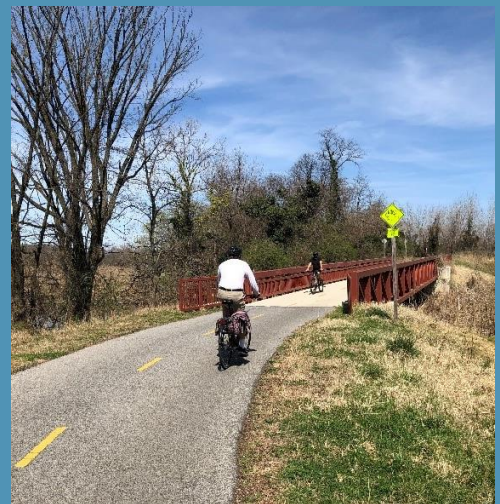
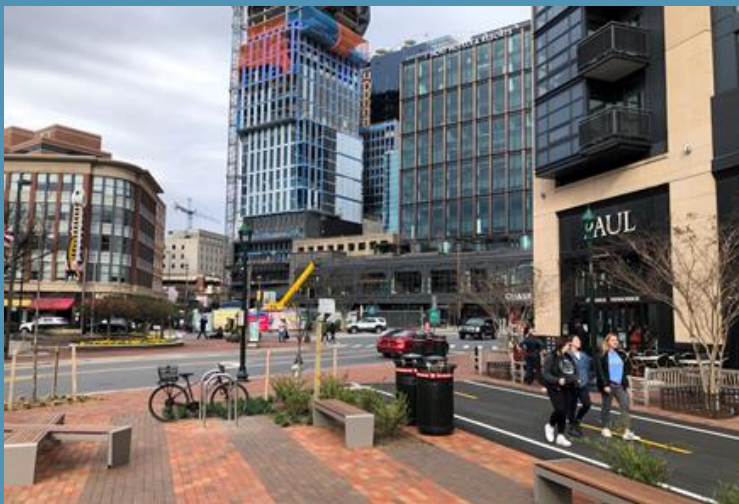


BICYCLE AND PEDESTRIAN PLAN FOR THE NATIONAL CAPITAL REGION

May 2022



National Capital Region
Transportation Planning Board

BICYCLE AND PEDESTRIAN PLAN FOR THE NATIONAL CAPITAL REGION

Prepared by Bicycle and Pedestrian Subcommittee of the TPB Technical Committee

Adopted on May 18, 2022

ABOUT THE TPB

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	5
Bicycling and Walking in the National Capital Region	5
Bicycling, Walking and the Transportation Planning Board	6
Plan Development and Organization	7
CHAPTER 1: PLANNING CONTEXT	9
Regional Planning	9
The Vision of the Transportation Planning Board	9
Visualize 2045	11
Equity	12
Transit Access Focus Areas	13
National Capital Trail Network	13
Regional Transportation Priorities Plan	16
Complete Streets	16
Green Streets	17
Air Quality and Bicycling	18
Transportation Improvement Program	19
Bicycle and Pedestrian Subcommittee	20
Access for All Advisory Committee	21
Bicycling, Walking, and the Regional Travel Demand Model	22
Regional Encouragement and Funding Programs	22
Commuter Connections	22
Transportation-Land Use Connections Program	23
Transportation Alternatives	23
Transit Within Reach	23
Regional Roadway Safety Program	24
Federal Policies	24
Routine Accommodation of Walking and Bicycling	24
Manual on Uniform Traffic Control Devices	26
The FAST ACT	27
Infrastructure Investment & Jobs Act of 2021	27
State Planning	29
District of Columbia	29
Maryland	30
Virginia	31
Local Bicycle and Pedestrian Planning	33
Planning for a “Low Stress” Network	35
Metrorail Silver Line Access	35
WMATA Bicycle and Pedestrian Access Planning	36
Outlook	37
CHAPTER 2: BICYCLING AND WALKING IN THE WASHINGTON REGION	39
Overview	39
US Census Bureau Information	40

2017/2018 Regional Travel Survey	45
Bicycle/Pedestrian Counts	48
Walking and Bicycling to Transit	52
CHAPTER 3: PEDESTRIAN AND BICYCLE SAFETY	55
Pedestrian Fatalities in the United States	55
Pedestrian and Bicyclist Fatalities in the Washington MSA	57
Pedestrian and Bicyclist Education and Enforcement: The “Street Smart” Campaign	61
Transportation Safety Subcommittee	62
CHAPTER 4: EXISTING FACILITIES FOR WALKING AND BICYCLING	64
Facility Types	65
Bike Parking	78
Capital Bikeshare	80
Micromobility	80
CHAPTER 5: RECOMMENDED PRACTICES	85
A. Incorporate bicycle and pedestrian elements in all jurisdictional planning and design policies. Adopt “Complete Streets” policies.	85
B. Improve inter-jurisdictional coordination to develop a continuous bicycle and pedestrian transportation system throughout the Washington metropolitan area. To that end, agencies should:	87
C. Develop and adhere to consistent bicycle and pedestrian facility design and construction standards in each jurisdiction:	88
D. Improve Access for Persons with Disabilities	89
E. Minimize roadway width, curb radii & crossing distance.	90
F. Set target vehicle speeds appropriate to surrounding land use.	91
G. Improve bicycle and pedestrian circulation within and between regional activity centers and the urban core.	91
H. Integrate bicycling and walking into the public transportation system.	92
I. Provide adequate bicycle support facilities.	93
J. Expand the Regional Bike Sharing Program	93
K. Realize the Transportation Benefits of Micromobility	93
L. Develop pedestrian and bicycle safety education and enforcement programs in all jurisdictions.	95
M. Encourage Walking and Bicycling	96
N. Each jurisdiction should develop a high visibility bicycle or pedestrian project to demonstrate the effectiveness of bicycling and walking as a short distance transportation mode.	97
O. Each agency should designate a bicycle coordinator and a pedestrian coordinator to oversee bicycle and pedestrian programs.	97
P. Integrate equity in bicycle and pedestrian planning.	98
CHAPTER 6: THE 2045 NETWORK	100
Buffer Analysis of the Planned Low Stress Network	101
Equity Emphasis Areas, Activity Centers, and Transit Access Focus areas	102
The 2045 Network Map	104
APPENDIX A: 2045 NETWORK PROJECTS	107

APPENDIX B: “DEEP DIVE” INTO PEDESTRIAN CRASHES IN THE WASHINGTON REGION	235
APPENDIX C: MODE OF ACCESS TO METRORAIL	245
APPENDIX E: GLOSSARY OF ACRONYMS	252
APPENDIX F: LINKS AND RESOURCES	253
TABLE 1: BICYCLE AND PEDESTRIAN PLANS IN THE NATIONAL CAPITAL REGION	34
TABLE 2: PEDESTRIAN COMMUTING IN LARGE METROPOLITAN AREAS	40
TABLE 3: BICYCLE COMMUTING IN LARGE METROPOLITAN AREAS	41
TABLE 4: ALL TRIPS/RTS	46
TABLE 5: COMMUTE TRIPS/RTS	46
TABLE 6: TRIP DISTANCES IN MILES/RTS	46
TABLE 7: PEDESTRIAN AND BICYCLIST FATALITIES & CRASHES/STREET SMART	57
TABLE 8: PLANNED BICYCLE AND PEDESTRIAN FACILITIES	100
TABLE 9: PLANNED LOW STRESS FACILITIES	101
TABLE 10: PLANNED LOW-STRESS NETWORK VS. NATIONAL CAPITAL TRAIL NETWORK	101
TABLE 11: PEDESTRIAN CRASH SEVERITY	236
TABLE 12: PEDESTRIAN INJURY SEVERITY BY TIME OF DAY	237
TABLE 13: PEDESTRIAN INJURY SEVERITY BY DAY OF THE WEEK	238
TABLE 14: PEDESTRIAN INJURY SEVERITY BY MONTH	238
TABLE 15: INJURY SEVERITY BY PEDESTRIAN LOCATION	239
TABLE 16: INJURY SEVERITY BY PEDESTRIAN AGE	241
TABLE 17: PEDESTRIAN INJURY SEVERITY BY LIGHTING CONDITION	241
TABLE 18: PEDESTRIAN INJURY SEVERITY BY FUNCTIONAL CLASS	242

EXECUTIVE SUMMARY

Purpose

This *Bicycle and Pedestrian Plan for the National Capital Region* identifies the capital improvements, studies, actions, and strategies that the region proposes to carry out by 2045 for major bicycle and pedestrian improvements in state, local, and agency plans, and shows how implementation of these improvements, actions, and strategies will advance the goals of the region’s long range transportation plan, *Visualize 2045*. It serves as a resource for planners and the public.

Overview

This plan is an update to the 2015 *Bicycle and Pedestrian Plan for the National Capital Region*.

The National Capital Region Transportation Planning Board (TPB), composed of governments and agencies from around metropolitan Washington, has developed this plan with the support of its Bicycle and Pedestrian Subcommittee. The plan incorporates the goals for walking and bicycling from the *TPB Vision* (1998), the current *Visualize 2045* long range plan, and other TPB planning documents and policies.

In addition to the *TPB Vision*, *Visualize 2045*, and its predecessor plans, the *Bicycle and Pedestrian Plan for the National Capital Region* draws on and has been shaped by regional, federal, and state guidance on bicycle and pedestrian facilities and a wealth of state and local bicycle, pedestrian, and trail plans from around the region.

In contrast to the fiscally constrained element of the long-range plan, the *Bicycle and Pedestrian Plan* includes both funded and unfunded projects. Projects in this plan may not yet have funding identified to support their implementation.

Planning Context

A number of federal, state, and local activities, as noted above, provide the planning context (Chapter 1) for this document. At all levels, the trend is to require or strongly encourage the routine inclusion of pedestrian and bicycle facilities in all transportation, a policy sometimes known as “Complete Streets”.

The TPB has also endorsed an initiative to improve walk and bike access to transit and to build a connected, regional long-distance “National Capital Trail Network”.

Jurisdictions and agencies around the region maintain active bicycle and pedestrian planning and coordination programs. Within this context, the TPB incorporates bicycle and pedestrian considerations into overall regional transportation planning, the bike-to-work components of the Commuter Connections program, and the Transportation-Land Use Connections, Transit Within Reach, and Regional Roadway Safety technical assistance programs. The region’s Access for All

Advisory Committee advises the TPB on issues relating to minority, low-income, and disability communities, which often relate to pedestrian access and safety.

The TPB and the Metropolitan Washington Council of Governments (COG) support bicycling and walking and their health, community, pollution reduction, and congestion reduction benefits for the region.

Bicycling and Walking in the National Capital Region

The state of bicycling and walking in the Washington region (Chapter 2) includes success stories, challenges, and opportunities for improvement. Data from the 2017/2018 Regional Travel Survey, the U.S. Census, surveys, and other sources provide an understanding of where bicycling and walking are found throughout the region, as well as who is walking and bicycling. These data may point to opportunities for increasing these activities and support the need to consider bicycling and walking in overall roadway and transit planning and engineering.

Safety

Bicycle and pedestrian safety (Chapter 3) is a key challenge for the region. The plan describes the scope of the safety problem, its geographic and demographic distribution across the region, and the legal rights and responsibilities of drivers, pedestrians, and bicyclists.

Unfortunately, bicycle and pedestrian safety issues are found throughout the region. The region and member agencies are actively pursuing a number of engineering, enforcement, and educational strategies to reduce deaths and injuries.

Existing Facilities

The metropolitan Washington region benefits from numerous popular bicycle and pedestrian facilities in place in our communities (Chapter 4). The region's transit agencies have also worked to provide access and accommodation of bicycling and walking to and on their systems. A goal of this plan is to complement and augment the existing system of facilities.

Recommended Best Practices

Convenient and safe bicycle and pedestrian access is a key goal of the TPB's *Vision* and the Council of Governments' *Region Forward 2050* plans. To help achieve this, the Bicycle and Pedestrian Subcommittee developed a set of recommended best practices (Chapter 5) for the design and implementation of bicycle and pedestrian facilities, as well as for the incorporation of bicycling and walking considerations into overall roadway and transit design. Best practices are based upon national and state laws and guidelines.

Planned Bicycle and Pedestrian Facilities and Improvements

Improvements included on the plan's list of regional bicycle and pedestrian projects (overview in Chapter 6 and the full listing in Appendix A) were identified, submitted, and reviewed by agency staffs of TPB member jurisdictions.

The Bicycle and Pedestrian Plan for the National Capital Region includes 1,650 bicycle and pedestrian facility improvement projects from across the region. If every project in the plan is implemented, in 2045 the region will have added approximately 138 miles of protected bicycle lanes, 30 miles of buffered bicycle lanes, 363 miles of standard bicycle lanes, and over 1,700 miles of shared-use path. The overall network length will increase by approximately 2,500 miles.

By 2045 the region will have approximately 3,600 miles of bike lanes and shared use paths if it implements the projects in this plan—over three times the current total.

The Washington region is a national leader in design and services. Treatments such as protected bike lanes, protected intersections, High-Intensity Activated CrossWalk (HAWK) signals, and floating bus stops were developed or refined here. The Washington region has also been a national leader in micromobility, including Capital Bikeshare and numerous e-scooter and e-bike rental services.

Costs

Total estimated cost of projects in the draft plan is about \$5 billion (2021 dollars). Total plan cost was imputed based on planned facility mileage and project types. Project-level cost estimates, if provided, should be considered as order-of-magnitude planning estimates and in most cases do not reflect engineering-level estimates.

Project Infotrak

Development of the *Bicycle and Pedestrian Plan for the National Capital Region* has benefited from a recently developed on-line project database, Project Infotrak, a resource separate from the printed document. Agency staff are able to view, enter, and edit their project listings on-line in the database. Project Infotrak will facilitate keeping the regional list accurate and up-to-date, and it eliminates the duplication of records and that formerly existed between the Transportation Improvement Program and bike-ped project databases.

A public access version of the list of bicycle and pedestrian projects, and an interactive map of those projects, will be made available on the COG web site.

Outlook

For over 20 years successive regional plans have called for convenient, safe bicycle and pedestrian access, walkability in regional activity centers and the urban core, reduced reliance on the

automobile, increased walking and bicycling, inclusion of bicycle and pedestrian facilities in new transportation projects and improvements, and implementation of a regional bicycle and pedestrian plan, developing specific strategies to make it happen. Today the region is well on its way to making that vision a reality. The *Bicycle and Pedestrian Plan for the National Capital Region* provides a blueprint for providing bicycle and pedestrian access to virtually all of the region's developed areas.

INTRODUCTION

This section briefly describes the role of walking and bicycling within the region’s transportation system and transportation planning. It also provides a summary of the development and organization of this Bicycle and Pedestrian Plan for the National Capital Region.

Bicycling and Walking in the National Capital Region

The Washington region is nationally known for the quality, beauty, and extent of its bicycle paths. Its walkable core neighborhoods attract residents and visitors alike. The region has a strong foundation of walking and bicycling facilities to build upon.

Taken together, bicycling and walking are a significant and growing mode of transportation in the Washington region. According to the Transportation Planning Board’s 2017-2018 Regional Travel Survey walking and bicycling account for 11% of all trips in the Washington region, up from 9% in 2008. Bicycling to Work in the District of Columbia tripled in ten years, from 1.6% in 2008 to 5.3% in 2018.



Figure 1: Green Bike Lane/TPB/Michael Farrell

Recent years have seen progress for bicyclists and pedestrians. Several major new trails and bridges have opened, and most local governments have adopted bicycle, pedestrian, and/or trail plans. Most of the transit agencies in the region have added bike racks to their buses. Bicycle or pedestrian coordinators and trail planners are now found at most levels of government. In accordance with federal guidance and state and local Complete Streets policies, pedestrian and bicycle facilities are routinely provided as part of larger transportation projects. Employers are investing in bike facilities at work sites, and developers are including paths in new construction. Capital Bikeshare, which launched in September 2010, has been a dramatic success, and now features over 5,000 bicycles at over 600 stations.

Walking and bicycling account for 11% of all trips in the region



Figure 2: NOMA/Gallaudet Metro Station and Metropolitan Branch Trail/TPB/Michael Farrell

The NOMA/Gallaudet Metro Station incorporates a shared-use path and bicycle parking

Bicycling and walking could reach a greater potential in the Washington region, however. Many trips currently taken by automobile could be taken by bicycle. The median work trip length for auto commuters in the Washington Metropolitan Statistical Area is nine miles.¹ But for non-work trips, which are more than $\frac{3}{4}$ of all trips, the median distance is only 3.1 miles.

Many people who live far from their jobs, but closer to transit or a carpool location, could walk or bike to transit or the carpool

instead of driving.

Destinations such as schools, shopping, and recreational facilities are often close enough to walk or bicycle. Bicycling and walking have considerable potential to displace automobile trips if suitable transportation, design, safety, parking, school siting, and land development policies are followed.

Bicycling, Walking and the Transportation Planning Board

The National Capital Region Transportation Planning Board (TPB) has long recognized the benefits of bicycling and walking in the region's multi-modal transportation system. The Transportation Planning Board's *Transportation Vision for the 21st Century*, adopted in 1998, emphasizes bicycles and pedestrians in its goals, objectives, and strategies.

The region has a growing network of shared-use paths

Since then, the TPB has adopted a regional trails plan, known as the National Capital Trail Network, prioritized pedestrian, and bicycle initiatives in its long-range transportation plan, and promoted the adoption of "Complete Streets" policies, which have led to the incorporation of pedestrian and bicycle accommodations in nearly every new transportation project.

¹ 2017-2018 Regional Travel Survey,



Figure 3: Woodrow Wilson Bridge/TPB/Michael Farrell

Complete Streets in Action: The Woodrow Wilson Bridge Trail opened in 2009

COMPLETE STREETS

The National Capital Region Transportation Planning Board adopted a Complete Streets policy in May 2012. The policy defined a complete street as one that safely and adequately accommodates motorized and nonmotorized users, including pedestrians, bicyclists, motorists, freight vehicles, emergency vehicles, and transit riders of all ages and abilities, in a manner appropriate to the function and context of the facility. The TPB endorsed the concept of Complete Streets and encouraged its member governments, if they had not already done so, to adopt a Complete Streets policy.

All three States and 91% of the local governments in the Washington region now have Complete Streets policies.

All three states and 91% of local governments have a Complete Streets Policy

Plan Development and Organization

This plan is intended to help fulfill the goals of *Visualize 2045* and the *TPB Vision* for bicyclists and pedestrians. It includes performance measures that will show progress towards regional goals.

This plan has been prepared by the National Capital Region Transportation Planning Board, the federally designated Metropolitan Planning Organization (MPO) for the Washington region. The TPB is composed of representatives from the 24 cities and counties, including the District of Columbia, that are members of the Metropolitan Washington Council of Governments (COG), the three state-level transportation agencies, the Washington Metropolitan Area Transit Authority (WMATA), the

Metropolitan Washington Airports Authority (MWAA), four federal agencies, the General Assemblies of Maryland and Virginia, and private transportation service providers.

This document presents the long-range Bicycle and Pedestrian Plan for the Washington Region through the year 2045. The plan includes a list of regional projects identified by the TPB member jurisdictions, accompanied by recommended best practices and a description of existing facilities and regional trends for bicycling and walking. This plan includes both funded and unfunded projects. It recommends referring to state and national design guidelines for bicycle and pedestrian facilities.

This update of the *Bicycle and Pedestrian Plan for the National Capital Region* seeks to reflect the goals, objectives, and strategies of the 1998 *TPB Vision, Visualize 2045*, and the approved *National Capital Trail Network*, while building on information from previous plans.

Pedestrian access and safety receive enhanced attention in this update, reflecting increased involvement in transportation safety planning by the TPB. Though pedestrian planning takes place primarily at the county, city, and neighborhood level, there is a role for regional pedestrian planning, in safety, public education, and connections to transit and between jurisdictions. This plan documents how the planned projects will serve activity centers, selected high-capacity transit stations, and low income and minority areas.

PROJECT INFOTRAK

Development of the *Bicycle and Pedestrian Plan for the National Capital Region* has benefited from a recently developed on-line plan project database, Project Infotrak, a resource separate from the printed document. Agency staff are able to view, enter, and edit their project listings on-line in the database. Projects that can be mapped have associated GIS layers. GIS mapping enables better analysis of how the network of planned projects will serve regional goals.

Project Infotrak will facilitate keeping the regional list accurate and up to date and eliminates the duplication of records that formerly existed between the Transportation Improvement Program (TIP) and bicycle and pedestrian project databases. New TIP projects that include bicycle and pedestrian accommodation are automatically added to the list of bicycle and pedestrian projects.

A public access version of the list of bicycle and pedestrian projects, and an interactive map of those projects, will be made available on the COG web site.

CHAPTER 1: PLANNING CONTEXT

There are numerous plans, policies, and goals in the region that both affect and are affected by the level of walking and bicycling. This section describes the role of walking and bicycling in regional, federal, state, and local planning and policies.

Regional Planning

THE VISION OF THE TRANSPORTATION PLANNING BOARD

The National Capital Region Transportation Planning Board (TPB) is the Metropolitan Planning Organization for the Washington region. It brings key decision-makers together to coordinate planning and funding for the region's transportation system.

The TPB's official vision statement for the region, the *Transportation Vision for the 21st Century*, adopted in 1998, is meant to guide regional transportation investments. It lays out eight broad goals, with associated objectives and strategies to help the region reach them.

**The TPB Vision
calls for more
walking and
bicycling**

The *Vision* is supportive of pedestrians and bicyclists. It calls for:

- Convenient, safe bicycle and pedestrian access
- Walkable regional activity centers and urban core
- Reduced reliance on the automobile
- Increased walk and bike mode share
- Including bicycle and pedestrian facilities in new transportation projects and improvements
- Implementation of a regional bicycle and pedestrian plan

Other goals of the *Vision* affect bicyclists and pedestrians, such as: maintaining the existing transportation system, reducing per capita vehicle miles traveled, linking land use and transportation planning, and achieving enhanced funding for transportation priorities.

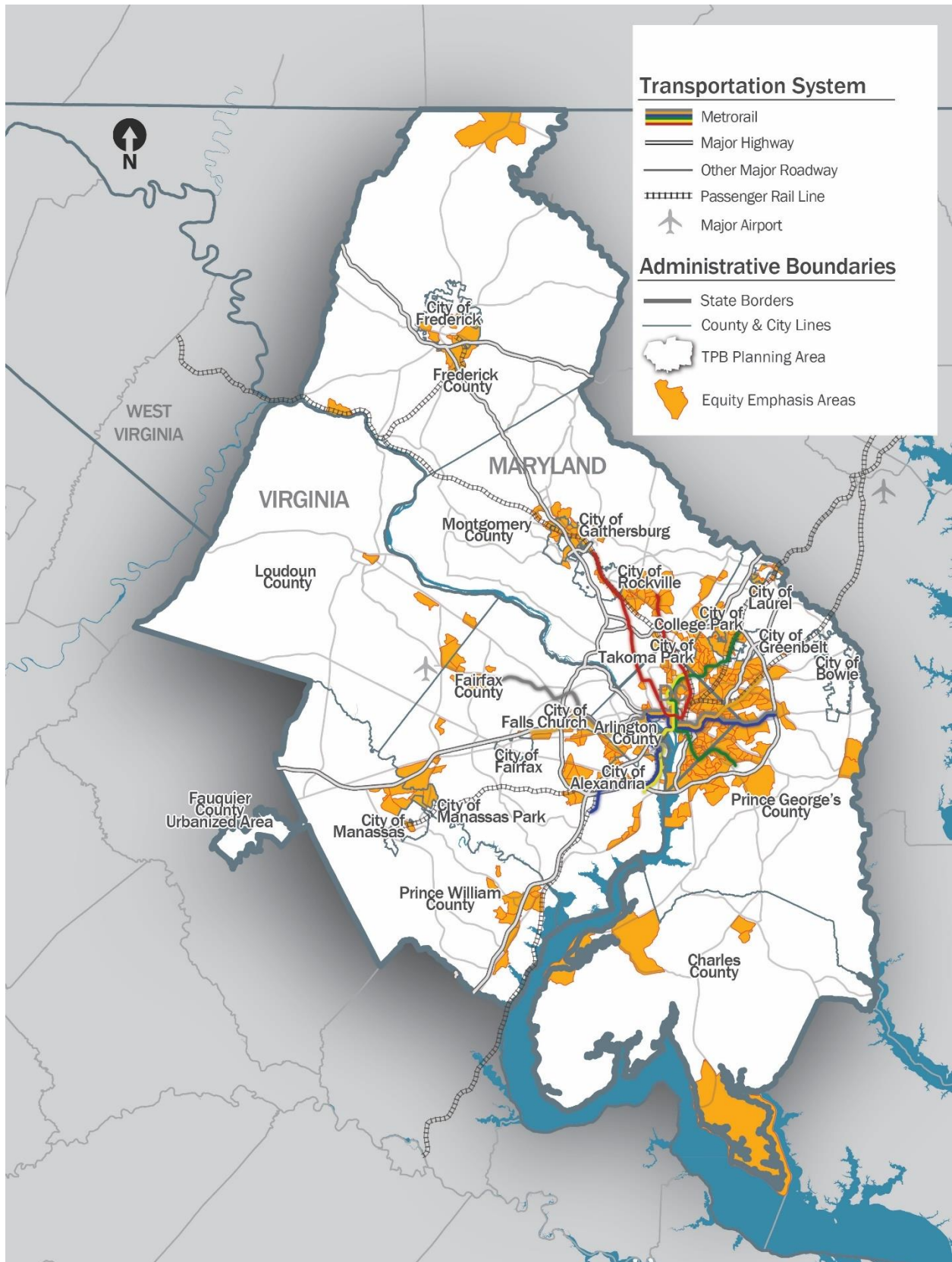


Figure 4: National Capital Region Transportation Planning Board Membership Area

Visualize 2045

Visualize 2045, which was approved by the Transportation Planning Board in October 2018 and amended in 2020, is the current federally mandated, long-range transportation plan for the National Capital Region. An updated version of *Visualize* is slated for public release in mid-2022.

Visualize 2045 contains both projects that the region expects to be able to fund (the constrained element) and unfunded (aspirational) elements.

Financially Constrained Element

Federal regulations require the TPB to develop a long-range transportation plan identifying the projects expected to be funded within a minimum planning horizon of 20 years. The TPB must demonstrate that there is funding available for those projects. The total expenditures cannot exceed the total anticipated funding. The TPB must also analyze the plan for its effect on the region's air quality.

This kind of plan is known as a financially constrained long-range plan. Future population growth, congestion, and travel mode shares are forecast based on the transportation network for which funding is available.

The constrained element predicts 45% growth in walk and bike trips by 2045, much greater than the expected 23% increase in population and 20% increase in vehicle-miles traveled.

Aspirational Element

Visualize 2045 also represents a new kind of long-range planning effort in this region. For the first time, in addition to projects that the region's transportation agencies expect to be able to afford between now and 2045, the plan includes aspirational projects, programs, and policies that go beyond financial constraints.

The latest information on the 2022 update to the plan can be found at the [Visualize 2045 web site](#). In addition, an [interactive companion](#) is available to view Visualize 2045 projects and initiatives in a story map.

Visualize 2045 proposes seven aspirational initiatives which, if enacted, would have the potential to significantly improve the region's transportation system performance compared to current plans and programs. *Visualize* goes beyond earlier strategic plans, in that it identifies specific locations in need of improvements.

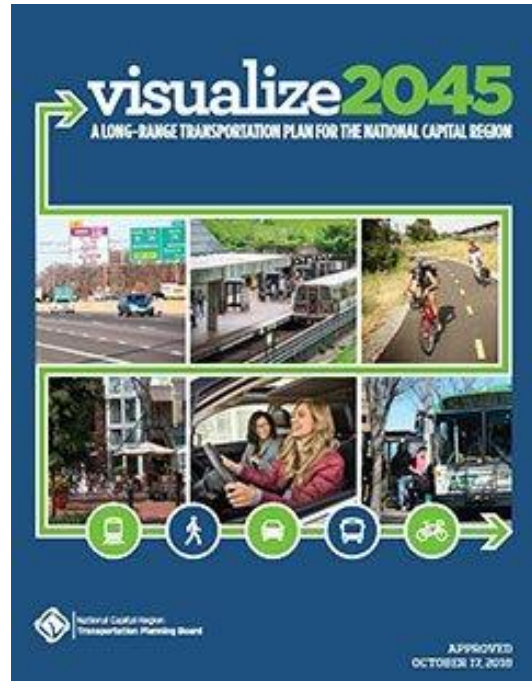


Figure 5: Visualize 2045

The seven Aspirational Initiatives are:

- Bring Jobs and Housing Closer Together
- Expand Bus Rapid Transit and Transitways
- Move More People on Metrorail
- Provide More Telecommuting and Other Options for Commuting
- Expand Express Highway Network
- **Improve Walk and Bike Access to Transit**
- Complete the **National Capital Trail Network**

Most of these initiatives imply a greater role for walking and bicycling. Bringing jobs and housing closer together echoes longstanding TPB goals and makes walking and bicycling for transportation more feasible. Increased transit service and improving walk and bike access to transit mean more walking and bicycling. Completing the National Capital Trail Network would provide a continuously connected, high quality regional and long-distance bicycle and pedestrian network.

Projects that will advance the Aspirational Initiatives receive favorable consideration for the competitive grant and technical assistance funds that TPB administers, such as the *Transportation-Land Use Connections* and *Transportation Alternatives* programs. Additionally, *Visualize 2045* identifies specific trails and transit stations to be prioritized for improvements.

EQUITY

In July 2020, the TPB adopted Resolution R1-2021 to establish equity as a fundamental value and integral part of all TPB work activity. TPB and its staff has committed that our work together will be anti-racist and will advance equity. Equity, as a foundational principle, will be woven throughout TPB's analyses, operations, procurement, programs, and priorities to ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents. This will recognize that past actions have been exclusionary or have had disparate negative impacts on people of color and marginalized communities, including institutionalized policies and practices that continue to have inequitable impacts today, and commits to act to correct such inequities in all our programs and policies.

Also, in July 2020, the TPB adopted Resolution R3-2021, which established the Regional Roadway Safety Program, a competitive technical assistance program directed at improving roadway safety.² The resolution also specified that TPB would promote transportation safety in an equitable, anti-racist manner. At a minimum, this means that TPB's programs are evaluated in part based on their effects on poor and minority populations.

Low income and minority populations in the Washington region are disproportionately killed or injured on the roadways, especially as pedestrians. One explanation is the historic legacy of postwar suburban development and road building, which often gave a low priority to the needs of people on foot or taking transit. As people who earn low incomes move into the suburbs, they too often find themselves in an unsafe environment for walking.

² <https://www.mwco.org/transportation/planning-areas/management-operations-and-safety/roadway-safety/regional-safety-program/>

This plan, when implemented, will make the transportation system safer and easier to use for people on foot. It will serve the Equity Emphasis Areas (minority and low-income areas), by providing access to a regional network of high-quality walking and bicycling facilities, by making it easier to walk to transit, and by making it safer to walk everywhere.

When the planned network of bicycle and pedestrian facilities is complete, 80% of the Equity Emphasis Areas in the region will have high quality facility, usually a shared-use path, built within their boundaries.

TRANSIT ACCESS FOCUS AREAS

At its July 2020 meeting, the TPB adopted Resolution R4-2021 to approve a regional list of 49 Transit Access Focus Areas (TAFAs). The TAFAs include Metrorail stations, commuter rail, light rail, and selected bus transit centers. The TAFAs are rooted in the region's long-range transportation plan, *Visualize 2045*, and its aspirational initiative to **Improve Walk and Bike Access to Transit**.

TPB was able to identify those stations that had the greatest potential for increasing ridership through improved pedestrian access, based on the stations' effective half-mile walksheds given their existing pedestrian network, and on their density of people and jobs.

The TPB approved 49 TAFAs and also asked member jurisdictions to:

...Prioritize projects, programs, and policies that will implement improvements in the Transit Access Focus Areas. All projects, programs, and policies must be implemented in an environmentally sensitive and sustainable manner, consistent with the TPB Vision.

NATIONAL CAPITAL TRAIL NETWORK

The National Capital Trail Network, which was adopted by the TPB in July 2020, is a trails plan for the National Capital Region. It will be a continuous network of long-distance, mostly off-street facilities, designed for non-motorized use. The network will provide healthy, low-stress access to open space and clean, inexpensive, reliable transportation for people of all ages and abilities.³

When complete, the National Capital Trail Network will include over 1400 miles of shared use paths and other low-stress facilities, of which 645 miles already exist, and 780 miles are planned.

Visualize 2045 calls for the completion of the National Capital Trail Network. The network will provide high-quality bicycle and pedestrian access for most of the region's people and jobs. 70% of the region's population lives within a half-mile of the network, and 98% of the jobs are within two miles

³ The National Capital Trail Network benefited from concurrent trails planning work for the urban core and inner suburbs done by the Capital Trails Coalition, an effort housed at the Washington Area Bicyclist Association and funded by a grant from REI. The Capital Trails Coalition also promotes the completion of the trail network within the urban core and the inner suburbs. The Capital Trail Network plan took nearly three years to develop. National Park Service and TPB staff participated in the plan development. To keep the task of creating a regional trail plan manageable, the footprint of the Capital Trail Network was limited to the urban core and inner suburbs, which is the Washington Area Bicyclist Association service area.

of the network. 136 of the region's 141 Activity Centers are within a half-mile of the network, as are 308 of the 351 Equity Emphasis Areas.

When the TPB adopted the trail network, it also asked its member jurisdictions to:

“Prioritize projects, programs, and policies that will implement portions of the National Capital Trail Network. All projects, programs, and policies must be implemented in an environmentally sensitive and sustainable manner, consistent with the TPB Vision”.

The network will be used to prioritize funding for the Transportation Alternatives Program and the Transportation – Land Use Connections (TLC) Program.

The network was developed using the following facility types and design criteria:

- Off-Street Paths:
 - 10'+ wide for new construction.
 - 8' minimum for existing facilities
 - Narrower in short segments if necessary
 - Paved or firm surface such as crushed limestone
 - Designed for non-motorized users (<20 mph design speed)
- On-street:
 - Protected from moving traffic (i.e., parked cars, curb, flexposts)
 - Short, unprotected connections where necessary for connectivity
 - Traffic-calmed, low-stress “bicycle boulevards” are also acceptable
- Connectivity
 - Directly connected to the regional network
 - Suitable for both transportation and recreation
 - Existing or planned facilities are acceptable
 - Planned facilities must be in an approved plan

To develop this network TPB staff gathered information from the Capital Trails Coalition and from jurisdictions which the Capital Trails Coalition plan did not include, including Charles, Frederick, Loudoun, and Prince William Counties. The network will be updated regularly to reflect the adoption of new agency bicycle and pedestrian plans.

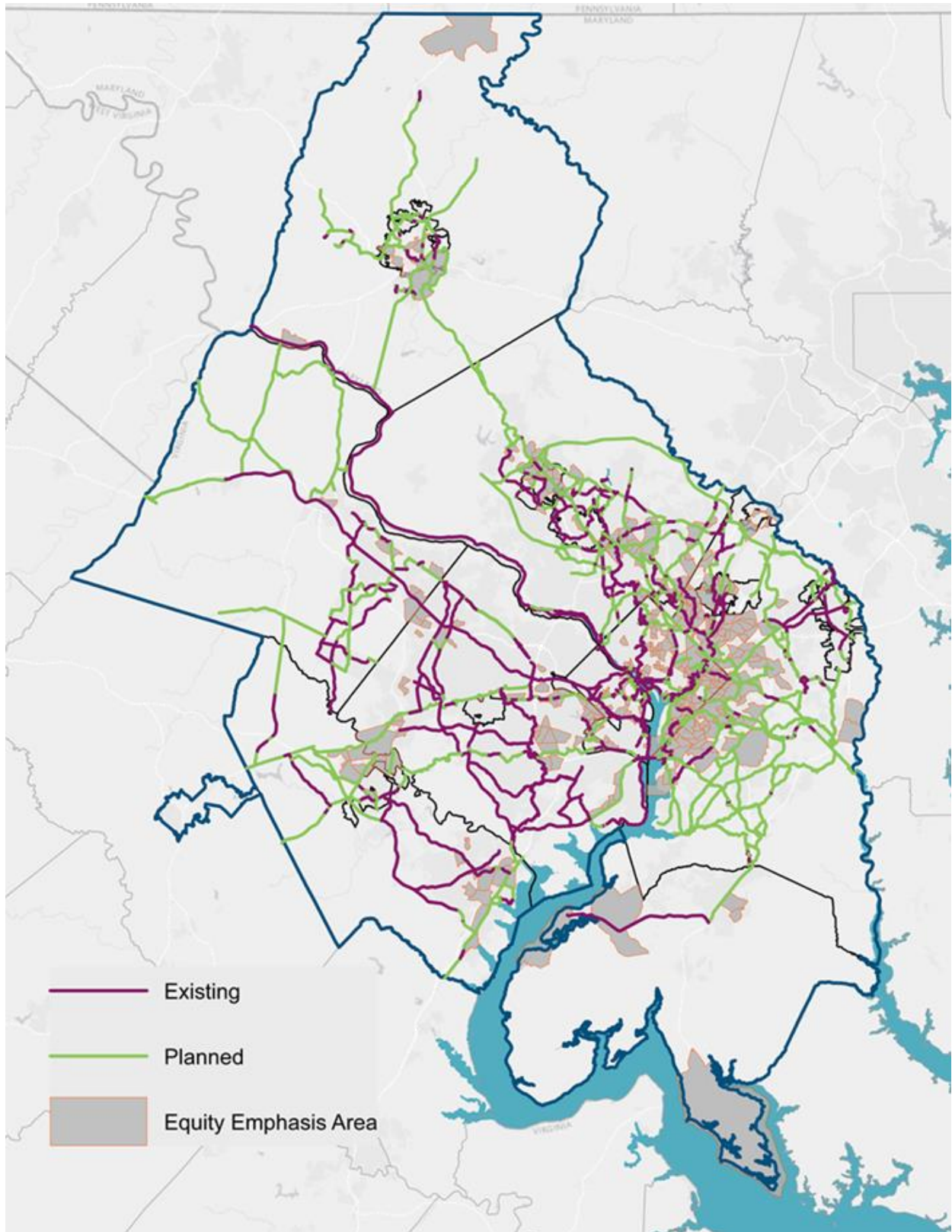


Figure 6: National Capital Trail Network (Source COG/TPB 2022)

REGIONAL TRANSPORTATION PRIORITIES PLAN

In January 2014, the TPB approved, the *Regional Transportation Priorities Plan* (RTPP). The RTPP built on the *Vision* goals by identifying strategies with the greatest potential to respond to our most significant transportation challenges. The strategies were intended to be complementary, to make better use of existing infrastructure, and to be "within reach" both financially and politically. The RTPP is a precursor to *Visualize 2045*.

Bicycle and pedestrian modes are prominent in the RTPP. It calls for:

- **Improved access to transit stops and stations**, connecting them to nearby neighborhoods and commercial areas with sidewalks, crosswalks, and bridges.
- **Incentives to use commute alternatives** such as transit, carpool, vanpool, bicycling, walking, telework, and living closer to work.
- **Expanded pedestrian and bicycle infrastructure**, including
 - Sidewalks, crossings, traffic calming
 - Bicycle lanes/paths, bicycle parking, bikeshare
 - Workplace amenities for bicyclists.
- Growth concentrated in **Walkable, Bikeable Activity Centers**
- **Improved circulation** within activity centers through enhanced
 - Pedestrian and bicycle infrastructure
 - Local bus service
 - Street connectivity

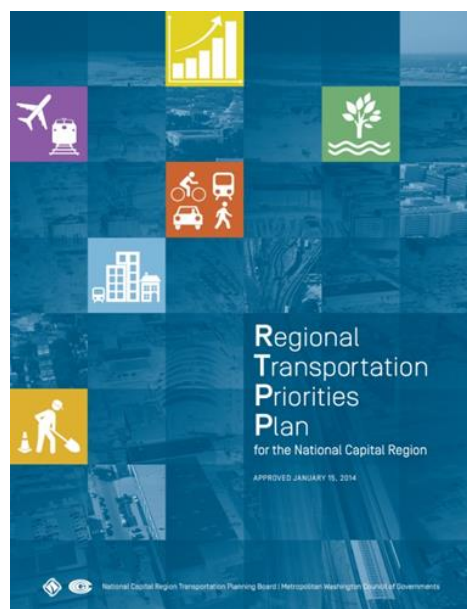


Figure 7: Regional Transportation Priorities Plan

COMPLETE STREETS

In May 2012 the TPB approved a *Complete Streets Policy for the National Capital Region*. The policy defines a Complete Street as a “facility that safely and adequately accommodates motorized and non-motorized users, including pedestrians, bicyclists, motorists, freight vehicles, emergency vehicles, and transit riders of all ages and abilities, in a manner appropriate to the function and context of the facility”. The TPB endorsed the concept of Complete Streets, provided a sample policy template, and urged its members who had not already adopted such a policy to do so.

The significance of Complete Streets is that future pedestrian and bicycle projects are likely to be built as part of larger transportation projects. Therefore, far more such projects are likely to be built. Moreover, designing and building with pedestrians and bicyclists in mind from the start is far more cost-effective than retrofitting after the fact.

As of 2021 all three state departments of transportation and 91% of local jurisdictions (including DC) had adopted a Complete Streets policy. Complete Streets is now standard practice.

Under Complete Streets, accommodation for pedestrians and bicyclists are now typically provided as part of larger transportation projects. Prior to the adoption of Complete Streets and precursor policies, these may have been seen as optional amenities.

GREEN STREETS

In February 2012 the TPB adopted a voluntary regional Green Streets Policy. The policy defines a Green Street as an “alternative to conventional street drainage systems designed to more closely mimic the natural hydrology of a particular site by infiltrating all or a portion of local rainfall events”. A Green Street uses trees, landscaping, and related

DC's Urban Forestry Program helps keep dc cool and green

Green Streets Environmentally Friendly Landscapes for Healthy Watersheds

environmental site design features to capture and filter stormwater runoff within the right of way, while cooling and enhancing the appearance of the street.⁴



Green Streets benefit pedestrians and bicyclists by cooling and beautifying the street, making it a more pleasant place to walk or bike. Green Streets treatments may compete with pedestrians and bicyclists for space but can often be placed in traffic calming features such as bulb-outs and landscaped islands. Road diets and traffic calming projects can free up space for Green Streets treatments.⁵

A warming climate means that reducing urban temperatures will be even more important for maintaining the walkability and bikeability of urban areas.

Green Streets are mostly an urban phenomenon. Greening the streets and sidewalks is an effective mitigation for urban challenges such as the heat island effect, stormwater runoff, and combined sewage



Watershed Management Division
Department of Environmental Protection
255 Rockville Pike, Suite 120
Rockville, MD 20850
www.montgomerycountymd.gov/watershedrestoration

Figure 8: Green Streets/Montgomery County Department of Environmental Protection

⁴ <https://ddot-urban-forestry-dcgis.hub.arcgis.com/>

⁵ <https://ddot.dc.gov/GreenInfrastructure>

overflow.⁶ Inner suburban places such as Arlington, Hyattsville, and Wheaton that face similar issues have also been working to green their streets.⁷

As of 2020, half the local governments had adopted a Green Streets policy, particularly the more urbanized jurisdictions. Less dense suburban and rural areas already benefit from significant green space and are less likely to pursue Green Streets policies.

AIR QUALITY AND BICYCLING

Walking and bicycling are near zero emission modes of transportation. At the same time, cleaner air helps pedestrians and bicyclists, who are more vulnerable than motorists to smog and particulate pollution. During “code red” air quality days people are typically urged to avoid outdoor exercise.

Fortunately, the metropolitan Washington region has made tremendous progress in its air quality thanks to decades of actions at the federal, state, and local government levels.⁸ The number of bad air days (code orange or worse) fell by 97% between 1997 and 2020.⁹ The region had zero code red days in 2021, and only eight code orange days.¹⁰ The number of bad days for fine particulates has fallen to zero. These declines have come even as population and vehicle miles traveled have grown.

Within transportation, reductions in emissions of NO_x and VOCs have resulted mostly from federal requirements for cleaner, more fuel-efficient vehicles and for cleaner-burning fuels. Efforts to reduce roadway congestion and to encourage less driving have also contributed.

Bicycling and Greenhouse Gases

Progress on greenhouse gas emissions, while significant, has been much less than for NO_x, Volatile Organic Compounds, and particulates.¹¹ Transportation and mobile sources account for a large share of greenhouse emissions.¹²

Bicycling is the most energy-efficient form of transport

Walk and bike trips do not contribute significantly to greenhouse gas emissions. Increased walking and bicycling could help reduce the region’s greenhouse gas emissions.

⁶ <https://www.montgomerycountymd.gov/DEP/Resources/Files/brochures/GreenStreetsHandout.pdf>

⁷ <https://potomac.org/blog/2020/3/1/dc-green-streets>

⁸ <https://www.mwcog.org/environment/data-and-tools/air-quality-progress-dashboard/>

⁹ <https://www.mwcog.org/environment/data-and-tools/air-quality-progress-dashboard/>

¹⁰ <https://www.mwcog.org/environment/data-and-tools/air-quality-progress-dashboard/>

¹¹ <https://www.mwcog.org/documents/2017/09/23/air-quality-trends-air-quality-air-quality-data-featured-publications/>

¹² <https://www.mwcog.org/documents/2018/02/08/metropolitan-washington-community-wide-greenhouse-gas-emissions-inventory-summary-featured-publications-greenhouse-gas/>

Bicycling is the most energy-efficient mode of transportation. Accounting for the life-cycle carbon emissions of the vehicle, a bicycle emits 1/30 the greenhouse gases of a fossil fuel vehicle, and 1/10 the emissions of an electric vehicle.¹³

To the extent that the region can divert motorized trips to walking and bicycling, it can help reduce these emissions. Active transport is part of the regional strategy to reduce greenhouse gas emissions.

TRANSPORTATION IMPROVEMENT PROGRAM

The Transportation Improvement Program (TIP) is a federal obligation document which describes the planned schedule in the next four years for distributing federal, state, and local funds for state and local transportation projects. The TIP represents the intent of transportation agencies to construct or implement specific projects in the short term and identifies the anticipated flow of federal funds and matching state or local contributions. It is a multimodal list of projects that includes highway projects, rail, bus and streetcar projects, and bicycle and pedestrian improvements. It also includes roadway and transit maintenance projects, operational programs, and many other transportation-related activities.

The TPB's FY 2021–2024 TIP contains over 300 project records and more than \$15 billion in funding across the region. The TIP is a dynamic budget document and is amended and modified on a weekly/monthly basis.

The TIP includes \$1.475 billion for pedestrian and bicycle projects, or roughly 10% of total funding.

Funding for bicycle and pedestrian projects in the TIP has increased sharply. For example, the six-year Fiscal Year 2013-2018 TIP included \$313 million for bicycle and pedestrian projects. Annual bike/ped project funding in the current TIP is seven times what it was in the FY 2013-2018 TIP.

The TIP does not provide a complete picture of the region's planned investments in bicycle and pedestrian infrastructure, however, because projects not utilizing federal surface transportation funding often are not required under federal law to be reflected in the TIP. Every submitting agency reported

The Transportation Improvement Program includes \$1.475 billion for pedestrian and bicycle projects.

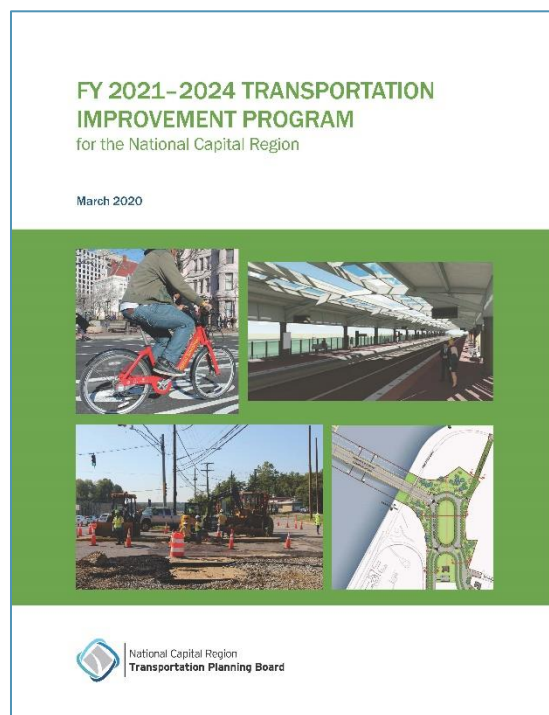


Figure 9: FY 2021-2024 TIP

¹³ <https://theconversation.com/cycling-is-ten-times-more-important-than-electric-cars-for-reaching-net-zero-cities-157163>

that their jurisdiction has a Complete Streets policy, which implies pedestrian and bicycle accommodation, the cost of which is not always calculated or reported.

BICYCLE AND PEDESTRIAN SUBCOMMITTEE

The Bicycle and Pedestrian Subcommittee of the TPB Technical Committee advises the TPB, TPB Technical Committee, and other TPB committees on bicycle and pedestrian considerations in overall regional transportation planning. It meets six times per year.

One of the subcommittee's most important functions is information exchange, both at its regular meetings and at sponsored training events. Training events are held at least twice per year. They address issues of interest to the TPB member agencies, including emerging topics such as shared micromobility (e-scooters) and ongoing challenges such as bicycle and pedestrian counts, street design for all users, trail signage, and emergency services. Recent training and coordination events have included a Vision Zero Arterial Design webinar and a series of workshops on shared micromobility.

The subcommittee also coordinates TPB bicycle and pedestrian planning efforts which require inter-jurisdictional coordination. It developed a vision for a regional circumferential bicycle route, or "bicycle beltway," which ultimately became the National Capital Trail Network, and advised the development of the regional Bicycle and Pedestrian Plan.

Street Smart Pedestrian and Bicycle Safety Campaign

Since 2002, the Metropolitan Washington Council of Governments' Street Smart program has worked to protect vulnerable road users by raising awareness about pedestrian and bicycle safety. The region-wide public safety campaign educates drivers, pedestrians, and bicyclists on about safe use of roadways in the District of Columbia, suburban Maryland, and Northern Virginia.

The campaign integrates several components, including broadcast and outdoor advertising, media relations, digital media, and outreach events. It is meant to complement, not replace, the efforts of state and local governments and agencies to build safer streets and sidewalks, enforce laws, and train better drivers, bicyclists, and pedestrians. The campaign is advised by an advisory group comprising participating TPB member jurisdictions and agencies.



Figure 10: Street Smart Ad

ACCESS FOR ALL ADVISORY COMMITTEE

TPB and its member jurisdictions have committed, through their Complete Streets policies, to creating a transportation system that will serve users of all ages and abilities. To help achieve that goal, the Access for All Advisory Committee (AFA) advises the TPB on transportation issues, programs, policies, and services important to traditionally underserved communities, including low-income communities, underrepresented communities, people with limited English proficiency, people with disabilities, and older adults. The committee identifies issues of concern to traditionally underserved populations in order to determine whether and how these issues might be addressed within the TPB process.

