority Shared Lane Markings

GAITHERSBURG CITY



Policy Area
Parkland
City of Rockville
B Bus Rapid Transit Station (Proposed)
MARC MARC Station
Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways

Note: White lines represent non-master planned bikeways

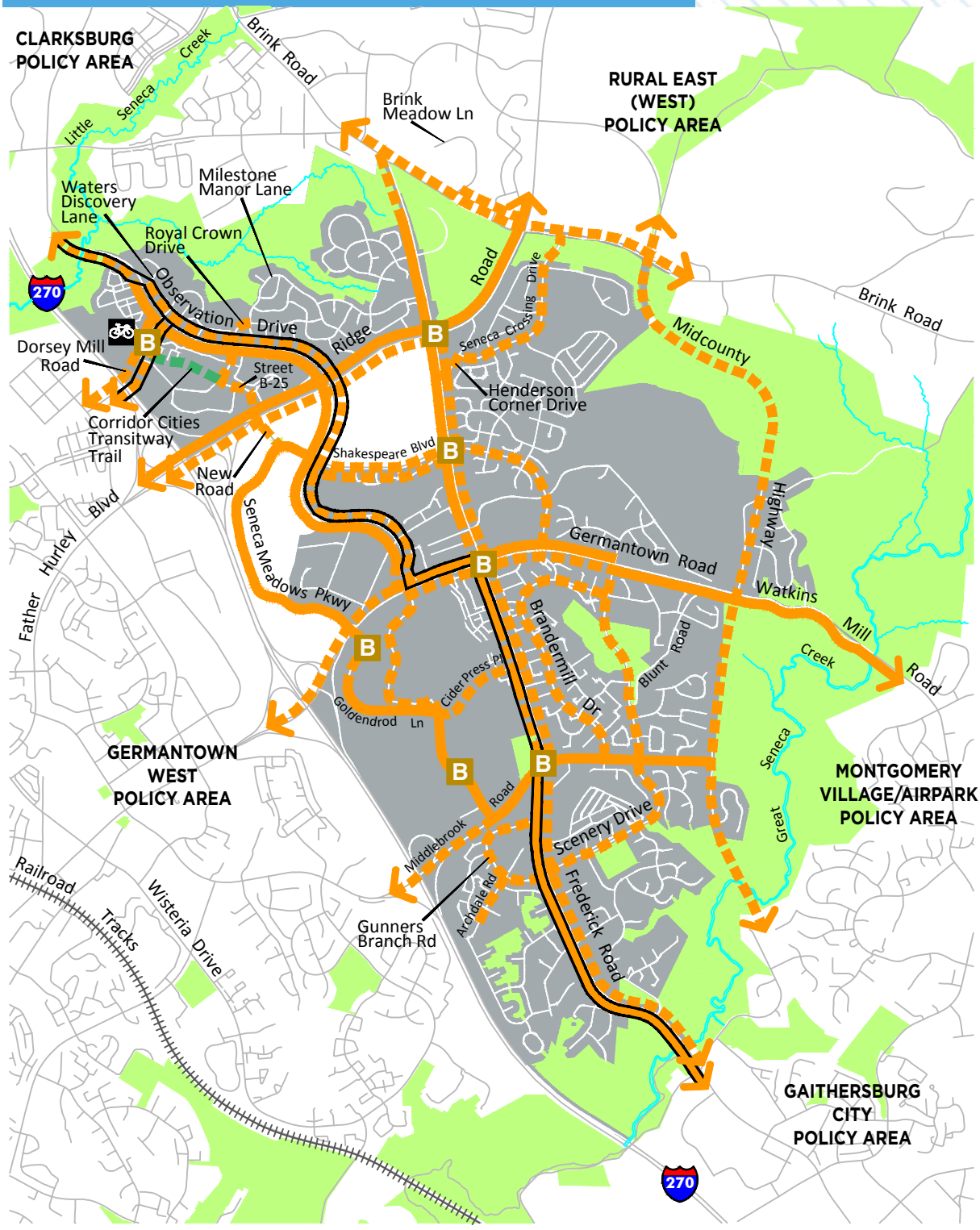
0 4000'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
CCT Trail	Omega Dr	King Farm Blvd	Trail	Off-Street Trail
Christopher Ave	Frederick Ave	City of Gaithersburg	Separated Bikeway	Sidepath (South Side)
Clopper Rd	Longdraft Rd	Quince Orchard Rd	Separated Bikeway	Sidepath (Both Sides)
Corridor Cities Transitway Trail	City of Gaithersburg	Quince Orchard Rd	Trail	Off-Street Trail
Darnestown Rd	Quince Orchard Rd	Tschiffely Square Rd	Separated Bikeway and Striped Bikeway	Separated Bike Lanes (Two-Way, North Side) and
	Tschiffely Square Rd	Muddy Branch Rd	Separated Bikeway and Striped Bikeway	Sidepath (North Side) and Conventional Bike Lanes
Diamondback Dr	Muddy Branch Rd	Ellington Blvd	Separated Bikeway	Sidepath (South Side)
	Ellington Blvd	Reprise Dr	Separated Bikeway	Sidepath (Both Sides)
Emory Grove Rd	Goshen Rd	Washington Grove La	Separated Bikeway	Sidepath (North Side)
Fields Rd	Sam Eig Hwy	City of Gaithersburg	Separated Bikeway	Sidepath (South Side)
Frederick Ave	Game Preserve Rd	O'Neill Dr	Separated Bikeway	Sidepath (Both Sides)
Frederick Rd	O'Neill Dr	Shady Grove Rd	Separated Bikeway	Sidepath (Both Sides)
Gaither Rd	Industrial Dr	Shady Grove Rd	Separated Bikeway	Sidepath (Side TBD)
Gatestone St	Main St	Lakelands Dr	Separated Bikeway	Sidepath (South Side)
Golden Ash Way	Hart Rd	Main St	Separated Bikeway	Sidepath (North Side)
Goshen Rd	Emory Grove Rd	Odendhal Ave	Separated Bikeway and Striped Bikeway	Sidepath (West Side) and Conventional Bike Lanes
	Odendhal Ave	Girard St	Separated Bikeway and Striped Bikeway	Sidepath (West Side) and Conventional Bike Lanes
Great Seneca Hwy	Longdraft Rd	Sam Eig Hwy	Separated Bikeway	Sidepath (Both Sides)
	Sam Eig Hwy	Darnestown Rd	Separated Bikeway	Sidepath (Both Sides)
Great Seneca Hwy Ramp	Great Seneca Hwy	Sam Eig Hwy	Separated Bikeway	Sidepath (North Side)
Longdraft Rd	North Potomac Policy Area	North Potomac Policy Area	Separated Bikeway	Sidepath (West Side)
Lost Knife Rd	Montgomery Village Ave	Odendhal Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Main St	Gatestone St	Golden Ash Way	Separated Bikeway	Sidepath (West Side)
	Golden Ash Way	Neighborhood Connector	Separated Bikeway	Sidepath (East Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Midcounty Hwy	Great Seneca Creek	Montgomery Village Ave	Separated Bikeway	Sidepath (Side TBD)
	Montgomery Village Ave	Washington Grove La	Separated Bikeway and Bikeable Shoulders	Sidepath (Side TBD) and Bikeable Shoulders
Montgomery Village Ave	Lost Knife Rd	I-270	Separated Bikeway	Sidepath (Both Sides)
Muddy Branch Rd	W Diamond Ave	Great Seneca Hwy	Separated Bikeway	Sidepath (Both Sides)
	Great Seneca Hwy	City of Gaithersburg	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (East Side)
	City of Gaithersburg	Darnestown Rd	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (East Side)
Odendhal Ave	Lost Knife Rd	Goshen Rd	Separated Bikeway	Sidepath (North Side)
Omega Dr	Fields Rd	Research Blvd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Quince Orchard Rd	I-270	Longdraft Rd	Separated Bikeway	Sidepath (Both Sides)
	Longdraft Rd	Hillstone Rd	Separated Bikeway	Sidepath (Both Sides)
Sam Eig Hwy	Washingtonian Blvd Ramp	Fields Rd	Separated Bikeway	Sidepath (West Side)
	Fields Rd	Great Seneca Hwy	Separated Bikeway	Sidepath (West Side)
Sam Eig Hwy Ramp	City of Gaithersburg	Great Seneca Hwy	Separated Bikeway	Sidepath (East Side)
Service Road A	Frederick Ave	W Diamond Ave	Separated Bikeway	Sidepath (South Side)
Shady Grove Rd	City of Gaithersburg	City of Gaithersburg	Separated Bikeway	Sidepath (Both Sides)
Utility Corridor #2	I-270	Midcounty Hwy	Trail	Off-Street Trail
W Diamond Ave	Quince Orchard Rd	Service Road A	Separated Bikeway	Sidepath (South Side)
Woodfield Rd	Emory Grove Rd	Midcounty Hwy	Separated Bikeway	Sidepath (West Side)

THIS PAGE INTENTIONALLY LEFT BLANK

GERMANTOWN EAST



Policy Area
Parkland
B Bus Rapid Transit Station (Proposed)
Breezeway Network

Existing Proposed
Trails
Separated Bikeways
Bicycle Parking Station

Note: White lines represent non-master planned bikeways

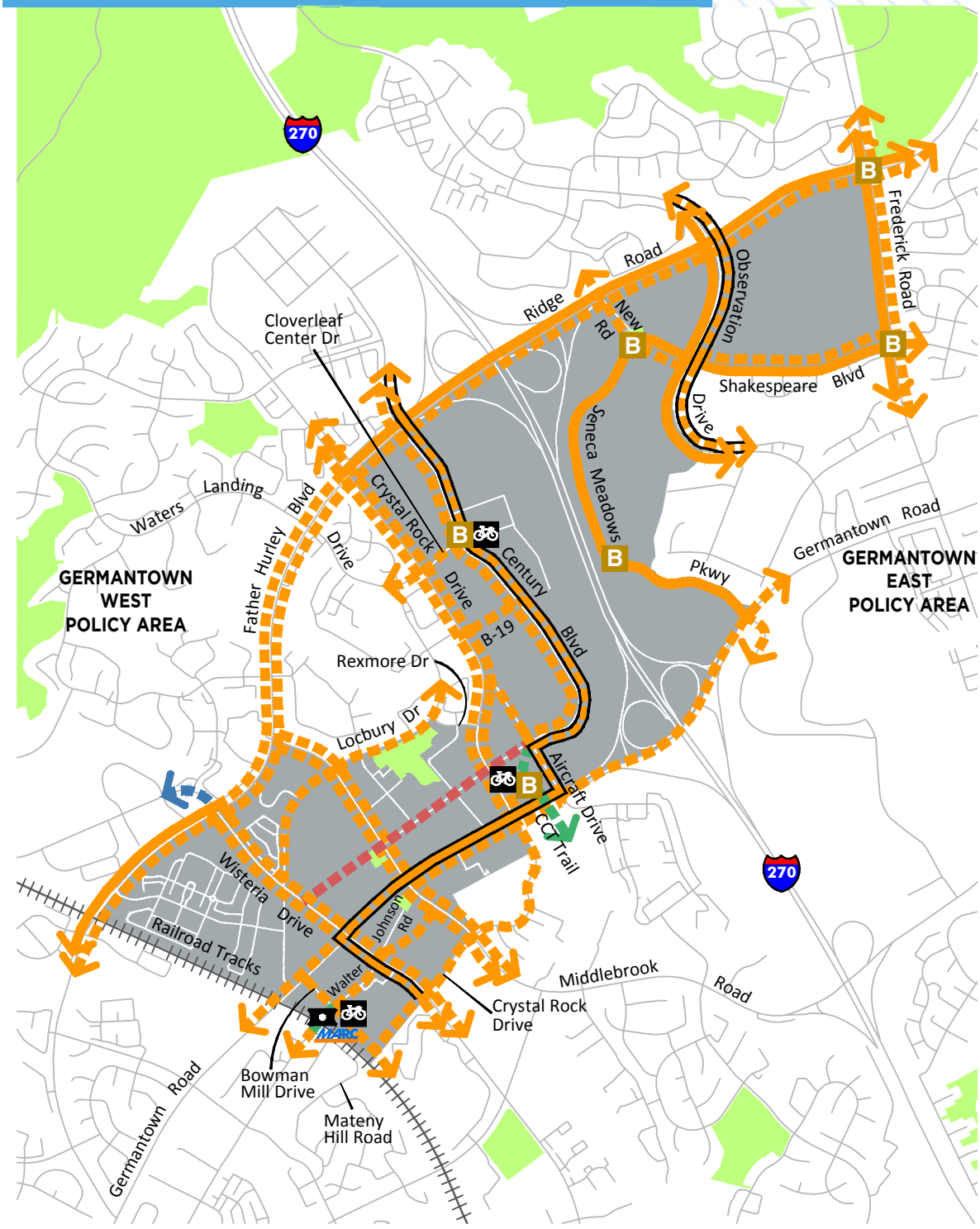
0 3000'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 NORTH BREEZEWAY				
Observation Dr	Little Seneca Creek	Ridge Rd	Separated Bikeway	Sidepath (East Side)
Germantown Rd	Observation Dr	Frederick Rd	Separated Bikeway	Sidepath (North Side)
Frederick Rd	Germantown Rd	Great Seneca Creek	Separated Bikeway	Sidepath (East Side)
GERMANTOWN - LIFE SCIENCES CENTER BREEZEWAY				
Dorsey Mill Rd	I-270	Observation Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
ADDITIONAL RECOMMENDATIONS				
Archdale Rd	Gunners Branch Rd	Fox Chapel Elementary School	Separated Bikeway	Sidepath (East Side)
Brandermill Dr	Scenery Dr	Middlebrook Rd	Separated Bikeway	Sidepath (side TBD)
Brink Rd	Brink Meadow La	Ridge Rd	Separated Bikeway	Sidepath (Both Sides)
	Ridge Rd	MidCounty Hwy	Separated Bikeway	Sidepath (South Side)
Cider Press Pl	Observation Dr	Frederick Rd	Separated Bikeway	Sidepath (North Side)
Corridor Cities Transitway Trail	Dorsey Mill Rd	Milestone Center Dr	Trail	Off-Street Trail
Dorsey Mill Rd	I-270	Observation Dr	Separated Bikeway	Sidepath (North Side)
Frederick Rd	Brink Rd	Ridge Rd	Separated Bikeway	Sidepath (West Side)
	Ridge Rd	Germantown Rd	Separated Bikeway	Sidepath (Both Sides)
Frederick Rd	Germantown Rd	Great Seneca Creek	Separated Bikeway	Sidepath (West Side)
Germantown Rd	Seneca Meadows Pkwy	Observation Dr	Separated Bikeway	Sidepath (North Side)
	Observation Dr	Scenery Dr	Separated Bikeway	Sidepath (Both Sides)
	Scenery Dr	Blunt Rd	Separated Bikeway	Sidepath (South Side)
Goldenrod La	Germantown Rd	Observation Dr	Separated Bikeway	Sidepath (East Side)
Gunners Branch Rd	Frederick Rd	Frederick Rd	Separated Bikeway	Sidepath (West Side)
Henderson Corner Rd	Seneca Crossing Rd	Frederick Rd	Separated Bikeway	Sidepath (East Side)
MidCounty Hwy	Brink Rd	Great Seneca Creek	Separated Bikeway	Sidepath (side TBD)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Middlebrook Rd	I-270	Observation Dr	Separated Bikeway	Sidepath (South Side)
	Observation Dr	Midcounty Hwy	Separated Bikeway	Sidepath (South Side)
Milestone Center Dr	Dorsey Mill Rd	Observation Dr	Separated Bikeway	Sidepath (North Side)
Observation Dr	Waters Discovery La	Ridge Rd	Separated Bikeway	Sidepath (West Side)
Observation Dr	Shakespeare Blvd	Germantown Rd	Separated Bikeway	Sidepath (Both Sides)
	Germantown Rd	Middlebrook Rd	Separated Bikeway	Sidepath (East Side)
Ridge Rd	I-270	Frederick Rd	Separated Bikeway	Sidepath (Both Sides)
	Frederick Rd	Brink Rd	Separated Bikeway	Sidepath (West Side)
Royal Crown Dr	Observation Dr	Milestone Manor La	Separated Bikeway	Sidepath (North Side)
Scenery Dr	Germantown Rd	Frederick Rd	Separated Bikeway	Sidepath (East Side)
Seneca Crossing Dr	Brink Rd	Henderson Corner Rd	Separated Bikeway	Sidepath (East Side)
Seneca Meadows Pkwy	Germantown Rd	Observation Dr	Separated Bikeway	Sidepath (East Side)
Shakespeare Blvd	Observation Dr	Frederick Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
	Frederick Rd	Germantown Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side) and Sidepath (South Side)
Street B-25 / Milestone Center Ct	Milestone Center Dr	Seneca Meadows Pkwy	Separated Bikeway	Separated Bike Lanes (One-Way, Boths Sides)
Watkins Mill Rd	Blunt Rd	Great Seneca Creek	Separated Bikeway	Sidepath (South Side)

THIS PAGE INTENTIONALLY LEFT BLANK

GERMANTOWN TOWN CENTER



Policy Area
Parkland
B Bus Rapid Transit Station (Proposed)
MARC MARC Station
Breezeway Network

Existing Proposed
Trails
Separated Bikeways
Striped Bikeways
Shared Roads
Grade Separated Crossing
Bicycle Parking Station

Note: White lines represent non-master planned bikeways

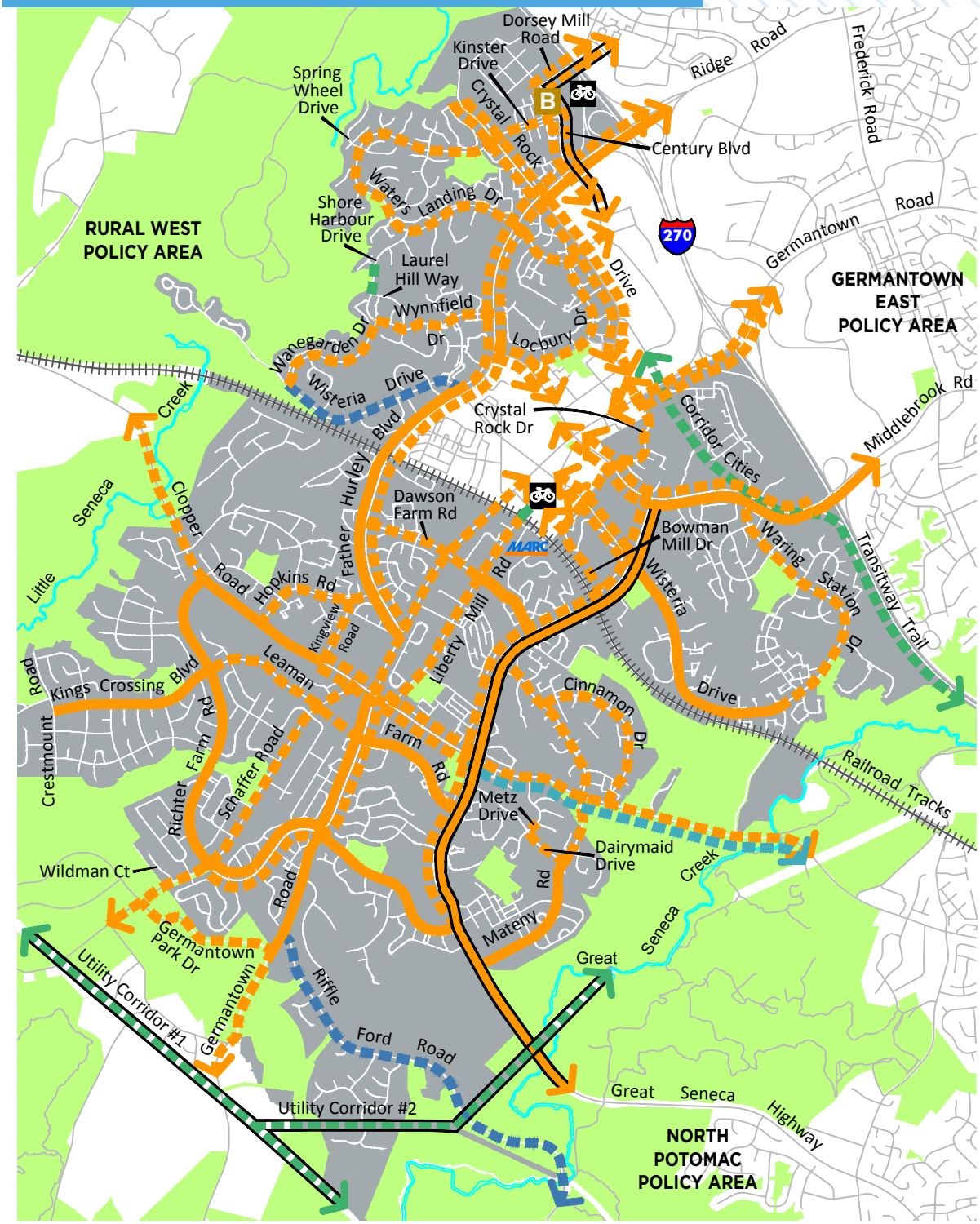
0 2000'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 NORTH BREEZEWAY				
Observation Dr	Ridge Rd	Shakespeare Blvd	Separated Bikeway	Sidepath (East Side)
GERMANTOWN - LIFE SCIENCES CENTER BREEZEWAY				
Century Blvd	Father Hurley Blvd	Aircraft Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Aircraft Dr	Crystal Rock Dr	Germantown Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Germantown Rd	Middlebrook Rd	Aircraft Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Middlebrook Rd	Germantown Rd	Crystal Rock Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
ADDITIONAL RECOMMENDATIONS				
Bowman Mill Dr	Germantown Rd	Crystal Rock Dr	Separated Bikeway	Sidepath (West Side)
Century Blvd	Father Hurley Blvd	Aircraft Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
	Aircraft Dr	Wisteria Dr	Shared Road	Priority Shared Lane Markings
Cloverleaf Center Dr	Crystal Rock Dr	Century Blvd	Separated Bikeway	Sidepath (South Side)
Corridor Cities Transitway Trail	Century Blvd	Germantown Rd	Trail	Off-Street Trail
Crystal Rock Dr	Father Hurley Blvd	Rexmore Dr	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (Two-Way, East Side)
	Rexmore Dr	Germantown Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Father Hurley Blvd	Railroad Tracks	I-270	Separated Bikeway	Sidepath (Both Sides)
Frederick Rd	Ridge Rd	Shakespeare Blvd	Separated Bikeway	Sidepath (Both Sides)
Germantown Rd	Railroad Tracks	Middlebrook Rd	Separated Bikeway	Sidepath (North Side)
	Middlebrook Rd	Aircraft Dr	Separated Bikeway	Sidepath (Both Sides)
	Aircraft Dr	Seneca Meadows Pkwy	Separated Bikeway	Sidepath (North Side)
Locbury Dr	Rexmore Dr	Middlebrook Rd	Separated Bikeway	Sidepath (Side TBD)
Locbury Dr	Middlebrook Rd	Wisteria Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
MARC Station Bridge	Railroad Tracks	Walter Johnson Rd	Trail	Off-Street Trail