The Access for All Advisory Committee has provided input on practices related to shared micromobility and e-scooters, such as sidewalk riding and parking, which can have an adverse effect on pedestrians with disabilities. The committee has also provided input on innovative bicycle facility designs such as protected bike lanes, floating bus stops, and other features that affect curbside access and crosswalks.

The jurisdictions and e-scooter firms have altered practices, regulations, and designs in response to input from the disability community, but more work needs to be done. This is an ongoing and iterative process, as new facility designs and vehicle types are fielded and designs are adjusted to reflect experience and user feedback.

BICYCLING, WALKING, AND THE REGIONAL TRAVEL DEMAND MODEL

Data relevant to walking and bicycling are gathered as part of the regional household travel survey, and are incorporated into regional transportation modeling and forecasting.

TPB uses a “four-step” travel demand model. Trip generation of both motorized person trips (person-trips in cars, buses, and trains) and non-motorized person trips (walk and bike). Only motorized person trips continue through the model to trip distribution, mode choice, and trip assignment.

Motorized transport planning and modeling focusses on facility capacity relative to forecast traffic volumes, with capacity constraints and congestion limiting system performance and effective access to destinations.

In contrast, in pedestrian and bicycle planning, the main constraint on access is not pedestrian or bicycle congestion, but whether a destination can be reached safely by nonmotorized means, i.e., connectivity. With some exceptions, such as dense activity centers or heavily used transit stations, a standard sidewalk, bike lane, or trail width is usually sufficient to serve anticipated volumes.

This plan focuses on access. It uses a GIS buffer analysis to determine the share of population, jobs, activity centers, transit access focus areas, and equity emphasis areas, that will be served by a planned bicycle and pedestrian facility that is safe for people of all ages and abilities.

Regional Encouragement and Funding Programs

To help reduce automobile traffic, congestion and air pollution, COG and TPB have developed several programs to encourage bicycling and walking in the Washington region. TPB offers technical assistance and funding for construction to its member governments, while the regional Commuter Connections program offers incentives to commuters to encourage them to use transit, carpooling, and walk/bike to get to work.

COMMUTER CONNECTIONS

As part of the Commuter Connections program, every year on the third Friday in May the TPB sponsors a regional Bike to Work Day. This event has grown into one of the largest of its kind in the country, attracting thousands of riders at dozens of “pit stops” or rallying points around the region. The event is meant to encourage first-time riders to try bicycling to work.

The Commuter Connections program also supports publication of *Biking to Work in the Washington Area: A Guide for Employers and A Guide for Employees*, which provides tips for employees and employers. For employees, there are tips on safe cycling, laws, equipment and clothing, and transit connections. For employers, the guide explains the benefits of bicycling to the employer, the types of bicycle parking, and the ways an employer can encourage an employee to bike to work.

Commuter Connections produces a regional Bike Route map, plus an on-line bike routing application. Google Maps offers both pedestrian and bicycle routing. Other tools and resources for

bicycle commuters are listed on the bicycling resources section of the Commuter Connections web site.

People sometimes drive to work because they need to be able to get home quickly in an emergency. To meet that need and help get more people out of their cars, the Commuter Connections program offers a free taxi ride home in an emergency for commuters who regularly (twice a week) carpool, vanpool, bike, walk or take transit to work. Commuters who sign up for the Guaranteed Ride Home program may use it up to four times per year.

TRANSPORTATION-LAND USE CONNECTIONS PROGRAM

The Transportation Land Use Connections (TLC) Program provides short-term consultant services to local jurisdictions for small planning projects that promote mixed-use, walkable communities and support a variety of transportation alternatives. The program provides consultant assistance of \$30,000 to \$60,000 for planning projects, and up to \$80,000 for design or preliminary engineering projects.

Since 2007 dozens of pedestrian and transit access planning projects have been funded through the TLC program. The program has proven popular with local jurisdictions.

In addition to providing technical assistance, the TLC Program includes a Peer Exchange Network and provides support for the TPB's project selection role under the federal Transportation Alternatives Set Aside Program (TA Set-Aside Program).

TRANSPORTATION ALTERNATIVES

The TA Set-Aside Program provides federal funds for small-scale projects such as pedestrian and bicycle facilities, trails, Safe Routes to School (SRTS) projects, community improvements, and environmental mitigation. These kinds of projects are considered "alternatives" to traditional highway construction.

Under federal law, the TPB is responsible for selecting projects using sub-allocations of each state's TA Set-Aside funding.

The TPB encourages applications that support regional transportation priorities, including projects focused on Activity Centers, access to transit, regional trails, access for disadvantaged communities, and Americans with Disabilities Act (ADA) improvements.

Past recipients of TLC assistance for design often go on to apply for TA funding for construction.

TRANSIT WITHIN REACH

To encourage more projects that will provide pedestrian and bicycle access to high capacity transit, TPB launched the Transit Within Reach technical assistance program in Spring 2021.

The Transit Within Reach Program funds design and preliminary engineering projects to help improve bike and walk connections to existing high-capacity transit stations or stations that will be open to riders by 2030. The program places special emphasis on projects that improve access in TPB Transit Access Focus Areas (TAFAs), which have been identified as prime locations for small capital improvements— such as sidewalks, trails, crosswalks— that will make it safer and easier to walk or bike to those train stations and bus stops.

The program complements the TLC Program, which also funds technical assistance for local governments throughout the region. The TLC Program promotes access to transit, but its projects address other topics as well.

REGIONAL ROADWAY SAFETY PROGRAM

TPB Resolution R3-2021 adopted in July of 2020 established and funded the Regional Roadway Safety Program. It is similar in structure to the TLC program, and funds projects to reduce fatal and injury crashes. Many of these projects focus on bicycle and pedestrian safety.

Studies, planning, and design projects are eligible. The program provides consultant assistance of up to \$60,000 for studies or planning projects, and up to \$80,000 for design or preliminary engineering projects.

Federal Policies

ROUTINE ACCOMMODATION OF WALKING AND BICYCLING

U.S. Department of Transportation guidance issued in 2000 calls for bicycling and walking facilities to be incorporated into all transportation projects unless exceptional circumstances exist. Further guidance issued in March 2010 urged agencies to go beyond the minimum standards to provide safe and convenient facilities for pedestrians and bicyclists, set mode share targets, and collect data on walk and bike trips. Bicycling and walking are to have equal importance to other transportation modes. Transportation projects using federal funds may not sever an existing bicycle or pedestrian route unless an alternate route exists or is provided.

The U.S. DOT headquarters in Washington sets an example for other employers by encouraging employee bicycling.

Federal and state policies have evolved over the last few decades, from not requiring (or in some cases prohibiting) the use of transportation funds for pedestrian or bicycle facilities, towards requiring the provision of such facilities. These federal and state guidelines and policies have led to an increase in the number of pedestrian and bicycle facilities provided, with many facilities provided as part of larger transportation projects rather than as stand-alone projects.

Federal and state policies are also evolving away from encouraging single-use cul-de-sac development patterns typical of the last half of the 20th century, to encouraging mixed use development and a connected street grid that is far more accessible to pedestrians and bicyclists.¹⁴

AMERICANS WITH DISABILITIES ACT

The Americans with Disabilities Act (ADA) is a federal civil rights statute that prohibits discrimination against people who have disabilities. Under the ADA, designing and constructing facilities that are not usable by people with disabilities constitutes discrimination. Public rights of way, including pedestrian facilities, are required by federal law to be accessible to people with disabilities.

The ADA Requires that all new and altered pedestrian facilities be made accessible

Both new and altered pedestrian facilities must be made accessible to persons with disabilities, including those who are blind or visually impaired. The courts have held that if a street is to be altered to make it more usable by the public, it must also be made more usable for those with disabilities.

Government facilities which were in existence prior to the effective dates of the ADA and which have not been altered are not required to be in full compliance with facility standards developed for new construction and alterations. However, they must achieve 'program access.' That is, the program must, when viewed in its entirety, not deny people with disabilities access to government programs and services. For example, curb ramps may not be required at every existing walkway if a basic level of access to the pedestrian network can be achieved by other means (e.g., the use of a slightly longer route). Municipalities should develop plans for the installation of curb ramps and accessible signals such that pedestrian routes are, when viewed in their entirety, accessible to people who are blind or visually impaired within reasonable travel time limits.¹⁵

Design standards for individuals with disabilities, such as smoother surfaces, adequate width, and limits on cross-slope, are also beneficial for pedestrians without disabilities. Good design for persons with disabilities is good design for all.

More information on the Americans with Disabilities Act is available from the U.S. Access Board.

UNIVERSAL DESIGN

People with disabilities and individuals with low incomes are more likely to use transit and walk or use mobility devices on sidewalks than the general population. Narrower streets, shorter crossing distances, traffic calming, lower traffic speeds, wider, ADA-accessible sidewalks, street trees, and amenities such as benches, are all good for older pedestrians and people with disabilities. Compact

¹⁴ Southworth, Michael and Eran Ben-Joseph, *Street Standards and the Shaping of Suburbia*, Journal of the American Planning Association, Volume 61, Number One, Winter 1995.

¹⁵ American Council for the Blind, *Pedestrian Safety Handbook: A Handbook for Advocates*. www.acb.org

urban design and a connected street and pedestrian grid reduces pedestrian travel distances is helpful for all pedestrians but is especially important to older adults and people with disabilities. These individuals may lack the physical agility and stamina needed to navigate substandard facilities, dodge traffic, and walk long distances.¹⁶ Older adults, people with disabilities, and people with low incomes also suffer from disproportionately high pedestrian fatality rates.

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

The *Manual on Uniform Traffic Control Devices for Streets and Highways*, or MUTCD, defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel.

The MUTCD includes standard pedestrian and bicycle signs and signals. These standard designs are widely used by departments of transportation in the Washington region.¹⁷

Parks departments may have their own signing standards or practices, which for facilities not located on a public roadway may be different from the MUTCD. The National Park Service adheres to the MUTCD for bike signs located on roadways.¹⁸

The MUTCD is published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F. It can be found at <http://mutcd.fhwa.dot.gov>.

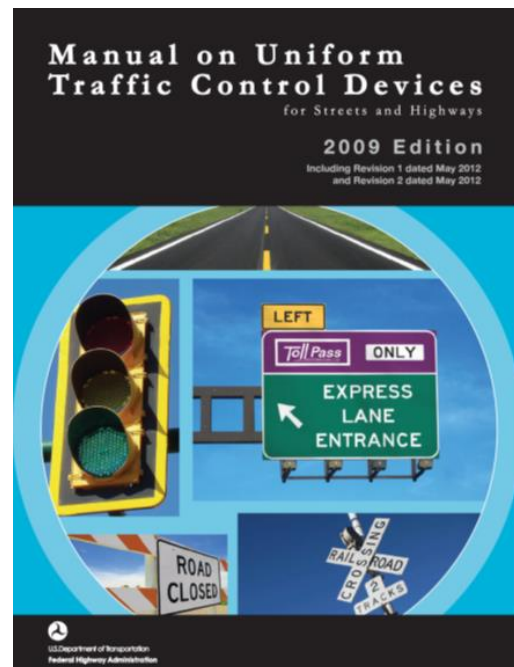


Figure 11: MUTCD

¹⁶ <https://ggwash.org/view/83714/zero-vision-in-dc-vision-zero-is-a-disability-rights-issue>

¹⁷ <https://mutcd.fhwa.dot.gov/htm/2003/part9/part9b.htm>

¹⁸ https://www.nps.gov/subjects/transportation/upload/UPDATED_NPS_Guidebook_July2018_Final_UpdateSept2018-High-Res_WEB-2.pdf

THE FAST ACT

Under the Fixing America's Surface Transportation Act (FAST Act) the federal transportation legislation signed in December 2015, bicycle and pedestrian projects remained broadly eligible for nearly all funding categories, either for projects incorporated into something larger, or for stand-alone bicycle and pedestrian projects.

The FAST Act built on the Moving Ahead for Progress in the 21st Century Act (MAP-21), which was enacted in 2012, to strengthen the role of Metropolitan Planning Organizations in regional planning. MPOs now have an enhanced role in transportation safety planning and goal setting, and more control over Transportation Alternatives (TA) funds, which are often used for walking and bicycling projects.

Most federal transportation funds may be used for bicycle and pedestrian projects

Transportation Alternatives

The FAST Act established a set-aside of Surface Transportation Block Grant (STBG) funding for Transportation Alternatives. These set-aside funds include projects and activities such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

The FAST Act required FHWA to distribute 50 percent of TATA funds to areas based on population (suballocated), with the remainder available for use anywhere in the State.

States and MPOs for urbanized areas with more than 200,000 people are required to conduct a competitive application process for the use of TA funds; eligible applicants include tribal governments, local governments, transit agencies, school districts, and a new eligibility for nonprofit organizations responsible for local transportation safety programs.

Under federal transportation legislation, large MPOs, including the Transportation Planning Board, play an enhanced role in project selection for a portion of program funds sub-allocated to large metropolitan regions. For the National Capital Region, this program offers an opportunity to fund regional priorities and complement regional planning activities.

In the National Capital Region, the TA Program is framed as a complementary program to the TPB's [Transportation Land-Use Connections \(TLC\) Program](#), which provides [technical assistance](#) for small planning studies to TPB member jurisdictions, and a potential implementation tool for the bicycle and pedestrian components of the Visualize 2045 plan.

INFRASTRUCTURE INVESTMENT & JOBS ACT OF 2021

The current federal transportation legislation, the Infrastructure Investment and Jobs Act (IIJA), was signed in November 2021. The IIJA increases funding for trails, walking, and bicycling, while emphasizing the importance of connectivity, equitable access, and safety.

Active Transport Programs¹⁹

The **Transportation Alternatives Program** is the biggest dedicated source of funds for pedestrian, bike, and trails. IIJA increases funding and restricts transfers of TA funding to other purposes. It also increases Recreational Trails funding.

IIJA authorizes a number of new funding programs relevant to walking and bicycling, including:²⁰

- **Healthy Streets Program.** A competitive grant program that funds grants to states, local governments, and tribes to deploy cool pavements and porous pavements and to expand tree cover.
- **Reconnecting Communities Pilot Program.** This program funds projects that remove, retrofit, or mitigate previously constructed barriers to mobility, access, or economic development to restore community connectivity. State and local governments are eligible applicants.
- **Active Transportation Infrastructure Investment Program.** A competitive grant program for infrastructure improvements that create safe and connected active transportation facilities, including adding sidewalks, bikeways, and pedestrian trails. Eligible entities include government entities.
- **Safe Streets and Roads for All Competitive Grant Program.** A competitive grant program for local governments to implement "Vision Zero" plans and other improvements to reduce crashes and fatalities, especially for cyclists and pedestrians.
- **Carbon Reduction Formula Program.** States may use the funds for projects that reduce transportation emissions, including **trails and paths for bicyclists and pedestrians**. States must develop carbon reduction plans and coordinate and consult with urbanized and rural areas.

Bicycle and pedestrian projects remain broadly eligible for most federal transportation funding, including Surface Transportation Block Grants, Congestion Mitigation and Air Quality, and the Highway Safety Improvement Program.

¹⁹ Rails to Trails Conservancy presentation, December 9, 2021

²⁰ <https://www.mondaq.com/unitedstates/government-contracts-procurement-ppp/1110054/infrastructure-investment-and-jobs-act-summary-of-key-programs-and-provisions>

State Planning

DISTRICT OF COLUMBIA

As the center of the Washington region, a major employment center, and one of its most walkable and bikeable jurisdictions, the District of Columbia's policies have a significance larger than its population would suggest.

Reflecting its urban character, the District of Columbia is doing much to encourage walking and bicycling. The District of Columbia Department of Transportation intends to create a “walk-centric, bike-centric” city. DDOT's 2010 “Action Agenda” called for safety, sustainability, and increasing livability and prosperity by creating great spaces that are the “living room” of the city.

Streetscaping projects and traffic calming projects are a high priority. By providing pedestrians with plenty of well-designed, safe, and comfortable space, the city hopes to increase retail sales and property values. Business Improvement Districts have considerable input into transportation projects.

Due to the built-up character of the District of Columbia, DDOT aims to shift travel from less space-efficient modes, such as single occupant vehicles, to more space efficient modes, such as walking, bicycling, and public transportation.

DDOT's strategy for shifting auto trips to transit, walk, and bike trips encompasses both transportation and land development elements. The District of Columbia encourages mixed use development projects that promote and support non-auto mobility. Reduced auto parking, increased bike parking, on-site car and bike sharing, and transportation demand management plans will reduce auto trips generated by new development.

On a citywide basis there will be car sharing, bike sharing, new transit service, streetcars, reduced off-street parking requirements, required off-street bike parking, and rapid construction of new pedestrian and bicyclist infrastructure. The Bicycle Master Plan (2005) and Pedestrian Plan have been succeeded by the pedestrian and bicycle elements of the city's latest transportation plan, MoveDC.

MoveDC Update

In December 2021 DDOT released the most recent version of the District's Transportation Plan, MoveDC. MoveDC continues in the same direction as previous planning documents, but in greater detail, and with more ambitious goals and methods. MoveDC is a 25-year plan. It proposes to (among other things):

Improve safety for all, especially vulnerable road users, by

- Implementing road diets to make streets safer
- Making intersections safer for pedestrians

An average District resident can reach 32,269 jobs and 117 destinations such as grocery stores, hospitals, and schools, in a 20-minute walk.

DDOT's Bicycle Lane Program has built 95 miles of bicycle lanes in the District since 2001

- Using Complete Streets principles to make streets and sidewalks safer for all users
- Designing public space to be people-focused
- Installing more car-free streets and plazas
- Expanding street tree coverage
- Making more efficient use of curb space
- Expanding the bicycle network

EXPANDING THE MULTIMODAL NETWORK

MoveDC identifies a bicycle priority network within the city, as well as pedestrian, transit, freight, and auto priority networks. DC recognizes that while every street should serve all permitted users, not every street can serve all users equally well.

MoveDC proposed adding twenty miles of protected bike lanes per year for three years, **building more trails in the (National) Capital Trail Network**, as well as adding more public and private bike parking, expanded access to bike sharing and micromobility, and signed neighborhood bike routes.

MoveDC will fill major gaps in the regional bicycle network, and improve connections between the District, Maryland, and Virginia. MoveDC proposes a new bicycle and pedestrian crossing of the Potomac River at the Long Bridge, and three new crossings of the Anacostia. Other bridges that currently have outmoded bicycle and pedestrian facilities will be upgraded.

MARYLAND

Maryland adopted its first Bicycle and Pedestrian Access Plan in 2002. Under that plan the State made numerous advances in promoting bicycling and walking. MDOT invested more than \$283 million in non-motorized transportation projects to improve bicycling and walking conditions over the last decade. The proportion of total highway expenditures dedicated to bicycle or pedestrian programs increased from 2% to 4% over the last decade.

“Maryland will be a great place for biking and walking that safely connects people of all ages and abilities to life’s opportunities.”

The State also created a number of grant programs, including the **Maryland Bikeways Program**, which provides \$3 million per year in technical assistance to a wide range of bicycle network improvements, and the **Maryland Bikeshare Program** provides grants to communities interested in adding a bikeshare system.

Maryland State Highway Administration adopted Complete Streets policy in 2012.

The current Maryland Twenty-Year Bicycle and Pedestrian Master Plan (2019) calls for a Complete Streets approach. Complete Streets in Maryland means that the state transportation network will address the needs of all users, regardless of travel mode. It does not, however, mean that all users will have equal priority on all roadways. Design is to be appropriate for the land use and context, including Urban Centers, Towns and Suburban Centers, Rural and Agricultural Areas, and Natural Areas.

The initial focus will be to support biking and walking in urban centers and main streets. MDOT will pilot a Bicycle and Pedestrian Prioritization Area (BPPA) program to foster collaboration with local jurisdictions and support the development of connected bicycle and pedestrian networks in high need locations.

Maryland has also published *Accessibility Policy and Design Guidelines for Pedestrian Facilities along State Highways* (2010), *Bicycle Policy and Design Guidelines* (2015), the *Maryland Context-Driven Design Guide* (2020), a *Strategic Trails Implementation Plan* (2009), a bicyclist education video, and other materials designed to share information on best practices with respect to the engineering, education, and enforcement aspects of walking and bicycling.

A Bicycle and Pedestrian Advisory Committee advises state government agencies on issues directly related to bicycling and pedestrian activity including funding, public awareness, safety, and education.

VIRGINIA

In 2004, the Virginia Department of Transportation released its policy for bicycle and pedestrian accommodation, which commits VDOT to routinely accommodating pedestrians and bicyclists as part of all new construction and reconstruction projects, unless exceptional circumstances exist.²¹

Since 2004 VDOT has developed a process to ensure that bicycle and pedestrian accommodations are provided in accordance with the policy. The Bicycle and Pedestrian Accommodations Decision

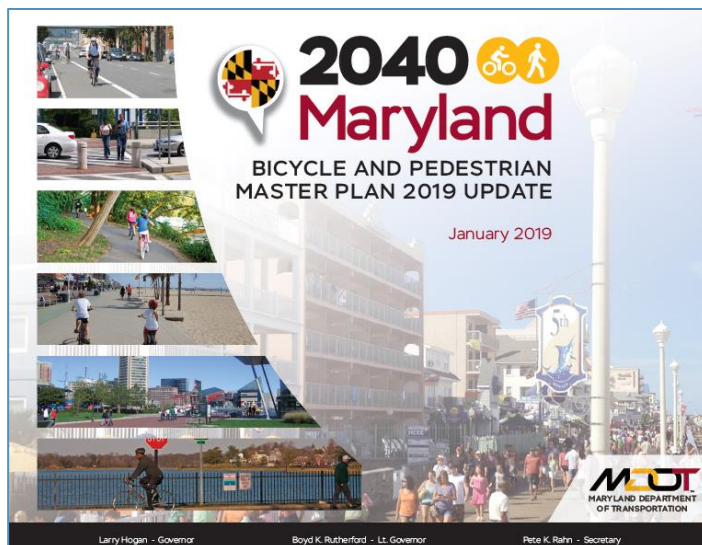


Figure 12: 2040 Maryland Bicycle and Pedestrian Master Plan 2019 Update

“VDOT will initiate all highway construction projects with the presumption that the projects shall accommodate bicycling and walking.”

²¹ www.virginiadot.org

Process gives designers a step by step process to determine if bicycle/pedestrian accommodations are appropriate for the characteristics of a particular roadway, and a Bicycle and Pedestrian Accommodations list and a design guide provides project managers with a menu of possible accommodations. A series of implementation guidance documents for localities have also been developed to improve communication between agencies regarding planning and accommodation of pedestrians and cyclists under terms of the 2004 policy.

VDOT maintains all roads in Virginia outside of urban areas, including thousands of miles of residential streets originally built by developers. In view of the importance of secondary streets for vehicular, pedestrian, and bicycle movement, VDOT has revised its Secondary Street Acceptance Requirements (SSAR) to mandate higher levels of street connectivity in urban areas, as well as adequate pedestrian accommodation. New streets and developments are required to connect to the surrounding streets and future developments in a way that adds to the capacity of the transportation network.

Virginia requires new developments to connect with the surrounding streets

The policy divides Virginia into “compact”, suburban, and rural areas, with graduated connectivity requirements for each. Narrower streets, traffic calming, and “context-sensitive” design are encouraged where appropriate.

New development proposals initially submitted to counties and VDOT after June 30, 2009, must comply with the requirements of the SSAR.

Cul-de-sac development patterns have long been an obstacle to walking or bicycling in suburban areas. More direct, traffic-calmed secondary streets will allow more people to walk or bike to local destinations.

Virginia has adopted a fairly stringent set of requirements mandating accommodation of pedestrians and bicyclists on both public roads and private developments which are accepted by the State for maintenance, which in Virginia means almost all development. Since these requirements have gone into effect, many additional bicycle and pedestrian facilities have been built.

Virginia State Bicycle Policy Plan

VDOT completed a State Bicycle Policy Plan in September 2011, which incorporates the policies discussed above. The plan calls for increased bicycling for all trip purposes, and a transportation system that “accommodates and encourages” bicycling by providing facilities for bicyclists of all ages and abilities.

It also calls for better data gathering and benchmarking of bicycling, coordination with various stakeholders, and recommends a number of strategies to improve implementation of VDOT’s 2004 policy for bicycle and pedestrian accommodation.

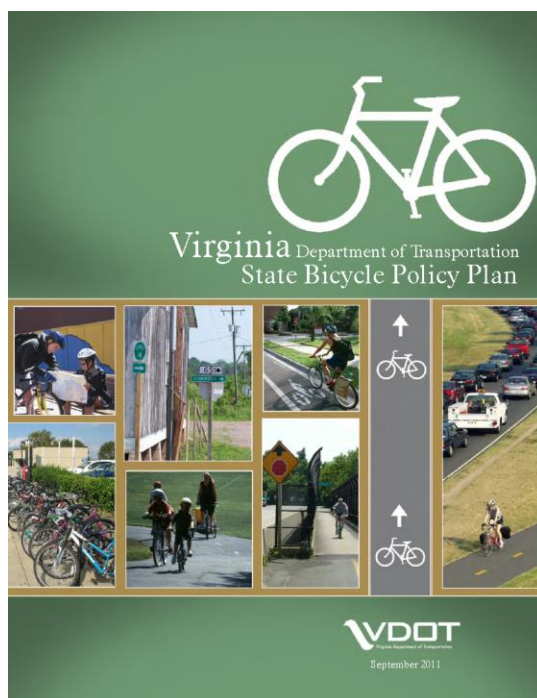


Figure 13: Virginia State Bicycle Policy Plan

The plan provides some guidance on bicycle facilities to be used. Bicycle lanes and paved shoulders are recommended over other bicycle facilities. Restriping travel lanes, or “road diets” are recommended as a way to provide bicycle lanes within the current right of way. Actuated traffic signals that detect bicycles, and bicycle compatible drain grates should be used on all roads where bicycles are permitted. A signed bike route should have at least a bicycle level of service “C”.

Virginia State Pedestrian Policy Plan

VDOT completed the Pedestrian Policy Plan. Released in September 2014, this document is a complement to the Bicycle Policy Plan.

The plan establishes a vision for the future of walking in Virginia and advances the walking element of the Commonwealth Transportation Board’s Policy for Integrating Bicycle and Pedestrian Accommodations consistently, appropriately and cost-effectively. The plan addresses implementation of both the Bicycle and the Pedestrian Policy Plans.

Northern Virginia Bikeway Study

This study and network map, which were completed in 2004 and updated in 2015, used latent demand analysis to determine the most promising portions of a network of regionally significant bicycle routes in Northern Virginia. As of 2015, 108 miles of the 544-mile network had been built.

Local Bicycle and Pedestrian Planning

The metropolitan Washington region is fortunate to host a community of agencies and consultants that are advancing the national practice of bicycle and pedestrian planning.

Planning for Active Transportation has become mainstream in the Washington region. Nearly every jurisdiction has completed a bicycle or pedestrian plan, and nearly all of them have bicycle, pedestrian, or trail planners. Larger agencies with ambitious programs, such as DDOT, have many people working full time on active transportation.

Table 1 shows local and state plans and studies and the year published. Jurisdictions and agencies drew projects from these individual plans and submitted them for incorporation into the Regional Bicycle and Pedestrian Plan. Local plans may include unfunded projects.

Table 1: Bicycle and Pedestrian Plans in the National Capital Region

Jurisdiction/Agency	Plans/Studies	Year(s)
Arlington County	Arlington Master Plan -Pedestrian Element, Bicycle Element	2011, 2019
City of Alexandria	Transportation Master Plan – Pedestrian and Bicycle Chapter	2016
District of Columbia	District of Columbia Bicycle Master Plan, District of Columbia Pedestrian Master Plan, MoveDC	2005, 2009, 2014, 2021
Charles County	Charles County Bicycle and Pedestrian Master Plan	2012
City of Fairfax	Bike Fairfax City Plan	2021
City of Falls Church	Bicycle Master Plan	2015
Fairfax County	Fairfax County Bicycle Master Plan	2014
Frederick County	Frederick County Bikeways and Trails Plan	2018
City of Gaithersburg	Transportation Plan, Bikeways and Pedestrian Plan	2010
Greenbelt	Greenbelt Bicycle and Pedestrian Master Plan	2013
Town of Herndon	Bicycle Network Master Plan	2019
City of Laurel	Bikeway Master Plan	2009
Loudoun County	Loudoun County Bicycle and Pedestrian Master Plan	2003
City of Manassas	City of Manassas Transportation Master Plan	2019
Maryland Department of Transportation	Maryland Twenty Year Bicycle and Pedestrian Master Plan SHA Complete Streets Policy	2019, 2014, 2012, 2008
M-NCPPC – Prince George's County	County Master Plan of Transportation – Bikeways and Trails	2009
Montgomery County	Montgomery County Bicycle Master Plan	2018
National Capital Planning Commission	Comprehensive Plan for the National Capital - Transportation	2020
National Capital Region Transportation Planning Board	Bicycle and Pedestrian Plan for the National Capital Region	2006, 2010, 2014, 2021
National Park Service	Paved Trails Plan Active Transportation Guidebook	2016 2018
Prince William County	Transportation Plan – Nonmotorized	2016
City of Rockville	Bikeway Master Plan	2017
Virginia Department of Transportation	Virginia Pedestrian and Bicycle Policy Plans	2014, 2011
Virginia Department of Transportation, Northern Virginia Office	Northern Virginia Regional Bikeway and Trail Network Study	2015
WMATA	Metrorail Bicycle & Pedestrian Access Improvements Study Station Area Planning Guide Bust Stop Amenity Reference Guide	2010 2017 2019

PLANNING FOR A “LOW STRESS” NETWORK

Most bicycle and pedestrian plans involve designating a bicycle and pedestrian network and then determining the appropriate facility type and priority for implementation. Some agencies, however, are starting to take a slightly different approach, by first analyzing the “level of stress” for bicyclists or pedestrians on their existing street network, and then using the results to prioritize those improvements.

For example, the Montgomery County has adopted the goal of a “low-stress” bicycle network, accessible to people of all ages and abilities. While about 75 percent 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 bikeability and walkability, cut off from most useful destinations.

The goal is to connect these islands of bikeability and increase the share of bicycle trips that can be accomplished entirely on low-stress facilities from 16% to 50%. The County will also sharply increase the percentage of residences within two miles of a High-Capacity Transit Station that have low-stress bike access to that station, as well as the percentage of schools and other public facilities that are easily accessible by bike.

Montgomery County will increase the share of bike trips that can be accomplished entirely on low stress streets from 16% to 50%.



Figure 14: Montgomery County Bicycle Plan

METRORAIL SILVER LINE ACCESS

Since 2010 one of the most significant changes in the region has been the extension of the Metrorail to Tysons Corner in Fairfax County towards Dulles Airport and beyond. This Metrorail extension is generating new, walkable development.

Tysons, already the second-largest commercial center in the region, is undergoing a dramatic transformation from an auto-oriented commercial “edge city” to a mixed-use urban downtown. The four new Metrorail stations in Tysons provide the foundation for this shift. Pedestrian and bicycle access is critical to making a redeveloped Tysons work.

Other Silver Line stations along the Dulles Tollway serve park and ride commuters, but also incorporate some development and pedestrian and bicycle access, in an area which has been overwhelmingly oriented towards driving. A future phase of the

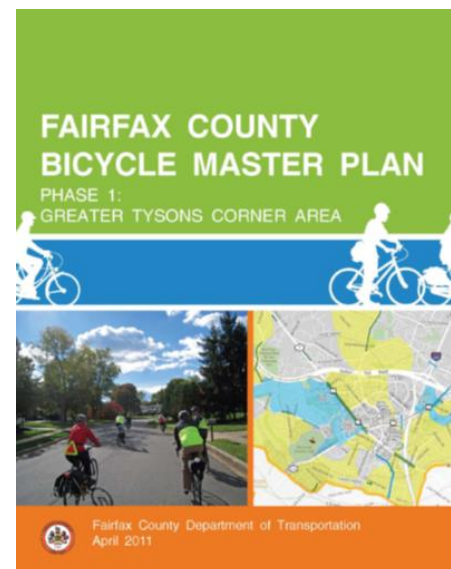


Figure 15: Tysons Area Plan

Silver Line will extend into Loudoun County, which is preparing station-area pedestrian and bicycle access plans.

Safe Routes to School

Safe Routes to School is a national movement that encourages students to travel to and from school by walking or bicycling. Safe Routes to School efforts are supported by parents, schools, community leaders, Safe Routes to School coordinators and local, state, and federal governments to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. The Safe Routes to School movement in the United States grew rapidly with a federal funding program starting in 2005. In 2012, Safe Routes to School was incorporated into the Transportation Alternatives program, but Safe Routes to School programs continue to grow.

In the Washington region, Safe Routes to School programs have flourished. The majority of school systems in the region have access to a Safe Routes to School coordinator either within the school district or in the department of transportation.

DC schools teach students how to ride bikes

WMATA BICYCLE AND PEDESTRIAN ACCESS PLANNING

In recent years WMATA has become a regional leader in pedestrian and bicycle access and safety, both on and off WMATA property. WMATA's priorities include signage and crosswalk striping on and around stations, designated and improved bicycle access routes into stations, resurfacing deteriorated sidewalks, lighting, and high security bicycle parking.

METRO RAIL ACCESS NEEDS

Improving pedestrian and bike access at and around stations is often a more cost-effective way to boost ridership than to add car parking or connecting bus service. Approximately 45% of Metrorail customers live within walking or bicycling distance from a station (up to 3 miles).

TRANSIT ORIENTED AND JOINT DEVELOPMENT

Walkable and bikeable station areas will have a positive and mutually reinforcing impact on Metro's Joint Development programs and local government's encouragement of Transit Oriented Development (TOD). Bringing more people out into the streetscape will increase visibility and safety of those on foot and bike, while also demonstrating the viability of similar future developments.

In its 2010 *Metrorail Bicycle and Pedestrian Access Improvements Study* WMATA identified pedestrian and bicycle access problems at its Metrorail stations. A number of the projects identified as part of that process, totaling \$25 million, have been funded in WMATA's Capital Improvement program. A few examples of completed projects are shown in Figure 15.

WMATA also identified “hot spots” of short distance auto access, i.e., places where people live close enough to walk to Metro, but do not, and studied those areas to find out what was missing.

WMATA's 2017 *Station Area Planning Guide* provides concise, clear design guidance for station site and access planning at Metrorail stations. The guide is meant to enhance user access and promote transit-oriented development around the station. Access hierarchies are provided for different station types. Intended users include WMATA, jurisdictional planners, related government agencies, and WMATA's real estate partners.

MEDICAL CENTER BEFORE AND AFTER, REPLACING OLD RACKS



VIENNA STATION BEFORE AND AFTER, NEW ACCESS POINT



FRANCONIA – SPRINGFIELD BEFORE AND AFTER, NEW SIDEWALK TO IMPROVE SAFETY



Figure 16: Access to Metrorail/WMATA

METROBUS ACCESS

Bus stops are often located in areas that lack safe crossings or sidewalks. There have been efforts over the years to inventory and improve conditions. WMATA published a Bus Stop Amenity Reference Guide in 2019, which together with previous bus stop siting and design guidelines will continue to improve access and conditions for bus riders.

Outlook

Policies in the Washington region have become more favorable to walking and bicycling over the last three decades, and the change has only accelerated since 2015. Bicycling and walking have become an integral part of transportation planning at all levels. The Federal, State, and local policy context has changed in ways that make it more likely that the goals of these plans will be met. Pedestrian and bicycle accommodation is no longer an optional “amenity”; it is built into nearly every project and new development. The effects of the policy changes have become evident in the way people live, work, and travel in our region.

Implementation of walk and bike friendly policies is likely to accelerate. As the cleanest, most energy efficient modes of transportation, walking and bicycling play a significant role in addressing the challenge of climate change, while continuing to address the issues of congestion, health, air quality, safety, access, and economic development.

CHAPTER 2: BICYCLING AND WALKING IN THE WASHINGTON REGION

Introduction

This chapter discusses bicycling and walking trip mode shares in the Washington region. It draws on a number of sources, including the TPB's Regional Travel Survey, the U.S. Census Bureau's American Community Survey, the National Household Travel Survey, the Commuter Connections State of the Commute survey, WMATA's Passenger Rail Survey, and various bicycle and pedestrian counting programs. It compares walking and bicycling in the Washington region with national trends, as well as trends in other major metropolitan areas.

Data Sources

The data sources each have their own strengths and weaknesses, and the samples and information tracked are different. The U.S. Census Bureau's American Community Survey has the largest sample size, but it does not track non-work trips. The TPB's Regional Travel Survey is the best source for non-work trips, but it is conducted only once every ten years. The Commuter Connections *State of the Commute* survey, which is conducted every three years, surveys employed adult residents, and asks questions about demographics and attitudes towards the commute not found in other sources, though the sample size limits geographic specificity at sub-regional levels.

OVERVIEW

Residents of the Washington region walk and bicycle slightly more than in the nation as a whole. Bicycling has grown faster in the Washington region than in other large metropolitan areas.

Nationally, 12% of all trips are made on foot or by bike

The walk and bike modes are more common than the census commute mode numbers would lead one to believe. Work trips account for about one quarter of all trips and walking and biking are more common for other purposes. According to the National Household Travel Survey 12% of all trips taken in the U.S. are on foot or by bike.²²

Geography/urban design, age, race, ethnicity, gender, and car ownership can affect the decision to walk or bicycle.

People living in households without cars are more likely to walk or bicycle than those that have one, and those living in households with only one car are more likely to walk or bicycle than those owning two. Whites are more likely to bicycle than African Americans or Hispanics.

²² https://nhts.ornl.gov/assets/FHWA_NHTS_Brief_Bike%20Ped%20Travel_041520.pdf

Men are more than twice as likely to bike to work as women, 0.7% to 0.3%.²³

Trips in the urban core are mostly short enough to walk or bike

Regionally, bicycling and walking are concentrated in the urbanized areas of the Washington region, especially areas near downtown D.C. and certain Metro stations, as well as college campuses and military bases.

In the past decade walk mode share for all trips in the Washington region has stabilized, while bike mode share has grown, especially in the urban core.

There is potential to convert short auto trips to walk or bike. Transit and walking are interdependent, with 80% of bus and 60% of Metrorail access trips on foot. Pedestrian access to Metrorail has grown over the last decade, while motor vehicle access has fallen. Bicycling to transit is less common than walking and varies greatly by Metro station, with the highest rates of bicycle access found west of the Anacostia River.

US CENSUS BUREAU INFORMATION

The U.S. Census Bureau’s American Community Survey data is the best source of information on work trips. The five-year rolling averages are reasonably accurate down to the census tract level. At a national level, in 2019 2.7% of Americans walked to work, and 0.5% bicycled to work. In the Washington region 3.3% of workers walked to work, while 0.9% bicycled to work.

Bicycling is growing faster in the Washington region than in other large metro areas

	Pedestrian Commuting in the Ten Largest Metropolitan Areas ²⁴	% Walk to Work 2000 Census	% Walk to Work 2006-2008	% Walk to Work 2008-2012	% Walk to Work 2015-2019
1	New York	5.55%	6.2%	6.2%	5.9%
2	Boston	4.12%	4.8%	5.3%	5.4%
3	San Francisco	3.25%	4.2%	4.3%	4.7%
4	Philadelphia	3.88%	3.7%	3.7%	3.6%
5	Washington	3.10%	3.0%	3.2%	3.3%
6	Chicago	3.13%	2.9%	3.1%	3%
7	Houston	1.62%	1.5%	1.4%	3%
8	Los Angeles	2.56%	2.6%	2.7%	2.5%
9	Detroit	1.83%	1.5%	1.4%	1.4%
10	Dallas-Fort Worth	1.48%	1.3%	1.2%	1.2%
	United States	2.93%	2.8%	2.8%	2.7%

Table 2: Pedestrian Commuting in Large Metropolitan Areas

²³https://data.census.gov/cedsci/table?q=coummute%20mode%20united%20states&text=S0801&g=0100000US_0500000US51179&tid=ACSS1Y2019.S0801

²⁴ 2000 US Census, 2006-2008, 2008-2012 American Community Survey, 2015-2019 American Community Survey

	Bicycle Commuting in the Ten Largest Metropolitan Areas	% Bike to Work 2000	% Bike to Work 2006-2008	% Bike to Work 2008-2012	% Bike to Work 2015-2019
1	San Francisco	1.12%	1.4%	1.7%	1.9%
2	Boston	0.38%	0.7%	0.9%	1.1%
3	Washington	0.30%	0.5%	0.6%	0.9%
4	Los Angeles	0.63%	0.7%	0.9%	0.7%
5	Chicago	0.31%	0.5%	0.6%	0.7%
6	New York	0.30%	0.4%	0.5%	0.7%
7	Houston	0.30%	0.3%	0.3%	0.7%
8	Philadelphia	0.33%	0.5%	0.6%	0.6%
9	Detroit	0.18%	0.2%	0.2%	0.2%
10	Dallas--Fort Worth	0.14%	0.2%	0.2%	0.1%
	United States	0.38%	0.5%	0.6%	0.5%

Table 3: Bicycle Commuting in Large Metropolitan Areas

Long Run Trends

Throughout the second half of the 20th century, driving increased, while walking bicycling, and public transportation declined. In 2000 2.93% of Americans walked to work, and 0.38% bicycled. By comparison, in 1960 9.9% of workers walked to work.²⁵ The number of people driving alone rose from 73.2% in 1990 to 75.7% in 2000, while use of public transportation fell by 0.5%.

In the 21st century, solo driving, transit, walking and bicycling mode shares have stabilized. 76.3% of workers drove alone in 2019, which is essentially the same as in 2000, and public transportation grew from 4.7% to 5%.

The 20th century trend towards less walking and bicycling also applied to the Washington Metropolitan Statistical Area (MSA). From 1990 to 2000, the walk to work mode share fell from 3.9% to 3.1%. In the first two decades of the 21st century walk mode share rose slightly, to 3.3%, while bike mode share tripled, to 0.9%.

²⁵ 1960 Census of Population, Characteristics of Population, United States Summary

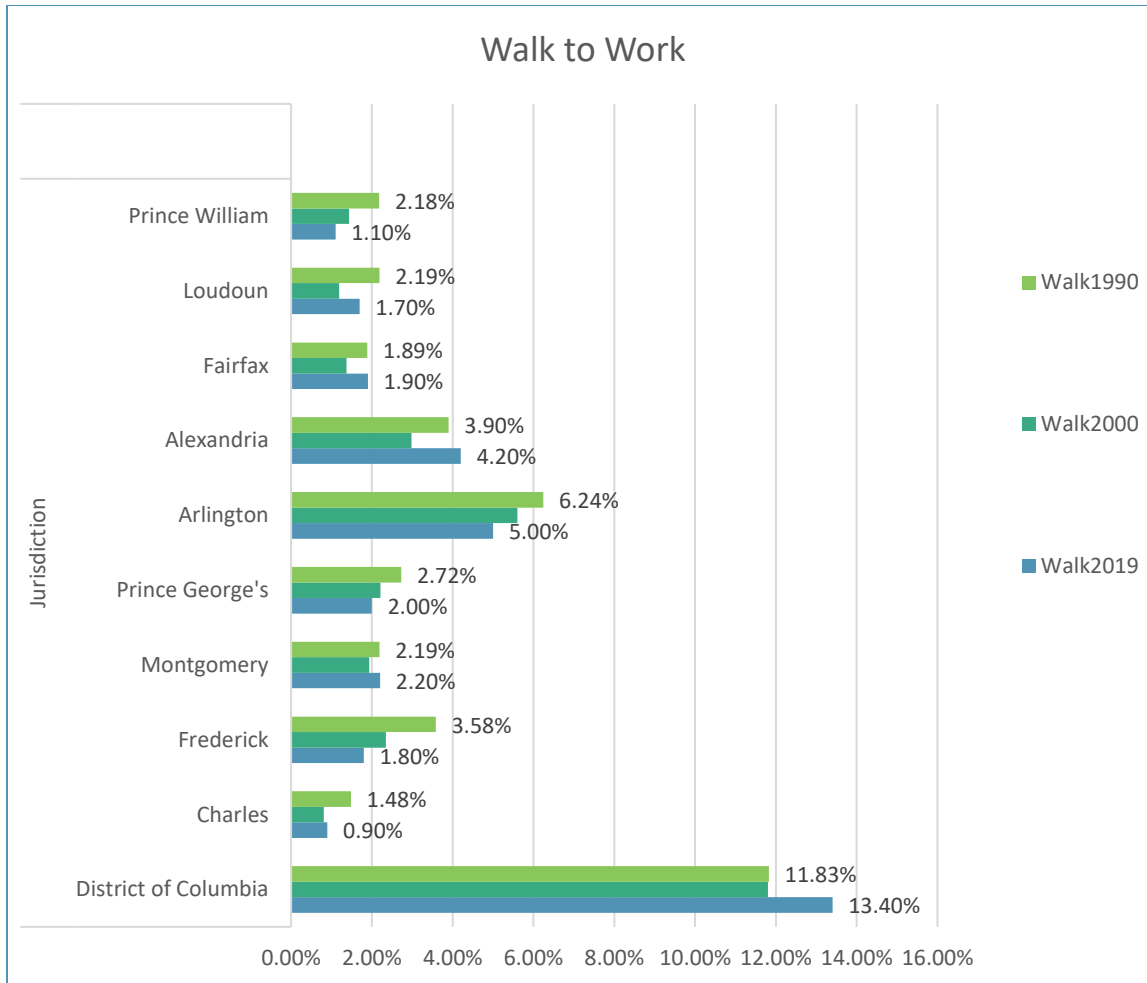


Figure 17: Walk to Work Washington MSA/US Census Bureau

The urban core of the Washington region, consisting of the District of Columbia, Arlington, and Alexandria saw major gains in bicycling between 1990 and 2019. The District of Columbia increased its bicycle commute mode share by a factor of six, and Arlington and Alexandria tripled theirs.

Montgomery County also tripled its bike commute mode share, to 0.6%.

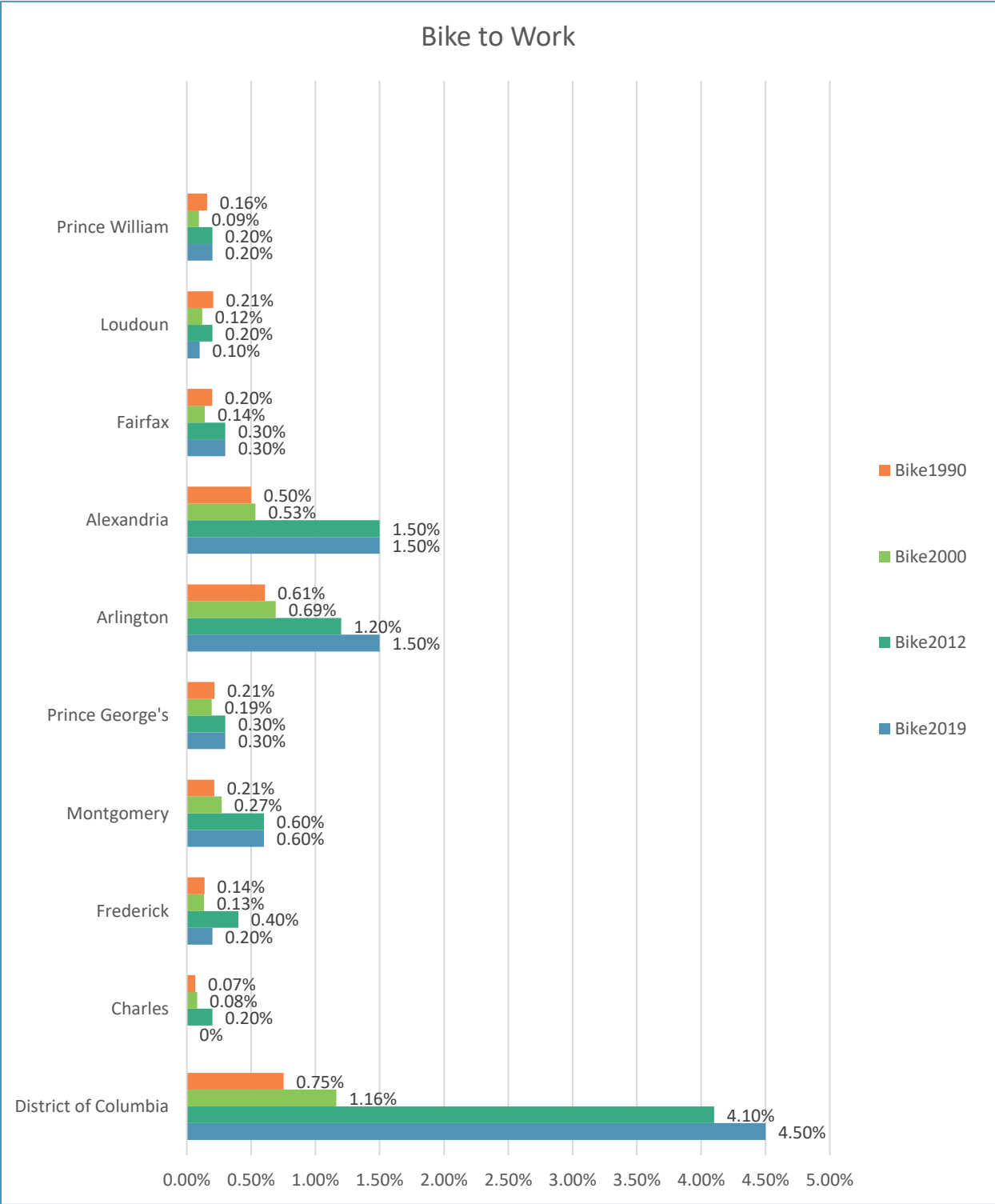


Figure 18: Bike to Work Washington MSA/U.S. Census Bureau

Mode Share by Census Tract

The Census Bureau provides an application that shows American Community Survey five-year data at the census tract level, including walk commuting numbers.²⁶

Walking and bicycling are hyper-local, with big differences between census tracts even within the same city or county.

In the Washington region, bicycling and walking are concentrated in the neighborhoods surrounding downtown D.C., Capitol Hill, and North Arlington. Downtown DC and the surrounding neighborhoods show the highest walk mode shares, as much as 52%, while those a little further out have the highest bike mode shares. Outside DC, North Arlington, Old Town Alexandria, downtown Bethesda, and the City of Frederick have the highest (non-campus) walk mode shares.

College campuses and military bases such as University of Maryland, Ft. Myers, the National Institute of Health, George Mason, Howard, Georgetown, and Gallaudet all have high walk and bike mode share.

Census tracts abutting major facilities such as the W&OD, the C&O, and the Mt. Vernon Trails tend to show higher levels of bicycling than the surrounding suburban tracts. However, the highest bike mode share by far is in the ring of neighborhoods within easy biking distance of downtown DC, on where bike commute mode share is on the order of 10-15%. A dense network of on-street bicycle facilities, and proximity between housing and employment, seems to be more predictive of bicycling than an isolated trail.

NATIONAL HOUSEHOLD TRAVEL SURVEY

The Federal Highway Administration's Household Travel Survey is the best national source for non-work trips. It includes trips made by all modes of travel, and for all purposes.

**9% of weekday
walk/bike trips in
the U.S. are trips to
work**

According to the 2017 National Household Travel Survey (NHTS), Americans ages 5+ reported more than 42.5 billion trips by walking or biking. These trips averaged 1 mile in length and 16 minutes in duration and comprised almost 12% of all trips annually (across all modes and purposes).²⁷

Only 9% of weekday non-motorized trips were commute trips. Another 2% were work-related. Weekend work trips were only 4% of the total. 37% of weekday trips were social/recreational, as were 49% of weekend trips.

²⁶ <https://data.census.gov/cedsci/> A training video is also available at <https://www.census.gov/data/academy/data-gems/2020/how-to-access-data-for-your-neighborhood.html>.

²⁷ https://nhts.ornl.gov/assets/FHWA_NHTS_Brief_Bike%20Ped%20Travel_041520.pdf

2017/2018 REGIONAL TRAVEL SURVEY

The TPB's once-in-a-decade Regional Travel Survey (RTS) helps paint a detailed picture of the daily travel patterns of people who call this region home. The survey, which has been conducted approximately every ten years since 1968, collects demographic and travel information from a randomly-selected representative sample of households in the region and adjacent areas. It is the primary source of observed data used to estimate, calibrate, and validate the regional travel demand model, which is used for the travel forecasting and air quality conformity analysis of the region's long-range transportation plan. The survey data are also used to analyze travel trends and for other key program activities. Over 16,000 households responded to the 2017/2018 survey.



Figure 19: Core, Inner Suburbs, Outer Suburbs/TPB Regional Travel Survey Presentation

The initial results of the 2017/2018 RTS were made available in a series of presentations.²⁸ TPB staff have prepared tabulations that provide insights on travel patterns in the region.²⁹

The Regional Transportation Data Clearinghouse (RTDC) RTS Tabulations are an online resource for the RTS data to be used by practitioners, researchers, and other stakeholders.

Mode Shares in 2017/2018

The RTS shows that commute trips are only about a quarter of the total trips in the region. Drive alone is less significant for all trips than it is for commuter trips, and walk is more significant.

²⁸ <https://www.mwcog.org/documents/2020/01/21/regional-travel-survey-presentations-regional-travel-survey-tpb-travel-surveys/>

²⁹ <https://www.mwcog.org/documents/2021/02/11/regional-travel-survey-tabulations-regional-travel-survey/>

Table 4: All Trips/RTS

Travel Mode	TPB Region	
	N	%
Drive Alone	40784	39.9
Drive Others	13141	15.8
Auto Passenger	15429	21.5
Rail Transit	5895	5.0
Bus Transit	2080	2.0
Walk	10555	9.6
Bike	1292	1.4
Ride-Hail/Taxi	1200	1.0
School Bus	2022	3.4
Other	461	0.4

Table 5: Commute Trips/RTS

Travel Mode	TPB Region	
	N	%
Drive Alone	10046	62.2
Drive Others	507	3.4
Auto Passenger	627	4.1
Rail Transit	3541	17.6
Bus Transit	861	4.6
Walk	766	3.8
Bike	480	2.6
Ride-Hail/Taxi	255	1.3
School Bus	9	0.1
Other	54	0.2

Median Trip Distances

People will travel farther for work. For non-commute purposes, the median distances that people walk or bicycle are short.

Table 6: Trip Distances in Miles/RTS

Travel Mode	All	Commute	Non-commute
Drive Alone	4.3	9.3	3.1
Rail Transit	8.6	9.3	6.9
Bus Transit	3.3	4.5	2.9
Walk	0.3	0.7	0.3
Bike	1.6	3.0	1.0
Ride-Hail/Taxi	3.6	4.6	3.3

Changes Since the 2007/2008 Survey

- Bike mode share increased from 0.6% to 1.4% for all trips in the region.
- Walk mode share increased slightly, from 9.1% to 9.3%
- Dramatic increase in bicycle trips in the urban core
- Rail transit declined, and bus transit was stable.
- The differences between the urban core and the outer suburbs are becoming sharper. Walk/bike/ride hail increased in the urban core, while drive alone increased in the outer suburbs.

Bike mode share in DC increased from 1.6% to 5.3%

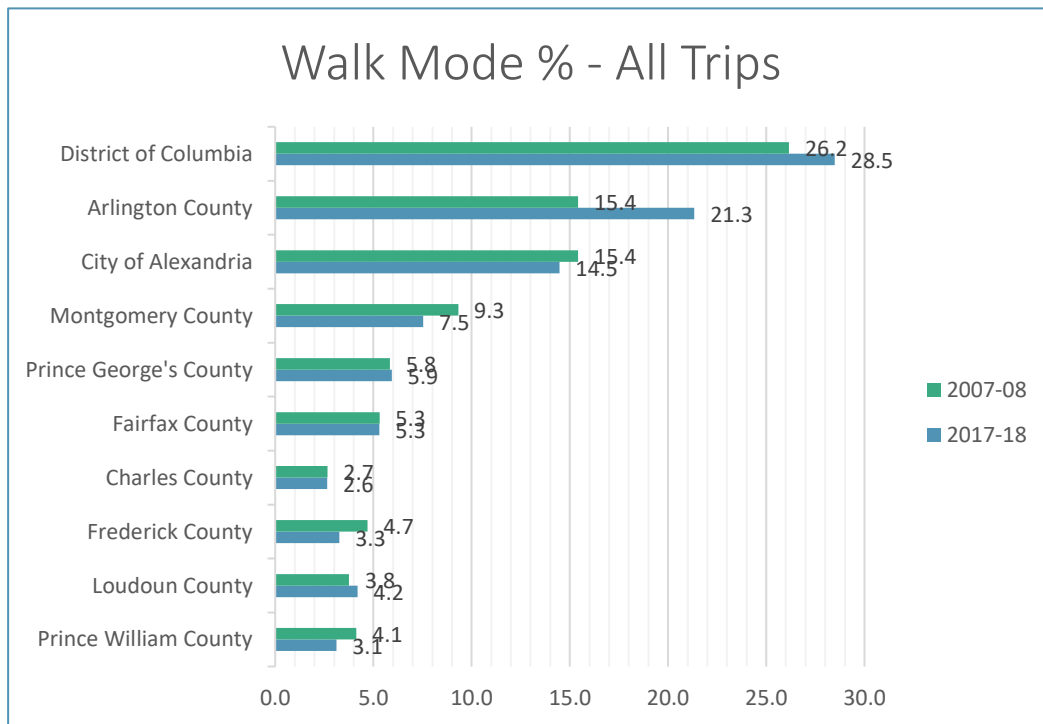


Figure 20: Walk Mode/RTS

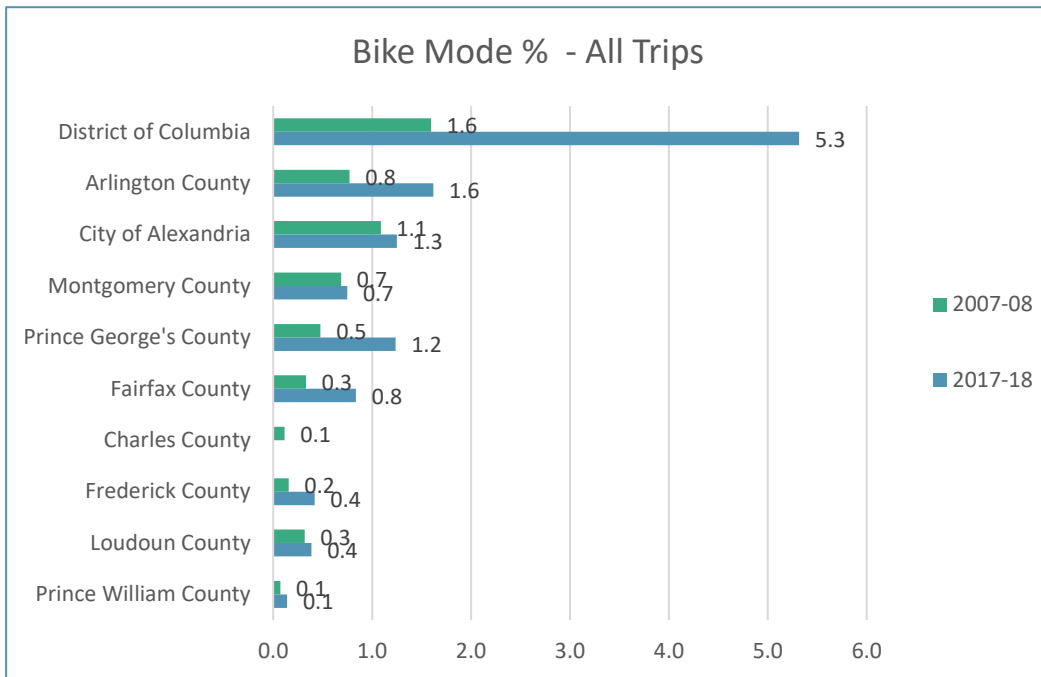


Figure 21: Bike Mode/RTS

BICYCLE/PEDESTRIAN COUNTS

Historically agencies have relied on manual counts of pedestrians and bicyclists, often carried out by volunteers. Manual counts have a number of disadvantages, notably cost, an inherently limited time window, unrepresentative counts due to weather events, and a lack of data on cyclists' and pedestrians' off-peak presence. As a result, there has been a move towards the use of automated bicycle and pedestrian counters. The number of automated counters in the region is still fairly limited.

Arlington County has by far the largest automated counting program in the region. Arlington's first two automated bike and pedestrian counters were installed in the fall and spring of 2009-10 on the Custis and Four Mile Run Trails. They use a combination of in-ground inductive loops and passive infrared detectors to collect data on trail volumes and travel direction. The loops detect metal, which distinguishes a bicyclist from a pedestrian.

The County has 37 permanent installations, and six portable counters to gauge and monitor usage and demand. Mobile counters are used to estimate facility needs and guide negotiations with developers.

The data show that people continue to ride in bad weather, but are deterred by snow and ice on the trails which may not be plowed. Weekday bike traffic peaks during the morning and evening rush hours, while week-end traffic peaks mid-day.

BikeArlington Dashboard

Arlington automated counter data can be found on the BikeArlington dashboard, along with automated count data from Alexandria, DC, Montgomery County, and Prince George’s County. The dashboard can be queried for pedestrians and/or bicyclists by time period, day of the week, direction, and a number of other variables.³⁰

DDOT Counters & Dashboard

The District Department of Transportation (DDOT) maintains a system of automated counters to measure the number of people walking and biking. DDOT began installing these counters in 2014, and currently has 18 in operation. Counters have been installed in both bicycle lanes and trails. One location counts only pedestrians; 10 locations count only bikes; and 7 locations count people biking and walking.

DDOT monitors the continuous data stream to analyze trends in walking and biking, assess the value of its facility investments, and apply this data to plan for new bike lanes and trails. DDOT has created a dashboard where the public can view the counts at each counter.³¹

Regional Transportation Data Clearinghouse

Other bicycle and pedestrian counts from around the region, including both manual and automated counts, are posted on COG’s Regional Transportation Data Clearinghouse.³²

³⁰ <https://www.bikearlington.com/counter-data/>

³¹ <https://ddot.dc.gov/page/dc-automated-bicycle-and-pedestrian-counters>

³² <https://gis.mwcog.org/webmaps/rtdc/>

COMMUTER CONNECTIONS STATE OF THE COMMUTE SURVEY

Demographics and car ownership affect the decision to walk or bicycle to work. The best recent source of this demographic information on pedestrian and bicycle commuters in the Washington region is the 2019 Commuter Connections *State of the Commute Survey*.

The State of the Commute Survey is conducted every three years and documents regional trends in commuting patterns, such as commute mode shares and distance traveled, and prevalent attitudes about transportation services. The resulting data is used to estimate the impacts of several Commuter Connections program services, such as carpooling incentives. Several new modes, such as ride-hail and scooters/bikeshare, were added to the 2019 survey.

The survey had 8,246 respondents. It included Calvert County, in addition to the TPB member jurisdictions.

The *State of the Commute Survey*, like the U.S. Census, measures work trips only.

All data in the following tables comes from the 2019 *State of the Commute Survey* unless otherwise noted. Walking and bicycling were not calculated separately in the *State of the Commute Survey* for the subcategories of race, ethnicity, income, age, and state of residence due to sample size issues. All mode shares are for primary commute mode, 3+ days per week. Walk/bike mode share varies by state of residence, number of vehicles in the household, ethnicity, and age.

Walk/Bike Mode Share

Walk mode in 2019 was 1.7%, and bike/scooter was 1.6%. Weekly commute trips made by biking/scooter/walking were evenly divided between the two modes. Scooters accounted for only 0.1% of total commute trips.

Nearly one in four bike commuters used a rented bike, either a Capital Bikeshare bicycle (16%) or a dockless bike (7%) on some days.



Figure 22: State of the Commute Survey Report

Trip Satisfaction

92% of bike/walk commuters reported being satisfied with their commutes, the highest of any commuter mode. Drive alone commuters were the least happy. Only 45% of drive alone commuters reported being satisfied with their commutes, a steep decline from 57% in 2013. Drivers and carpoolers were also more likely to report that their commutes were getting worse. Bike/walk commuters typically have shorter commutes and are able to avoid traffic congestion.

Bicyclists and pedestrians are the happiest commuters

Of commuters who had recently moved, 3% reported that the availability of protected bike lanes was a factor. Three percent also reported that access to a bikeshare station was important. Access to Metrorail ranked far higher at 44%.

People who walked or biked listed the major benefits as “get exercise” (80%), “avoid stress” (32%), and “save money” (23%).

Bike/Walk by Demographics

Five percent of bike/walk commuters were under the age of 35. Two percent were 55 or older. Younger people are also more likely to use bike share and e-scooter services.

Sex and income had little effect on bike/walk.

Bike/walk use was highest among white respondents, at 6%. Hispanics reported a 2% bike/walk mode share, and African-Americans 1%. Drive alone shares were similar for all three groups.

Motor Vehicles per Household

Vehicles per household is a strong predictor of mode share – the more cars per adult, the more driving. Non-work trips also shift sharply away from walking in households that have at least one car per adult.

16% of people without a car walk or bike to work

Not having a car is also associated with more use of bike share, scooting, transit, and ride-hailing apps. 23% of people living in households with no car had used bike share, and 13% had used an e-scooter service. Having less than one car per adult in the household also had a positive effect on the use of these modes. Having a least one car per adult is predictive of more driving.

Geography

17% of DC residents biked or walked to work, versus 1% for Maryland residents, and 2% for Virginia residents. 13% of residents of the urban core jurisdictions biked or walked to work, and only 37% drove alone.

Distance and Time

Average commute distance was 17.1 miles. About one-third (34%) of respondents commuted fewer than 10 miles one-way, and 16% commuted less than five miles.

Mixed use development near stations has increased pedestrian access to Metrorail

Bicyclists reported an average commute distance of 4.2 miles, and pedestrians reported an average distance of one mile. Trip times were 24 and 15 minutes respectively. Average commute time for the region for all modes was 43 minutes.

Travel distances to alternative meeting points, such as transit stations and park and rides, are short, typically less than three miles.

WALKING AND BICYCLING TO TRANSIT

Mode of Access

Walking is the dominant mode of access to transit. Census Bureau-reported walk to work mode share does not include walk trips to transit, since a walk trip to transit is counted as a transit trip rather than as a walk trip. In areas with high transit ridership the Census walk to work numbers significantly undercount the amount of walking to or from work.

In 2016 WMATA surveyed passengers at all 91 of its Metrorail stations. The primary purpose of the survey was to estimate the percentage of total ridership residing in each jurisdiction. Passengers *entering* each Metro station were queried throughout the entire day, so the “mode of access” number for any given Metro station includes both people on their way to work or some other destination, and those on their way home. “Mode of access” is the mode people use to get to the station, not to leave it.

In 2016 62% of all Metrorail passengers walked to the station and 0.6% arrived by bicycle, essentially the same as in 2012.

However, the A.M. peak results, which as of 2016 are the best measure of how people access the system (as opposed to any particular station), show higher auto mode and bus mode of access. Pedestrian mode of access for the A.M. peak was 40%, up from 37% in 2012, and 33.3% in 2007. Bike access was 1%, the same as in 2012. Drive mode fell from 25.6% in 2012 to 21.5% in 2016.

As of 2016, WMATA was making significant progress increasing walk mode and decreasing drive mode of access to the system.

Distribution

Mode of Access varies greatly by station, from Arlington Cemetery and Mt. Vernon Square 7th St-Convention Center stations, with 97%+ access by foot, to New Carrollton station, with 6% access by foot. The thirty-six stations with the greatest share of pedestrian access (as a percentage of total

passengers accessing that station) are all located in the District of Columbia, Arlington, or Alexandria.³³

Stations with a very high share of pedestrians tend to be major employment centers, with people walking from work to the station, rather than from home to the station. However more than half the top twenty Metro stations for pedestrian access are mixed-use areas with significant residential, retail, or entertainment, which in many cases didn't exist twenty years ago.



Figure 23: NOMA Station Area/TPB/Michael Farrell

The bicycle mode of access to Metrorail ranges from 4% at Medical Center, McLean, East Falls Church, Braddock Road, and West Hyattsville to zero at 48 stations.³⁴ Stations with more bicycling tended to be located in the western portion of the region, have access to a major shared-use path, be near a major University, and/or be located in an area with a bicycle-friendly street grid. Stations with no bicycling are either in dense urban employment centers with no bicycle parking, or are located in the southeastern portion of the region.

³³ Appendix E: Origin Station Sorted by All Day Walk Mode of Access.

³⁴ 2016 WMATA Rail Passenger Survey.

OUTLOOK

Walking and bicycling taken together are significant travel modes in the Washington region, especially for non-work trips, and for trips to transit. Walking is the larger mode, and is growing slowly. Cycling is less common, but is growing rapidly.

Rapid growth in the urban core and regional activity centers favors walking and bicycling

Exurban and outer suburban areas have developed in ways that often make utilitarian walking and bicycling difficult and dangerous, with long distances, lack of direct routes, heavy and fast automobile traffic, and incomplete facilities for walking or bicycling. They typically have low levels of walking and bicycling.

The story in urban areas is different. In the District of Columbia, Arlington, Alexandria, and portions of Montgomery, Prince George's, and Frederick Counties, walking and bicycling are growing.

Since 2010 the urban core jurisdictions have captured a larger share of the region's growth, and have expanded their share of the region's population, a trend which if it continues will help increase walking and bicycling.

It is likely that urban core and inner suburban communities will develop over the next thirty years in ways that will be conducive to walking and bicycling. Many inner suburban activity centers have already reached critical levels of traffic congestion, and regional projections call for rapid employment growth in these same areas.

From 2015 to 2045, 76 percent of job growth and 64 percent of household growth is expected to occur in Activity Centers.³⁵ Under "Complete Streets" policies most of this new development will be walkable and bikeable.

A prominent example is the ongoing transformation of Tysons Corner, a classic auto-oriented commercial center, into a walkable downtown built around Metrorail.

If growth occurs in ways that are consistent with the TPB's regional plans and forecasts, creating activity centers that mix jobs, housing and services in a walkable environment, we can expect growth in walking and bicycling in the inner suburbs as well as in the core.



Figure 24: Growth Trends to 2045

³⁵ <https://www.mwcog.org/documents/2018/10/17/growth-trends-cooperative-forecasting-in-metropolitan-washington-cooperative-forecast-growth-development/>

CHAPTER 3: PEDESTRIAN AND BICYCLE SAFETY

Pedestrian and bicycle fatalities and injuries are a serious problem in the Washington region. More than one quarter of all traffic fatalities in the region are pedestrians or bicyclists. Every jurisdiction has a significant pedestrian safety problem. Pedestrian and bicyclist fatalities account for at least 7% of total traffic fatalities in every major jurisdiction.

While all areas and demographic groups are affected, some groups are more affected than others. Urban areas and inner suburban areas are more heavily affected than the outer suburbs, Hispanics and African Americans more than Whites and Asians.

Adjusted for their high walk and bike mode shares, the urban core jurisdictions are the safest places to walk or bicycle.

This section will describe the scope of the pedestrian and bicycle safety problem, its distribution across the region by jurisdiction, a look at the factors associated with pedestrian crashes, and the legal rights and responsibilities of drivers, pedestrians, and bicyclists. It will also discuss the region's efforts to deal with the problem through the "Street Smart" pedestrian and bicycle safety campaign, and the Regional Roadway Safety Program.

Pedestrian Fatalities in the United States

Pedestrian safety is a major problem nationally as well as in the metropolitan Washington region. Of the 36,408 traffic fatalities in the United States in 2019, 6,301, or 17%, were pedestrians.³⁶

Pedestrian Fatalities are up 46% nationally since 2010

Pedestrian fatalities are up 46% nationally since 2010. All other traffic fatalities are up 5%. This is a reversal of a decades-long trend towards reduced traffic and pedestrian fatalities. The last time pedestrians accounted for 17% of traffic deaths was in 1982.

The United States is an outlier in this respect. From 2010 to 2018 per-capita fatality rates in the U.S. rose by 19% for pedestrians and 11% for cyclists. Northern European countries either saw no increase or continued to see reductions in pedestrian fatalities during this period.³⁷ Walking and bicycling is much more dangerous in the United States than in its peer industrialized countries, and the gap is only getting wider.

Within the United States pedestrian fatalities vary widely by state and region, with Sunbelt cities rated the most dangerous for pedestrians, and Florida as the most dangerous state. Smart Growth

³⁶ <https://www.ghsa.org/resources/Pedestrians21>

³⁷ "The Growing Gap in Pedestrian and Cyclist Fatality rates between the United States and the United Kingdom, Germany, Denmark, and the Netherlands, 1990-2018". Ralph Buehler and John Pucher, *Transport Reviews*, Volume 41, 2021.

America ranks Maryland the 18th most dangerous state for pedestrians Virginia the 26th most dangerous, and the District of Columbia the 48th.³⁸

2020: COVID Impacts

2020 was an unusual year. Despite fewer cars on the road in the first half of 2020, the number of pedestrian fatalities stayed flat. Nationally, from January through June 2020 there were 2,957 pedestrian deaths, while in 2019, there were 2,951 for the same time period.³⁹

Pedestrian Fatalities by Age and Race in the United States

American Indians, African Americans, and people over the age of 65 are over-represented among pedestrian fatalities relative to their share of the population.⁴⁰ Asians are under-represented. Risk varies significantly by State, so jurisdictions should not rely solely on national numbers when planning safety programs.

Pedestrians over age 75 are at high risk of dying if involved in a crash

People over the age of 75 are at high risk; with 6% of the U.S. population, but more than 12% of pedestrian fatalities.

Adjusted for exposure, pedestrians over the age of 65 have a very high risk of dying if involved in a crash, over six times as high as children under age 16.⁴¹ For pedestrians over age 75 the risk is even higher, about eight times the risk for children.

American Indians are also over-represented among bicyclist fatalities. Blacks, Hispanics and Whites have roughly comparable per capita bicycle fatality rates.

Asians have the second-lowest per capita bicyclist fatality rate, after native Hawaiians. Asians have the lowest fatality rates for most other crash types.

³⁸ *Dangerous by Design 2021 Update*, Smart Growth America, page 23. <https://smartgrowthamerica.org/wp-content/uploads/2021/03/Dangerous-By-Design-2021-update.pdf>

³⁹ Governors Highway Safety Association, *Pedestrian Traffic Fatalities by State: 2020 Preliminary Data*, published March 2021

⁴⁰ *An Analysis of Traffic Fatalities by Race and Ethnicity*, Governor's Highway Traffic Safety Association, June 2021. <https://www.ghsa.org/resources/Analysis-of-Traffic-Fatalities-by-Race-and-Ethnicity21>

⁴¹ *Dangerous by Design 2014*, Smart Growth America, p. 13.

PEDESTRIAN AND BICYCLIST FATALITIES IN THE WASHINGTON MSA

Washington is one of the safer Metro areas for pedestrians. The Washington Metropolitan Area was rated 81st out of the 100 largest metro areas for pedestrian danger by Smart Growth America.

Despite a decrease in traffic on our region’s roadways in 2020, pedestrian fatalities held steady relative to 2019, reflecting national trends. In 2020 there were 91 pedestrian and five bicyclist fatalities, compared to 89 pedestrian and seven bicycle fatalities in 2019.⁴²

In 2018 there were 91 pedestrian fatalities, and six bicyclist fatalities.

Pedestrians and Bicyclists account for 30% of the region’s Traffic Fatalities

2020	Alexandria City	Arlington Co.	City of Fairfax	Fairfax Co.	City of Falls Church	Loudoun Co.	City of Manassas	City of Manassas Park	Prince William Co.	Charles Co.	Frederick Co.	Montgomery Co.	Prince George’s Co.	District of Columbia	TOTAL
FATALITIES															
Pedestrian	2	2	0	15	0	1	0	0	5	4	2	15	35	10	91
Bicyclist	0	0	0	0	0	0	0	0	0	0	0	2	2	1	5
All traffic	7	4	1	37	0	12	1	0	18	26	23	46	110	36	321
CRASHES															
Pedestrian	51	77	5	130	6	41	12	3	50	30	30	329	374	626	1764
Bicyclist	9	33	4	52	6	27	9	0	14	12	14	145	90	360	775

Table 7: Pedestrian and Bicyclist Fatalities & Crashes/Street Smart

The region had a stable number of pedestrian fatalities and serious injuries through 2017, but the 2018-2020 fatality numbers are worse. Historically the combined pedestrian and bicyclist fatalities were roughly one quarter of the total traffic fatalities, but now they are at 30%.

While District of Columbia and Virginia pedestrian fatality rates have been roughly stable, in the Maryland counties, especially Prince George’s, fatalities are up. The four Maryland counties in the region had 31 pedestrian fatalities in 2016, but 56 in 2020.

⁴² Data compiled from DDOT, MHSO, and VHSO TREDS

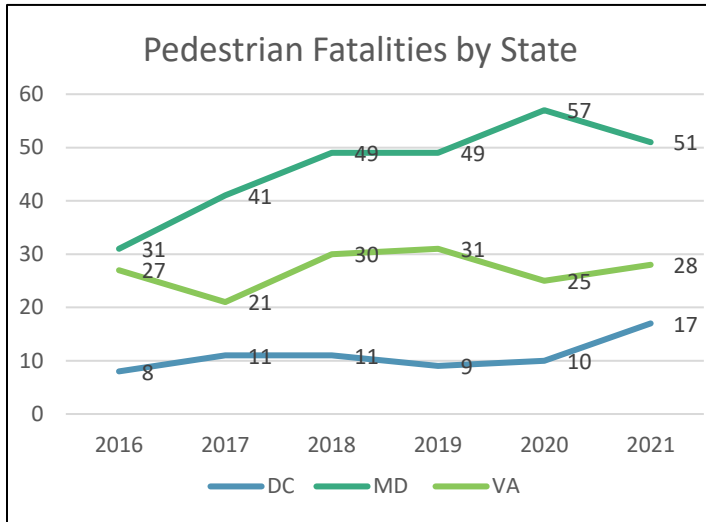


Figure 25: Pedestrian Fatalities by State, 2016-2021, Washington Region

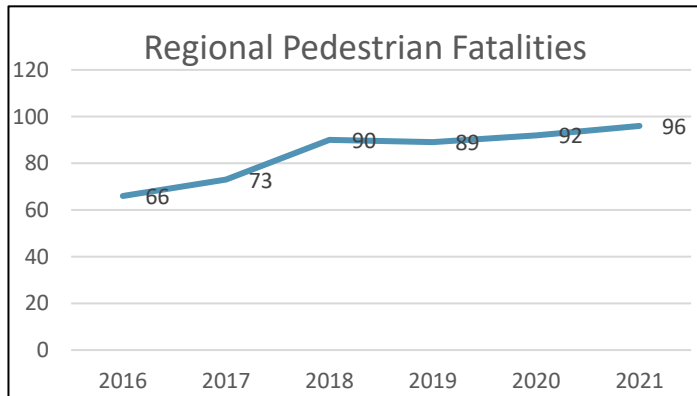


Figure 26: Regional Pedestrian Fatalities, 2016-2021

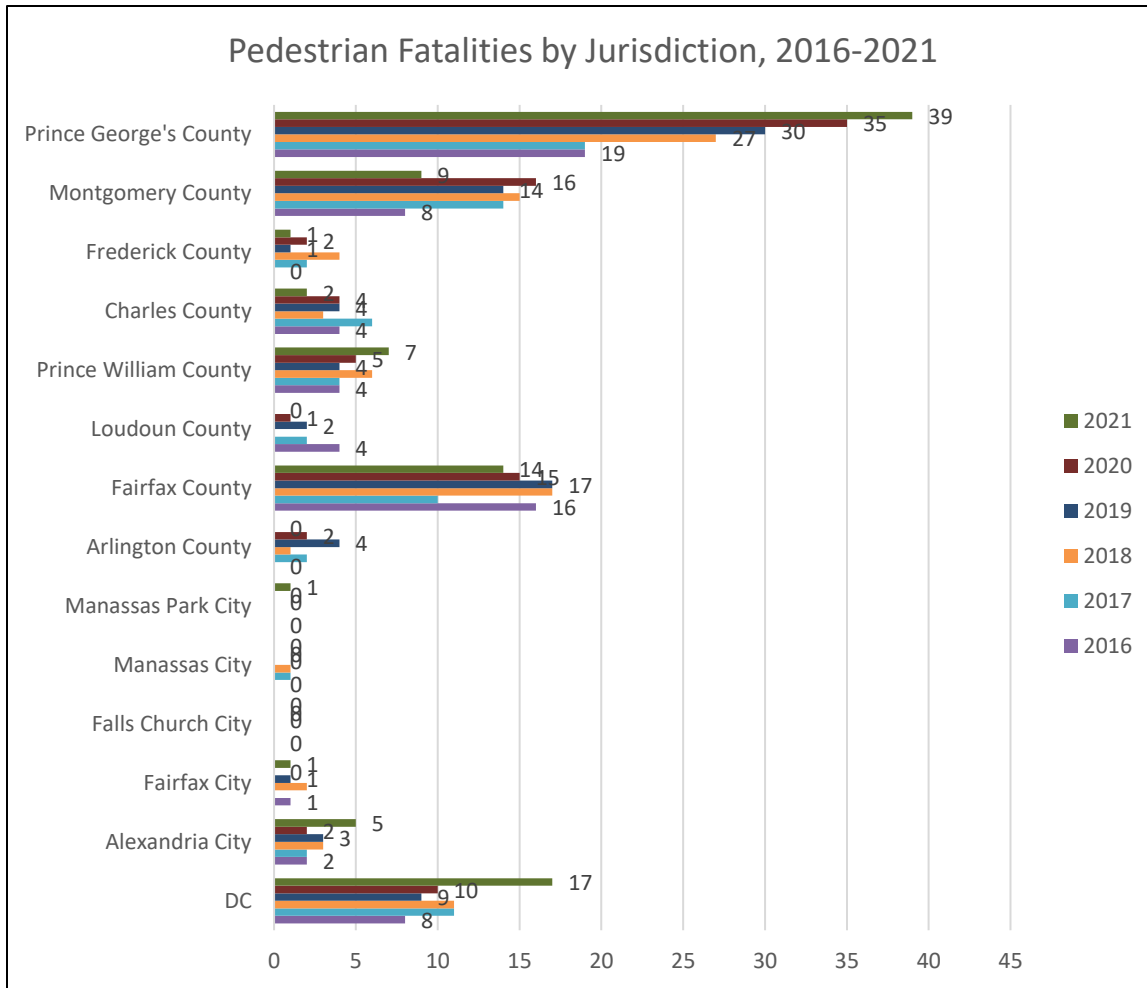


Figure 27: Pedestrian Fatalities by Jurisdiction, 2016-2021

“Deep Dive” into Pedestrian Crashes in the Washington Region

As part of its Regional Roadway Safety Program, TPB commissioned a study of traffic safety in the Washington region in 2019. The study included detailed information on pedestrian crashes by time of day, month of the year, age, location, lighting conditions, severity, etc.⁴³

Information from the safety study regarding pedestrian and bicyclist crashes can be found in Appendix B.

⁴³ <https://www.mwcog.org/transportation/planning-areas/management-operations-and-safety/roadway-safety/>

Safety in Numbers

In the Washington region the jurisdictions that have the highest number of pedestrians are the safest places to walk. The urban core has good pedestrian facilities and low traffic speeds, and drivers expect to see pedestrians and bicyclists. The pedestrian crash rate tends to fall as the number of pedestrians at a location increases. Doubling the number of pedestrians at an intersection already crowded with pedestrians will usually result in little, if any, increase in pedestrian crashes.⁴⁴ Similar effects have been noted for cyclists, with cities having the highest rates of bicycling also having the lowest crash rate per bicycle trip.⁴⁵ High levels of walking and bicycling are associated, in advanced industrialized nations, with very low auto-involved crash rates.⁴⁶ The Netherlands has half the overall traffic fatality rate of the United States, despite a very high walk and bike mode share.

**Pedestrians find
safety in
numbers**

Experience of other nations shows that it is possible to reduce pedestrian and bicycle fatalities while increasing walking and bicycling. On the other hand, it is not possible to eliminate pedestrian fatalities by eliminating pedestrian facilities and discouraging walking; even in our least pedestrian-oriented jurisdictions, pedestrian fatalities account for at least 7% of total traffic fatalities. For the foreseeable future there will be people without cars, and there will always be some trips that will be made on foot.

Numbers alone do not guarantee safety, however. The region's most dangerous areas for walking have high-speed roads and poor pedestrian facilities, together with people who lack automobiles. Lower vehicle speeds in the urban core are a likely cause of the lower fatality rates there.

Differences in the pedestrian injury rates between the suburban jurisdictions are much smaller than differences in fatality rates.

The District of Columbia has seen rising bicycle crash rates as its rate of bicycling has increased, though the crash rate has risen more slowly than bicycling, indicating that riding is getting safer.

Walking is a necessary part of human life and health, and it is essential to the mobility of those who cannot drive. Through "Complete Streets" and other policies the region is striving to make walking safer everywhere.

⁴⁴ Raford, Noah. Space Syntax: An Innovative Pedestrian Volume Modeling Tool for Pedestrian Safety. Presented at the 2004 TRB Conference, January, 2004. (TRB2004-000977) p. 8.

⁴⁵ Denmark Ministry of Transport (1994) Safety of Cyclists in Urban Areas: Danish Experiences.

⁴⁶ Pucher, John. "Making Walking and Bicycling Safer: Lessons from Europe," Transportation Quarterly, Summer 2000.

Legal Status of Bicyclists and Pedestrians

State traffic codes allow bicyclists to travel on most roadways with the general rights and responsibilities of drivers of vehicles. Bicyclists must ride in the same direction as traffic, use lights after dark, and yield to pedestrians. Like operators of other slow-moving vehicles, cyclists—when traveling at less than the normal speed of other traffic—should generally ride as far to the right as safely practicable, except when preparing to turn left, passing, avoiding obstructions, mandatory turn lanes or unsafe pavement conditions, or when the travel lane is not wide enough to safely split with a motor vehicle. Cyclists may use the full travel lane if the lane is too narrow to allow them to ride to the right of motor vehicles safely. Cyclists may usually ride on roadway shoulders, paths and sidewalks, except where prohibited. Cyclists have the rights and duties of pedestrians when traveling on paths, sidewalks, and crosswalks, however, they must yield to pedestrians in those locations.

Bicyclists have the same rights and responsibilities as motorists when riding on the road

Unlike bicyclists, pedestrians should walk facing traffic if they must walk in the road. If sidewalks are available pedestrians are usually required to use them. Mid-block crossings are usually legal unless both ends of the block are signal-controlled. However, pedestrians crossing mid-block must yield to motorists if they are present. An intersection is a legal crossing for pedestrians, regardless of whether the crosswalk is marked. However, a pedestrian may not cross an intersection diagonally unless that movement is specifically permitted. Pedestrians must obey the walk signals.

Rules relating to bicycles can be found on the Washington Area Bicyclist Association web site at <https://waba.org/resources/bikelaws>. Laws for motorists, pedestrians and bicyclists are also listed on <http://www.bestreetsmart.net/laws/>.

PEDESTRIAN AND BICYCLIST EDUCATION AND ENFORCEMENT: THE “STREET SMART” CAMPAIGN

Pedestrian and bicycle safety efforts generally fall into three broad categories of actions, the three E’s: Engineering, Education, and Enforcement. Engineering deals with the design of safer roads, streets, and pedestrian and bicycle facilities. Education includes both classroom-based training and behavioral modification campaigns. Enforcement consists of enforcement of the traffic laws with respect to pedestrians and bicyclists. The regional pedestrian and bicycle safety campaign, Street Smart, deals primarily with education through mass media.

Street Smart was created in 2002 by the region’s governments in response to an ongoing regional pedestrian and bicycle safety problem. Since the region is a single media market, a unified regional campaign is the most cost-effective approach. The program is supported by federal funds made available through state governments, and local funds from WMATA. It is administered by the National Capital Region Transportation Planning Board.

The Street Smart campaign is a twice-yearly, month-long blitz of video, transit, gas station, and internet advertising, supported by public relations activities, direct outreach, and by concurrent law enforcement. The goal of the campaign is to change driver, pedestrian, and bicyclist behavior in order to reduce deaths and injuries. Motorists are urged to “Slow Down and Watch for Pedestrians,” bicyclists to “Obey Signs and Signals,” pedestrians to “Use Crosswalks” and Wait for the Walk Signal.” All materials, including radio spots, are translated into Spanish. Since 2007 campaigns have been held twice per year, in the fall and in the spring. Campaign materials can be found on the web site, <http://bestreetsmart.net>.

Efforts to enforce pedestrian laws are also stepped up in conjunction with the “Street Smart” pedestrian and bicycle safety campaign. Law enforcement has helped reinforce the campaign message, just as it has been used effectively as part of anti-drunk driving and seatbelt advertising campaigns.

Public awareness of these heightened enforcement activities has been a key aspect of this campaign. Fear of legal consequences is effective at changing behavior. And the TV and press media often cover enforcement, providing further opportunities for the campaign to get its message out.

Evaluation

The Street Smart survey of area motorists and pedestrians usually shows that the public is hearing and remembering the Street Smart messages. A survey of 600 households is carried out in December of each year, after the fall campaign, and results compared year over year.



Figure 28: Press Event/Street Smart



Figure 29: Street Smart Ad/TPB/Sherry Matthews Marketing

TRANSPORTATION SAFETY SUBCOMMITTEE

TPB has a Transportation Safety program, which includes pedestrian and bicycle safety. The Transportation Safety Subcommittee convenes safety planners from around the region, coordinates with the three State Strategic Highway Safety Plans, advises the maintenance of the safety aspects of Visualize 2045, and serves as a forum to exchange information on best practices in transportation safety planning.

As part of this effort, the TPB compiles and analyzes safety data at the regional level. As needed, it commissions studies, such as the “Deep Dive” into the causes of crashes described above.⁴⁷

Regional Roadway Safety Program

As mentioned in Chapter 2, this program, established in July 2020, is a technical assistance program similar in structure to the Transportation-Land Use Connections program. It funds projects aimed at reducing fatal and injury crashes. Many of these projects focus on bicycle and pedestrian safety.

OUTLOOK

Pedestrian and bicycle safety has drawn increasing attention in the Washington region and at all levels of government. To build walkable communities, walking and bicycling need to be made safer. Improved occupant protection and vehicle design have saved the lives of many motorists, but we have not made comparable progress for people outside motor vehicles. In fact, the situation has gotten significantly worse over the last several years, both locally and nationally.

Bicycling mode share has increased in the last decade, most notably in the District of Columbia, and that increase has been associated with increased numbers of injuries.

Competing demands on police resources are an ongoing challenge to enforcement of traffic safety laws, and COVID precautions have exacerbated the situation. Automated enforcement has been helpful in many cases but has limitations. Nevertheless, enforcement remains a key component of pedestrian and bicyclist safety.

The Street Smart campaign helps raise awareness, but it is meant to complement, not replace, local three “E” (Engineering, Education, Enforcement) safety efforts. States, cities, and counties need to continue engineering and building safer streets, enforcing the traffic safety laws, and educating motorists, pedestrians, and bicyclists. Agencies that make pedestrian safety a priority have gotten positive results. Increased attention and resources for safety, at all levels, may lead to better understanding of the problem, and more projects to address it.

⁴⁷ <https://www.mwcog.org/documents/2020/07/22/tpb-safety-study-resources--safety-policy-federal-performance-measures-highways--roads-traffic-safety/>

CHAPTER 4: EXISTING FACILITIES FOR WALKING AND BICYCLING

This section describes the types of walking and bicycling facilities currently available in the Washington region, including access to transit, bike sharing, and micromobility.

OVERVIEW

The Washington region has excellent long-distance separated facilities for bicyclists and pedestrians, and an urban core and certain regional activity centers that have good pedestrian and bicycle facilities. In addition, the region is at the forefront of innovation in bicycle facility design. On the other hand, many Activity Centers, not originally designed with pedestrians in mind, have grown dense enough to generate significant pedestrian traffic, and face challenges in terms of providing safe facilities and crossing locations for pedestrians and bicyclists. Other parts of the region have developed at low densities, with separated land uses and indirect routes, which increase pedestrian and bicycle travel time. Pedestrian and bicycle accommodations are not always provided.



Figure 30: Informal foot path/TPB/Michael Farrell

Bicycle connections with transit are generally good, with bicycle parking, bus bicycle racks, and bikes permitted on Metrorail at most hours. Walking is the primary mode of access to transit. Conditions for pedestrian access are excellent at many rail stations, though at some rail stations, originally designed primarily with auto and transit access in mind, pedestrian access could be improved. Bus stops in places originally designed primarily for automobiles often have access and safety problems.

Informal Foot-Paths Show where People Walk

Pedestrians are found throughout the region, and pedestrian traffic is increasingly found in places that were not built for it. This section highlights some of the region's successes in providing for bicycling and walking. These successes can serve as examples of what the region needs to serve its pedestrians and bicyclists.

FACILITY TYPES

Shared-Use Paths



Figure 31: Mount Vernon Trail/TPB/Michael Farrell

The Washington region is renowned for the quality and extent of its major shared-use paths. Shared-use paths are typically located in their own right-of-way, such as a canal, railway, or stream valley, or in the right-of-way of a limited-access highway or parkway, such as the George Washington Memorial Parkway. Most shared-use paths are eight to twelve feet in width. The region has approximately 800 miles of shared-use paths, either paved or level packed crushed stone surface suitable for road bikes. Well-known trails include the W&OD and Mount Vernon Trails

in Virginia, and the C&O Canal, Capital

Crescent, and Rock Creek Trails connecting the District of Columbia and Maryland. Many of the region's shared-use paths go through heavily populated areas, connect major employment centers, and get significant commuter traffic. More information on trails in the Washington region can be found at capitaltrailscoalition.org.

The region continues to build new trails along stream valleys and in conjunction with major highway projects. The remaining inventory of disused rail lines, which often provide the best opportunities for shared-use paths, is small. However, as the region expands commuter rail services, there may be opportunities to build new shared use paths alongside active rail right of way, a practice known as “rails with trails”.⁴⁸



Figure 32: Metropolitan Branch Trail next to Metrorail/TPB/Michael Farrell

⁴⁸ Rails with Trails Best Practices and Lessons Learned (dot.gov) Available at https://www.fhwa.dot.gov/environment/recreational_trails/publications/rwt2021/fhwahep21017.pdf

Sidepaths

Side-paths are shared-use paths that do not have their own right of way, but are closely adjacent to a non-limited access roadway and thus subject to more frequent conflict with driveways, side streets, and turning traffic. Side-paths differ from sidewalks in that they are at least ten feet wide (eight feet was the old standard), are typically made of asphalt, and are designed to meet the needs of bicyclists.

Side-paths meet the need for a separated pedestrian facility and provide separation from traffic that is safer for children and slow-moving cyclists, especially in places where the road has speeds of 40 mph or more and high traffic volumes, conditions often found on major suburban arterials. However, the AASHTO (American Association of State Highway and Transportation Officials) Guide for the Development of Bicycle Facilities offers a number of cautions regarding the use of side-paths or wide sidewalks for bicycles. Frequent driveways, especially with poor sightlines, are hazardous to bicyclists on side-paths. Side-paths remove bicyclists from the motorists' line of sight and allow travel against the flow of traffic, so they may increase the potential for conflicts with motor vehicles at intersections. If the facility is shared with pedestrians there is also a potential for cyclist-pedestrian crashes. Side-paths are most suitable where driveways and intersections are few and sight-lines are good. Intersection crossings should be designed carefully, with a protected signal phase providing the best level of protection.

Bicycle Lanes

Bicycle lanes are marked lanes in the public right-of-way that are by law exclusively or preferentially for use by bicyclists. Bike lanes are one-way, with a bicycle symbol or arrow indicating the correct direction of travel. The minimum width is five feet for roadways with no curb or gutter; next to a curb or parked cars six feet, not including the gutter pan. Bike lanes are provided on both sides of the street, except for one-way streets, and allow travel only in the same direction as adjacent motor vehicle traffic. On-street bicycle



Figure 34: Bike Lane/Pedbikeimages.org/Dan Burden



Figure 35: Green Bike Lane/TPB/Michael Farrell

lanes are generally much less expensive than separated paths. Bike lanes decrease wrong-way riding, define the road space that cyclists are expected to use, increase cyclists' comfort level, and call attention to the presence of cyclists on the roadway. Bicycle lanes are not generally considered safe or adequate for pedestrians, though in rural areas without sidewalks the roadway shoulder serves as both a bicycle lane and as a pedestrian facility.

Bike lanes may be colored green for conspicuity.

The number of bicycle lanes is growing rapidly. The District of Columbia currently has 97 miles of bicycle lanes, up from 19 miles in 2006, Arlington County has 36 miles, and Montgomery County has 55 miles.⁴⁹ The regional mileage of bicycle lanes is expected to increase significantly in the future as the jurisdictions in the urban core build out their planned networks, and suburban areas add more. Google Maps shows existing bicycle paths, lanes, and on-road routes.

Buffered Bicycle Lanes

A buffered bicycle lane is a bicycle lane with a spatial buffer to increase the distance between the bicycle travel lane and the automobile travel lane or the parking zone. The buffer zone is usually marked with striped paint. Buffered bike lanes are sometimes used where higher than normal speeds, traffic volumes or truck volumes, or high-turnover parking are experienced. It allows additional space to be provided for bicyclists without creating something that looks like a travel lane to motorists. The example in Figure 23 is from Arlington County.



Figure 36: Buffered Bike Lane/TPB/Michael Farrell



Figure 37: Contraflow Bike Lane/TPB/Michael Farrell

⁴⁹ <https://www.montgomerycountymd.gov/dot-dte/bikeways/index.html>

Contraflow Bike Lanes

On some one-way streets, if there is a need, a bike lane may be marked against the flow of traffic. As shown in Figure 24, a one-way single lane street has been marked with a contraflow bike lane, while the travel lane has been given speed humps and shared lane markings (sharrows) to encourage sharing the travel lane. The street is one-way for cars, but two ways for bikes. Side streets in the District of Columbia have a 15 mph speed limit, which on this street is observed thanks to traffic calming features such as speed humps and a mature tree canopy.

Protected Bike Lanes (Cycle Track)

A protected bike lane or cycle track is a bicycle-only facility that provides physical separation within the right of way from vehicle travel lanes. Protected lanes can be either one-way or two-way, on one or both sides of a street, and are separated from vehicles by wands,

The 15th Street cycle track has increased ridership by more than 200%

bollards, curbs/medians, parked cars, or a combination of these elements. Protected bike

lanes can either incorporate bicycle-only signal phases at intersections (for 100% separation) or utilize “mixing zones” to merge bicycle and motor vehicle traffic.⁵⁰ DDOT is an innovator in the development of protected bike lanes in the United States.



Figure 38: 1st Street NE Protected Lane/TPB/Michael Farrell

Protected bike lanes can pose a design challenge due to the potential conflicts with turning vehicles, and lack of visibility of cyclists to turning vehicles when separated by parked cars.

They have been used in numerous cities in Europe with mixed results.⁵¹ Installation of protected bike lanes was found to result in an increase in collisions at intersections in Copenhagen, which more than offset a decrease in motorist-overtaking collisions and collisions with parked cars, for a net increase in the number of collisions of 9%. However, the same study showed that installing protected bike lanes increased bicycle (and moped) ridership 18 to 20 percent.⁵² Installing bike lanes resulted in a 5 to 7% increase in ridership, and a 5% increase in crashes. For both protected and unprotected bike lanes the number of riders can be expected to increase more than the number of crashes.

Riders perceive protected bike lanes as safer, and it should be noted that motorist-overtaking collisions, while relatively rare, account for a disproportionate number of serious and fatal injuries.

⁵⁰ National Association of City Transportation Officials. <http://www.nacto.org/cycletracks.html>

⁵¹ Jensen, Søren Underlien, Claus Rosenkilde and Niels Jensen. Road safety and perceived risk of cycle facilities in Copenhagen. Available at http://www.ecf.com/files/2/12/16/070503_Cycle_Tracks_Copenhagen.pdf

⁵² *Cycle Tracks: Lessons Learned*. February 2009. Alta Planning and Design. Page 1.

Protected bike lanes attract users of all ages and abilities

The District of Columbia is actively installing protected bike lanes, towards an eventual planned network of 72 miles.

The first segment of protected bike lane in the District of Columbia was installed in 2009 on 15th Street NW. In terms of ridership, the 15th Street protected bike lane, which has been in operation the longest, has been a success. After the two-way protected bike lane was installed, there was a 205 percent increase in bicycle volumes during the P.M. peak hour.⁵³

More recent projects include a one-way couplet of protected bike lanes on L Street and M Street NW (not yet complete) in downtown as well as the 1st Street NE protected bike lane, which connects the Metropolitan Branch Trail to Union Station, and numerous others. DDOT's goal is to add 20 miles of protected bike lanes per year.

To help prevent turning conflicts, protected bike lanes may be equipped with separate signals for bicycles.



Figure 39: Union Station/TPB/Michael Farrell



Figure 40: 15th Street NW Protected Lane/TPB/Michael Farrell

⁵³ *Bicycle Facility Evaluation, Final Report*. April, 2012, p. 12.