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Middlebrook Rd	Father Hurley Blvd	Locbury Dr	Separated Bikeway	Sidepath (Both Sides)
	Locbury Dr	Crystal Rock Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Observation Dr	Ridge Rd	Shakespeare Blvd	Separated Bikeway	Sidepath (West Side)
Street B-25	Ridge Rd	Seneca Meadows Pkwy	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Ridge Rd	I-270	Frederick Rd	Separated Bikeway	Sidepath (Both Sides)
Seneca Meadows Pkwy	Observation Dr	New Rd	Separated Bikeway	Sidepath (North Side)
	New Rd	Germantown Rd	Separated Bikeway	Sidepath (Both Sides)
Shakespeare Blvd	Observation Dr	Frederick Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side) and Sidepath (South Side)
Street B-19	Crystal Rock Dr	Century Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Walter Johnson Rd	Bowman Mill Dr	Middlebrook Rd	Separated Bikeway	Sidepath (North Side)
Wisteria Dr	Father Hurley Blvd	Crystal Rock Dr	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (Two-Way, East Side)

THIS PAGE INTENTIONALLY LEFT BLANK

GERMANTOWN WEST



- Policy Area
- Parkland
- B — Bus Rapid Transit Station (Proposed)
- MARC — MARC Station
- Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways
		Bikeable Shoulders
		Bicycle Parking Station

Note: White lines represent non-master planned bikeways

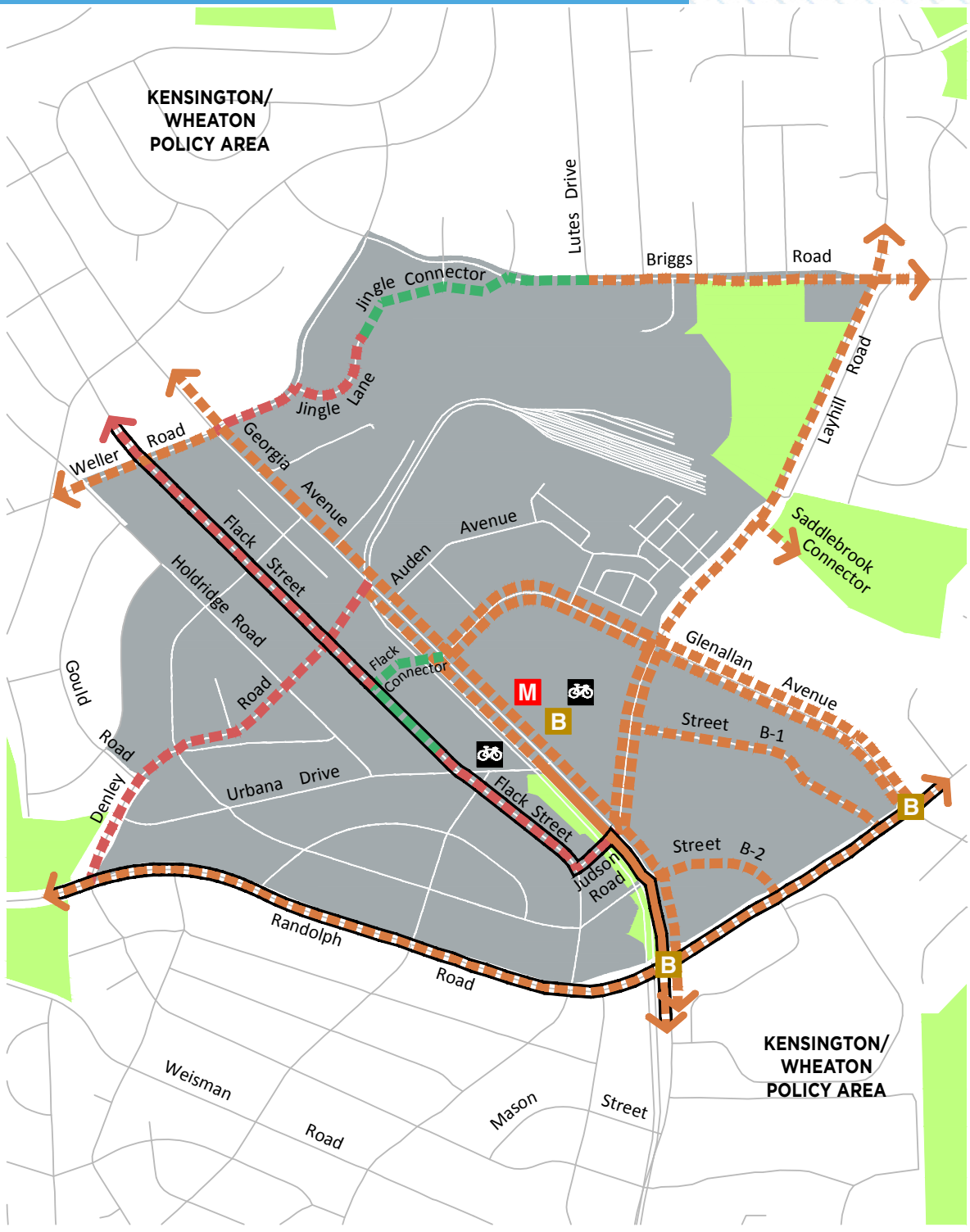
0 3400'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GERMANTOWN - LIFE SCIENCES CENTER BREEZEWAY				
Dorsey Mill Rd	Century Blvd	I-270	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Century Blvd	Dorsey Mill Rd	Father Hurley Blvd	Separated Bikeway	Separated Bike Lanes (East Side)
SEE GERMANTOWN TOWN CENTER POLICY AREA				
Middlebrook Rd	Crystal Rock Dr	Great Seneca Hwy	Separated Bikeway	Sidepath (East Side)
Great Seneca Hwy	Middlebrook Rd	Great Seneca Creek	Separated Bikeway	Sidepath (East Side)
GERMANTOWN - GROSVENOR BREEZEWAY				
Utility Corridor #1	Schaeffer Rd	Great Seneca Creek	Trail	Off-Street Trail
GERMANTOWN - BURTONSVILLE BREEZEWAY				
Utility Corridor #2	Rural West Policy Area	Great Seneca Creek	Trail	Off-Street Trail
ADDITIONAL RECOMMENDATIONS				
Bowman Mill Dr Ext	Crystal Rock Dr Ext	Great Seneca Hwy	Separated Bikeway	Sidepath (West Side)
Century Blvd	Dorsey Mill Rd	Father Hurley Blvd	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Cinnamon Dr	Mateny Rd	Clopper Rd	Separated Bikeway	Sidepath (East Side)
Clopper Rd	Little Seneca Creek	Kingsview Rd	Separated Bikeway	Sidepath (East Side)
	Kingsview Rd	Great Seneca Hwy	Separated Bikeway	Sidepath (Both Sides)
	Great Seneca Hwy	Great Seneca Creek	Separated Bikeway and Bike-able Shoulders	Sidepath (West Side) and Bikeable Shoulders
Corridor Cities Transitway Trail	Germantown Rd	Great Seneca Creek	Trail	Off-Street Trail
Crystal Rock Dr	Dorsey Mill Rd	Father Hurley Blvd	Separated Bikeway	Sidepath (Both Sides)
	Father Hurley Blvd	Rexmore Dr	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (Two-Way, East Side)
Crystal Rock Dr	Germantown Rd	Bowman Mill Dr Ext	Separated Bikeway	Sidepath (South Side)
Dairymaid Dr	Mateny Rd	Metz Dr	Separated Bikeway	Sidepath (West Side)
Dawson Farm Rd	Father Hurley Blvd	Great Seneca Hwy	Separated Bikeway	Sidepath (South Side)
Dorsey Mill Rd	Century Blvd	I-270	Separated Bikeway	Sidepath (South Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Father Hurley Blvd	Germantown Rd	I-270	Separated Bikeway	Sidepath (Both Sides)
Germantown Park Dr	Schaeffer Rd	Germantown Rd	Separated Bikeway	Sidepath (West Side)
Germantown Rd	Rural West Policy Area	Richter Farm Rd	Separated Bikeway	Sidepath (North Side)
	Richter Farm Rd	Clopper Rd	Separated Bikeway	Sidepath (Both Sides)
	Clopper Rd	Railroad Tracks	Separated Bikeway	Sidepath (North Side)
Germantown Rd	Crystal Rock Rd	Aircraft Dr	Separated Bikeway	Sidepath (Both Sides)
	Aircraft Dr	I-270	Separated Bikeway	Sidepath (North Side)
Great Seneca Hwy	Middlebrook Rd	Richter Farm Rd	Separated Bikeway	Sidepath (West Side)
Hopkins Rd	Clopper Rd	Father Hurley Blvd	Separated Bikeway	Sidepath (North Side)
Kings Crossing Blvd	Crestmount Rd	Richter Farm Rd	Separated Bikeway	Sidepath (North Side)
Kingsview Rd	Hopkins Rd	Clopper Rd	Separated Bikeway	Sidepath (East Side)
Kinster Dr	Crystal Rock Dr	Century Blvd	Separated Bikeway	Sidepath (North Side)
Leaman Farm Rd	Richter Farm Rd	Great Seneca Hwy	Separated Bikeway	Sidepath (North Side)
Liberty Mill Rd	Clopper Rd	Dawson Farm Rd	Separated Bikeway	Sidepath (Side TBD)
	Dawson Farm Rd	Railroad Tracks	Separated Bikeway	Sidepath (North Side)
Locbury Dr	Waters Landing Dr	Middlebrook Rd	Separated Bikeway	Sidepath (Side TBD)
MARC Station Bridge	Mateny Hill Rd	Railroad Tracks	Trail	Off-Street Trail
Mateny Rd	Great Seneca Hwy	Great Seneca Hwy	Separated Bikeway	Sidepath (West Side)
Metz Dr	Open Hearth Way	Dairymaid Dr	Separated Bikeway	Sidepath (Side TBD)
Middlebrook Rd	Father Hurley Blvd	Locbury Dr	Separated Bikeway	Sidepath (Both Sides)
Middlebrook Rd	Crystal Rock Dr	Corridor Cities Transitway Trail	Separated Bikeway	Sidepath (Both Sides)
	Corridor Cities Transitway Trail	I-270	Separated Bikeway	Sidepath (South Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Richter Farm Rd	Clopper Rd	Schaeffer Rd	Separated Bikeway	Sidepath (East Side)
	Schaeffer Rd	Germantown Rd	Separated Bikeway	Sidepath (Both Sides)
	Germantown Rd	Great Seneca Hwy	Separated Bikeway	Sidepath (North Side)
Riffle Ford Rd	Germantown Rd	Great Seneca Creek	Striped Bikeway	Buffered Bike Lanes
Schaeffer Rd	Burdette La	Clopper Rd	Separated Bikeway	Sidepath (North Side)
Wanegarden Dr	Wisteria Dr	Wynnfield Dr	Separated Bikeway	Sidepath (Side TBD)
Waring Station Rd	Wisteria Dr	Middlebrook Rd	Separated Bikeway	Sidepath (West Side)
Waters Landing Dr	Crystal Rock Dr	Crystal Rock Dr	Separated Bikeway	Sidepath (Inner Side)
Wisteria Dr	Wanegarden Dr	Father Hurley Blvd	Striped Bikeway	Buffered Bike Lanes
Wisteria Dr	Crystal Rock Dr	Great Seneca Hwy	Separated Bikeway	Sidepath (West Side), Separated Bike Lanes (Two-Way, East Side)
	Great Seneca Hwy	Waring Station Rd	Separated Bikeway	Sidepath (East Side)
Wynnfield Dr	Shore Harbour Dr	Laurel Hill Way	Trail	Off-Street Trail
Wynnfield Dr	Wanegarden Dr	Father Hurley Blvd	Separated Bikeway	Sidepath (Side TBD)

GLENMONT



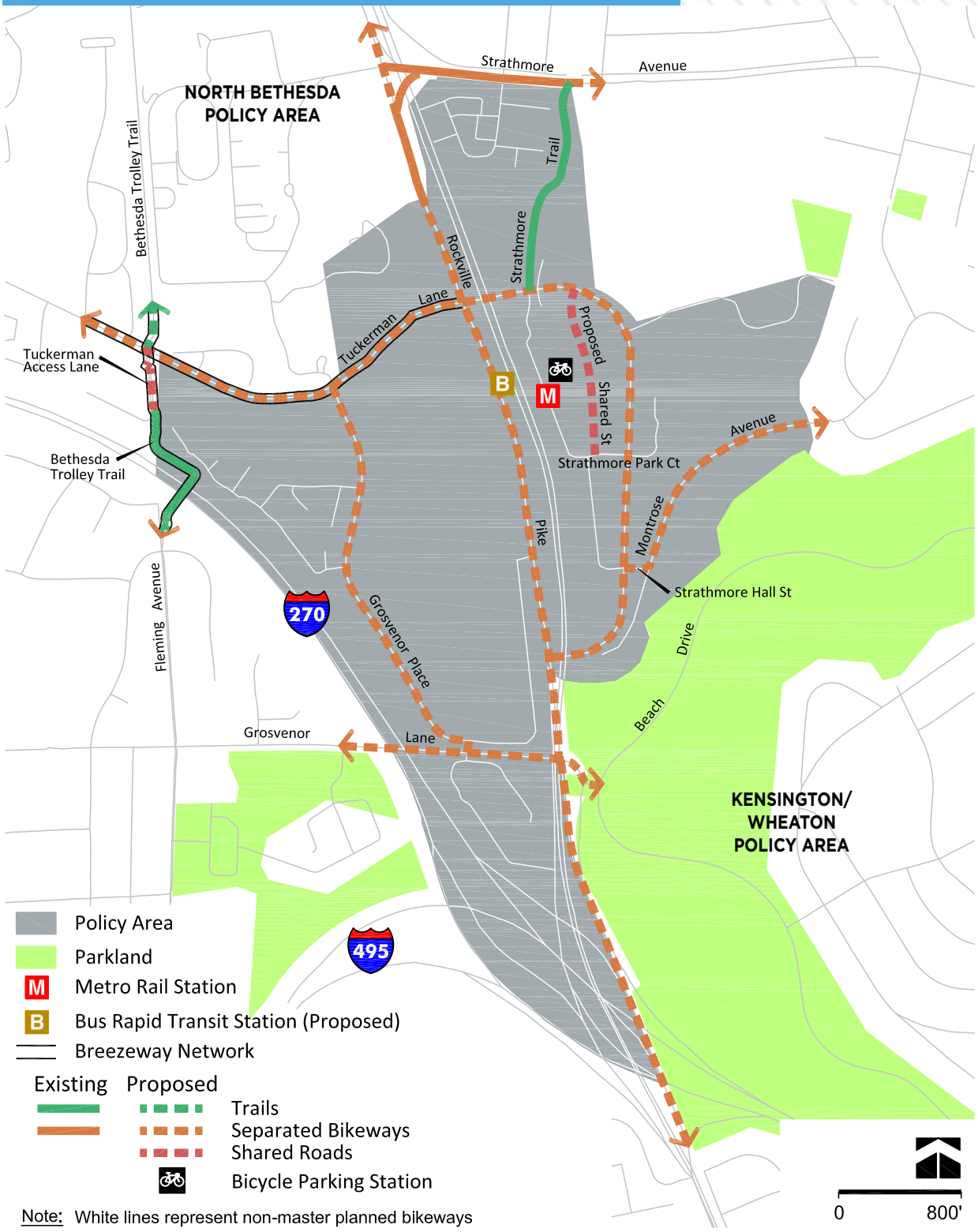
Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GEORGIA AVE NORTH BREEZEWAY				
Flack St	Weller Rd	Flack Connector	Shared Road	Neighborhood Greenway
Flack Connector	Flack St	Glenallan Ave	Trail	Off-Street Trail
Flack St	Trail	Judson Rd	Shared Road	Neighborhood Greenway
Judson Rd	Flack St	Georgia Ave	Shared Road	Neighborhood Greenway
GEORGIA AVE SOUTH BREEZEWAY				
Georgia Ave	Judson Rd	Randolph Rd	Separated Bikeway	Sidepath (West Side)
RANDOLPH RD BREEZEWAY				
Randolph Rd	Denley Rd	Glenallan Ave	Separated Bikeway	Sidepath (North Side)
ADDITIONAL RECOMMENDATIONS				
Briggs Rd	Lutes Dr	Layhill Rd	Separated Bikeway	Sidepath (South Side)
Denley Rd	Randolph Rd	Gould Rd	Shared Road	Neighborhood Greenway
Gould Rd	Denley Rd	Denley Rd	Shared Road	Neighborhood Greenway
Denley Rd	Gould Rd	Georgia Ave	Shared Road	Neighborhood Greenway
Georgia Ave	Weller Rd	Denley Rd	Separated Bikeway	Sidepath (East Side)
	Denley Rd	Judson Rd	Separated Bikeway	Sidepath (Both Sides)
	Judson Rd	Randolph Rd	Separated Bikeway	Sidepath (East Side)
Glenallan Ave	Georgia Ave	Randolph Rd	Separated Bikeway	Sidepath (North Side) and Separated Bike Lanes (Two-Way, South Side)
Jingle Connector	Jingle La	Briggs Rd	Trail	Off-Street Trail
Jingle La	Weller Rd	Jingle Connector	Shared Road	Neighborhood Greenway
Layhill Rd	Briggs Rd	Glenallan Ave	Separated Bikeway and Striped Bikeway	Sidepath (East Side) and Conventional Bike Lanes
	Glenallan Ave	Georgia Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Neighborhood Connector	Briggs Ct	Lutes Dr	Trail	Neighborhood Connector
Street B-1	Layhill Rd	Randolph Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Street B-2	Georgia Ave	Randolph Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Trail	Flack Connector	Flack St	Trail	Off-Street Trail
Weller Rd	Holdridge Rd	Georgia Ave	Separated Bikeway	Sidepath (North Side)
	Georgia Ave	Jingle La	Shared Road	Neighborhood Greenway

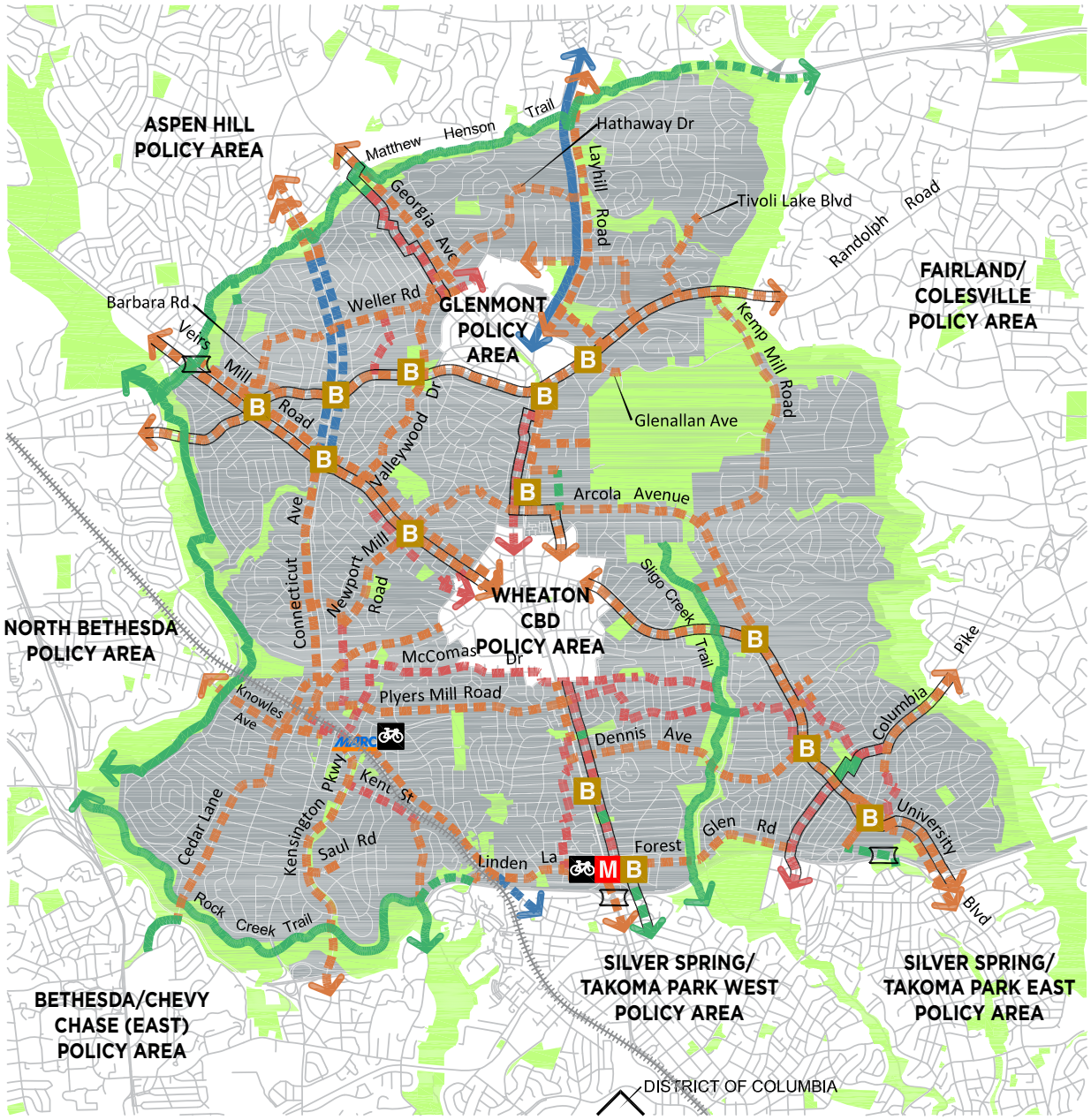
THIS PAGE INTENTIONALLY LEFT BLANK

GROSVENOR


NORTH BETHESDA POLICY AREA
Strathmore Avenue
Bethesda Trolley Trail
Trail
Strathmore
Rockville Pike
Lane
Tuckerman
Tuckerman Access Lane
Bethesda Trolley Trail
B
M
Proposed Shared St
Strathmore Park Ct
Avenue
Montrose
Strathmore Hall St
Drive
Beach
Fleming Avenue
270
Grosvenor Place
Grosvenor
Lane
KENSINGTON/ WHEATON POLICY AREA
495
Policy Area
Parkland
Metro Rail Station
Bus Rapid Transit Station (Proposed)
Breezeway Network
Existing
Proposed
Trails
Separated Bikeways
Shared Roads
Bicycle Parking Station
Note: White lines represent non-master planned bikeways
0
800'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 SOUTH BREEZEWAY				
Bethesda Trolley Trail	Tuckerman Access La	Fleming Ave	Trail	Off-Street Trail
GERMANTOWN - GROSVENOR BREEZEWAY				
Tuckerman La	Grosvenor Pl	Rockville Pike	Separated Bikeway	Sidepath (Side TBD)
ADDITIONAL RECOMMENDATIONS				
Grosvenor La	I-270	Rockville Pike	Separated Bikeway	Sidepath (Side TBD)
Grosvenor Pl	Tuckerman La	Grosvenor La	Separated Bikeway	Sidepath (West Side)
Montrose Ave	Strathmore Hall St	North Bethesda Policy Area	Separated Bikeway	Sidepath (North Side)
Proposed Shared Street	Tuckerman La	Strathmore Park Ct	Shared Road	Shared Street
Rockville Pike	North Bethesda Policy Area	I-495	Separated Bikeway	Sidepath (East Side)
Strathmore Ave	Rockville Pike	Strathmore Trail	Separated Bikeway	Sidepath (South Side)
Strathmore Hall St	Tuckerman La	Montrose Ave	Separated Bikeway	Sidepath (North Side)
Strathmore Trail	Strathmore Ave	Tuckerman La	Trail	Off-Street Trail
Tuckerman Access La	Tuckerman La	Bethesda Trolley Trail	Shared Road	Priority Shared Lane Markings
Tuckerman La	Bethesda Trolley Trail	Rockville Pike	Separated Bikeway	Sidepath (Side TBD)
Tuckerman La	Rockville Pike	Rockville Pike	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)