Figure 41: 15th & Florida NW Intersection with Traffic Arrow and Bike Signal/TPB/Michael Farrell

Dual Facilities

In recognition of the fact that fast-moving cyclists may be better off with an on-road facility, Montgomery County is planning many of its bicycle routes as dual facilities, with both an on-road bike lane and a side-path for pedestrians and slow bicyclists. VDOT's *Northern Virginia Bikeway and Regional Trail Study* recommends that both on- and off-road accommodation be provided.⁵⁴ Under the routine accommodation policy, VDOT is to provide adequate facilities for pedestrians and bicyclists even if not called for in the local plan.



Figure 42: Virginia Avenue SE/TPB/Michael Farrell

⁵⁴ *Northern Virginia Regional Bikeway and Trail Network Study*. November, 2003. Virginia Department of Transportation, Northern District Office. Page 19.

Where bicycle and pedestrian volumes warrant it, and right of way permits, multi-use paths may be split into parallel pedestrian and bicycle paths. This separation allows cyclists and rollerbladers to maintain speed without risk to pedestrians. The Washington & Old Dominion Trail in Northern Virginia includes several sections with gravel pedestrian paths that parallel the paved shared-use path. The Virginia Avenue SE Shared Use path includes an adjacent sidewalk for pedestrians, as does the bike path along Maine Avenue SW next to the Wharf.



Figure 43: The Wharf, DC/TPB/Michael Farrell

Protected Intersection⁵⁵

At protected intersections, the bikeway is set back from the parallel motor vehicle traffic. Unlike at conventional bike intersections, people biking are not forced to merge into mixed traffic. Instead, they are given a dedicated path through the intersection, and have the right of way over-turning motor vehicles. Protected intersections are a new treatment in the Washington region. The first fully protected intersection in the region is at Spring Street and Second Avenue in Silver Spring, MD.⁵⁶



Figure 44: Partial Protected Intersection/TPB/Michael Farrell

⁵⁵ <https://nacto.org/publication/dont-give-up-at-the-intersection/protected-intersections/>

⁵⁶ <https://ggwash.org/view/73335/the-east-coasts-first-protected-intersection-is-coming-to-silver-spring-heres-how-it-works>

Tactical Urbanism

Tactical urbanism is the use of inexpensive materials, like flexposts, rather than permanent curbs. With flexposts, traffic calming features such as bulbouts can be installed at low cost. Using such materials allows a treatment to prove itself without spending a lot of money on new curbs and drainage. If it fails or creates unanticipated issues, it can easily be removed or modified. An effective treatment may be replaced with permanent materials once it wears out.



Figure 45: Flexpost Bulbouts/TPB/Michael Farrell

Signed Bicycle Routes

The region has hundreds of miles of signed bicycle routes. Signed routes have the advantage of being inexpensive and informative for cyclists. A signed route has not necessarily had any bicycle-related improvements apart from signing. However, bicycle-friendly features such as paved shoulders, a wide curb lane, or low traffic volumes or speeds *may* be present. Bicycle route signs often include information on distances to destinations.

The regional (and national) standard for on-road bicycle facilities is the FHWA's Manual on Uniform Traffic Control Devices, discussed in Chapter One. For off-road facilities, especially those run by parks departments, signs are not standardized.



Figure 46: DC Bike Route Sign/TPB/Michael Farrell

Bicycle Boulevards/Neighborhood Greenways

Bicycle Boulevards, which Montgomery County calls Neighborhood Greenways, are streets with low motorized traffic volumes and speeds, designed 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.⁵⁷

Design elements may include:

- 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.

⁵⁷ <https://montgomeryplanning.org/wp-content/uploads/2018/05/Bicycle-Facility-Design-Toolkit-May-2018.pdf> Page 43.

- 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.
- Wayfinding signs to guide bicyclists along the route and to key destinations.

Long-Distance Bicycle Routes

Several notable long-distance routes promoted by national-level organizations pass through the Washington region. These include the East Coast Greenway, Bicycle Route 1, the Great American Rail-Trail and the American Discovery Trail.

The East Coast Greenway Alliance is promoting what will eventually be a mostly off-road path connecting all the major cities of the East Coast. Currently 20% open for public use, it will span 2,600 miles from Calais, Maine, to Key West, Florida. Bicycle Route 1 is part of a national network of low-traffic road routes promoted by the Adventure Cycling Association. The cross country Great American Rail Trail, currently 50% complete, starts on the Mall and follows the C&O Towpath west, ending on the Olympic Peninsula of Washington State. The American Discovery Trail is a coast-to-coast, recreational, non-motorized trail, which follows the C&O Canal Towpath and the Anacostia River Tributary Trails. All organizations promoting long-distance routes rely on local agencies and organizations to realize their vision.



Figure 47: East Coast Greenway in DC/East Coast Greenway Alliance

Exclusive Bus/Bicycle Lanes

Exclusive bus lanes are sometimes used on streets with heavy bus traffic. Bicycles are sometimes permitted to use those lanes. Bus/Bike Lanes can be found in the District of Columbia. Conflicts can occur due to differences in speed between buses and bicyclists.

Bike Boxes



Figure 48: Bike Box/TPB/Michael Farrell

A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.⁵⁸ They are often painted green and are typically located between the stop bar and the crosswalk. Bike boxes are typically used at locations where bike volumes are high, and they are sometimes combined with an advanced signal phase for bicyclists, which allows the crowd of bicyclists to clear the intersection and make turns without conflicting with automobile traffic.

Bridges

The Woodrow Wilson Bridge trail, completed in 2009, allows cyclists to cross the Potomac River on the capital beltway at Alexandria. This multi-use path allows riders on the Mt. Vernon Trail to access the National Harbor development in Prince George's County without going on street. Connections are also provided to an on-street network of bicycle routes in Prince George's County.

The 14th Street Bridge, the Memorial Bridge, the Theodore Roosevelt Bridge, the Key Bridge, and the Chain Bridge all have bicycle and pedestrian facilities.

⁵⁸ <https://nacto.org/publication/urban-bikeway-design-guide/intersection-treatments/bike-boxes/>



Figure 49: Woodrow Wilson Bridge Trail/TPB/Michael Farrell

Cyclists may use the US 15 bridge at Point of Rocks and the MD 17 bridge at Brunswick to get across Frederick County and Loudoun County, though they have no separated facilities.

With the completion of the 11th Street Bridge project, bicyclists and pedestrians gained a first rate multi-use path connection from Anacostia to the Navy Yard area of Southeast DC.

The District of Columbia is in the process of upgrading the remaining Anacostia River separated bicycle and pedestrian river crossings as these aging bridges are replaced and rebuilt.

The Long (rail) Bridge over the Potomac will eventually include a second span for two additional tracks, and a separate bike/ped bridge.



Figure 50: 11th Street Bridge/TPB/Michael Farrell

On-Line Bicycle and Pedestrian Routing

The last few years have seen a flowering of on-line resources that enable cyclists and pedestrians to locate facilities and plan their routes. Google Maps offers the most familiar interface.

BICYCLES AND PUBLIC TRANSIT

The region has made progress integrating bicycling and public transit, with secure bike parking available at most rail stations, bicycles permitted on Metrorail at all times (subject to crowding), and most of the buses in the region now equipped with bicycle racks. Specific agency policies and facilities are described below.⁵⁹

Metrorail Guidelines

- Bicycles are welcome on Metrorail during all hours; however,
- **Bikes are not allowed on crowded railcars.**
- Bikes may not block aisles or doors of the train.
- Older adults and people with disabilities always have priority.
- When boarding the train, use the doors at either end of the railcar - not the center doors.
- Bicycles may not be carried on escalators. Use elevators only.
- Do not ride bicycles in stations, on platforms or on trains.
- Metro reserves the right to disallow bicycles when there is crowding.
- For full Bike on Rail guidelines see: <https://www.wmata.com/service/bikes/>

Metrorail Bike Parking

Metro now has three secure Bike & Ride facilities at historically high bike-to-rail stations: College Park, East Falls Church, and Vienna. Together, Metro's Bike & Ride facilities now offer secure parking for about 270 bikes, with space for expansion to meet future demand.

Metro currently owns and operates about 2,400 bicycle racks, and is replacing older racks with new inverted-U racks. Metro also offers 2,400 bike lockers.



⁵⁹ <https://www.wmata.com/service/bikes/>



Figure 51: New Bike Racks/WMATA

Metrobus

- All Metrobuses have racks on the front that carry **up to** two bicycles. No permit is required. Instructions for how to use bus bike racks is available at
- Metro has adopted guidelines for the design and placement of bus stops to improve their safety, comfort, accessibility, and efficiency.

Park and Ride

Of the 400 park and ride lots in the Washington DC-MD-VA Metropolitan Statistical Area, about a quarter have bike lockers or racks.⁶⁰ Commuter Connections offers an interactive park and ride lot map, which shows whether park parking is available at a lot.

Commuter Rail

Collapsible bicycles are permitted on all VRE trains. Full size bicycles will only be allowed on the last three northbound, the mid-day, and the last three southbound trains on each line.

MARC trains have bike racks on all trains. The racks will accommodate a full-size bicycle. No bag or case is required.

⁶⁰ <https://www.commuterconnections.org/park-ride-lots-in-the-metropolitan-washington-baltimore-regions/>

PEDESTRIAN ACCESS TO TRANSIT

82% of Metrobus passengers walk to transit, and 62% of all Metrorail trips start with the passenger walking to the rail station. However, the morning peak walk mode of access, which is the best measure of how people originally get into the system, is 40%.⁶¹

The quality of pedestrian access to Metrorail and Metrobus varies. Many suburban rail stations were built with an emphasis on automobile and bus access. Bus stops are often placed in areas with no sidewalks or available crosswalks. However, conditions have improved in recent decades, as new design guidelines have gone into effect, and station areas have been redeveloped along more pedestrian-level lines.

BIKE PARKING

The District of Columbia, Arlington, Alexandria, and other jurisdictions provide bike racks on public property for short-term bicycle parking. They also require secure long-term bicycle parking to be provided as part of new development.



Figure 52: Ad hoc bike parking/TPB/Michael Farrell

⁶¹ 2016 WMATA Rail Passenger Survey.

Bike Corrals

As demand grows in congested areas, the District of Columbia has added bike corrals, which are bike racks placed in the street, and protected by flexi-wands and tire stops. Twelve bicycles can be parked in the space required to park one automobile. And because bicycles do not block motorists' sight lines, they can be placed near the intersection where parking is not permitted, resulting in no loss of car parking. New bike corrals include space for e-scooters.

Tire stops are used at some locations to prevent cars from backing into the racks.

District of Columbia Bike Center

In response to demand for secure bicycle parking at Union Station, in 2009 the District of Columbia opened a Bike Station. The facility houses over 100 bicycles in 1,600 sq. ft. of free-standing ultra-modern glass and steel design. DDOT manages the Bike Center at Union Station, which has offered secure bike parking at Union Station since 2010. The Bike Center is currently closed for repairs.



Figure 53: Bike Corral/TPB/Michael Farrell



Figure 54: DC Bike Center/TPB/Michael Farrell



Figure 55: DC Bike Center/TPB/Michael Farrell

The DC Bike Center is a unique structure designed for a particular site. It required an unusual degree of architectural review due to its location on the National Mall. Far less expensive, modular self-service bike parking structures are available.

CAPITAL BIKESHARE

Bike sharing is self-service public bicycle rental. It is similar to a car-sharing system, such as ZipCar, where members pay a fee and have access to any available bike throughout the regional system. Unlike earlier “public bicycle” or “yellow bike” programs, which failed due to lack of means of preventing theft, modern bicycle sharing links rentals to a user’s credit card, which can be charged if the bicycle is not returned. Bike sharing became common and popular first in Europe and then the United States, with programs in dozens of cities. Options for low-income access are also available.

Capital Bikeshare has over 5,000 bicycles and 600 stations

Since it opened in 2010, the regional bike sharing program, Capital Bikeshare has grown to include 5,000 bicycles at over 600 stations in seven jurisdictions: District of Columbia, Arlington County, City of Alexandria, Montgomery County, Prince George’s County, Fairfax County, and the City of Falls Church.

Capital Bikeshare is one of the largest and most successful bike share systems in the United States. Its solar-powered semi-mobile bike stations require no utility hook-up, which expedites installation. It operates year-round, with winter ridership a little more than one third the level of the warm weather months. It attracts many tourists as well as residents.

Capital Bikeshare now offers e-bikes at some stations. In 2019 e-bikes accounted for 10% of the fleet but 20% of the trips, which with the higher fees has made them a revenue driver.



Figure 56: Capital Bikeshare Station/TPB

MICROMOBILITY

“Shared micro-mobility” includes both station-based bikeshare such as Capital Bikeshare, and the various dockless e-scooter and e-bike rental services. There are major differences in the organization and operations of these systems.

Capital Bikeshare is a regional, publicly provided program, and its user base consists mostly of its long-term membership, along with some short-term passes, using a fob key or app QR code to unlock the bikes. Bikes must be returned to a station.

Dockless bikeshare is privately provided, and the bikes or e-scooters accessed with a Smart phone app. Trips are charged per minute. In the initial launch period, the issue of where to park the bike was left mostly unresolved, with non-binding recommendations to users not to block the sidewalk.

Each jurisdiction developed its own regulations for these services, although there was regular consultation between the jurisdictions, including workshops held every six months, while these regulations were being developed.



Figure 57: Shared E-scooters/TPB/Michael Farrell

The initial roll-out in the Washington region happened in 2017-2018, with various companies putting dockless pedal bikes out on the street, often with little consultation with the affected jurisdictions.

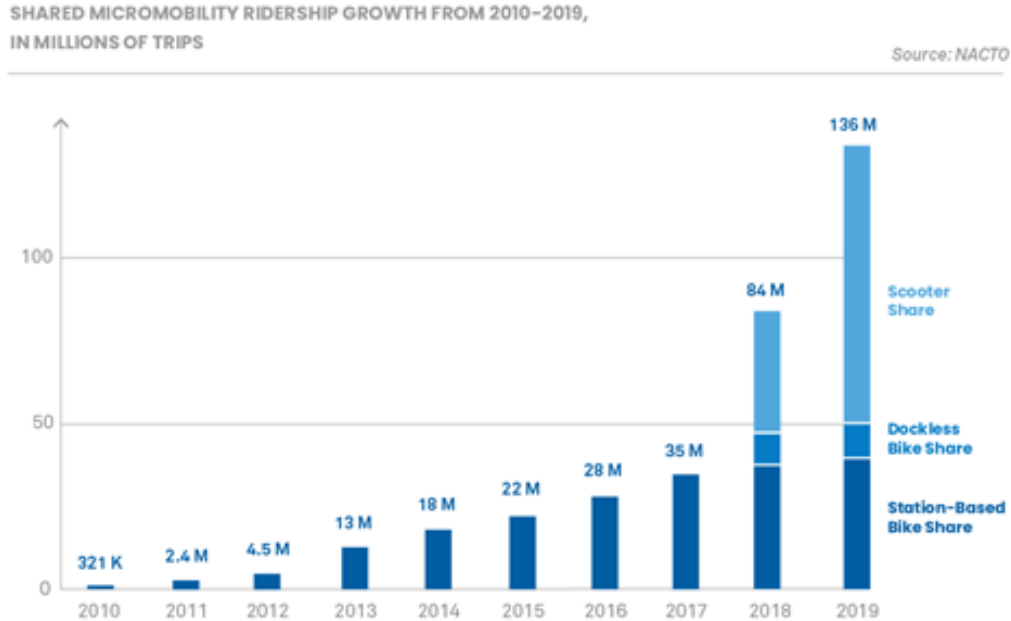


Figure 58: Shared Micromobility Ridership Growth/NACTO

THE E-SCOOTER BOOM⁶²

In 2019, people took 40 million trips on station-based bike share systems (pedal & e-bikes). In 2019 the brand-new dockless systems dwarfed those numbers. There were 96 million trips on dockless e-bikes (10M trips) and scooters (86M trips). In 2019, 109 cities had dockless scooter programs, a 45 increase from 2018. E-scooter trips doubled compared to 2018.

Station-based bikeshare trip numbers increased by 10%, even as the number of systems fell by 4%.

THE WASHINGTON REGION

The DC area is a good market for shared micro-mobility. It has a young population, low car ownership, high smartphone use, high income and education, and congested traffic. Use is focused on the core of the Washington region, especially DC proper, along with Arlington, Alexandria, and portions of Montgomery County, which have active permit programs. The regional permitted fleet size was over 13,000 as of 2020, of which the DC fleet accounted for roughly half.

TRAINING

While Capital Bikeshare users typically know how to ride a bike, e-scooter users often had never ridden an e-scooter. User training is mostly app-based, followed by trial and error. A third of incidents happen on the first use. Some agencies/operators have sponsored training events. “Push” safety reminders from the app remind users of issues they may be facing based on time and location (i.e., don’t drink and ride).

REGULATION

E-scooters are privately provided at no cost to the jurisdiction. However, the jurisdiction cannot avoid administrative costs from a scooter deployment. It must respond to calls from the public regarding badly parked scooters, sidewalk riding, crashes, etc. E-scooters generate demand for more infrastructure, such as bike lanes and e-scooter parking areas.

A permit program can help alleviate some of these issues. Fees on operators can generate revenue to pay for the agency’s expenses, while requirements on operators to share anonymized trip data can assist with planning.

Built-in speed governors can enforce speed, while geofencing can enforce slow zones and no-service zones. Other common restrictions on users include age restrictions, driver’s license requirements, and late night use restrictions (though this last is controversial, due to late night need for transport when transit service may be spotty).



Figure 59: Safety Tips/Arlington

⁶² “Shared Micromobility in the US: 2019” NACTO. Page 4.

Inconsistent regulations governing where and how e-scooters e-bikes can be used complicates enforcement and compliance. For example, a parks department might ban e-scooters on its trails, while the DOT in the same jurisdiction allows them.

Arlington polled e-scooter riders and found that they strongly preferred riding in protected bike lanes and regular bike lanes over riding on the sidewalk. Only 9% of polled riders indicated that the sidewalk was their first choice.

E-scooter and E-bike speeds are generally limited to 20 mph or less on shared use paths, a speed already commonly attained by faster bicyclists. Where traffic volumes warrant it, dual, separated facilities such as protected bike lanes and clearly delineated bike trails alongside pedestrian-only sidewalks are being built.

Based on the crash rate rates, the agencies have determined that safety is not a significant enough problem to justify stopping the permit programs.

CHALLENGES FOR PEDESTRIANS WITH DISABILITIES

Improper sidewalk parking and sidewalk riding of e-scooters poses a hazard to pedestrians, especially pedestrians with disabilities. E-scooters, even when limited to 10 mph, can pose a hazard, especially to more vulnerable pedestrians, including small children and older adults. Improperly parked e-scooters may block the sidewalk entirely, a major problem for the walkers who have visual impairments and people who use wheelchairs.

The e-scooters were a private sector initiative, and continue to be privately provided. The jurisdictions have permitted them to operate, and attempted to mitigate the harms, while capturing the benefits. Shared e-scooter trips displace a significant amount of private motor vehicle and ride share (taxi) traffic in congested areas, while requiring very little space for parking. They can share bike lane and parking infrastructure with bicycles.

Mitigation efforts by the jurisdictions include the provision of bike corrals for parking bikes and e-scooters, addition of bike lanes for e-scooter and bicycle riding, and in DC the requirement that e-scooters be locked to a bike rack or sign. However, even when locked to a sign a scooter can still be illegally parked in such a manner as to block the sidewalk. And not all E-scooter users use the corrals. Getting to a solution that is acceptable to everyone is likely to be an iterative process, with infrastructure, vehicular, and regulatory adjustments to be developed as problems become evident.

E-scooters are not useable by most people with disabilities, and are generally less used by older people. They are physically more challenging to operate than a Capital Bikeshare bike. Arlington is introducing seated e-scooters, which may broaden their appeal somewhat.

EQUITY

E-scooters are typically used in the densest neighborhoods, which have the highest volume of the short trips which micro-mobility can serve. In the Washington region that often means affluent areas with good Metro access and a well-developed network of bike lanes.

Studies show that in Baltimore the user base is significantly less white and less affluent than in Arlington County or the District of Columbia. Baltimore requires that high-poverty close-in neighborhoods receive minimum deployments of e-scooters. Hispanic residents of Baltimore have been the most likely to use the e-scooters. Baltimore has several low income and minority neighborhoods close to the city center, and a lot of demand for short trips that are not well served by Baltimore's transit system.

The experience of Baltimore shows that e-scooters can be a popular, well-used mode in low income and minority communities.

PROSPECTS

Shared micro-mobility serves the TPB's regional planning goals. It provides a valued option for short trips. On average, the typical scooter user or bike share annual/monthly pass-holder rides for 11-12 minutes and 1-1.5 miles per trip.⁶³ Growth in dockless mobility has come mostly at the expense of ride-hailing, driving, and walking.

Dockless shared mobility is likely to continue for the immediate future. Safety, sidewalk riding, and parking issues can be at least partially mitigated.

However, there are long-term threats to the industry. The companies are not profitable, and they depend on venture capital. Theft and vandalism have led to a low vehicle lifespan. Permit fees and other regulatory demands are increasing, and operators may need to raise their rates, which could reduce the appeal of shared systems.

OUTLOOK

Facilities for bicycling and walking in the Washington region are likely to improve significantly in the future. Federal, regional, state and local policies and transit agency initiatives all call for better and more complete facilities. Bicycle lanes, protected bike lanes, and dual facilities for pedestrians and bicyclists will become more common, and bike sharing will continue to expand in the urban core and beyond.

⁶³ Ibid, page 8.

CHAPTER 5: RECOMMENDED PRACTICES

The *TPB Vision*, *Region Forward*, and *Regional Transportation Priorities Plan* call for a transportation system that allows convenient and safe bicycle and pedestrian access, with dynamic regional activity centers and an urban core that contain a mix of jobs, housing and services in a walkable environment. In order to achieve these goals, the Bicycle and Pedestrian Subcommittee has developed the following set of recommended best practices.

A. INCORPORATE BICYCLE AND PEDESTRIAN ELEMENTS IN ALL JURISDICTIONAL PLANNING AND DESIGN POLICIES. ADOPT “COMPLETE STREETS” POLICIES.

Include bicycling and walking, incorporating provisions for persons with disabilities, in all stages of the transportation and land use planning process, from initial concept through implementation.

In particular, consistent with federal policy and the National Capital Region Transportation Planning Board’s [Complete Streets](#) policy, every jurisdiction and agency should **adopt a Complete Streets policy** that includes elements that the TPB believes reflect current best practices.



Figure 60: Missing Sidewalk/TPB/Michael Farrell

Under Complete Streets policies pedestrians and bicyclists will be accommodated as part of all transportation projects, with a **few limited and well-defined exceptions**. A Complete Streets policy would typically not apply:

- To a new transportation facility construction or modification project for which, as of the effective date of the adoption of the policy, at least 30 percent of the design phase is completed.
- To a transportation facility which prohibits, by law, use of the facility by specified users, in which case a greater effort should be made to accommodate those specified users elsewhere in the travel corridor.
- When the cost to the exempted project in achieving compliance with the applicable complete streets policy would be excessively disproportionate (as per FHWA guidance), as compared to the need or probable use of a particular complete street.

“A complete street safely and adequately accommodates motorized and non-motorized users, including pedestrians, bicyclists, motorists, freight vehicles, emergency vehicles, and transit riders of all ages and abilities, in a manner appropriate to the function and context of the facility.”

- When the existing and planned population and employment densities or level of transit service around a particular roadway are so low that there is a documented absence of a need (as per FHWA guidance) to implement the applicable complete streets policy.
- To passenger and freight rail projects, which shall not be required to accommodate other motorized users in the railway right of way, although safe and adequate rail crossings for motorized and non-motorized users should be provided.
- To transportation projects which do not provide for direct use by the public, such as maintenance facilities, drainage and stormwater management facilities, education and training, transportation security projects, beautification, and equipment purchase or rehabilitation.

“VDOT will initiate all highway construction projects with the presumption that the projects shall accommodate bicycling and walking”

Agencies should carry out periodic **audits to monitor compliance** with a Complete Streets policy once it is adopted.

An effective complete streets policy is critical, since retrofitting pedestrian and bicycle accommodations is far more expensive than designing them in from the beginning. Policies which urge agencies to “consider” or “encourage” the provision of pedestrian and bicycle facilities often do not provide clear guidance as to when pedestrian or bicycle facilities should or should not be provided. Absent a clear mandate, pedestrian and bicycle facilities tend to be omitted.

Retrofitting pedestrian and bicycle accommodations is far more expensive than designing them in from the beginning.

In addition, agencies should:

1. **Take into account likely future demand** for bicycling and walking facilities in planning transportation projects; do not adopt designs that would preclude future improvements.
2. **Encourage public participation** by bicyclists, pedestrians with disabilities, and other community groups in the planning process.
3. Ensure **adequate funding** for bicycle and pedestrian transportation staff and facilities, including land acquisition, design, construction, and proper maintenance.
4. **Integrate bicycling and walking** into new development, including new **schools**.
5. Require **land developers to finance and construct sidewalks**, shared-use paths, and bicycle parking facilities within their developments.

6. Require land developers to design developments in a way that facilitates internal and external bicycle and pedestrian access.

Students who walk to school behave and perform better

New development should feature a **dense network of interconnected streets** to minimize trip distance and offer many low-speed, low-traffic routes. Superblock and cul-de-sac development patterns should be discouraged, and transit-oriented development should be encouraged. Use the Virginia Department of Transportation's [Secondary Street Acceptance Requirements](#) as a model.⁶⁴

7. Locate new schools in walkable communities. Use the EPA school siting guidelines.⁶⁵ For existing schools, improve pedestrian and bicycle facilities whenever a school is renovated or the streets surrounding a school are repaved or reconstructed.

8. Design, construct, operate, and maintain sidewalks, shared-use paths, street crossings (including over- and under crossings), pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways so that all pedestrians, including **people with disabilities, can travel safely and independently**, in all seasons. Maintenance of pedestrian and bicycle facilities should include snow and ice removal.

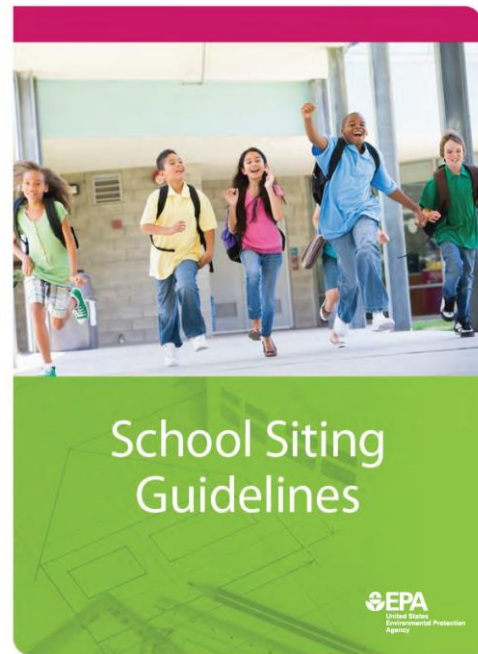


Figure 61: EPA School Siting Design Guide

B. IMPROVE INTER-JURISDICTIONAL COORDINATION TO DEVELOP A CONTINUOUS BICYCLE AND PEDESTRIAN TRANSPORTATION SYSTEM THROUGHOUT THE WASHINGTON METROPOLITAN AREA. TO THAT END, AGENCIES SHOULD:

1. Identify networks of existing bicycle routes (both on-street and off-street) in the urban core, suburbs, developing fringe, as well as connecting long distance inter-city routes. Ensure that these routes are included in land use and transportation plans, and not eliminated as development occurs.
2. Identify shared-use path corridors before they are developed, and preserve opportunities for development as shared-use paths.
3. Identify existing physical barriers to bicycling (such as rivers and streams, bridges, railroad tracks, highway crossings, and limited access highways with no crossing route) and identify solutions to overcome them.

⁶⁴ http://www.virginiadot.org/info/secondary_street_acceptance_requirements.asp

⁶⁵ <http://www.epa.gov/schools/guidelinstools/siting/>

4. Implement uniform wayfinding and/or designation for inter-jurisdictional routes that will provide easily understood instructions and information.
5. Convene and participate in a regional **working group** consisting of state and regional representatives to identify regional and long distance travel corridors for bicyclists, develop common signage guidelines, and develop of recommended bikeway alignments within travel corridors.
6. Identify **low-stress streets** for bicyclists and pedestrians in the street network, and identify ways to connect them to each other.⁶⁶

C. DEVELOP AND ADHERE TO CONSISTENT BICYCLE AND PEDESTRIAN FACILITY DESIGN AND CONSTRUCTION STANDARDS IN EACH JURISDICTION:

Assure adequate planning, construction and maintenance standards for comfortable and safe bicycling on both on-street routes and off-street paths, as well as comfortable and safe walking on paths and sidewalks. To do so, they should:

- Adopt, as minimum standards for privately and publicly built facilities, the AASHTO *Guide for the Development of Bicycle Facilities*, AASHTO's *A Policy on Geometric Design of Highways and Streets*, and the AASHTO *Guide for the Planning, Design and Operation of Pedestrian Facilities*, the ADA Accessibility Guidelines from the U.S. Architectural and Transportation Barriers Compliance Board (Access Board), and the *Manual on Uniform Traffic Control Devices (MUTCD)* from the Federal Highway Administration.
- Establish and maintain **minimum design and maintenance standards** for each type of facility.
- In accordance with [federal guidance](#), **go beyond the minimum requirements where necessary** to provide safe and comfortable accommodation for bicyclists and pedestrians. Agencies such as the District of Columbia Department of Transportation have developed their own design manuals to meet their specific needs, and which may incorporate experimental measures which are not found in the current AASHTO bicycle facility design guide. The National Association of City Transportation Officials (NACTO), an alliance of city transportation departments, including the District Department of Transportation, has developed guides for bikeways and for urban areas. The NACTO guides provide designs and treatments not currently found in the AASHTO guides.

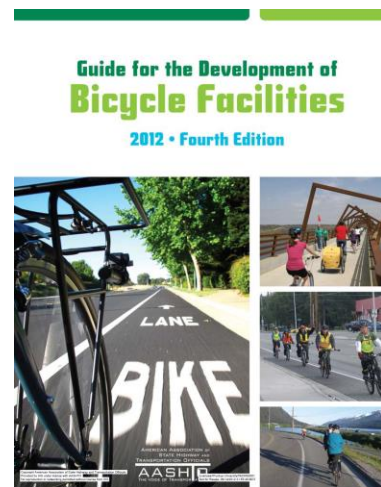
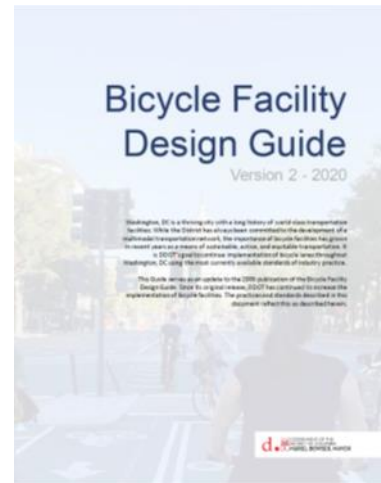


Figure 63: AASHTO Guide for the Development of Bicycle Facilities

⁶⁶ <https://montgomeryplanning.org/awards/stress-map-award/>

- For dense urban centers with low-traffic speeds and relatively high levels of bicycling and walking, use the NACTO [Urban Street Design Guide](#) and [Urban Bikeway Design Guide](#) where appropriate. FHWA [has endorsed](#) the “appropriate” use of the *Urban Bikeway Design Guide* to help agencies fulfill the above-mentioned 2010 federal guidance. FHWA notes that most of the treatments in the NACTO guide are allowed or not precluded by the MUTCD. Non-compliant traffic control devices can still be used as pilot projects, under the MUTCD experimentation process. As a supplement to the Bikeway Design Guide, NACTO’s [Designing for All Ages & Abilities](#) guide provides guidance for selecting bikeways in various urban street settings.

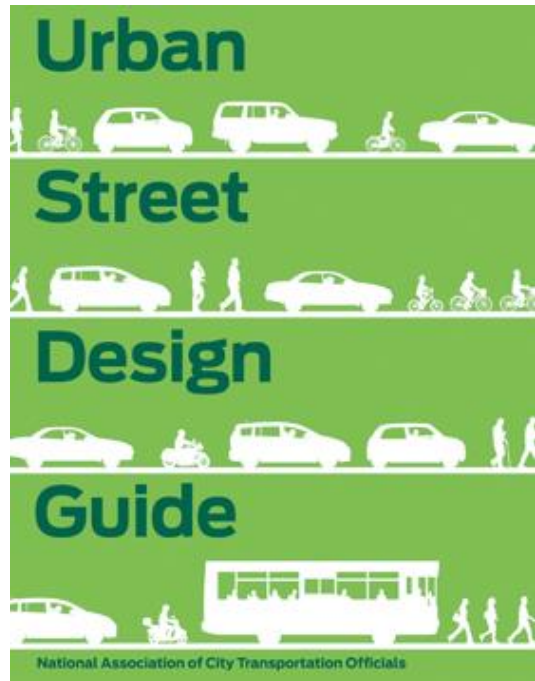


Figure 64: NACTO Urban Street Design Guide/NACTO

- **Provide bicycle and pedestrian facility design and construction standards for various contexts.** Communities in low-density suburban and rural environments face different barriers to safe walking and bicycling than those in urban cores and require different design solutions to support safe bicycling and walking.
- Incorporate guidance from FHWA’s Bikeway Selection Guide, which provides a framework for selecting safe bikeways in various roadway contexts, including those found in suburban and rural environments. The guide suggests the safest bicycle facilities based on a roadway’s traffic volume and speed. In general, the higher the roadway traffic volume and vehicular speed, the greater the separation of the facility from the roadway.
- The U.S. Department of Housing and Urban Development (HUD)’s Creating Walkable and Bikeable Communities features street and bicycle facility design guidelines for rural, suburban, and urban settings. The guide provides near-term actions as well as long-term recommendations, such as retrofitting community layouts.

D. IMPROVE ACCESS FOR PERSONS WITH DISABILITIES⁶⁷

The Transportation Planning Board’s Access for All Advisory Committee has identified the following recommended best practices for improving access to pedestrian facilities for persons with disabilities. More detailed recommendations can be found in the Accessibility Guidelines as noted above. With the exception of hand-rails on steep sidewalks, all of the following practices are legally required under the ADA for all new facilities and all reconstructed facilities:

⁶⁷ “Lessons Learned” fact sheet for Disability Awareness Day. National Capital Region Transportation Planning Board Access for All Committee, October 20, 2004.

- Sidewalks should have curb ramps. Ramps should be well-maintained, well-placed, and not too steep in order to permit their use by persons using wheelchairs.
- The height of wheelchair users should be considered when placing shrubs or other objects where they might block them from the view of motorists.
- Objects such as security barriers, fences, fire hydrants, telephone poles, parking meters, newspaper boxes, signal control boxes, and other street furniture should be placed in locations where they will not block curb ramps.
- The placement of crosswalk buttons must take into consideration the needs of people with disabilities.
- Audible pedestrian signals make communities safer for all pedestrians, including seniors and children as well as people with visual impairments.
- Sidewalks with steep slopes are difficult for people with disabilities to navigate, especially for people who use manual wheelchairs or people who have trouble walking. Hand rails could help mitigate these difficulties.

Design standards for those with disabilities , such as smoother surfaces, adequate width, and limits on cross-slope, are also beneficial for pedestrians without physical disabilities. Slower traffic speeds, reduced turning speeds, and shorter crossing distances are safer for all pedestrians. Good design for persons with disabilities is good design for all.

E. MINIMIZE ROADWAY WIDTH, CURB RADII & CROSSING DISTANCE.⁶⁸

To minimize pedestrian crossing distances and reduce impermeable, heat-absorbing asphalt coverage, the paved roadway of all streets should be designed to be the minimum width – and have the minimum number of lanes – that safely and cost- effectively allow for the desired operations of motor vehicles, buses, and bicyclists. Excess width should be reallocated to provide walking, transit, and bicycling facilities, public open space, green cover, and/or stormwater source control measures. If financial limitations preclude final implementation of street retrofits (e.g., curbing, streetscaping, etc.), the reallocation of space should still proceed with temporary or least costly approaches such as restriping.

To further reduce pedestrian crossing distances and slow turning vehicles, all roadway corners should be designed with the smallest possible radius that still accommodates the intended vehicle and emergency vehicles.

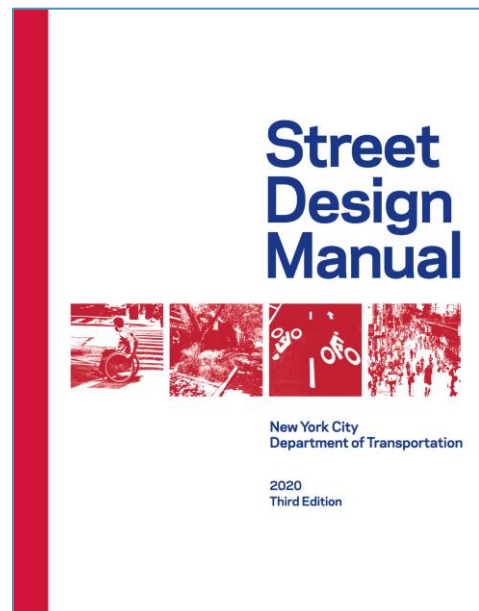


Figure 65: NYC Street Design Manual

⁶⁸ New York City Department of Transportation, *Street Design Manual*, 2009. Page 46.

F. SET TARGET VEHICLE SPEEDS APPROPRIATE TO SURROUNDING LAND USE.

- Urban streets should function as public spaces for people as well as arteries for traffic and transportation. The best street design adds to the value of businesses, offices, and schools located along the roadway.⁶⁹ Lower speeds are often needed to enable a street to serve as a comfortable place to gather, shop, work, or live.
- Streets should be designed with target speeds and speed limits appropriate to their surrounding uses and desired role in the vehicular network. Slower target speeds and speed limits should be considered on local streets, residential streets, alleys; on streets adjacent to schools or other trip generators serving pedestrians who are older or who have disabilities, ; waterfronts, parks, rail stations, and other significant pedestrian destinations.
- Traffic calming features may be designed in from the beginning, or retrofitted where needed, to bring traffic speeds down to the desired level.⁷⁰

**All Metrobuses
have been
equipped with
racks to carry up to
two bikes per bus**

G. IMPROVE BICYCLE AND PEDESTRIAN CIRCULATION WITHIN AND BETWEEN REGIONAL ACTIVITY CENTERS AND THE URBAN CORE.

- Improve sidewalks, bikeways, intersections, signage and links to transit for bicyclists and pedestrians in activity centers.
- Improve access to and between regional activity centers.
- Provide access to activity centers from surrounding neighborhoods.
- Provide facilities to connect nearby activity centers.



Figure 66: Bike Lockers and Racks at NOMA Metro Station/TPB/Michael Farrell

⁶⁹ NACTO, *Urban Street Design Guide*, 2013.

⁷⁰ *Ibid*, pp. 76-91.

H. INTEGRATE BICYCLING AND WALKING INTO THE PUBLIC TRANSPORTATION SYSTEM.⁷¹

- Make it easier and safer to walk and bike to bus stops and rail stations.
- Build sidewalks and pedestrian crosswalks and/or overpasses that connect transit stops to nearby neighborhoods, commercial areas, and existing pedestrian infrastructure.
- Site and/or space bus stops along bus routes so that they are accessible within a comfortable walking distance for passengers (typically ¼ to ½ mile).
- Improve lighting, signage, and wayfinding around transit stations.
- Improve bicycle parking at Metro, commuter rail stations, and park and ride lots. Replace broken and obsolete bicycle racks with current recommended models. Add more Bike & Ride secure bicycle parking facilities at Metrorail stations.
- Improve customers' ability to make the "last mile" of their trip by locating bike sharing or increasing bike parking options at rail stations, and eliminate the need to bring a bike on the train during peak periods
- Provide bicycle racks on all transit buses.
- Provide for more efficient accommodation of bicycles on future rail services, including commuter rail, Metro, and light rail, in the Washington region. Vertical storage racks such as those on Maryland's MARC trains, and on the MAX light rail line in Portland, Oregon, are good examples.



Figure 67: Bike on Bus/WABA/Eric Gilliland

⁷¹ Photo of NOMA/Gallaudet Metro Station Bike Lockers: COG/TPB, Michael Farrell

I. PROVIDE ADEQUATE BICYCLE SUPPORT FACILITIES.

- Enact zoning laws to require bicycle parking and related facilities as part of all new construction or major renovation, including office, retail, and housing developments.
- Construct bicycle parking facilities in well-traveled and lighted areas. Facilities should be covered and secure
- Require placement of bicycle parking facilities in convenient locations; short-term parking should be as close as possible to building entrances; long term parking facilities should be located in secure areas.
- Ensure the provision of showers and changing facilities in all new or renovated commercial developments.
- Provide bicycle parking on public property. Jurisdictions should install bicycle parking in public spaces where there is demand, such as public libraries, parks, and sidewalks near storefront retail.⁷²

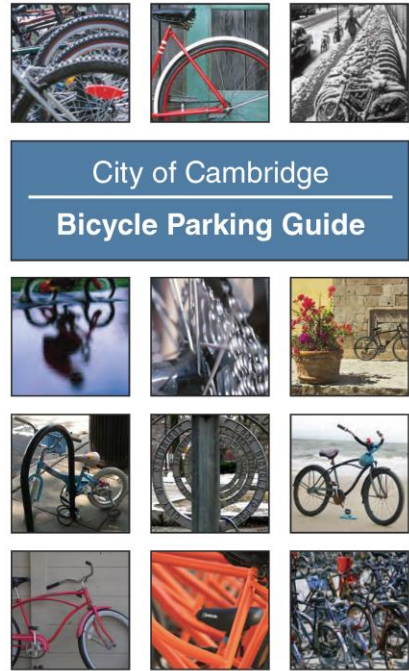


Figure 68: City of Cambridge Bike Parking Guide

J. EXPAND THE REGIONAL BIKE SHARING PROGRAM

Bike sharing is self-service public bicycle rental. It is similar to a car-sharing system, such as ZipCar, where members pay a fee and have access to any available bike throughout the regional system. Modern bicycle sharing links rentals to a user's credit card, which can be charged if the bicycle is not returned. Bike sharing took hold first in Europe, but has now become common in North America, with programs in dozens of cities.

The bike sharing system for the Washington region is Capital Bikeshare, currently one of the largest and most successful North American bike share systems. Their solar-powered docking stations have proven easier and faster to install than stations that require a utility hook-up.

The Institute for Transport Development Policy publishes a detailed



Figure 69: Cyclist training/ WABA

K. REALIZE THE TRANSPORTATION BENEFITS OF MICROMOBILITY

- Bikeshare is part of a rapidly expanding category of transportation called micromobility. While there is some disagreement about what constitutes micromobility, micromobility generally refers to travel across short distances using small, lightweight devices that operate at low speeds (typically 15 mph) such as e-scooters, hoverboards, and e-bikes.⁷³ Users access micromobility systems through a smartphone application that locates a device, tracks the start and end of a trip, and collects payment. Micromobility has recently increased in popularity. As of August 2020, the United States had 71 docked bikeshare systems, 50 dockless bikeshare systems, and 145 e-scooter systems.⁷⁴
- Micromobility is changing the transportation landscape in communities where it is deployed. It enhances the efficiency of a transportation network by meeting travel needs at the individual trip level. It also supports transportation demand management (TDM) goals by reducing automobile trips. Moreover, the flexibility of micromobility systems enables service to reach locations currently lacking transportation alternatives. While micromobility is associated with positive outcomes, it also presents jurisdictions with questions about operator regulation, public safety, and curb space management. While cities have approached micromobility differently, some common practices have emerged, such as:
 - Regulate shared micromobility vendors through permits or a pilot/demonstration program. Permits and pilots tie system operations to performance standards set by the municipality. NACTO's Shared Mobility Guidelines outlines recommended terms and conditions for city permits or contracts with shared mobility providers.
 - Provide infrastructure so that users can safely ride devices. NACTO recommends that cities prioritize construction of bikeways and discuss what devices can operate in bikeways.
 - Designate parking zones for shared micromobility devices in high volume areas. Seattle, Atlanta, and Washington, D.C., have "corrals" to limit devices parked in the public right-of-way.
 - Enhance micromobility laws to promote safe user behavior. Jurisdictions have passed laws that regulate where micromobility users can ride, operation speeds, device parking locations, adherence to traffic laws, riding while under the influence of drugs or alcohol, user age requirements, and helmet requirements among other topics. Some laws penalize users with fines for violations.
 - To help enforce the rules, jurisdictions can request that vendors limit the function of devices, such as geofencing areas where devices are prohibited.
 - Offer frequent education and training through different mediums on the safe use of devices.

⁷³ PBIC Brief does not include human-powered devices in its definition of micromobility (https://www.pedbikeinfo.org/cms/downloads/PBIC_Brief_MicromobilityTypology.pdf) while ITDP does (<https://www.itdp.org/multimedia/defining-micromobility/>).

⁷⁴ Available from BTS: <https://data.bts.gov/stories/s/fwcs-jprj>

- Obtain data from micromobility vendors to evaluate programs and inform planning.
- Coordinate with engineers, planners, and designers to determine how street design standards should be updated to accommodate low-speed devices.
- Minimize sidewalk riding. Sidewalk riding and illegal parking can be dangerous to pedestrians, especially those with disabilities and vulnerable pedestrians. Provision of bike lanes and parking corrals, rider education, and enforcement can help mitigate these conflicts.

The regional “Street Smart” pedestrian and bicycle safety campaign urges motorists and pedestrians to “slow down” and “use crosswalks”

L. DEVELOP PEDESTRIAN AND BICYCLE SAFETY EDUCATION AND ENFORCEMENT PROGRAMS IN ALL JURISDICTIONS.

- Promote pedestrian and bicycle safety education programs for children beginning at the early ages.
- Establish and maintain pedestrian and bicycle safety programs at the elementary school level, including classroom and on-bicycle instruction.
- Develop and distribute pedestrian and bicycle safety information materials designed to teach beginning cyclists and young pedestrians.
- Emphasize the use of bicycle helmets as a means of injury reduction, lights after dark, reflectors, and reflective clothing for pedestrians.
- Improve cycling skills and pedestrian safety habits of adults and young adults.
- Produce and distribute information on bicycle usage and safety.
- Emphasize the use of helmets for rider protection, lights after dark, reflectors, and reflective clothing for pedestrians.
- Increase motorist awareness and accommodation of bicyclists and pedestrians, and bicyclist and pedestrian awareness and accommodation of motorists.
- Include bicycle and pedestrian information in automobile drivers' training classes, driver's manuals, and license exams, and through the media.
- Coordinate public media campaigns with law enforcement.
- Encourage jurisdictional uniformity of traffic laws relating to bicycling and walking. Encourage conformity with such regulations as the Uniform Vehicle Code.
- Encourage consistent bicycle law enforcement to assure safe bicycling and walking.

Volunteer patrols can help with trail security

- Emphasize the enforcement of traffic laws dealing with offenses known to cause crashes between bicycles and motor vehicles, such as wrong way bicycling, and ignoring stop signs or stop lights.
- Emphasize enforcement of traffic laws dealing with offenses known to cause crashes between pedestrians and motor vehicles, such as motorists failing to yield to pedestrians, and pedestrians disobeying “Don’t walk” signals.
- Improve bicycle and pedestrian accident reporting and analysis procedures at the state and regional levels, to provide jurisdictions with a better understanding of accident causes and countermeasures.
- Provide significant law enforcement presence along regional off-road trail networks and encourage inter-jurisdictional cooperation and coordination to provide for the safety and security of all pedestrians and bicyclists.



Figure 70: Street Smart Ad

M. ENCOURAGE WALKING AND BICYCLING

- Each jurisdiction and agency should encourage walking and bicycling and promote the perception of both as legitimate forms of travel in the way most appropriate to that organization. Examples include:
- Have walk and bike-friendly policies for employees. Let employees know that walking and bicycling is both permitted and encouraged. Organize/support/participate in events such as Bike to Work Day, Car-Free Day, etc.
- Carry out pedestrian and cyclist education programs that also encourage walking and bicycling, such as Safe Routes to School. Designate a Safe Routes to School coordinator for every community.
- Provide high-quality information to the public on the benefits of walking and bicycling, and where and how it can be done in your community, through programs such as WalkArlington and BikeArlington. Partner with employers, transportation demand managers, and advocacy groups.
- As part of a comprehensive TDM program, provide financial incentives for employees to walk and bicycle.
- For States and metropolitan regions, consider investing in paid media campaigns.

N. EACH JURISDICTION SHOULD DEVELOP A HIGH VISIBILITY BICYCLE OR PEDESTRIAN PROJECT TO DEMONSTRATE THE EFFECTIVENESS OF BICYCLING AND WALKING AS A SHORT DISTANCE TRANSPORTATION MODE.

- Ensure that projects are feasibly implemented and supported by the community and the government agencies responsible for implementation.
- Undertake extensive publicity and promotion for each facility or service included in the project.
- Conduct an extensive analysis of the effectiveness of each project following the demonstration period.



Figure 71: Lawyers Road Before Road Diet/VDOT



Figure 72: Lawyers Road After Road Diet/VDOT

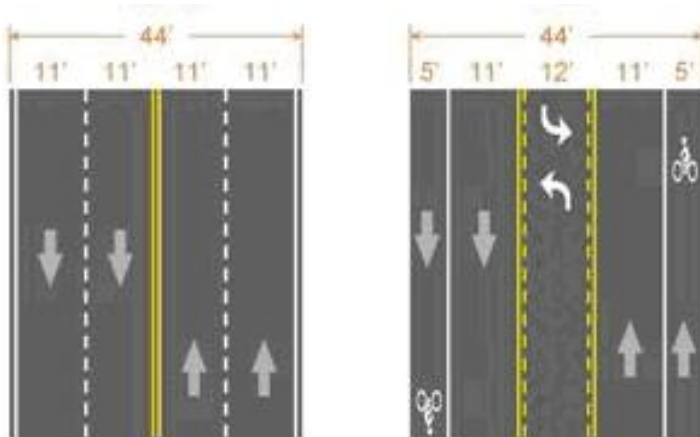


Figure 73: Road Diet/VDOT

VDOT completed a model road diet project in Reston, VA, shrinking Lawyer’s Road from four lanes to two plus a turn lane and bike lanes

O. EACH AGENCY SHOULD DESIGNATE A BICYCLE COORDINATOR AND A PEDESTRIAN COORDINATOR TO OVERSEE BICYCLE AND PEDESTRIAN PROGRAMS.

- Experience has shown that without a designated staff person or persons responsible for overseeing their implementation, pedestrian and bicycle programs and policies are not

implemented effectively. Staffing levels should be proportional to the size of the agency and volume of work.

- All TPB member jurisdictions with active pedestrian and bicycle programs should designate a lead staff person or coordinator.