KENSINGTON-WHEATON



Policy Area		Existing	Proposed
Parkland			Trails
County Line			Separated Bikeways
Metrorail Station			Striped Bikeways
MARC Station			Shared Roads
Bus Rapid Transit Station (Proposed)			Grade Separated Crossing
Breezeway Network			Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 5000'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GEORGIA AVE SOUTH BREEZEWAY				
Trail	Matthew Henson Trail	Holdridge Rd	Trail	Off-Street Trail
Holdridge Rd	Olympic St	May St	Shared Road	Neighborhood Greenway
May St	Holdridge Rd	Estelle Rd	Shared Road	Neighborhood Greenway
Estelle Rd	May St	Kayson St	Shared Road	Neighborhood Greenway
Kayson St	Estelle Rd	Flack St	Shared Road	Neighborhood Greenway
Flack St	Kayson St	Weller Rd	Shared Road	Neighborhood Greenway
SEE GLENMONT POLICY AREA				
Georgia Ave	Randolph Rd	Mason St	Separated Bikeway	Sidepath (West Side)
Mason St	Georgia Ave	Grandview Ave	Shared Road	Neighborhood Greenway
Grandview Ave	Mason St	Arcola Ave	Shared Road	Neighborhood Greenway
Arcola Ave	Grandview Ave	Amherst Ave	Separated Bikeway	Sidepath (Side TBD)
Amherst Ave	Arcola Ave	Elkin St	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
SEE WHEATON CBD POLICY AREA				
Amherst Ave	Windham La	Dennis Dr	Shared Road	Neighborhood Greenway
Woodland Dr Ext	Dennis Dr	Medical Park Dr	Shared Road	Neighborhood Greenway
Woodland Dr	Medical Park Dr	Forest Glen Rd	Shared Road	Neighborhood Greenway
I-495 Bridge (East Side)	Forest Glen Rd	Woodland Rd	Trail	Off-Street Trail
US 29 CORRIDOR BREEZEWAY				
Colesville Rd	Northwest Branch	Lorain Ave	Separated Bikeway	Sidepath (East Side)
Lorain Ave	Colesville Rd	Woodmoor Cir	Shared Road	Neighborhood Greenway
Woodmoor Cir	Lorain Ave	Woodmoor Dr	Shared Road	Neighborhood Greenway
Woodmoor Dr	Woodmoor Cir	Pierce Dr	Shared Road	Neighborhood Greenway
Pierce Dr	Woodmoor Dr	Lexington Dr	Shared Road	Neighborhood Greenway

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Lexington Dr	Pierce Dr	University Blvd	Separated Bikeway	Sidepath (West Side)
Colesville Rd	University Blvd	I-495 Bridge	Separated Bikeway	Sidepath (East Side)
I-495 Bridge	Colesville Rd	Marshall Ave	Trail	Off-Street Trail
UNIVERSITY BLVD BREEZEWAY				
University Blvd	Reedie Dr	I-495	Separated Bikeway	Sidepath (East Side)
VEIRS MILL RD BREEZEWAY				
Veirs Mill Rd	Matthew Henson Trail	Gridley Rd	Separated Bikeway	Sidepath (South Side)
Veirs Mill Rd	Gridley Rd	Randolph Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Veirs Mill Rd	Randolph Rd	College View Dr	Separated Bikeway	Sidepath (South Side)
RANDOLPH RD BREEZEWAY				
Randolph Rd	Glenallan Ave	Kemp Mill Rd	Separated Bikeway	Sidepath (North Side)
SILVER SPRING - GLENMONT WEST NEIGHBORHOOD GREENWAY				
Georgia Ave	Windham La	Evans Dr	Separated Bikeway	Sidepath (West Side)
Evans Dr	Georgia Ave	Douglas Ave	Shared Road	Neighborhood Greenway
Douglas Ave	Evans Dr	Darrow St	Shared Road	Neighborhood Greenway
McKenney Ave	Darrow St	Hildarose Dr	Shared Road	Neighborhood Greenway
Hildarose Dr	McKenney Ave	Greeley Ave	Shared Road	Neighborhood Greenway
Greeley Ave	Hildarose Dr	Arthur Ave	Shared Road	Neighborhood Greenway
Clark Pl	Arthur Ave	Darcy Forest Dr	Shared Road	Neighborhood Greenway
Darcy Forest Dr	Clark Pl	Forest Glen Dr	Shared Road	Neighborhood Greenway
Forest Glen Rd	Darcy Forest Dr	Georgia Ave	Separated Bikeway	Sidepath (North Side)
I-495 Bridge (West Side)	Forest Glen Rd	I-495	Separated Bikeway	Sidepath (West Side)
VEIRS MILL RD (NORTH SIDE)				
Veirs Mill Rd	Matthew Henson Trail	Havard St	Separated Bikeway	Sidepath (North Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Veirs Mill Rd	Havard St	Bushey Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Veirs Mill Rd	Bushey Rd	Galt Ave	Separated Bikeway	Sidepath (North Side)
VEIRS MILL RD NEIGHBORHOOD GREENWAY				
Glorus Pl	Huggins Dr	College View Dr	Shared Road	Neighborhood Greenway
College View Dr	Glorus Pl	Norris Dr	Shared Road	Neighborhood Greenway
Trail	Norris Dr	Pleasant View LP Trail	Trail	Neighborhood Connector
College View Dr	Pleasant View LP Trail	Veirs Mill Rd	Shared Road	Neighborhood Greenway
Veirs Mill Rd	College View Dr	Galt Ave	Separated Bikeway	Sidepath (North Side)
CONNECTICUT AVE WEST BIKEWAY				
Connecticut Ave	Matthew Henson Trail	Littleton St	Separated Bikeway	Sidepath (West Side)
Connecticut Ave Access Rd	Littleton St	Brightview St	Shared Road	Contra-Flow Bike Lane
Connecticut Ave	Brightview St	Farragut Ave	Separated Bikeway	Sidepath (West Side)
Connecticut Ave	Farragut Ave	Knowles Ave	Separated Bikeway	Separated Bike Lanes (West Side)
CONNECTICUT AVE EAST BIKEWAY				
Connecticut Ave	Matthew Henson Trail	Munsey St	Separated Bikeway	Sidepath (East Side)
Connecticut Ave Access Rd	Munsey St	400 Ft North Of Veirs Mill Rd	Shared Road	Contra-Flow Bike Lane
Connecticut Ave	400 Ft North Of Veirs Mill Rd	Veirs Mill Rd	Separated Bikeway	Sidepath (East Side)
COLESVILLE RD WEST NEIGHBORHOOD GREENWAY				
Southwood Ave	Colesville Rd	North Four Corners Local Park	Shared Road	Neighborhood Greenway
Park Trail	Southwood Ave	University Blvd	Trail	Off-Street Trail
Brunett Ave	University Blvd	I-495	Shared Road	Neighborhood Greenway
KENSINGTON - FOUR CORNERS NEIGHBORHOOD GREENWAY				
Plyers Mill Rd	Summit Ave	Lexington St Ext	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Plyers Mill Rd	Lexington Ave Ext	Georgia Ave	Separated Bikeway	Sidepath (South Side)

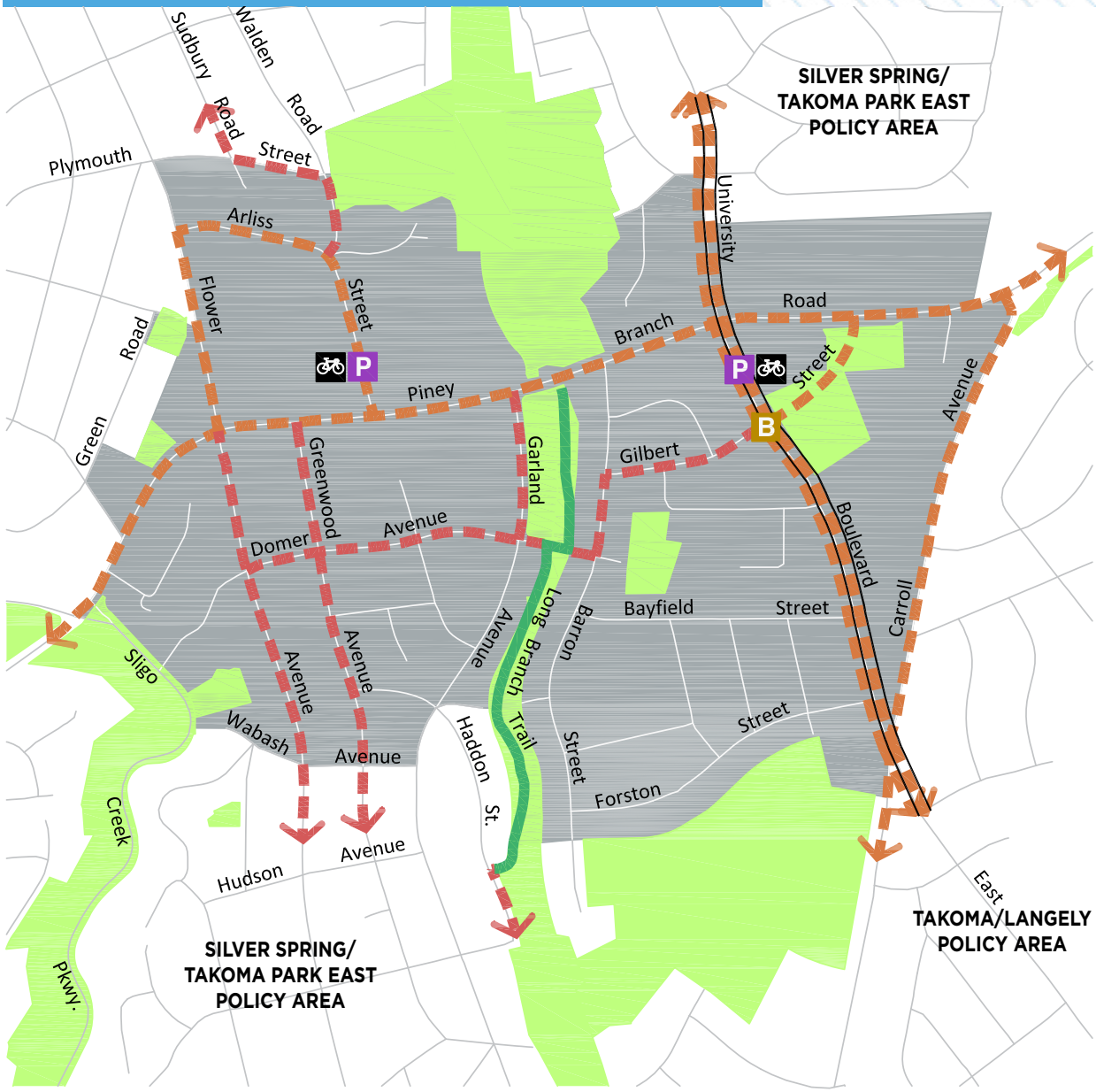
BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Plyers Mill Rd	Georgia Ave	Glenhaven Dr	Shared Road	Neighborhood Greenway
Glenhaven Dr	Plyers Mill Rd	Gridley La	Shared Road	Neighborhood Greenway
Gridley La	Glenhaven Dr	Malone St	Shared Road	Neighborhood Greenway
Malone St	Gridley La	Sligo Creek Trail Access	Shared Road	Neighborhood Greenway
Sligo Creek Trail Access	Malone St	Tenbrook Dr	Trail	Stream Valley Park Trail
Whitehall St	Tenbrook Dr	Orange Dr	Shared Road	Neighborhood Greenway
Orange Dr	Whitehall St	Gilmoure Dr	Shared Road	Neighborhood Greenway
Gilmoure Dr	Orange Dr	Dennis Ave	Shared Road	Neighborhood Greenway
KENSINGTON - CHEVY CHASE LAKE NEIGHBORHOOD GREENWAY				
Howard Ave	Summit Ave	Connecticut Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Howard Ave	Connecticut Ave	Proposed Railroad Crossing	Shared Road	Priority Shared Lane Markings
Howard Ave	Proposed Railroad Crossing	Montgomery Ave	Separated Bikeway	Sidepath (North Side)
Montgomery Ave	Howard Ave	Kensington Pkwy	Separated Bikeway	Sidepath (East Side)
Kensington Pkwy	Montgomery Ave	I-495	Separated Bikeway	Sidepath (East Side)
ROCK CREEK TRAIL - SLIGO CREEK TRAIL BIKEWAY				
Trail	Stoneybrook Dr	Linden La	Trail	Off-Street Trail
Linden La	Trail	Seminary Rd	Separated Bikeway	Sidepath (North Side)
Forest Glen Rd	Seminary Rd	Darcy Forest Dr	Separated Bikeway	Sidepath (North Side)
Forest Glen Rd	Darcy Forest Dr	Georgia Ave	Separated Bikeway	Sidepath (Both Sides)
Forest Glen Rd	Georgia Ave	Brunett Ave	Separated Bikeway	Sidepath (South Side)
ADDITIONAL RECOMMENDATIONS				
Arcola Ave	Parker Ave	University Blvd	Separated Bikeway	Sidepath (Side TBD)
Armory Ave	Howard Ave	Knowles Ave	Shared Road	Priority Shared Lane Markings
Barbara Rd	Havard St	Randolph Rd	Separated Bikeway	Sidepath (South Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Briggs Rd	Layhill Rd	Middlevale La	Separated Bikeway	Sidepath (South Side)
Caddington Ave	University Blvd	Forest Knolls ES	Separated Bikeway	Sidepath (South Side)
Capitol View Ave	Metropolitan Ave	Forest Glen Rd	Separated Bikeway	Sidepath (West Side)
Cedar La	Summit Ave	Elmhirst Pkwy Trail	Separated Bikeway	Sidepath (North Side)
Colie Dr	Havard St	Randolph Rd	Separated Bikeway	Sidepath (South Side)
Connecticut Ave	Farragut Ave	Knowles Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Dalewood Dr	Dean Rd	Randolph Rd	Shared Road	Neighborhood Greenway
Dean Rd	Weller Rd	Dalewood Dr	Shared Road	Neighborhood Greenway
Denfield Ave	Dewey Rd	Newport Mill Rd	Separated Bikeway	Sidepath (North Side)
Dennis Ave	Douglas Ave	Edgewood Ave	Separated Bikeway	Sidepath (North Side)
Edgewood Ave	Eisner St	Southwood Ave	Shared Road	Neighborhood Greenway
Eisner St	University Blvd	Edgewood Ave	Shared Road	Neighborhood Greenway
Evans Parkway NP Trail	Amherst Ave	Evans Dr	Trail	Off-Street Trail
Farragut Ave	Connecticut Ave	Summit Ave Ext	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Garden Gate Rd	Randolph Rd	Billman La	Separated Bikeway	Sidepath (East Side)
Georgia Ave	Matthew Henson Trail	Weller Rd	Separated Bikeway	Sidepath (East Side)
Georgia Ave	Randolph Rd	Arcola Ave	Separated Bikeway	Sidepath (East Side)
Glenallen Ave	Randolph Rd	Wallace Ave	Separated Bikeway	Sidepath (North Side)
Grandview Ave	Arcola Ave	Dawson Ave	Shared Road	Neighborhood Greenway
Hathaway Dr	Layhill Rd	Valleywood Dr	Separated Bi keway	Sidepath (Side TBD)
Kemp Mill Rd	Randolph Rd	Arcola Ave	Separated Bikeway	Sidepath (West Side)
Kent St	Kensington Pkwy	Stoneybrook Dr	Shared Road	Neighborhood Greenway
Knowles Ave	Rock Creek Trail	Connecticut Ave	Separated Bikeway	Sidepath (West Side)
	Connecticut Ave	Armory Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Lamberton Rd	Sligo Creek Trail Access	Arcola Ave	Separated Bikeway	Sidepath (Side TBD)
Layhill Rd	Matthew Henson Trail	Briggs Rd	Separated Bikeway and Striped Bikeway	Sidepath (East Side) and Conventional Bike Lanes
Lexington St	University Blvd	Plyers Mill Rd	Shared Road	Priority Shared Lane Markings
Matthew Henson Trail	Rock Creek Trail	Alderton Rd	Trail	Stream Valley Park Trail
	Alderton Rd	Fairland / Colesville Policy Area	Trail	Stream Valley Park Trail
Matthew Henson Trail Connector	Matthew Henson Trail	Littleton St	Trail	Stream Valley Park Trail
McComas Ave	St Paul St	St Margarets Way	Shared Road	Neighborhood Greenway
Metropolitan Ave	St Paul St	Capitol View Ave	Separated Bikeway	Sidepath (West Side)
Middlevale La	Briggs Rd	Randolph Rd	Separated Bikeway	Sidepath (East Side)
Newport Mill Rd	King Tree St	Denfeld Ave	Separated Bikeway	Sidepath (East Side)
	Denfeld Ave	University Blvd	Shared Road	Priority Shared Lane Markings
Parker Ave	Newport Mill Rd	Arcola Ave	Separated Bikeway	Sidepath (Side TBD)
Railroad Crossing	Metropolitan Ave	Montgomery Ave	Trail	Off-Street Trail
Randolph Rd	Rock Creek	Denley Rd	Separated Bikeway	Sidepath (North Side)
Rippling Brook Dr	Bel Pre Rd	Matthew Henson Trail	Trail	Off-Street Trail
Rock Creek Trail	Matthew Henson Trail	Stoneybrook Dr	Trail	Stream Valley Park Trail
Saddlebrook Connector	Layhill Rd	Randolph Rd	Separated Bikeway	Sidepath (TBD)
Saddlebrook Dr Ext	Saddlebrook Dr	Street P-27	Trail	Off-Street Trail
Saul Rd	Kensington Pkwy	B-CC Middle School #2	Separated Bikeway	Sidepath (North Side)
Seminary Rd	Forest Glen Rd	I-495	Striped Bikeway	Conventional Bike Lanes
Shorefield Rd	Georgia Ave	Wheaton Regional Park	Separated Bikeway	Sidepath (Side TBD)
Sligo Creek Trail	Orebaugh Ave	I-495	Trail	Stream Valley Park Trail
St Paul St	Metropolitan Ave	McComas Ave	Shared Road	Priority Shared Lane Markings
Stoneybrook Dr	Capitol View Ave	Beach Dr	Separated Bikeway	Sidepath (West Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Summit Ave Ext	Farragut Ave	Plyers Mill Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Summit Ave	Plyers Mill Rd	Knowles Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
	Knowles Ave	Cedar La	Separated Bikeway	Sidepath (North Side)
Tivoli Lake Blvd	Red Spire Rd	Randolph Rd	Separated Bikeway	Sidepath (East Side)
University Blvd	Connecticut Ave	Decatur Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
	Decatur Ave	Drumm Ave	Separated Bikeway	Sidepath (South Side)
University Blvd	Lorain Ave	I-495	Separated Bikeway	Sidepath (West Side)
Upton Dr	Neighborhood Connector	Kensington Blvd	Shared Road	Neighborhood Greenway
Valleywood Dr	Dalewood Dr	Weisman Rd	Trail	Off-Street Trail
	Weisman Rd	Veirs Mill Rd	Separated Bikeway	Sidepath (Side TBD)
Weller Rd	Barbara Rd	Connecticut Ave	Separated Bikeway	Sidepath (Side TBD)
	Connecticut Ave	Holdridge Rd	Separated Bikeway	Sidepath (North Side)
Windham La	Douglas Ave	Sligo Creek Trail	Shared Road	Neighborhood Greenway

LONG BRANCH



Policy Area
Parkland
B Bus Rapid Transit Station (Proposed)
P Purple Line Station (Proposed)
Breezeway Network

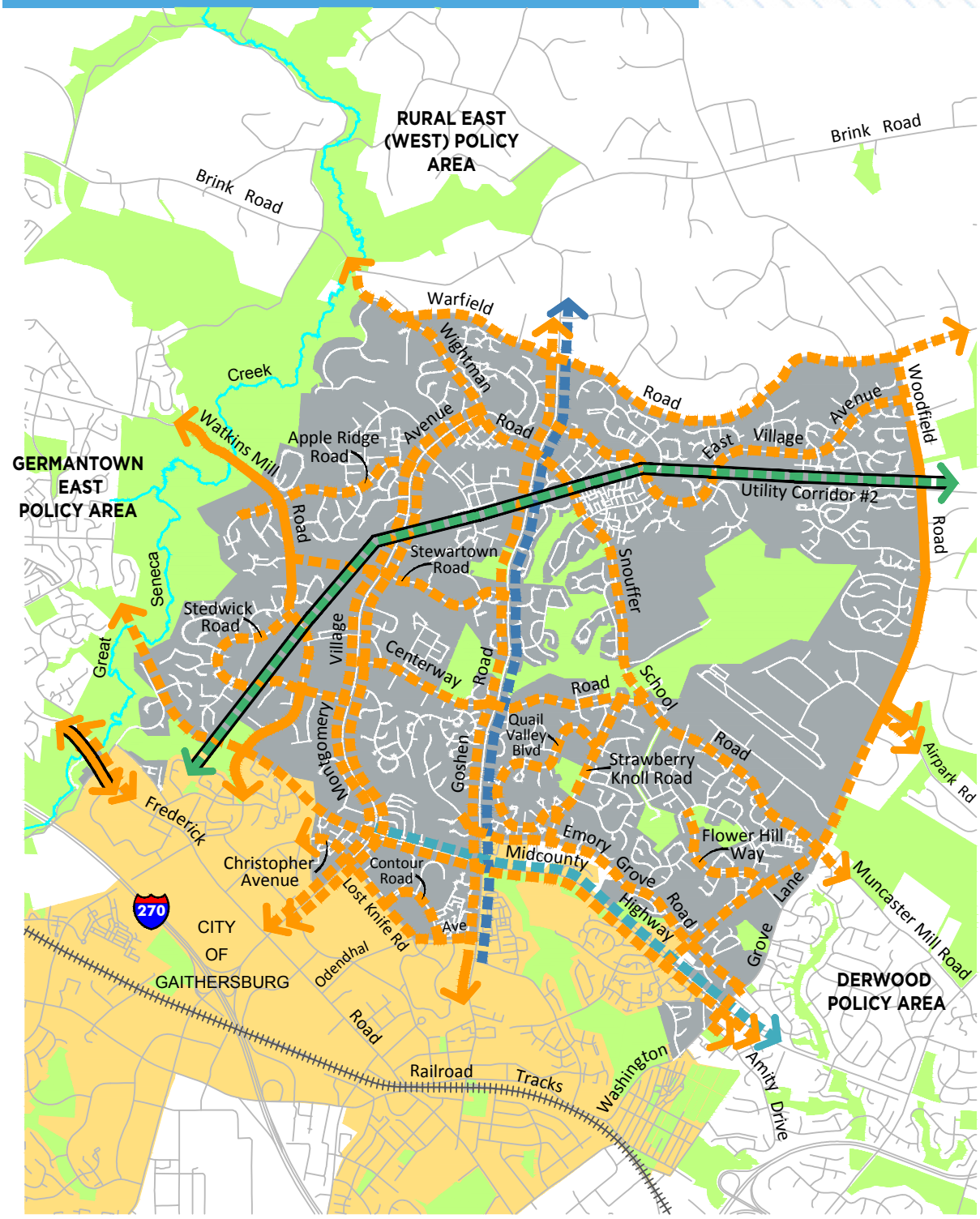
Existing Proposed
Trails
Separated Bikeways
Striped Bikeways
Shared Roads
Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 800'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
UNIVERSITY BLVD BREEZEWAY				
University Blvd	Langley Dr	Carroll Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
ADDITIONAL RECOMMENDATIONS				
Arliss St	Flower Ave	Piney Branch Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Barron St	Domer Ave	Gilbert St	Shared Road	Neighborhood Greenway
Carroll Ave	Piney Branch Rd	University Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Domer Ave	Flower Ave	Barron St	Shared Road	Neighborhood Greenway
Flower Ave	Arliss St	Piney Branch Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Piney Branch Rd	Wabash Ave	Shared Road	Priority Shared Lane Markings
Garland Ave	Piney Branch Rd	Domer Ave	Shared Road	Neighborhood Greenway
Gilbert St	Barron St	University Blvd	Shared Road	Neighborhood Greenway
	University Blvd	Piney Branch Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Greenwood Ave	Piney Branch Rd	Wabash Ave	Shared Road	Neighborhood Greenway
Long Branch Trail	Piney Branch Rd	Haddon Dr	Trail	Stream Valley Park Trails
Piney Branch Rd	Sligo Creek Pkwy	Flower Ave	Separated Bikeway	Sidepath (South Side)
	Flower Ave	Carroll Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Plymouth St	Sudbury Rd	Walden St	Shared Road	Neighborhood Greenway
University Blvd	Langley Dr	Carroll Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Walden Rd	Plymouth St	Arliss St	Shared Road	Neighborhood Greenway

MONTGOMERY VILLAGE-AIRPARK



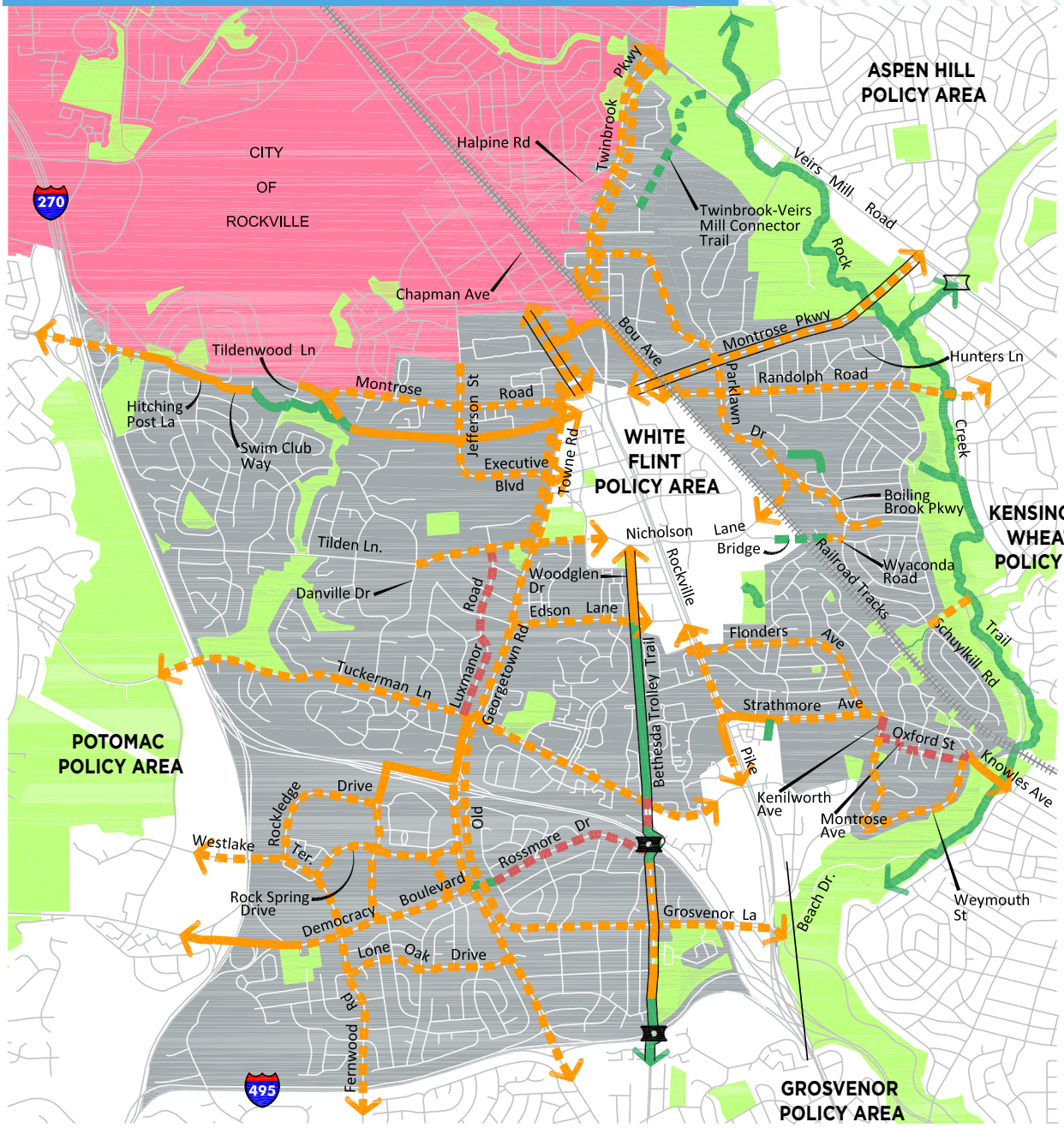
Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 NORTH BREEZEWAY				
Frederick Rd	Great Seneca Creek	Game Preserve Rd	Separated Bikeway	Sidepath (East Side)
GERMANTOWN - BURTONSVILLE BREEZEWAY				
Utility Corridor #2	Midcounty Hwy	Woodfield Rd	Trail	Off-Street Trail
ADDITIONAL RECOMMENDATIONS				
Apple Ridge Rd	Watkins Mill High School	Montgomery Village Ave	Separated Bikeway	Sidepath (North Side)
Centerway Rd	Montgomery Village Ave	Snouffer School Rd	Separated Bikeway	Sidepath (North Side)
Christopher Ave	City of Gaithersburg	Montgomery Village Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Contour Rd	Lost Knife Rd	Odendhal Ave	Separated Bikeway	Sidepath (North Side)
East Village Ave	Goshen Rd	Woodfield Rd	Separated Bikeway	Sidepath (North Side)
Emory Grove Rd	Walkers Mill Rd	Washington Grove La	Separated Bikeway	Sidepath (North Side)
Flower Hill Way	Mountain Laurel La	Woodfield Rd	Separated Bikeway	Sidepath (East Side)
Frederick Rd	Great Seneca Creek	Game Preserve Rd	Separated Bikeway	Sidepath (West Side)
Goshen Rd	Warfield Rd	Odendhal Ave	Separated Bikeway and Striped Bikeway	Sidepath (West Side) and Conventional Bike Lanes
Lost Knife Rd	Montgomery Village Ave	Odendhal Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Midcounty Hwy	Great Seneca Creek	Montgomery Village Ave	Separated Bikeway	Sidepath (Side TBD)
	Montgomery Village Ave	Washington Grove La	Separated Bikeway and Bike-able Shoulders	Sidepath (Side TBD) and Bikeable Shoulders
Montgomery Village Ave	Wightman Rd	Lost Knife Rd	Separated Bikeway	Sidepath (Both Sides)
Odendhal Ave	City of Gaithersburg	Goshen Rd	Separated Bikeway	Sidepath (North Side)
Quail Valley Blvd	Strawberry Knoll Rd	Strawberry Knoll Rd	Separated Bikeway	Sidepath (East Side)
Snouffer School Rd	Goshen Rd	Woodfield Rd	Separated Bikeway	Sidepath (North Side)
Stedwick Rd	Watkins Mill Rd	Seneca Ridge Rd	Separated Bikeway	Sidepath (South Side)
Stedwick Rd	Seneca Ridge Rd	Montgomery Village Ave	Separated Bikeway	Sidepath (North Side)
Stewartown Rd Ext	Watkins Mill Rd	Montgomery Village Ave	Separated Bikeway	Sidepath (South Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Stewartown Rd	Montgomery Village Ave	Goshen Rd	Separated Bikeway	Sidepath (South Side)
Strawberry Knoll Rd	Centerway Rd	Emory Grove Rd	Separated Bikeway	Sidepath (West Side)
Warfield Rd	Wightman Rd	Woodfield Rd	Separated Bikeway	Sidepath (South Side)
Washington Grove La	Emory Grove Rd	Amity Dr	Separated Bikeway	Sidepath (West Side)
Watkins Mill Rd	Great Seneca Creek	Midcounty Hwy	Separated Bikeway	Sidepath (West Side)
Wightman Rd	Brink Rd	Goshen Rd	Separated Bikeway	Sidepath (North Side)
Woodfield Rd	Warfield Rd	Emory Grove Rd	Separated Bikeway	Sidepath (West Side)

THIS PAGE INTENTIONALLY LEFT BLANK

NORTH BETHESDA-TWINBROOK



Policy Area
Parkland
City of Rockville
Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways
		Shared Roads
		Grade Separated Crossing

0 3000'

Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 SOUTH BREEZEWAY				
Rockville Pike	City of Rockville	Towne Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
SEE WHITE FLINT POLICY AREA				
Bethesda Trolley Trail	Edson La	Tuckerman La	Trail	Off-Street Trail
	Tuckerman La	Tuckerman Access La	Shared Road	Priority Shared Lane Markings
	Tuckerman Access La	Rossmore Dr	Trail	Off-Street Trail
	Rossmore Dr	I-495	Separated Bikeway	Sidepath (East Side)
VEIRS MILL RD BREEZEWAY				
Veirs Mill Rd	Twinbrook Pkwy	Rock Creek Trail	Separated Bikeway	Sidepath (South Side)
GERMANTOWN - GROSVENOR BREEZEWAY				
Tuckerman La	I-270	Old Georgetown Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Old Georgetown Rd	Grosvenor Pl	Separated Bikeway	Sidepath (Side TBD)
MONTROSE PARKWAY BREEZEWAY				
Montrose Pkwy	Railroad Tracks	Rock Creek	Separated Bikeway	Sidepath (North Side)
STRATHMORE - KENSINGTON BIKEWAY				
Strathmore Ave	Rockville Pike	Kenilworth Ave	Separated Bikeway	Sidepath (South Side)
Kenilworth Ave	Strathmore Ave	Oxford St	Shared Road	Neighborhood Greenway
Oxford St	Kenilworth Ave	Montrose Ave	Shared Road	Neighborhood Greenway
Montrose Ave	Oxford St	Oxford St	Shared Road	Neighborhood Greenway
Oxford St	Montrose Ave	Weymouth St	Shared Road	Neighborhood Greenway
Weymouth St	Oxford St	Knowles Ave	Separated Bikeway	Sidepath (Side TBD)
Knowles Ave	Weymouth St	Rock Creek Trail	Separated Bikeway	Sidepath (West Side)

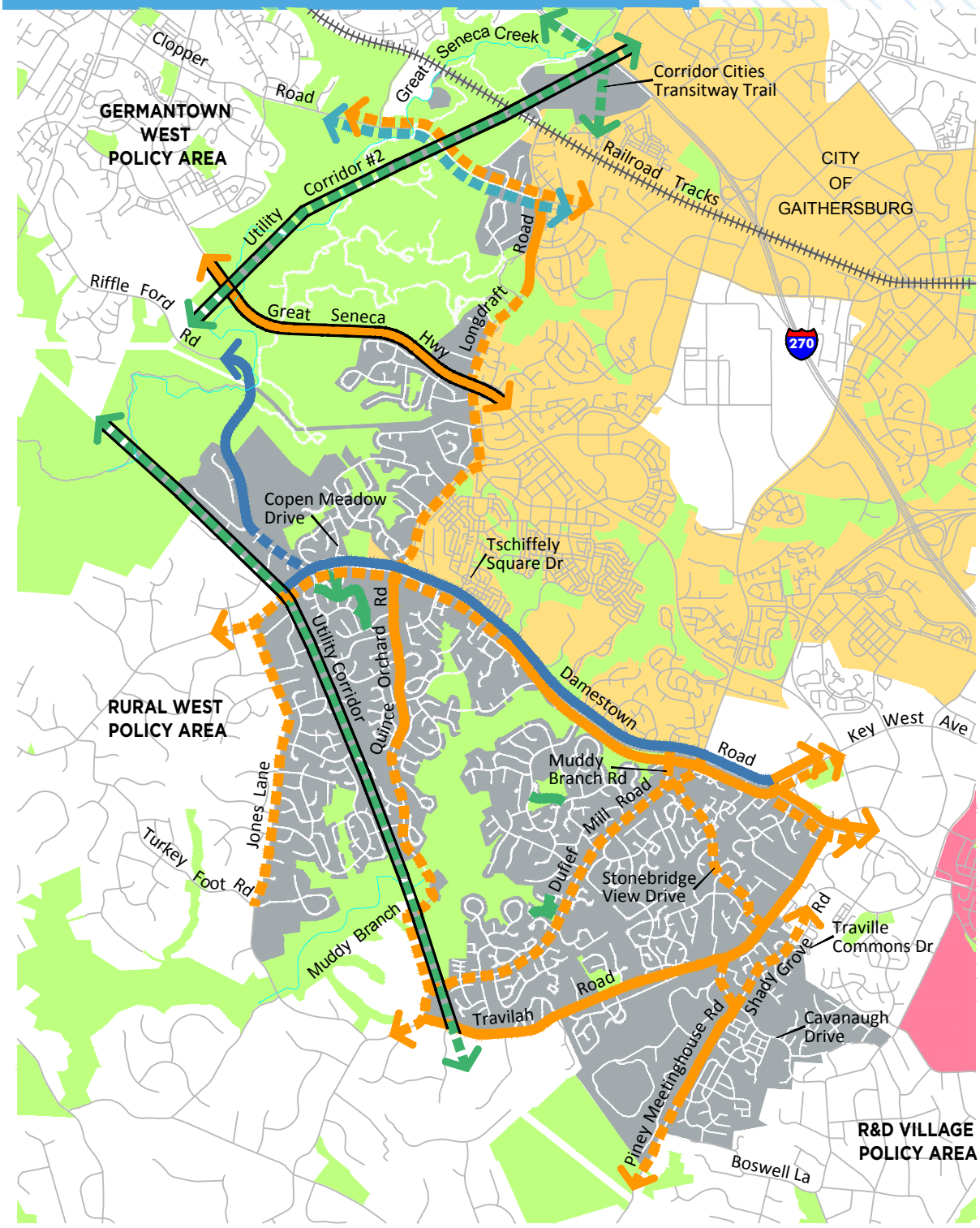
BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
ADDITIONAL RECOMMENDATIONS				
Boiling Brook Pkwy	Parklawn Dr	Schuykill Rd	Separated Bikeway	Separated Bike Lanes (Side TBD)
Bou Ave	Rockville Pike	Montrose Pkwy	Separated Bikeway	Sidepath (East Side)
Chapman Ave	City of Rockville	Bou Ave	Separated Bikeway	Sidepath (West Side)
Cheshire Dr	Old Georgetown Rd	Grosvenor La	Separated Bikeway	Sidepath (Side TBD)
Democracy Blvd	I-270 Spur	Old Georgetown Rd	Separated Bikeway	Sidepath (North Side)
Edson La	Old Georgetown Rd	Woodglen Dr	Separated Bikeway	Sidepath (Side TBD)
Executive Blvd	Jefferson St	Old Georgetown Rd	Separated Bikeway	Separated Bike Lanes (Side TBD)
Fernwood Rd	Rockledge Dr	Democracy Blvd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
	Democracy Blvd	I-495	Separated Bikeway	Sidepath (East Side)
Flanders Ave	Rockville Pike	Strathmore Ave	Separated Bikeway	Sidepath (Side TBD)
Fleming Ave	Rossmore Dr	Bethesda Trolley Trail	Shared Road	Neighborhood Greenway
Garrett Park Rd	Schuylkill Rd	Rock Creek Trail	Separated Bikeway	Sidepath (North Side)
Grosvenor La	Cheshire Dr	I-270	Separated Bikeway	Sidepath (Side TBD)
Grosvenor La	Rockville Pike	Beach Dr	Separated Bikeway	Sidepath (North Side)
Hitching Post La	Montrose Rd	Swim Club Way	Separated Bikeway	Sidepath (South Side)
I-270 Northbound Ramp	Old Georgetown Rd	Rockledge Blvd	Separated Bikeway	Sidepath (North Side)
Jefferson St	City of Rockville	Executive Blvd	Separated Bikeway	Separated Bike Lanes (Side TBD)
Kenilworth Ave	Montrose Ave	Neighborhood Connector	Separated Bikeway	Sidepath (West Side)
Lone Oak Dr	Fernwood Rd	Old Georgetown Rd	Separated Bikeway	Sidepath (South Side)
Luxmanor Rd	Tilden La	Tuckerman La	Shared Road	Neighborhood Greenway
Montrose Ave	Grosvenor Policy Area	Kenilworth Ave	Separated Bikeway	Sidepath (North Side)
Montrose Rd	I-270	Hitching Post La	Separated Bikeway	Sidepath (South Side)
Montrose Rd	Tildenwood La	Towne Rd	Separated Bikeway	Sidepath (North Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Nicholson La	Old Georgetown Rd	Executive Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
North-South Connector	Rock Spring Dr	Democracy Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Old Georgetown Rd	Towne Rd	Nicholson La	Separated Bikeway	Sidepath (Both Sides)
	Nicholson La	Tuckerman La	Separated Bikeway	Sidepath (East Side)
	Tuckerman La	I-270	Separated Bikeway	Sidepath (Both Sides)
	I-270	Cheshire Dr	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (Two-
	Cheshire Dr	I-495	Separated Bikeway	Sidepath (East Side)
Parklawn Dr	Twinbrook Pkwy	Railroad Tracks	Separated Bikeway	Sidepath (Side TBD)
Randolph Rd	Railroad Tracks	Parklawn Dr	Separated Bikeway	Sidepath (South Side)
	Parklawn Dr	Hunters La	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
	Hunters La	Rock Creek	Separated Bikeway	Sidepath (South Side)
Rock Creek Trail	Veirs Mill Rd Trail Connector	Matthew Henson Trail	Trail	Stream Valley Park Trail
Rock Spring Dr	Fernwood Rd	Old Georgetown Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Rockledge Blvd	I-270 Northbound Ramp	I-270 Southbound Ramp	Separated Bikeway	Sidepath (East Side)
	I-270 Southbound Ramp	Rockledge Dr	Separated Bikeway	Sidepath (East Side)
Rockledge Dr	Westlake Ter	Rockledge Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Rockledge Dr	Democracy Blvd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Rockville Pike	City of Rockville	Towne Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Rockville Pike	White Flint Policy Area	Strathmore Ave	Separated Bikeway	Sidepath (Both Sides)
	Strathmore Ave	Grosvenor Policy Area	Separated Bikeway	Sidepath (East Side)
Rossmore Dr	Berkshire Dr	Fleming Ave	Shared Road	Neighborhood Greenway
Strathmore Trail	Strathmore Ave	Tuckerman La	Trail	Off-Street Trail
Swim Club Way	Hitching Post La	Trail	Separated Bikeway	Sidepath (South Side)
Tilden La	Danville Dr	Old Georgetown Rd	Separated Bikeway	Sidepath (North Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Towne Rd	Rockville Pike	Old Georgetown Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Trail	Swim Club Way	Montrose Pkwy	Trail	Off-Street Trail
Twinbrook Pkwy	Veirs Mill Rd	Halpine Rd	Separated Bikeway	Sidepath (Both Sides)
	Halpine Rd	City of Rockville	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Twinbrook - Veirs Mill Rd Connector	Veirs Mill Rd	Rock Creek Mill Rd	Trail	Off-Street Trail
Westlake Ter	I-270 Spur	Rockledge Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Weymouth St	Montrose Ave	Knowles Ave	Separated Bikeway	Sidepath (Side TBD)
Woodglen Dr	Marinelli Rd	Edson La	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Wyaconda Rd	Bike / Ped Bridge	Schuylkill Rd	Separated Bikeway	Separated Bike Lanes (Side TBD)
Weymouth St	Montrose Ave	Knowles Ave	Separated Bikeway	Sidepath (Side TBD)

THIS PAGE INTENTIONALLY LEFT BLANK

NORTH POTOMAC



Policy Area
Parkland
City of Gaithersburg
City of Rockville
Breezeway Network

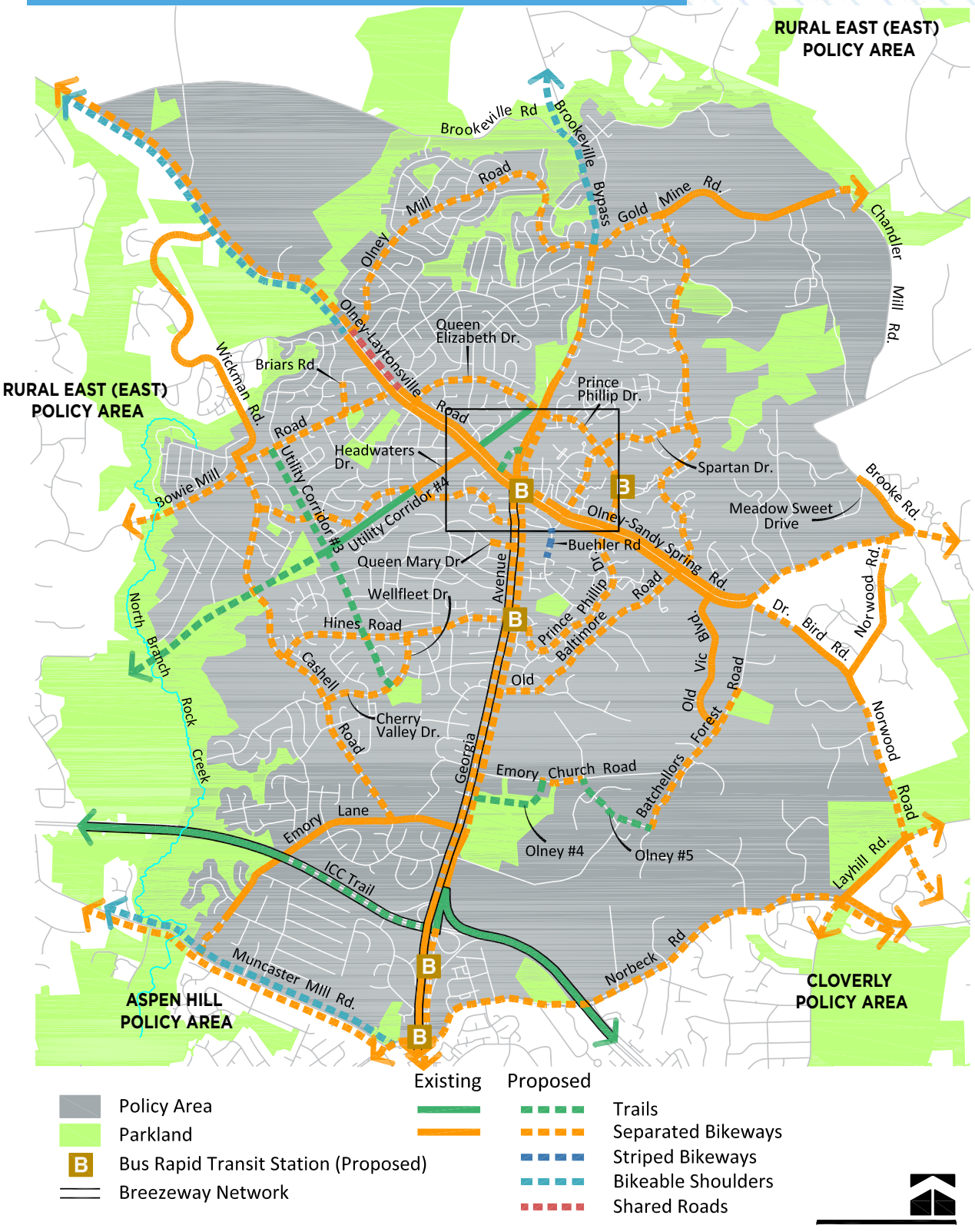
Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways
		Bikeable Shoulders