P. INTEGRATE EQUITY IN BICYCLE AND PEDESTRIAN PLANNING.

- Transportation planning in the U.S. has traditionally been driven by efficiency or cost. Since the 1990s, however, transportation professionals have increasingly recognized equity as a necessary consideration, among other factors. By focusing on equity, transportation professionals allocate transportation investments based on need, allowing services and infrastructure improvements to flow to the most under-resourced populations. In July 2020, the TPB Board of Directors affirmed equity as a fundamental value in the metropolitan region. This commitment is consistent with federal policy.
- Under-resourced populations may rely on alternative modes like walking and biking more than other segments of the population. Households in poverty have lower car ownership rates, and higher biking and walking rates compared to higher-income households.⁷⁵ Planning professionals can address the needs of under-resourced communities through several strategies, including:
 - Hire agency staff of all levels who understand the community the agency serves.
 - Train agency staff to effectively communicate with constituents about transportation equity issues, which can often be complex.
 - Evaluate the metrics used to prioritize infrastructure projects to avoid unintentional bias in the allocation of resources. The Victoria Transport Policy Institute's Evaluating Transportation Equity guide discusses the various equity impacts resulting from transportation planning, and how planning assumptions and metrics affect outcomes. FHWA's Performance Based Planning and Programming Guidebook may offer additional guidance for incorporating equity and environmental justice into planning processes.
 - Remove barriers for under-resourced communities to participate in the transportation planning process.
 - Consider developing an inclusive public engagement planning guide, similar to those developed for the cities of Seattle or Oakland, to assist planners.
 - Locate public meetings in accessible and convenient locations and times.
 - Host public meetings in informal settings that are conducive to participation and enable relationship-building.

⁷⁵ FHWA, FHWA NHTS Brief: Mobility Challenges for Households in Poverty (2014). Available at: <https://nhts.ornl.gov/briefs/PovertyBrief.pdf> .

- Communicate meetings through mediums that the community uses, such as social media, and provide ample advance notice of meetings. Partner with local community organizations to communicate meetings.
- Make meetings family-friendly or provide childcare at meetings.

CHAPTER 6: THE 2045 NETWORK

This chapter details the types, numbers, and mileage of facilities in the plan.⁷⁶ It shows the share of people, jobs, households, Equity Emphasis Areas, Activity Centers, and Transit Access Focus Areas that will be served by a network of high quality, low-stress facilities. It provides a cost estimate for building the 2045 Network, and it includes a network map and a link to an interactive map and dashboard.

Facility Type	Number of projects	Total Number of Miles
Bicycle Route Marking	117	53.19
Bike Boulevard	38	35.56
Bike Share	2	--
Bike/Scooter Corral	1	--
Bikeable Shoulders	3	4.26
Buffered Bicycle Lane	44	29.45
Contraflow Lanes	2	1.73
Other	96	113.87
Pedestrian Intersection Improvement	9	4.32
Pedestrian/Bicycle Bridge or Tunnel	8	3.10
Protected Bicycle Lane	210	137.79
Shared Use Path	810	1,707.00
Sidewalk ⁷⁷	18	10.86
Standard Bicycle Lane	274	363.23
Streetscape/Pedestrian Improvements	17	44.93
Traffic Calming	1	1.83
Total	1,650	2,510.15

Table 8: Planned Bicycle and Pedestrian Facilities

The Bicycle and Pedestrian Plan for the National Capital Region includes 1,650 bicycle and pedestrian facility improvement projects from across the region. If every project in the plan is implemented, in 2045 the region will have added approximately 138 miles of protected bicycle lanes, 30 miles of buffered bicycle lanes, 274 miles of standard bicycle lanes, and over 1,700 miles of shared-use paths. The overall network length will increase by approximately 2,500 miles.

If every project in the plan is built, the regional bike/ped network will increase by 2500 miles

⁷⁶ Approximately 150 projects in the Project Infotrak database were missing project type and length information as of this writing. When that information is entered, the reported length of the total planned network is expected to increase by roughly 100-200 miles.

⁷⁷ Numerous small projects, especially sidewalk projects, or projects not receiving federal funding, do not appear in this plan. Total actual mileage constructed in the region is presumed to be much greater.

The 2015 Bicycle and Pedestrian Plan included 593 miles of existing major shared-use paths, and 136 miles of existing on-street bike lanes. Bike lane construction under Complete Streets policies has accelerated since then, bringing the Washington region to over 300 miles of on-street bike lanes, and over 800 miles of major shared-used paths. If every project in this plan is built, the total network length in the year 2045 will be over 3,600 miles. This estimate does not include numerous neighborhood bike paths, sidewalks, hiking paths, roadway shoulders, and signed bicycle routes.

BUFFER ANALYSIS OF THE PLANNED LOW STRESS NETWORK

Facility Type	Total Number of Miles
Bike Boulevard	35.56
Protected Bicycle Lane	137.79
Shared Use Path	1,797.00
Total	1,880.35

Shared used paths, protected bike lanes, and bicycle boulevards are low-stress, high quality facilities, suitable for all ages and abilities, and therefore potentially eligible to be part of the National Capital Trail Network.

Table 9: Planned Low Stress Facilities

There are 1,880 miles of such facilities planned. If this network existed in 2020, 75% of the population and 86% would be within a half-mile of it. The proportions of population and jobs within ½ mile of this network in 2045 would be essentially the same, at 76% of population and 87% of jobs.

76% of the population and 86% of the jobs will be within a half mile of a low stress bike/ped facility

THE LOW-STRESS NETWORK VS. THE NATIONAL CAPITAL TRAIL NETWORK (NCTN)

The low-stress network includes all the planned facilities in the Bicycle and Pedestrian Plan that are of a type judged to be “low stress” – shared-use paths, protected bike lanes, and bicycle boulevards. Existing facilities are generally not part of the plan.

The National Capital Trail Network includes 779 miles of planned low-stress facilities, while the larger low-stress network identifies 1,880 miles of such facilities. The National Capital Trail Network also includes 644 miles of existing low-stress facilities. The National Capital Trail Network is one of the initiatives of the region’s transportation plan, Visualize 2045. A project that is part of the National Capital Trail Network is prioritized for funding.

	Low-Stress Network (Bicycle and Pedestrian Plan)	National Capital Trail Network
Miles (Planned)	1,880	779
Miles (Existing)	N/A	644
% Population within ½ Mile	75%	71%
% Jobs within ½ Mile	86%	76%
Miles (Total)	1,880	1,423

Table 10: Planned Low-Stress Network vs. National Capital Trail Network

EQUITY EMPHASIS AREAS, ACTIVITY CENTERS, AND TRANSIT ACCESS FOCUS AREAS

Equity Emphasis Areas are the 351 of the region’s 1,222 total Census tracts identified by the TPB as having high concentrations of low-income individuals and communities of color. In this plan, 283 of the Equity Emphasis Areas in the region will have a low stress bicycle or pedestrian facility built within their boundaries, as will 132 of the 141 Activity Centers, and 42 of the 49 Transit Access Focus Areas. Transit Access Focus Areas around high capacity transit stations have been identified as having the greatest need for improvements to make it easier for people to walk and bike to transit.

Jurisdiction	Number of EEAs Served
City of Alexandria	5
Arlington County	12
Charles County	4
District of Columbia	85
Fairfax County	35
Frederick County	9
Loudoun County	3
City of Manassas	1
City of Manassas Park	1
Montgomery County	45
Prince George's County	68
Prince William County	15
Total	283

Table 11: Number of Equity Emphasis Areas Served

80% of Equity Emphasis Areas will be served by a planned Low Stress Facility

Jurisdiction	Activity Centers Served
City of Alexandria	4
Arlington County	10
Charles County	2
District of Columbia	24
Fairfax County	28
Frederick County	7
Loudoun County	7
Montgomery County	22
Prince George's County	19
Prince William County ⁷⁸	9
Total	132

Table 12: Number of Activity Centers Served

94% of Activity Centers will be served by a Low Stress Facility

Jurisdiction	Number of TAFE Walksheds Served
Arlington County	3
City of Alexandria	2
City of College Park	1
City of Falls Church	1
City of Frederick	1
City of Gaithersburg	1
City of Greenbelt	1
City of Rockville	1
City of Takoma Park	1
District of Columbia	7
Fairfax County	8
Frederick County	1
Montgomery County	8
Prince George's County	7
Prince William County ⁷⁹	1
Total	44

Table 13: Transit Access Focus Areas Served

86% of Transit Access Focus Areas, will be served by a Low Stress Facility

⁷⁸ Includes City of Manassas Activity Center

⁷⁹ Includes Broad Run TAFE in City of Manassas

Project Infotrak Database and the Interactive Map and Dashboard

During the preparation of this plan, TPB member jurisdictions provided project information and associated GIS layers for the new plan database, enabling mapping for most individual projects. The GIS map in turn helps us analyze the degree to which the network will serve the TPB's priorities.

THE 2045 NETWORK MAP

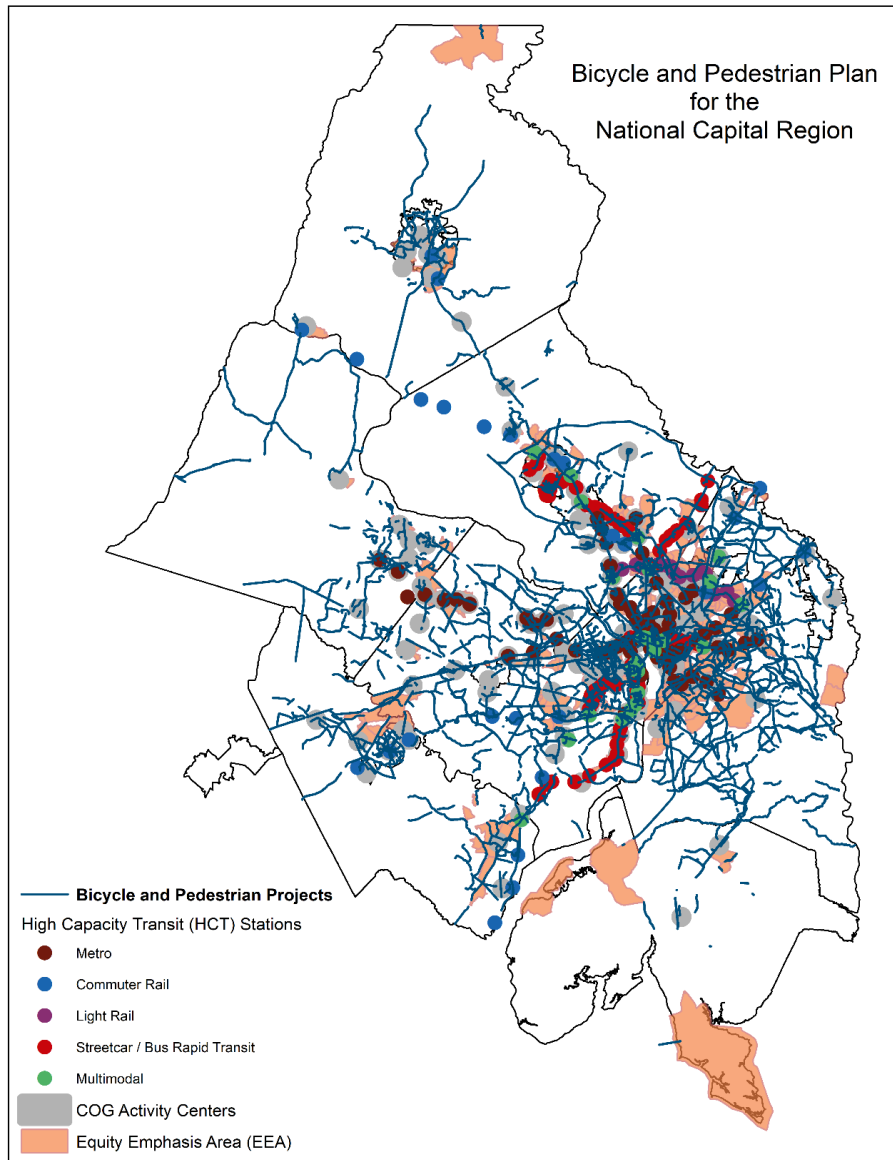


Figure 74: Planned Bicycle and Pedestrian Network

A static map of the 2045 Network is shown above. An interactive map of the planned projects can be found at https://www.mwco.org/maps/map-listing/bikepedplan_map/.

COST PROJECTIONS

Given the difficulties of getting actual cost estimates for each project, we have imputed a range of regional costs for the plan based on an typical cost per mile or per project.

Completing all the planned projects would cost \$5 billion.

Costs for bicycle and pedestrian projects vary significantly. Costs for pavement restriping can be very low, especially if carried out in conjunction with scheduled resurfacing. On the other hand, complex urban projects can be quite expensive.⁸⁰

Within the urban core and inner suburbs, the top 20 most expensive projects account for 50% of the cost estimate for completing 408 miles of trail. Completing those 408 miles, according to the combined estimates by the jurisdiction staff, will take \$1.2 billion. Long-distance trails and complex urban projects comprise the top 20 most expensive projects within the network and are not representative of average trail project costs.

The total cost of bicycle and pedestrian improvements listed in the regional plan, based on facility types and mileage, is expected to be on the order of \$5 billion (2020 dollars).

	Imputed Costs for Selected Bicycle Facilities (in thousands of dollars)			
Facility Type	Imputed Cost Range per Mile or per Project	Average	Miles or Number of Projects	Imputed Cost
Shared Use Path ⁸¹	\$400 - \$3,000	1700	1707 miles	\$680,000 - \$5,100,000
Bicycle Lane	\$5 - \$50	27	395 miles	\$2,000 - \$40,000
Protected Bicycle Lane	\$130-\$540	140	138	\$18,000-\$74,500
Pedestrian/Bicycle Bridge/Tunnel	\$2,000 - \$10,000	600	8 projects	\$16,000 - \$80,000
Pedestrian Intersection Improvement	\$500 - \$1000	750	9 projects	\$4,500 - \$9,000
Streetscape	\$2,000 - \$5,000	2,500	17 projects	\$34,000 - \$85,000
Total				\$600,000 - \$6,060,000

⁸⁰ The Capital Trails Coalition has studied local construction costs within the Washington region, meeting with the staff at the different jurisdictions within the urban core to gather actual costs from recently completed trail projects, as well as locally known project cost estimates.

⁸¹ <https://www.capitaltrailscoalition.org/network-cost-estimate/>

Table 14: Imputed Costs

COST OF BIKE/PED PROJECTS IN THE 2021-2024 TRANSPORTATION IMPROVEMENT PROGRAM

To put the \$5 billion estimate in context, the TPB’s four-year, FY 2021–2024 TIP contains over 300 project records and more than \$15 billion in funding across the region. Of the 420 TIP projects, 49 are identified as being “primarily a bicycle and/or pedestrian project. These projects add up to \$751 million, or **4.7% of the funding in the four-year TIP**. If the region maintains that level of spending through 2045, **it will spend roughly \$4.7 billion on pedestrian and bicycle infrastructure.**

The COG/TPB’s goal to increase the rate of construction of bicycle and pedestrian facilities in the region is being met. Funding for bicycle and pedestrian projects in the TIP has increased sharply during the last decade. For example, the six-year Fiscal Year 2013-2018 TIP included \$313 million for bicycle and pedestrian projects, less than half of the level in the current TIP.

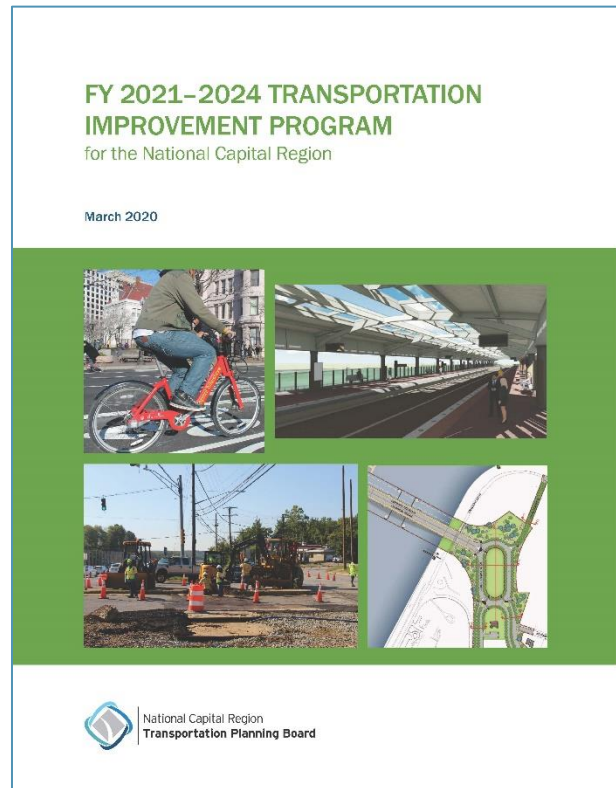
The TIP does not provide a complete picture of the region’s planned investments in bicycle and pedestrian infrastructure. Every submitting agency reported that their jurisdiction had a Complete Streets policy, which implies pedestrian and bicycle accommodations in larger road or transit projects. The cost of those accommodations is not always calculated or reported. Privately funded infrastructure is not included in the TIP.

EXPLANATION OF PROJECT LISTINGS

Appendix A lists the plan projects, organized alphabetically by lead agency.

The Project Infotrak database contains more extensive information. Agency staff may submit or edit project information via a web portal.

This project list is intended to be a list of significant planned bicycle and pedestrian projects in the Washington region. Agencies were encouraged to submit projects for inclusion if they were one mile or more in length or cost more than \$400,000. Small sidewalk projects are not included unless they were part of a larger pedestrian or bicycle project.



APPENDIX A: 2045 NETWORK PROJECTS

BY LEAD AGENCY

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
E CUSTIS AVE	City of Alexandria	Bicycle Route Marking		BP8926
CAMERON MILLS RD	City of Alexandria	Bicycle Route Marking		BP8937
LESLIE AVE	City of Alexandria	Bicycle Route Marking		BP8955
RAYBURN AVE	City of Alexandria	Bicycle Route Marking		BP8954
E UHLER AVE	City of Alexandria	Bicycle Route Marking		BP8924
E MOUNT IDA AVE	City of Alexandria	Bicycle Route Marking		BP8933
CARPENTER RD	City of Alexandria	Bicycle Route Marking		BP8930
S 30TH ST	City of Alexandria	Bicycle Route Marking		BP8961
N STEVENS ST	City of Alexandria	Bicycle Route Marking		BP8950
ORONOCO ST	City of Alexandria	Bicycle Route Marking		BP8944
W GLEBE RD	City of Alexandria	Bicycle Route Marking		BP8963
EDISON ST	City of Alexandria	Bicycle Route Marking		BP8959
STEWART AVE	City of Alexandria	Bicycle Route Marking		BP8939
CAMBRIDGE RD	City of Alexandria	Bicycle Route Marking		BP8935
BASHFORD LN	City of Alexandria	Bicycle Route Marking		BP8946
E LURAY AVE	City of Alexandria	Bicycle Route Marking		BP8953
KEY DR	City of Alexandria	Bicycle Route Marking		BP8945
E HOWELL AVE	City of Alexandria	Bicycle Route Marking		BP8962

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
DEWITT AVE	City of Alexandria	Bicycle Route Marking		BP8956
W ABINGDON DR	City of Alexandria	Bicycle Route Marking		BP8964
E GLENDALE AVE	City of Alexandria	Bicycle Route Marking		BP8951
FRANCIS HAMMOND PKWY	City of Alexandria	Bicycle Route Marking		BP8947
N GORDON ST	City of Alexandria	Bicycle Route Marking		BP8941
N FAYETTE ST	City of Alexandria	Bicycle Route Marking		BP8960
BERNARD ST	City of Alexandria	Bicycle Route Marking		BP8942
MOUNT VERNON AVE	City of Alexandria	Bicycle Route Marking		BP8925
W REED AVE	City of Alexandria	Bicycle Route Marking		BP8949
N ROSSER ST	City of Alexandria	Bicycle Route Marking		BP8921
MARK CENTER DR	City of Alexandria	Bicycle Route Marking		BP8943
KENMORE AVE	City of Alexandria	Bicycle Route Marking		BP8931
RUSSELL RD	City of Alexandria	Bicycle Route Marking		BP8929
CALLAHAN DR	City of Alexandria	Bicycle Route Marking		BP8927
S WEST ST	City of Alexandria	Bicycle Route Marking		BP8952
S PAYNE ST	City of Alexandria	Bicycle Route Marking		BP8948
WOODBINE ST	City of Alexandria	Bicycle Route Marking		BP8965
READING AVE	City of Alexandria	Bicycle Route Marking		BP8958
John Marshal Drive/Ohio Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.7	BP8582

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
S. Joyce - June Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	0.8	BP8585
N. Stafford Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.4	BP8581
West Ballston On-Street Bicycle Facility	Arlington Co. DES	Bike Boulevard	1.2	BP8529
Virginia Square - Cherrydale Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1	BP8579
Fort Scott Drive Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1	BP8591
Rock Spring Road Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	0.4	BP8568
Key Boulevard/13th Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.7	BP8574
N. Fillmore Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	0.4	BP8548
15th and 16th Streets N. Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.6	BP8567
Rock Spring Road/35th Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.1	BP8598
Fairfax Drive Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	0.3	BP8566
N. Harrison Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	3.1	BP8538
Penrose- Courthouse Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.3	BP8547
Ashton Heights-Lyon Park Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.2	BP8575
S. Monroe Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.2	BP8594
N. Edison/4th Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1	BP8537

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Park Drive Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1	BP8540
N. Jackson Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	0.4	BP8577
Irving Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.3	BP8589
Henderson Rd/S Abingdon/3rd Street/ S Wakefield Bicycle Boulevard	Arlington Co. DES	Bike Boulevard	1.5	BP8590
26th Street Bicycle Boulevard	Arlington Co. DES	Bike Boulevards	2.3	BP8535
11th Street North Bicycle Boulevard	Arlington Co. DES	Bike Boulevards	0.6	BP8580
Columbia Pike Bicycle Boulevards Expansion	Arlington Co. DES	Bike Boulevards	1.2	BP8505
22nd St North Bicycle Boulevard	Arlington Co. DES	Bike Boulevards	2	BP8534
22nd Street South Bicycle Boulevard	Arlington Co. DES	Bike Boulevards	0.5	BP8593
20th Street South Bicycle Boulevard	Arlington Co. DES	Bike Boulevards	0.9	BP8587
16th Street South Bicycle Boulevard	Arlington Co. DES	Bike Boulevards	0.9	BP8592
HOLMES RUN PKWY	City of Alexandria	Bike Boulevards	1	BP8934
Tunlaw Rd. NW	District Department of Transportation	Bike Boulevards	0.308	BP8016
New Jersey Ave SE from M St SE to Tingey Square SE	District Department of Transportation	Bike Boulevards	0.114	BP8009
Florida Ave./NY Ave. NE Project	District Department of Transportation	Bike Boulevards	0.312	BP8003

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Mercury Dr	Montgomery County	Bike Boulevards	0.258	BP8239
Denley Rd	Montgomery County	Bike Boulevards	0.481	BP8279
Weller Rd	Montgomery County	Bike Boulevards	0.106	BP8261
Glenmont to Silver Spring Breezeway (Georgia Ave to Arcola Ave)	Montgomery County	Bike Boulevards	0.702	BP8440
Jingle Ln	Montgomery County	Bike Boulevards	0.124	BP8306
Douglas Ave	Montgomery County	Bike Boulevards	0.18	BP8219
McKenney Ave	Montgomery County	Bike Boulevards	0.303	BP8200
Riggs Road Langley Park Area Neighborhood Bicycle Boulevards	Prince Georges County	Bike Boulevards	1	BP9627
MD 180 Highway Reconstruction	Maryland Department of Transportation - State Highway Administration	Bike Rack	1	T6489
Monocacy Blvd	City of Frederick	Bike Route Marking	0.693	BP7719
East St	City of Frederick	Bike Route Marking	0.321	BP7718
Kirby St	City of Manassas	Bike Route Marking	0.11	BP7785
Fairview Ave	City of Manassas	Bike Route Marking	0.575	BP7781
Battle St	City of Manassas	Bike Route Marking	0.104	BP7795
Grant Ave	City of Manassas	Bike Route Marking	1.22	BP7786

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Weems Rd	City of Manassas	Bike Route Marking	1.271	BP7783
Robnel Ave	City of Manassas	Bike Route Marking	0.783	BP7791
East St	City of Manassas	Bike Route Marking	0.046	BP7771
Hastings Dr	City of Manassas	Bike Route Marking	2.312	BP7779
Main St	City of Manassas	Bike Route Marking	0.742	BP7789
Park Ave	City of Manassas	Bike Route Marking	0.826	BP7790
Jackson Ave	City of Manassas	Bike Route Marking	0.281	BP7787
Kirby St And Vicksburg Ln	City of Manassas	Bike Route Marking	0.17	BP7784
West Ave	City of Manassas	Bike Route Marking	0.106	BP7765
Observation Dr	City of Manassas	Bike Route Marking	0.984	BP7773
Stonewall Road	City of Manassas	Bike Route Marking	1.07	BP7782
Liberty Dr	City of Manassas	Bike Route Marking	0.141	BP7804
Liberia Ave	City of Manassas	Bike Route Marking	0.277	BP7788
Main St	City of Manassas	Bike Route Marking	0.048	BP7766
Ashton Ave	City of Manassas	Bike Route Marking	0.84	BP7797
Center St	City of Manassas	Bike Route Marking	0.772	BP7799
Maryland Ave	Montgomery County	Bike Route Marking	0.491	BP8085
West Ave	Montgomery County	Bike Route Marking	0.417	BP8064
Darcy Forest Dr	Montgomery County	Bike Route Marking	0.179	BP8291
Baltimore Ave	Montgomery County	Bike Route Marking	0.004	BP8313

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Alton Pkwy	Montgomery County	Bike Route Marking	0.594	BP8079
Adrian St	Montgomery County	Bike Route Marking	0.802	BP8265
Lyttonsville Rd	Montgomery County	Bike Route Marking	0.341	BP8059
Dorset Ave	Montgomery County	Bike Route Marking	0.682	BP8101
Greenwood Ave	Montgomery County	Bike Route Marking	0.316	BP8061
Selfridge Rd	Montgomery County	Bike Route Marking	0.315	BP8164
Sleaford Rd	Montgomery County	Bike Route Marking	0.451	BP8122
McKinley St	Montgomery County	Bike Route Marking	0.149	BP8154
Douglas Ave	Montgomery County	Bike Route Marking	1.206	BP8076
Sudbury Rd	Montgomery County	Bike Route Marking	0.794	BP8068
Gilbert St	Montgomery County	Bike Route Marking	0.512	BP8139
Grandview Ave	Montgomery County	Bike Route Marking	0.282	BP8155
Pearl St	Montgomery County	Bike Route Marking	0.055	BP8175
Silver Spring Ave	Montgomery County	Bike Route Marking	0.701	BP8150
College View Dr	Montgomery County	Bike Route Marking	0.425	BP8075
Gould Rd	Montgomery County	Bike Route Marking	0.009	BP8315
2nd Ave	Montgomery County	Bike Route Marking	0.473	BP8078
Hildarose Dr	Montgomery County	Bike Route Marking	0.056	BP8308

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
MacArthur Blvd Sidepath and Bikeable Shoulders (Goldsboro Rd to District of Columbia)	Montgomery County	Bike Route Marking	2.56	BP8044
Elm St	Montgomery County	Bike Route Marking	0.509	BP8120
College View Dr	Montgomery County	Bike Route Marking	0.174	BP8165
Erskine St	Montgomery County	Bike Route Marking	0.14	BP8252
Glenmont to Silver Spring Breezeway (Georgia Ave to Arcola Ave)	Montgomery County	Bike Route Marking	0.023	BP8167
Sherrill Ave	Montgomery County	Bike Route Marking	0.006	BP8301
Seven Locks Rd	Montgomery County	Bike Route Marking	0.997	BP8057
Moorland Ln	Montgomery County	Bike Route Marking	0.958	BP8081
Greenwood Ave	Montgomery County	Bike Route Marking	0.51	BP8135
Galt Ave	Montgomery County	Bike Route Marking	0.136	BP8142
Aspen Hill Rd	Montgomery County	Bike Route Marking	0.026	BP8316
Norfolk Ave	Montgomery County	Bike Route Marking	0.299	BP8069
Greeley Ave	Montgomery County	Bike Route Marking	0.073	BP8303
Anne St	Montgomery County	Bike Route Marking	0.306	BP8066
Maryland Ave	Montgomery County	Bike Route Marking	0.685	BP8021
Weiss St	Montgomery County	Bike Route Marking	0.088	BP8238
Ferrara Ave	Montgomery County	Bike Route Marking	0.63	BP8117

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Clark Pl	Montgomery County	Bike Route Marking	0.089	BP8294
Research Blvd SB	Montgomery County	Bike Route Marking	1.266	BP8019
Rosedale Ave	Montgomery County	Bike Route Marking	0.228	BP8168
Ray Dr	Montgomery County	Bike Route Marking	0.647	BP8100
Tilbury St	Montgomery County	Bike Route Marking	0.348	BP8086
Wildwood Dr	Montgomery County	Bike Route Marking	0.63	BP8062
Exeter Rd	Montgomery County	Bike Route Marking	0.62	BP8070
Falcon St	Montgomery County	Bike Route Marking	0.125	BP8281
Glenside Dr	Montgomery County	Bike Route Marking	0.587	BP8113
Upton Dr	Montgomery County	Bike Route Marking	0.203	BP8077
Reedie Dr	Montgomery County	Bike Route Marking	0.09	BP8160
Holton Ln	Montgomery County	Bike Route Marking	0.101	BP8286
Ellsworth Dr	Montgomery County	Bike Route Marking	0.151	BP8132
Larkin Pl	Montgomery County	Bike Route Marking	0.053	BP8317
Evans Dr	Montgomery County	Bike Route Marking	0.063	BP8260
Saratoga Ave	Montgomery County	Bike Route Marking	0.003	BP8319
Sundale Dr	Montgomery County	Bike Route Marking	0.835	BP8060
Grove St	Montgomery County	Bike Route Marking	0.713	BP8063
Frontier Drive from Franconia-Springfield Parkway to Loisdale Road	Virginia Department of Transportation	Bike Route Marking	0.561	BP7922

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Frederick Rd (MD 355)	Maryland Department of Transportation - State Highway Administration	Bikeable Shoulders	0.537	BP8298
MacArthur Blvd	Montgomery County	Bikeable Shoulders	1.081	BP8222
MacArthur Blvd	Montgomery County	Bikeable Shoulders	2.639	BP8191
McKinley Road Buffered Bicycle Lanes	Arlington Co. DES	Buffered Bicycle Lane	0.7	BP8490
Portsmouth Boulevard Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.727	BP8374
River Creek Parkway Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.545	BP8325
Circle Drive Bike Lanes	Loudoun County	Buffered Bicycle Lane	0.63	BP8436
River Creek Parkway	Loudoun County	Buffered Bicycle Lane	0.195	BP8326
Cedar Ridge Blvd	Loudoun County	Buffered Bicycle Lane	1.7	BP8379
Arlington Oaks Drive Bicycle lanes	Loudoun County	Buffered Bicycle Lane	0.46	BP8391
Haleybird Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.338	BP8401
Broadmore Drive Bike Lanes	Loudoun County	Buffered Bicycle Lane	0.18	BP8419
Middlefield Drive Bicycle Lane and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.611	BP8387
Hay Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	1.331	BP8355

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Christiana Drive Bike Lanes	Loudoun County	Buffered Bicycle Lane	0.37	BP8411
Woodshire Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.284	BP8400
Ridgetop Circle Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	1.329	BP8399
Tripleseven Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.587	BP8386
Wynridge Drive Bicycle Lane and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.581	BP8341
Marblehead Drive Bicycle and Pedestrian Improvements	Loudoun County	Buffered Bicycle Lane	1.154	BP8375
Eastgate View Drive Bicycle and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.514	BP8396
Eastgate View Drive	Loudoun County	Buffered Bicycle Lane	0.617	BP8339
Devin Shafron Drive Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.29	BP8364
Edgewater Street Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.5	BP8335
Crossroads Drive Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.8	BP8427
Barrister Street Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0	BP8428
Destiny Drive Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	1.09	BP8371
Dulles Center Boulevard Bicycle Lanes and Pedestrian Improvements	Loudoun County	Buffered Bicycle Lane	0.79	BP8381

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Broderick Drive Bike Lanes	Loudoun County	Buffered Bicycle Lane	0.43	BP8413
Cromwell Road Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.23	BP8385
Deerfield Avenue Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.23	BP8404
Victoria Station Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.515	BP8417
Augusta Drive Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.74	BP8376
Red Rum Drive Bicycle Lanes and Pedestrian Improvements	Loudoun County	Buffered Bicycle Lane	0.6	BP8415
Church Road Bike Lane and Sidewalk	Loudoun County	Buffered Bicycle Lane	0.22	BP8421
Dresden Street Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.22	BP8414
Bridgefield Way/Research Place Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.33	BP8407
Centergate Drive Bike Lanes	Loudoun County	Buffered Bicycle Lane	0.48	BP8343
Ashburn Village Boulevard Bike Lanes	Loudoun County	Buffered Bicycle Lane	0	BP8324
Glenn Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Buffered Bicycle Lane	0.633	BP8331
Millstream Drive Bicycle Lanes and Pedestrian Improvements	Loudoun County	Buffered Bicycle Lane	1.195	BP8373
Woodridge Parkway Bicycle Lanes and Pedestrian Improvements	Loudoun County	Buffered Bicycle Lane	0.92	BP8405

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Defender Drive Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.23	BP8395
Ladbrook Drive Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.64	BP8426
Poland Rd (Route 742) Bicycle Lanes	Loudoun County	Buffered Bicycle Lane	0.46	BP8365
City Of Rockville To Friendship Heights	Montgomery County	Buffered Bicycle Lane	0.142	BP7501
Bethesda Trolley Trail	Montgomery County	Buffered Bicycle Lane	0.075	BP7485
Research Blvd NB	Montgomery County	Contraflow Lanes	1.241	BP8020
Jefferson	Montgomery County	Contraflow Lanes	0.488	BP8017
N. Sycamore Street/N. Roosevelt Street Bicycle Facility	Arlington Co. DES	Other	1.6	BP8561
Wilson Boulevard Bicycle Facility	Arlington Co. DES	Other	2	BP8554
Fairfax Drive Enhanced Bicycle Facility	Arlington Co. DES	Other	1.2	BP8553
N. Glebe Road Bicycle Facility	Arlington Co. DES	Other	4.3	BP8531
Walter Reed Drive/ Fillmore Street Bicycle Facility	Arlington Co. DES	Other	2	BP8543
Washington Boulevard Bicycle Facility	Arlington Co. DES	Other	1	BP8571
Lee Highway Bicycle Lanes	Arlington Co. DES	Other	0.5	BP8558
Washington Boulevard Bridge	Arlington Co. DES	Other	0.085	BP7452
Clarendon Metro Station Access	Arlington Co. DES	Other	0.5	BP8550
S. Lynn St/Arlington Ridge Road Bicycle Facility	Arlington Co. DES	Other	1.5	BP8586

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Fort Myer Drive - North Detour	Arlington Co. DES	Other	0.431	BP7333
Walter Reed Drive Bicycle Facility	Arlington Co. DES	Other	1.1	BP8542
S. Joyce Street/15th Street S. Enhanced Bicycle Facility	Arlington Co. DES	Other	0.5	BP8546
Shirlington Road/S. Kenmore St Bicycle Facility	Arlington Co. DES	Other	1	BP8539
Washington Boulevard Bridge	Arlington Co. DES	Other	0.195	BP7451
Memorial Bridge Detour	Arlington Co. DES	Other	0.105	BP7450
Fifth Road South Bicycle Facility	Arlington Co. DES	Other	0.3	BP8588
N. Quincy Street/Military Road Bicycle Facility	Arlington Co. DES	Other	0.5	BP8541
S. Courthouse Road Bicycle Facility	Arlington Co. DES	Other	0.7	BP8595
N. Meade Street Bicycle Facility	Arlington Co. DES	Other	0.2	BP8555
10th Street North Bicycle Facility	Arlington Co. DES	Other	0.9	BP8576
N. George Mason Dr Bicycle Facility	Arlington Co. DES	Other	1.5	BP8526
S. Glebe Road Enhanced Bicycle Facility	Arlington Co. DES	Other	2.3	BP8527
Washington Boulevard Bicycle Facility	Arlington Co. DES	Other	1.2	BP8572
Washington Boulevard Bicycle Facility	Arlington Co. DES	Other	2.5	BP8573
S. Fern Street Bicycle Facility	Arlington Co. DES	Other	0.6	BP8584

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Wilson Boulevard/Clarendon Boulevard Enhanced Bicycle Facilities	Arlington Co. DES	Other	1.4	BP8551
Crystal Drive/Potomac Avenue Enhanced Bicycle Facilities	Arlington Co. DES	Other	1.5	BP8544
North Ballston Custis Connection	Arlington Co. DES	Other	0.2	BP8530
Lee Highway Bicycle Facility	Arlington Co. DES	Other	1.3	BP8532
Quaker Lane Bicycle Facility	Arlington Co. DES	Other	0.7	BP8569
Fairfax Drive Bicycle Facility	Arlington Co. DES	Other	0.7	BP8565
Courthouse Road Bicycle Facility	Arlington Co. DES	Other	0.4	BP8549
18th Street South Bicycle Facility	Arlington Co. DES	Other	0.2	BP8545
Memorial Bridge Detour	Arlington Co. DES	Other	0.847	BP7449
N. Glebe Road Bicycle Facility	Arlington Co. DES	Other	1.5	BP8528
Lee Highway Bicycle Facility	Arlington Co. DES	Other	2.4	BP8533
N. Carlin Springs Rd Bicycle Facility	Arlington Co. DES	Other	1.5	BP8583
S. George Mason Drive Bicycle Facility	Arlington Co. DES	Other	2.1	BP8525
Manchester Street Bicycle Facility	Arlington Co. DES	Other	0.3	BP8597
N. Abingdon/ N. Cameron/Columbus Streets Bicycle Facility	Arlington Co. DES	Other	1.9	BP8536
S. Carlin Springs Road Bicycle Facility	Arlington Co. DES	Other	0.4	BP8570

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
South 2nd Street Bicycle Facility	Arlington Co. DES	Other	1	BP8596
Army Navy Country Club Emergency Access Road	Arlington Co. DES	Other	0.7	BP8498
Southern Md Rapid Transit Study	Charles County	Other	6.196	BP7571
MASSEY LN	City of Alexandria	Other		BP8920
Monocacy Blvd	City of Frederick	Other	2.519	BP7554
East St	City of Frederick	Other	0.513	BP7568
East St	City of Frederick	Other	2.214	BP7566
Monocacy Blvd	City of Frederick	Other	0.627	BP7559
Monocacy Blvd	City of Frederick	Other	0.683	BP7555
Monocacy Blvd	City of Frederick	Other	0.286	BP7562
Monocacy Blvd	City of Frederick	Other	0.648	BP7577
Monocacy Blvd	City of Frederick	Other	0.517	BP7578
14TH ST NW Columbia Rd, NW to Florida Ave., NW	District Department of Transportation	Other	0.509	BP8639
Safe Routes to School	District Department of Transportation	Other	0	T2888
Pennsylvania Ave. NW	District Department of Transportation	Other	1.331	BP7993

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
M St. SW/SE from 6th St SW to 11th St SE	District Department of Transportation	Other	1.529	BP8008
New Jersey Ave SE from I St SE to M St SE	District Department of Transportation	Other	0.202	BP8010
Key Bridge Connection To Capital Crescent Trail	District Department of Transportation	Other	0.318	BP7351
Governor Harry W. Nice/Senator Thomas "Mac" Middleton Bridge Replacement Project	Maryland Department of Transportation - Maryland Transportation Authority	Other	1.8	T5527
Glenmont To Silver Spring	Montgomery County	Other	0.665	BP7527
Glenmont To Silver Spring	Montgomery County	Other	1.466	BP7511
Selfridge Rd	Montgomery County	Other	0.043	BP8174
Burtonsville To Silver Spring	Montgomery County	Other	1.633	BP7499
Edgemoor Ln Neighborhood Greenway (Exeter Rd to Arlington Rd)	Montgomery County	Other	0.246	BP8034
Norwood Trail	Montgomery County	Other	0.18	BP8121
Anacostia River Trail	National Park Service	Other	1.686	BP7283
Livingston Rd	Prince Georges County	Other	2.505	BP7354
Good Luck Road	Prince Georges County	Other	1.641	BP7339

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Schuster Dr	Prince Georges County	Other	0.543	BP7400
Jericho Park Road Extension To Bowie State	Prince Georges County	Other	0.701	BP7347
Laurel-bowie Connection	Prince Georges County	Other	5.851	BP7440
Heritage Blvd	Prince Georges County	Other	0.7	BP7343
Livingston Rd	Prince Georges County	Other	0.182	BP7293
Waterfront St	Prince Georges County	Other	0.231	BP7420
Soil Conservation Rd	Prince Georges County	Other	2.324	BP7403
Brandywine Connector	Prince Georges County	Other	0.569	BP7465
Annapolis Rd	Prince Georges County	Other	1.079	BP7284
Soil Conservation Rd	Prince Georges County	Other	1.28	BP7386
Springfield Rd	Prince Georges County	Other	2.438	BP7406
Floral Park Road	Prince Georges County	Other	0.308	BP7326
Annapolis Road (MD 450)	Prince Georges County	Other	0.59	BP7285

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Wells Pkwy E #1	Prince Georges County	Other	0.308	BP7424
Mitchellville Road	Prince Georges County	Other	1.232	BP7368
Fort Foote Road	Prince Georges County	Other	0.239	BP7331
Brandywine Connector	Prince Georges County	Other	0.222	BP7466
A-65	Prince Georges County	Other	0.03	BP7282
Walker Mill Road	Prince Georges County	Other	0.326	BP7419
Mathew Street	Prince Georges County	Other	1.93	BP7363
Unknown	Prince Georges County	Other	0.001	BP7438
MD 223	Prince Georges County	Other	2.761	BP7365
Unknown	Prince Georges County	Other	7E-04	BP7439
Dyson Road	Prince Georges County	Other	0.004	BP7321
Rolling Road Widening Phase II - Viola Street to Old Keene Mill Road	Virginia Department of Transportation	Other	1.748	BP7879
I-495 Express Lanes Ped/Bike at Idylwood Road (South)	Virginia Department of Transportation	Other	0.184	BP7902

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
HOT Lanes Bicycle/Pedestrian Facilities - Phase II	Virginia Department of Transportation	Other	1	T6273
RICHMOND HIGHWAY CORRIDOR IMPROVEMENTS	Virginia Department of Transportation	Other	3.13	T6443
ROUTE 7/ROUTE 690 INTERCHANGE #SMART18	Virginia Department of Transportation	Other	0.96	T6618
Old Dominion Drive	Arlington Co. DES	Pedestrian Intersection Improvement	0.2	BP8559
W&OD/FMR Trail Crossing of Shirlington Road	Arlington Co. DES	Pedestrian Intersection Improvement	0.2	BP8495
Chain Bridge Connection Enhancements	Arlington Co. DES	Pedestrian Intersection Improvement	0.3	BP8560
Middletown Road at Billingsley Road Intersection Treatments	Charles County	Pedestrian Intersection Improvement	0.01	BP8871
US 301 Smallwood Drive Crosswalks	Charles County	Pedestrian Intersection Improvement	0.047	BP8856
Pennsylvania Ave and Potomac Ave SE Intersection Improvements	District Department of Transportation	Pedestrian Intersection Improvement	0	T5957
Bladensburg Road Multimodal Safety and Access	District Department of Transportation	Pedestrian Intersection Improvement	2.6	T6675

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Mitchell Road Intersection Treatments	Maryland Department of Transportation - State Highway Administration	Pedestrian Intersection Improvement	0.016	BP8861
Rosslyn Esplanade/Circle Improvements	Virginia Department of Transportation	Pedestrian Intersection Improvement	0.2	BP8488
Braddock Road Multimodal Corridor Improvements	Virginia Department of Transportation	Pedestrian Intersection Improvement	3.032	BP7972
Boundary Channel Connection	Virginia Department of Transportation	Pedestrian Intersection Improvement	0.5	BP8487
I-66 Overpass	Arlington Co. DES	Pedestrian/Bicycle Bridge or Tunnel	0.2	BP8511
Rosslyn Circle Underpass	Arlington Co. DES	Pedestrian/Bicycle Bridge or Tunnel	0.2	BP8506
Four Mile Run Bridge	Arlington Co. DES	Pedestrian/Bicycle Bridge or Tunnel	0.2	BP8508
Shirlington Road Bridge	Arlington Co. DES	Pedestrian/Bicycle Bridge or Tunnel	0.2	BP8489
W&OD Trail Crossing at Lee Highway	Virginia Department of Transportation	Pedestrian/Bicycle Bridge or Tunnel	0.2	BP8483
Poplar Tree Road - Bridge Widening	Virginia Department of Transportation	Pedestrian/Bicycle Bridge or Tunnel	0.834	BP7926
Wilson Boulevard Protected Bicycle Lanes	Arlington Co. DES	Protected Bicycle Lane	1.1	BP8552
N. Lynn Street Protected Bicycle Lanes	Arlington Co. DES	Protected Bicycle Lane	0.5	BP8562

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Fort Myer Drive Protected Bike Lanes	Arlington Co. DES	Protected Bicycle Lane	0.5	BP8556
South Clark Cycle Track	Arlington Co. DES	Protected Bicycle Lane	0.395	BP7279
N. Nash Street Protected Bicycle Lanes	Arlington Co. DES	Protected Bicycle Lane	0.2	BP8563
Hungerford Dr (MD 355)	City of Gaithersburg	Protected Bicycle Lane	0.774	BP7694
Omega Dr	City of Gaithersburg	Protected Bicycle Lane	0.349	BP8092
Dumfries Road Bike Facilities	City of Manassas	Protected Bicycle Lane	0.5	BP11609
Crosstown (Irving St, NW and NE)	District Department of Transportation	Protected Bicycle Lane	1.064	BP7997
NANNIE HELEN BURROUGHS AVE NE from Minnesota Ave NE to Gault Place NE	District Department of Transportation	Protected Bicycle Lane	0.486	BP8778
Potomac Ave., SW	District Department of Transportation	Protected Bicycle Lane	0.108	BP7985
4TH ST SW from Madison Drive, SW to P St., SW	District Department of Transportation	Protected Bicycle Lane	1.27	BP8667
Shepherd Branch Trail (Firth Sterling Road SE and South Capitol Street SE to E Street SE)	District Department of Transportation	Protected Bicycle Lane	3.117	BP7402
C ST NE Cycletrack between 17th St to 21st St NE	District Department of Transportation	Protected Bicycle Lane	0.33	BP8699

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
20th and 21st Street, NW Protected Bike Lanes from Conn. Ave. to Constitution Ave., NW	District Department of Transportation	Protected Bicycle Lane	1.45	BP9266
Pennsylvania Ave. NW	District Department of Transportation	Protected Bicycle Lane	0.974	BP7986
CONNECTICUT AVE NW from R St NW to Chevy Chase Circle NW	District Department of Transportation	Protected Bicycle Lane	4.8	BP8704
Benning Rd., NE Bicycle Facility from Oklahoma Ave NE to East Capitol Street SE	District Department of Transportation	Protected Bicycle Lane	1.84	BP8616
Tunlaw Rd. NW from New Mexico to 37th St	District Department of Transportation	Protected Bicycle Lane	0.266	BP7984
C ST NE from 4th St to 6th St NE	District Department of Transportation	Protected Bicycle Lane	0.115	BP8698
15th St. NW, RW Pl. SW, Ohio Dr. SW, E Basin Dr. SW	District Department of Transportation	Protected Bicycle Lane	1.013	BP8005
New Mexico Ave NW from Tunlaw Rd to Lowell St NW	District Department of Transportation	Protected Bicycle Lane	0.493	BP7983
Virginia Ave SE between 2nd Street SE and 9th Street SE	District Department of Transportation	Protected Bicycle Lane	0.55	BP7416

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
15th St. NW, from E St., NW to Constitution Ave., NW	District Department of Transportation	Protected Bicycle Lane	0.234	BP7994
CONSTITUTION AVE NW from Penn. Ave., NW to Louisiana Ave., NW	District Department of Transportation	Protected Bicycle Lane	0.18	BP8706
BLADENSBURG RD NE	District Department of Transportation	Protected Bicycle Lane	2.573	BP8689
Brentwood Parkway two-way Cycle track from Penn St., NE to 9th St., NE	District Department of Transportation	Protected Bicycle Lane	0.22	BP8002
4TH ST NW from Penn. Ave., NW to Madison Dr.,	District Department of Transportation	Protected Bicycle Lane	0.166	BP8664
SOUTHERN AVE SE	District Department of Transportation	Protected Bicycle Lane	1.777	BP8820
BRENTWOOD RD NE from Saratoga Ave to V St NE	District Department of Transportation	Protected Bicycle Lane	0.438	BP8694
Georgetown Waterfront Trail	District Department of Transportation	Protected Bicycle Lane	0.109	BP7338
G ST NW from 17th Street NW to Rock Creek Trail	District Department of Transportation	Protected Bicycle Lane	0.684	BP8725
IRVING ST NW	District Department of Transportation	Protected Bicycle Lane	1.132	BP8743

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
West Virginia Ave. NE from Mt Olivet Rd to K St NE	District Department of Transportation	Protected Bicycle Lane	0.597	BP8004
First Street, SE	District Department of Transportation	Protected Bicycle Lane	0.127	BP8011
4TH St SE from East Capitol St., NE to M Street, SE	District Department of Transportation	Protected Bicycle Lane	0.9	BP8666
West Virginia Ave. NE from New York Ave to Mt. Olivet Rd NE	District Department of Transportation	Protected Bicycle Lane	0.6	BP8001
14TH ST NW Eastern Ave., NW to Alaska Ave., NW	District Department of Transportation	Protected Bicycle Lane	0.781	BP8640
Arizona Ave NW from Loughboro Rd to MacArthur Blvd., NW	District Department of Transportation	Protected Bicycle Lane	0.5	BP8007
Potomac Ave., SW	District Department of Transportation	Protected Bicycle Lane	0.091	BP7987
Virginia Ave. NW from Rock Creek/Potomac Pkwy to Constitution Ave NW	District Department of Transportation	Protected Bicycle Lane	1.08	BP7991
RIGGS RD NE	District Department of Transportation	Protected Bicycle Lane	0.4	BP8808

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
MASSACHUSETTS AVE SE from Lincoln Park to Southern Ave SE	District Department of Transportation	Protected Bicycle Lane	0.065	BP8766
K Street NE/NW from 1st St NE to 3rd St NW	District Department of Transportation	Protected Bicycle Lane	0.501	BP8006
Virginia Ave. NW	District Department of Transportation	Protected Bicycle Lane	1.082	BP8000
8th St. NE from Monroe St., NE to Franklin St., NE	District Department of Transportation	Protected Bicycle Lane	0.468	BP8014
Warder St. NW/7th St. NW from Columbia Rd to New Hampshire Ave NW	District Department of Transportation	Protected Bicycle Lane	0.8	BP7999
4th St NE Cycletrack	District Department of Transportation	Protected Bicycle Lane	0.311	BP8618
Fort Lincoln Drive Connector Trail	District Department of Transportation	Protected Bicycle Lane	0.731	BP7332
15TH ST NW Euclid St., NW to H St., NW	District Department of Transportation	Protected Bicycle Lane	1.6	BP8643
MOUNT OLIVET RD NE from New York Ave NE to Bladensburg Rd NE	District Department of Transportation	Protected Bicycle Lane	0.81	BP8776
PENNSYLVANIA AVE NW from M St NW to 15th St NW	District Department of Transportation	Protected Bicycle Lane	1.028	BP8790

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
NEW JERSEY AVE NW	District Department of Transportation	Protected Bicycle Lane	0.37	BP8784
NEW HAMPSHIRE AVE NW from Dupont Circle NW to Washington Circle NW	District Department of Transportation	Protected Bicycle Lane	0.203	BP8783
4TH ST NE from East Capitol St., NE to New York Ave., NE - Cycletrack	District Department of Transportation	Protected Bicycle Lane	1.5	BP8662
Fort Circle Parks Connector/Military Road, NW	District Department of Transportation	Protected Bicycle Lane	1.075	BP7329
K Street NW from 3rd St NW to 4th St NW	District Department of Transportation	Protected Bicycle Lane	0.054	BP8013
East Capitol Street Bridge Connector	District Department of Transportation	Protected Bicycle Lane	0.389	BP7322
MASSACHUSETTS AVE NW from Dupont Circle to N Capitol St NW	District Department of Transportation	Protected Bicycle Lane	1.825	BP8765
SOUTHERN AVE SE	District Department of Transportation	Protected Bicycle Lane	1.477	BP8821
Great Streets - Pennsylvania Ave, SE	District Department of Transportation	Protected Bicycle Lane	1	T2743
Ballenger Creek	Frederick County	Protected Bicycle Lane	0.234	BP7619

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
New Design Road Protected Bike Lanes	Frederick County	Protected Bicycle Lane	2.755	BP7622
Goldsboro Rd (MD 614)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	2.124	BP8110
Main St (MD 108)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.221	BP8296
New Hampshire Ave (MD 650)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.156	BP8299
Bradley Blvd (MD 191)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.458	BP8118
16th St (MD 390)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.335	BP8124
Old Georgetown Rd (MD 187)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.298	BP8158

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Connecticut Ave (MD 185)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.146	BP8284
Rockville Pike (MD 355)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	1.724	BP7695
New Hampshire Ave (MD 650)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.417	BP8189
16th St (MD 390)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.759	BP8203
Bradley Ln (MD 191)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.053	BP8282
East West Hwy (MD 410)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.805	BP8136

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Old Georgetown Rd (MD 187)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.174	BP8143
Rockville Pike (MD 355)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.105	BP8266
Piney Branch Rd (MD 320)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.237	BP8206
Layhill Rd (MD 182)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.232	BP8220
University Blvd (MD 193)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.636	BP8207
Arliss St (MD 594-D)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.553	BP8225

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Piney Branch Rd Separated Bike Lanes (Flower Ave to University Blvd)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.019	BP8053
Rockville Pike (MD 355)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	1.389	BP8073
Burlington Ave (MD 410)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.339	BP8087
Old Georgetown Rd (MD 187)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.299	BP8103
University Blvd (MD 193)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.215	BP8112
Colesville Rd (MD 384)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.155	BP8102

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Connecticut Ave (MD 185)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.331	BP8182
Flower Ave (MD 787)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.38	BP8226
Piney Branch Rd (MD 320)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.476	BP8227
Ridge Rd (MD 27)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.262	BP8196
Montgomery Ave Separated Bike Lanes (Wisconsin Ave to East West Hwy)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.445	BP8027
Georgia Ave (MD 97)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.465	BP8202

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Rockville Pike (MD 355)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.502	BP8129
Plyers Mill Rd (MD 192)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.311	BP8257
Colesville Rd (MD 384)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.306	BP8128
University Blvd (MD 193)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.312	BP8080
Connecticut Ave (MD 185)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.564	BP8254
Ridge Rd (MD 27)	Maryland Department of Transportation - State Highway Administration	Protected Bicycle Lane	0.345	BP8280
Crystal Rock Dr	Montgomery County	Protected Bicycle Lane	1.022	BP8245

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Grandview Ave Separated Bike Lanes (Blueridge Ave to University Blvd)	Montgomery County	Protected Bicycle Lane	0.263	BP8033
City Of Rockville To Friendship Heights	Montgomery County	Protected Bicycle Lane	0.887	BP7538
Fernwood Rd	Montgomery County	Protected Bicycle Lane	0.411	BP8241
Burtonsville To Silver Spring	Montgomery County	Protected Bicycle Lane	0.859	BP7519
Spring St / Cedar St	Montgomery County	Protected Bicycle Lane	0.159	BP8176
Montgomery St	Montgomery County	Protected Bicycle Lane	0.059	BP8171
Medical Center Dr	Montgomery County	Protected Bicycle Lane	0.12	BP8153
Life Sciences Center Loop (Key West Ave to Great Seneca Hwy)	Montgomery County	Protected Bicycle Lane	1.102	BP8041
Omega Dr	Montgomery County	Protected Bicycle Lane	0.121	BP8172
Dixon Ave	Montgomery County	Protected Bicycle Lane	0.285	BP8166
Clarksburg To City Of Gaithersburg	Montgomery County	Protected Bicycle Lane	0.35	BP7518
Lewis Dr	Montgomery County	Protected Bicycle Lane	0.18	BP8194
Rock Spring Dr	Montgomery County	Protected Bicycle Lane	0.661	BP8240
Friendship Blvd Separated Bike Lanes (Willard Ave to District of Columbia)	Montgomery County	Protected Bicycle Lane	0.201	BP8040
Wheaton To Takoma / Langley	Montgomery County	Protected Bicycle Lane	1.228	BP7508
Glenmont To Silver Spring	Montgomery County	Protected Bicycle Lane	2.593	BP7512

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Westlake Ter	Montgomery County	Protected Bicycle Lane	0.786	BP8242
Cameron St	Montgomery County	Protected Bicycle Lane	0.338	BP8141
Olney #2	Montgomery County	Protected Bicycle Lane	0.715	BP8209
Nebel St	Montgomery County	Protected Bicycle Lane	0.497	BP8089
Twinbrook Pkwy	Montgomery County	Protected Bicycle Lane	0.305	BP8212
Wheaton Plaza Entrance	Montgomery County	Protected Bicycle Lane	0.126	BP8138
Appomattox Ave	Montgomery County	Protected Bicycle Lane	0.79	BP8216
City Of Rockville To Friendship Heights	Montgomery County	Protected Bicycle Lane	0.126	BP7531
Rockville Pkwy	Montgomery County	Protected Bicycle Lane	5.082	BP7469
Cheltenham Dr	Montgomery County	Protected Bicycle Lane	0.079	BP8082
Nebel St Ext	Montgomery County	Protected Bicycle Lane	1.295	BP8088
Spartan Rd	Montgomery County	Protected Bicycle Lane	0.615	BP8217
Edson Ln	Montgomery County	Protected Bicycle Lane	0.4	BP8140
City Of Rockville To Wheaton	Montgomery County	Protected Bicycle Lane	2.729	BP7509
Executive Blvd	Montgomery County	Protected Bicycle Lane	0.343	BP8170
Plum Orchard Dr	Montgomery County	Protected Bicycle Lane	1.278	BP8130
Tuckerman Ln	Montgomery County	Protected Bicycle Lane	0.663	BP8177
Battery Ln	Montgomery County	Protected Bicycle Lane	0.321	BP8137
Diamondback Dr	Montgomery County	Protected Bicycle Lane	0.177	BP8151
Westbard Ave	Montgomery County	Protected Bicycle Lane	0.703	BP8228

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Wheaton Plaza Ring Road	Montgomery County	Protected Bicycle Lane	2.19	BP8201
Pearl St	Montgomery County	Protected Bicycle Lane	0.133	BP8107
Industrial Pkwy	Montgomery County	Protected Bicycle Lane	2.11	BP8111
Rockledge Dr	Montgomery County	Protected Bicycle Lane	0.476	BP8188
Green Trail	Montgomery County	Protected Bicycle Lane	0.341	BP7483
Lyttonsville Rd	Montgomery County	Protected Bicycle Lane	0.865	BP8109
Aspen Hill Rd	Montgomery County	Protected Bicycle Lane	0.315	BP8190
City Of Rockville To Friendship Heights	Montgomery County	Protected Bicycle Lane	0.417	BP7516
Clarksburg To City Of Gaithersburg	Montgomery County	Protected Bicycle Lane	0.143	BP7526
City Of Rockville To Friendship Heights	Montgomery County	Protected Bicycle Lane	0.033	BP7517
Rockledge Dr	Montgomery County	Protected Bicycle Lane	1.203	BP8210
Blackwell Rd	Montgomery County	Protected Bicycle Lane	0.195	BP8148
Street B-5	Montgomery County	Protected Bicycle Lane	0.371	BP8095
Traville Gateway Dr Ext	Montgomery County	Protected Bicycle Lane	0.172	BP8169
Aircraft Dr	Montgomery County	Protected Bicycle Lane	0.124	BP7523
2nd Ave / Wayne Ave	Montgomery County	Protected Bicycle Lane	0.315	BP8152
Decoverly Dr	Montgomery County	Protected Bicycle Lane	0.465	BP8126
Capital Crescent Trail (surface Route)	Montgomery County	Protected Bicycle Lane	0.052	BP7478
Life Sciences Center Loop (Great Seneca Hwy to Key West Ave)	Montgomery County	Protected Bicycle Lane	0.454	BP8031

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Willard Ave	Montgomery County	Protected Bicycle Lane	0.501	BP8230
Marinelli Rd Separated Bike Lanes (Executive Blvd to Woodglen Dr)	Montgomery County	Protected Bicycle Lane	0.177	BP8048
FDA Blvd	Montgomery County	Protected Bicycle Lane	0.772	BP8074
Nicholson Ln	Montgomery County	Protected Bicycle Lane	1.004	BP8091
E Jefferson St	Montgomery County	Protected Bicycle Lane	0.458	BP8119
Fenton St Separated Bike Lanes (Wayne Ave to King St)	Montgomery County	Protected Bicycle Lane	0.568	BP8024
City Of Rockville To Friendship Heights	Montgomery County	Protected Bicycle Lane	1.004	BP7487
Sligo Ave	Montgomery County	Protected Bicycle Lane	0.055	BP8163
Olney To Glenmont	Montgomery County	Protected Bicycle Lane	0.357	BP7498
Marinelli Rd Separated Bike Lanes (Rockville Pike to Nebel St)	Montgomery County	Protected Bicycle Lane	0.424	BP8045
Medical Center Dr Ext (Outer Side) Separated Bike Lanes (Great Seneca Hwy to Key West Ave)	Montgomery County	Protected Bicycle Lane	0.479	BP8046
Executive Blvd	Montgomery County	Protected Bicycle Lane	0.287	BP8104
Towne Rd	Montgomery County	Protected Bicycle Lane	0.207	BP8145
Germantown To Life Sciences Center	Montgomery County	Protected Bicycle Lane	3.678	BP7495
Summit Ave	Montgomery County	Protected Bicycle Lane	0.175	BP8234

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Prichard Rd	Montgomery County	Protected Bicycle Lane	0.193	BP8099
Farragut Ave	Montgomery County	Protected Bicycle Lane	0.064	BP8233
Cherry Hill Rd Separated Bike Lanes (Prosperity Dr to Prince George's County)	Montgomery County	Protected Bicycle Lane	1.312	BP8036
Johns Hopkins Dr	Montgomery County	Protected Bicycle Lane	0.119	BP8146
Pearl St	Montgomery County	Protected Bicycle Lane	0.302	BP8108
Leland St	Montgomery County	Protected Bicycle Lane	0.068	BP8144
Broschart Rd	Montgomery County	Protected Bicycle Lane	0.517	BP8133
Belward Campus Dr	Montgomery County	Protected Bicycle Lane	0.751	BP8125
Capital Crescent Trail (Surface Route) (Woodmont Ave to Elm St Park)	Montgomery County	Protected Bicycle Lane	0.251	BP8029
Street B-2	Montgomery County	Protected Bicycle Lane	0.264	BP8272
Blackwell Rd	Montgomery County	Protected Bicycle Lane	2.005	BP8090
Grubb Rd	Montgomery County	Protected Bicycle Lane	0.66	BP8224
Twinbrook Pkwy	Montgomery County	Protected Bicycle Lane	0.136	BP8318
Blueridge Ave	Montgomery County	Protected Bicycle Lane	0.76	BP8098
Fenton St Separated Bike Lanes (Ellsworth Dr to Wayne Ave)	Montgomery County	Protected Bicycle Lane	0.11	BP8054
Street B-2	Montgomery County	Protected Bicycle Lane	0.335	BP8295

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Glenallan Ave	Montgomery County	Protected Bicycle Lane	0.609	BP8289
Woodmont Ave Separated Bike Lanes (Strathmore St to Wisconsin Ave)	Montgomery County	Protected Bicycle Lane	0.063	BP8037
Wisteria Dr	Montgomery County	Protected Bicycle Lane	1.043	BP8204
Grandview Ave Separated Bike Lanes (University Blvd to Reedie Dr)	Montgomery County	Protected Bicycle Lane	0.412	BP8032
Edgemoor Ln Separated Bike Lanes (Arlington Rd to Bethesda Metrorail Station)	Montgomery County	Protected Bicycle Lane	0.159	BP8025
Summit Ave Ext	Montgomery County	Protected Bicycle Lane	0.187	BP8178
Arlington Rd Separated Bike Lanes (Old Georgetown Rd to Bradley Blvd)	Montgomery County	Protected Bicycle Lane	0.658	BP8038
Norfolk Ave	Montgomery County	Protected Bicycle Lane	0.111	BP8083
City Of Rockville To Friendship Heights	Montgomery County	Protected Bicycle Lane	0.153	BP7482
Tech Rd	Montgomery County	Protected Bicycle Lane	0.817	BP8131
Broadbirch Dr Separated Bike Lanes (Tech Rd to Cherry Hill Rd)	Montgomery County	Protected Bicycle Lane	0.673	BP8030
Montgomery Ln Separated Bike Lanes (Woodmont Ave to Wisconsin Ave)	Montgomery County	Protected Bicycle Lane	0.145	BP8042
East Ave	Montgomery County	Protected Bicycle Lane	0.049	BP8096

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Reedie Dr	Montgomery County	Protected Bicycle Lane	0.126	BP8123
Spartan Rd	Montgomery County	Protected Bicycle Lane	0.378	BP8271
Twinbrook Pkwy	Montgomery County	Protected Bicycle Lane	0.06	BP8270
White Flint To Rock Spring	Montgomery County	Protected Bicycle Lane	0.624	BP7490
Aircraft Dr	Montgomery County	Protected Bicycle Lane	0.166	BP8250
Cherry Hill Rd	Montgomery County	Protected Bicycle Lane	1.416	BP7549
Nicholson Ln	Montgomery County	Protected Bicycle Lane	0.742	BP8072
Grubb Rd	Montgomery County	Protected Bicycle Lane	0.232	BP8147
Dorsey Mill Rd	Montgomery County	Protected Bicycle Lane	0.019	BP8149
15th St NW Cycle Track from Penn Ave NW to Maine Ave SW	National Park Service	Protected Bicycle Lane	0.796	BP7861
New Hampshire Ave (MD 650)	Takoma Park Public Works Department	Protected Bicycle Lane	0.527	BP8218
Mount Vernon Pentagon Connector	Arlington Co. DES	Shared Use Path	0.185	BP7429
Four Mile Run Trail Enhancements	Arlington Co. DES	Shared Use Path	1.8	BP8494
Tr Bridge To N Meade St	Arlington Co. DES	Shared Use Path	0.198	BP7413
Four Mile Run & W&OD Trail Improvements in Benjamin Banneker Park	Arlington Co. DES	Shared Use Path	0.3	BP8484
Glencarly/Hospital Trail	Arlington Co. DES	Shared Use Path	0.5	BP8515

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Key Boulevard Trail Renovation	Arlington Co. DES	Shared Use Path	0.4	BP8513
Washington Boulevard Sidewalk Upgrade	Arlington Co. DES	Shared Use Path	1.2	BP8499
Arlington National Cemetery Wall Trail	Arlington Co. DES	Shared Use Path	1.2	BP8509
Army Navy Drive Protected Bike Lane	Arlington Co. DES	Shared Use Path	0.685	BP7287
Donaldson Run Trail Renovation	Arlington Co. DES	Shared Use Path	0.5	BP8521
West Ballston Connection	Arlington Co. DES	Shared Use Path	0.4	BP8497
Arlington Boulevard Trail	Arlington Co. DES	Shared Use Path	4.594	BP7324
Manchester Street/Bluemont Connection	Arlington Co. DES	Shared Use Path	0.1	BP8517
Chain Bridge Access Improvements	Arlington Co. DES	Shared Use Path	0.3	BP8524
Custis (I-66) Trail Renovation	Arlington Co. DES	Shared Use Path	3.9	BP8493
110 Trail/cemetery Wall Trail	Arlington Co. DES	Shared Use Path	1.168	BP7278
Long Bridge Extension	Arlington Co. DES	Shared Use Path	0.479	BP7428
Columbia Pike Sidewalk Project	Arlington Co. DES	Shared Use Path	0.811	BP7315
Iwo Jima Memorial Connection to Theodore Roosevelt Bridge	Arlington Co. DES	Shared Use Path	0.9	BP8504
Mount Vernon Trail Extension	Arlington Co. DES	Shared Use Path	0.2	BP8523
N. Carlin Springs Road Trail	Arlington Co. DES	Shared Use Path	0.3	BP8516
Route 110 Trail Upgrades	Arlington Co. DES	Shared Use Path	0.5	BP8500
Bluemont Park to Upton Hill Park Trail	Arlington Co. DES	Shared Use Path	0.7	BP8519

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Route 110 South Trail	Arlington Co. DES	Shared Use Path	0.7	BP8510
Four Mile Run - Potomac Yards Connector	Arlington Co. DES	Shared Use Path	0.055	BP7336
Freedom Park Enhancements	Arlington Co. DES	Shared Use Path	0.3	BP8512
Culpepper to 20th Street North Connector	Arlington Co. DES	Shared Use Path	0.2	BP8522
Potomac Yard Four Mile Run Trail Connector	Arlington Co. DES	Shared Use Path	0.2	BP8485
Long Bridge Section	Arlington Co. DES	Shared Use Path	0.71	BP7356
8th Road N./Bluemont Park Connector	Arlington Co. DES	Shared Use Path	0.1	BP8491
Chain Bridge Road /Pimmit Run Trail	Arlington Co. DES	Shared Use Path	0.5	BP8520
Bluemont Junction Trail Upgrades	Arlington Co. DES	Shared Use Path	1.3	BP8518
St. Paul's Drive Shared Use Path	Charles County	Shared Use Path	0.498	BP8850
St. Patrick's Drive Shared Use Path Connection	Charles County	Shared Use Path	0.447	BP8853
Radio Station Road Shared Use Path	Charles County	Shared Use Path	1.636	BP8857
Middletown Road Shared Use Path	Charles County	Shared Use Path	0.863	BP8858
St. Charles Parkway Shared Use Path	Charles County	Shared Use Path	2.765	BP8854
Billingsley Road East Shared Use Path	Charles County	Shared Use Path	1.368	BP8867
Billingsley Road Shared Use Path	Charles County	Shared Use Path	4.589	BP8852
St. Patrick's Drive Shared Use Path	Charles County	Shared Use Path	0.361	BP8851

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Western Parkway Phase III	Charles County	Shared Use Path	0.812	BP8848
Smallwood Drive Shared Use Path	Charles County	Shared Use Path	0.684	BP8855
Rose Hill Road Shared Use Path Construction	Charles County	Shared Use Path	2.682	BP8869
Smallwood Drive West Shared Use Paths	Charles County	Shared Use Path	5.439	BP8870
Cameron Run	City of Alexandria	Shared Use Path	1	BP11613
N VAN DORN ST	City of Alexandria	Shared Use Path	2	BP8919
N BEAUREGARD ST	City of Alexandria	Shared Use Path	3	BP8899
Jermantown Road Corridor Improvements	City of Fairfax	Shared Use Path	0.737	BP7748
Country Club Commons Connector Trail	City of Fairfax	Shared Use Path	0.145	BP7747
George Snyder Trail	City of Fairfax	Shared Use Path	1.366	BP7745
Old Lee Highway Multimodal Improvements	City of Fairfax	Shared Use Path	1.452	BP7744
Pickett Trail Connector	City of Fairfax	Shared Use Path	0.248	BP7746
Mill Pond Rd	City of Frederick	Shared Use Path	0.143	BP7724
Baughmans Ln	City of Frederick	Shared Use Path	0.424	BP7737
Key Pkwy	City of Frederick	Shared Use Path	1.624	BP7738
Mill Pond Rd	City of Frederick	Shared Use Path	0.323	BP7743
Shookstown Rd	City of Frederick	Shared Use Path	0.335	BP7736
Madison St	City of Frederick	Shared Use Path	0.329	BP7729

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Butterfly Ln	City of Frederick	Shared Use Path	0.949	BP7740
E Church St	City of Frederick	Shared Use Path	0.632	BP7722
Tuscarora Creek Trail	City of Frederick	Shared Use Path	1.55	BP7573
Carroll Creek	City of Frederick	Shared Use Path	1.247	BP7564
Tuscarora Creek	City of Frederick	Shared Use Path	1.55	BP7569
Carroll Creek	City of Frederick	Shared Use Path	0.377	BP7563
Carroll Creek	City of Frederick	Shared Use Path	1.065	BP7558
Tuscarora Creek Trail	City of Frederick	Shared Use Path	0.451	BP7581
Tuscarora Creek Trail	City of Frederick	Shared Use Path	0.336	BP7582
Tbd	City of Frederick	Shared Use Path	1.802	BP7567
Gas House Pike	City of Frederick	Shared Use Path	2.016	BP7721
Mccain Dr	City of Frederick	Shared Use Path	1.033	BP7739
Lee Pl	City of Frederick	Shared Use Path	0.577	BP7735
H&F Trolley Trail	City of Frederick	Shared Use Path	1.063	BP7591
Monocacy River	City of Frederick	Shared Use Path	3.187	BP7557
Tuscarora Creek Trail	City of Frederick	Shared Use Path	0.169	BP7572
S Market St	City of Frederick	Shared Use Path	0.836	BP7727
N Market St	City of Frederick	Shared Use Path	2.725	BP7726
Taney Ave	City of Frederick	Shared Use Path	0.86	BP7734
E Patrick St	City of Frederick	Shared Use Path	1.26	BP7730

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Stadium Dr	City of Frederick	Shared Use Path	0.565	BP7728
Tuscarora Creek	City of Frederick	Shared Use Path	0.652	BP7556
Carroll Creek	City of Frederick	Shared Use Path	0.429	BP7561
Carroll Creek	City of Frederick	Shared Use Path	2.103	BP7565
Carroll Creek	City of Frederick	Shared Use Path	0.225	BP7560
Tuscarora Creek	City of Frederick	Shared Use Path	0.157	BP7570
Tuscarora Creek Trail	City of Frederick	Shared Use Path	0.157	BP7576
Thomas Johnson Dr	City of Frederick	Shared Use Path	1.923	BP7733
Opposumton Pike	City of Frederick	Shared Use Path	2.712	BP7732
7th St	City of Frederick	Shared Use Path	0.555	BP7720
Rosemont Ave	City of Frederick	Shared Use Path	1.451	BP7742
Tuscarora Creek Trail	City of Frederick	Shared Use Path	0.12	BP7580
Wormans Mill Rd	City of Frederick	Shared Use Path	0.704	BP7723
Main St - Md144	City of Frederick	Shared Use Path	0.486	BP7731
Routzahn Way	City of Frederick	Shared Use Path	0.109	BP7725
Yellow Springs Rd	City of Frederick	Shared Use Path	1.363	BP7741
Hungerford Dr (MD 355)	City of Gaithersburg	Shared Use Path	0.762	BP7689
Service Road A	City of Gaithersburg	Shared Use Path	0.258	BP7684
W Diamond Ave (MD 117)	City of Gaithersburg	Shared Use Path	0.227	BP7685

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Garland Ct And Winterwood Ct Connector	City of Manassas	Shared Use Path	0.16	BP7800
Godwin Drive shared-use path (north)	City of Manassas	Shared Use Path	0.9	BP11605
Godwin Drive shared-use path (south)	City of Manassas	Shared Use Path	2	BP11604
Public Works Dr	City of Manassas	Shared Use Path	0.133	BP7793
Namette Dr Ext	City of Manassas	Shared Use Path	0.06	BP7805
Vicksburg Ln Ext	City of Manassas	Shared Use Path	0.251	BP7792
Nokesville Road shared use path (west)	City of Manassas	Shared Use Path	0.6	BP11606
Dean Park Ln	City of Manassas	Shared Use Path	1.373	BP7777
Stonewall Park	City of Manassas	Shared Use Path	0.463	BP7764
Grant Ave shared-use path	City of Manassas	Shared Use Path	0.6	BP11608
Gateway Blvd And Godwin Dr Connector	City of Manassas	Shared Use Path	0.39	BP7776
Nokesville Road shared-use path (east)	City of Manassas	Shared Use Path	1	BP11607
Redoubt Rd	City of Manassas	Shared Use Path	0.139	BP7767
Fairview Ave	City of Manassas	Shared Use Path	0.098	BP7780
Merit Ct And Olden Ct Connector	City of Manassas	Shared Use Path	0.077	BP7801
Wellington Rd shared-use path gap	City of Manassas	Shared Use Path	0.3	BP11610
Gateway Blvd	City of Manassas	Shared Use Path	0.795	BP7775

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
FLORIDA AVE NW	District Department of Transportation	Shared Use Path	0.056	BP8720
Pennsylvania Ave SE	District Department of Transportation	Shared Use Path	0.304	BP8613
Dalecarlia Pkwy Trail from Mass Ave., NW to Loughboro Rd., NW	District Department of Transportation	Shared Use Path	1.46	BP7462
Klinge Valley Trail	District Department of Transportation	Shared Use Path	0.34	BP8609
Louisiana Ave (national Mall-mbt Connector)	District Department of Transportation	Shared Use Path	0.637	BP7373
Hains Point Bridge	District Department of Transportation	Shared Use Path	0.191	BP8841
NEBRASKA AVE NW from Oregon Ave NW to Wisconsin Ave NW	District Department of Transportation	Shared Use Path	0.411	BP8779
Metropolitan Branch Trail	District Department of Transportation	Shared Use Path	0	T3228
11th St. Bridge Crossing	District Department of Transportation	Shared Use Path	0.452	BP8599
Piney Branch Pkwy NW	District Department of Transportation	Shared Use Path	0.832	BP8607

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Connection To Marvin Gaye Trail from the Anacostia River Trail	District Department of Transportation	Shared Use Path	0.4	BP8837
Virginia Ave Trail from 9th St SE to 11th St SE	District Department of Transportation	Shared Use Path	0.116	BP7460
South Capitol Street Trail	District Department of Transportation	Shared Use Path	3	T6114
Palisades Trolley Trail	District Department of Transportation	Shared Use Path	2.28	BP8602
FLORIDA AVE NE	District Department of Transportation	Shared Use Path	0.654	BP8719
Fort Circle Planned Trails/Fort Davis Drive	District Department of Transportation	Shared Use Path	1.232	BP7463
Oxon Run Trail from 13th St to Southern Ave SE	District Department of Transportation	Shared Use Path	2.259	BP7446
RIGGS RD NE	District Department of Transportation	Shared Use Path	0.459	BP8809
New York Ave NE from Montana Ave NE to DC line	District Department of Transportation	Shared Use Path	2.019	BP8612
15TH ST NW	District Department of Transportation	Shared Use Path	0.082	BP8644

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
South Capitol Street Trail	District Department of Transportation	Shared Use Path	3.332	BP7404
Roosevelt Bridge to Mt. Vernon Trail	District Department of Transportation	Shared Use Path	0.2	BP8503
Metropolitan Branch Trail	District Department of Transportation	Shared Use Path	0.783	BP8838
Commodore Joshua Barney Dr Ne Sidepath	District Department of Transportation	Shared Use Path	0.717	BP7317
FLORIDA AVE NW	District Department of Transportation	Shared Use Path	0.409	BP8721
MILITARY RD NW Nebraska Ave NW to 28th St NW	District Department of Transportation	Shared Use Path	0.619	BP8770
MICHIGAN AVE NE from South Dakota Ave NE to Eastern Ave NE	District Department of Transportation	Shared Use Path	0.418	BP8769
Metropolitan Branch Trail	District Department of Transportation	Shared Use Path	4.713	BP7367
South Captiol Trail Extension	District Department of Transportation	Shared Use Path	0.382	BP7405
NEBRASKA AVE NW Loughboro Rd NW to Rockwood Pkwy NW	District Department of Transportation	Shared Use Path	0.263	BP8780

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Arizona Avenue Connector Trail to the Capital Crescent Trail	District Department of Transportation	Shared Use Path	0.09	BP8684
Oxon Cove Trail	District Department of Transportation	Shared Use Path	0.388	BP8608
Oxon Run Trail	District Department of Transportation	Shared Use Path	0.421	BP8610
12TH ST NW	District Department of Transportation	Shared Use Path	0.02	BP8633
Texas Ave SE	District Department of Transportation	Shared Use Path	0.784	BP8600
S. Capitol Bridge Crossing	District Department of Transportation	Shared Use Path	1.361	BP8606
16th ST NW Eastern Ave., NW to Spring Rd, NW	District Department of Transportation	Shared Use Path	3.789	BP8620
Pennsylvania Ave SE	District Department of Transportation	Shared Use Path	0.211	BP8614
Mass Ave NW Sidepath Western Ave NW to R St NW	District Department of Transportation	Shared Use Path	3.621	BP8624
New York Ave Trail from MBT to Bladensburg Rd NE	District Department of Transportation	Shared Use Path	1.677	BP7441

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Grist Mill Trail Phase 1	Fairfax County	Shared Use Path	3	BP11381
Cub Run Trail	Fairfax County	Shared Use Path	2	BP11396
Centreville to Clifton Trail	Fairfax County	Shared Use Path	1	BP11476
Idylwood Road Trail	Fairfax County	Shared Use Path	2	BP11430
Guinea Road Trail	Fairfax County	Shared Use Path	5	BP11484
Shreve Road Trail	Fairfax County	Shared Use Path	2	BP11447
Mount Vernon Memorial Highway Trail	Fairfax County	Shared Use Path	2	BP11463
Franconia Trail	Fairfax County	Shared Use Path	5.5	BP11408
Fair Lakes Circle Trail	Fairfax County	Shared Use Path	0.67	BP11394
Trap Road Trail	Fairfax County	Shared Use Path	1	BP11421
South County East West Trail	Fairfax County	Shared Use Path	17.08	BP7453
Clark Crossing Road Trail	Fairfax County	Shared Use Path	1	BP11423
Sherwood Hall Road Trail	Fairfax County	Shared Use Path	1	BP11461
Collingwood Road Trail	Fairfax County	Shared Use Path	2	BP11462
South Count East-West Trail Phase 1	Fairfax County	Shared Use Path	3	BP11392
Route 29 Trail Phase 2	Fairfax County	Shared Use Path	10	BP11446
Fox Mill Trail	Fairfax County	Shared Use Path	1.07	BP11379
Reston Parkway Trail	Fairfax County	Shared Use Path	6.4	BP11387
Route 28 Trail	Fairfax County	Shared Use Path	4	BP11406
Kirby Road Trail	Fairfax County	Shared Use Path	3	BP11431
Roberts Road Trail	Fairfax County	Shared Use Path	1	BP11480
South Van Dorn Street Trail	Fairfax County	Shared Use Path	2.2	BP11459
66 Parallel Trail	Fairfax County	Shared Use Path	18.12	BP7320
Braddock Trail	Fairfax County	Shared Use Path	11	BP11376
Route 1 Trail	Fairfax County	Shared Use Path	4	BP11318

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Richmond Highway Trail	Fairfax County	Shared Use Path	14.8	BP11388
Frederick and Pennsylvania Line RR Trail	Frederick County	Shared Use Path	1.35	BP7614
Frederick and Pennsylvania Line RR Trail	Frederick County	Shared Use Path	0.142	BP7575
Frederick and Pennsylvania Line RR Trail	Frederick County	Shared Use Path	2.089	BP7617
Mount Airy Trail	Frederick County	Shared Use Path	1.109	BP7717
Ballenger Creek	Frederick County	Shared Use Path	0.838	BP7616
Frederick and Pennsylvania Line RR Trail	Frederick County	Shared Use Path	3.464	BP7586
Ballenger Creek	Frederick County	Shared Use Path	0.131	BP7620
Bush Creek	Frederick County	Shared Use Path	3.284	BP7703
Sugarloaf - Little Bennet Trail	Frederick County	Shared Use Path	1.529	BP7705
Emmitsburg Area Trails	Frederick County	Shared Use Path	1.349	BP7696
New Design Road Side Path	Frederick County	Shared Use Path	8.518	BP7621
H&F Trolley Trail	Frederick County	Shared Use Path	5.889	BP7583
Brunswick Crossing	Frederick County	Shared Use Path	0.743	BP7712
Frederick Scenic Trail	Frederick County	Shared Use Path	1.429	BP7618
Middletown Greenway	Frederick County	Shared Use Path	0.054	BP7608
Town Of Middletown Greenway	Frederick County	Shared Use Path	0.727	BP7599

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
MIDDLETOWN - MYERSVILLE TROLLEY TRAIL	Frederick County	Shared Use Path	1.953	BP7612
Middletown Greenway	Frederick County	Shared Use Path	0.102	BP7607
I-270 Transitway	Frederick County	Shared Use Path	3.474	BP7593
Middletown Greenway	Frederick County	Shared Use Path	0.815	BP7609
Middletown Greenway	Frederick County	Shared Use Path	0.188	BP7603
Monocacy River	Frederick County	Shared Use Path	1.924	BP7706
Middletown Greenway	Frederick County	Shared Use Path	0.404	BP7601
Ballenger Creek	Frederick County	Shared Use Path	0.335	BP7610
Brunswick Crossing	Frederick County	Shared Use Path	1.366	BP7711
Sugarloaf - Little Bennet Trail	Frederick County	Shared Use Path	1.683	BP7716
H&F Trolley Trail	Frederick County	Shared Use Path	2.243	BP7584
H&F Trolley Trail	Frederick County	Shared Use Path	0.821	BP7585
H&F Trolley Trail	Frederick County	Shared Use Path	0.464	BP7590
H&F Trolley Trail	Frederick County	Shared Use Path	2.373	BP7589
Middletown Greenway	Frederick County	Shared Use Path	0.084	BP7605
I-270 Transitway	Frederick County	Shared Use Path	4.575	BP7595
Middletown Greenway	Frederick County	Shared Use Path	0.634	BP7602
Middletown Greenway	Frederick County	Shared Use Path	0.063	BP7604
MIDDLETOWN - MYERSVILLE TROLLEY TRAIL	Frederick County	Shared Use Path	0.407	BP7597

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
MIDDLETOWN - MYERSVILLE TROLLEY TRAIL	Frederick County	Shared Use Path	1.555	BP7611
I-270 Transitway	Frederick County	Shared Use Path	2.696	BP7594
Bush Creek	Frederick County	Shared Use Path	4.993	BP7704
Frederick Scenic Trail	Frederick County	Shared Use Path	1.6	BP7613
John Mosby Highway Pedestrian Facilities	Loudoun County	Shared Use Path	9.788	BP7673
Arcola Boulevard	Loudoun County	Shared Use Path	1.736	BP7644
Mooreview Parkway Bicycle Lanes and Pedestrian Facilities	Loudoun County	Shared Use Path	0.606	BP7652
Innovation Avenue Bicycle Lanes and Pedestrian Facilities	Loudoun County	Shared Use Path	0.637	BP8349
Lockridge Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Shared Use Path	1.025	BP7648
Loudoun County Parkway Pedestrian Facilities	Loudoun County	Shared Use Path	3.69	BP7671
Charles Town Pike Shared Use path	Loudoun County	Shared Use Path	12.7	BP7662
W & OD West Extension	Loudoun County	Shared Use Path	8.584	BP7665
Route 9	Loudoun County	Shared Use Path	0.346	BP7675
James Monroe Highway Pedestrian Facilities	Loudoun County	Shared Use Path	10.39	BP7649
James Monroe Highway Pedestrian Facilities	Loudoun County	Shared Use Path	2.585	BP7661

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Davis Drive Pedestrian Facilities	Loudoun County	Shared Use Path	1	BP8439
Claude Moore Drive Sidewalk	Loudoun County	Shared Use Path	0.22	BP8340
Hansen Park Shared Use Path	Loudoun County	Shared Use Path	0.808	BP7647
Loudoun County Parkway Pedestrian Facilities	Loudoun County	Shared Use Path	9.927	BP7670
Ashburn Road Shared Use Path	Loudoun County	Shared Use Path	0.46	BP8430
Harry Byrd Highway	Loudoun County	Shared Use Path	2.981	BP7655
Riverside Parkway Pedestrian Facilities	Loudoun County	Shared Use Path	0.695	BP7667
Cascades Parkway Shared Use Path	Loudoun County	Shared Use Path	0.431	BP7654
Demott Drive Bicycle Lanes	Loudoun County	Shared Use Path	0.71	BP8425
John Mosby Highway Pedestrian Facilities	Loudoun County	Shared Use Path	0.803	BP7674
Tall Cedars Parkway Bicycle Lanes and Pedestrian Improvements	Loudoun County	Shared Use Path	0.268	BP7672
Ashburn Farm Parkway Shared Use Path Widening	Loudoun County	Shared Use Path	1.06	BP7668
Snickersville Turnpike Bicycle Lanes	Loudoun County	Shared Use Path	1.97	BP7659
Belmont Ridge Road Shared Use Path	Loudoun County	Shared Use Path	1.858	BP7645
Lovettsville Road Pedestrian Facilities	Loudoun County	Shared Use Path	5.756	BP7650
Berlin Turnpike (VA Route 287)	Loudoun County	Shared Use Path	10.58	BP7663
Whites Ferry Connector	Loudoun County	Shared Use Path	4.667	BP7664

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Croson Lane Pedestrian Facilities	Loudoun County	Shared Use Path	1.307	BP7669
Ashburn Road	Loudoun County	Shared Use Path	0.43	BP8367
Riverside Parkway Pedestrian Facilities	Loudoun County	Shared Use Path	0.313	BP7666
Leesburg Bypass Pedestrian Facility	Loudoun County	Shared Use Path	0.809	BP7660
Atlantic Boulevard Shared Use Path	Loudoun County	Shared Use Path	1.122	BP7653
Braddock Road Shared Use Path	Loudoun County	Shared Use Path	1.336	BP7678
Davis Drive	Loudoun County	Shared Use Path	0.96	BP8332
Nice/Middleton Bridge Bike/Ped Access	Maryland Department of Transportation - Maryland Transportation Authority	Shared Use Path	1.962	BP8868
Frederick Rd (MD 355)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.701	BP8093
Knowles Ave (MD 547)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.416	BP8232
Rockville Pike (MD 355)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.13	BP8262

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Olney-Sandy Spring Rd (MD 108)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.22	BP8180
Montgomery Village Ave (MD 124)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	2.646	BP7680
Metropolitan Ave (MD 192)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.151	BP8290
Connecticut Ave (MD 185)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.273	BP8231
Muncaster Mill Rd (MD 115)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.66	BP7690
Wisconsin Ave (MD 355)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.071	BP8159

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Ridge Rd (MD 27)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.639	BP8195
Silver Spring Green Trail Sidepath (Cedar St to Sligo Creek Pkwy)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.685	BP8026
Quince Orchard Rd (MD 124)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	2.298	BP7681
Clarksburg Rd (MD 121)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.355	BP8307
Frederick Rd (MD 355)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.526	BP8244
Piney Branch Rd (MD 320)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.225	BP8275

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Falls Rd (MD 189)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	3.818	BP8058
Clopper Rd (MD 117)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.212	BP7682
Falls Rd (MD 189)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.136	BP7688
Georgia Ave (MD 97)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.223	BP8292
Connecticut Ave (MD 185)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.023	BP8221
MD 5 Bike/Ped Treatments	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.134	BP8863

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Great Seneca Hwy (MD 119)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.027	BP8106
University Blvd (MD 193)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.19	BP8199
New Hampshire Ave (MD 650)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.452	BP8297
East West Hwy (MD 410)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.349	BP8311
Frederick Rd Sidepath (Stringtown Rd to North Germantown Greenway Trail)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	2.369	BP8039
University Blvd (MD 193)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.702	BP8067

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Capitol View Ave (MD 192)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.06	BP8197
Colesville Rd (MD 384)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.097	BP8115
River Rd (MD 190)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.194	BP8193
Germantown Rd (MD 118)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.133	BP8259
Main St (MD 108)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.298	BP8236
Rockville Pike (MD 355)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.729	BP8187

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Piney Branch Rd (MD 320)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.506	BP8253
Woodfield Rd (MD 124)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.297	BP8181
Frederick Ave (MD 355)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	3.26	BP7679
Germantown Rd (MD 118)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.103	BP8215
New Hampshire Ave (MD 650)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.462	BP8264
Indian Head Rail Trail Path Connection	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.742	BP8865

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Bradley Blvd (MD 191)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.132	BP8116
Rockville Pike (MD 355)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.307	BP8192
MD 6 Bike/Ped Treatments Over Zekiah Swamp	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.109	BP8862
Midcounty Hwy (MD 124)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	4.026	BP7683
Forest Glen Rd (MD 192)	Maryland Department of Transportation - State Highway Administration	Shared Use Path	0.069	BP8268
MD 225, Hawthorne Road, Bridge Replacement	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.4	T6689

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
MD 197 Highway Reconstruction - PE ONLY	Maryland Department of Transportation - State Highway Administration	Shared Use Path	1.4	T4887
Matthew Henson Trail Connector	Maryland-National Capital Park and Planning Commission	Shared Use Path	0.193	BP7529
Jingle Connector	Maryland-National Capital Park and Planning Commission	Shared Use Path	0.182	BP8314
Piedmont Crossing Local Park Trail	Maryland-National Capital Park and Planning Commission	Shared Use Path	0.06	BP8094
Montrose Ave	Montgomery County	Shared Use Path	0.491	BP8277
Icc Trail Extension	Montgomery County	Shared Use Path	0.11	BP7539
Queen Mary Dr	Montgomery County	Shared Use Path	0.134	BP8229
Off-Street Trail	Montgomery County	Shared Use Path	0.042	BP8312
Metropolitan Branch Trail	Montgomery County	Shared Use Path	0.613	BP7481
Glenmont To Silver Spring	Montgomery County	Shared Use Path	0.31	BP7524
Southlawn Ln	Montgomery County	Shared Use Path	0.21	BP7692
Parklawn Dr	Montgomery County	Shared Use Path	0.591	BP8278
Matthew Henson Trail to Poplar Run	Montgomery County	Shared Use Path	0.599	BP7489
Olney To Glenmont	Montgomery County	Shared Use Path	0.056	BP7530

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Potomac To Veirs Mill Road	Montgomery County	Shared Use Path	2.999	BP7515
Scott WB	Montgomery County	Shared Use Path	0.631	BP8018
Grosvenor Ln	Montgomery County	Shared Use Path	0.518	BP8263
Bethesda Trolley Trail	Montgomery County	Shared Use Path	0.233	BP7541
Metropolitan Branch Trail Breezeway (Silver Spring Transit Center to King St)	Montgomery County	Shared Use Path	0.032	BP8035
Olney To Glenmont	Montgomery County	Shared Use Path	1.166	BP7510
Capital Crescent Trail Breezeway (Elm St Park to Silver Spring Transit Center)	Montgomery County	Shared Use Path	0.054	BP8055
Burtonsville To Silver Spring	Montgomery County	Shared Use Path	0.338	BP7542
Capital Crescent Trail	Montgomery County	Shared Use Path	3.372	BP7472
Howard Ave	Montgomery County	Shared Use Path	0.04	BP8300
Capital Crescent Trail Connector	Montgomery County	Shared Use Path	0.059	BP8161
Emory Ln	Montgomery County	Shared Use Path	0.013	BP7687
Seven Locks Rd	Montgomery County	Shared Use Path	1.238	BP8065
Observation Dr	Montgomery County	Shared Use Path	2.187	BP7504
Jones Bridge Rd (South Side) Sidepath (Platt Ridge Dr to Connecticut Ave)	Montgomery County	Shared Use Path	0.167	BP8051

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Westbard Ave	Montgomery County	Shared Use Path	0.307	BP8302
Grosvenor Pl	Montgomery County	Shared Use Path	0.516	BP8258
Emory Lane Sidepath	Montgomery County	Shared Use Path	0.297	BP7488
Frederick Rd	Montgomery County	Shared Use Path	3.144	BP7547
Strathmore Hall St	Montgomery County	Shared Use Path	0.036	BP8288
Morningwood Dr	Montgomery County	Shared Use Path	0.204	BP8255
Montgomery Ave	Montgomery County	Shared Use Path	0.06	BP8243
Utility Corridor #2	Montgomery County	Shared Use Path	25.32	BP7513
Forest Glen Rd	Montgomery County	Shared Use Path	0.019	BP8283
Veirs Mill Road To White Oak	Montgomery County	Shared Use Path	0.017	BP7532
I-495 Bridge	Montgomery County	Shared Use Path	0.359	BP7525
Weller Rd	Montgomery County	Shared Use Path	0.104	BP8276
Randolph Rd	Montgomery County	Shared Use Path	0.77	BP7544
Tuckerman Ln	Montgomery County	Shared Use Path	1.512	BP8235
Nicholson Ln	Montgomery County	Shared Use Path	0.157	BP8269
Long Branch Trail	Montgomery County	Shared Use Path	0.013	BP7520
Plyers Mill Rd	Montgomery County	Shared Use Path	0.1	BP8310
Jones Bridge Rd	Montgomery County	Shared Use Path	0.03	BP8084
Crystal Rock Dr	Montgomery County	Shared Use Path	0.418	BP8246
MacArthur Blvd	Montgomery County	Shared Use Path	1.334	BP8249

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Needwood Drive Bikepath	Montgomery County	Shared Use Path	0.263	BP7476
Old Columbia Pike	Montgomery County	Shared Use Path	0.124	BP7545
Wheaton To Takoma / Langley	Montgomery County	Shared Use Path	4.316	BP7506
Germantown Town Center To Montgomery College	Montgomery County	Shared Use Path	0.972	BP7505
Bowie Mill Rd	Montgomery County	Shared Use Path	3.348	BP8208
Dale Dr	Montgomery County	Shared Use Path	2.125	BP8184
Matthew Henson Trail Ext	Montgomery County	Shared Use Path	0.54	BP7491
Avery Rd	Montgomery County	Shared Use Path	1.182	BP7686
Walter Johnson Rd	Montgomery County	Shared Use Path	0.323	BP8214
City Of Rockville To Friendship Heights	Montgomery County	Shared Use Path	0.13	BP7522
Veirs Mill Road To White Oak	Montgomery County	Shared Use Path	6.121	BP7494
Burtonsville Access Road	Montgomery County	Shared Use Path	0.274	BP8285
Capital Crescent Trail Breezeway (Elm St Park to Silver Spring Transit Center)	Montgomery County	Shared Use Path	0.371	BP8028
Potomac to Veirs Mill Road Breezeway (Randolph Rd to Veirs Mill Rd)	Montgomery County	Shared Use Path	0.098	BP8050
Railroad Crossing	Montgomery County	Shared Use Path	0.045	BP8320

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
MacArthur Blvd Sidepath and Bikeable Shoulders (Goldsboro Rd to District of Columbia)	Montgomery County	Shared Use Path	0.329	BP8052
Redland Rd	Montgomery County	Shared Use Path	1.284	BP7691
North Branch Hiker-biker Trail	Montgomery County	Shared Use Path	3.922	BP7550
Clarksburg To City Of Gaithersburg	Montgomery County	Shared Use Path	3.95	BP7496
Kensington Blvd	Montgomery County	Shared Use Path	0.271	BP8097
Summit Hills Bikeway	Montgomery County	Shared Use Path	0.211	BP8304
Goshen Rd	Montgomery County	Shared Use Path	3.099	BP8237
Germantown To Burtonsville	Montgomery County	Shared Use Path	0.003	BP7533
Tuckerman Ln	Montgomery County	Shared Use Path	5.717	BP7470
Sligo Creek Trail Ext. To Matthew Henson	Montgomery County	Shared Use Path	3.499	BP7551
Snuffer School Rd Sidepath (Centerway Rd to Sweet Autumn Dr)	Montgomery County	Shared Use Path	1.03	BP8043
Old Columbia Pike	Montgomery County	Shared Use Path	0.098	BP7543
Lockwood Dr	Montgomery County	Shared Use Path	0.143	BP8156
Colie Dr	Montgomery County	Shared Use Path	0.364	BP8287
Sligo Creek Trail	Montgomery County	Shared Use Path	0.008	BP7536
Crabbs Branch Way	Montgomery County	Shared Use Path	0.407	BP8134

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Darnestown Rd	Montgomery County	Shared Use Path	0.415	BP8223
White Flint To Rock Spring	Montgomery County	Shared Use Path	1.34	BP7507
Industrial Dr	Montgomery County	Shared Use Path	0.318	BP8273
Potomac To Rock Spring	Montgomery County	Shared Use Path	2.084	BP7500
Gaither Rd	Montgomery County	Shared Use Path	0.322	BP8293
Evans Parkway Neighborhood Park Trail	Montgomery County	Shared Use Path	0.051	BP7535
Clarksburg To City Of Gaithersburg	Montgomery County	Shared Use Path	0.087	BP7534
Stringtown Rd	Montgomery County	Shared Use Path	1.189	BP8183
Little Seneca Pkwy	Montgomery County	Shared Use Path	0.268	BP8157
Intercounty Connector Trail	Montgomery County	Shared Use Path	5.506	BP7468
A-251	Montgomery County	Shared Use Path	0.728	BP7546
Piedmont Crossing Local Park Trail	Montgomery County	Shared Use Path	0.304	BP8114
Olney #6	Montgomery County	Shared Use Path	0.109	BP8309
Icc Trail Extension	Montgomery County	Shared Use Path	0.141	BP7540
Parklawn Dr	Montgomery County	Shared Use Path	0.908	BP8213
Southlawn Ln	Montgomery County	Shared Use Path	1.052	BP7693
Intercounty Connector Trail	Montgomery County	Shared Use Path	4.278	BP7480
Hyattstown Bypass	Montgomery County	Shared Use Path	0.506	BP7548
Capital Crescent Trail	Montgomery County	Shared Use Path	4.524	BP7475

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Willard Ave Trail	Montgomery County	Shared Use Path	0.452	BP8274
Diamondback Dr	Montgomery County	Shared Use Path	0.507	BP8127
Life Sciences Center To Shady Grove Metro	Montgomery County	Shared Use Path	2.667	BP7502
Snowden Farm Pkwy	Montgomery County	Shared Use Path	0.579	BP8267
Utility Corridor #1	Montgomery County	Shared Use Path	11.19	BP7473
Capital Crescent Trail Connector	Montgomery County	Shared Use Path	0.034	BP8173
Randolph Rd	Montgomery County	Shared Use Path	0.181	BP8305
Middlebrook Rd	Montgomery County	Shared Use Path	0.327	BP8205
Powder Mill Rd	Montgomery County	Shared Use Path	0.693	BP8198
Woodglen	Montgomery County	Shared Use Path	0.066	BP7486
Great Seneca Hwy	Montgomery County	Shared Use Path	0.492	BP8056
Jones Bridge	Montgomery County	Shared Use Path	0.061	BP7477
Street A-251	Montgomery County	Shared Use Path	0.728	BP8251
New Ave Bikeway	Montgomery County	Shared Use Path	0.768	BP7552
Green Trail	Montgomery County	Shared Use Path	0.677	BP7474
Montrose Rd	Montgomery County	Shared Use Path	0.998	BP8256
I-495 Bridge (east Side)	Montgomery County	Shared Use Path	0.357	BP7521
Germantown To Life Sciences Center	Montgomery County	Shared Use Path	0.516	BP7528
City Of Rockville To Wheaton	Montgomery County	Shared Use Path	1.66	BP7514

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Briggs Rd	Montgomery County	Shared Use Path	0.345	BP8179
Olney to Glenmont Breezeway (Wendy Ln to Matthew Henson Trail)	Montgomery County	Shared Use Path	0.396	BP8321
Macarthur Blvd	Montgomery County	Shared Use Path	1.663	BP7479
Olney To Glenmont	Montgomery County	Shared Use Path	2.593	BP7497
Montrose Pkwy	Montgomery County	Shared Use Path	0.023	BP7484
Sligo Creek Trail	Montgomery County	Shared Use Path	0.058	BP7537
Capital Crescent Trail Access	Montgomery County	Shared Use Path	0.97	BP7471
Capital Crescent Trail (Surface Route) (Woodmont Ave to Elm St Park)	Montgomery County	Shared Use Path	0.068	BP8049
Gold Mine Rd Sidepath (James Creek Ct to Chandlee Mill Rd)	Montgomery County	Shared Use Path	0.14	BP8047
Burtonsville To Silver Spring	Montgomery County	Shared Use Path	8.426	BP7493
W&OD and Four Mile Run Trail Upgrades	NOVA Parks	Shared Use Path	5.5	BP8492
Long Bridge Park to Mt. Vernon Trail Connection	National Park Service	Shared Use Path	0.2	BP8502
Rock Creek Park Multi-use Trail and Pedestrian Bridge Project	National Park Service	Shared Use Path	3.6	BP10086
Mount Vernon Trail Extension	National Park Service	Shared Use Path	0.118	BP7370
Mount Vernon Trail Widening	National Park Service	Shared Use Path	4.8	BP8501

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Rock Creek Park Trail Extension	National Park Service	Shared Use Path	3.569	BP7395
Anacostia Riverwalk Trail Phase II	National Park Service	Shared Use Path	9.607	BP7859
Anacostia Kenilworth Trail	National Park Service	Shared Use Path	1.754	BP8839
Oxon Cove Hiker Biker Trail	National Park Service	Shared Use Path	1.075	BP7376
Suitland Parkway Sidepath from Southern Ave to Firth Sterling Ave SE	National Park Service	Shared Use Path	2.758	BP7442
Arboretum Connector	National Park Service	Shared Use Path	1.113	BP7286
Fort Circle Park Trail	National Park Service	Shared Use Path	2	BP11614
Kennedy Center Pedestrian/Bicycle Trail	National Park Service	Shared Use Path	0.595	BP7858
Anacostia River Trail-SW From Buzzard Point to the Wharf	National Park Service	Shared Use Path	0.706	BP7443
Presidential Parkway (MC-634) Side Path	Prince Georges County	Shared Use Path	3.36	BP10030
Croom Rd Sidepath	Prince Georges County	Shared Use Path	0.886	BP7319
Unknown	Prince Georges County	Shared Use Path	0.408	BP7435
MD 223 Side Path	Prince Georges County	Shared Use Path	9.9	BP10024
Little Paint Branch Trail	Prince Georges County	Shared Use Path	0.254	BP7380

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Fort Washington Rd Sidepath	Prince Georges County	Shared Use Path	1.278	BP7334
Metzerott Rd., MD 650 to Adelphi Rd., Pedestrian Safety Improvements	Prince Georges County	Shared Use Path	0.83	BP11369
Folly Branch Trail	Prince Georges County	Shared Use Path	0.773	BP7328
US-1 Side Path	Prince Georges County	Shared Use Path	3.65	BP10052
Unknown	Prince Georges County	Shared Use Path	0.11	BP7437
Cabin Branch Trail	Prince Georges County	Shared Use Path	3.656	BP7302
Patuxent River Park Hard Surface Trail	Prince Georges County	Shared Use Path	1.21	BP7193
Rock Creek Trail Natural Surface Trail	Prince Georges County	Shared Use Path	6.17	BP7219
Landover Road (MD 202) Side Path	Prince Georges County	Shared Use Path	1.09	BP9986
Marlboro Race Track Rd Sidepath	Prince Georges County	Shared Use Path	0.909	BP7359
Mattawoman Creek Trail Hard Surface Trail	Prince Georges County	Shared Use Path	13.97	BP7153
Patuxent River Park Hard Surface Trail	Prince Georges County	Shared Use Path	1.76	BP7192
Indian Creek	Prince Georges County	Shared Use Path	1.092	BP7344

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Mt. Oak Road Side Path	Prince Georges County	Shared Use Path	1.25	BP7164
Lottsford Road Side Path	Prince Georges County	Shared Use Path	2.05	BP7142
A-55 Side Path	Prince Georges County	Shared Use Path	3.77	BP7002
Wesson Drive Hard Surface Trail	Prince Georges County	Shared Use Path	1.01	BP7269
Ritchie Marlboro Road Side Path	Prince Georges County	Shared Use Path	2.44	BP7216
Steed Road Side Path	Prince Georges County	Shared Use Path	1.71	BP7238
Henson Creek Trail	Prince Georges County	Shared Use Path	3.461	BP7342
Grandhaven Ave Sidepath	Prince Georges County	Shared Use Path	0.478	BP7340
Lottsford Road Side Path	Prince Georges County	Shared Use Path	1.1	BP7143
Greenbelt Road Sidepath North Side Path	Prince Georges County	Shared Use Path	3.11	BP7107
Landover Gateway Bike Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.09	BP7125
Cattail Branch Hard Surface Trail	Prince Georges County	Shared Use Path	2.66	BP7054
Lanham Severn Road (MD 564) Side Path	Prince Georges County	Shared Use Path	2.24	BP10014

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Folly Branch Trail	Prince Georges County	Shared Use Path	2.629	BP7327
Auth Way Side Path	Prince Georges County	Shared Use Path	2.16	BP7017
White House Road Side Path	Prince Georges County	Shared Use Path	1.56	BP7273
Gunpowder Road Side Path	Prince Georges County	Shared Use Path	1.04	BP7111
Cheverly To Bladensburg Waterfront Park Trail	Prince Georges County	Shared Use Path	0.307	BP7280
Collington Branch Trail	Prince Georges County	Shared Use Path	7.356	BP7313
Brandywine Road Trail	Prince Georges County	Shared Use Path	8.677	BP7297
Central Avenue Connector Trail	Prince Georges County	Shared Use Path	5.939	BP7307
Patuxent River Park Natural Surface Trail	Prince Georges County	Shared Use Path	1.05	BP7194
Barnaby Run Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.53	BP7025
Lottsford Branch Hard Surface Trail	Prince Georges County	Shared Use Path	2.82	BP7139
Van Dusen Road	Prince Georges County	Shared Use Path	1.522	BP7415
Unknown	Prince Georges County	Shared Use Path	1.19	BP7432

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Brooke Rd Sidepath	Prince Georges County	Shared Use Path	0.128	BP7299
Race Track Road	Prince Georges County	Shared Use Path	2.708	BP7388
Indian Head Hwy Sidepath	Prince Georges County	Shared Use Path	0.079	BP7346
Euclid Street Sidepath	Prince Georges County	Shared Use Path	0.055	BP7325
Melwood Community Park Connector Natural Surface Trail	Prince Georges County	Shared Use Path	3.39	BP7157
Bowie Connector Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.17	BP7032
Grey Fox Road Natural Surface Trail	Prince Georges County	Shared Use Path	1.13	BP7108
Timothy Branch Trail Hard Surface Trail	Prince Georges County	Shared Use Path	3.96	BP7248
John Hanson Hwy	Prince Georges County	Shared Use Path	1.158	BP7348
Charles Branch Trail	Prince Georges County	Shared Use Path	1.174	BP7308
Burch Branch Trail	Prince Georges County	Shared Use Path	4.422	BP7301
Tinkers Creek Trail	Prince Georges County	Shared Use Path	0.033	BP7430
US-1 Side Path	Prince Georges County	Shared Use Path	1.73	BP10053

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Lower Beaverdam Trail	Prince Georges County	Shared Use Path	1.777	BP7357
Charles Branch Trail Natural Surface Trail	Prince Georges County	Shared Use Path	7.26	BP7060
Crain Hwy Sidepath	Prince Georges County	Shared Use Path	0.255	BP7318
Little Paint Branch Trail	Prince Georges County	Shared Use Path	0.777	BP7401
Church Road Side Path	Prince Georges County	Shared Use Path	1.87	BP7067
Swan Point Creek Trail Natural Surface Trail	Prince Georges County	Shared Use Path	1.16	BP7245
Oxon Run Trail Hard Surface Trail	Prince Georges County	Shared Use Path	3.4	BP7189
N Crain Hwy Sidepath	Prince Georges County	Shared Use Path	0.968	BP7371
Chesapeake Beach Rail Trail Hard Surface Trail	Prince Georges County	Shared Use Path	3.25	BP7065
Back Branch Trail	Prince Georges County	Shared Use Path	0.05	BP7434
Allentown Road Side Path	Prince Georges County	Shared Use Path	2.42	BP9706
Collington Road/Laurel Bowie Road Side Path	Prince Georges County	Shared Use Path	1.4	BP7070
Kenhill Dr Sidepath	Prince Georges County	Shared Use Path	0.094	BP7350

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Unknown	Prince Georges County	Shared Use Path	0.192	BP7436
Perrie Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.12	BP7202
Black Swamp Trail Natural Surface Trail	Prince Georges County	Shared Use Path	6.3	BP7029
Gunpowder Road Side Path	Prince Georges County	Shared Use Path	1.05	BP7110
Pennsy Drive Side Path	Prince Georges County	Shared Use Path	2.08	BP7197
Tom Walls Branch Trail Natural Surface Trail	Prince Georges County	Shared Use Path	3.66	BP7250
Butler Branch Costca Connector Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.31	BP7043
Presidential Parkway (MD 634)	Prince Georges County	Shared Use Path	4.498	BP7385
Watkins Reg. Park Connector	Prince Georges County	Shared Use Path	1.816	BP7422
Martin Luther King Jr. Hwy (md 704)/wb&a Extension	Prince Georges County	Shared Use Path	0.201	BP7417
Suitland Community Park	Prince Georges County	Shared Use Path	1.114	BP7409
Unknown	Prince Georges County	Shared Use Path	0.735	BP7433
Fort Washington Rd Sidepath	Prince Georges County	Shared Use Path	1.805	BP7335

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Woodmoore Road Side Path	Prince Georges County	Shared Use Path	2.62	BP7275
Melwood Legacy Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.05	BP7158
Watkins Regional Park Trails	Prince Georges County	Shared Use Path	0.912	BP7423
Unknown	Prince Georges County	Shared Use Path	2.571	BP7431
Martin Luther King Jr. Hwy (md 704)/wb&a Extension	Prince Georges County	Shared Use Path	6.377	BP7361
Saarc Connector	Prince Georges County	Shared Use Path	1.678	BP7399
Collington Road/laurel Bowie Road	Prince Georges County	Shared Use Path	1.356	BP7314
Bowie Heritage Trail	Prince Georges County	Shared Use Path	2.887	BP7467
Fairwood Drive Side Path	Prince Georges County	Shared Use Path	1.02	BP7094
Chesapeake Beach Railway Trail	Prince Georges County	Shared Use Path	7.656	BP7311
Old Baltimore Pike Side Path	Prince Georges County	Shared Use Path	1.51	BP7180
Tinkers Creek Trail	Prince Georges County	Shared Use Path	8.643	BP7412
Suitland Parkway Extended (MC 631) Side Path	Prince Georges County	Shared Use Path	3.05	BP10033

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Western Branch Trail	Prince Georges County	Shared Use Path	4.69	BP7426
Melwood Community Park Connector	Prince Georges County	Shared Use Path	0.036	BP7366
Jug Bay Park Connector	Prince Georges County	Shared Use Path	0.991	BP7349
Pennsylvania Avenue Sidepath	Prince Georges County	Shared Use Path	7.262	BP7381
A-65 Side Path	Prince Georges County	Shared Use Path	4.55	BP7006
Lower Beaverdam Trail Hard Surface Trail	Prince Georges County	Shared Use Path	3.15	BP7145
Indian Head Highway (md 210)	Prince Georges County	Shared Use Path	1.952	BP7345
Charles Branch Connector Trails Natural Surface Trail	Prince Georges County	Shared Use Path	1.21	BP7059
Walker Mill Regional Park/Chesapeake Rail Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.22	BP7264
Annapolis Road (MD 450, MD 202) Side Path	Prince Georges County	Shared Use Path	2.5	BP10008
Suitland Parkway Side Path	Prince Georges County	Shared Use Path	6.42	BP7241
Oxon Hill Road	Prince Georges County	Shared Use Path	1.493	BP7378

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Woodyard Road (MD 223) Side Path	Prince Georges County	Shared Use Path	1.36	BP10056
Brown Station Road Side Path	Prince Georges County	Shared Use Path	4.02	BP7041
Maryland 4 To Livingston Sidepath	Prince Georges County	Shared Use Path	10.04	BP7362
Lottsford Branch Hard Surface Trail	Prince Georges County	Shared Use Path	1.77	BP7140
University Boulevard (MD 193) Side Path	Prince Georges County	Shared Use Path	2.14	BP10048
Back Branch Trail	Prince Georges County	Shared Use Path	1.362	BP7288
Lydell Rd Sidepath	Prince Georges County	Shared Use Path	0.104	BP7358
Rosaryville Connector	Prince Georges County	Shared Use Path	2.606	BP7396
Cherry Hill Road Side Path	Prince Georges County	Shared Use Path	1.19	BP7063
MC-703 Side Path	Prince Georges County	Shared Use Path	2.26	BP7155
Campus Way Side Path	Prince Georges County	Shared Use Path	3.2	BP7051
Parkwood Street Side Path	Prince Georges County	Shared Use Path	1.22	BP7191
A-63 Side Path	Prince Georges County	Shared Use Path	1.94	BP10035

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Back Branch Trail	Prince Georges County	Shared Use Path	3.201	BP7289
Bald Hill Branch Trail	Prince Georges County	Shared Use Path	3.885	BP7291
Dower House Branch Hard Surface Trail	Prince Georges County	Shared Use Path	1.41	BP7081
Pea Hill Branch Connection 2 Side Path	Prince Georges County	Shared Use Path	1.28	BP7195
Pea Hill Branch Trail Natural Surface Trail	Prince Georges County	Shared Use Path	3.21	BP7196
Chestnut Avenue & Highbridge Road Side Path	Prince Georges County	Shared Use Path	2.67	BP7066
Brandywine To Piscataway	Prince Georges County	Shared Use Path	3.259	BP7298
Peppermill Drive Side Path	Prince Georges County	Shared Use Path	1	BP7201
DB-7 Hard Surface Trail	Prince Georges County	Shared Use Path	1.19	BP7079
Suitland Bog Park Trail	Prince Georges County	Shared Use Path	0.447	BP7408
Burch Branch Trail Hard Surface Trail	Prince Georges County	Shared Use Path	3.59	BP7042
Fletchertown Road Side Path	Prince Georges County	Shared Use Path	1.66	BP7097
Mataponi Hiker Equestrian Trail Natural Surface Trail	Prince Georges County	Shared Use Path	1.75	BP7151

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Walker Mill Road Side Path	Prince Georges County	Shared Use Path	1.35	BP7267
Power Line Connector	Prince Georges County	Shared Use Path	3.346	BP7384
Old Laurel Bowie Road	Prince Georges County	Shared Use Path	0.281	BP7375
Largo Road (MD 202) Side Path	Prince Georges County	Shared Use Path	7.59	BP10023
Good Luck Road Side Path	Prince Georges County	Shared Use Path	6.71	BP7105
Rhode Island Avenue Trolley Trail	Prince Georges County	Shared Use Path	4.002	BP7392
S. Crain Hwy Sidepath	Prince Georges County	Shared Use Path	0.408	BP7398
Largo Road (md 202)	Prince Georges County	Shared Use Path	2.27	BP7352
Dyson Road Side Path	Prince Georges County	Shared Use Path	2.48	BP7086
Mitchellville Road Side Path	Prince Georges County	Shared Use Path	1.23	BP7161
Camp Springs Connector	Prince Georges County	Shared Use Path	6.75	BP7304
Piscataway Creek Trail	Prince Georges County	Shared Use Path	16.82	BP7382
College Park Woods Connector	Prince Georges County	Shared Use Path	0.495	BP7312

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
A-6 Side Path	Prince Georges County	Shared Use Path	1.03	BP10006
Cattail Branch	Prince Georges County	Shared Use Path	0.043	BP7305
Cheverly To Bladensburg Waterfront Park Trail	Prince Georges County	Shared Use Path	0.254	BP7364
Farm Road Trail Natural Surface Trail	Prince Georges County	Shared Use Path	2.42	BP7095
Walker Mill Regional Park/Chesapeake Rail Trail	Prince Georges County	Shared Use Path	1.214	BP7418
White Marsh Park Trail	Prince Georges County	Shared Use Path	0.364	BP7427
Rail Trail	Prince Georges County	Shared Use Path	2.65	BP7389
Boston Connector Trail	Prince Georges County	Shared Use Path	0.29	BP7294
Martin Luther King Jr Boulevard (MD 704) Side Path	Prince Georges County	Shared Use Path	4.36	BP10020
Regency Ln Sidepath	Prince Georges County	Shared Use Path	0.201	BP7390
Marlton Park Trail	Prince Georges County	Shared Use Path	0.253	BP7360
Ritchie Branch Trail Hard Surface Trail	Prince Georges County	Shared Use Path	2.67	BP7215
Little Paint Branch Trail	Prince Georges County	Shared Use Path	1.189	BP7309

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Western Branch Trail Hard Surface Trail	Prince Georges County	Shared Use Path	15.41	BP7270
Campus Way Side Path	Prince Georges County	Shared Use Path	1.36	BP7052
HOA Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.09	BP7117
Indian Head Highway (MD 210) Side Path	Prince Georges County	Shared Use Path	14.46	BP10022
Mattawoman Creek Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.86	BP7154
Laurel Bowie Road (md 197)	Prince Georges County	Shared Use Path	6.327	BP7353
Hotchkins Branch Trail Natural Surface Trail	Prince Georges County	Shared Use Path	2.49	BP7118
National Harbor Blvd	Prince Georges County	Shared Use Path	0.973	BP7372
Oxon Run Trail Extension	Prince Georges County	Shared Use Path	0.787	BP7448
Bowie Heritage Trail	Prince Georges County	Shared Use Path	0.724	BP7295
Baltimore Avenue (US-1) Side Path	Prince Georges County	Shared Use Path	5.4	BP10010
Cherry Tree Crossing Rd	Prince Georges County	Shared Use Path	0.001	BP7310
Cb Rail-trail Connector	Prince Georges County	Shared Use Path	0.53	BP7306

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Sunnyside Avenue Side Path	Prince Georges County	Shared Use Path	1.04	BP7243
Prince Georges Connector	Prince Georges County	Shared Use Path	0.383	BP7387
Ritchie Marlboro Road	Prince Georges County	Shared Use Path	0.043	BP7394
Upper Marlboro Connector	Prince Georges County	Shared Use Path	1.148	BP7414
Central Park Loop Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.26	BP7058
Duckettown Road Side Path	Prince Georges County	Shared Use Path	1.7	BP7083
Walker Mill Road Side Path	Prince Georges County	Shared Use Path	2.31	BP7266
Oak Grove Road Side Path	Prince Georges County	Shared Use Path	1.24	BP7177
Cherrywood Lane Sidepath West Side Path	Prince Georges County	Shared Use Path	1.57	BP7064
Back Branch Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.58	BP7019
SP-40 Hard Surface Trail	Prince Georges County	Shared Use Path	1.76	BP7235
Floral Park Road Side Path	Prince Georges County	Shared Use Path	5.4	BP7098
Folly Branch Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.94	BP7099

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Oak Grove/Leeland Road Side Path	Prince Georges County	Shared Use Path	1.57	BP7178
Cheltingham Park Connector Hard Surface Trail	Prince Georges County	Shared Use Path	1.78	BP7061
Martin Luther King Jr Boulevard (MD 704) Side Path	Prince Georges County	Shared Use Path	2.32	BP10021
Southwest Branch Hard Surface Trail	Prince Georges County	Shared Use Path	7.71	BP7234
Trolley Trail Hard Surface Trail	Prince Georges County	Shared Use Path	1.43	BP7251
Baltimore-Washington Parkway	Prince Georges County	Shared Use Path	3.75	BP7292
Brooks Dr Sidepath	Prince Georges County	Shared Use Path	0.805	BP7300
Suitland Bog Connector	Prince Georges County	Shared Use Path	1.333	BP7407
Cabin Branch Trail	Prince Georges County	Shared Use Path	5.971	BP7303
Landover Road (MD 202) Side Path	Prince Georges County	Shared Use Path	1.56	BP9966
Cheverly To Bladensburg Waterfront Park	Prince Georges County	Shared Use Path	0.27	BP7355
Lanham Severn Road (MD 564) Side Path	Prince Georges County	Shared Use Path	2.68	BP10015
Westphalia Road (C-626) Side Path	Prince Georges County	Shared Use Path	2.56	BP10055

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Watkins Connector	Prince Georges County	Shared Use Path	0.988	BP7421
University	Prince William Co. DPW	Shared Use Path	2.302	BP7845
Balls Ford	Prince William Co. DPW	Shared Use Path	2.818	BP7809
Dumfries	Prince William Co. DPW	Shared Use Path	0.928	BP7803
Dale	Prince William Co. DPW	Shared Use Path	1.91	BP7812
Godwin Dr	Prince William Co. DPW	Shared Use Path	0.9	BP7553
Hoadly	Prince William Co. DPW	Shared Use Path	1.555	BP7846
Jefferson Davis	Prince William Co. DPW	Shared Use Path	11.84	BP7634
Old Bridge	Prince William Co. DPW	Shared Use Path	0.371	BP7842
Caton Hill	Prince William Co. DPW	Shared Use Path	0.883	BP7810
Neabsco	Prince William Co. DPW	Shared Use Path	1.522	BP7827
Harbor Station	Prince William Co. DPW	Shared Use Path	1.31	BP7825
Manassas Drive	Prince William Co. DPW	Shared Use Path	1.163	BP7643
Rippon	Prince William Co. DPW	Shared Use Path	1.988	BP7818
Blackburn	Prince William Co. DPW	Shared Use Path	1.277	BP7641
Red Mulberry Powerline Cut	Prince William Co. DPW	Shared Use Path	1.826	BP7855
River Heritage	Prince William Co. DPW	Shared Use Path	0.624	BP7850
Summit School	Prince William Co. DPW	Shared Use Path	0.623	BP7820
Harbor Station	Prince William Co. DPW	Shared Use Path	0.37	BP7839

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Gordon	Prince William Co. DPW	Shared Use Path	2.061	BP7632
Benita Fitzgerald	Prince William Co. DPW	Shared Use Path	1.061	BP7807
Dale	Prince William Co. DPW	Shared Use Path	6.045	BP7811
Sudley Manor	Prince William Co. DPW	Shared Use Path	1.78	BP7828
Neabsco Mills	Prince William Co. DPW	Shared Use Path	1.105	BP7829
Telegraph	Prince William Co. DPW	Shared Use Path	1.435	BP7821
Wellington	Prince William Co. DPW	Shared Use Path	6.761	BP7642
Hoadly	Prince William Co. DPW	Shared Use Path	2.232	BP7815
Dumfries	Prince William Co. DPW	Shared Use Path	2.148	BP7639
Csx Potomac River Corridor	Prince William Co. DPW	Shared Use Path	8.084	BP7857
John Marshall	Prince William Co. DPW	Shared Use Path	1.725	BP7843
Station	Prince William Co. DPW	Shared Use Path	1.64	BP7824
Lee	Prince William Co. DPW	Shared Use Path	5.863	BP7633
Potomac Shore Powerline Cut	Prince William Co. DPW	Shared Use Path	2.298	BP7856
Prince William	Prince William Co. DPW	Shared Use Path	9.471	BP7635
Reddy	Prince William Co. DPW	Shared Use Path	0.266	BP7837
Horner	Prince William Co. DPW	Shared Use Path	1.271	BP7816
Rippon	Prince William Co. DPW	Shared Use Path	0.297	BP7638
Occoquan Greenway Segment 1	Prince William Co. DPW	Shared Use Path	1.459	BP7852

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Powell'S Creek Boardwalk	Prince William Co. DPW	Shared Use Path	0.66	BP7851
Route 29 Alternate	Prince William Co. DPW	Shared Use Path	5.166	BP7636
Freedom Center	Prince William Co. DPW	Shared Use Path	0.689	BP7813
Van Buren North	Prince William Co. DPW	Shared Use Path	2.562	BP7822
Wellington Road	Prince William Co. DPW	Shared Use Path	0.37	BP7625
University	Prince William Co. DPW	Shared Use Path	1.1	BP7847
Grant Ave	Prince William Co. DPW	Shared Use Path	0.607	BP7627
McGraws Corner	Prince William Co. DPW	Shared Use Path	1.323	BP7832
Tri-County	Prince William Co. DPW	Shared Use Path	2.143	BP7628
Manassas Bat Byp	Prince William Co. DPW	Shared Use Path	2.082	BP7835
Carver	Prince William Co. DPW	Shared Use Path	0.955	BP7830
Catharpin	Prince William Co. DPW	Shared Use Path	0.712	BP7841
Cushing Road	Prince William Co. DPW	Shared Use Path	0.7	BP7848
Dumfries Rd	Prince William Co. DPW	Shared Use Path	0.974	BP7626
Gideon	Prince William Co. DPW	Shared Use Path	0.807	BP7814
Featherstone	Prince William Co. DPW	Shared Use Path	0.968	BP7630
Godwin Trail	Prince William Co. DPW	Shared Use Path	2.064	BP7624
Town Of Dumfries Connector	Prince William Co. DPW	Shared Use Path	0.551	BP7854
Signal Hill Road Trail	Prince William Co. DPW	Shared Use Path	0.3	BP11612
Thoroughfare	Prince William Co. DPW	Shared Use Path	1.349	BP7831

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Clover Hill	Prince William Co. DPW	Shared Use Path	1.104	BP7802
North South	Prince William Co. DPW	Shared Use Path	0.881	BP7834
Nokesville	Prince William Co. DPW	Shared Use Path	6.401	BP7640
Nokesville Road	Prince William Co. DPW	Shared Use Path	0.354	BP7623
Belmont Bay	Prince William Co. DPW	Shared Use Path	0.7	BP7806
Smoketown	Prince William Co. DPW	Shared Use Path	1.354	BP7819
Telegraph	Prince William Co. DPW	Shared Use Path	0.142	BP7849
Devlin	Prince William Co. DPW	Shared Use Path	1.951	BP7808
Rollins Ford	Prince William Co. DPW	Shared Use Path	3.468	BP7833
John Marshall	Prince William Co. DPW	Shared Use Path	0.81	BP7844
Waterway	Prince William Co. DPW	Shared Use Path	3.44	BP7823
James Madison	Prince William Co. DPW	Shared Use Path	6.547	BP7631
Farm Creek	Prince William Co. DPW	Shared Use Path	1.05	BP7629
Harbor Station	Prince William Co. DPW	Shared Use Path	0.161	BP7840
John Marshall	Prince William Co. DPW	Shared Use Path	0.482	BP7826
Purcell	Prince William Co. DPW	Shared Use Path	3.199	BP7817
Minnieville Road Trail (between Fowke Lane to Cardinal Drive)	Prince William Co. DPW	Shared Use Path	3	BP11611
Opitz	Prince William Co. DPW	Shared Use Path	1.57	BP7836

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Prince William Park Connector To Van Buren Rd	Prince William Co. DPW	Shared Use Path	1.63	BP7853
Summit School	Prince William Co. DPW	Shared Use Path	0.331	BP7838
Centreville	Prince William Co. DPW	Shared Use Path	2.103	BP7637
New Hampshire Ave (MD 650)	Takoma Park Public Works Department	Shared Use Path	0.079	BP8248
Old Courthouse Road Trail	Town of Vienna	Shared Use Path	0.372	BP7905
Route 7 Sidepath	Virginia Department of Transportation	Shared Use Path	11.52	BP7397
I-495 Express Lanes Ped/Bike at Idylwood Road (North)	Virginia Department of Transportation	Shared Use Path	0.263	BP7874
Herndon Parkway from W&OD Trail to Fairbrook Drive	Virginia Department of Transportation	Shared Use Path	0.451	BP7944
Route 29 Pedestrian Improvements from Nutley Street to Vaden Drive	Virginia Department of Transportation	Shared Use Path	0.363	BP7936
Lee Highway Widening Phase II	Virginia Department of Transportation	Shared Use Path	2.137	T6604
RICHMOND HIGHWAY CORRIDOR IMPROVEMENTS, PH 2	Virginia Department of Transportation	Shared Use Path	1.62	T11602

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Sub-Project of G1005 I-495 EXPRESS LANES NORTHERN EXTENSION	Virginia Department of Transportation	Shared Use Path	3	T11577
Seminary Rd	City of Alexandria	Sidewalk	0.27	BP7231
W Braddock	City of Alexandria	Sidewalk	0.31	BP7263
Cameron Station	City of Alexandria	Sidewalk	0.04	BP7049
W Braddock	City of Alexandria	Sidewalk	0.306	BP8457
N Fayette	City of Alexandria	Sidewalk	0.04	BP7167
S Payne St, Jefferson St	City of Alexandria	Sidewalk	0.03	BP7226
Eisenhower Ave	City of Alexandria	Sidewalk	0.203	BP8451
N Jordan St	City of Alexandria	Sidewalk	0.47	BP7169
Russell Rd from Cedar to King St	City of Alexandria	Sidewalk	0.07	BP7223
King St from S 28th to N Quaker	City of Alexandria	Sidewalk	1.64	BP7123
Russell Rd from W Bellefonte to W Mason, W Monroe from Russell to Hancock	City of Alexandria	Sidewalk	0.15	BP7224
N Van Dorn from Kenmore past Fort Ward Park	City of Alexandria	Sidewalk	0.66	BP7175
Malcolm X Trail	District Department of Transportation	Sidewalk	1.425	BP7464
Middletown Greenway	Frederick County	Sidewalk	0.322	BP7606

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Monocacy Blvd	Frederick County	Sidewalk	2.942	BP7579
MD 500 at Mount Rainier/Chillum Urban Reconstruction	Maryland Department of Transportation - State Highway Administration	Sidewalk	1	T6590
Stuart Ln. Pedestrian Safety Improvements	Prince Georges County	Sidewalk	0.34	BP11370
Van Buren Street from W&OD to Monroe Street Bridge	Town of Herndon	Sidewalk	1.061	BP7888
Wakefield Chapel Road Walkway	Virginia Department of Transportation	Sidewalk	0.138	BP7925
Monument Drive Bridge - Pedestrian Improvements	Virginia Department of Transportation	Sidewalk	0.243	BP7909
I-495 Tysons Ped/Bike Bridge South of Route 123	Virginia Department of Transportation	Sidewalk	0.843	BP7952
Northstar Blvd. Extension	Virginia Department of Transportation	Sidewalk	1.6	T6634
19th Street North Bicycle Lanes	Arlington Co. DES	Standard Bicycle Lane	0.2	BP8564
S PICKETT ST	City of Alexandria	Standard Bicycle Lane		BP8906
E ABINGDON DR	City of Alexandria	Standard Bicycle Lane		BP8913
METRO RD	City of Alexandria	Standard Bicycle Lane		BP8914
EDSALL RD	City of Alexandria	Standard Bicycle Lane		BP8896

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
SLATERS LN RAMP TO N HENRY ST SB	City of Alexandria	Standard Bicycle Lane		BP8909
MADISON ST	City of Alexandria	Standard Bicycle Lane		BP8902
N PITT ST	City of Alexandria	Standard Bicycle Lane		BP8905
S GORDON ST	City of Alexandria	Standard Bicycle Lane		BP8889
STOVALL ST	City of Alexandria	Standard Bicycle Lane		BP8893
Fort Williams Pkwy	City of Alexandria	Standard Bicycle Lane		BP8892
FARRINGTON AVE	City of Alexandria	Standard Bicycle Lane		BP8915
SWANN AVE	City of Alexandria	Standard Bicycle Lane		BP8877
EISENHOWER AVE	City of Alexandria	Standard Bicycle Lane		BP8917
NETHERTON DR	City of Alexandria	Standard Bicycle Lane		BP8901
S EARLY ST	City of Alexandria	Standard Bicycle Lane		BP8912
POTOMAC GREENS DR	City of Alexandria	Standard Bicycle Lane		BP8872
REINEKERS LN	City of Alexandria	Standard Bicycle Lane		BP8881
S REYNOLDS ST	City of Alexandria	Standard Bicycle Lane		BP8911
CAMERON STATION BLVD	City of Alexandria	Standard Bicycle Lane		BP8894
DUKE ST	City of Alexandria	Standard Bicycle Lane		BP8884
SEMINARY RD	City of Alexandria	Standard Bicycle Lane		BP8875
N RIPLEY ST	City of Alexandria	Standard Bicycle Lane		BP8882
UPLAND PL	City of Alexandria	Standard Bicycle Lane		BP8890
SANGER AVE	City of Alexandria	Standard Bicycle Lane		BP8904

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
KING ST	City of Alexandria	Standard Bicycle Lane		BP8900
POLK AVE	City of Alexandria	Standard Bicycle Lane		BP8878
N LATHAM ST	City of Alexandria	Standard Bicycle Lane		BP8879
N QUAKER LN	City of Alexandria	Standard Bicycle Lane		BP8897
STEVENSON AVE	City of Alexandria	Standard Bicycle Lane		BP8883
N JORDAN ST	City of Alexandria	Standard Bicycle Lane		BP8891
Portner Ave	City of Manassas	Standard Bicycle Lane	1.368	BP7752
Wakeman Dr	City of Manassas	Standard Bicycle Lane	0.726	BP7774
Center St	City of Manassas	Standard Bicycle Lane	0.942	BP7762
Lucasville Rd	City of Manassas	Standard Bicycle Lane	0.127	BP7769
Stonewall Rd	City of Manassas	Standard Bicycle Lane	1.305	BP7794
Sudley Rd	City of Manassas	Standard Bicycle Lane	0.811	BP7753
Hastings Dr	City of Manassas	Standard Bicycle Lane	0.631	BP7763
Mathis Ave	City of Manassas	Standard Bicycle Lane	0.171	BP7755
Liberia Ave	City of Manassas	Standard Bicycle Lane	2.164	BP7758
Eucid Ave	City of Manassas	Standard Bicycle Lane	0.359	BP7798
Grant Ave	City of Manassas	Standard Bicycle Lane	0.999	BP7749
Dean Dr	City of Manassas	Standard Bicycle Lane	0.809	BP7768
Stonewall Rd Ext	City of Manassas	Standard Bicycle Lane	0.127	BP7772
Godwin Dr	City of Manassas	Standard Bicycle Lane	0.343	BP7796

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Quarry Rd	City of Manassas	Standard Bicycle Lane	0.586	BP7751
Lake Jackson Dr	City of Manassas	Standard Bicycle Lane	0.475	BP7757
Breeden Ave	City of Manassas	Standard Bicycle Lane	0.186	BP7754
Church St	City of Manassas	Standard Bicycle Lane	0.606	BP7761
Plantation Ln	City of Manassas	Standard Bicycle Lane	0.613	BP7759
Sudley Rd	City of Manassas	Standard Bicycle Lane	0.348	BP7770
Oakenshaw Dr	City of Manassas	Standard Bicycle Lane	0.651	BP7756
MINNESOTA AVE NE Eastern Ave NE to Meade St NE	District Department of Transportation	Standard Bicycle Lane	0.778	BP8771
7TH ST SW from I St., SW to Maine Ave., SW	District Department of Transportation	Standard Bicycle Lane	0.063	BP8677
MARYLAND AVE NE from C St NE to M St NE	District Department of Transportation	Standard Bicycle Lane	1.723	BP8763
BRANCH AVE SE from Southern Ave SE to Randle Circle SE	District Department of Transportation	Standard Bicycle Lane	1.6	BP8693
DIVISION AVE NE from Sheriff Rd NE to E Capitol St SE	District Department of Transportation	Standard Bicycle Lane	1.014	BP8709
10TH ST NW	District Department of Transportation	Standard Bicycle Lane	0.74	BP8627

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
37th St. NW from Tunlaw Rd., NW to Reservoir Rd., NW	District Department of Transportation	Standard Bicycle Lane	0.481	BP8015
PINEY BRANCH RD NW Butternut St to Quackenbos St NW	District Department of Transportation	Standard Bicycle Lane	0.8	BP8791
11TH ST NE	District Department of Transportation	Standard Bicycle Lane	0.18	BP8628
Eastern Ave	District Department of Transportation	Standard Bicycle Lane	0.6	BP7323
11TH ST SE	District Department of Transportation	Standard Bicycle Lane	0.04	BP8631
12TH ST/Buchanan St., NE	District Department of Transportation	Standard Bicycle Lane	0.5	BP8632
VERMONT AVE NW	District Department of Transportation	Standard Bicycle Lane	0.5	BP8829
NEW HAMPSHIRE AVE NW from Park Rd NW to Kennedy St NE	District Department of Transportation	Standard Bicycle Lane	0.155	BP8782
13TH PL NW/Fort Stevens Dr NW	District Department of Transportation	Standard Bicycle Lane	0.18	BP8634
9TH ST NE T St., NE to Mt. Olivet St., NE	District Department of Transportation	Standard Bicycle Lane	0.218	BP8679

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
P ST SW from 2nd St SW to S Capitol St SW	District Department of Transportation	Standard Bicycle Lane	0.257	BP8788
6TH ST NE from Mass Ave., NE to Maryland Ave., NE (Stanton Park segment)	District Department of Transportation	Standard Bicycle Lane	0.067	BP8674
1ST ST SE	District Department of Transportation	Standard Bicycle Lane	0.501	BP8648
M ST NW from 29th St NW to 34th St NW	District Department of Transportation	Standard Bicycle Lane	0.253	BP8757
Walter Reed Main Drive, NW Bicycle Facility from 16th Street to Georgia Ave NW	District Department of Transportation	Standard Bicycle Lane	0.6	BP8604
6TH ST NE from Brentwood Pkwy., NE to E. Cap. St., NE	District Department of Transportation	Standard Bicycle Lane	1.4	BP8673
Aspen Street NW Bicycle Facility from 16th Street to Georgia Ave., NW	District Department of Transportation	Standard Bicycle Lane	0.5	BP9186
9TH ST NE Brentwood Pkwy to T St., NE	District Department of Transportation	Standard Bicycle Lane	0.116	BP8680
6TH ST NW from Rhode Island Ave., NW to Penn. Ave., NW	District Department of Transportation	Standard Bicycle Lane	1.399	BP8675

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
11TH ST NW	District Department of Transportation	Standard Bicycle Lane	0.2	BP8630
Town Of Middletown Greenway	Frederick County	Standard Bicycle Lane	0.122	BP7600
Summerall Drive Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.544	BP8390
Saulty Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.352	BP8409
Sycolin Creek Connector Bicycle and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.776	BP8408
Supreme Drive Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.13	BP8389
Prentice Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.053	BP8362
Shellhorn Road Bicycle Lanes and pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.55	BP8328
Stone Springs Boulevard Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.671	BP8372
State Street Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.402	BP8402
Shellhorn Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.147	BP8357

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
River Creek Parkway Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.308	BP8327
Fincastle Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.432	BP8422
Trailhead Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.617	BP8434
Prentice Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.723	BP8361
Shellhorn Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.132	BP8433
Pleasant Valley Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.972	BP8350
South Cottage Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.788	BP8378
South Sterling Boulevard Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.682	BP8329
Moran Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.674	BP8351
Edgewater Street Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.82	BP8336
Atwater Drive Bike Lanes and Sidewalk	Loudoun County	Standard Bicycle Lane	0	BP8392
Lockridge Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.194	BP8360

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Loudoun Reserve Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.458	BP8429
Seneca Ridge Drive Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.232	BP8377
Loudoun Reserve Drive Bicycle Lanes and Pedestrian Facilities.	Loudoun County	Standard Bicycle Lane	0.801	BP8388
Grassland Grove Drive (Route 3394)	Loudoun County	Standard Bicycle Lane	3.029	BP8347
Trailhead Drive Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	1.897	BP8345
Magnolia Drive Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.475	BP8416
Hardwood Forest Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.292	BP8423
Trailhead Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.139	BP8346
Lansdowne Boulevard Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.381	BP8406
South Sterling Boulevard Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.91	BP8437
South Sterling Boulevard Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.255	BP8432

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Stone Springs Boulevard Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.378	BP8384
Pinebrook Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.212	BP8382
East Maple Avenue Bicycle and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	0.48	BP8420
Tall Cedars Parkway Bicycle Lanes and Pedestrian Improvements	Loudoun County	Standard Bicycle Lane	1.338	BP8334
Mineral Springs Circle Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.308	BP8380
Ashburn Road Bike Lanes and Sidewalk	Loudoun County	Standard Bicycle Lane	0	BP8431
Benedict Drive Bicycle Lanes and Sidewalk	Loudoun County	Standard Bicycle Lane	0	BP8398
Barrister Street/Bullpen Drive	Loudoun County	Standard Bicycle Lane	0	BP8342
Mooreview Parkway Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.144	BP8337
Bles Park Drive	Loudoun County	Standard Bicycle Lane	0.15	BP8438
Thumb Drive Bicycle Lanes and Sidewalk	Loudoun County	Standard Bicycle Lane	0	BP8344
Everfield Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	2.66	BP8412
Trailhead Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.812	BP8435

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Shaw Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.175	BP8353
Prentice Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.48	BP8363
Loudoun Station Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.318	BP8403
Windmill Drive Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.932	BP8410
River Creek Parkway Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.305	BP8370
Pinebrook Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.332	BP8383
South Fillmore Avenue Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.347	BP8394
Poland Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.203	BP8323
Augusta Drive Bike Lanes and Sidewalk	Loudoun County	Standard Bicycle Lane	0	BP8338
Belfort Park Drive	Loudoun County	Standard Bicycle Lane	0	BP8352
Bartholomew Fair Drive Bicycle Lanes and Sidewalk	Loudoun County	Standard Bicycle Lane	0	BP8397
North Sterling Boulevard Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.697	BP8330
Ashburn Road Bike Lanes and Sidewalk	Loudoun County	Standard Bicycle Lane	0	BP8368

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
River Bank Street Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.37	BP8424
Shellhorn Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.236	BP8356
South Fillmore Avenue Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.228	BP8393
Mooreview Parkway Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.766	BP8369
Shaw Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	0.608	BP8354
Shellhorn Road Bicycle Lanes and Pedestrian Facilities	Loudoun County	Standard Bicycle Lane	1.016	BP8358
Poland Road Extension to Defender Drive	Loudoun County	Standard Bicycle Lane	0.4	BP8322
Bradley Blvd (MD 191)	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1.143	BP8105
Clarksburg Rd (MD 121)	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	0.359	BP8247
MD 75 over I-70 Bridge Rehabilitation	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6690

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
MD 140 Flat Run Bridge Replacement	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6439
MD 355 CSX Old Main Line Subdivision Bridge Replacement	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6486
MD 254 Neale Sound Bridge Replacement	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	0	T6603
MD 381 Timothy Branch Bridge Replacement	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6487
MD 234 Allens Fresh Run Bridge Replacement	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6385
MD 75 Haines Branch Bridge Replacement	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6482

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
I-70/US 40 at MD 144FA, Meadow Road, and Old National Pike Interchange Construction	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6411
MD 5 and MD 637 Urban Reconstruction	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6683
US 301 Planning for Operations Study	Maryland Department of Transportation - State Highway Administration	Standard Bicycle Lane	1	T6386
Carl Henn Millennium Trail	Montgomery County	Standard Bicycle Lane	0.202	BP7492
Tuckerman Ln	Montgomery County	Standard Bicycle Lane	2.316	BP8186
Goshen Rd	Montgomery County	Standard Bicycle Lane	3.094	BP8211
Stewart Ln	Montgomery County	Standard Bicycle Lane	0.06	BP8162
Tuckerman Ln	Montgomery County	Standard Bicycle Lane	1.519	BP8185
Falls	Montgomery County	Standard Bicycle Lane	0.58	BP8022
St Elmo Ave	Montgomery County	Standard Bicycle Lane	0.208	BP8071
US-1 Bike Lane	Prince Georges County	Standard Bicycle Lane	1.79	BP10050
Brandywine Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.43	BP7034
Brooke Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.04	BP7038

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
US-1 Bike Lane	Prince Georges County	Standard Bicycle Lane	4.73	BP10051
Ammendale Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.07	BP7013
Beaver Dam Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.46	BP7026
Allentown Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.32	BP7010
Paint Branch Parkway	Prince Georges County	Standard Bicycle Lane	0.427	BP7379
Kenilworth Avenue (MD 201) Side Path	Prince Georges County	Standard Bicycle Lane	7.24	BP9926
Springfield Road Bike Lane	Prince Georges County	Standard Bicycle Lane	4.96	BP7236
Veteran's Parkway (MD 410) Bike Lane	Prince Georges County	Standard Bicycle Lane	2.23	BP10054
Gunpowder Road	Prince Georges County	Standard Bicycle Lane	0.614	BP7341
Marlboro Pike Bike Lane	Prince Georges County	Standard Bicycle Lane	2.74	BP7146
Harry S Truman Drive Bike Lane	Prince Georges County	Standard Bicycle Lane	2.39	BP7113
Redskins Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.11	BP7211
St. Barnabas Road Bike Lane	Prince Georges County	Standard Bicycle Lane	4.11	BP7237

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Odell Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.66	BP7179
Old Branch Avenue Bike Lane	Prince Georges County	Standard Bicycle Lane	3.13	BP7181
Capitol Heights Boulevard Bike Lane	Prince Georges County	Standard Bicycle Lane	1.09	BP7053
Peppermill Drive Bike Lane	Prince Georges County	Standard Bicycle Lane	1	BP7200
New Hampshire Avenue (MD 650) Bike Lane	Prince Georges County	Standard Bicycle Lane	1.12	BP10025
Rollins Avenue Bike Lane	Prince Georges County	Standard Bicycle Lane	1.64	BP7220
Montgomery Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.69	BP7162
Oxon Hill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.72	BP7187
Landover Road (MD 202) Bike Lane	Prince Georges County	Standard Bicycle Lane	3.61	BP9946
Riverview Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.07	BP7218
Rhode Island Avenue Trolley Trail Bike Lane	Prince Georges County	Standard Bicycle Lane	1.33	BP10032
Central Avenue (MD 214) Bike Lane	Prince Georges County	Standard Bicycle Lane	2.78	BP9786
Addison Road Bike Lane	Prince Georges County	Standard Bicycle Lane	4.06	BP7007

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
University Boulevard (MD 193) Bike Lane	Prince Georges County	Standard Bicycle Lane	2.45	BP10046
Brooks Drive Bike Lane	Prince Georges County	Standard Bicycle Lane	1.02	BP7040
Collington Road (MD 197) Side Path	Prince Georges County	Standard Bicycle Lane	1.92	BP9866
Powder Mill Road (MD 212) Bike Lane	Prince Georges County	Standard Bicycle Lane	5.42	BP10028
Beech Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.18	BP7028
Swan Creek Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.27	BP7244
Walker Mill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.72	BP7265
Sellman Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.96	BP7230
Ardwick Ardmore Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.07	BP7015
Livingston Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.02	BP7138
Ellin Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.27	BP7091
Good Luck Road Bike Lane	Prince Georges County	Standard Bicycle Lane	6.71	BP7104
Village Drive West Bike Lane	Prince Georges County	Standard Bicycle Lane	0.864	BP10506

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Seat Pleasant Drive Bike Lane	Prince Georges County	Standard Bicycle Lane	1.17	BP7229
Dower House Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.34	BP7082
Hill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.7	BP7115
Metroland Parkway Bike Lane	Prince Georges County	Standard Bicycle Lane	1.13	BP7159
23rd Parkway Bike Lane	Prince Georges County	Standard Bicycle Lane	1.41	BP7000
Campus Dr. Green Street Improvements	Prince Georges County	Standard Bicycle Lane	0.735	BP10366
Forbes Boulevard Bike Lane	Prince Georges County	Standard Bicycle Lane	2.62	BP7100
Central Avenue (MD 332) Bike Lane	Prince Georges County	Standard Bicycle Lane	1.11	BP10011
Rhode Island Avenue (US 1) Bike Lane	Prince Georges County	Standard Bicycle Lane	1.69	BP10031
Old Gunpowder Road Bike Lane	Prince Georges County	Standard Bicycle Lane	0.511	BP10486
University Boulevard (MD 193) Bike Lane	Prince Georges County	Standard Bicycle Lane	2.09	BP10047
East West Highway (MD 410) Bike Lane	Prince Georges County	Standard Bicycle Lane	5.1	BP9886
Montgomery Street Bike Lane	Prince Georges County	Standard Bicycle Lane	1.23	BP7163

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Wheeler Road (C-704) Bike Lane	Prince Georges County	Standard Bicycle Lane	1.79	BP7272
Whitfield Chapel Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.82	BP7274
US-1 Bike Lane	Prince Georges County	Standard Bicycle Lane	5.28	BP10049
Ager Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.33	BP7008
Brinkley Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.53	BP7037
Allentown Road (MD 337) Bike Lane	Prince Georges County	Standard Bicycle Lane	2.91	BP10007
Contee Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.07	BP7075
Regency Parkway Bike Lane	Prince Georges County	Standard Bicycle Lane	1.06	BP7212
Old Branch Avenue Bike Lane	Prince Georges County	Standard Bicycle Lane	3.8	BP7182
Lottsford Vista Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.64	BP7144
Old Fort Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.23	BP7186
Metzerott Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.08	BP7160
Brightseat Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.22	BP7036

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Temple Hill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	5.55	BP7247
Columbia Park Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.17	BP7072
Brooklyn Bridge Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.26	BP7039
LB-7 Bike Lane	Prince Georges County	Standard Bicycle Lane	1.26	BP7137
Palmer Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.36	BP7190
Garrett A Morgan Boulevard Bike Lane	Prince Georges County	Standard Bicycle Lane	1.23	BP7103
Ritchie Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.2	BP7217
Cherry Hill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.64	BP10012
Enterprise Road (MD 193) Bike Lane	Prince Georges County	Standard Bicycle Lane	4.55	BP9906
Baltimore Avenue (US-1) Bike Lane	Prince Georges County	Standard Bicycle Lane	1.07	BP10009
A-56 Bike Lane	Prince Georges County	Standard Bicycle Lane	1.65	BP7003
Gunpowder Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.67	BP7109
Tucker Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.73	BP7252

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Suitland Road Bike Lane	Prince Georges County	Standard Bicycle Lane	4.58	BP7242
Campus Way Bike Lane	Prince Georges County	Standard Bicycle Lane	4.17	BP7050
Prospect Hill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.51	BP7208
Brightseat Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.58	BP7035
Bond Mill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.58	BP7031
Pennsylvania Avenue (MD 4) Bike Lane	Prince Georges County	Standard Bicycle Lane	4.46	BP10026
Arena Drive Bike Lane	Prince Georges County	Standard Bicycle Lane	1.68	BP7016
Lanham Severn Road (MD 564) Bike Lane	Prince Georges County	Standard Bicycle Lane	5.02	BP10013
Brandywine Road Bike Lane	Prince Georges County	Standard Bicycle Lane	4.49	BP7033
Karen Boulevard Bike Lane	Prince Georges County	Standard Bicycle Lane	1.34	BP7120
Oxon Hill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.13	BP7188
Corporate Drive Bike Lane	Prince Georges County	Standard Bicycle Lane	1.01	BP7076
Old Fort Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.64	BP7185

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Princess Garden Parkway Bike Lane	Prince Georges County	Standard Bicycle Lane	1.31	BP7207
Martin Luther King Jr Boulevard (MD 704) Bike Lane	Prince Georges County	Standard Bicycle Lane	4.35	BP10019
Sheriff Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.48	BP7232
Allentown Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.62	BP7011
Bock Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.52	BP7030
Lottsford Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.15	BP7141
Marlboro Pike Bike Lane	Prince Georges County	Standard Bicycle Lane	4.25	BP7147
Hillmeade Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.77	BP7116
Edmonston Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.17	BP7089
Silver Hill Road Bike Lane	Prince Georges County	Standard Bicycle Lane	3.11	BP7233
Muirkirk Road Bike Lane	Prince Georges County	Standard Bicycle Lane	4.41	BP7165
Lake Arbor Way Bike Lane	Prince Georges County	Standard Bicycle Lane	1.79	BP7124
Rosaryville Road Bike Lane	Prince Georges County	Standard Bicycle Lane	2.42	BP7221

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Larchmont Avenue Bike Lane	Prince Georges County	Standard Bicycle Lane	1.04	BP7132
Powder Mill Road (MD 212) Bike Lane	Prince Georges County	Standard Bicycle Lane	5.02	BP10029
Beaver Dam Road Bike Lane	Prince Georges County	Standard Bicycle Lane	1.32	BP7027
38th Street (MD 208) Bike Lane	Prince Georges County	Standard Bicycle Lane	1.42	BP10034
Creek Crossing Pedestrian Enhancements	Town of Vienna	Standard Bicycle Lane	0.571	BP7863
Crystal Drive Two-Way Conversion Bicycle Lanes	Arlington Co. DES	Standard Bike Lane	0.2	BP8486
Airport Viaduct Connector	Arlington Co. DES	Standard Bike Lane	0.3	BP8507
Lee Highway (eastbound) Bicycle Lane	Arlington Co. DES	Standard Bike Lane	1	BP8557
Kirkwood Road Bicycle Lanes	Arlington Co. DES	Standard Bike Lane	0.1	BP8578
Alcova Heights/South Glebe Road Improvements	Arlington Co. DES	Streetscape/Pedestrian Improvements	0.9	BP8514
Washington Avenue Sidewalk	Charles County	Streetscape/Pedestrian Improvements	0.87	BP8866
Old Washington Road Reconstruction	Charles County	Streetscape/Pedestrian Improvements	1.062	BP8847
Hamilton Road Sidewalk	Charles County	Streetscape/Pedestrian Improvements	1.2	BP8849
Town of Lovettsville - East Broad Way	Loudoun County	Streetscape/Pedestrian Improvements	0.591	BP7677

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
La Plata Sidewalk on US 301	Maryland Department of Transportation - State Highway Administration	Streetscape/Pedestrian Improvements	5.727	BP8860
Indian Head Highway Sidewalk Construction	Maryland Department of Transportation - State Highway Administration	Streetscape/Pedestrian Improvements	0.358	BP8864
Complete Streets near Metro Stations - South Stonestreet Avenue	Maryland Department of Transportation - State Highway Administration	Streetscape/Pedestrian Improvements	0	T6507
Complete Streets near Metro Stations - Twinbrook Station	Maryland Department of Transportation - State Highway Administration	Streetscape/Pedestrian Improvements	0	T6508
Waldorf/White Plains Sidewalk on US 301	Maryland Department of Transportation - State Highway Administration	Streetscape/Pedestrian Improvements	12.99	BP8859
MD 223 at Dower House Road Intersection Improvements	Maryland Department of Transportation - State Highway Administration	Streetscape/Pedestrian Improvements	0	T6660
W&OD Realignment at East Falls Church	NOVA Parks	Streetscape/Pedestrian Improvements	0.2	BP8496

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Iverson St. Pedestrian Safety Improvements	Prince Georges County	Streetscape/Pedestrian Improvements	0.842	BP10406
Swann Rd. Green/Complete Street Improvements	Prince Georges County	Streetscape/Pedestrian Improvements	0.608	BP10466
Donnell Dr. Pedestrian Safety Improvements	Prince Georges County	Streetscape/Pedestrian Improvements	0.874	BP10386
Marlboro Pk. Pedestrian Safety Improvements, Ph. 2	Prince Georges County	Streetscape/Pedestrian Improvements	1.23	BP11367
Adelphi Rd. Pedestrian Safety Improvements	Prince Georges County	Streetscape/Pedestrian Improvements	1.464	BP10346
Creek Crossing Pedestrian Enhancements	Town of Vienna	Streetscape/Pedestrian Improvements	0.571	BP7869
Alabama Avenue, SE from Burns Street to Martin Luther King Jr. Ave., SE	District Department of Transportation			BP9426
Garfield-Canal Park Connector	District Department of Transportation			T5376
Arboretum Bridge and Trail	District Department of Transportation			T6497
National Recreational Trails	District Department of Transportation			T2796
Pedestrian Bridge over Arizona Ave NW and Connecting Trail Rehabilitation	District Department of Transportation			T6516

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Shepherd Branch Trail	District Department of Transportation			T6500
New York Ave NE Improvements	District Department of Transportation			T6230
Safety Improvements Citywide	District Department of Transportation			T3212
Rock Creek Park Trail	District Department of Transportation			T3230
9th Street Bicycle Lane	District Department of Transportation			T11557
Capital Bikeshare Expansion	District Department of Transportation			T11560
Bicycle and Pedestrian Safety	District Department of Transportation			T11567
Bike Lane Design	District Department of Transportation			T6802
Pedestrian & Traffic Calming Improvements	District Department of Transportation			T6810
11th Street Bridge Park	District Department of Transportation			T11361

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
East Capitol Street Corridor Mobility & Safety Plan	District Department of Transportation			T6315
Bicycle and Pedestrian Management Program	District Department of Transportation			T3232
Galloway Street NE Trail Improvements	District Department of Transportation			T6678
Fort Davis Dr and Texas Ave SE Trail	District Department of Transportation			T11561
Transit Hubs	District Department of Transportation			T11565
Klinge Trail	District Department of Transportation			T2806
Vision Zero Safety Improvements	District Department of Transportation			T11566
Lincoln Connector Trail	District Department of Transportation			T6498
Suitland Parkway Trail	District Department of Transportation			T11564
Oxon Run Trail Restoration	District Department of Transportation			T2780

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
K St and Water St NW Trail Connection	District Department of Transportation			T6643
Active Transportation Equipment	District Department of Transportation			T11558
Arizona Avenue to Capital Crescent Trail	District Department of Transportation			T11563
Long Bridge Pedestrian and Bicycle Connection	District Department of Transportation			T6807
Tenleytown Multi- Modal Access	District Department of Transportation			T6598
Georgia Avenue NW Multi-Modal Transportation Study	District Department of Transportation			T6677
7th Street NW Planning Study	District Department of Transportation			T6674
North Capitol Street Area Model	District Department of Transportation			T6679
Telegraph Rd Trail	Fairfax County			BP11393
Frying Pan Road Trail	Fairfax County			BP11434
Hunter Mill Road Trail	Fairfax County			BP11425
Grist Mill Trail Phase 2	Fairfax County			BP11382
Waples Mill Road Trail	Fairfax County			BP11477

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Stonecroft Boulevard Trail	Fairfax County			BP11438
Georgetown Pike Trail	Fairfax County			BP11415
Lawyers Road Trail	Fairfax County			BP11427
Burke Lake Road Trail	Fairfax County			BP11474
Lee Jackson Memorial Hwy Trail	Fairfax County			BP11395
Route 123 Trail	Fairfax County			BP11397
Route 1 to Laurel Hill Trail	Fairfax County			BP11468
Gallows Road Trail Phase 2	Fairfax County			BP11449
Spring Hill Road Trail	Fairfax County			BP11419
Zion Drive Trail	Fairfax County			BP11482
Huntington Trail	Fairfax County			BP11410
Loisdale Road Trail	Fairfax County			BP11454
Stringfellow Road Trail	Fairfax County			BP11441
North Kings Hwy Trail	Fairfax County			BP11485
Old Colechester Road Trail	Fairfax County			BP11467
Hooes Road Trail	Fairfax County			BP11469
Franconia-Springfield Parkway Trail	Fairfax County			BP11455
Braddock Road Trail Phase 3	Fairfax County			BP11437
Poplar Tree Road Trail	Fairfax County			BP11440
Fox Mill Road Trail Phase 2	Fairfax County			BP11435
Rolling Road Trail	Fairfax County			BP11457
Old Keene Mill Road Trail	Fairfax County			BP11458
Commerce Street Trail	Fairfax County			BP11453

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Beulah Road Trail	Fairfax County			BP11422
Backlick Run Stream ValleyTrail	Fairfax County			BP11452
Pleasant Valley Trail	Fairfax County			BP11403
Old Dominion Trail	Fairfax County			BP11401
Prosperity Avenue Trail	Fairfax County			BP11479
Vale Road Trail	Fairfax County			BP11426
Little River Turnpike Trail	Fairfax County			BP11399
Towlston Road Trail	Fairfax County			BP11418
Cross County Trail	Fairfax County			BP11377
Henderson Road Trail	Fairfax County			BP11471
Potomac Heritage National Scenic Trail Section 1	Fairfax County			BP11464
Lincolnia Road Trail	Fairfax County			BP11450
Compton Road Trail	Fairfax County			BP11442
Braddock Rd - Rt 29 Connector Trail	Fairfax County			BP11444
Lewinsville Road Trail	Fairfax County			BP11424
West Ox Road Trail	Fairfax County			BP11372
Jeff Todd Trail	Fairfax County			BP11384
Beacon Hill Road Trail	Fairfax County			BP11460
Columbia Pike Trail	Fairfax County			BP11400
Mason Neck Trail	Fairfax County			BP11466
Thompson Road Trail	Fairfax County			BP11443
Clifton Road Trail Phase 2	Fairfax County			BP11475
Vale Road Trail Phase 2	Fairfax County			BP11429
Fairfax County Parkway to Rolling Road Connector Trail	Fairfax County			BP11470

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Centreville Rd Trail	Fairfax County			BP11404
Shirley Gate Road Trail	Fairfax County			BP11478
Gallows Road Trail	Fairfax County			BP11380
Vaden Drive Trail	Fairfax County			BP11373
Beauregard Street Trail	Fairfax County			BP11451
Baron Cameron Trail	Fairfax County			BP11405
Mount Vernon Trail	Fairfax County			BP11385
Colvin Run Road Trail	Fairfax County			BP11417
Hancock Road Trail	Fairfax County			BP11432
Arlington Blvd Trail	Fairfax County			BP11374
Fairfax County Parkway Trail	Fairfax County			BP11378
Route 29 Trail Phase 1	Fairfax County			BP11445
Ox Road Trail	Fairfax County			BP11386
Annandale Road Trail	Fairfax County			BP11448
Westmoreland Street Trail	Fairfax County			BP11433
Walker Road Trail	Fairfax County			BP11416
Braddock Road Trail Phase 2	Fairfax County			BP11436
Furnace Road Trail	Fairfax County			BP11465
Hampton Road Trail	Fairfax County			BP11472
International Drive Trail	Fairfax County			BP11420
Sideburn Road Trail	Fairfax County			BP11481
Route 7 Trail	Fairfax County			BP11391
I-495 Trail	Fairfax County			BP11398
South Kings Hwy Trail	Fairfax County			BP11407
Clifton Road Trail Phase 1	Fairfax County			BP11473
Braddock Road Trail Phase 4	Fairfax County			BP11439

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Backlick Trail	Fairfax County			BP11402
Manchester Blvd Trail	Fairfax County			BP11456
Arlington Blvd Trail Phase 2	Fairfax County			BP11390
Various Trails - City of Frederick	Frederick County			T6669
Planning, Design & Construction	Frederick County			T5495
Purple Line	Maryland Department of Transportation - Maryland Transit Administration			T2795
US 29 Bus Rapid Transit Improvements Project	Maryland Department of Transportation - Maryland Transit Administration			T6397
Bikeshare Program	Maryland Department of Transportation - State Highway Administration			T6076
Wheaton Through Connector to Poplar Run	Maryland-National Capital Park and Planning Commission			BP8638
Muddy Branch Trail	Maryland-National Capital Park and Planning Commission			BP11513

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Muddy Branch Trail	Maryland-National Capital Park and Planning Commission			BP8635
Matthew Henson to Poplar Run	Maryland-National Capital Park and Planning Commission			BP8636
North Branch Trail-ICC Connector	Maryland-National Capital Park and Planning Commission			BP8625
Ovid Hazen Wells to Damascus	Maryland-National Capital Park and Planning Commission			BP8629
North Branch Lakeside Renovation	Maryland-National Capital Park and Planning Commission			BP8637
Seven Locks Bikeway & Safety Improvements	Montgomery County			T6017
Annual Bikeway Program	Montgomery County			T3066
Pedestrian Safety Program	Montgomery County			T3642
MacArthur Boulevard Bikeway Improvements	Montgomery County			T5729
Transportation Improvements for Schools	Montgomery County			T6364
Metropolitan Branch Trail	Montgomery County			T5942

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Falls Road East Side Hiker/Biker Path	Montgomery County			T3429
Silver Spring Green Trail	Montgomery County			T3125
Capital Crescent Trail	Montgomery County			T6015
Sidewalk Program - Minor Projects	Montgomery County			T3067
Frederick Road Bike Path: Stringtown to Milestone Manor	Montgomery County			T6063
Bicycle and Pedestrian Priority Area Improvements	Montgomery County			T6365
Ovid Hazen Wells to Damascus Regional Park	Montgomery County			BP11515
Sidewalk & Curb Replacement	Montgomery County			T5975
Bethesda CBD Streetscape	Montgomery County			T5943
Pedestrian Safety Improvements	Prince Georges County			T6370
Largo Area CIP Roadway Project	Prince Georges County			BP11365
Bike Share Stations in Prince George's County	Prince Georges County			BP11603
Cool Spring Adelphi Road Pedestrian and Bike Access Improvement Project	Prince Georges County			BP10526
School Access Project	Prince Georges County			T6026

PROJECT TITLE	LEAD AGENCY	Facility Type	Miles	TIP ID
Traffic Congestion Improvements	Prince Georges County			T6373
Transit Oriented Development Infrastructure	Prince Georges County			T6381
Addison Road I	Prince Georges County			T6367
Bus Mass Transit/ Metro Access 2	Prince Georges County			T6375
Annapolis Road (MD 450, MD 202) Side Path	Prince Georges County			BP9826
Project Grouping: Construction: Recreational Trails	Virginia Department of Transportation			T6485

APPENDIX B: “DEEP DIVE” INTO PEDESTRIAN CRASHES IN THE WASHINGTON REGION

TPB carried out a study of traffic safety in the Washington region in 2019. Excerpts relating to pedestrian crashes are summarized below.

The region had a stable number of pedestrian fatalities and serious injuries through 2017, but the 2018-2020 fatality numbers are worse. Historically the combined pedestrian and bicyclist fatalities were roughly one quarter of the total traffic fatalities, but now they are at 30%.

Figure 3: Regional Pedestrian Fatalities and Injuries



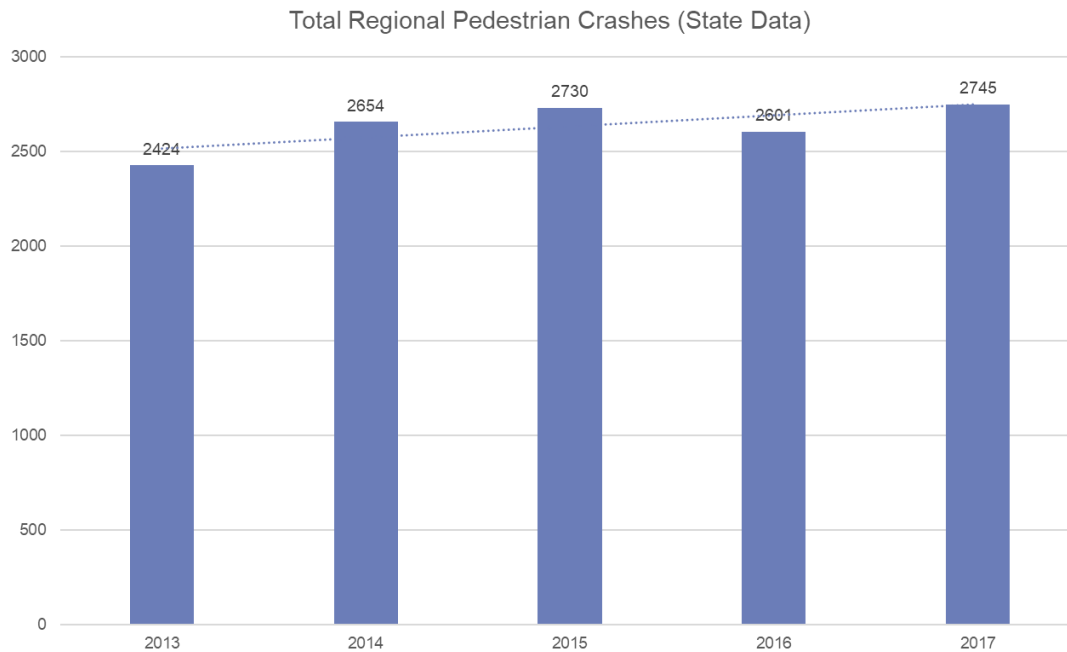


Table 11:

Pedestrian Crash Severity

Pedestrian Crash Severity by Jurisdiction, 2013-2017			
Jurisdiction	Fatalities	Serious Injuries	Total Crashes
District of Columbia	50	399	5,431
Charles County, MD	16	49	208
Frederick County, MD	7	36	284
Montgomery County, MD	56	318	2,297
Prince George's County, MD	108	269	2,156
Arlington County, VA	6	74	693
Fairfax County, VA	55	331	1,024
Fauquier County, VA (urbanized area)	1	7	24
Loudoun County, VA	14	57	235
Prince William County, VA	20	96	299
Alexandria, VA	7	58	338
Fairfax City, VA	1	21	54
Falls Church, VA	0	13	30
Manassas, VA	1	39	74
Manassas Park, VA	0	0	7
District of Columbia	50	399	5,431

Suburban Maryland	187	672	4,945
Northern Virginia	105	696	2,778
National Capital Region Total	342	1,767	13,154

The District of Columbia had the largest number of serious injuries and pedestrian crashes, while Prince George’s County has the largest number of fatalities. Pedestrian activity is far more intense in DC than in Prince George’s, but vehicle speeds are much higher in Prince George’s.

Table 12: Pedestrian Injury Severity by Time of Day

Pedestrian Injury Severity by Time of Day			
Time of Day	National Capital Region		
	Fatalities	Serious Injuries	Total Crashes
Midnight - 0:59 a.m.	11	37	206
1:00 a.m. - 1:59 a.m.	13	35	161
2:00 a.m. - 2:59 a.m.	13	35	163
3:00 a.m. - 3:59 a.m.	7	31	131
4:00 a.m. - 4:59 a.m.	10	4	67
5:00 a.m. - 5:59 a.m.	15	29	187
6:00 a.m. - 6:59 a.m.	24	65	390
7:00 a.m. - 7:59 a.m.	12	85	623
8:00 a.m. - 8:59 a.m.	3	88	673
9:00 a.m. - 9:59 a.m.	7	57	543
10:00 a.m. - 10:59 a.m.	11	59	498
11:00 a.m. - 11:59 a.m.	8	64	547
12:00 p.m. - 12:59 p.m.	6	64	531
1:00 p.m. - 1:59 p.m.	5	68	588
2:00 p.m. - 2:59 p.m.	9	84	726
3:00 p.m. - 3:59 p.m.	11	107	872
4:00 p.m. - 4:59 p.m.	12	104	862
5:00 p.m. - 5:59 p.m.	12	151	1,103
6:00 p.m. - 6:59 p.m.	25	166	1,151
7:00 p.m. - 7:59 p.m.	26	137	911
8:00 p.m. - 8:59 p.m.	34	103	757
9:00 p.m. - 9:59 p.m.	33	99	632
10:00 p.m. - 10:59 p.m.	28	92	518
11:00 p.m. - 11:59 p.m.	18	65	311

Pedestrian injuries peaked during the evening rush hour, while deaths peak later, after 8 p.m.

Table 13: Pedestrian Injury Severity by Day of the Week

Pedestrian Injury Severity by Day of the Week			
Day of Week	National Capital Region		
	Fatalities	Serious Injuries	Total Crashes
Sunday	39	215	1,272
Monday	41	277	1,838
Tuesday	50	280	2,076
Wednesday	51	278	2,091
Thursday	66	249	2,006
Friday	48	296	2,183
Saturday	58	235	1,688

October-December are the peak months for pedestrian fatalities, serious injuries, and crashes. October is pedestrian safety month

Table 14: Pedestrian Injury Severity by Month

Pedestrian Injury Severity by Month			
Month	National Capital Region		
	Fatalities	Serious Injuries	Total Crashes
January	28	151	1,162
February	28	136	929
March	27	145	984
April	23	149	1,027
May	31	155	1,101
June	23	150	1,087

July	22	109	892
August	29	160	967
September	24	156	1,117
October	40	180	1,389
November	38	163	1,242
December	40	176	1,257

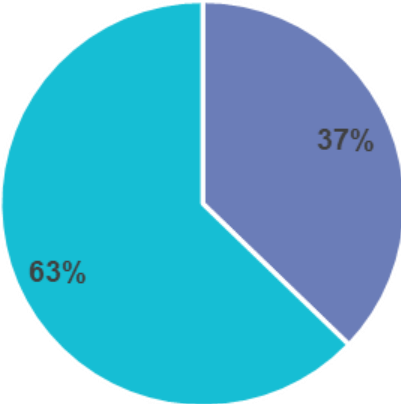
“Not at an intersection” is the most dangerous place to cross the street.

Table 15: Injury Severity by Pedestrian Location

Injury Severity by Pedestrian Location			
Pedestrian Location	National Capital Region		
	Fatalities	Serious Injuries	Total Crashes
Unknown	65	414	4,270
Unmarked Crosswalk	6	54	386
Marked Crosswalk	61	536	3,927
Sidewalk	7	33	252
In Roadway/Unmarked Midblock/Not at Intersection	197	675	3,770
Median/Island	2	4	28
Outside Roadway	15	114	521

Figure 4: Pedestrian Non-Intersection Fatalities

Pedestrian Fatalities



■ Intersection ■ Non-Intersection

Table 16: Injury Severity by Pedestrian Age

Injury Severity by Pedestrian Age			
Pedestrian Age	TPB Region		
	Fatalities	Serious Injuries	Total Pedestrians in Crashes
Younger than 5	9	27	351
5-9	2	52	488
10-14	2	70	665
15-19	15	148	1088
20-24	28	205	1495
25-29	22	204	1584
30-34	30	145	1344
35-39	29	119	1057
40-44	20	94	828
45-49	24	132	905
50-54	33	129	928
55-59	33	114	843
60-64	35	104	766
65-69	13	80	490
70-74	20	48	314
75-79	16	39	216
80-84	10	14	119
Older than 84	10	25	147

Older pedestrians are much more likely to be killed if they are hit. It should be noted that the Washington region has a relatively young population, and these numbers are not adjusted for exposure. People over the age of 65 may be aware of their vulnerability and exercise greater caution in crossing, or avoid making dangerous crossings.

People aged 15-34 are heavily represented among pedestrian crashes but are less likely to die when hit.

Table 17: Pedestrian Injury Severity by Lighting Condition

Pedestrian Injury Severity by Light Condition			
Light Condition	National Capital Region		
	Fatalities	Serious Injuries	Total Crashes
Dawn	7	41	245
Daylight	90	922	7,443

Dusk	4	41	333
Dark (Lighted)	157	603	4,033
Dark (Not Lighted)	86	188	716
Dark (Unknown Lighting)	4	22	128
Unknown	4	13	256

Far more crashes happen during daylight than at night, but the night-time crashes are much more likely to be fatal.

Table 18: Pedestrian Injury Severity by Functional Class

Pedestrian Injury Severity by Functional Class			
Functional Class	TPB Region		
	Fatalities	Serious Injuries	Total Crashes
Collector	38	288	2220
Expressway	10	40	250
Freeways	26	111	500
Major Arterial	146	674	4875
Minor Arterial	109	641	4650
Ramp	5	18	94

Major arterials are the most dangerous for pedestrians. They have the most crashes, and a higher likelihood of a fatal collision than a minor arterial.

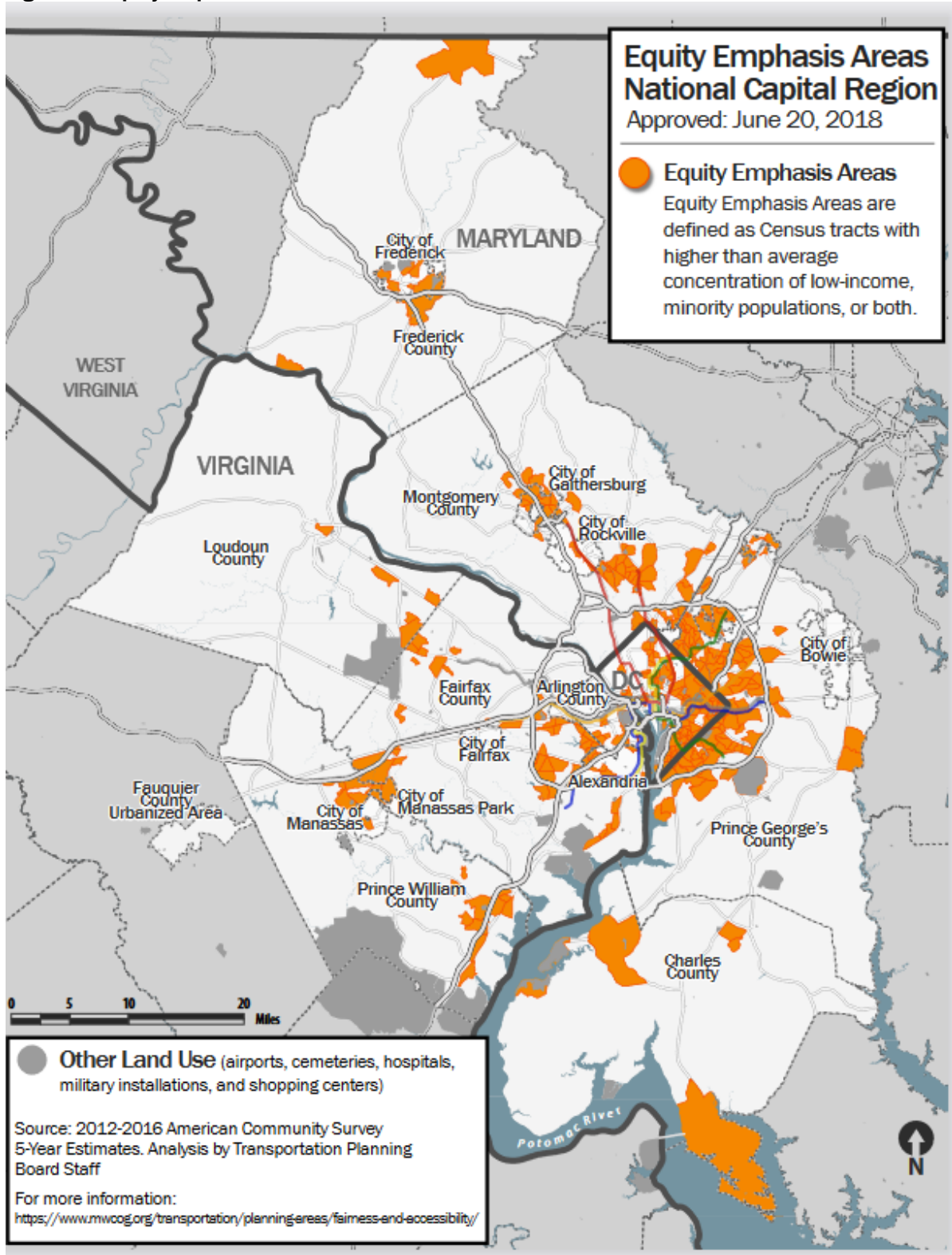
Safety in Equity Emphasis Areas

TPB defines Equity Emphasis Areas (EEAs) as those containing high concentrations of low income and/or minority populations. These areas were approved by the Board in 2017, updated in June 2018 to reflect current census data.

The EEAs contain 29 percent of the region's population, yet they account for 34 percent of the region's fatalities. They have higher percentages of fatalities involving young drivers, pedestrians, crashes at intersections, and crashes on major arterials.

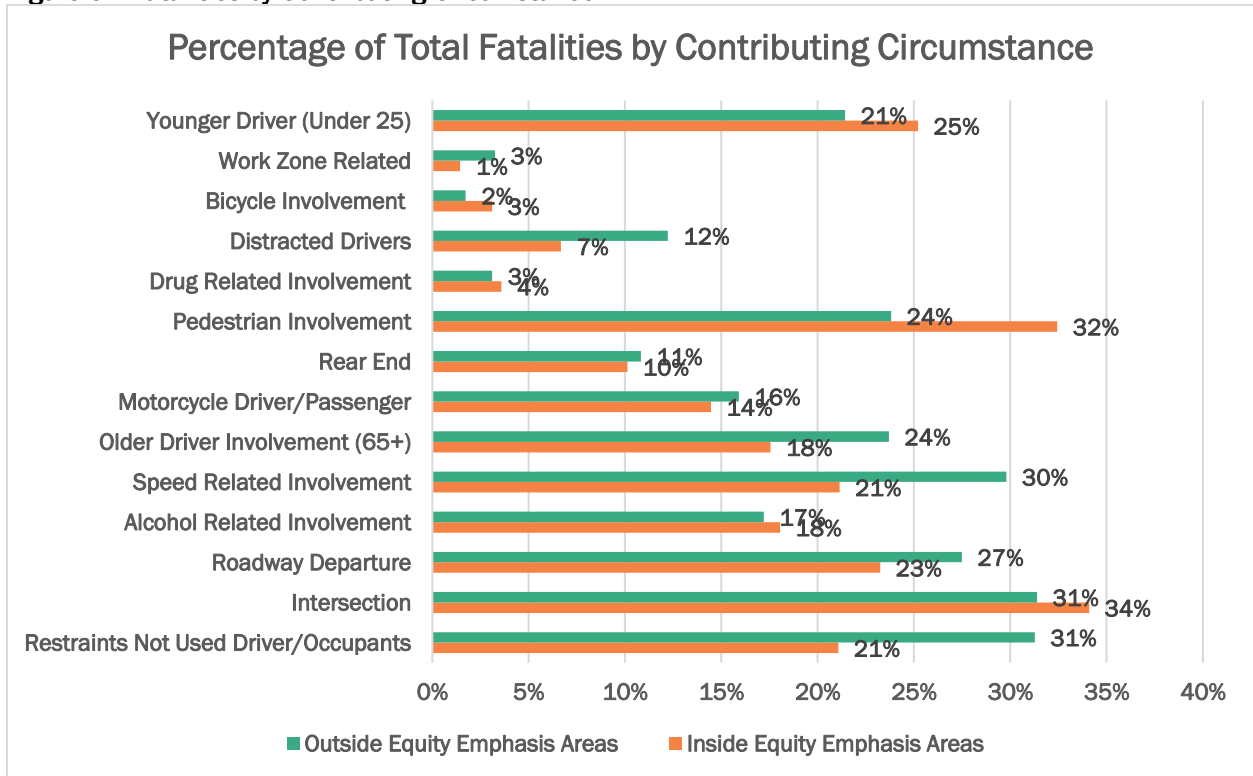
Not all categories of crash are more common in EEAs. Unbelted crashes, speeding-related crashes, and roadway departure crashes are more likely outside an EEA.

Figure 5: Equity Emphasis Areas



Equity emphasis areas have higher rates of pedestrian and bicycle crashes than areas outside of equity emphasis areas.

Figure 6: Fatalities by Contributing Circumstance



APPENDIX C: MODE OF ACCESS TO METRORAIL

Major Modes of Access, by Walk Mode of Access, All-Day
2016 WMATA Rail Passenger Survey

Station	Dropped off	Drove alone	Metrobus	Other bus	Bike	Shuttle	Taxi/Ride Share	Walk
CAPITOL SOUTH	0%	2%	2%	1%	0%	0%	1%	93%
FEDERAL CENTER SW	1%	3%	2%	0%	0%	0%	0%	93%
MT VERNON SQUARE 7TH ST-CONVENTION CENTER	1%	3%	2%	0%	0%	0%	0%	91%
COURT HOUSE	2%	3%	2%	1%	0%	0%	0%	90%
NAVY YARD-BALLPARK	1%	2%	4%	1%	0%	1%	0%	90%
JUDICIARY SQUARE	2%	5%	1%	0%	0%	0%	0%	90%
WATERFRONT	1%	3%	4%	0%	0%	0%	0%	89%
FEDERAL TRIANGLE	1%	5%	2%	1%	0%	0%	0%	88%
U STREET/AFRICAN-AMERICAN CIVIL WAR MEMORIAL/CARDOZO	1%	1%	8%	0%	0%	0%	0%	88%
FARRAGUT NORTH	1%	3%	4%	1%	0%	1%	0%	88%
VIRGINIA SQUARE-GMU	4%	5%	1%	0%	1%	0%	0%	88%
CLEVELAND PARK	3%	4%	4%	0%	0%	0%	0%	87%
NOMA-GALLAUDET U	1%	2%	4%	1%	1%	1%	0%	87%
WOODLEY PARK-ZOO	1%	3%	5%	2%	1%	0%	0%	86%
METRO CENTER	1%	4%	3%	2%	0%	0%	0%	86%
ARCHIVES-NAVY MEMORIAL-PENN QUARTER	1%	6%	5%	1%	0%	0%	0%	86%
MCPHERSON SQUARE	1%	4%	7%	0%	0%	1%	0%	86%
FOGGY BOTTOM-GWU	1%	3%	6%	1%	0%	1%	0%	85%
GALLERY PLACE-CHINATOWN	2%	3%	6%	1%	0%	0%	0%	85%
FARRAGUT WEST	1%	4%	7%	1%	0%	1%	0%	85%
SMITHSONIAN	2%	5%	2%	2%	0%	1%	0%	85%
ARLINGTON CEMETERY	0%	1%	3%	1%	1%	5%	0%	84%
EASTERN MARKET	1%	2%	8%	1%	1%	0%	0%	84%

Station	Dropped off	Drove alone	Metrobus	Other bus	Bike	Shuttle	Taxi/Ride Share	Walk
CLARENDON	3%	4%	3%	3%	1%	0%	1%	83%
DUPONT CIRCLE	1%	2%	9%	1%	0%	2%	0%	82%
SHAW-HOWARD UNIVERSITY	2%	3%	11%	0%	1%	0%	0%	81%
VAN NESS-UDC	3%	4%	10%	1%	1%	0%	0%	80%
COLUMBIA HEIGHTS	1%	1%	13%	1%	0%	6%	0%	76%
CRYSTAL CITY	3%	3%	7%	2%	0%	4%	0%	75%
STADIUM-ARMORY	3%	5%	15%	0%	0%	0%	1%	74%
L'ENFANT PLAZA	2%	5%	4%	4%	0%	4%	0%	74%
BALLSTON-MU	4%	6%	11%	2%	1%	3%	0%	72%
EISENHOWER AVENUE	12%	9%	2%	1%	1%	4%	0%	71%
ROSSLYN	5%	3%	7%	6%	0%	6%	0%	71%
GREENSBORO	14%	11%	2%	0%	1%	1%	0%	70%
MEDICAL CENTER	3%	3%	7%	6%	1%	7%	0%	70%
GEORGIA AVE-PETWORTH	3%	3%	22%	1%	0%	0%	1%	69%
FRIENDSHIP HEIGHTS	5%	6%	14%	2%	1%	1%	0%	68%
POTOMAC AVENUE	1%	4%	22%	3%	0%	0%	0%	68%
BETHESDA	5%	9%	5%	8%	1%	2%	0%	67%
KING STREET-OLD TOWN	5%	2%	7%	12%	2%	4%	1%	65%
BRADDOCK ROAD	8%	3%	12%	7%	3%	4%	0%	62%
Total	4.2%	11.1%	10.9%	3.7%	0.6%	2.4%	0.4%	62.0%
SPRING HILL	12%	4%	5%	10%	1%	4%	0%	62%
WHITE FLINT	7%	14%	6%	6%	2%	2%	1%	61%
PENTAGON CITY	4%	7%	10%	1%	0%	12%	1%	61%
TYSONS CORNER	8%	5%	11%	12%	0%	3%	1%	58%
SILVER SPRING	4%	6%	18%	7%	1%	1%	0%	58%
BROOKLAND-CUA	6%	5%	18%	1%	0%	10%	1%	58%
UNION STATION	1%	3%	4%	1%	0%	1%	0%	58%
TENLEYTOWN-AU	5%	8%	12%	3%	1%	13%	0%	56%
TAKOMA	9%	8%	10%	14%	2%	0%	0%	55%
BENNING ROAD	7%	5%	31%	1%	0%	1%	1%	53%
TWINBROOK	5%	27%	7%	5%	1%	1%	0%	51%
MCLEAN	13%	14%	7%	3%	2%	7%	1%	50%
MINNESOTA AVENUE	3%	8%	42%	0%	0%	0%	0%	46%
FOREST GLEN	13%	27%	2%	3%	1%	0%	0%	46%

Station	Dropped off	Drove alone	Metrobus	Other bus	Bike	Shuttle	Taxi/Ride Share	Walk
WHEATON	10%	23%	16%	3%	0%	0%	0%	45%
PRINCE GEORGE'S PLAZA	5%	18%	22%	1%	2%	6%	0%	43%
WEST HYATTSVILLE	10%	16%	22%	2%	4%	0%	1%	42%
CONGRESS HEIGHTS	6%	13%	37%	0%	0%	0%	0%	41%
DUNN LORING-MERRIFIELD	9%	30%	6%	2%	2%	8%	1%	40%
DEANWOOD	7%	20%	25%	0%	0%	1%	0%	39%
RONALD REAGAN WASHINGTON NATIONAL AIRPORT	2%	3%	6%	2%	0%	5%	1%	37%
ROCKVILLE	12%	17%	7%	14%	1%	2%	0%	37%
PENTAGON	2%	4%	42%	8%	0%	2%	1%	37%
RHODE ISLAND AVENUE-BRENTWOOD	5%	7%	45%	1%	0%	1%	1%	37%
GROSVENOR-STRATHMORE	8%	41%	3%	7%	2%	0%	0%	33%
EAST FALLS CHURCH	15%	21%	17%	3%	3%	4%	1%	31%
MORGAN BLVD	16%	34%	4%	8%	1%	1%	2%	30%
FORT TOTTEN	8%	9%	46%	1%	1%	1%	1%	29%
CAPITOL HEIGHTS	12%	26%	23%	5%	1%	0%	1%	27%
SUITLAND	5%	31%	31%	3%	0%	0%	1%	26%
HUNTINGTON	7%	39%	8%	10%	1%	7%	0%	24%
NAYLOR ROAD	12%	19%	40%	5%	0%	1%	0%	21%
COLLEGE PARK - U OF MD	10%	27%	10%	7%	4%	15%	1%	20%
WEST FALLS CHURCH-VT/UVA	10%	37%	12%	8%	2%	5%	0%	20%
ANACOSTIA	2%	8%	65%	2%	1%	1%	0%	19%
CHEVERLY	16%	37%	19%	2%	0%	0%	0%	19%
VIENNA/FAIRFAX-GMU	10%	42%	6%	15%	1%	5%	0%	16%
ADDISON ROAD	11%	33%	34%	4%	0%	2%	1%	13%
VAN DORN STREET	9%	15%	9%	18%	1%	31%	2%	12%
WIEHLE-RESTON EAST	12%	34%	8%	26%	2%	5%	1%	11%
GLENMONT	13%	45%	12%	7%	1%	0%	1%	11%
LARGO TOWN CENTER	15%	51%	12%	3%	0%	1%	1%	10%

Station	Dropped off	Drove alone	Metrobus	Other bus	Bike	Shuttle	Taxi/Ride Share	Walk
BRANCH AVENUE	14%	54%	12%	2%	0%	0%	1%	9%
SOUTHERN AVENUE	7%	31%	44%	2%	0%	1%	1%	9%
LANDOVER	6%	48%	23%	6%	0%	2%	2%	7%
SHADY GROVE	9%	42%	9%	20%	1%	7%	0%	7%
GREENBELT	11%	48%	20%	3%	2%	4%	1%	7%
FRANCONIA-SPRINGFIELD	10%	55%	6%	10%	2%	4%	1%	6%
NEW CARROLLTON	11%	52%	19%	1%	0%	1%	1%	6%

APPENDIX D: GLOSSARY OF TERMS

BICYCLE LANE (BIKE LANE)

A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. Consists of a 4'-6' lane in each direction, with bicycle traffic moving in the same direction as motorized traffic.

BICYCLE PATH (BIKE PATH)

A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right of way or within an independent right of way.

BICYCLE PARKING

An area dedicated and designed specifically for storing and locking a bicycle. Includes bicycle racks and bicycle lockers.

BICYCLE ROUTE (BIKE ROUTE)

A segment of a system of bikeways designated by the jurisdiction with appropriate directional and informational markers, with or without specific bicycle route numbers.

BIKE CORRAL

A bike corral transforms a standard parking lane or curbside zone into bike parking, typically by placing bike racks in the space, and using with flexiwands and curb stops to discourage conflicts with automobiles. Often used in areas with narrow and/or busy sidewalks.

BIKE SHARING

Short-term bicycle rental available at a network of unattended locations.

BIKE STATION

A staffed, enclosed bicycle parking facility, usually located at a transit center, which may offer such services as bicycle repair, rental, lockers, and showers.

BIKEWAY

Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

BUFFERED BIKE LANE

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

COMPLETE STREETS

Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street

CYCLE TRACK (Protected Bike Lane)

A bicycle-only facility that provides physical separation within the right of way from vehicle travel lanes.

CLASS I, II or III BIKEWAY

Terms sometimes used to describe different types of bicycle facilities. Class I is a shared-use path, Class II a bicycle lane, and Class III a shared roadway. However, Since there is some disagreement on the exact meaning of these terms, the AASHTO terms (listed above) should be used.

GREENWAY

A linear park or recreation facility of limited width, located along the length of an existing or former public utility or railroad right-of-way, or along a stream bed.

HIKER-BIKER TRAIL

A paved path designed for use by both pedestrians and bicyclists, which is completely separated from vehicular traffic.

METROPOLITAN STATISTICAL AREA

A core area containing a substantial population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan statistical areas comprise one or more entire counties. They are used by the United States Census for the purpose of tabulating, enumerating, and publishing data.

RAILS-TO-TRAILS CONSERVANCY

A national membership organization that works to facilitate the acquisition of abandoned railroad lines for use in creating bicycle and pedestrian trails and linear parks.

RAIL-TRAIL

A Shared-Use Path, either paved or unpaved, built within the right-of-way of an existing or former railroad.

REGIONAL ACTIVITY CENTER

A set of locations within the National Capital Region Transportation Planning Board planning area identified by the Council of Government's Planning Director's Technical Advisory Committee as employment centers of regional significance. Five types of Regional Activity Center have been designated, with different employment and residential density criteria for each.

REGIONAL ACTIVITY CLUSTER

An employment center adjacent to a Regional Activity Center, with a lower density than a Regional Activity Center

ROAD DIET

A road diet is a technique whereby a road is reduced in number of travel lanes and/or effective width in order to achieve systemic improvements. An example of a road diet would be the conversion of two travel lanes in each direction to a 3-lane section with one travel lane in each direction, optional bicycle lanes, and a two-way turn lane in the middle.

SHARED ROADWAY

A roadway which is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes, or road with paved shoulders.

SHARED-USE PATH

A bikeway, at least 8' in width, physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared-Use Paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Also called a multi-use path.

SHARROW

A shared-lane marking or sharrow is a street marking used to indicate the recommended position and direction of travel for the bicyclist.

SIDE-PATH

A shared-used path built within the right-of-way of a non limited-access highway.

SIDEWALK

The portion of a street or highway right-of-way, at least 4' in width, designed for preferential or exclusive use by pedestrians.

SIGNED SHARED ROADWAY

A shared roadway that has been designated as a referred route for bicycle use using warning, directional, and informational signage.

TRAFFIC CALMING

Traffic calming is a way to design streets, using physical measures, to encourage people to drive more slowly.

TRAVELED WAY

The portion of a roadway for the movement of vehicles, exclusive of shoulders.

UNIFORM VEHICLE CODE

The standards for traffic regulations recommended for adoption by state and local jurisdictions, as prepared by the National Committee on Uniform Traffic Laws and Ordinances.

APPENDIX E: GLOSSARY OF ACRONYMS

AASHTO	American Association of Highway Transportation Officials
ADA	Americans with Disabilities Act
AFA	Access for All Advisory Committee
CLRP	Financially Constrained Long-Range Transportation Plan
CMAQ	Congestion Mitigation and Air Quality Improvement Program
COG	Metropolitan Washington Council of Governments
DDOT	District of Columbia Department of Transportation
FAST Act	Fixing America’s Surface Transportation Act
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
IJJA	Infrastructure Investment and Jobs Act
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
MAP-21	Moving Ahead for Progress in the 21st Century Act
MDOT	Maryland Department of Transportation
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MTA	Maryland Transit Administration
MUTCD	Manual on Uniform Traffic Control Devices
NACTO	National Association of City Transportation Officials
NCPC	National Capital Planning Commission
NVTC	Northern Virginia Transportation Commission
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: Legacy for Users
MDSHA	Maryland State Highway Administration
SOV	Single-Occupant Vehicle
SRTS	Safe Routes to School
TCSP	Transportation and Community and System Preservation Pilot Program
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TPB	National Capital Region Transportation Planning Board
US DOT	U.S. Department of Transportation
VDOT	Virginia Department of Transportation
VMT	Vehicle-Miles Traveled
WABA	Washington Area Bicyclist Association
WMATA	Washington Metropolitan Area Transit Authority

APPENDIX F: LINKS AND RESOURCES

Alexandria Rideshare

www.alexride.org

America Walks

<https://americawalks.org/>

BikeArlington

www.bikearlington.com

Arlington bicycle information.

BikeWashington

www.bikewashington.org

Bike trails and routes in the Washington region, clubs, and organized rides.

Capital Bikeshare

www.capitalbikeshare.com/

Regional self-service bicycle rental.

Capital Trails Coalition <https://www.capitaltrailscoalition.org/>

Advocacy coalition for a regional trail network. Staffed by the Washington Area Bicyclist Association.

Coalition for Smarter Growth

www.smartergrowth.net

An advocacy group for transit-oriented development in the Washington region.

Fairfax Advocates for Better Bicycling

<http://www.fabb-bikes.org/>

Advocacy Group for bicycling in Fairfax County, VA. ‘

League of American Bicyclists

www.bikeleague.org

LAB is a national cycling advocacy group founded in 1880.

National Center for Bicycling and Walking

www.bikewalk.org

A national advocacy group for walking and bicycling.

Metropolitan Washington Council of Governments
777 North Capitol Street NE, Suite 300
Washington, D.C. 20002
(202) 962-3200
www.mwcog.org
www.commuterconnections.org

Metropolitan planning organization. Offers ride matching and Guaranteed Ride Home services through its Commuter Connections program, publishes a Bike to Work Guide.

National Aging and Disability Transportation Center
<https://www.nadtc.org/>

National Association of City Transportation Officials
www.nacto.org/

An association of big city transportation officials oriented towards “smart growth” principles.

National Complete Streets Coalition
www.completestreets.org/

Advocacy group for “complete streets”, or provision of pedestrian and bicycle facilities as part of all transportation projects.

Pedestrian and Bicycle Information Center
www.bicyclinginfo.org
www.walkinginfo.org

National clearinghouse for information on walking and bicycling.

Rails to Trails Conservancy
<https://www.railstotrails.org/>

A national advocacy organization for trails.

Ride the City
www.ridethecity.com/dc

A bicycle route finding web site.

Safe Routes to School
www.saferoutesinfo.org

The Safe Routes to School programs enables community leaders, schools, and parents across the United States to improve safety and encourage more children, including children with disabilities, to safely walk and bicycle to school.

Shared-Use Mobility Center
<https://sharedusemobilitycenter.org/>

United States Access Board
www.access-board.gov

A federal agency dedicated to design that is accessible to persons with disabilities.

Virginia Bicycling Federation
www.vabike.org

Advocacy group for Virginia bicycling.

WalkArlington
www.walkarlington.com

Arlington walking information.

Washington Area Bicyclist Association
www.waba.org



National Capital Region
Transportation Planning Board

Metropolitan Washington Council of Governments
777 North Capitol Street NE, Suite 300
Washington, DC 20002

mwcog.org/tpb