Note: White lines represent non-master planned bikeways

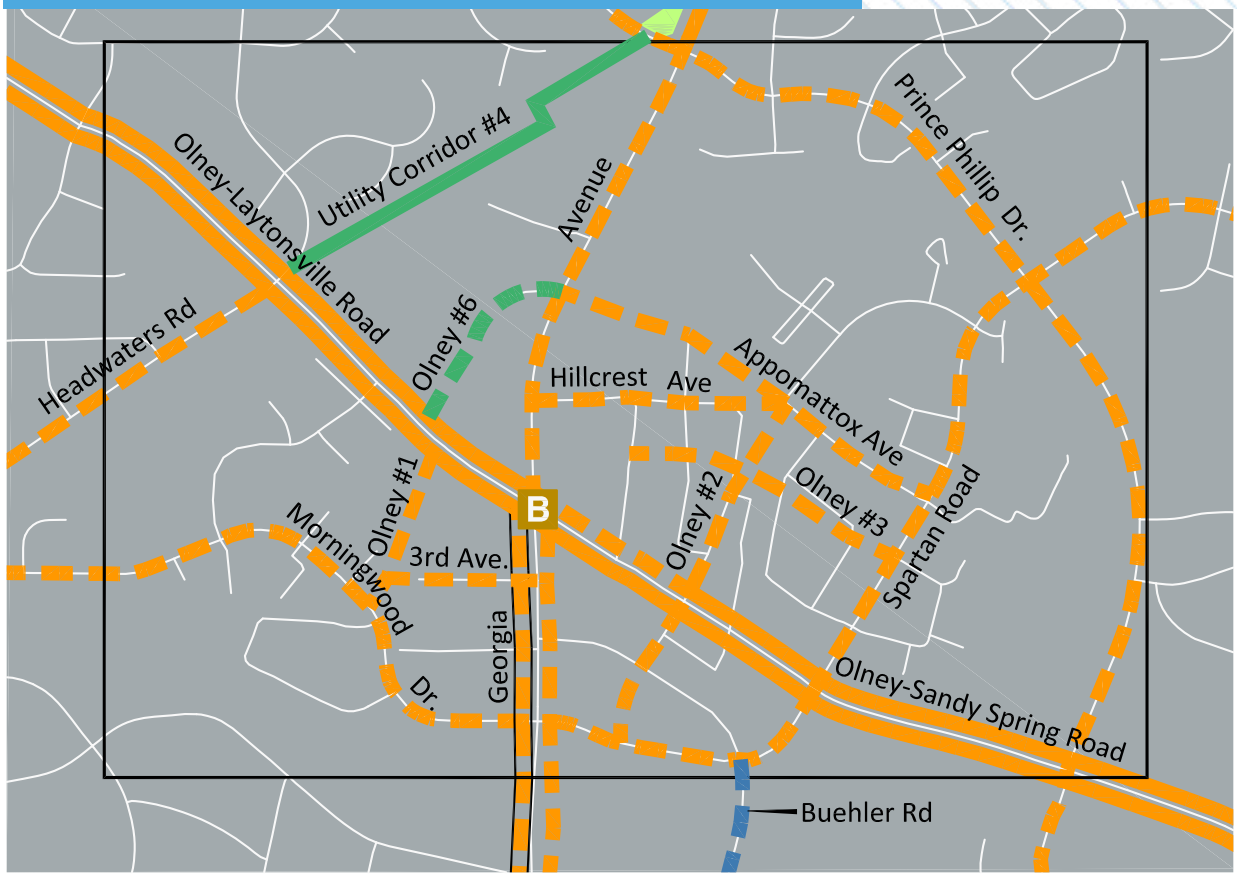
0 4500'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GERMANTOWN - GROSVENOR BREEZEWAY				
Utility Corridor #1	Great Seneca Creek	Travilah Rd	Trail	Off-Street Trail
GERMANTOWN - BURTONSVILLE BREEZEWAY				
Utility Corridor #2	Great Seneca Creek	I-270	Trail	Off-Street Trail
GERMANTOWN - LIFE SCIENCES CENTER BREEZEWAY				
Great Seneca Hwy	Great Seneca Creek	Longdraft Rd	Separated Bikeway	Sidepath (East Side)
ADDITIONAL RECOMMENDATIONS				
Clopper Rd	Great Seneca Creek	Longdraft Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Corridor Cities Transitway Trail	Great Seneca Creek	City of Gaithersburg	Trail	Off-Street Trail
Darnestown Rd	Utility Corridor #1	Copen Meadow Dr	Separated Bikeway and Striped Bikeway	Sidepath (North Side) and Conventional Bike Lanes
	Copen Meadow Dr	Tschiffely Square Rd	Separated Bikeway and Striped Bikeway	Separated Bike Lanes (Two-Way, North Side) and Conventional Bike Lanes
	Tschiffely Square Rd	Muddy Branch Rd	Separated Bikeway and Striped Bikeway	Sidepath (North Side) and Conventional Bike Lanes
	Muddy Branch Rd	Key West Ave	Separated Bikeway and Striped Bikeway	Separated Bike Lanes (North Side) and Conventional Bike Lanes
	Key West Ave	Travilah Rd	Separated Bikeway	Sidepath (Both Sides)
Dufief Mill Rd	Dufief Mill Rd	Travilah Rd	Separated Bikeway	Sidepath (East Side)
Longdraft Rd	Longdraft Rd	Quince Orchard Rd	Separated Bikeway	Sidepath (West Side)
Muddy Branch Rd	Darnestown Rd	Dufief Mill Rd	Separated Bikeway	Sidepath (East Side)
Piney Meetinghouse Rd	Travilah Rd	Boswell La	Separated Bikeway	Sidepath (East Side)
Quince Orchard Rd	Hillstone Rd	Darnestown Rd	Separated Bikeway	Sidepath (Both Sides)
Quince Orchard Rd	Darnestown Rd	Dufief Mill Rd	Separated Bikeway	Sidepath (West Side)
Riffle Ford Rd	Great Seneca Creek	Darnestown Rd	Striped Bikeway	Buffered Bike Lanes
Shady Grove Rd	R&D Village Policy Area	Cavanaugh Dr	Separated Bikeway	Sidepath (West Side)
Stonebridge View Dr	Muddy Branch Rd	Travilah Rd	Separated Bikeway	Sidepath (East Side)
Travilah Rd	Darnestown Rd	Dufief Mill Rd	Separated Bikeway	Sidepath (West Side)

OLNEY


RURAL EAST (EAST) POLICY AREA
RURAL EAST (EAST) POLICY AREA
ASPEN HILL POLICY AREA
CLOVERLY POLICY AREA
Brookeville Rd
Brookeville Bypass
Mill Road
Olney
Olney-Laytonsville Road
Gold Mine Rd.
Chandler Mill Rd.
Queen Elizabeth Dr.
Briars Rd.
Wickman Rd.
Prince Phillip Dr.
Headwaters Dr.
Spartan Dr.
Bowie Mill Road
Utility Corridor #3
Utility Corridor #4
Olney-Sandy Spring Rd.
Meadow Sweet Drive
Brooke Rd.
Buehler Rd
Queen Mary Dr
Avenue
Wellfleet Dr.
Hines Road
Prince Phillip Dr.
Prince Baltimore Blvd.
Norwood Rd.
Dr. Bird Rd.
North Branch Rock Creek
Cashell Road
Cherry Valley Dr.
Old Vic Blvd.
Old Forest Road
Georgia
Emory Church Road
Batchellors
Norwood Road
Emory Lane
Olney #4
Olney #5
ICC Trail
Layhill Rd.
Muncaster Mill Rd.
Norbeck Rd
B
Existing
Proposed
Policy Area
Parkland
Bus Rapid Transit Station (Proposed)
Breezeway Network
Trails
Separated Bikeways
Striped Bikeways
Bikeable Shoulders
Shared Roads

OLNEY INSERT



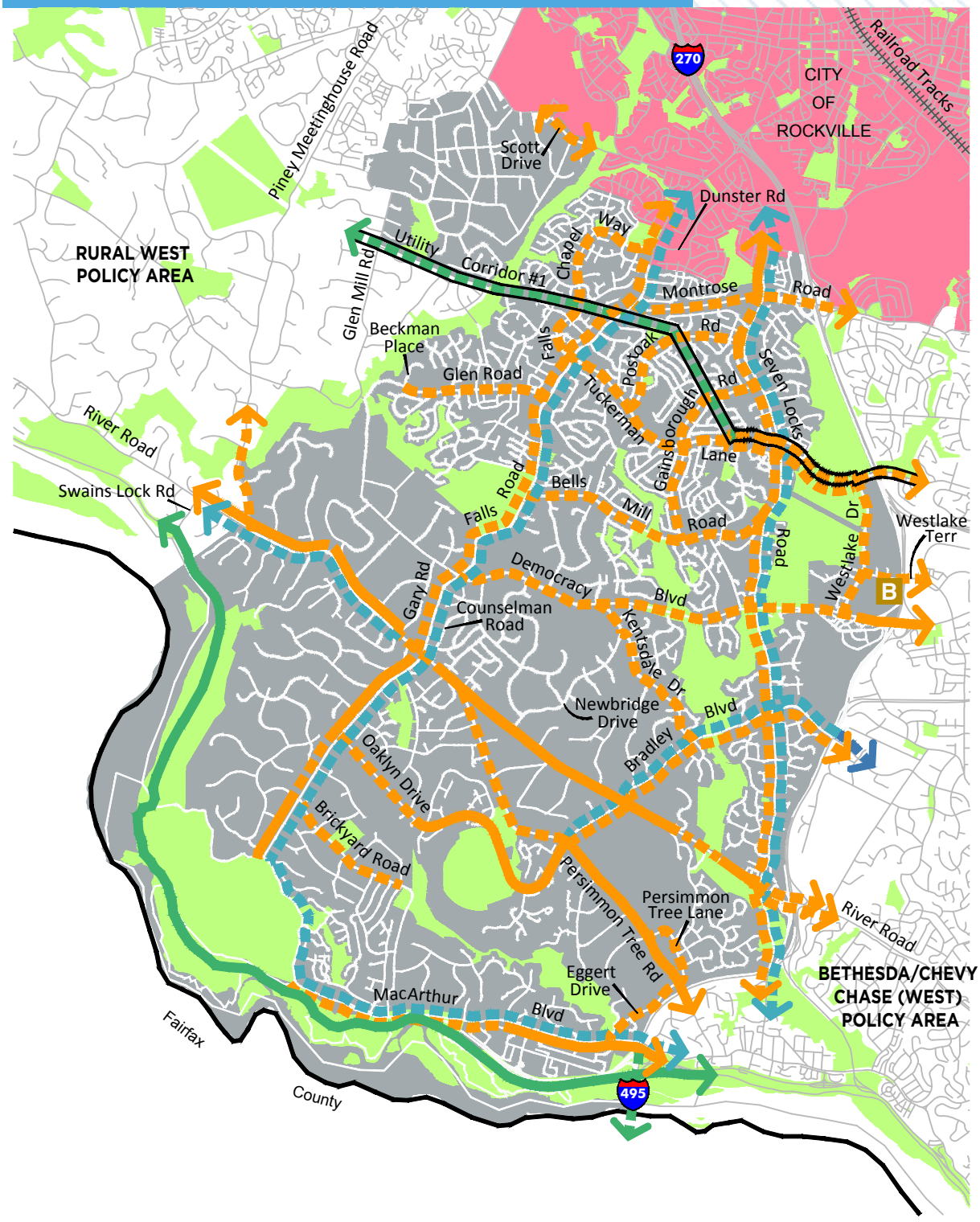
STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GEORGIA AVE NORTH BREEZEWAY				
Georgia Ave	Olney-Laytonsville Rd	Queen Mary Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Georgia Ave	Queen Mary Dr	Norbeck Rd	Separated Bikeway	Sidepath (West Side)
INTERCOUNTY CONNECTOR TRAIL BREEZEWAY				
Intercounty Connector Trail	North Branch Rock Creek	Norbeck Rd	Trail	Off-Street Trail
MD 108 (NORTH SIDE)				
Olney-Laytonsville Rd	Brookeville Rd	Olney Policy Area	Separated Bikeway and Bikeable Shoulders	Sidepath (North Side) and Bikeable Shoulders
Olney-Laytonsville Service Rd	Olney Policy Area	Queen Elizabeth Dr	Shared Road	Neighborhood Greenway
Olney-Laytonsville Rd	Queen Elizabeth Dr	Georgia Ave	Separated Bikeway	Sidepath (North Side)
Olney-Sandy Spring Rd	Georgia Ave	Brooke Rd	Separated Bikeway	Sidepath (North Side)
MD 108 (SOUTH SIDE)				
Olney-Laytonsville Rd	Brookeville Rd	Olney Policy Area	Separated Bikeway and Bikeable Shoulders	Bikeable Shoulders
Olney-Laytonsville Rd	Olney Policy Area	Georgia Ave	Separated Bikeway	Sidepath (South Side)
Olney-Sandy Spring Rd	Georgia Ave	Dr. Bird Rd	Separated Bikeway	Sidepath (South Side)
ADDITIONAL RECOMMENDATIONS				
3rd Ave	Olney #1	Georgia Ave	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
Appomattox Ave	Hillcrest Rd	Spartan Rd	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
Batchellors Forest Rd	Olney #5	Farquhar Middle School	Separated Bikeway	Sidepath (Side TBD)
Bowie Mill Rd	North Branch Rock Creek	Olney-Laytonsville Rd	Separated Bikeway	Sidepath (South Side)
Brooke Rd	Meadowsweet Dr	Olney Sandy Spring Rd	Separated Bikeway	Sidepath (East Side)
Briars Rd	Thornhurst Dr	Bowie Mill Rd	Separated Bikeway	Sidepath (West Side)
Brookeville Bypass	Brookeville Rd	Gold Mine Rd	Bikeable Shoulders	Bikeable Shoulders
Buehler Rd	Spartan Rd	Lockness Cir	Striped Bikeway	Conventional Bike Lanes
Cashell Rd	Bowie Mill Rd	Emory La	Separated Bikeway	Sidepath (East Side)

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Cherry Valley Dr	Wellfleet Dr	Cashell Rd	Separated Bikeway	Sidepath (North Side)
Emory Church Rd	Olney #4	Olney #5	Separated Bikeway	Sidepath (South Side)
Emory La	Georgia Ave	Muncaster Mill Rd	Separated Bikeway	Sidepath (East Side)
Georgia Ave	Brookeville Rd	Norbeck Rd	Separated Bikeway	Sidepath (East Side)
Gold Mine Rd	Olney Mill Rd	Chandlee Mill Rd	Separated Bikeway	Sidepath (South Side)
Headwaters Dr	Olney-Laytonsville Rd	Morningwood Dr	Separated Bikeway	Sidepath (South Side)
Hillcrest Ave	Georgia Ave	Appomattox Ave	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
Hines Rd	Cashell Rd	Georgia Ave	Separated Bikeway	Separated Bike Lanes (Side TBD)
Morningwood Dr	Cashell Rd	Georgia Ave	Separated Bikeway	Sidepath (Side TBD)
Muncaster Mill Rd	North Branch Rock Creek	Norbeck Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Norbeck Rd	Muncaster Mill Rd	Layhill Rd	Separated Bikeway	Sidepath (North Side)
Old Baltimore Rd	Gold Mine Rd	Georgia Ave	Separated Bikeway	Sidepath (West Side)
Old Vic Blvd	Olney-Sandy Spring Rd	Batchellors Forest Rd	Separated Bikeway	Sidepath (West Side)
Olney #1	Olney-Laytonsville Rd	Morningwood Dr	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
Olney #2	Appomattox Ave	Spartan Rd	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
Olney #3	Hillcrest Ave	Spartan Rd	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
Olney #4	Georgia Ave	Emory Church Rd	Trail	Off-Street Trail
Olney #5	Emory Church Rd	Batchellors Forest Rd	Trail	Off-Street Trail
Olney #6	Olney-Laytonsville Rd	Georgia Ave	Trail	Off-Street Trail
Olney Mill Rd	Olney-Laytonsville Rd	Gold Mine Rd	Separated Bikeway	Sidepath (West Side)
Prince Phillip Dr	Georgia Ave	Olney-Sandy Spring Rd	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
	Olney-Sandy Spring Rd	Georgia Ave	Separated Bikeway	Sidepath (East Side)
Queen Elizabeth Dr	Olney-Laytonsville Rd	Georgia Ave	Separated Bikeway	Sidepath (North Side)
Queen Mary Dr	Olney Elementary School	Georgia Ave	Separated Bikeway	Sidepath (North Side)

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Spartan Rd	Georgia Ave	Appomattox Ave	Separated Bikeway	Separated Bike Lanes (One-Way on Both Sides of Street)
	Appomattox Ave	Old Baltimore Rd	Separated Bikeway	Sidepath (East Side)
Utility Corridor #3	Bowie Mill Rd	Cherry Valley Dr	Trail	Off-Street Trail
Utility Corridor #4	North Branch Rock Creek	Morningwood Dr	Trail	Off-Street Trail
Utility Corridor #4	Olney-Laytonsville Rd	Queen Elizabeth Dr	Trail	Off-Street Trail
Wellfleet Dr	Hines Rd	Cherry Valley Dr	Separated Bikeway	Sidepath (West Side)
Wickham Rd	Rural East Policy Area	Bowie Mill Rd	Separated Bikeway	Sidepath (West Side)

THIS PAGE INTENTIONALLY LEFT BLANK

POTOMAC



Policy Area
Parkland
City of Rockville
County Line
B Bus Rapid Transit Station (Proposed)
Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways
		Bikeable Shoulders

Note: White lines represent non-master planned bikeways

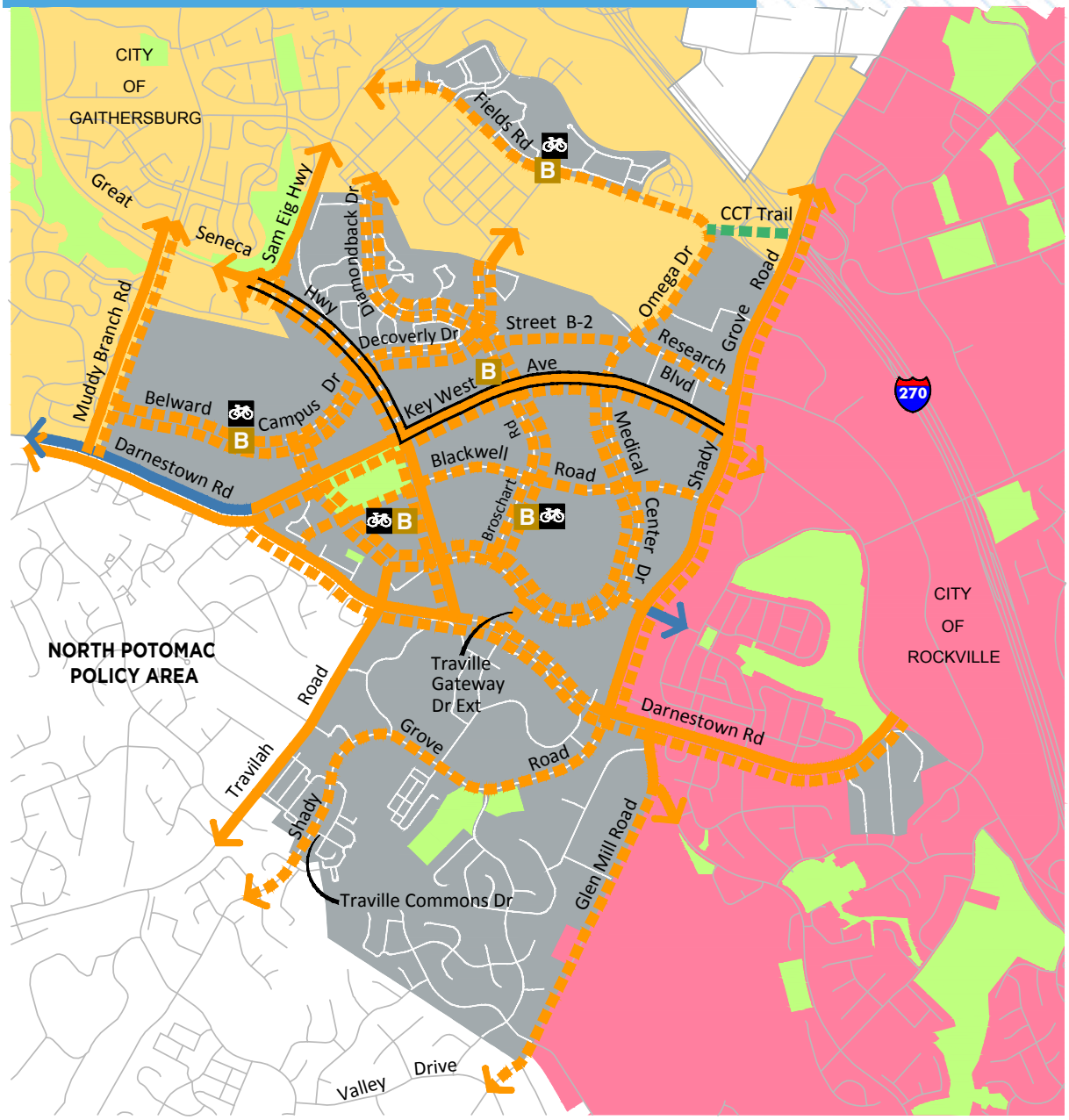
0 6000'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GERMANTOWN - GROSVENOR BREEZEWAY				
Utility Corridor #1	Glen Mill Rd	Tuckerman La	Trail	Off-Street Trail
Tuckerman La	Utility Corridor #1	I-270	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
ADDITIONAL RECOMMENDATIONS				
American Legion Bridge	Virginia	Mac Arthur Blvd	Trail	Off-Street Trail
Bells Mill Rd	Falls Rd	Seven Locks Rd	Separated Bikeway	Sidepath (North Side)
Bradley Blvd	Persimmon Tree Rd	I-495	Separated Bikeway and Bikeable Shoulders	Sidepath (East Side) and Bikeable Shoulders
Brickyard Rd	Falls Rd	Horshoe La	Separated Bikeway	Sidepath (North Side)
C&O Canal Towpath	Rural West Policy Area	I-495	Trail	Off-Street Trail
Democracy Blvd	Falls Rd	Seven Locks Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (North Side) and Bikeable Shoulders
	Seven Locks Rd	I-270 Spur	Separated Bikeway	Sidepath (North Side)
Eggert Dr	MacArthur Blvd	Persimmon Tree Rd	Separated Bikeway	Sidepath (North Side)
Falls Chapel Way	Falls Rd	Falls Rd	Separated Bikeway	Sidepath (West Side)
Falls Rd	Dunster Rd	River Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (East Side) and Bikeable Shoulders
	River Rd	MacArthur Blvd	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Gainsborough Rd	Seven Locks Rd	Bells Mill Rd	Separated Bikeway	Sidepath (East Side)
Glen Mill Rd	Veirs Dr	Valley Dr	Separated Bikeway	Sidepath (East Side)
Glen Rd	Beckman Pl	Falls Rd	Separated Bikeway	Sidepath (North Side)
Kentsdale Dr	Newbridge Dr	Bradley Blvd	Separated Bikeway	Sidepath (Side TBD)
MacArthur Blvd	Falls Rd	Old Angler's Inn	Bikeable Shoulders	Bikeable Shoulders
MacArthur Blvd	Old Angler's Inn	I-495	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Montrose Rd	Falls Rd	I-270	Separated Bikeway	Sidepath (South Side)
Newbridge Rd	Democracy Blvd	Kentsdale Dr	Separated Bikeway	Sidepath (West Side)
Oaklyn Dr	Falls Rd	Persimmon Tree Rd	Separated Bikeway	Sidepath (North Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Persimmon Tree La	Persimmon Tree Rd	Persimmon Tree Rd	Separated Bikeway	Sidepath (Side TBD)
Persimmon Tree Rd	River Rd	I-495	Separated Bikeway	Sidepath (West Side)
Piney Meetinghouse Rd	Rural West Policy Area	River Rd	Separated Bikeway	Sidepath (East Side)
Postoak Rd	Seven Locks Rd	Tuckerman La	Separated Bikeway	Sidepath (West Side)
River Rd	Piney Meetinghouse Rd	Gary Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (East Side) and Bikeable Shoulders
	Gary Rd	Counselman Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
	Counselman Rd	Seven Locks Rd	Separated Bikeway	Sidepath (East Side)
	Seven Locks Rd	I-495	Separated Bikeway	Sidepath (Both Sides)
Scott Dr	City of Rockville	City of Rockville	Separated Bikeway	Sidepath (North Side)
Seven Locks Rd	City of Rockville	Bradley Blvd	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
	Bradley Blvd	I-495	Separated Bikeway and Bikeable Shoulders	Sidepath (East Side) and Bikeable Shoulders
Tuckerman La	Falls Rd	Utility Corridor #1	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Westlake Dr	Tuckerman La	Democracy Blvd	Separated Bikeway	Sidepath (East Side) Bikeable Shoulders
Westlake Ter	Westlake Drive	I-270 Spur	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)

THIS PAGE INTENTIONALLY LEFT BLANK

R&D VILLAGE



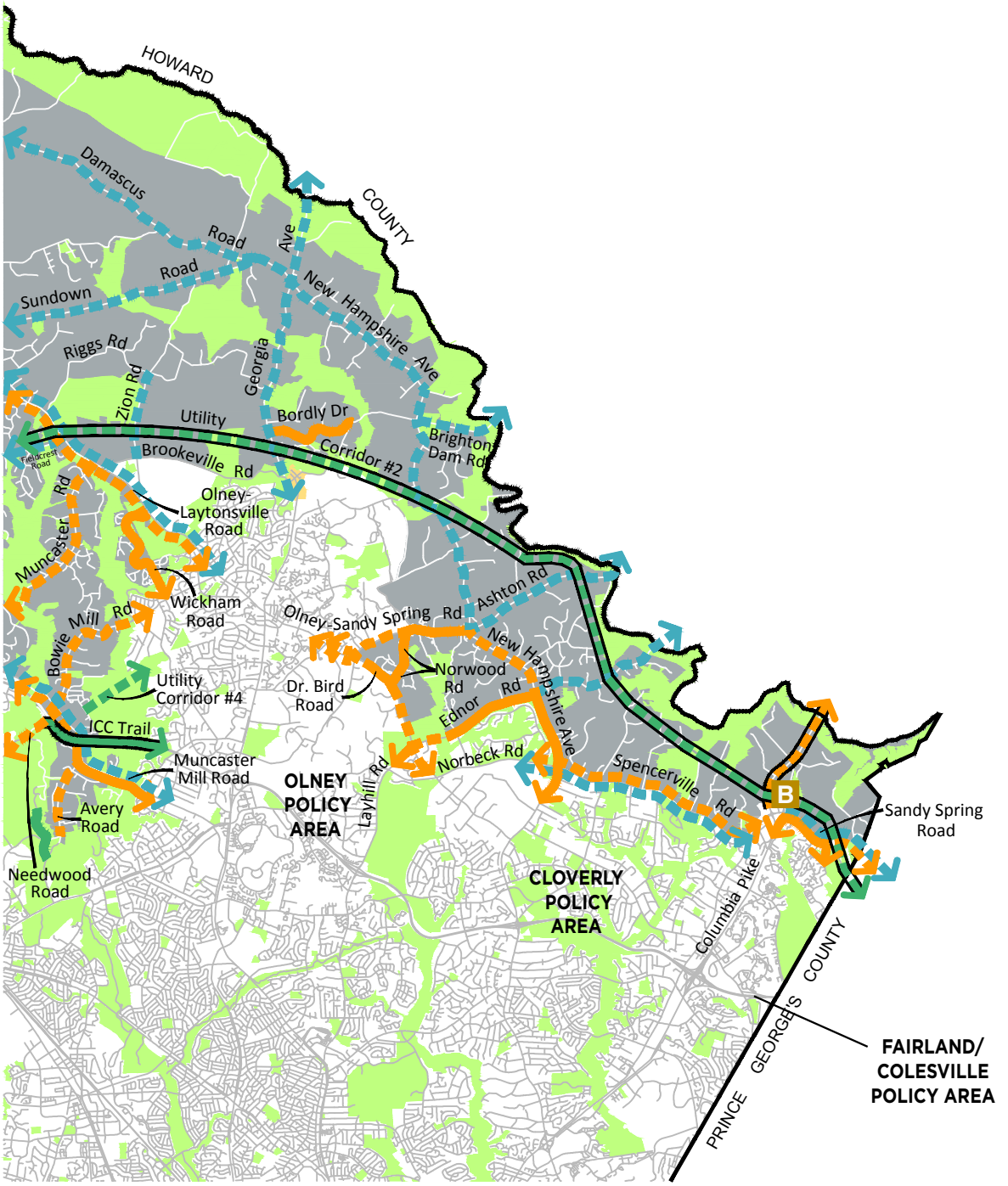
Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GERMANTOWN - LIFE SCIENCES CENTER BREEZEWAY				
Great Seneca Hwy	Sam Eig Hwy	Key West Ave	Separated Bikeway	Sidepath (West Side)
Key West Ave	Great Seneca Hwy	City of Rockville	Separated Bikeway	Separated Bike Lanes (North Side)
ADDITIONAL RECOMMENDATIONS				
Belward Campus Dr	Muddy Branch Rd	Great Seneca Hwy	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Blackwell Rd	Darnestown Rd	Shady Grove Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Broschart Rd	Key West Ave	Darnestown Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Darnestown Rd	Muddy Branch Rd	Key West Ave	Separated Bikeway and Striped Bikeway	Separated Bike Lanes (North Side) and Conventional Bike Lanes
	Key West Ave	Montgomery Ave	Separated Bikeway	Sidepath (Both Sides)
Decoverly Dr	Great Seneca Hwy	City of Gaithersburg	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Diamondback Dr	City of Gaithersburg	Decoverly Dr	Separated Bikeway	Sidepath (Both Sides)
	Decoverly Dr	Key West Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Fields Rd	Sam Eig Hwy	City of Gaithersburg	Separated Bikeway	Sidepath (South Side)
Glen Mill Rd	Darnestown Rd	Valley Dr	Separated Bikeway	Sidepath (East Side)
Great Seneca Hwy	Sam Eig Hwy	Darnestown Rd	Separated Bikeway	Sidepath (Both Sides)
Johns Hopkins Dr	Belward Campus Dr	Key West Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Key West Ave	Darnestown Rd	City of Rockville	Separated Bikeway	Sidepath (South Side)
Medical Center Dr	Key West Ave	Great Seneca Hwy	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Medical Center Dr Ext	Great Seneca Hwy	Key West Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Medical Center Way	Medical Center Dr	Shady Grove Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Muddy Branch Rd	City of Gaithersburg	Darnestown Rd	Separated Bikeway	Sidepath (West Side) and Separated Bike Lanes (East Side)
Omega Dr	Research Blvd	Key West Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Research Blvd	Omega Dr	Shady Grove Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, Side TBD)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Sam Eig Hwy Ramp	Sam Eig Hwy	Great Seneca Hwy	Separated Bikeway	Sidepath (West Side)
Sam Eig Hwy	City of Gaithersburg	Great Seneca Hwy	Separated Bikeway	Sidepath (West Side)
Shady Grove Rd	City of Gaithersburg	Darnestown Rd	Separated Bikeway	Sidepath (Both Sides)
	Darnestown Rd	North Potomac Policy Area	Separated Bikeway	Sidepath (West Side)
Street B-2	Diamondback Dr	Omega Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, Side TBD)
Travilah Rd Ext	Medical Center Dr Ext	Darnestown Rd	Separated Bikeway	Sidepath (West Side)
Traville Gateway Dr Ext	Darnestown Rd	Medical Center Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)

THIS PAGE INTENTIONALLY LEFT BLANK

RURAL EAST (EAST)



Policy Area
Parkland
Town of Brookeville
County Line
B Bus Rapid Transit Station (Proposed)
Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Bikeable Shoulders

Note: White lines represent non-master planned bikeways

0 12,000'

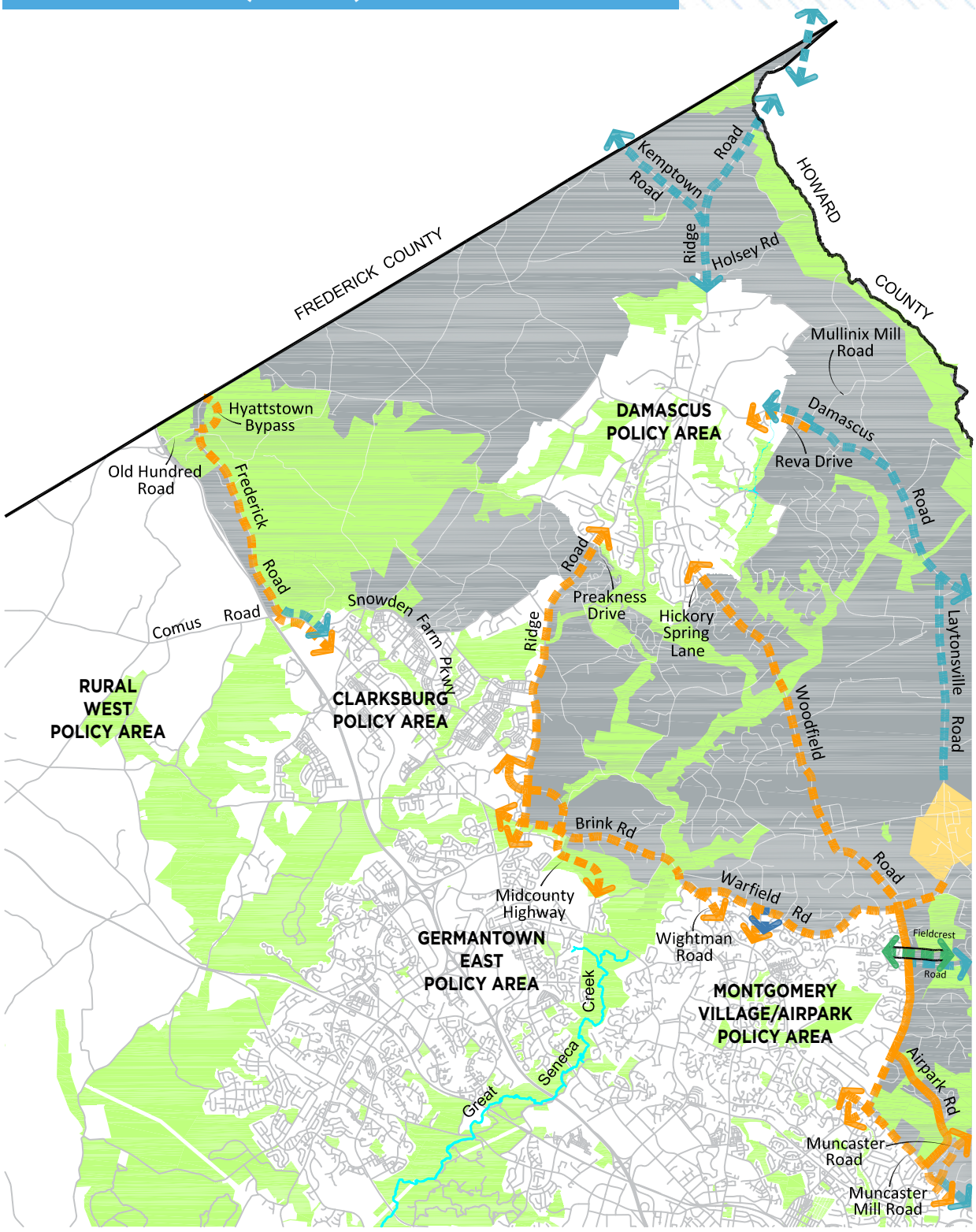
BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
US 29 CORRIDOR BREEZEWAY				
Columbia Pike	Howard County	Old Columbia Pike	Separated Bikeway	Sidepath (West Side)
Old Columbia Pike	Columbia Pike	Utility Corridor #2	Separated Bikeway	Sidepath (West Side)
GERMANTOWN - BURTONSVILLE BREEZEWAY				
Utility Corridor #2	Rural East (West) Policy Area	Sandy Spring Rd	Trail	Off-Street Trail
INTERCOUNTY CONNECTOR TRAIL BREEZEWAY				
Muncaster Mill Rd	Rock Creek	Needwood Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Needwood Rd	Muncaster Mill Rd	Intercounty Connector Trail	Separated Bikeway	Sidepath (South Side)
Intercounty Connector	Needwood Rd	North Branch Rock Creek	Separated Bikeway	Sidepath (South Side)
ADDITIONAL RECOMMENDATIONS				
Ashton Rd	New Hampshire Ave	Howard County	Bikeable Shoulders	Bikeable Shoulders
Avery Rd	Muncaster Mill Rd	Southlawn Dr	Separated Bikeway	Sidepath (West Side)
Bordly Dr	Georgia Ave	Brighton Dam Rd	Separated Bikeway	Sidepath (South Side)
Bowie Mill Rd	Muncaster Mill Rd	North Branch Rock Creek	Separated Bikeway	Sidepath (South Side)
Brighton Dam Rd	New Hampshire Ave	Howard Co	Bikeable Shoulders	Bikeable Shoulders
Brookeville Bypass	Georgia Ave	Brookeville Rd	Bikeable Shoulders	Bikeable Shoulders
Damascus Rd	Laytonsville Rd	Georgia Ave	Bikeable Shoulders	Bikeable Shoulders
Dr. Bird Rd	Olney-Sandy Spring Rd	Norwood Rd	Separated Bikeway	Sidepath (East Side)
Ednor Rd	Howard County	New Hampshire Ave	Bikeable Shoulders	Bikeable Shoulders
Fieldcrest Rd	Belle Chase Dr	Olney-Laytonsville Rd	Bikeable Shoulders	Bikeable Shoulders
Georgia Ave	Howard County	Brookeville Bypass	Bikeable Shoulders	Bikeable Shoulders
Muncaster Mill Rd	Muncaster Rd	North Branch Rock Creek	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Muncaster Rd	Olney-Laytonsville Rd	Rural East (West) Policy Area	Separated Bikeway	Sidepath (North Side)
Needwood Rd	Beach Dr	Muncaster Mill Rd	Separated Bikeway	Sidepath (South Side)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
New Hampshire Ave	Georgia Ave	Olney-Sandy Spring Rd	Bikeable Shoulders	Bikeable Shoulders
	Olney-Sandy Spring Rd	Ednor Rd	Separated Bikeway	Sidepath (West Side)
Norwood Rd*	Olney-Sandy Spring Rd	Dr. Bird Rd	Separated Bikeway	Sidepath (West Side)
	Dr. Bird Rd	Ednor Rd	Separated Bikeway	Sidepath (East Side)
Old Columbia Pike	Columbia Pike	Dustin Rd	Separated Bikeway	Sidepath (West Side)
	Dustin Rd	Utility Corridor #2	Separated Bikeway	Sidepath (East Side)
Olney-Laytonsville Rd	Town of Laytonsville	Olney Policy Area	Separated Bikeway and Bikeable Shoulders	Sidepath (North Side) and Bikeable Shoulders
Olney-Sandy Spring Rd	Dr. Bird Rd	New Hampshire Ave	Separated Bikeway	Sidepath (North Side)
Sandy Spring Rd	Columbia Pike	Prince George's County	Separated Bikeway and Bikeable Shoulderss	Sidepath (South Side) and Bikeable Shoulders
Southlawn Dr	Avery Dr	Rock Creek Trail	Separated Bikeway	Sidepath (Side TBD)
Spencerville Rd	New Hampshire Ave	School Access Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (North Side) and Bikeable Shoulders
Sundown Rd	Town of Laytonsville	Damascus Rd	Bikeable Shoulders	Bikeable Shoulders
Utility Corridor #4	Heartwood Dr	North Branch Rock Creek	Trail	Off-Street Trail
Wickham Rd	Olney-Laytonsville Rd	Olney Policy Area	Separated Bikeway	Sidepath (West Side)
Zion Rd	Riggs Rd	Brookeville Rd	Bikeable Shoulders	Bikeable Shoulders

** Appropriate measures must be taken to minimize impacts to Woodlawn Manor Special Park and Red Door Store Special Park.*

THIS PAGE INTENTIONALLY LEFT BLANK

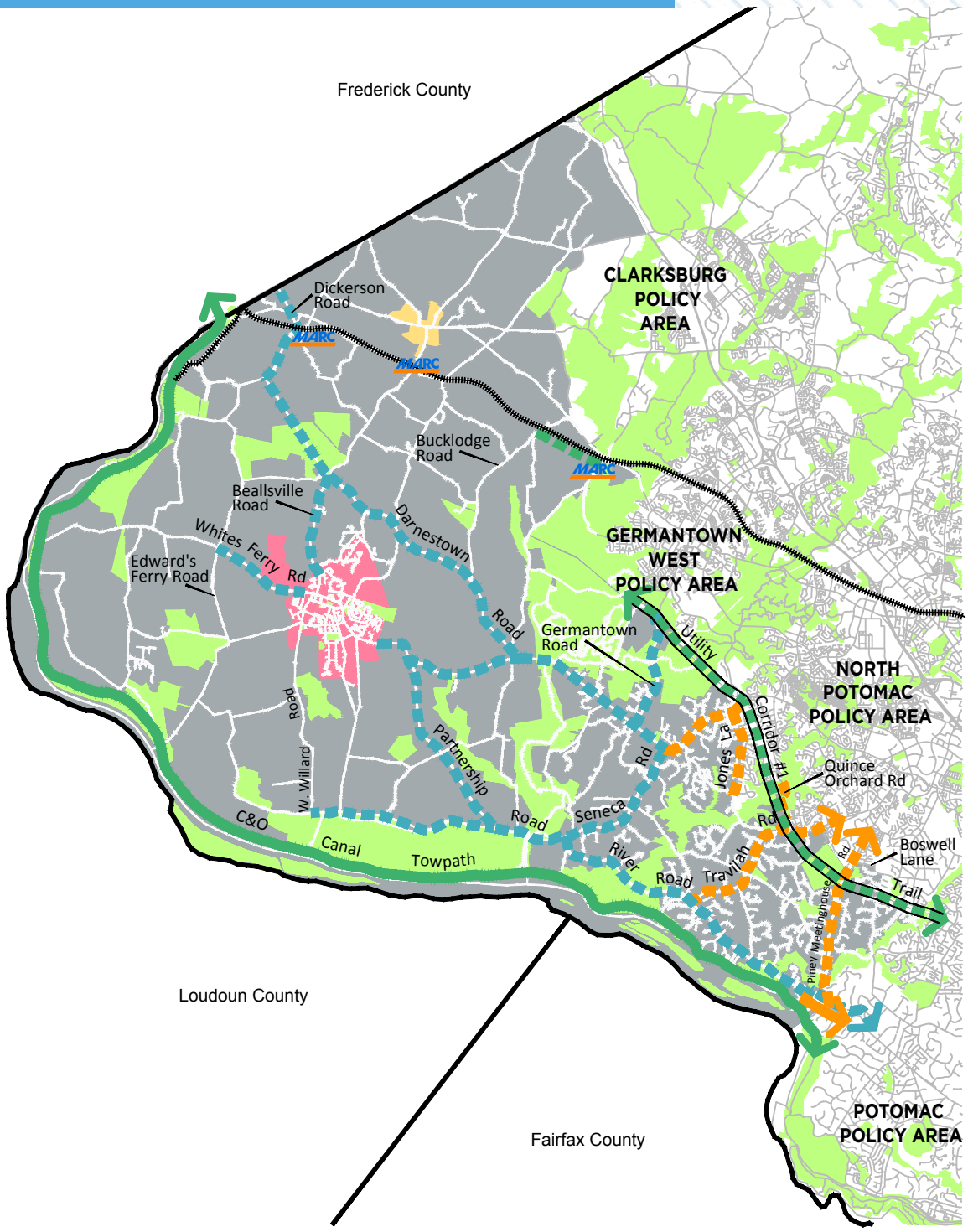
RURAL EAST (WEST)



Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GERMANTOWN - BURTONSVILLE BREEZEWAY				
Utility Corridor #2	Woodfield Rd	Rural East (East) Policy Area	Trail	Off-Street Trail
ADDITIONAL RECOMMENDATIONS				
Airpark Rd	Woodfield Rd	Muncaster Mill Rd	Separated Bikeway	Sidepath (East Side)
Brink Rd	Ridge Rd	Wightman Rd	Separated Bikeway	Sidepath (South Side)
Damascus Rd	Reva Dr	Mullinix Mill Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (South Side) and Bikeable Shoulders
	Mullinix Mill Rd	Laytonsville Rd	Bikeable Shoulders	Bikeable Shoulders
Fieldcrest Rd	Woodfield Rd	Belle Chase Dr	Bikeable Shoulders	Bikeable Shoulders
Frederick Rd	Howard County	Hyattstown Bypass	Separated Bikeway	Sidepath (Side TBD)
Frederick Rd	Old Hundred Rd	Comus Rd	Separated Bikeway	Sidepath (West Side)
	Comus Rd	Snowden Farm Pkwy	Separated Bikeway and Bikeable Shoulders	Sidepath (West Side) and Bikeable Shoulders
Goshen Rd	Lochaven Dr	Warfield Rd	Separated Bikeway and Striped Bikeway	Sidepath (West Side) and Conventional Bike Lanes
Hyattstown Bypass	Frederick Rd	Frederick Rd	Separated Bikeway	Sidepath (Side TBD)
Laytonsville Rd	Damascus Rd	Town of Laytonsville	Bikeable Shoulders	Bikeable Shoulders
Midcounty Hwy	Ridge Rd	Brink Rd	Separated Bikeway	Sidepath (South Side)
	Brink Rd	Great Seneca Creek	Separated Bikeway	Sidepath (side TBD)
Muncaster Rd	Rural East (West) Policy Area	Muncaster Mill Rd	Separated Bikeway	Sidepath (North Side)
Ridge Rd	Howard County	Howard County	Bikeable Shoulders	Bikeable Shoulders
Ridge Rd	Howard County	Damascus Policy Area	Bikeable Shoulders	Bikeable Shoulders
Ridge Rd	Preakness Dr	Kings Valley Rd	Separated Bikeway	Sidepath (West Side)
Warfield Rd	Woodfield Rd	Town of Laytonsville	Separated Bikeway	Sidepath (North Side)
Woodfield Rd	Hickory Spring La	Warfield Rd	Separated Bikeway	Sidepath (West Side)

RURAL WEST



Policy Area
Parkland
Town of Barnesville
Town of Poolesville
County Line
Breezeway Network
MARC MARC Station

Existing	Proposed
	Trails
	Separated Bikeways
	Bikeable Shoulders

Note: White lines represent non-master planned bikeways

0 16,000'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GERMANTOWN - GROSVENOR BREEZEWAY				
Utility Corridor #1	Schaeffer Rd	Great Seneca Creek	Trail	Off-Street Trail
SEE NORTH POTOMAC POLICY AREA				
Utility Corridor #1	Travilah Rd	Glen Mill Rd	Trail	Off-Street Trail
GERMANTOWN - BURTONSVILLE BREEZEWAY				
Utility Corridor #2	Utility Corridor #1	Germantown West Policy Area	Trail	Off-Street Trail
ADDITIONAL RECOMMENDATIONS				
Beallsville Rd	Darnestown Rd	Poolesville	Bikeable Shoulders	Bikeable Shoulders
Bucklodge - White Ground Connector	Bucklodge Rd	White Ground Rd	Trail	Off-Street Trail
C&O Canal Towpath	Frederick Co	Potomac Policy Area	Trail	Off-Street Trail
Central Park Cir	Burdette Ln	Germantown Park Dr	Separated Bikeway	Sidepath (North Side)
Clarksburg Rd	Ten Mile Creek	Clopper Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (East Side) and Bikeable Shoulders
Clopper Rd	Clarksburg Rd	Little Seneca Creek	Separated Bikeway	Sidepath (East Side)
Darnestown Rd	Dickerson Rd	Seneca Rd	Bikeable Shoulders	Bikeable Shoulders
	Seneca Rd	Utility Corridor	Separated Bikeway	Sidepath (North Side)
Dickerson Rd	Frederick Co	Darnestown Rd	Bikeable Shoulders	Bikeable Shoulders
Germantown Rd	Germantown West Policy Area	Utility Corridor #1	Separated Bikeway	Sidepath (North Side)
Germantown Rd	Utility Corridor #1	Darnestown Rd	Bikeable Shoulders	Bikeable Shoulders
Glen Rd	Piney Meetinghouse Rd	Watts Branch	Separated Bikeway	Sidepath (North Side)
Jones La	Darnestown Rd	Turkey Foot Rd	Separated Bikeway	Sidepath (West Side)
Partnership Rd	Whites Ferry Rd	River Rd	Bikeable Shoulders	Bikeable Shoulders
Piney Meetinghouse Rd	Boswell La	Potomac Policy Area	Separated Bikeway	Sidepath (East Side)
River Rd	W. Willard Rd	Swains Lock Rd	Bikeable Shoulders	Bikeable Shoulders
River Rd	Swains Lock Rd	Piney Meetinghouse Rd	Separated Bikeway and Bikeable Shoulders	Sidepath (East Side) and Bikeable Shoulders

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Seneca Rd	Darnestown Rd	River Rd	Bikeable Shoulders	Bikeable Shoulders
Travilah Rd	Dufief Mill Rd	River Rd	Separated Bikeway	Sidepath (West Side)
Whites Ferry Rd	Edwards Ferry Rd	Poolesville	Bikeable Shoulders	Bikeable Shoulders
Whites Ferry Rd	Poolesville	Darnestown Rd	Bikeable Shoulders	Bikeable Shoulders

THIS PAGE INTENTIONALLY LEFT BLANK

SHADY GROVE METRO STATION



Policy Area
Parkland
City of Gaithersburg
City of Rockville
M Metro Rail Station
B Bus Rapid Transit Station (Proposed)
Breezeway Network

Existing Proposed
Trails
Separated Bikeways
Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 1200'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
INTERCOUNTY CONNECTOR TRAIL BREEZEWAY				
Redland Rd	Frederick Rd	Shady Grove Access Rd	Separated Bikeway	Sidepath (North Side)
Shady Grove Access Rd	Redland Rd	Shady Grove Rd	Separated Bikeway	Sidepath (East Side)
ADDITIONAL RECOMMENDATIONS				
Crabbs Branch Way	Shady Grove Rd	Redland Rd	Separated Bikeway	Sidepath (Both Sides)
	Redland Rd	Indianola Dr	Separated Bikeway	Sidepath (West Side)
Frederick Rd	Shady Grove Rd	City of Rockville	Separated Bikeway	Sidepath (Both Sides)
	City of Rockville	Ridgemont Ave	Separated Bikeway	Sidepath (East Side)
	Ridgemont Ave	Paramount Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Redland Rd	Needwood Rd (South)	Shady Grove Access Rd	Separated Bikeway	Sidepath (North Side)
Shady Grove Metro Parking Lot	Shady Grove Metro Station	Frederick Rd	Separated Bikeway	Separated Bike Lanes (Side TBD)
Shady Grove Rd	City of Rockville	MD 200 Ramp	Separated Bikeway	Sidepath (Both Sides)

SILVER SPRING CBD



Policy Area	Existing	Proposed	
Parkland			Trails
County Line			Separated Bikeways
Metro Rail Station			Striped Bikeways
Bus Rapid Transit Station			Shared Roads
Purple Line Station			Grade Separated Crossing
MARC Station			Bicycle Parking Station
Breezeway Network			

Note: White lines represent non-master planned bikeways

0 1000'

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
CAPITAL CRESCENT TRAIL BREEZEWAY				
Capital Crescent Trail	Spring St	Silver Spring Transit Center	Trail	Off-Street Trail
METROPOLITAN BRANCH TRAIL BREEZEWAY				
Metropolitan Branch Trail	Silver Spring Transit Center	Silver Spring - Takoma Park Policy Area	Trail	Off-Street Trail
GEORGIA AVE SOUTH BREEZEWAY				
Fenton St Extended	Spring St	Cameron St	Separated Bikeway	Separated Bike Lanes
Fenton St	Cameron St	Wayne Ave	Separated Bikeway	Separated Bike Lanes
US 29 CORRIDOR BREEZEWAY				
Ellsworth Dr	Spring St	Fenton St	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
ADDITIONAL RECOMMENDATIONS				
13th St	District of Columbia	Georgia Ave	Separated Bikeway	Separated Bike Lanes (Side TBD)
16th St	Spring St	District of Columbia	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
2nd Ave / Wayne Ave	Spring St	Colesville Rd	Separated Bikeway	Separated Bike Lanes
	Colesville Rd	Cedar St	Separated Bikeway	Separated Bike Lanes
Burlington Ave	Georgia Ave	Fenton St	Separated Bikeway	Separated Bike Lanes
Cameron St	Spring St	2nd Ave	Separated Bikeway	Separated Bike Lanes
Colesville Rd	16th St	East-West Hwy	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side) & Sidepath (South Side)
Colesville Rd	East-West Hwy	Wayne Ave	Separated Bikeway	Separated Bike Lanes
Dixon Ave	Wayne Ave	Georgia Ave	Separated Bikeway	Separated Bike Lanes
East-West Hwy	16th St	Colesville Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
	Colesville Rd	Georgia Ave	Separated Bikeway	Separated Bike Lanes
Ellsworth Dr	Fenton St	Georgia Ave	Shared Road	Shared Street
Fenton St	Wayne Ave	King St	Separated Bikeway	Separated Bike Lanes

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Metropolitan Branch Trail / King St (Interim)	Railroad Tracks	Fenton St	Separated Bikeway	Sidepath (South Side)
Metropolitan Branch Trail / Fenton St (Interim)	King St	New York Ave	Separated Bikeway	Sidepath (West Side)
Newell St	District of Columbia	East-West Hwy	Striped Bikeway	Conventional Bike Lanes
Philadelphia Ave / Gist Ave	Selim Rd	Silver Spring - Takoma Park Policy Area	Shared Road	Priority Shared Lane Markings
Selim Rd	Philadelphia Ave	Metropolitan Branch Trail	Separated Bikeway	Sidepath (West Side)
Silver Spring Ave	Georgia Ave	Silver Spring - Takoma Park Policy Area	Shared Road	Priority Shared Lane Markings
Silver Spring Ave	Fenton St	811 Silver Spring Ave	Separated Bikeway	Separated Bike Lanes
Spring St / Cedar St	16th St	Wayne Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)

THIS PAGE INTENTIONALLY LEFT BLANK

SILVER SPRING-TAKOMA PARK (EAST)



Policy Area
Parkland
County Line
Metro Rail Station
Bus Rapid Transit Station
Purple Line Station
Breezeway Network

Existing	Proposed
	Trails
	Separated Bikeways
	Striped Bikeways
	Shared Roads
	Grade Separated Crossing

Note: White lines represent non-master planned bikeways

0 2600'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
US 29 CORRIDOR BREEZEWAY				
Fairway Ave	Marshall Ave	Granville Dr	Shared Road	Neighborhood Greenway
Caroline Ave	Granville Dr	Franklin Ave	Shared Road	Neighborhood Greenway
Franklin Ave	Caroline Ave	Worth Ave	Separated Bikeway	Sidepath (South Side)
Sligo Creek Trail	Worth Ave	Bennington La	Trail	Stream Valley Park Trail
Bennington La	Bennington Dr	Off-Street Trail	Shared Road	Neighborhood Greenway
Bennington Dr	Ellsworth Dr	Bennington La	Shared Road	Neighborhood Greenway
Ellsworth Dr	Bennington Rd	Cedar St	Shared Road	Neighborhood Greenway
METROPOLITAN BRANCH TRAIL BREEZEWAY				
Takoma Ave	Silver Spring CBD Policy Area	District of Columbia	Trail	Off-Street Trail
UNIVERSITY BLVD BREEZEWAY				
University Blvd	I-495	Langley Dr	Separated Bikeway	Sidepath (East Side)
WAYNE AVE - FENTON ST NEIGHBORHOOD GREENWAY				
Cedar St	Wayne Ave	Bonifant St	Shared Road	Neighborhood Greenway
Bonifant St	Cedar St	Grove St	Shared Road	Neighborhood Greenway
Grove St	Bonifant St	Sligo Ave	Shared Road	Neighborhood Greenway
Sligo Ave	Grove St	Woodbury St	Separated Bikeway	Separated Bike Lanes (Two-Way, Side TBD)
Woodbury Dr	Sligo Ave	Neighborhood Connector	Shared Road	Neighborhood Greenway
Neighborhood Connector	Woodbury Dr	Fenton St	Trail	Neighborhood Connector
ADDITIONAL RECOMMENDATIONS				
Baltimore Ave	District of Columbia	Philadelphia Ave	Shared Road	Neighborhood Greenway
I-495 Bridge	I-495	Fairway Ave	Trail	Off-Street Trail

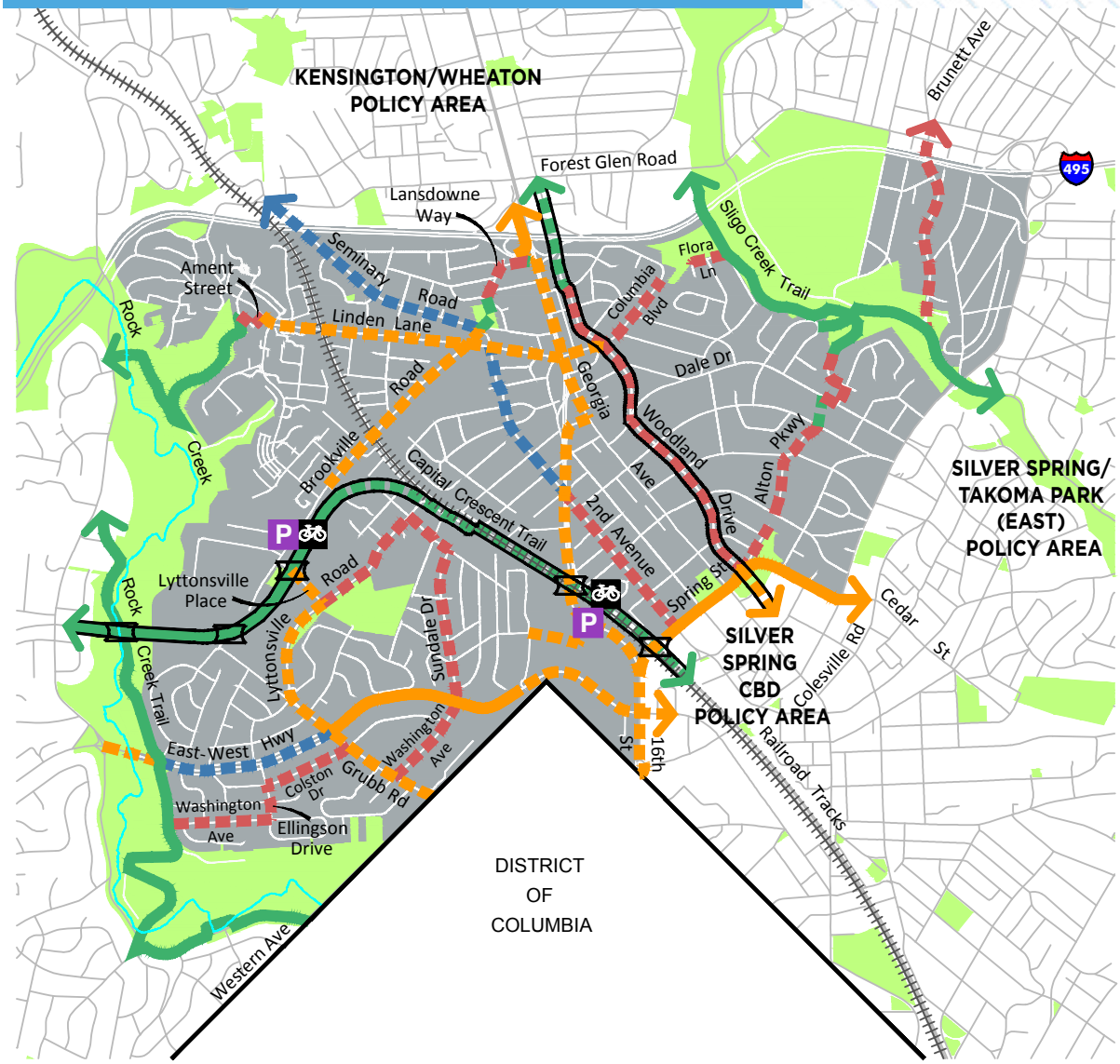
BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Carroll Ave	Piney Branch Rd	University Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	University Blvd	Merrimac Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	University Blvd	Long Branch Pkwy	Striped Bikeway	Conventional Bike Lanes
	Long Branch Pkwy	Flower Ave	Shared Road	Priority Shared Lane Markings
	Flower Ave	Lee Ave	Striped Bikeway	Conventional Bike Lanes
	Lee Ave	Ethan Allen Ave	Shared Road	Priority Shared Lane Markings
	Ethan Allen Ave	Tulip Ave	Striped Bikeway	Conventional Bike Lanes
	Tulip Ave	District of Columbia	Shared Road	Priority Shared Lane Markings
Cedar Ave	District of Columbia	Philadelphia Ave	Shared Road	Neighborhood Greenway
Cedar St	Ellsworth Dr	Wayne Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
City Hall Parking Lot	Philadelphia Ave	Grant Ave	Trail	Off-Street Trail
Division St	Greenwood Ave	Flower Ave	Shared Road	Neighborhood Greenway
Erskine St	New Hampshire Ave	Prince George's County	Shared Road	Neighborhood Greenway
Ethan Allen Ave	Carroll Ave	New Hampshire Ave	Separated Bikeway	Sidepath (North Side)
Flower Ave	Wabash Ave	Carroll Ave	Shared Road	Priority Shared Lane Markings
	Carroll Ave	Sligo Creek Pkwy	Shared Road	Neighborhood Greenway
Franklin Ave	Worth Ave	University Blvd	Separated Bikeway	Sidepath (South Side)
	University Blvd	End of Franklin Ave	Shared Road	Neighborhood Greenway
Gist Ave	Silver Spring CBD Policy Area	Ray Dr	Shared Road	Neighborhood Greenway
Grant Ave	Piney Branch Rd	Carroll Ave	Shared Road	Neighborhood Greenway
Greenwood Ave	Wabash Ave	Kennebec Ave	Shared Road	Neighborhood Greenway
	Kennebec Ave	Division St	Shared Road	Neighborhood Greenway
Haddon Dr	Long Branch Trail	Houston Ave	Shared Road	Neighborhood Greenway
Hamilton Ave	Sligo Creek Pkwy	Franklin Ave	Shared Road	Neighborhood Greenway

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Indian Spring Dr	Caroline Ave	University Blvd	Shared Road	Neighborhood Greenway
Kennebec Ave	Sligo Creek Pkwy	Long Branch Trail	Shared Road	Neighborhood Greenway
Long Branch Pkwy	Maplewood Ave	Carroll Ave	Shared Road	Neighborhood Greenway
Long Branch Trail	Houston Ave	Long Branch Pkwy	Trail	Stream Valley Park Trail
Maple Ave	Kennebec Ave	Hilltop Rd	Shared Road	Neighborhood Greenway
	Hilltop Rd	Philadelphia Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Philadelphia Ave	District of Columbia	Shared Road	Neighborhood Greenway
Maplewood Ave / Trail	Maple Ave	Flower Ave	Shared Road	Neighborhood Greenway
	Flower Ave	Greenwood Ave	Trail	Off-Street Trail
	Greenwood Ave	Garland Ave	Shared Road	Neighborhood Greenway
New Hampshire Ave	I-495	Prince George's County	Separated Bikeway	Sidepath (Both Sides)
New Hampshire Ave	Erskine St	Ethan Allen Ave	Separated Bikeway	Sidepath (Both Sides)
	Ethan Allen Ave	District of Columbia	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Oakview Dr	Northwest Branch Trail	New Hampshire Ave	Shared Road	Neighborhood Greenway
Philadelpha Ave	Baltimore Ave	Piney Branch Rd	Separated Bikeway	Sidepath (South Side)
Philadelphia Ave	Holly Ave	Maple Ave	Separated Bikeway	Sidepath (North Side)
Philadelphia Ave	Cedar Ave	Maple Ave	Shared Road	Neighborhood Greenway
Piney Branch Rd	Philadelphia Ave	Sligo Creek Pkwy	Separated Bikeway	Sidepath (South Side)
Piney Branch Rd	Carroll Ave	Prince George's County	Separated Bikeway	Sidepath (North Side)
Plymouth St	Sudbury Rd	Walden St	Shared Road	Neighborhood Greenway
Ray Dr	Gist Ave	Piney Branch Rd	Shared Road	Neighborhood Greenway
Silver Spring Ave	Silver Spring CBD Policy Area	Grove St	Shared Road	Priority Shared Lane Markings
	Grove St	Piney Branch Rd	Shared Road	Neighborhood Greenway
Sligo Creek Trail	Colesville Rd	Prince George's County	Trail	Stream Valley Park Trail

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Spring St	Colesville Rd	Ellsworth Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Sudbury Rd	Franklin Ave	Plymouth St	Shared Road	Neighborhood Greenway
Takoma Ave	Gist Ave	Albany Ave	Shared Road	Neighborhood Greenway
University Blvd	I-495	Langley Dr	Separated Bikeway	Sidepath (West Side)
Wayne Ave	Cedar St	Whitney St	Separated Bikeway	Sidepath (North Side)
Worth Ave	Sligo Creek Pkwy	Franklin Ave	Shared Road	Neighborhood Greenway

THIS PAGE INTENTIONALLY LEFT BLANK

SILVER SPRING-TAKOMA PARK (WEST)



Policy Area
Parkland
County Line
Purple Line Station (Proposed)
Breezeway Network

Existing	Proposed	
		Trails
		Separated Bikeways
		Striped Bikeways
		Shared Roads
		Grade Separated Crossing
		Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 2500'

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
CAPITAL CRESCENT TRAIL BREEZEWAY				
Capital Crescent Trail	Rock Creek Trail	Spring St	Trail	Off-Street Trail
GEORGIA AVE SOUTH BREEZEWAY				
Woodland Dr	I-495 Bridge (East Side)	Spring St	Shared Road	Neighborhood Greenway
US 29 CORRIDOR WEST BIKEWAY				
Brunett Ave	I-495	Sligo Creek Pkwy	Shared Road	Neighborhood Greenway
Edgevale Rd	Sligo Creek Trail Connector	Harvey Rd	Shared Road	Neighborhood Greenway
Harvey Rd	Edgevale Rd	Dale Dr	Shared Road	Neighborhood Greenway
Dale Dr	Harvey Rd	Alton Pkwy	Shared Road	Neighborhood Greenway
Alton Pkwy	Dale Dr	Spring St	Shared Road	Neighborhood Greenway
SILVER SPRING - GLENMONT WEST NEIGHBORHOOD GREENWAY				
I-495 Bridge (West Side)	Forest Glen Rd	I-495	Separated Bikeway	Sidepath (West Side)
Lansdowne Way	Georgia Ave	2nd Ave	Shared Road	Neighborhood Greenway
2nd Ave	Lansdowne Way	Riley Pl	Shared Road	Neighborhood Greenway
	Riley Rd	Seminary Rd	Trail	Off-Street Trail
	Seminary Rd	16th St	Striped Bikeway	Conventional Bike Lanes
	16th St	Spring St	Shared Road	Neighborhood Greenway
ADDITIONAL RECOMMENDATIONS				
16th St	Georgia Ave	Spring St	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Ament St	Trail	Linden La	Shared Road	Neighborhood Greenway
Brookville Rd	Stewart La	Seminary Rd	Separated Bikeway	Sidepath (South Side)
Colston Dr	Ellingson Dr	Grubb Rd	Shared Road	Neighborhood Greenway
Columbia Blvd	Seminary Rd	Georgia Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Columbia Blvd	Woodland Dr	Flora La	Shared Road	Neighborhood Greenway

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Dale Dr	Georgia Ave	Woodland Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
East West Hwy	Rock Creek	Grubb Rd	Striped Bikeway	Contra-Flow Bike Lane
	Grubb Rd	16th St	Separated Bikeway	Sidepath (North Side)
Ellingson Dr	Washington Ave	Colston Dr	Shared Road	Neighborhood Greenway
Flora La	Flora Ter	Sligo Creek Trail Connector	Shared Road	Neighborhood Greenway
Georgia Ave	Lansdowne Way	16th St	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Grubb Rd	Lyttonsville Rd	District of Columbia	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
I-495 Bridge (East Side)	Forest Glen Rd	Woodland Dr	Trail	Off-Street Trail
Linden La	Ament St	2nd Ave	Separated Bikeway	Sidepath (South Side)
Lyttonsville Pl	Brookville Rd	Lyttonsville Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Lyttonsville Rd	Lyttonsville Pl	Grubb Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Lyttonsville Rd	Lyttonsville Pl	Michigan Ave	Shared Road	Neighborhood Greenway
Michigan Ave	Lyttonsville Pl	Pennsylvania Ave	Shared Road	Neighborhood Greenway
Pennsylvania Ave	Michigan Ave	Lanier Dr	Shared Road	Neighborhood Greenway
Porter Dr	Lanier Dr	Sundale Dr	Shared Road	Neighborhood Greenway
Rock Creek Trail	Rock Creek	Western Ave	Trail	Stream Valley Park Trail
Seminary Rd	I-495	Brookville Rd	Striped Bikeway	Conventional Bike Lanes
	Linden La	Seminary Pl	Striped Bikeway	Conventional Bike Lanes
	2nd Ave	Columbia Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Sligo Creek Trail	I-495	Colesville Rd	Trail	Stream Valley Park Trail
Spring St	16th St	Colesville Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Summit Hills Bikeway	Spencer Rd	16th St	Separated Bikeway	Sidepath or Separated Bike Lanes
Sundale Dr	Porter Dr	East West Hwy	Shared Road	Neighborhood Greenway
Trail	Rock Creek Trail	Ament St	Trail	Stream Valley Park Trail

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Washington Ave	Meadowbrook La	Ellingson Dr	Shared Road	Neighborhood Greenway
Washington Ave	East West Hwy	Grubb Rd	Shared Road	Neighborhood Greenway

TAKOMA-LANGLEY



Policy Area
Parkland
County Line
B Bus Rapid Transit Station (Proposed)
P Purple Line Station (Proposed)
Breezeway Network

Existing Proposed

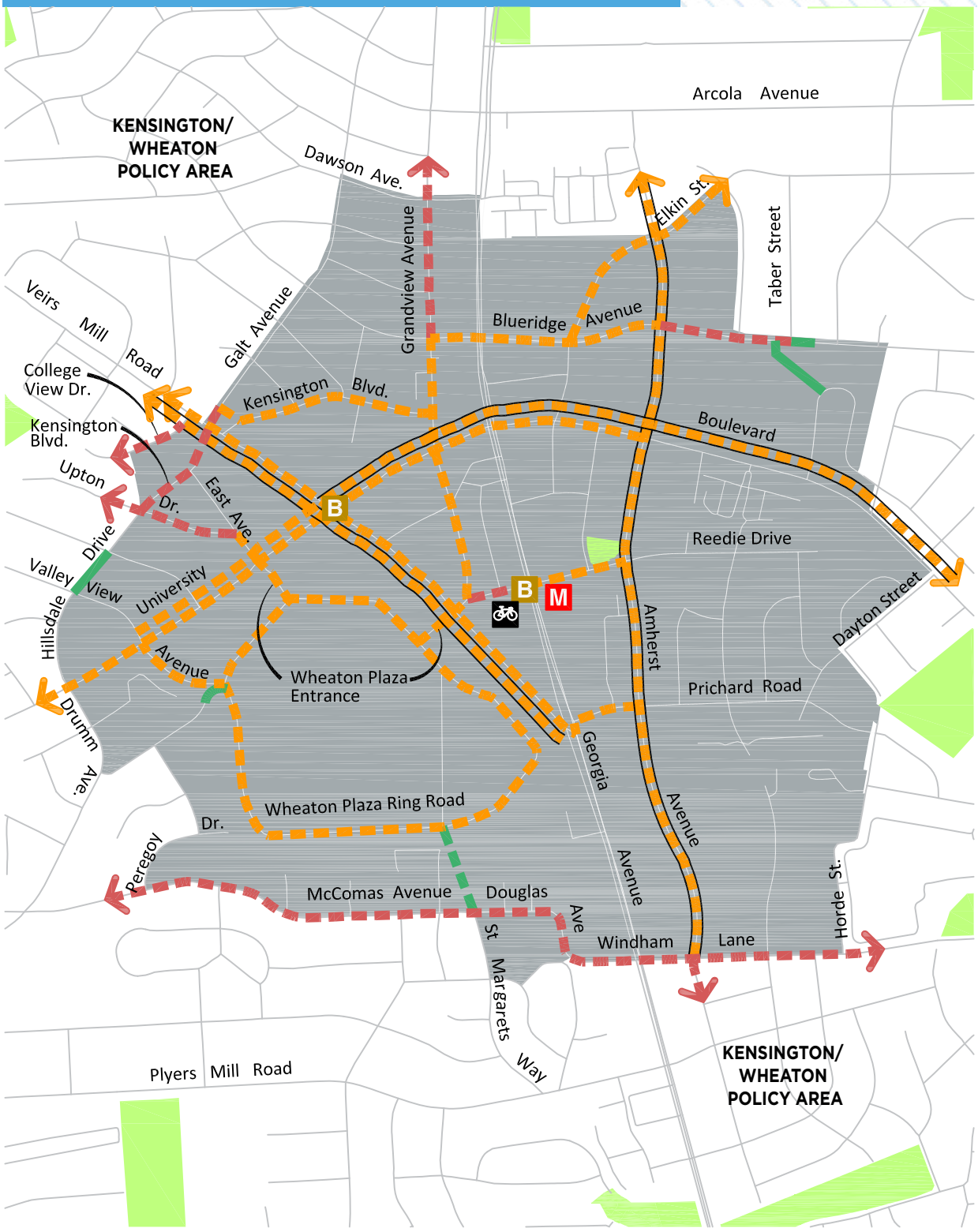
Trails
Separated Bikeways
Striped Bikeways
Shared Roads
Bicycle Parking Station

Note: White lines represent non-master planned bikeways

0 800'

STREET	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
UNIVERSITY BLVD BREEZEWAY				
University Blvd	Carroll Ave	Prince George's County	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
ADDITIONAL RECOMMENDATIONS				
Anne St	University Blvd	Glenside Dr	Shared Road	Neighborhood Greenway
Carroll Ave	University Blvd	Merrimac Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Merrimac Dr	Long Branch Pkwy	Striped Bikeway	Conventional Bike Lanes
Erskine St	New Hampshire Ave	Prince George's County	Shared Road	Neighborhood Greenway
Glenside Dr	Carroll Ave	New Hampshire Ave	Shared Road	Neighborhood Greenway
Holton La	Wildwood Dr	New Hampshire Ave	Shared Road	Neighborhood Greenway
	New Hampshire Ave	Prince George's County	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
New Hampshire Ave	University Blvd	Erskine St	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
	Erskine St	Sligo Creek Pkwy	Separated Bikeway	Sidepath (Both Sides)
Sligo Creek Trail	Glengarry Pl	Prince George's County	Trail	Stream Valley Park Trails
Street B-2	University Blvd	Holton La	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
University Blvd	Carroll Ave	Prince George's County	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Wildwood Dr	Carroll Ave	Glenside Dr	Shared Road	Neighborhood Greenway

WHEATON CBD



Note: White lines represent non-master planned bikeways

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
GEORGIA AVE SOUTH BREEZEWAY				
Amherst Ave	Elkin St	Windham La	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
VEIRS MILL RD BREEZEWAY				
Veirs Mill Rd	College View Dr	Georgia Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
UNIVERSITY BLVD BREEZEWAY				
University Blvd	Veirs Mill Rd	Amherst Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
University Blvd	Amherst Ave	Reedie Dr	Separated Bikeway	Sidepath (East Side)
VEIRS MILL RD (NORTH SIDE)				
Veirs Mill Rd	Galt Ave	Georgia Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
ADDITIONAL RECOMMENDATIONS				
Blueridge Ave	Grandview Ave	Amherst Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Blueridge Ave Ext	Amherst Ave	Taber St	Shared Road	Neighborhood Greenway
College View Dr	Pleasant View LP Trail	Veirs Mill Rd	Shared Road	Neighborhood Greenway
Douglas Ave	St Margarets Way	Windham La	Shared Road	Neighborhood Greenway
East Ave	Upton Dr	University Blvd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Elkin St	Bucknell Dr	Blueridge Ave	Separated Bikeway	Sidepath (South Side)
Franwell Ave	Tabor St	Bucknell Dr	Separated Bikeway	Sidepath (Side TBD)
Galt Ave	East Ave	Kensington Blvd	Shared Road	Neighborhood Greenway
Grandview Ave	Dawson Ave	Blueridge Ave	Shared Road	Neighborhood Greenway
	Blueridge Ave	Reedie Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Kensington Blvd	Galt Ave	Grandview Ave	Separated Bikeway	Sidepath (South Side)
Kensington Blvd	Upton Dr	East Ave	Shared Road	Neighborhood Greenway
McComas Ave	Peregoy Dr	St Margarets Way	Shared Road	Neighborhood Greenway
Neighborhood Connector	Blueridge Ave	Taber St	Trail	Neighborhood Connector

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Neighborhood Connector	Blueridge Ave	Westchester Dr	Trail	Neighborhood Connector
Neighborhood Connector	Faulkner Pl	Wheaton Plaza Ringroad	Trail	Neighborhood Connector
Neighborhood Connector	Hillsdale Dr	Midvale Rd	Trail	Neighborhood Connector
Neighborhood Connector	Upton Dr	Kensington Blv	Trail	Neighborhood Connector
Neighborhood Connector	Wheaton Plaza Ring Road	Douglas Ave	Trail	Neighborhood Connector
Prichard Rd	Georgia Ave	Amherst Ave	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Reedie Dr	Veirs Mill Rd	Georgia Ave	Shared Road	Shared Street
Reedie Dr	Georgia Ave	Amherst Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
University Blvd	Drumm Ave	Valley View Ave	Separated Bikeway	Sidepath (South Side)
	Valley View Ave	Amherst Ave	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
	Amherst Ave	Dayton St	Separated Bikeway	Sidepath (East Side)
Upton Dr	Kensington-Wheaton Policy Area	East Ave	Shared Road	Neighborhood Greenway
Valley View Ave	University Blvd	Wheaton Plaza Ring Rd	Separated Bikeway	Sidepath (South Side)
Wheaton Plaza Entrance	University Blvd	Wheaton Plaza Ring Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Wheaton Plaza Entrance	Veirs Mill Rd	Wheaton Plaza Ring Rd	Separated Bikeway	Separated Bike Lanes (Side TBD)
Wheaton Plaza Ring Road	Wheaton Plaza Ring Road	Wheaton Plaza Ring Road	Separated Bikeway	Separated Bike Lanes, One-Way, Both Sides
Windham La	Douglas Ave	Horde St	Shared Road	Neighborhood Greenway

THIS PAGE INTENTIONALLY LEFT BLANK

WHITE FLINT

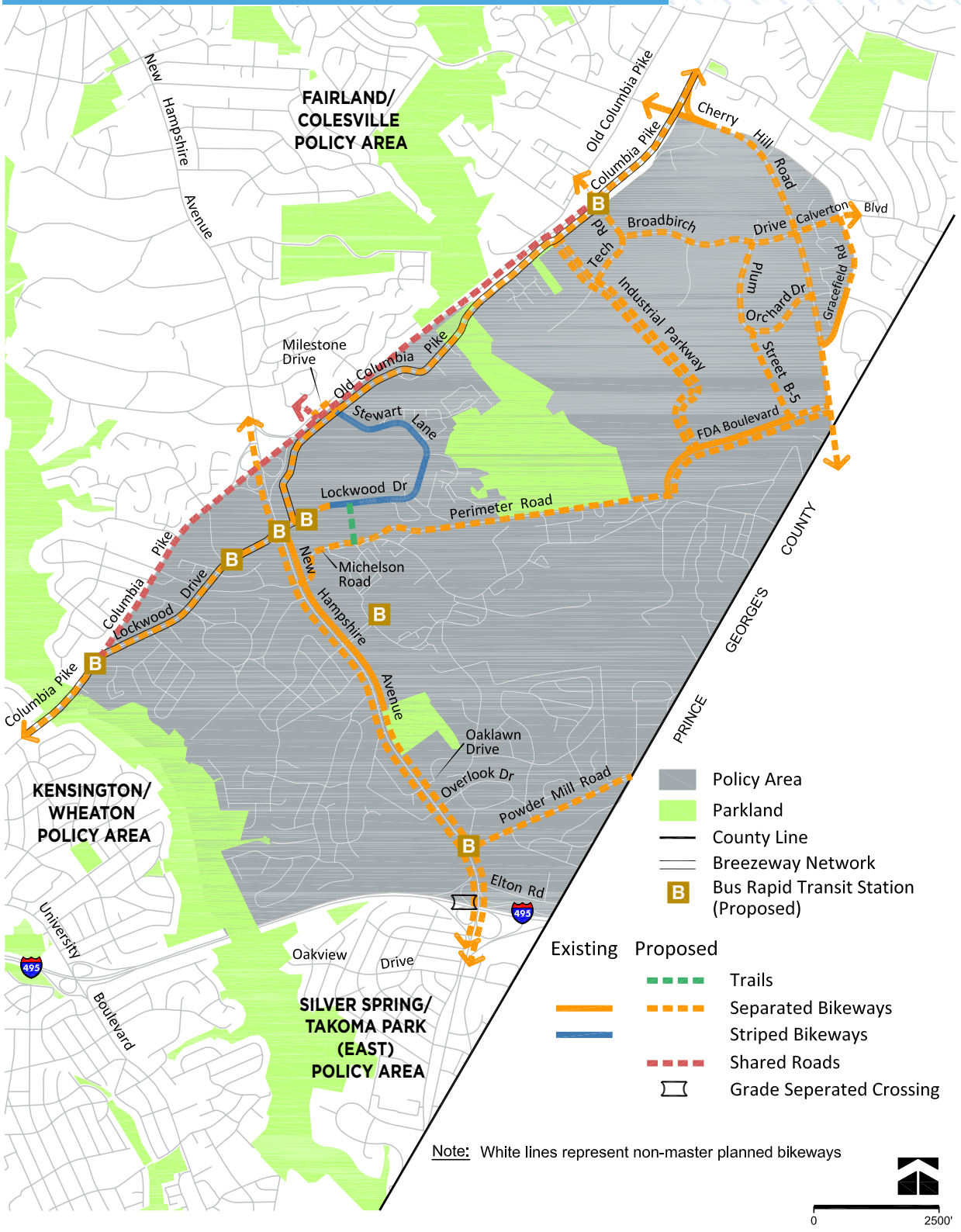

Parkway
Bou Ave.
Montrose
Randolph
Road
NORTH BETHESDA POLICY AREA
Montrose Road
Towne Road
Rockville Pike
Nebel Street
Railroad Tracks
Georgetown Road
Old Georgetown Road
Old Boulevard
Executive Drive
Marinelli Road
Wyaconda Road
Lane
Nicholson Court
Nicholson Lane
Woodglen Drive
Security Lane
Extended Roheby Street
Edson Lane
Nebel Street
Bethesda Trolley Trail
Hillery Way
NORTH BETHESDA POLICY AREA
Policy Area
Parkland
Metro Rail Station
Bus Rapid Transit Station (Proposed)
Breezeway Network
Existing Proposed
Trails
Separated Bikeways
Striped Bikeways
Grade Seperated Crossing
Bicycle Parking Station
Note: White lines represent non-master planned bikeways
0
800'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
MD 355 SOUTH BREEZEWAY				
Rockville Pike	Towne Rd	Marinelli Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
Marinelli Rd	Rockville Pike	Woodglen Dr	Separated Bikeway	Separated Bike Lanes (Side TBD)
Woodglen Dr	Marinelli Rd	Edson La	Separated Bikeway	Separated Bike Lanes (Two-Way, West Side)
MONTROSE PKWY BREEZEWAY				
Montrose Pkwy	Towne Rd	Railroad Tracks	Separated Bikeway	Sidepath (North Side)
RANDOLPH RD BREEZEWAY				
Randolph Rd	Montrose Pkwy	Railroad Tracks	Separated Bikeway	Sidepath (South Side)
ADDITIONAL RECOMMENDATIONS				
Bike / Ped Bridge	Nicholson Ct	Wyaconda Rd	Trail	Off-Street Trail
Bou Ave	Montrose Pkwy	Randolph Rd	Separated Bikeway	Sidepath (East Side)
Edson La	Woodglen Dr	Rockville Pike	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Executive Blvd	Old Georgetown Rd	Woodglen Dr	Separated Bikeway	Separated Bike Lanes (Side TBD)
Marinelli Rd	Executive Blvd	Nebel St	Separated Bikeway	Separated Bike Lanes (Side TBD)
Nebel St	Randolph Rd	Nicholson La	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Nebel St Ext	Nicholson La	Rockville Pike	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Neighborhood Connector	Rokeby Way	White Flint Mall	Trail	Neighborhood Connector
Nicholson Ct	Nebel St Ext	Bike / Ped Bridge	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Nicholson La	Old Georgetown Rd	Nebel St	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
	Nebel St	Railroad Tracks	Separated Bikeway	Sidepath (Side TBD)
Old Georgetown Rd	Nebel St	Rockville Pike	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
	Rockville Pike	Towne Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
	Towne Rd	Nicholson La	Separated Bikeway	Sidepath (Both Sides)

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Rockville Pike	Towne Rd	Marinelli Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
	Marinelli Rd	North Bethesda Policy Area	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
Security La	Rockville Pike	Woodglen Dr	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Towne Rd	Rockville Pike	Old Georgetown Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)

THIS PAGE INTENTIONALLY LEFT BLANK

WHITE OAK


FAIRLAND/
COLESVILLE
POLICY AREA
KENSINGTON/
WHEATON
POLICY AREA
SILVER SPRING/
TAKOMA PARK
(EAST)
POLICY AREA
PRINCE GEORGE'S COUNTY
New Hampshire Avenue
Old Columbia Pike
Columbia Pike
Cherry Hill Road
Broadbirch Drive
Calverton Blvd
Tech Rd
Industrial Parkway
Plum Orchard Dr
Gracefield Rd
Street B-5
FDA Boulevard
Milestone Drive
Stewart Lane
Lockwood Dr
Perimeter Road
Michelson Road
Lockwood Drive
Oaklawn Drive
Overlook Dr
Powder Mill Road
Elton Rd
University Boulevard
Oakview Drive
495
Policy Area
Parkland
County Line
Breezeway Network
Bus Rapid Transit Station (Proposed)
Existing
Proposed
Trails
Separated Bikeways
Striped Bikeways
Shared Roads
Grade Seperated Crossing
Note: White lines represent non-master planned bikeways
0
2500'

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
US 29 CORRIDOR BREEZEWAY				
Old Columbia Pike	Tech Rd	White Oak Shopping Center	Separated Bikeway	Sidepath (East Side)
Old Columbia Pike	White Oak Shopping Center	Lockwood Dr	Separated Bikeway	Separated Bike Lanes (Two-Way, East Side)
Lockwood Dr	New Hampshire Ave	Columbia Pike	Separated Bikeway	Sidepath (East Side)
Columbia Pike*	Lockwood Dr	Northwest Branch	Separated Bikeway	Sidepath (East Side)
ADDITIONAL RECOMMENDATIONS				
Broadbirch Dr	Tech Rd	Cherry Hill Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Calverton Blvd	Cherry Hill Rd	Gracefield Rd	Separated Bikeway	Sidepath (South Side)
Cherry Hill Rd	Columbia Pike	Prince George's County	Separated Bikeway	Separated Bike Lanes (Two-Way, South Side)
Columbia Pike	Tech Rd	Rachel Carson Greenway	Separated Bikeway	Sidepath (West Side)
FDA Blvd	Cherry Hill Rd	FDA Gate	Separated Bikeway	Sidepath (North Side)
Gracefield Rd	Calverton Blvd	Cherry Hill Rd	Separated Bikeway	Sidepath (West Side)
Industrial Pkwy	Columbia Pike	FDA Blvd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Lockwood Dr	Stewart La	White Oak Park Drwy	Striped Bikeway	Conventional Bike Lanes
	White Oak Park Drwy	New Hampshire Ave	Separated Bikeway	Sidepath (East Side)
Michelson Rd	New Hampshire Ave	Perimeter Rd	Separated Bikeway	Sidepath (Side TBD)
New Hampshire Ave	Columbia Pike	Lockwood Dr	Separated Bikeway	Sidepath (West Side)
	Lockwood Dr	Michelson Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
	Michelson Rd	Oaklawn Dr	Separated Bikeway	Sidepath (Both Sides)
	Oaklawn Dr	Overlook Dr	Separated Bikeway	Sidepath (Both Sides)
	Overlook Dr	Powder Mill Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
	Powder Mill Rd	Elton Rd	Separated Bikeway	Separated Bike Lanes (Two-Way, Both Sides)
	Elton Rd	I-495	Separated Bikeway	Sidepath (Both Sides)
Perimeter Rd**	Michelson Rd	FDA Blvd	Trail	Off-Street Trail

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Plum Orchard Dr	Broadbirch Dr	Cherry Hill Rd	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
Powder Mill Rd	New Hampshire Ave	Prince George's County	Separated Bikeway	Sidepath (North Side)
Stewart La	Columbia Pike	Old Columbia Pike	Separated Bikeway	Sidepath (Side TBD)
	Old Columbia Pike	Lockwood Dr	Striped Bikeway	Conventional Bike Lanes
Street B-5	Plum Orchard Dr	FDA Blvd	Separated Bikeway	Separated Bike Lanes (Two-Way, North Side)
Tech Rd	Columbia Pike	Industrial Pkwy	Separated Bikeway	Separated Bike Lanes (One-Way, Both Sides)
White Oak - FDA Connector	Lockwood Dr	FDA	Trail	Off-Street Trail

** Appropriate measures must be taken to minimize impacts to the former WSSC buildings. Any changes to the road cross section may require elevating the roadway out of the floodplain and reconstructing the stream channel upstream and downstream.*

*** Bikeway to be implemented along Perimeter Rd if approved by the federal government and / or through redevelopment of the adjacent multifamily dwelling units, whichever comes first.*

THIS PAGE INTENTIONALLY LEFT BLANK

BIKE PLAN CONTRIBUTORS

Project Team
David Anspacher, Project Manager
Stephen Aldrich
Tom Autrey
Larry Cole
Pam Dunn
Matt Folden
Laura Hodgson
Dan Janousek
Matt Johnson
Katie Mencarini
Russell Provost
Jon Ryder
Stephen Tu

Communications Team
Deborah Dietsch
Sam Dixon
Brian Kent
Kevin Leonard
Chris Peifer
Bridget Schwiesow

GIS / Information Services Team
Chris McGovern
Melissa Noakes
Vinay Suryavanshi

Community Advisory Group
Joe Allen, Resident of Gaithersburg
Kristin Blackmon, Bethesda Transportation Solutions and Bethesda Urban Partnership
Eva Chavez, Student Representative
Jack Cochrane, Montgomery Bicycle Advocates
Denise Cohen, Potomac Pedalers
Stacy Cook, Resident of Bethesda
Paul Daisey, Resident of Colesville
Peggy Dennis, Montgomery County Civic Federation
Alison Dewey, Resident of North Bethesda
Darrel Drobnich, Pedestrian Bicycle Traffic Safety Advisory Committee
Jay Elvove, Silver Spring Citizens Advisory Board
Emma Evans, Hispanic Chamber of Commerce
Janice Freeman, African American Chamber of Commerce
Joe Fritsch, Resident of Olney
Peter Gray, Washington Area Bicyclist Association
Richard Hoye, Action Committee for Transit
Renato Mendoza, CASA de Maryland

Jude Miller, Montgomery County Chamber of Commerce
Shawn Punga, Mid-Atlantic Off-Road Enthusiasts
Phil Shapiro, Resident of Kemp Mill
Geri Rosenberg, Resident
Deborah Turton, Resident of Damascus

Special thanks to the Montgomery County Department of Transportation, Maryland State Highway Administration, City or Gaithersburg, City or Rockville and City of Takoma Park for their collaboration in developing this plan.



Separated bike lanes on Maine Ave in Washington, DC

THE MONTGOMERY COUNTY

BICYCLE MASTER PLAN

PUBLIC HEARING DRAFT | DECEMBER 2017

MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION