

Bicycle and Pedestrian Plan for the National Capital Region



DRAFT September 2014

National Capital Region Transportation Planning Board

ABSTRACT

CREDITS

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Executive Summary



Overview

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 2040 for major bicycle and pedestrian facilities. This plan is an update to the 2010 *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, targets, and performance indicators for walking and bicycling from the *TPB Vision* (1998) and the Council of Governments' *Region Forward 2050* (2010) plans.

In addition to building upon the *TPB Vision*, the *Bicycle and Pedestrian Plan for the National Capital Region* draws on and has been shaped by a number of regional, state, and local policy statements, plans, and studies. These include the TPB's regularly updated Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP); federal and state guidance on bicycle and pedestrian facilities; and a wealth of state and local bicycle and pedestrian plans from around the region.

The *Bicycle and Pedestrian Plan for the National Capital Region* is intended to be advisory to the CLRP and TIP, and to stand as a resource for planners and the public. In contrast to the CLRP, 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”.

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, bike-to-work components of the Commuter Connections program, the Transportation-Land Use Connections program, and the region's Access for All Committee concerning minority, low-income, and disabled communities. The Transportation Planning Board and the Council of Governments 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 2007/2008 Household 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 Washington region benefits from a number of 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.

Goals and Indicators

Region Forward 2050 and the TPB's *Vision* of 1998 both encourage walking and bicycling. *Region Forward 2050* calls for more rapid implementation of the projects in this plan, increased walking and bicycling, and reduced pedestrian and bicyclist fatalities, as well as setting targets and indicators which will measure progress towards the regional goals. It also calls for specific targets and indicators which will measure progress towards the plan goals. Chapter 5 incorporates the goals in the *Vision* and *Region Forward 2050* relevant to walking and bicycling, as well as the corresponding targets and indicators from *Region Forward*. It also suggests additional indicators which could be used to measure progress.

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 6) 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 7 and the full listing in Appendix A) were identified, submitted and reviewed by agency staffs of TPB member jurisdictions. The plan includes 475 bicycle and pedestrian facility improvement projects from across the region.

If every project in the plan were implemented, in 2040 the region will have added over 770 miles of bicycle lanes, over 730 miles of shared-use paths, hundreds of miles of signed bicycle routes (signage without additional construction), 26 pedestrian intersection improvements, and sixteen pedestrian/bicycle bridges or tunnels. A new bicycle and pedestrian crossing over the Potomac would be created, at the American Legion Bridge, and bridges over the Anacostia River would be improved for pedestrians and bicyclists. In addition, 25 major streetscaping projects would improve pedestrian and bicycle access and amenities in DC, Bethesda, Arlington, Tysons Corner and other locations.

If it implements the projects in this plan, by 2040 the region will have nearly 2200 miles of bike lanes and multi-use paths, nearly four times the current total.

Progress since the 2010 Bicycle and Pedestrian Plan

Fifty-two projects from the 2010 Bicycle and Pedestrian Plan have been completed, including the 11th Street Bridge Trail and several protected or buffered bike lanes. The region added 30 miles of multiuse path. This does not include projects that have been partially completed, or any privately provided facilities, or projects such as sidewalk retrofits that were too small to be included in a regional plan.

The Washington region has become a national leader in innovative policies and designs, especially bike sharing (public self-service bicycle rental). In September 2010, the District of Columbia and Arlington County launched a regional bike sharing system, [Capital Bikeshare](#), which has since expanded to over 2500 bicycles at 300 stations in DC, Arlington, Alexandria, and Montgomery County.

Costs

Total estimated cost of projects in the draft plan is about \$2 billion (2014 dollars). For projects without an agency-submitted estimate, or in which the project appeared to be part of a larger transportation project, cost was imputed on a mileage and project type basis. Cost estimates should be considered as order-of-magnitude and in most cases do not reflect engineering-level estimates.

On-Line Resources

Development of the *Bicycle and Pedestrian Plan for the National Capital Region* has benefited from an on-line plan project database, a resource separate from the printed document. Bicycle and Pedestrian Subcommittee members were able to view, enter, and edit their project listings on-line. This on-line database will facilitate keeping the regional list accurate and up-to-date, and will facilitate integration of information from this plan into the region's *Constrained Long-Range Plan* and Transportation Improvement Program as necessary. A public access version of this on-line version of this database can be found at <http://www.mwcog.org/bikepedplan/>.

Outlook

The TPB's *Vision* and the Council of Governments' *Region Forward 2050* plans call 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 overall, inclusion of bicycle and pedestrian facilities in new transportation projects and improvements, and implementation of a regional bicycle and pedestrian plan. The *Bicycle and Pedestrian Plan for the National Capital Region* provides a blueprint for making the region a better place for bicycling and walking.

Introduction



**Bicycling, Walking and the Vision
of 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. A key part of the *Vision* is a strong urban core and a set of regional activity centers, which will provide for mixed uses in a walkable environment and reduced reliance on the automobile. The *Vision* also calls for the implementation of a regional bicycle and pedestrian plan. Recommendations in this plan will help realize the *Vision*.



Figure 1: DC Bike Lane

*The Urban Core has
a Growing Network
of Bicycle Lanes*



*The Woodrow
Wilson Bridge
Trail opened in
2009*

Figure 2: Woodrow Wilson Bridge Trail

Region Forward 2050

In 2010 the Council of Governments adopted [Region Forward](#), a vision for the National Capital region in 2050. *Region Forward* builds on the TPB *Vision*, calling for more rapid implementation of the regional bicycle and pedestrian plan, increased walking and bicycling, and reduced pedestrian and bicyclist fatalities.

This plan incorporated the goals, targets, and indicators from *Region Forward* which relate to walking and bicycling, as well as some additional indicators which will help show how well those goals are being met.

Complete Streets

The National Capital Region Transportation Planning Board adopted a [Complete Streets](#) policy in May 2012. A Complete Streets policy typically provides for safe and adequate accommodation of all users of the transportation network, including pedestrians and bicyclists, in a manner appropriate to the function and context of the relevant facility. The TPB endorsed the concept of Complete Streets and encouraged its member governments, which had not already done so, to adopt a Complete Streets policy.

The three States and a majority of the local governments in the Washington region now have Complete Streets policies. This is significant in that, isofar as Complete Streets policies are implemented, some kind of accommodation for pedestrians and bicyclists will be built as part of larger transportation projects.

Regional Transportation Priorities Plan

The National Capital Region Transportation Planning Board Regional Transportation Priorities Plan adopted the [Regional Transportation Priorities Plan](#) (RTTP) in January 2014. The Regional Transportation Priorities Plan aims to identify strategies with the greatest potential to respond to our most significant transportation challenges. It also aims to identify those strategies that are "within reach" both financially and politically-- recognizing the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue.

The RTTP expands on the TPB Vision goals for walking and bicycling, proposing improved access to transit stops and stations, expanded pedestrian and bicycle infrastructure, promotion of walking and bicycling, and concentration of growth in walkable, bikeable activity centers.

*Walking and
Bicycling
account for 9%
of all trips in the
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.¹

Taken together, bicycling and walking are a significant and growing mode of transportation in the Washington region. According to the Metropolitan Washington Council of Governments' 2008 Household Travel Survey walking and bicycling account for 9% of all trips in the Washington region, up from 8.3% in 1994.

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 increasingly being provided as part of larger transportation projects. Employers are investing in bike facilities at work sites, and developers are including paths in new construction.² The District of Columbia A pilot bike sharing program, [Smartbike](#), the first such program in the United States, has been implemented in the District of Columbia, and a large-scale regional bike sharing program, *Capital Bikeshare*, is in the planning phases.

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 average work trip length for all modes in the Washington Metropolitan Statistical Area is 16 miles.³

But 17% of commute trips are less than five miles, a distance most people can cover by bicycle.

*One fourth of all
driver trips in the
Washington Region
are less than 1½ miles
long*

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.

¹ DC Bicycle Lane Photo: COG/TPB /Michael Farrell

² Woodrow Wilson Bridge Trail Photo: COG/TPB / Michael Farrell

³ National Capital Region Transportation Planning Board, *2013 State of the Commute Survey Report*, p. 32.

The potential for shifting non-work trips to bicycling or walking is even greater than for work trips. The average non-work trip is a little more than five miles, and nearly 3/4 of all trips are non-work trips.⁴ The median auto driver trip in the Washington region, according to the 2008 COG Household Travel Survey, is four miles. The median trip for an auto passenger is only 2.8 miles. One fourth of all auto trips are less than 1½ miles in length. 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.

*The New York Avenue
Metro Station
Incorporates a Shared-
Use Path and Bicycle
Parking*

Plan Development and Organization

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 made up of representatives of 20 local governments, the departments of transportation of Maryland, Virginia, and the District of Columbia, the state legislatures, and the Washington Metropolitan Area Transit Authority (WMATA). Member jurisdictions are shown in Figure i-A on page i-5. The area of the TPB members plus Calvert County in Maryland and Stafford County in Virginia comprises the Washington, DC-MD-VA Metropolitan Statistical Area (MSA).



Figure 3: New York Avenue Metro Station and Metropolitan Branch Trail

This document presents the long-range Bicycle and Pedestrian Plan for the Washington Region through the year 2040. The plan is a list of regional projects identified by the TPB member jurisdictions, accompanied by recommended best practices and a

⁴ National Capital Regional Transportation Planning Board, *1994COG/TPB Household Travel Survey: Summary of Major Findings*, January, 1998. Page 5.

description of existing facilities and regional trends for bicycling and walking. This plan includes both funded and unfunded projects. It does not specify design guidelines, but refers instead to state and national 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, Region Forward 2050*, and the *Regional Transportation Priorities Plan* while building on information from previous bicycle plans. It includes performance measures that will show progress towards the *Vision* and *Region Forward* goals.

Pedestrian access and safety receives increased attention in this update, reflecting increased attention to pedestrian issues by the TPB member governments and agencies. . Pedestrian planning is most needed at the county, city and neighborhood level. There is, however, a role for regional pedestrian planning, especially in the area of educating the public.

**Figure i-A
TPB Planning Area**



Chapter 1
Planning Context

Overview

This *Bicycle and Pedestrian Plan for the National Capital Region* draws on and has been shaped by a number of regional, state, and local policy statements, plans, and studies, including the *Vision* and the *Regional Transportation Priorities Plan (RTPP)* of the Transportation Planning Board, the *Region Forward 2050* vision of the Council of Governments, federal and state guidance on provision of bicycle and pedestrian facilities, the Constrained Long Range Plan and Transportation Improvement Program, and state and local bicycle and pedestrian plans.

This plan is intended to help fulfill the goals of the *TPB Vision*, *RTPP*, and *Region Forward 2050* for bicyclists and pedestrians. It includes performance measures that will show progress towards the *Vision* and *Region Forward* goals.

I. 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 into the new century. The *Vision* is not a plan with a map or specific lists of projects. It lays out eight broad goals, with associated objectives and strategies that will help the region reach its goals.

*The Vision of the
TPB calls for more
Walking and
Biking*

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 the per capita vehicle miles traveled, linking land use and transportation planning, and achieving enhanced funding for transportation priorities. Sections of the *Vision* relating to bicycle and pedestrian goals are highlighted

**National Capital Region Transportation Planning Board
Member Jurisdictions**



in Table 1-1.

Table 1-1: Bicycle and Pedestrian Provisions of the Transportation Vision

<p><u>Goal 1. The Washington metropolitan region's transportation system will provide reasonable access at reasonable cost to everyone in the region.</u></p> <p>Objective 4: Convenient bicycle and pedestrian access.</p> <p>Strategy 3: Make the region's transportation facilities safer, more accessible and less intimidating for pedestrians, bicyclists, and persons with special needs.</p> <p><u>Goal 2. The Washington metropolitan region will develop, implement, and maintain an interconnected transportation system that enhances quality of life and promotes a strong and growing economy through the entire region, including a healthy regional core and dynamic region activity center with a mix of jobs, housing, and services in a walkable environment.</u></p> <p>Objective 2: Economically strong regional activity centers with a mix of jobs, housing, services, and recreation in a walkable environment.</p> <p>Objective 4: Improved internal mobility with reduced reliance on the automobile within the regional core and within regional activity centers.</p> <p><u>Goal 5. The Washington metropolitan region will plan and develop a transportation system that enhances and protects the region's natural environmental quality, cultural and historic resources, and communities.</u></p> <p>Objective 3: Increased transit, ridesharing, bicycling and walking mode shares.</p> <p>Strategy 7: Implement a regional bicycle/trail/pedestrian plan and include bicycle and pedestrian facilities in new transportation projects and improvements.</p>
--

Region Forward 2050

The Council of Governments is a regional organization of Washington area local governments. COG is comprised of 21 local governments surrounding our nation's capital, plus area members of the Maryland and Virginia legislatures, the U.S. Senate, and the U.S. House of Representatives.

*Region Forward 2050
Calls for Faster
Construction of the
projects in the Bicycle
and Pedestrian Plan*

COG provides a focus for action and develops sound regional responses to such issues as the environment, affordable housing, economic

development, health and family concerns, human services, population growth, public safety, and transportation.

In January 2010 the Council of Governments adopted *Region Forward*, a vision for the National Capital region in 2050. The goals of *Region Forward* are broader than those of the *TPB Vision*, encompassing areas such as public safety, land use, economic development, housing, and the environment. For transportation, *Region Forward* builds on the *TPB Vision*, calling for more rapid implementation of the regional bicycle and pedestrian plan, increased walking and bicycling, and reduced pedestrian and bicyclist fatalities.

Provisions of *Region Forward* relating to bicycling and walking are summarized in Table 1-2.

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**Table 1-2:
Bicycle and Pedestrian Provisions of Region Forward 2050**

Goals:

- Transit-oriented, compact, **walkable mixed-use communities** emerging in Regional Activity Centers that will capture new employment and household growth.
- A transportation system than maximizes **community connectivity** and **walkability**, and minimizes ecological harm to the region and the world beyond.
- A broad range of public and private transportation choices for our Region which maximizes accessibility and affordability to everyone and **minimizes reliance upon single occupancy use of the automobile**.
- Safe and healthy communities

Targets:

Reduce daily vehicle miles traveled (VMT) per capita.

Increase the rate of construction of bike and pedestrian facilities from the Transportation Planning Board's (bicycle and pedestrian) plan.

Prioritize walking and biking options by **improving pedestrian and bicycle networks**, especially in the regional activity centers. Planning and street improvements will focus on:

- Wide sidewalks
- Street trees
- Mixed-use development
- Pedestrian-friendly public spaces
- Bike stations near transit hubs
- Bike lanes
- Bike sharing

Increase the share of walk, bike and transit trips

- Give people options to meet everyday needs locally by building mixed-use developments

Reduce pedestrian and bicyclist fatalities

- Build sidewalks, bike lanes, and other improvements
- Narrower local streets
- Better crossings
- Lower speeds for vehicles on local streets and arterials
- More education and enforcement

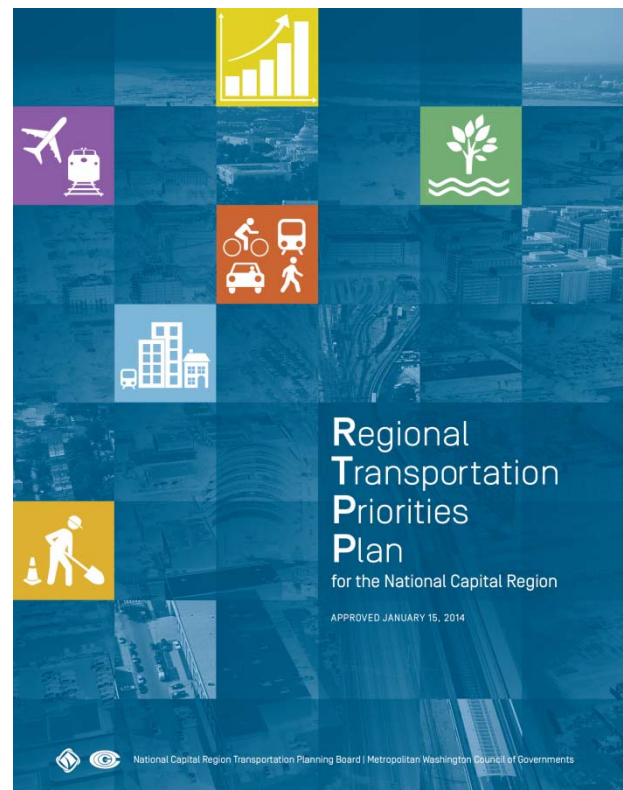
Indicators:

- Transit, bicycle and walk share in Regional Activity Centers
- Street/node ratio for Regional Activity Centers
- Square feet of mixed-use development
- Reduced pedestrian and bicyclist fatalities

Regional Transportation Priorities Plan

On January 15, 2014, the TPB approved the [Regional Transportation Priorities Plan](#) (RTPP). The RTPP builds on the *Vision* goals by identifying strategies with the greatest potential to respond to our most significant transportation challenges. The strategies are intended to be complementary, to make better use of existing infrastructure, and to be "within reach" both financially and politically. The RTPP recognizes the need for pragmatism in an era of limited financial resources and a lack of political will to raise significant amounts of new revenue.

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**
- **Improve circulation** within activity centers through enhanced
 - Pedestrian and bicycle infrastructure
 - Local bus service
 - Street connectivity

Expanded use of space-efficient modes such as walking, bicycling, and transit use, particularly in the activity centers, are essential to the success of the RTPP.

Complete Streets

In May 2012 the TPB approved a [*Complete Streets Policy for the National Capital Region*](#). They defined 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.

All three states and most of the TPB member governments and agencies have adopted some form of Complete Streets policy.

The significance of Complete Streets is that future pedestrian and bicycle projects are likely to be built as part of larger transportation projects, funded out of general revenue, rather than as stand-alone bicycle and pedestrian projects built with limited set-aside funds. 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.

The TPB Complete Streets policy also called upon TPB staff to carry out training on Complete Streets for agency staff within six months of adoption, and within two years to document the adoption and implementation of State and local Complete Streets policies in the Transportation Improvement Program, and create a regional information clearing house to provide access to state and local project web sites.

Follow-on actions to the policy included a [Complete Streets implementation workshop](#), held on January 29th, 2013, can be found on the Bicycle and Pedestrian Subcommittee web site, and the establishment of an information clearinghouse, the [Transportation Planning Information Hub for the National Capital Region](#), where links and information on state and regional planning processes and high-profile projects can be found.

The TPB's Complete Streets policy is part of a long-run [national trend](#) towards better accommodation of pedestrians and bicyclists in transportation projects.

Constrained Long-Range Plan

The financially Constrained Long-Range Transportation Plan (CLRP) is a comprehensive plan of transportation projects and strategies that the TPB realistically anticipates can be implemented by 2040. Some of these projects are scheduled for completion in the next few years; others will be completed much later. Each year the plan is updated to include new projects and programs, and analyzed to ensure that it meets federal requirements relating to **air quality** and **funding**.

The projects and programs that go into the CLRP are developed cooperatively by governmental bodies and agencies represented on the National Capital Region Transportation Planning Board (TPB). The TPB Vision, the policy framework adopted by the TPB in 1998, and the Regional Transportation Priorities Plan, adopted in 2014, serve guide project development.

To receive federal funding, a transportation project in metropolitan Washington must be included in the CLRP. Because funds must be reasonably anticipated to be available for all the projects in the CLRP, the CLRP is realistic plan based upon available resources.

Historically, less than 1% of the capital funding in the CLRP has been specifically for stand-alone bicycle and pedestrian projects. However, since bicycle and pedestrian projects are usually small projects, they are often added to the plan later than the major highway and transit projects. Moreover, much pedestrian and bicycle spending is subsumed within larger highway or transit projects, and thus is not reflected in the amount programmed for bicycle and pedestrian projects. Therefore, the CLRP probably under-estimates the amount of bicycle and pedestrian spending that will occur over the next 25 years. State Departments of Transportation are likely to increase funding levels in the future as they implement their Complete Streets policies, under which they will routinely accommodate pedestrians and bicyclists in most new transportation projects.

Transportation Improvement Program

The [Transportation Improvement Program](#) (TIP) provides detailed information showing which projects in the CLRP will be completed over the next six-year period. The TIP is updated every year. Like the CLRP, the TIP is subject to federal review. Many projects in the TIP are staged, so a single CLRP project could end being split into multiple TIP projects.

Bicycle and pedestrian projects, and transportation projects that include bicycle and pedestrian accommodation, are tracked in TIP. Under the regional Complete Streets policy, agencies are also required to report future TIPs whether they have a Complete Streets policy in place, and if so whether a project in the advances the goals of that policy.

*The Transportation
Improvement
Program includes
\$313 million for
pedestrian and
bicycle projects*

Funding for bicycle and pedestrian projects in the TIP has is increasing. For example, the Fiscal Year 2013-2018 TIP includes \$313 million for bicycle and pedestrian projects, nearly triple the \$124 million in bicycle and pedestrian projects in the FY 2010-2015 TIP.

Of the \$313 million, \$85 million is programmed for FY 2013, which is two percent of the total capital funds for all transportation projects programmed for FY 2013. Only \$23 million was programmed for bicycle and pedestrian projects in FY 2010.

As with the CLRP, funds spent on bicycle and pedestrian accommodations as part of a larger highway or transit project are often subsumed in budget of the larger project.

Top Priority Unfunded Bicycle and Pedestrian Projects

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.

The Subcommittee periodically selects a short list of priority unfunded bicycle and pedestrian projects, which it recommends for inclusion in the TIP. These projects are selected from the regional bicycle plan, and from state and local plans. The subcommittee has compiled and forwarded lists to TPB regularly since 1995, to be included in the solicitation document for the TIP/CLRP. In essence, the TPB urges the jurisdictions to consider funding these projects, which the Bicycle and Pedestrian Subcommittee has judged to be regionally significant, within six years.

The following selection criteria are used:

- **Bicycle Network Connectivity:** priority is given to projects that enhanced connectivity of facilities on the regional bicycle facilities network.
- **Pedestrian Safety:** priority is given to projects that promoted pedestrian safety, especially in areas with documented pedestrian safety problems and no pending road project that could address them.
- **Access to Transit:** priority is given to projects that enhanced access to Metrorail stations and other major transit stops or facilities.
- **Time Frame:** all projects should be able to be completed by 2018, the end of the TIP time frame.
- **Local Support:** the project is a priority for the jurisdiction or jurisdictions in which it is located.
- **Still seeking funding:** the project does not yet have full construction funding committed to it.
- **Reasonable Cost:** the total cost of the list should be a reasonable fraction of the total spending in the region on highways and bridges.

While considerable weight is given to the preference of the representative of the jurisdiction, subcommittee members are urged to think in terms of the regional selection criteria when nominating projects.

Projects are dropped from the list when they receive funding, or if the subcommittee and nominating jurisdiction decide that priorities have changed.

Four projects on the September 2012 list received partial funding, totaling \$5,745,000.

Projects from the list funded since 1995 include:

- US 15 Trail Tunnel (City of Frederick)
- Regional Bike Sharing (Capital Bikeshare), DC, Arlington, Alexandria, Montgomery County
- The Metropolitan Branch Trail in Washington, D.C.
- The Holmes Run Pedestrian/Bicycle crossing in Alexandria
- Pedestrian and Bicycle Safety Improvements on Route 1 in Fairfax County
- The Dumfries Road (Route 234) Bike Path in Prince William County
- The Rosslyn Circle Crossing in Arlington County
- The Eisenhower Trail in Alexandria
- The Matthew Henson Trail in Montgomery County
- The Falls Road Shared-Use Path in Montgomery County
- The Henson Creek Trail in Prince George's County
- The Millennium Trail in Rockville

Bicycling, Walking, and the Regional Transportation 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](#).

Encouraging Bicycling and Walking: Bike to Work Day, the Bike to Work Guide, and Guaranteed Ride Home

To help realize the *TPB Vision* and reduce congestion, air pollution, and single occupant vehicle traffic, the TPB has developed several programs to encourage bicycling and walking in the Washington region. As part of its [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 over sixteen thousand riders to seventy-nine “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.

Regional bike routing is available at www.ridethecity.com, and 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.

Encouraging Walkable Development: the Transportation-Land Use Connections Program

The [Transportation Land Use Connections](#) (TLC) Program provides support to local governments in the Metropolitan Washington region as they work to improve transportation and land use coordination. Through the program, the TPB provides communities with technical assistance to catalyze or enhance planning efforts for planning for transit and pedestrian access. Since 2007 dozens of pedestrian and transit access planning projects have been funded through the TLC program. Community response has been enthusiastic, and competition for the grants has been stiff.

II. 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 US DOT headquarters in Washington, D.C.](#) 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 more 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.

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 to the
Handicapped*

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 general 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.¹

Design standards for the disabled, such as smoother surfaces, adequate width, and limits on cross-slope, are also beneficial for the non-disabled pedestrian. Good design for persons with disabilities is good design for all. For more information on the Americans with Disabilities Act, contact the [US Access Board](#).

*All Federal
Transportation
Funds may be
used for Bicycle
and Pedestrian
Projects*

MAP-21 and the Transportation Alternatives Program

Under [MAP-21](#) (Moving Ahead for Progress in the 21st Century Act) the federal transportation bill signed in July 2012, bicycle and pedestrian projects remained broadly eligible for nearly all funding categories, including transit funding, either for projects incorporated into something larger, or for stand-alone bicycle and pedestrian projects. MAP-21 funded surface transportation programs at over \$105 billion for fiscal years (FY) 2013 and 2014. MAP-21 was the first long-term highway authorization enacted since 2005.

MAP-21 largely eliminated high priority projects, sometimes known as legislative earmarks, many of which were bicycle or pedestrian projects.²

However, the biggest change for pedestrian and bicycle projects is that MAP-21 combines several funding programs from its predecessor, SAFETEA-LU, that were often used to fund pedestrian and bicycle projects, into a single program, the [Transportation Alternatives program](#). The TA Program combines three former federal programs: Transportation Enhancements (TE), [Safe Routes to School](#) (SRTS), and Recreational Trails (RTP). Eligible recipients include local governments, regional transportation

¹ American Council for the Blind, *Pedestrian Safety Handbook: A Handbook for Advocates*. www.acb.org

² See www.bikeleague.org for further information on the Bicycle and Pedestrian provisions of SAFETEA-LU.

authorities, transit agencies, natural resource or public land agencies, school districts and agencies, and other appropriate local or regional governmental entities. Non-profits are not eligible to be direct recipients of the funds. Eligible projects will include bicycle and pedestrian facilities, complete streets, safe routes to schools, environmental mitigation, and others.

One of the key differences between the TA Program and the previous programs is that large MPOs, including the Transportation Planning Board, play a new role in project selection for a portion of program funds that will be sub-allocated to large metropolitan regions. For the National Capital Region, this new 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 component of 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 Regional Transportation Priorities Plan.

Projects funded under the FY 2013 and FY 2014 TA program for the National Capital can be seen [here](#).

MAP-21 is only a two year bill, so the rules could change again in FY 2015.

American Recovery and Reinvestment Act

Signed into law on February 17, 2009, the [American Recovery and Reinvestment Act](#) of 2009 (ARRA) provided over \$48 billion for transportation, including \$27.5 billion for highway infrastructure investment, \$8.4 billion for transit capital assistance, \$8 billion for high speed rail, \$1.5 billion for a competitive grant program for surface transportation, and \$1.3 billion for Amtrak.

*The District of
Columbia spent
nearly half its
stimulus funds on
pedestrians and
bicyclists*

The District of Columbia was allocated \$123.5 million, Maryland \$431 million (\$129 million sub-allocated to urban areas) and Virginia \$694.5 million (\$208 million sub-allocated to urban areas) in highway formula funds.

ARRA was a one time, “stimulus” bill, intended to promote recovery from the economic recession. Projects funded through ARRA were supposed to be capable of implementation within a relatively short time frame, which has in practice caused funds to be directed to those projects for which design was already complete, and which did not need additional right of way.

The District of Columbia spent nearly half its \$123.5 million allocation on bicycle and pedestrian projects. Over \$50 million will be spent on streetscaping and sidewalk construction, \$4 million for [Safe Routes to School](#), and a \$3 million on an expanded bike

sharing program. In addition bridge reconstruction projects will include upgraded sidewalks. Since projects are bid as a whole, the cost of the pedestrian portion of a project is not estimated separately.

Apart from \$4.6 million for ADA improvements, Maryland had no identifiable pedestrian or bicyclist projects funded under ARRA. Maryland stimulus funds largely went to resurfacing and bridge rehabilitation projects, often on limited-access highways. Out of \$160 million programmed so far in Northern Virginia, \$10 million was allocated to identifiable pedestrian and bicycle projects, such as pedestrian bridges and underpasses, trail reconstruction, streetscaping, and traffic calming.

The degree to which pedestrians and bicyclists benefited from the Act depended to a great degree on the extent to which the Departments of Transportation have included pedestrian and bicycle facilities in their project planning and design. An effective “complete streets” policy is critical.

III. State Policies

District of Columbia

As the center of the Washington region, a major employment center, and one 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 more to encourage walking and bicycling than is currently envisioned in Maryland or Virginia. [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

The District of Columbia is to become a “walk-centric, bike-centric” city.

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 are to have considerable input into transportation projects.

Due to the built-up character of the District of Columbia, DDOT rejects road widening as a means of increasing transportation capacity. Instead, DDOT aims to shift travel from less space-efficient modes, such as single occupant driving, 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 will encourage

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 is to 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

In May 2014 DDOT released the District's new Transportation Plan, MoveDC, for public comment. The draft MoveDC plan 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:

- Achieve 75% of all commute trips in the District by non-auto modes
- Achieve zero fatalities and serious injuries on the District transportation network
- Support neighborhood vitality, public space, and economic development.
- Manage streets to increase person-carrying capacity and reliability, through signal changes, parking management, pricing, and vehicle occupancy requirements
- Reduce travel demand through various Transportation Demand Management strategies
- Invest in better maintenance and asset management

In accordance with DC's Complete Streets policy, every street will accommodate all legally permitted users, but different streets will have different modal priorities.

Pedestrian Element

The Pedestrian Element promises to reduce the number of pedestrian injuries and fatalities, prioritize pedestrians, and create a pedestrian environment that accommodates people of all ages and abilities. To that end,



- All roadway reconstruction and development projects are to include **safe and convenient pedestrian facilities**. All projects should meet the standards identified in DDOT's **Public Realm Design Manual** and the **Design and Engineering Manual**.
- Identified priority corridors are to be improved.
- **Sidewalks** should be provided on **at least one side** of every street and preferably on both sides of every street.
- **Pedestrian crossings should be provided across all legs** of an intersection unless a special exception can be clearly justified.
- Improve **crossing safety**
- Create new street connections
- Expand **pedestrian education**, including the [Street Smart](#) campaign, which is carried out in partnership with the Metropolitan Washington Council of Governments
- Expand **automated red-light** and **speed enforcement**

Bicycle Element

The Bicycle Element of MoveDC is more ambitious than the 2005 Bicycle Master Plan. MoveDC recommends adding 213 miles of bicycle infrastructure. The system will eventually total 136 miles of bike lanes, 72 miles of protected bike lanes (cycle tracks), and 135 miles of trails, as well as more public and private bike parking, expanded bike sharing, and signed neighborhood bike routes.

The objective is to make bicycling a “principal and preferred” mode for travel, with a 12 % bicycle mode share for all trips that start and end in the District.

MoveDC will fill major gaps in the regional bicycle network, and improve connections between the District, Maryland and Virginia. MoveDC proposes two new bicycle and pedestrian crossings of the Potomac River, and three new crossings of the Anacostia, including

*DDOT expects a
12% bike mode
share for trips
within the District*

- A Massachusetts Avenue Bicycle and Pedestrian Bridge over the Anacostia River
- A new Long (Railway) Bridge connecting SW DC to Arlington
- A bicycle and pedestrian bridge from the Georgetown waterfront to Roosevelt Island, which together with a proposed K Street Cycle Track would provide an off-street connection between the Mount Vernon Trail, the Capitol Crescent Trail, and the Rock Creek Trail.

- A bicycle and pedestrian bridge and trail over the Anacostia River, from Kenilworth Park in NE and the Anacostia River Trail, to the National Arboretum and near NE.
- A New York Avenue Corridor trail and bridge to connect downtown DC with Anacostia River Trail system in Prince George’s County.

Other bridges that currently have mediocre bike and pedestrian facilities will be upgraded, and a multi-use path will be added to the Military Road Bridge across Rock Creek Park. The expanded District bicycle network will host signed national and regional bicycle routes including US Bike Routes 1 and 50, the East Coast Greenway, and the Potomac Heritage Trail.

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.

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 **Maryland Bikeshare Program** provides grants to communities interested in adding a bikeshare system, notably Montgomery County.

Maryland State Highway Administration adopted [Complete Streets policy](#) in 2012.

The current [Maryland Twenty-Year Bicycle and Pedestrian Master Plan](#) (2014) 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.



bicyclists

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.

MDOT has also published an [Accessibility Policy and Design Guidelines for Pedestrian Facilities along State Highways](#) (2010), [Bicycle Policy and Design Guidelines](#) (2013), 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.³

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 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.

*Virginia requires
“routine
accommodation” of
pedestrians and
bicyclists in
transportation
projects*

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

³ www.virginiadot.org

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.

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.

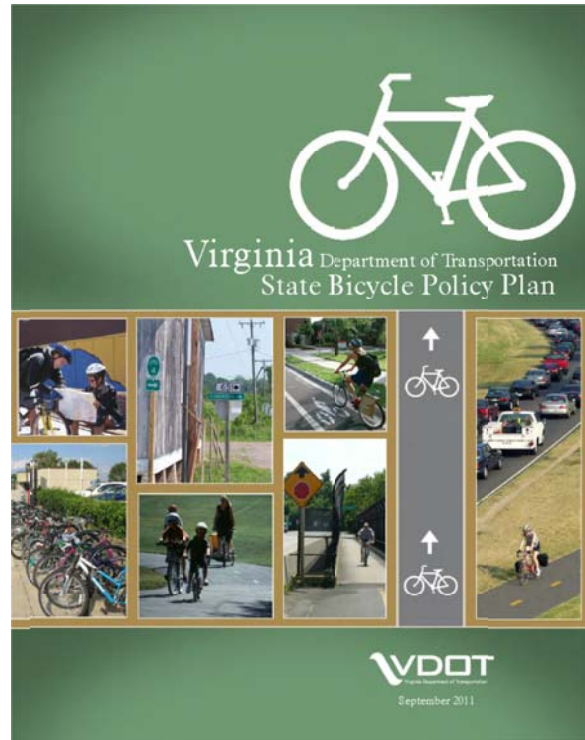
Cul-de-sac development patterns have long been an obstacle to walking or bicycling in suburban areas. More direct, traffic-calmed secondary streets will allow more people to walk or bike to local destinations.

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 State for maintenance, which in Virginia means almost all development. As the economy recovers, and new development applications fall under the new rules, we will be able to see the results of the new policies.

Virginia State Bicycle Policy Plan

VDOT completed a [State Bicycle Policy Plan](#) in April, 2010, which incorporates the policies discussed above, as well as the most recent federal guidance. The plan calls for bicycling 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](#).

Virginia requires new developments to connect with the surrounding streets



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 should be able to 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”.

IV: Local Bicycle and Pedestrian Planning

Nearly every jurisdiction in the region has completed a bicycle or pedestrian plan, and most have at least part time bicycle or pedestrian planner. Table 1-2 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 1-2:
Major Bicycle and Pedestrian Plans and Studies
Of the Washington Region**

Jurisdiction/ Agency	Plan/Study	Year
Arlington County	Pedestrian Transportation Plan, Bicycle Transportation Plan, Bike Lane Plan Arlington Master Plan - Pedestrian Element, Bicycle Element	1997, 1994 2001, 2008
City of Alexandria	Pedestrian and Bicycle Mobility Plan	2008
District of Columbia	District of Columbia Bicycle Master Plan, District of Columbia Pedestrian Master Plan, MoveDC	2005, 2009, 2014
Fairfax County	Countywide Trails Plan, County Bicycle Map, Phase I Bicycle Master Plan (Tysons), Fairfax County Comprehensive Plan	2002, 2009, 2011, 2013
Frederick County	Frederick County Bikeways and Trails Plan, Bicycle Parking Design Guide, Bicycle and Pedestrian Plan, Bicycle and Pedestrian Plan	1999, 2003, 2011
City of	Transportation Plan, Bikeways	2010, 1999

Gaithersburg	and Pedestrian Plan	
City of Laurel, Maryland	Bikeway Master Plan	2009
Loudoun County	Loudoun County Bicycle and Pedestrian Master Plan	2003
Maryland Department of Transportation	Maryland Twenty Year Bicycle and Pedestrian Master Plan SHA Complete Streets Policy 2009 Maryland Trails Strategic Implementation Plan	2014, 2012, 2008
MNCPPC – Prince George's County	Transportation Priority List (Joint Signature Letter) Countywide Master Plan of Transportation	1999, 2009
Montgomery County	Countywide Bikeways Functional Master Plan	2005
National Capital Planning Commission	Comprehensive Plan for the National Capital	2004
National Capital Region Transportation Planning Board	Priorities 2000: Metropolitan Washington Greenways & Circulation Systems, Bicycle and Pedestrian Plan for the National Capital Region	2001, 2006, 2010
National Park Service	Paved Recreation Trails Plan	1990
Prince William County	Transportation Chapter of Comprehensive Plan), Greenways and Trails Plan	2008, 1993
City of Rockville	Bikeway Master Plan	2014
Virginia Department of Transportation	Virginia Department of Transportation State Bicycle Policy Plan	2010
Virginia Department of Transportation, Northern Virginia Office	Northern Virginia Regional Bikeway and Trail Network Study	2003

WMATA	Metrorail Bicycle & Pedestrian Access Improvements Study , Bicycle and Pedestrian Element of the CIP	2010, 2012
Jurisdiction/ Agency	Plan/Study	Year

Table 1-3 shows the approximate number of full-time planners each agency has working on bicycle, pedestrian, and trails planning.

**Table 1-3:
Agency Bicycle/Pedestrian Planning Staff
Full-Time Equivalents (FTE's)**

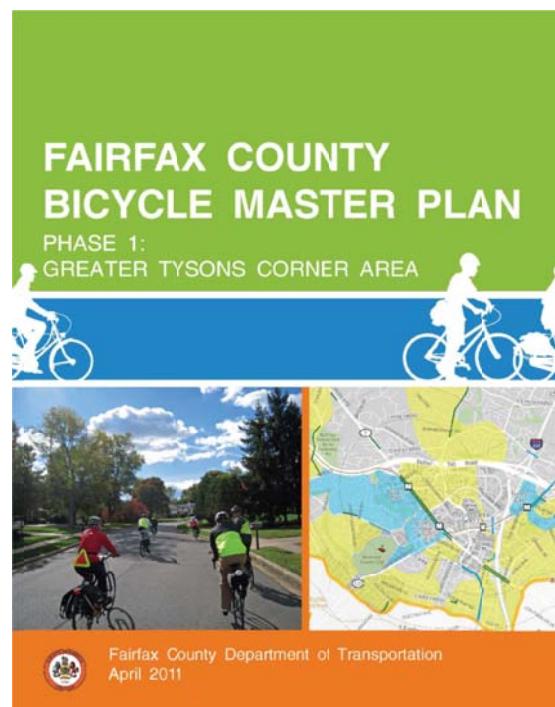
Jurisdiction/ Agency	Bicycle Planner FTE's	Pedestrian Planner FTE's	Trails Planner FTE's
Arlington County	1	1	1
City of Gaithersburg	0.5		
City of Alexandria	0.5	0.5	
City of College Park	0.5		
City of Frederick	0.5	0.5	
City of Rockville	0.5	0.5	
District of Columbia	2	1	1
Fairfax County	1	1	2
Frederick County	0.25	0.25	
Loudoun County	0.5		
Maryland Department of Transportation	1	2	1

MNCPPC – Montgomery County	0.33	0.33	1
MNCPPC – Prince George's County			1
Montgomery County	1	1	1
National Capital Region Transportation Planning Board	0.5	0.5	
National Park Service			1
Prince William County			0.5
WMATA	0.5	0.5	
Virginia Department of Transportation, Northern Virginia Office	1	1	

Metrorail Silver Line

Since 2010 one of the most significant changes in the region has been the extension of the Metrorail to Tysons Corner in Fairfax County (due to open in summer 2014), and (in Phase II) to 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 will provide the foundation for this shift. Pedestrian and bicycle access will be critical to making a redeveloped Tysons work.



Future [Silver Line](#) stations along the Dulles Tollway will serve park and ride commuters, but will also incorporate some development and some pedestrian and bicycle access, in an area which has been overwhelmingly oriented towards driving. Plans call for an eventual extension further into Loudoun County, which has been working on station-area pedestrian and bicycle access plans.

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

- **Passenger safety and security:** Examples of safety-related projects 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.
- **Metrorail 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 access problems at its Metrorail stations. A number of the projects identified as part of that process, totaling \$25 million, have been funded in WAMA's Capital Improvement program. A few examples of completed projects are shown below. WMATA is no longer builds fences to keep pedestrians out of its rail stations.

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



WMATA has also been working to identify “hot spots” of short distance auto access; i.e. places where people live close enough to walk to Metro, but don’t, and studying those areas to find out what is missing.

The National Capital Region Transportation Planning Board is currently working with WMATA on another study that will identify needed pedestrian and bicycle improvements at 25 under-used Metrorail Stations, [*High Impact Complete Streets Access Improvements for Rail Station Areas in the Washington Region*](#). This study will build on the results of WMATA’s 2010 study.

V: Regional Bicycle and Pedestrian Planning

Precursors to the Current Plan

The Washington region completed its first major bicycle study, the *Washington Regional Bikeways Study* in 1977. This study, created under the supervision of the Regional Bikeways Technical Subcommittee of the Transportation Planning Board Technical Committee, provided an overview of bicycling characteristics and the potential market for bicycle commuting.

In 1988 the Bicycle Technical Subcommittee began work on a bicycle element for incorporation into the region's transportation plan. The plan identified the extent to which bicycle facilities and planning processes already existed in the region, highlighted areas of concern for the future, and drafted a set of policy principles to be applied by the region's jurisdictions in updating their own transportation plans, as well as a list of recommended bicycle projects. The *Bicycle Element* was adopted by the Transportation Planning Board as part of the region's Constrained Long-Range Plan in November 1991.

In 1995, the Transportation Planning Board adopted an update to the 1991 *Bicycle Element*, the Bicycle Plan for the National Capital Region, as an amendment to the Constrained Long-Range Plan. The revised plan emphasized bicycling for transportation and recommended project lists and policy principles produced by the Bicycle Technical Subcommittee.

In February 2001, the TPB completed the *Priorities 2000: Greenways and Circulation Systems* reports, which identified greenway and pedestrian circulation systems priorities.

Except for the *Priorities 2000* reports, predecessors to the 2006 *Bicycle and Pedestrian Plan for the National Capital Region* were "bicycle" plans. The 2006 plan fully incorporated pedestrian elements for the first time. The 2006 plan was updated in 2010. This plan is an update to the 2010 plan.

Sources of the Regional Plan Projects

State, local, and agency bicycle and pedestrian plans are the source of the projects in this plan. Projects should be at least one mile in length or \$300,000 in cost to be included in the regional plan. They need not have an identified funding source.

Outlook

The Transportation Planning Board and the Council of Governments have a continuing and growing commitment to walking, bicycling, and the concentration of future growth in walkable, mixed-use activity centers. COG's *Region Forward 2050* shares the goals of

the TPB's *Vision* and proposes specific performance indicators and a schedule for reporting progress. Increasing the rate at which projects in this plan are constructed is an explicit goal of the Council of Governments' *Region Forward 2050* vision.

The *Regional Transportation Priorities Policy* re-affirms the commitment to bicycling and walking in the TPB *Vision*, while better explaining the role that increasing walk and bike mode share will play in supporting the growth of the regional activity centers, and making better use of existing transit infrastructure.

The Federal, State, and local policy environment has been changing in ways that make it more likely that goals of the regional plans will be met. Complete Streets policies are being adopted, strengthened and implemented. Pedestrian and bicycle facilities in most jurisdictions will no longer be "amenities" which agencies will consider providing, but facilities that they will routinely provide as part of every project. At the same time, land use, parking, and urban design policies are changing in ways that will make walking and bicycling a viable choice for more trips.

Partnerships between WMATA, local government, and business are growing transit-oriented around existing and new Metrorail stations, notably at Tysons Corner, shifting more trips to walk and bike modes.

As the economy recovers and development restarts, the effects of the policy changes of the last few years will become evident in the way people live, work, and travel in our region.

Chapter 2
Bicycling and Walking in the Washington Region

Overview

Residents of the Washington region walk and bicycle at about the same rate as the nation as a whole. Tables 2-1 and 2-2 show the share of walking and bicycling trips to work for the ten largest metropolitan areas.

Nationally, 10% of all urban area trips are made on foot or by bike

the ten largest metropolitan areas.

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.² 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%.

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

Trips in the Urban Core are Usually Short Enough to Walk or Bike

In the first decade of the 21st Century, growth in solo driving share appears to have stopped, and transit, walking and bicycling

mode shares have stabilized. 76% of workers drove alone in 2012, which is essentially the same as in 2000, and public transportation grew from 4.7% to 5%.

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

1 2000 US Census, 2006-2008, 2008-2012 American Community Survey
2 1960 Census of Population, Characteristics of Population, United States Summary

The walk and bike modes are more common than the census commute mode numbers would lead one to believe. Work trips account for less than 20% of all trips, and walking and biking are more common for other purposes. The most recent data documenting mode of transportation for all trips taken in the U.S. comes from the 2009 National Household Travel Survey (NHTS). According to the NHTS 1.0% of all trips taken in the U.S. are made by bicycle and 10.4% are by foot.³

Ethnicity, gender, geography, age, and car ownership affect the decision to walk or bicycle.

People under the age of 44 are more likely to walk or bicycle than people older than age 44, and people over age 65 have the lowest rates of walking and bicycling, with 13% of the U.S. population and but 10% of all walking trips and 6% of all bicycling trips. Children, as would be expected, are most likely to walk and bike - Estimates from NHTS indicate that youth under age 16 make up 39% of bicycling trips, despite accounting for just 21% of the U.S. population. This age group also accounts for 17% of walking trips.

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. Middle-income groups are slightly less likely to walk or bicycle than either low-income or high-income groups. Whites are more likely to bicycle. Only 24% of bike trips in the United States are taken by women.

Regionally, bicycling and walking are concentrated in the core neighborhoods 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 shares for all trips have grown, while bike mode shares have stabilize. Walking and bicycling have grown in the core. Bicycling, however, suffered a steep decline in the outer jurisdictions, resulting in no net increase between 1994 and 2007/2008.

Cold weather/winter is a major barrier to commuter cycling, along with distance, absence of safe routes, and lack of end-of-trip facilities such as showers and lockers.⁴ Trips in the outer suburbs are usually farther than most people are willing to walk or bicycle. However, most commute trips that are short enough to be bikable or walkable are still taken by car. The average trip distance to transit or carpool is short.

Transit and walking are interdependent, with 80% of bus and 60% of Metrorail access

³ Alliance for Bicycling and Walking, *Bicycling and Walking in the United States: 2014 Benchmarking Report*, page 35.

⁴ Metropolitan Washington Council of Governments, *2013 Bike to Work Day Survey- Summary of Results*, January 2014. Page 11.

trips on foot. Mode of access varies tremendously by Metro station. Bicycling to transit is less common and varies greatly by Metro station, with the lowest rates of bicycle access found east of the Anacostia river.

Walking and Bicycling Trends According to the US Census

The 2010 decennial US census form was shortened, and the decennial census no longer provides information on journey to work. In place of the long form, the census bureau carries out an annual survey, the American Community Survey (ACS), which contains information on journey to work.

The ACS data is currently the most up to date source of information on walk and bike mode shares. The five-year 2008-2012 rolling averages are reasonably accurate down to the census tract level. At the County level we show the 2012 American Community Survey Data.

The 20th Century trend towards less walking and bicycling also held for the Washington Metropolitan Statistical Area (MSA). In 1990, 6,633 people (0.3 %) biked to work on an average day in the Washington area and 85,292 (3.9 %) walked. In 2000, 7,532 people (0.3%) biked to work and 72,700 (3.1%) walked. In the first decade of the 21st century walk mode stabilized, at 3.2%, while bike mode share doubled, to 0.6%.

Charts 2-14 and 2-15 below show the changes in walking and biking to work by jurisdiction.

Chart 2-14: Percentage of Workers Walking to Work

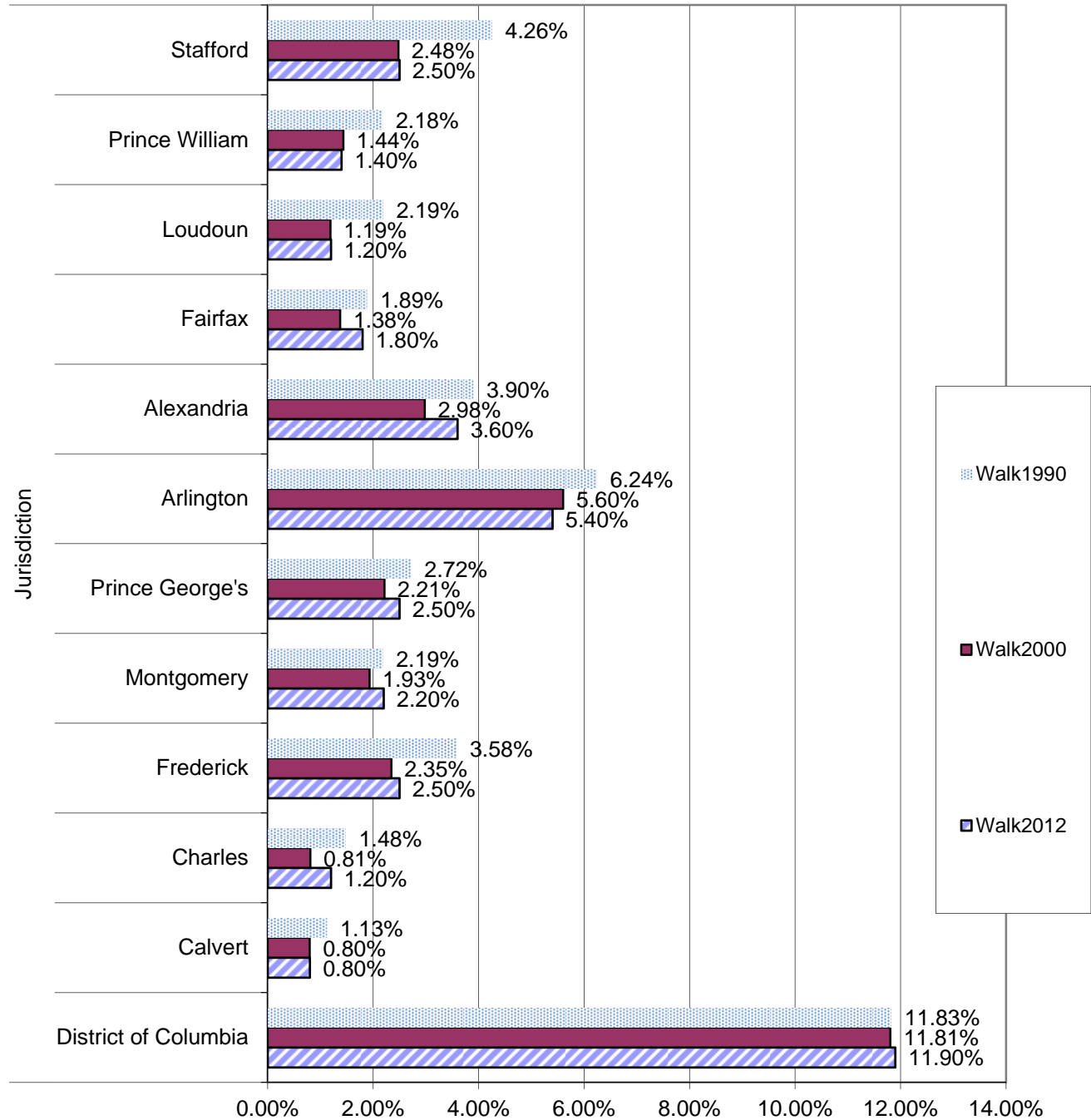
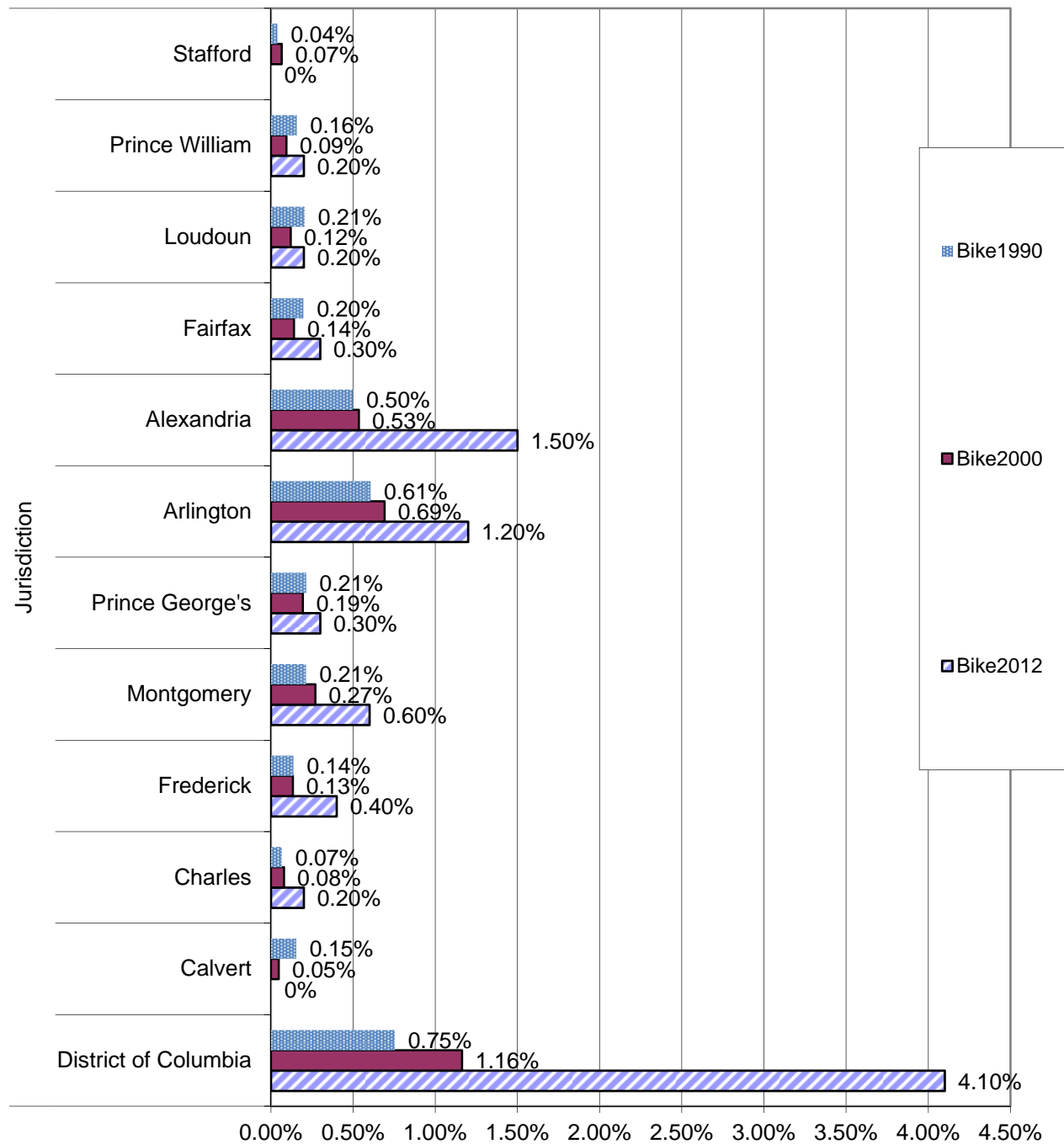


Chart 2-15: Percentage of Workers Biking to Work



Generally, the urban core of the Washington region, consisting of the District of Columbia, Arlington, and Alexandria, experienced stable pedestrian mode share and major gains in bicycling between 1990 and 2012. The District of Columbia nearly quadrupled its bicycle mode share.

The inner suburban jurisdictions of Fairfax, Montgomery, and Prince George's saw a decline in walking to work in the 1990's, which was reversed in the 2000's, leaving them roughly where they were in 1990. Bike mode share increased from 1990-2012, but from a low base.

The outer suburban counties of Frederick, Loudoun, Prince William, and Charles also saw a decline in walking to work in the 1990, which stabilized in 2000-2012, leaving them with less walking to work than in 1990. Bicycling mostly increased, but from a very low base. Frederick County more than doubled its bike mode share, to 0.6%.

The exurban counties of Calvert and Stafford had few people bicycling or walking to work in 1990, and that number fell further during the decades that followed. The American Community Survey counted 18 bicycle commuters in Stafford County in 2012, and 25 in Calvert County.

Mode Share by Census Tract

The Census Bureau recently released a web application that provides commuter mode share information, including bicycle and walking commuting numbers, for each state, county, and census tract.

<http://www.census.gov/censusexplorer/censusexplorer-commuting.html>

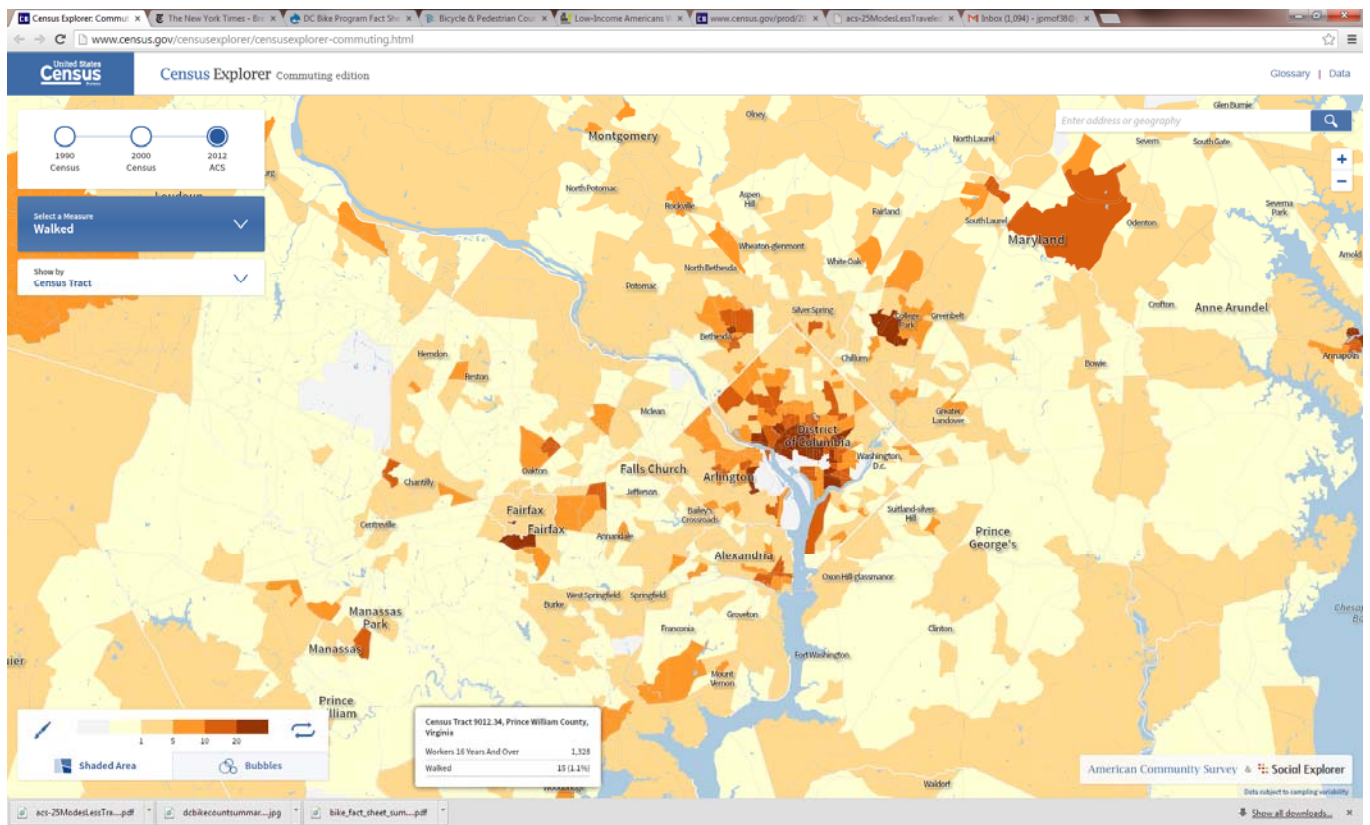
Zooming in to the Washington region, the maps show that bicycling and walking are concentrated in the neighborhoods surrounding downtown D.C., Capitol Hill, and North Arlington. Downtown DC and the surrounding neighborhoods show the highest walk mode shares, as much as 52%, while those a little further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

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

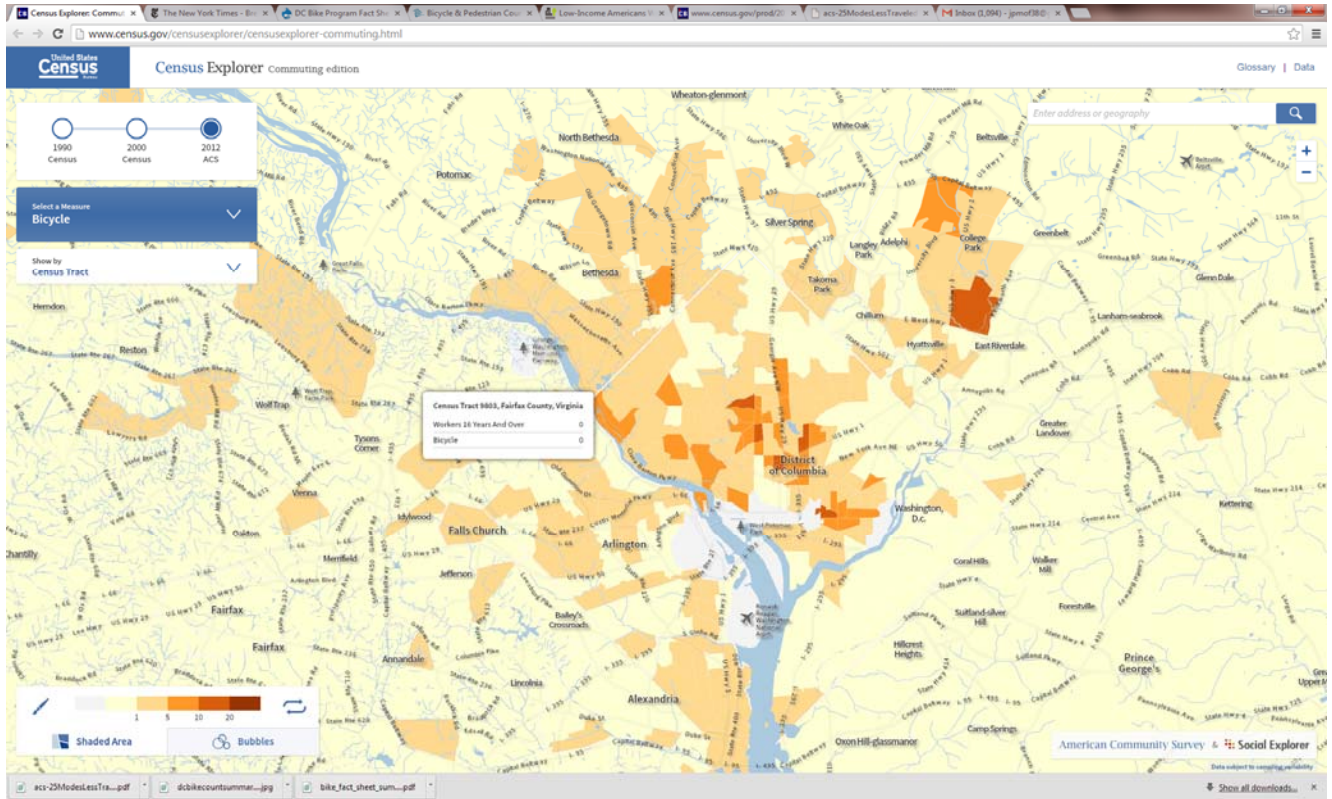
Census tracts abutting major facilities such as the W&OD, the C&O, and the Mt. Vernon Trails tend to show higher levels of bicycling than the surrounding suburban tracts.

However, the highest bike mode share by far is in the ring of neighborhoods within easy biking distance of downtown DC, on 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.

Walk to Work by Census Tract



Bike to Work by Census Tract



Walking and Bicycling According to the COG/TPB Household Travel Survey

The household travel survey is a roughly once in a decade survey of households in the greater Washington region. The survey was done in 1994, and again in 2007-2008. It is the best available source of information on travel mode shares in the Washington region. For the commute mode share the US Census American Community Survey provides more recent data.

For the most recent survey, 11,000 randomly selected households in TPB Region and adjacent areas (+3,500 in the Baltimore Region) were surveyed. Higher numbers of samples were taken in higher density, mixed use urban areas, and regional activity centers. The sample was address-based. Interviews were conducted between February 2007 and March 2008. Travel is weekday travel only; week-end travel was not counted.

Comparing the results of the 1994 and the 2007/2008 surveys, walk commuting fell from 3% to 2.7%, but bicycle commuting increased slightly, from 0.7% to 1%. Bicycling grew by the same amount as walking declined. Auto commute trips remained stable, while auto passenger (carpooling) declined steeply, and transit use grew.

These results are generally consistent with the 2000 US Census and 2006-2008 American Community Survey results for the Washington region, which also show walk commuting decreasing and bicycle commuting increasing.

Chart 2-1: Change in Commuting Mode Shares 1994-2007/2008

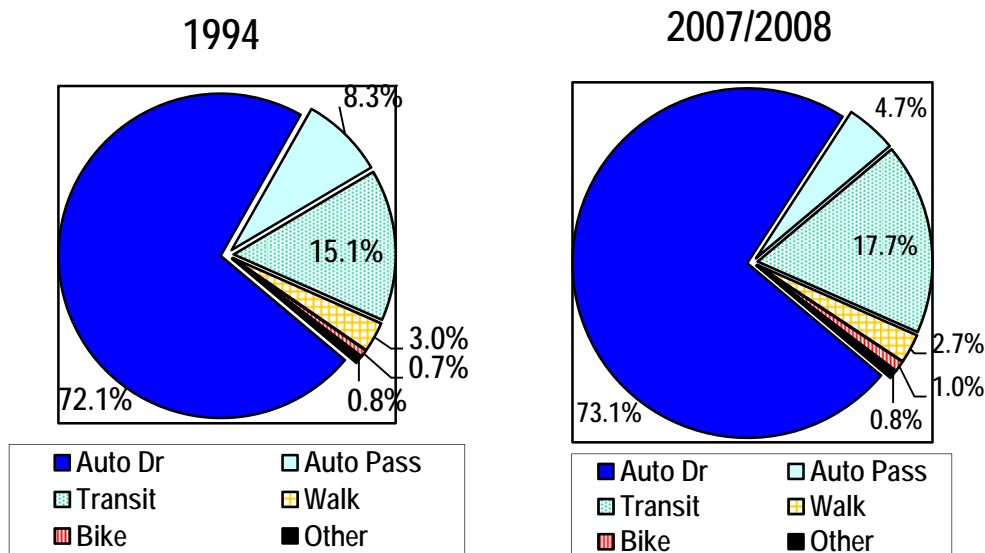


Chart 2-2: Walk Commute Share by Jurisdiction

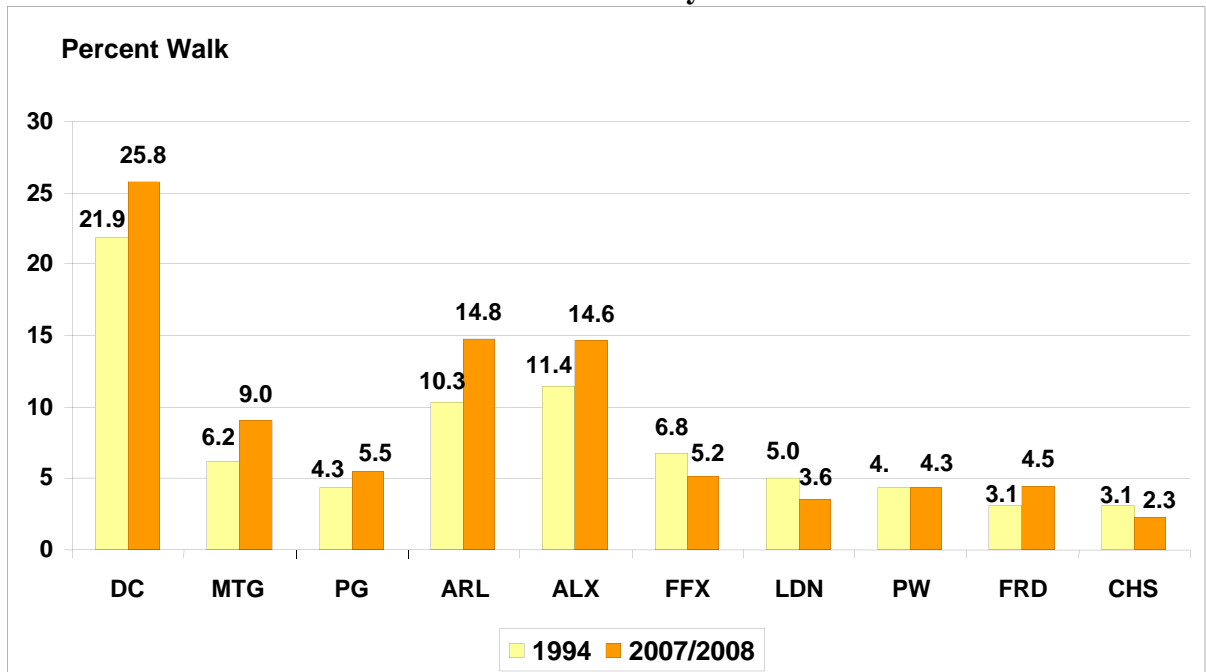
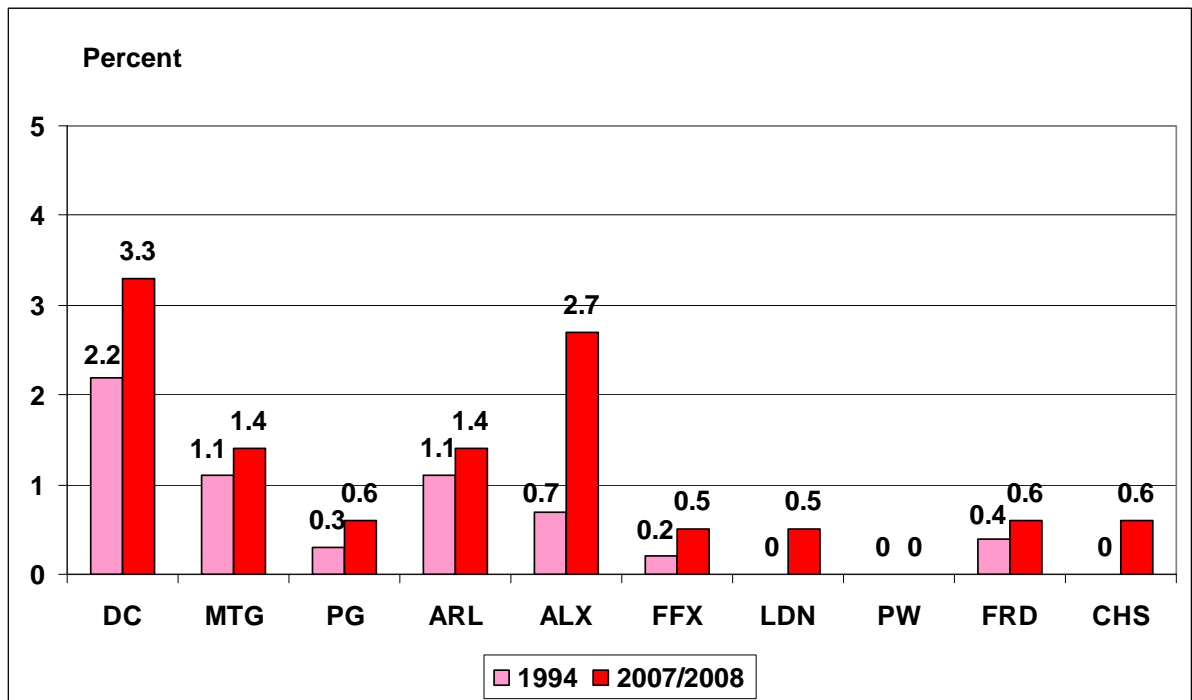


Chart 2-3: Bike Commute Mode Share by Jurisdiction



At the jurisdictional level, walk commuting declined in the District of Columbia, but grew in Alexandria, Arlington and Frederick Counties.

Walk commuting grew in urban core, and in Montgomery and Frederick Counties, but fell in other suburban areas, notably Fairfax and Loudoun Counties, which experienced considerable auto-oriented suburban growth.

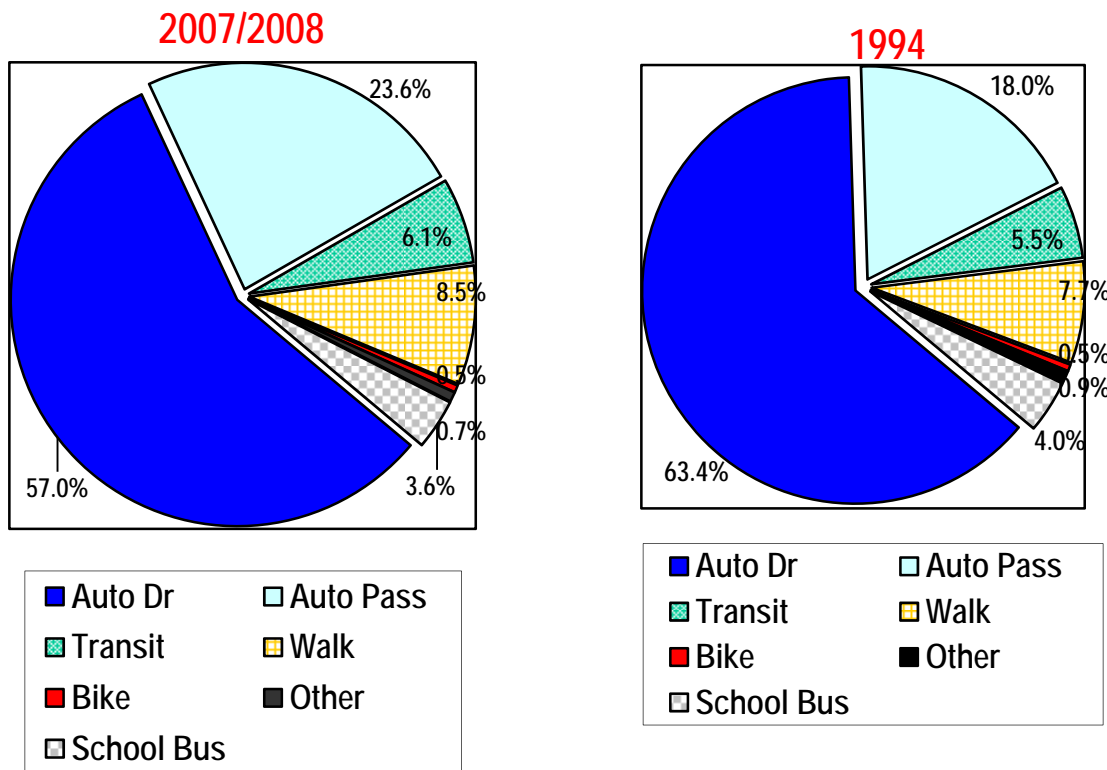
Bike commuting grew in most jurisdictions from a low base, with the biggest increases in the District of Columbia and Alexandria.

Mode Share Trends for All Trips in the Washington Region

Commuter trips, while they get a lot of attention, account for less than 20% of all trips in the Washington region. Nonwork trips have different characteristics than work trips, and overall trends in mode share are different from trends in commuter mode share.

Solo driving declined significantly in the Washington region between 1994 and 2007/8, while auto passenger, transit, and walk modes increased. Bicycling remained stable at the regional level.

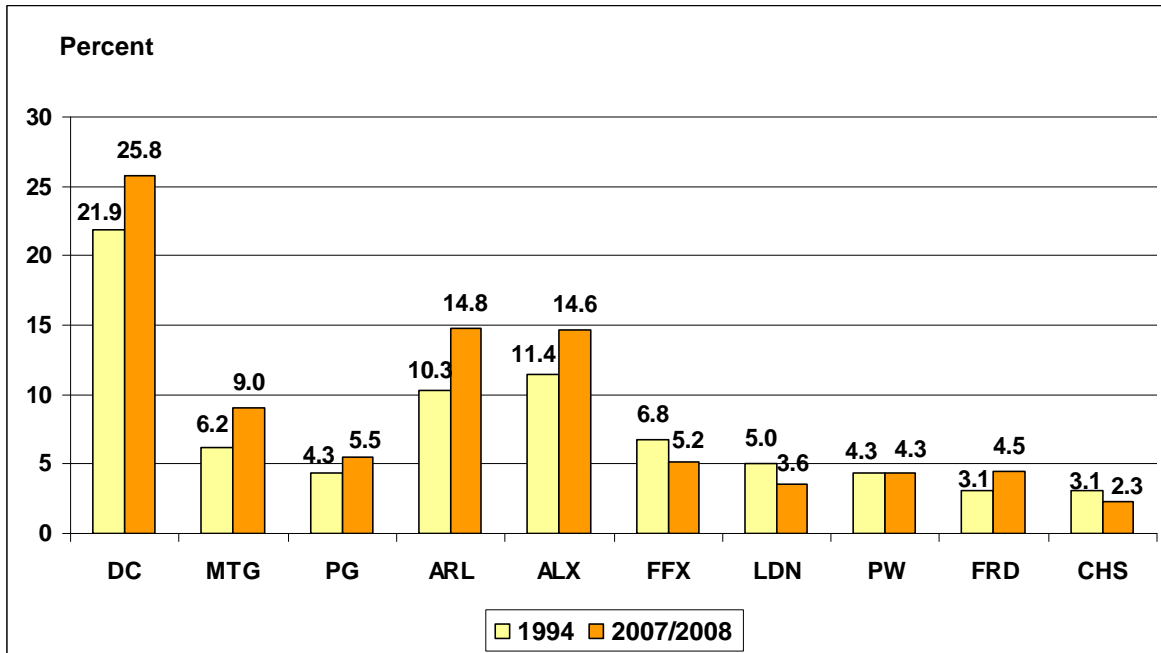
Chart 2-4: Mode Share for All Trips



Walk and Bike Mode Share by Jurisdiction

Walking increased in most jurisdictions, with the notable exceptions of declines in Fairfax and Loudoun Counties. The biggest increases were in the urban core and in Montgomery County.

**Chart 2-5: Daily Walk Trip Share by Jurisdiction of Residence
(1994 – 2007/2008)**

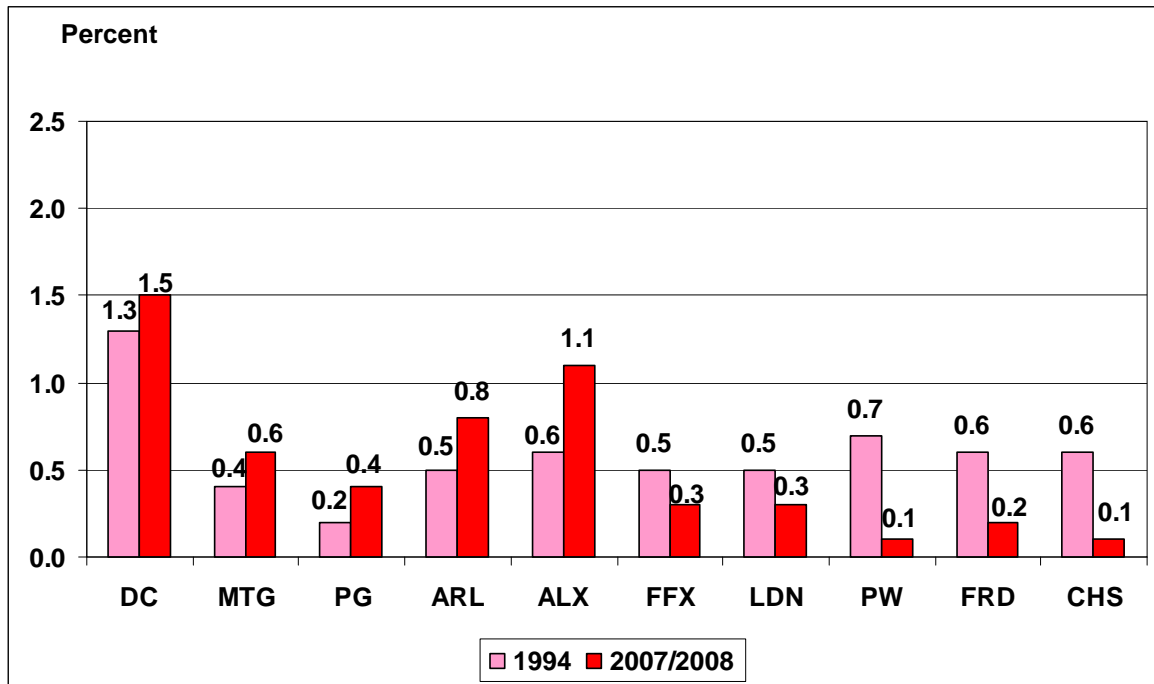


Bike mode share grew in the urban core, but fell steeply from low starting levels in the outer suburban counties. Growth in bicycling in the core has been offset by an equal decline in the outer suburbs, adding up to zero growth at the metropolitan level. The outer counties have experienced greatly increased auto traffic, much of it on narrow country roads without bike lanes or other accommodation. Fear of traffic is a commonly cited reason in surveys for not riding.

Alexandria had the largest increase at .5% followed by Arlington at .3%.

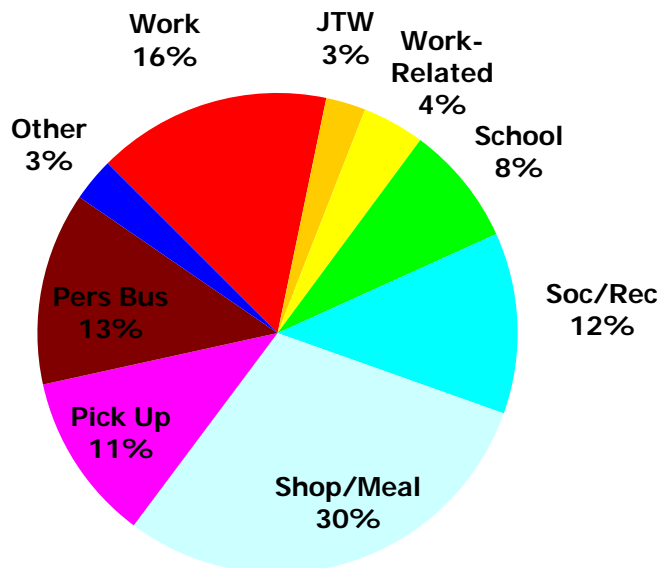
**Chart 2-6: Daily Bike Trip Share by Jurisdiction of Residence
(1994 – 2007/2008)**

.Daily Trips by Trip Purpose in the Washington Region



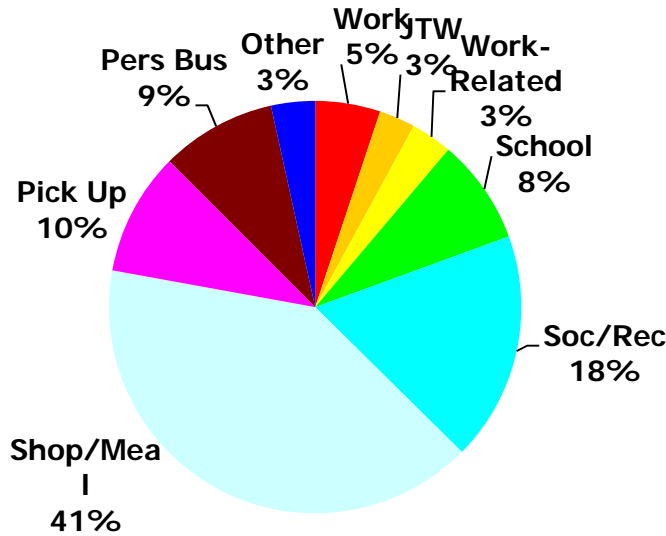
Commute trips account for less than 20% of total daily trips in the Washington region,

Chart 2-7: Daily Trips by Trip Purpose



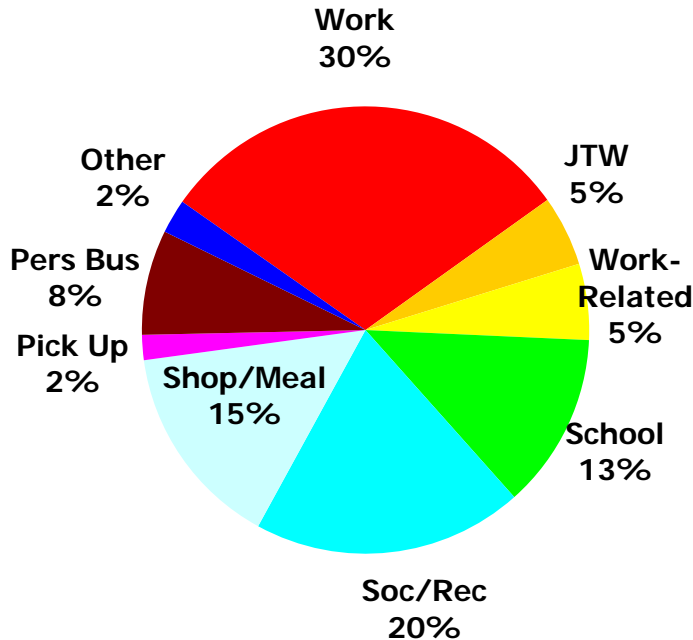
but have average trip lengths 3 times the distance of other trips for non-work purposes. Commute trips also have the highest median trip length, at 9.3 miles.

Chart 2-8: Walk Trips by Purpose



The vast majority of walking trips are for shopping, meals, recreation, or social visits. Compared to all trips, pedestrians are more likely to be doing a shopping, dining, or social/recreational trip, and less likely to be going to work.

Chart 2-9: Bike Trips by Purpose



Bicyclists are more likely to be going to work or school than either “all trips” or “walk trips”, and are less likely to be on shopping, dining, or social/recreational trips. This is the opposite of what one might expect based on median trip lengths. A possible explanation is that most bicyclists now live in walkable urban areas and have short, but not quite walkable commutes, so they will commute to

work by bicycle but are more likely to walk for other purposes.

Alternately, it may be that bicyclists, while few in number, tend to stick with their chosen mode for all types of trips (like car drivers). Walking is more conducive to being an

access mode or being used for only some legs of a trip chain.

Trip Lengths by Purpose

Based on trip lengths and number of trips shown below, school, shopping/meal, social/recreational, and personal business trips might be more susceptible to being shifted to walk or bike modes than commute trips.

**Table 2-1: Trip Length Distribution by Purpose
(Distance in Miles, 2007/2008 Household Travel Survey)**

Purpose	25%	Median	75%	90%
Work	4.3	9.3	17.1	25.8
To Work after other stop (JTW)	1.5	4.8	12.9	22.1
Work-Related	1.8	5.6	13.4	24.8
School	0.9	2.1	4.7	9.3
Social/Recreational	1.0	2.9	6.7	13.7
Shop/Meal	0.7	2.1	5.4	12.0
Pick-Up	0.8	2.2	5.2	11.2
Personal Business	1.4	3.5	7.5	14.9
Other	0.8	1.5	4.1	7.3

Trip Lengths by Mode

The median auto trip length in the Washington region is only four miles, and 25% of auto trips are 1.5 miles or less. The median auto passenger trip, which includes many child passengers, is only 2.2 miles, with 25% of auto passenger miles being 1.5 miles or less.

The median walk distance of 0.3 miles is consistent with most estimates of people’s willingness to walk. The median bike trip distance of 1.5 miles is brought down in the household travel survey by some short trips that are part of trip chains. Other sources show typical bike trip lengths as being five miles or less.

**Table 2-2: Trip Length Distribution by Mode
(Distance in Miles)**

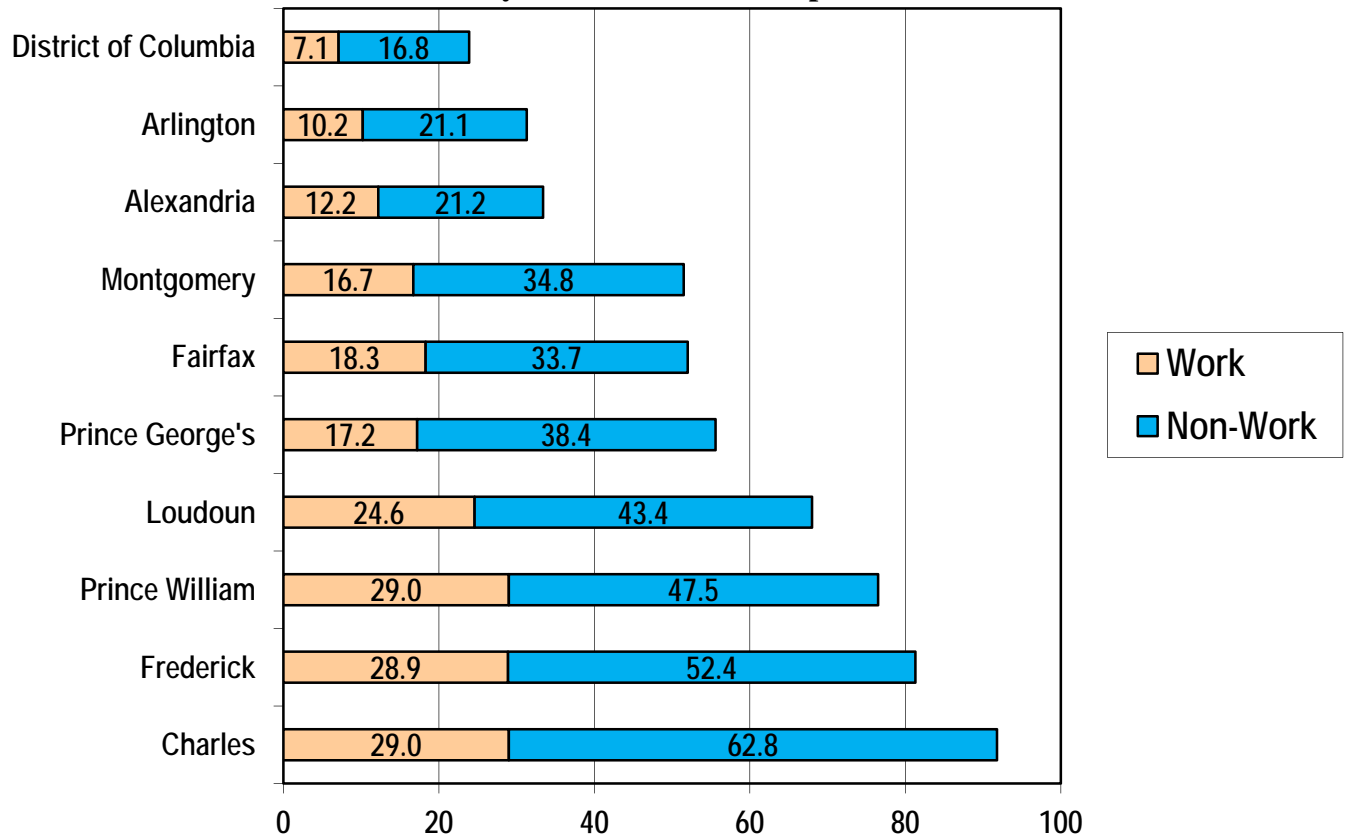
Mode	25%	Median	75%	90%
Auto Driver	1.5	4.0	9.7	18.7
Auto Passenger	1.2	2.8	6.4	12.9
Transit	3.5	6.9	14.1	23.4
School Bus	1.2	2.3	4.6	8.2
Walk	0.1	0.3	0.5	0.9
Bike	0.8	1.5	4.1	7.3

Average Daily Miles Traveled By Jurisdiction

Households in the urban core make slightly fewer trips per day, and travel far fewer miles per day than households in the outer jurisdictions. The average DC household

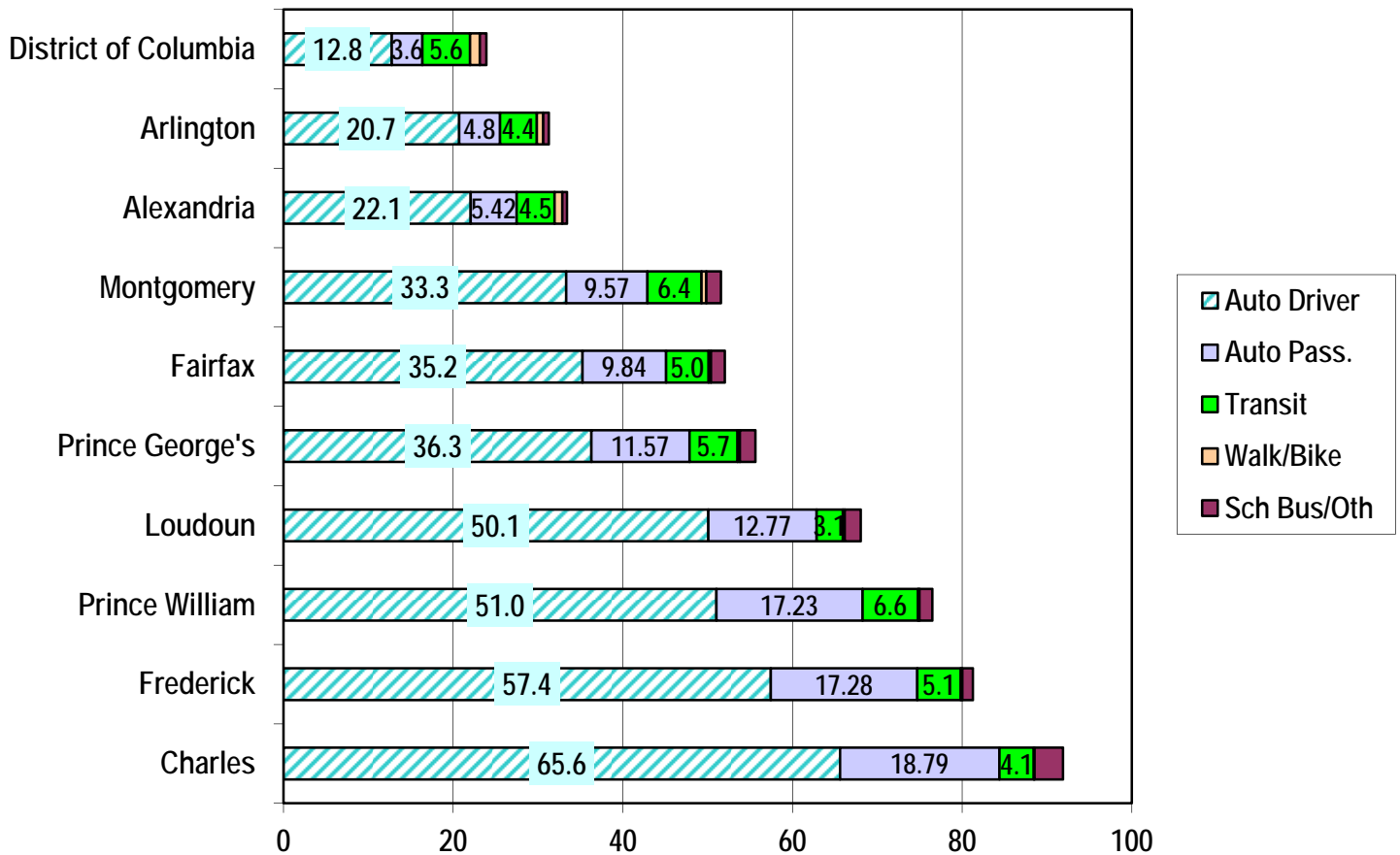
makes seven trips per day and travels 23.9 miles, while the average Charles County household makes nine trips per day, and travels 91.8 miles, or nearly four times as far.

**Chart 2-10: Average Daily Miles Traveled Per Household
by Jurisdiction and Purpose**



Nor are all the long trips in the outer suburbs commute trips; outer suburban households travel three to four times as many non-work miles as DC households. Low-density development patterns in the outer suburbs appear to be generating trip distances which are significantly longer than what most people are willing to walk or bicycle.

**Chart 2-11: Average Daily Miles Traveled Per Household
by Jurisdiction and Mode**



DC residents use an automobile for about half the miles they travel, while more than 90% of outer suburban residents' travel mileage is in a car, with transit and school buses accounting for the rest.

**Table 2-3: Total Weekday Walk and Bike Trips by Type in the Washington Region
(in Thousands)**

Type of Trip	Walk	Bike
Primary Travel Mode	1,370.0	87.5
“Loop” Trips	123.8	6.9
Metrorail Access	464.3	4.3
Metrorail Egress	469.0	4.0
Total	2,427.1	102.7

Access to transit accounts for a high proportion of the walk trips in the region, especially in the urban core.

**Chart 2-12: Weekday Walk Trips by Jurisdiction of Residence and Type
Per 1,000 Population in Households**

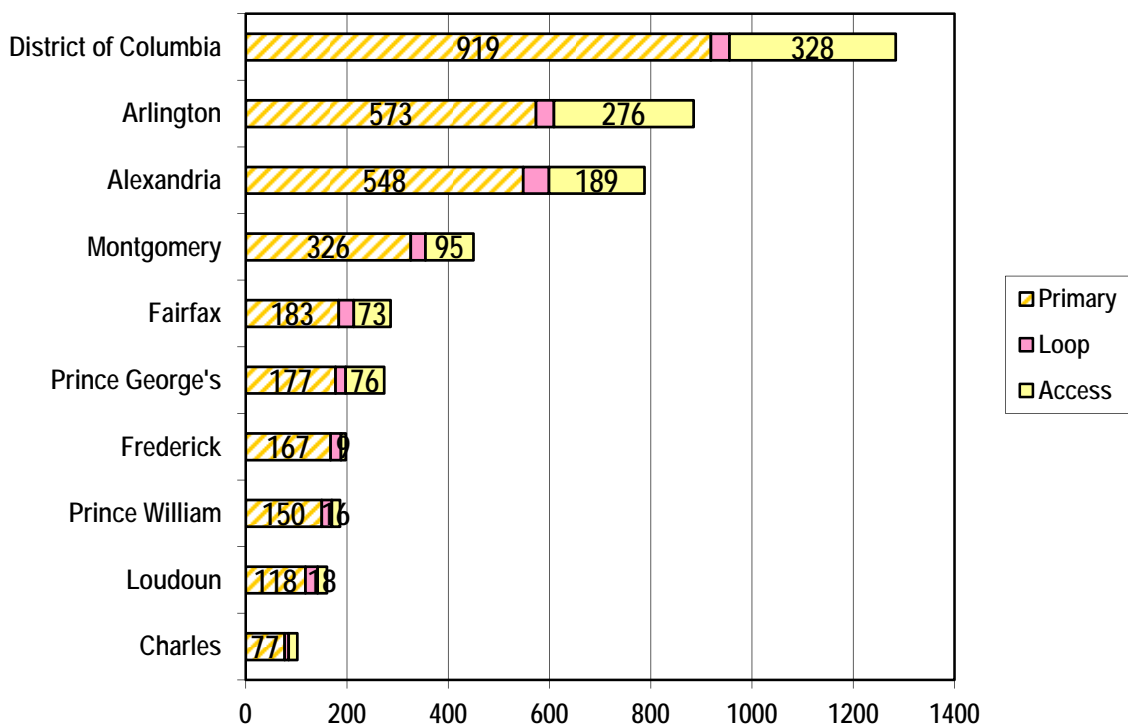
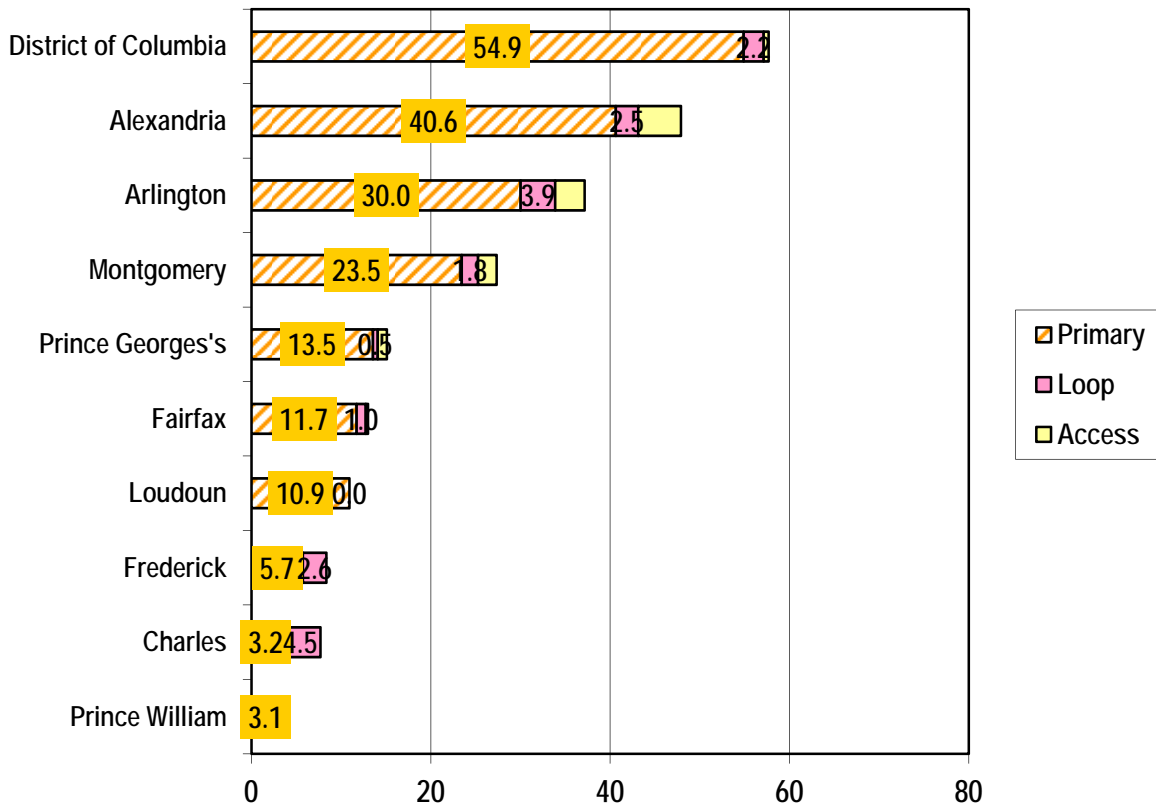


Chart 2-13: Weekday Bike Trips by Jurisdiction of Residence and Type Per 1,000 Population in Households



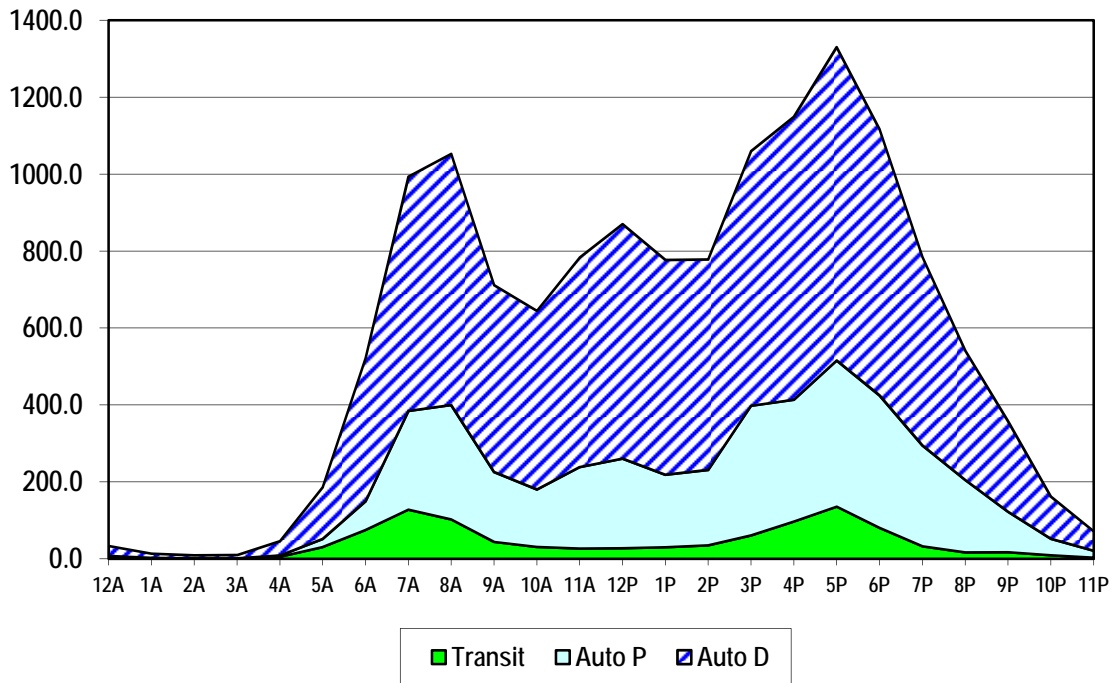
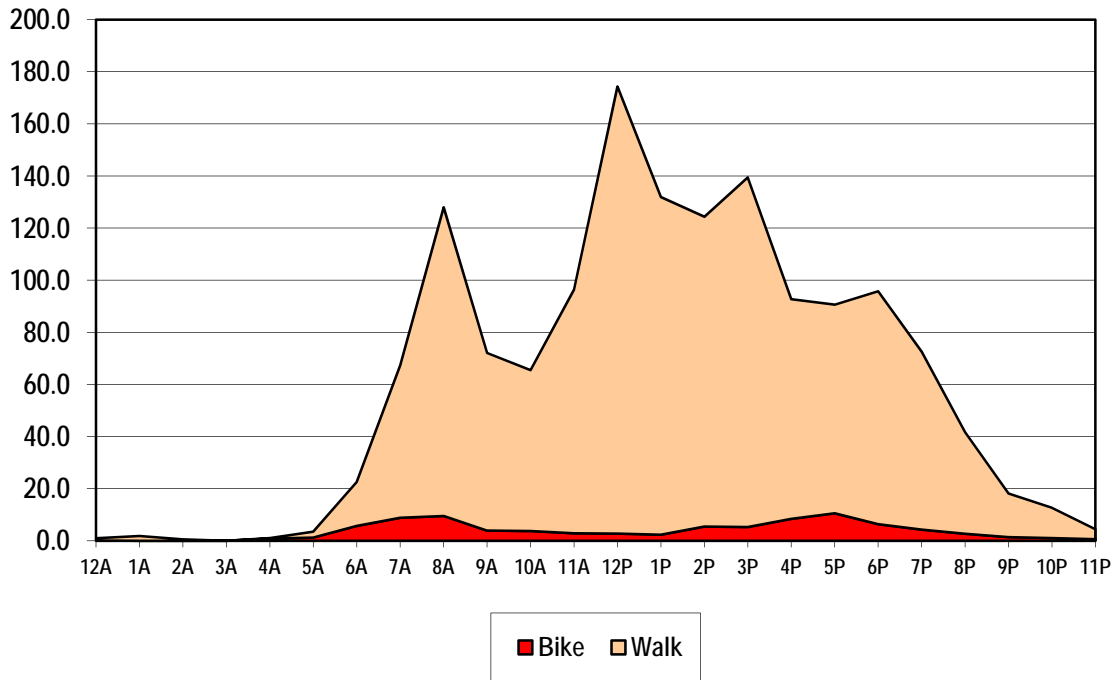
While DC residents are most likely to bicycle, Alexandria and Arlington are most likely to use bicycle to access Metrorail. Charles County has the highest rate of “loop” bicycle trips.

Walking and Bicycling by Time of Day

Walk trips peak at lunch hour, then around 3 p.m. when school lets out, and then during the morning rush hour just before 8 a.m. This is different from auto, auto passenger, and transit modes, which are highest at 5 p.m, and next highest at 8 a.m.

Bike trips are much more evenly distributed throughout the day than other modes. Bike trips peak at the evening and morning rush.

Chart 2-14: Walking and Bicycling by Time of Day



Bicycling in the Metro Core Cordon Counts

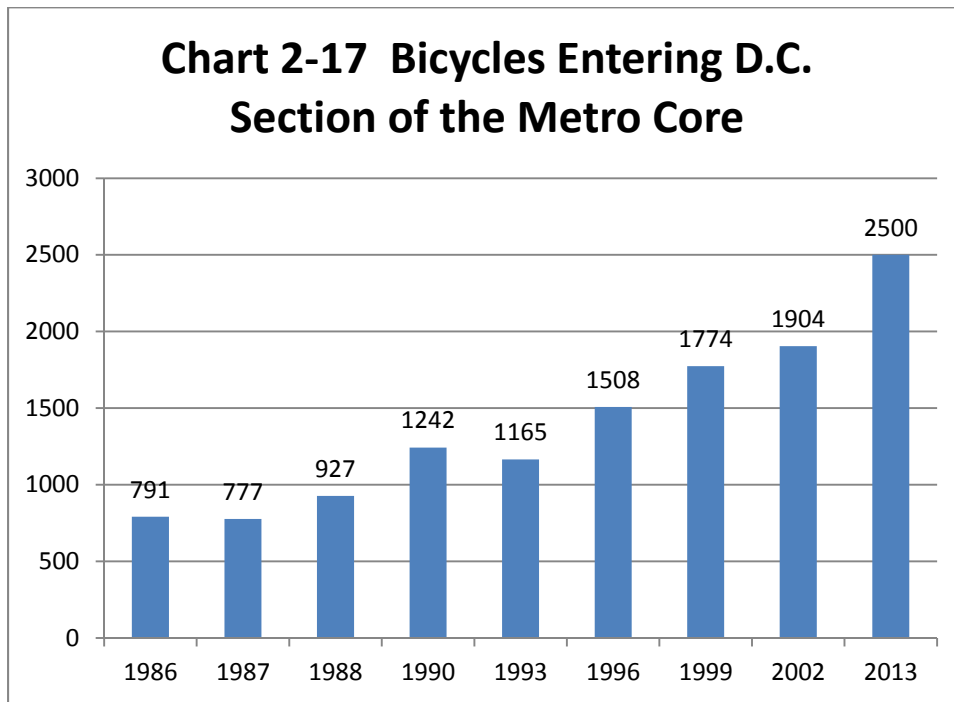
COG/TPB periodically takes a count of vehicular traffic, including bicycle traffic but excluding pedestrian traffic, entering downtown D.C. and Arlington, as well as traffic crossing the beltway. Cordon counts are not done in other parts of the region.

*Bicycling is
Growing
Rapidly in
Downtown D.C.
and North
Arlington*

COG/TPB's cordon counts confirm the census data indicating a concentration of bicycling in the neighborhoods close to downtown D.C., Arlington, and Alexandria.

The most recent counts were done March through June 2013, on Tuesdays, Wednesdays and Thursdays only. Holidays were avoided. Only 5:00 A.M. to 10:00 A.M. inbound traffic was counted. Pedestrians were not counted, but bicycles were.

The counts show that bicycle traffic into the downtown Metro core is growing rapidly, with bicycle traffic into the D.C. section of the Metro core more than tripling from 1986 to 2013. The number of bicyclists entering the Metro core within the District of Columbia between 6:30 a.m. and 9:30 a.m. has grown steadily from 474 in 1986, 1,379 in 2002, to 2,500 in 2013. The number of cyclists crossing the Potomac bridges grew from 317 in 1986 to 525 in 2002, to 811 in 2013. Chart 2-17 shows the number of bicycles entering the D.C. section of the Metro core from 1986 to 2013.

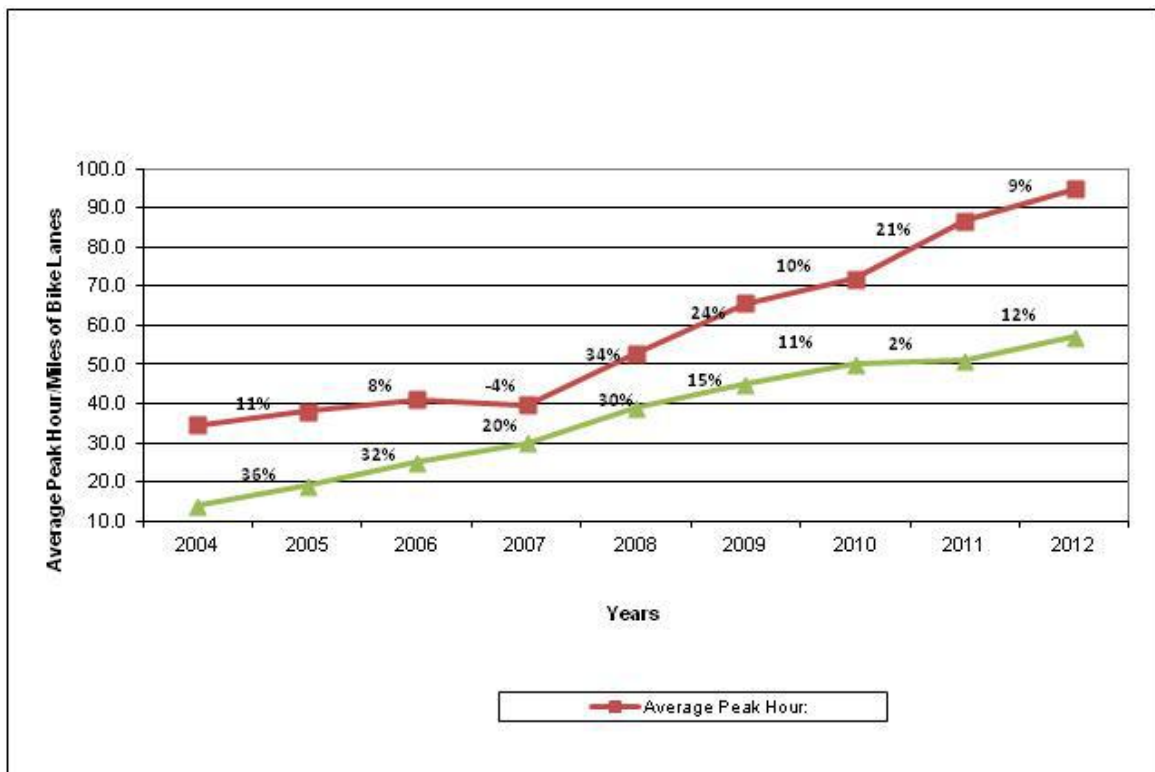


District of Columbia Bicycle Counts

The District of Columbia Department of Transportation has had an annual bicycle count program since 2004. Counts are taken at selected locations in the District Columbia, and on the bridges entering the District of Columbia. Numbers varied a lot by location; bridge locations and some central locations had hundreds of bicyclists per hour, others, in the outer wards, had few or none. Counts are taken at 8 hours at each location, 4 hours in the morning (6 to 10am), and 4 in the evening (3 to 7pm).

DDOT has consistent counts at 19 of the locations dating back to 2004, which are used to calculate the growth in *average peak hour* cycling. In 2004, the average peak hour count was 35 cyclists and there were 14 miles of bike lanes. By 2012 these numbers rose to 95 cyclists per hour and 57 miles of bike lanes, a 175% increase in the cycling rate and over 300% increase in the bike lane network.

Chart 2-18: Average Peak Hour Bike Counts in DC



Arlington Automated Counters

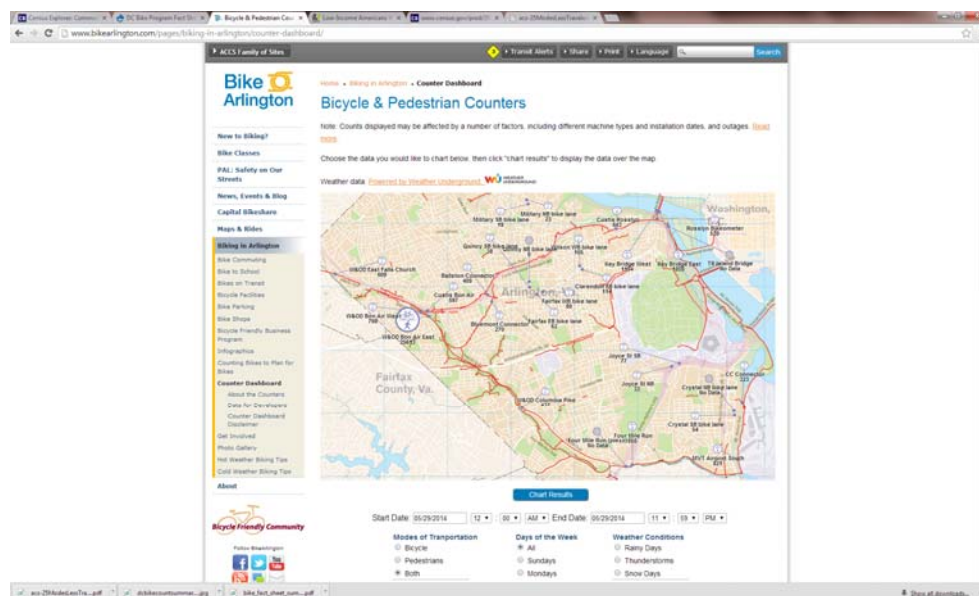
Manual counts have a number of disadvantages, notably cost, an inherently limited time window, unrepresentative counts due to weather events, and a lack of data on cyclists' and pedestrians' off-peak presence. There is strong interest among planners in automated bicycle and pedestrian counters.

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.

As of April 2014, the County had sixteen permanently installed bicycle and pedestrian counters on shared-use trails, ten permanent bicycle-only counters in on-street bike lanes, and three mobile counters typically used for short term sidewalk counts. 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 are not plowed. Weekday bike traffic peaks during the morning and evening rush hours, while week-end traffic peaks mid-day.

The Arlington count data has been posted at bikearlington.com/pages/biking-in-arlington/counter-dashboard/. It can be queried for pedestrians and/or bicyclists by time period, day of the week, temperature, snow, and a number of other variables.



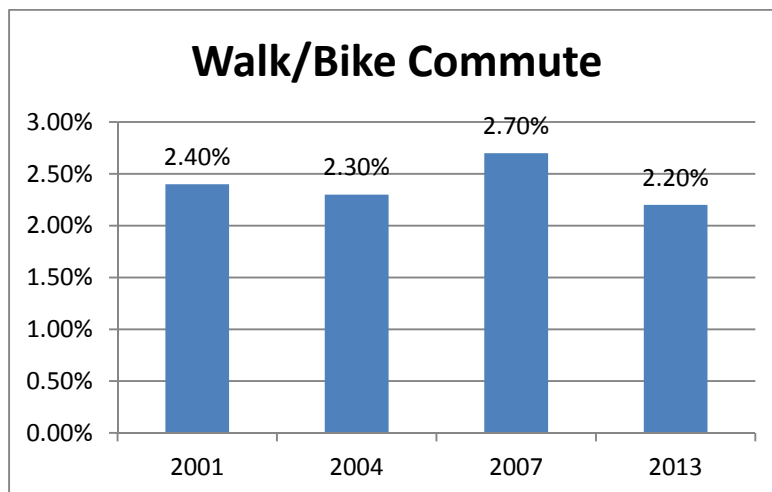
Demographic Characteristics of Pedestrians and Bicyclists

Ethnicity, geography, income, age, 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 2013 Commuter Connections *State of the Commute Survey*. However, the *State of the Commute Survey* and the US Census both measure work trips only, and the conclusions in terms of both the prevalence and distribution of walking and bicycling can be quite different for all trips than for work trips. Nationally, the 2009 *National Household Travel Survey* is the best source of demographic data on pedestrians and bicyclists for all types of trips.

All data in the following tables comes from the 2013 *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 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 household income, state of residence, number of vehicles in the household, ethnicity, and age.

The 2013 *State of the Commute* shows walking and bicycling, from 2.4% in 2001 to 2.2%. However, that change is well within the survey's margin of error, which is 1.2%. *State of the Commute* shows lower mode share for walking and bicycling than does the Census, a discrepancy probably explained by differing methodologies.

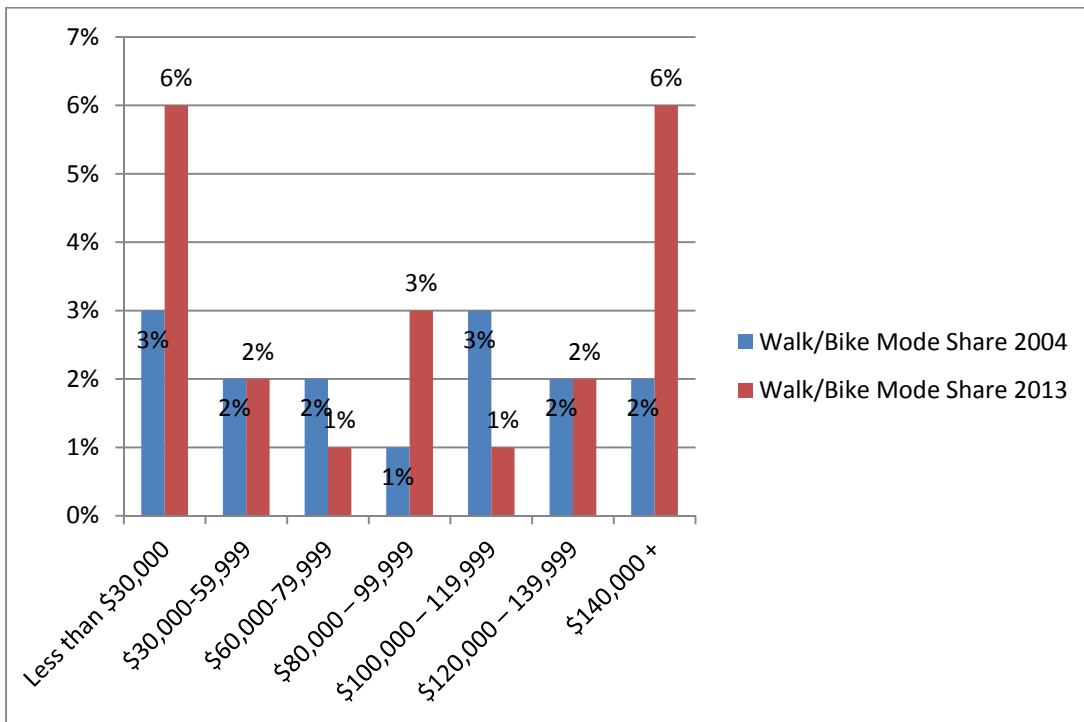
Chart 2-19: Walk/Bike Commute Mode Share



A. Household Income

Chart 2-4 shows walking and bicycling commute mode share by income. Walking and bicycling to work are somewhat more prevalent among the low-income (less than \$30,000 household income per year) than among the very high-income (more than \$140,000 per year). Bicycling and walking are slightly more common at the top and the bottom of the income distribution than in the middle. This is roughly consistent with the national data.

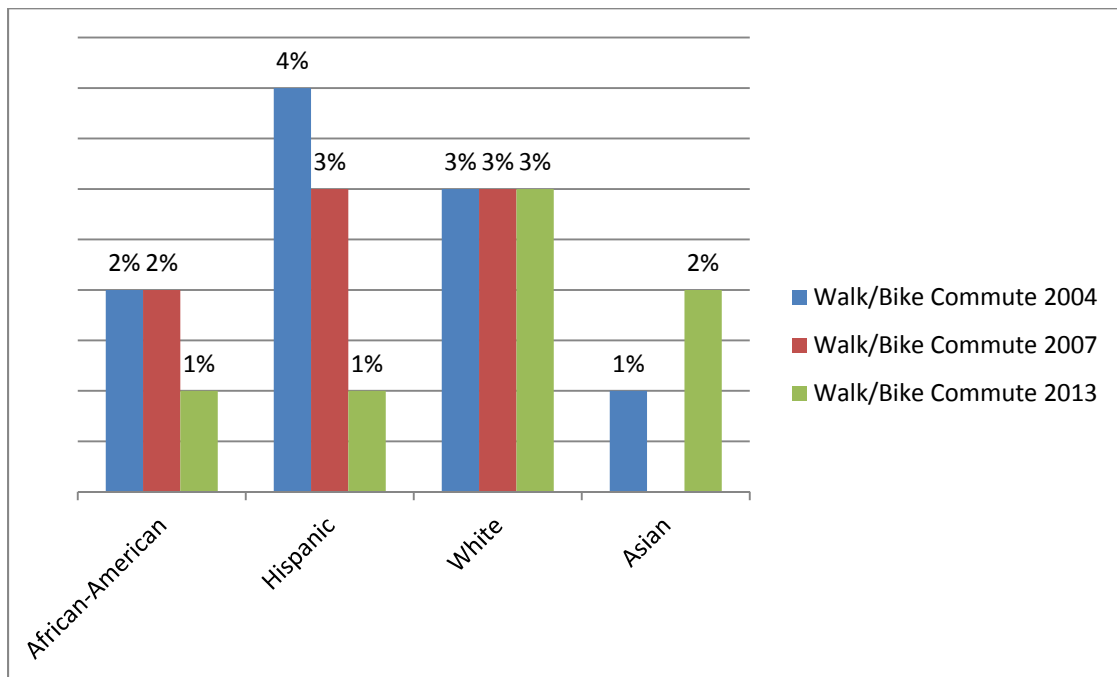
Chart 2-20: Walk/Bike Mode Share by Income



B. Ethnicity

Walk/bike commute mode varies by ethnicity. Whites have the highest walk/bike mode share at 3%, blacks the lowest at 1%. Hispanic walk/bike mode share has apparently declined.

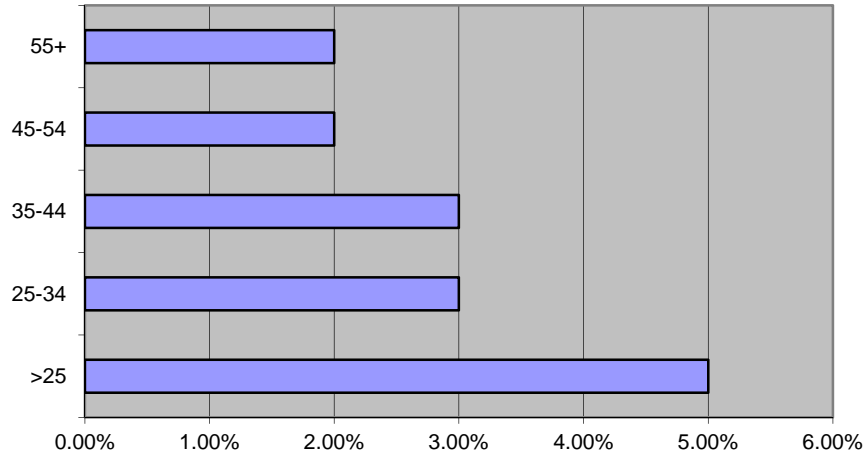
Chart 2-21: Walk/Bike Commute Mode Share by Ethnicity



C. Age

Chart 2-6 shows walk/bike commute mode share by age. People under 35 and over 65 are more likely to walk or bike to work than the middle-aged. Nationally the elderly have a lower than average mode share for bicycling, so we can presume that most of the elderly are walking rather than bicycling.

Chart 2-22: Walk/Bike Commute Mode Share by Age



D. Motor Vehicles per Household

Vehicles per household is another strong predictor, as shown in Table 2-4. People in households without any vehicles are much more likely to walk or bike to work than households that own one, while those living in households with one vehicle are more likely to walk or bicycle to work than those owning more than one vehicle. Non-work trips also shift radically away from walking in households that have at least one car.

**Table 2-4
Walk/Bike Mode Share by Number of Vehicles**

Number of Vehicles in the Household	0	1	2	3+
Walk/Bike Commute Mode Share 2004	11.4%	3.7%	1.2%	2%
Walk/Bike Commute Mode Share 2007	12.4%	4.0%	1.2%	2%
Walk/Bike Commute Mode Share 2013	16%	3%	2%	1%

Trip Distances

Distance was the most frequently cited reason, by 24% of respondents, to COG/TPB’s 2013 Bike to Work Day survey to explain why they were *not* riding to work. Reasons One and Three were “Don’t ride in cold/winter” (44%) and “No safe route” (21%). So trip distance is of great interest when gauging the potential for increasing bicycling (or walking). The 2013 SOC survey asked respondents about the length of their commutes. Commute mileage is shown in Table 2-5 below.

Table 2-5: Commute Distance
(n = 5,605)

Distance	Less than 5 miles	5 to 9 miles	10 to 14 miles	15 to 19 miles	20+ miles
Percentage	17%	21%	17%	12%	33%

17% of commutes in the Washington region are less than five miles and therefore potentially bikable on a daily basis. The average commute distance for Bike to Work Day survey respondents was 16 miles one-way.

Another potential source of walk or bike trips is the trip to transit, park and ride lot, or vanpool and carpool pick-up point. As shown in Table 2-6, most access trips to alternative mode meetings points are short. Respondents travel an average of 2.9 miles to the meeting point. Six in ten (61%) respondents travel one mile or less; these are primarily bus and Metrorail riders who walk to the stop or station. About one-quarter (23%) of respondents said they travel between two and five miles. Only 16% of respondents travel more than five miles. Based on the distances being traveled, some of the 29% of respondents who are currently driving to their alternative mode meeting point might be able to walk or bicycle instead.

Table 2-6
Distance Traveled from Home to Alternative Mode Meeting Point
(n=1,230)

Distance	2013
1 mile or less	61%
2 to 5miles	23%
6 to 10 miles	11%
11 miles or more	5%

**Table 2-7
Means of Getting from Home to Alternative Mode Meeting/Transfer Point
(n=1,442)**

Access Mode to Alternative Mode	2004	2007	2013
Walk	39%	35%	34%
Picked up at home	15%	12%	16%
Drive to a central location (e.g., Park & Ride)	18%	18%	19%
Drive alone to driver's/passenger's home	11%	10%	10%
Bus/transit	9%	12%	13%
I am the carpool/vanpool driver	5%	10%	6%
Dropped off/another CP/VP	1%	1%	2%
Other*	1%	2%	

Walking and Bicycling to Transit

*62% of
Metrorail
Passengers
Walk to the
Station*

Walking is the dominant mode of access to transit. The census 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. According to the 2004 *State of the Commute Survey*, 83% of bus commuters walk to the bus.⁵

In 2012 WMATA surveyed passengers at all 86 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.

⁵ 2013 *State of the Commute Survey Results*. Metropolitan Washington Council of Governments, p. 63.

Appendices E and F show mode of access to Metrorail by station.⁶

In 2012 62.2% of all Metrorail passengers walked to the station, essentially the same as 2007. 0.7% arrived by bicycle, an increase from the 0.31% who arrived by bicycle in 2002. However the AM peak results, which 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 AM peak is only 37%, up from 33.3% in 2007 and bike access is 1%, up from 0.7% in 2007.

*Fewer People are
Driving to
Metrorail, and
more are Walking
and Biking*

WMATA is making significant progress on increasing walk mode and decreasing drive mode of access to the system. WMATA is also on track to achieve its 2020 goal of 2% bike access to Metrorail.

Table 2-8: Mode of Access to Metrorail	Percent of Daily Total - 2012	Percent of Daily Total - 2007	AM Peak - 2012	AM Peak - 2007
Bus	15.3	15.6	21.9	22.2
Auto Driver	12.6	13.7	25.6	29.3
Auto Passenger (drop off)	4.5	5.5	7.8	9.3
Rode with someone who Parked	0.5	0.6	0.9	1
Bike	0.7	0.5	1.0	0.7
Walk	62.2	62.1	37.3	33.3
Commuter Rail	1.5	1.7	3.5	3.8
Shuttle	2.5	n/a	2.0	n/a
Taxi	0.2	0.2	0.1	0.2

⁶ 2012 WMATA Rail Passenger Survey, from the table "Origin Station by Mode of Access".

Mode of Access varies greatly by station, from Mount Vernon Square, with 95% access by foot, to New Carrollton, with 3.7% access by foot. The thirty 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.⁷

Stations with a very high share of pedestrians tend to be located in major employment centers, with people walking from work to the station, rather than from home to the station. However, largely residential-area stations such as Cleveland Park, Eastern Market, and Columbia Heights are found in the top twenty. Dense, mixed-use areas such as Bethesda, Foggy Bottom, Crystal City, Pentagon City, Friendship Heights, Van Ness, Dupont Circle, Shaw, and the Rosslyn-Ballston Corridor have high percentages of pedestrian access as well.

The bicycle mode of access to Metrorail ranged from 6.4% at Medical Center to zero at 31 stations.⁸ 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 eastern portion of the region. Brookland CUA was a notable exception, with no bicycle access despite the presence of a university.

Of the sixteen stations located east of the Anacostia River in 2013, thirteen had bicycle access that rounded to zero. All stations in Fairfax and Montgomery Counties had some bicycle use. The WMATA *Rail Passenger Survey* confirms what the census tells us about the distribution of walking and bicycling in the region, with walking and bicycling heavily concentrated in the Metro core and at certain inner suburban stations.

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

8 Appendix F: Origin Station Sorted by All Day Bike Mode of Access.

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.

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

The story in the urban core is different. In the District of Columbia, Arlington, Alexandria, and portions of Montgomery County and Frederick County, walking and bicycling are growing rapidly.

Since 2010 the urban core jurisdictions have captured a larger share of the region's growth, and are expanding their share of the region's population, at trend which if it continues will help increase walking and bicycling. The urban core is now [growing faster](#), in absolute and in percentage terms, than the exurban jurisdictions.

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. Seventy-two percent of regional employment growth to 2030 is planned to take place within the current regional activity clusters, as well as fifty-four percent of household growth.⁹ Under "Complete Streets" policies new development should accommodate pedestrians and bicyclists.

The most prominent example of this trend is the planned transformation of Tysons

*Rapid Growth in
the Urban Core
and Regional
Activity Centers
favors Walking
and Bicycling*

⁹ Metropolitan Washington Council of Governments, *Growth Trends to 2030: Cooperative Forecasting in the Washington Region*, October, 2005. Pp. 2, 14-15.

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 Vision*, *Regional Transportation Priorities Plan*, and *Region Forward 2050*, creating activity centers that mix jobs, housing and services in a walkable environment, we can expect rapid growth in walking and bicycling in the inner suburbs as well as in the core.

Chapter 3
Pedestrian and Bicycle Safety

Overview

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 pedestrian or cyclist. 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 and ethnicity, 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.

Pedestrian Fatalities in the United States

*Pedestrian
Fatalities are
Increasing*

Pedestrian safety is a major problem nationally and in the metropolitan Washington region. Of the 33,561 traffic fatalities in the United States in 2012, 4,743, or 14%, were pedestrians.

Pedestrian fatalities have been increasing nationally since 2010, while other traffic fatalities have been falling. More pedestrians died in 2012 than in 2008, causing the proportion of pedestrian fatalities to jump from 11% to 14% of the total.

**Table 3-1:
Total Fatalities and Pedestrian Fatalities in US Traffic Crashes, 2003-2012**

Year	Total Fatalities	Pedestrian Fatalities	Percent of Fatalities
2003	42884	4774	11%
2004	42836	4675	11%
2005	43510	4892	11%
2006	42708	4795	11%
2007	41259	4699	11%
2008	37423	4414	12%
2009	33883	4109	12%

2010	32999	4302	13%
2011	32749	4457	14%
2012	33561	4743	14%

Pedestrian Fatalities by Age and Ethnicity in the United States

American Indians, Blacks, Hispanics, and people over the age of 65 are over-represented among pedestrian fatalities relative to their share of the population.

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

Adjusted for exposure, pedestrians over the age of 65 have a very high risk of dying, over six times as high as children under age 16.¹ For pedestrians over age 75 the risk is even higher, about eight times the risk for children.

The number of children killed as pedestrians has declined dramatically in recent decades, from more than 1,000 fatalities in 1984 to 319 in 2012. This decline is often attributed to a general drop in physical activity. However, fatal pedestrian injury remains a leading cause of death for those 15 years and younger.²

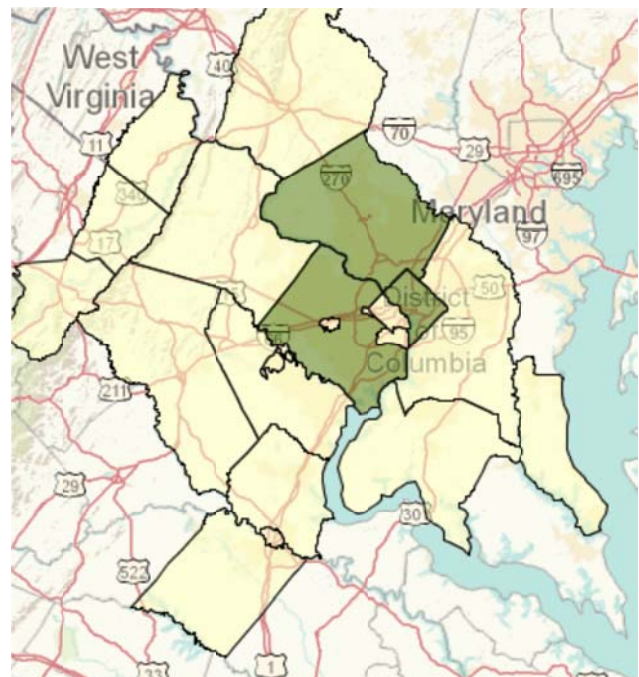
By ethnicity, American Indians have the highest exposure-adjusted risk, followed by African-Americans. Asians have few fatalities relative to their share of the population, and also lower than average exposure-adjusted risk. Ethnic risk varies significantly by State, so jurisdictions should not rely solely on national numbers when planning safety programs.

Pedestrian Fatalities in the Washington MSA

Urban areas have higher pedestrian fatality rates than rural areas. The [greater Washington region](#) ranks [24th](#) out of the 51 largest Metropolitan Statistical Areas in terms of pedestrian deaths per capita, with pedestrians accounting for 20% of all

*Pedestrians
over age 75
are at high
risk*

Figure 3-1: Washington-Arlington-Alexandria Metropolitan Statistical Area



¹ *Dangerous by Design 2014*, Smart Growth America, p. 13.
² *Ibid*, p. 20.

traffic fatalities.ⁱ³

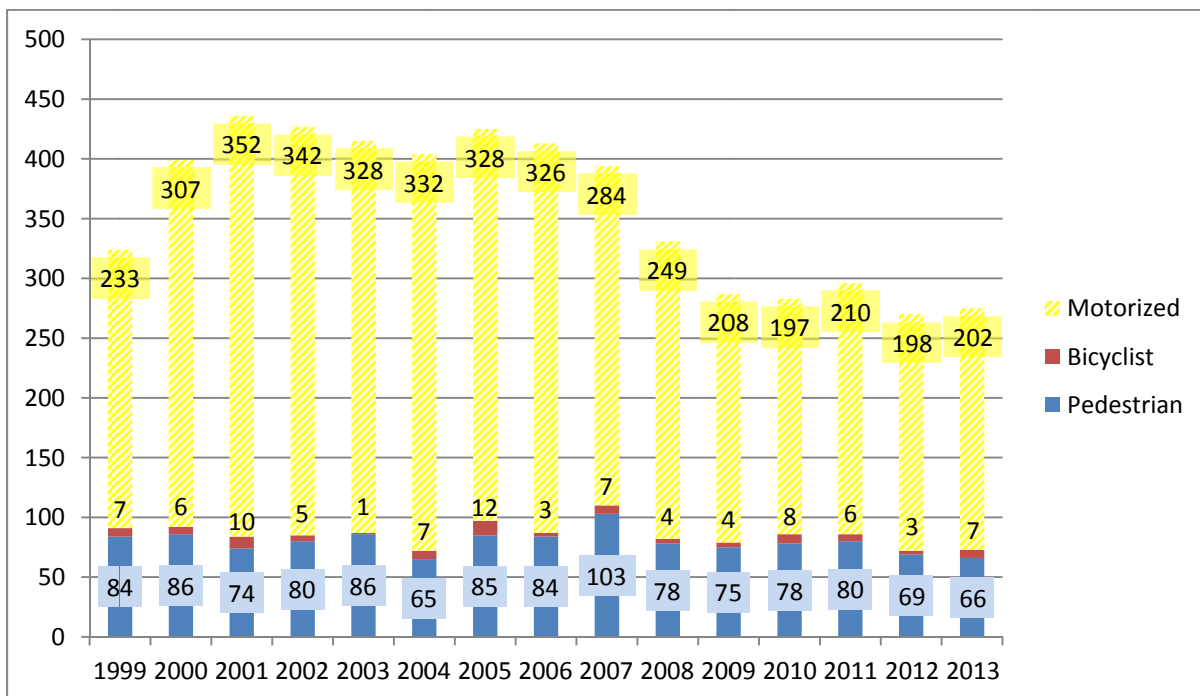
Fatalities in the TPB Member Jurisdictions

For the TPB member jurisdictions, pedestrians and bicyclists accounted for over a quarter of those killed on the roads in 2013. Over 2,600 pedestrians and bicyclists are injured every year, and 73 are killed. On average, there are 200 motorized fatalities, 68 bicyclist fatalities, and five bicyclist fatalities per year in the Washington region.⁴

Pedestrians and Bicyclists account for 27% of the region's Traffic Fatalities

Chart 3-1 shows the yearly variations in traffic fatalities from 1999-2013. Motorized traffic fatalities have declined sharply since 2006, while pedestrian and bicyclist fatalities have declined only slightly, from 87 to 73. The *proportion* of total fatalities that are pedestrian or bicyclist has risen from 21% to 27%. Chart 3-2 shows pedestrian fatalities only.

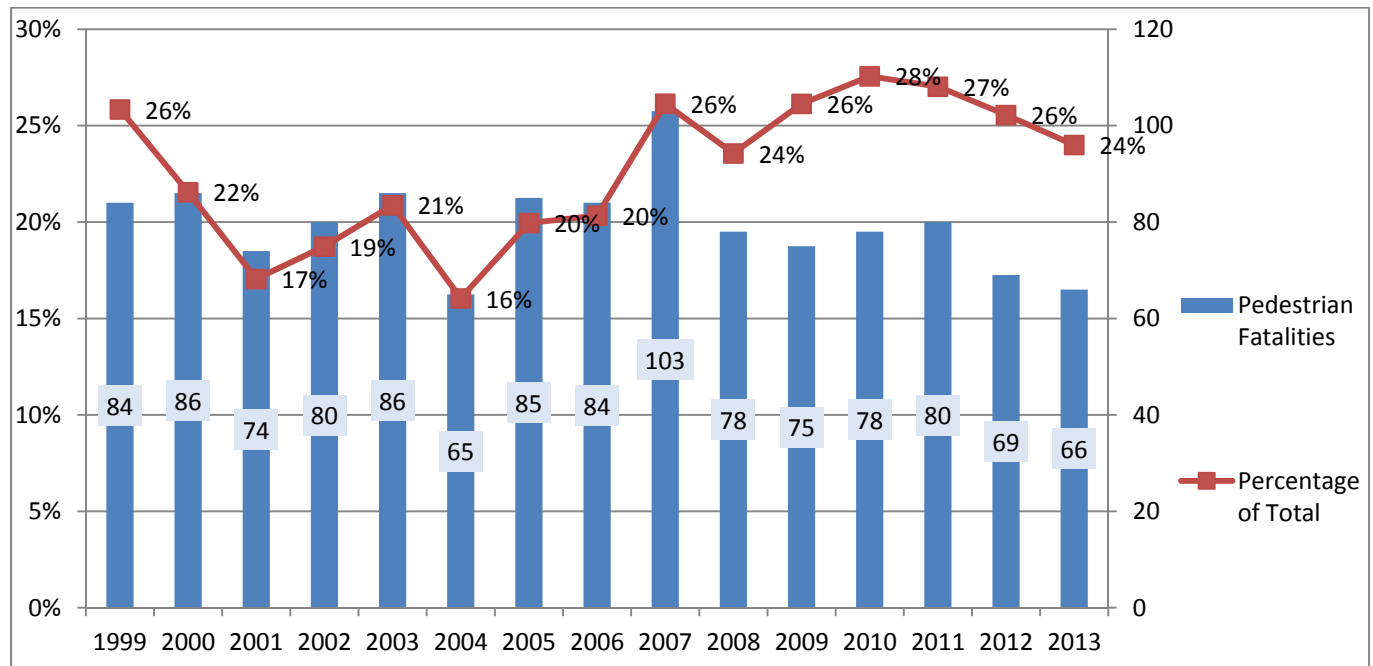
Chart 3-1: Traffic Fatalities in the Washington Region



³ *Dangerous by Design 2014*, Smart Growth America, p. 17.

⁴ Regional totals compiled from data provided by the District Department of Transportation, the Maryland Office of Highway Safety, and the Virginia Department of Motor Vehicles.

Chart 3-2: Pedestrian Fatalities in the Washington Region



Pedestrian and Bicyclist Fatalities by Jurisdiction

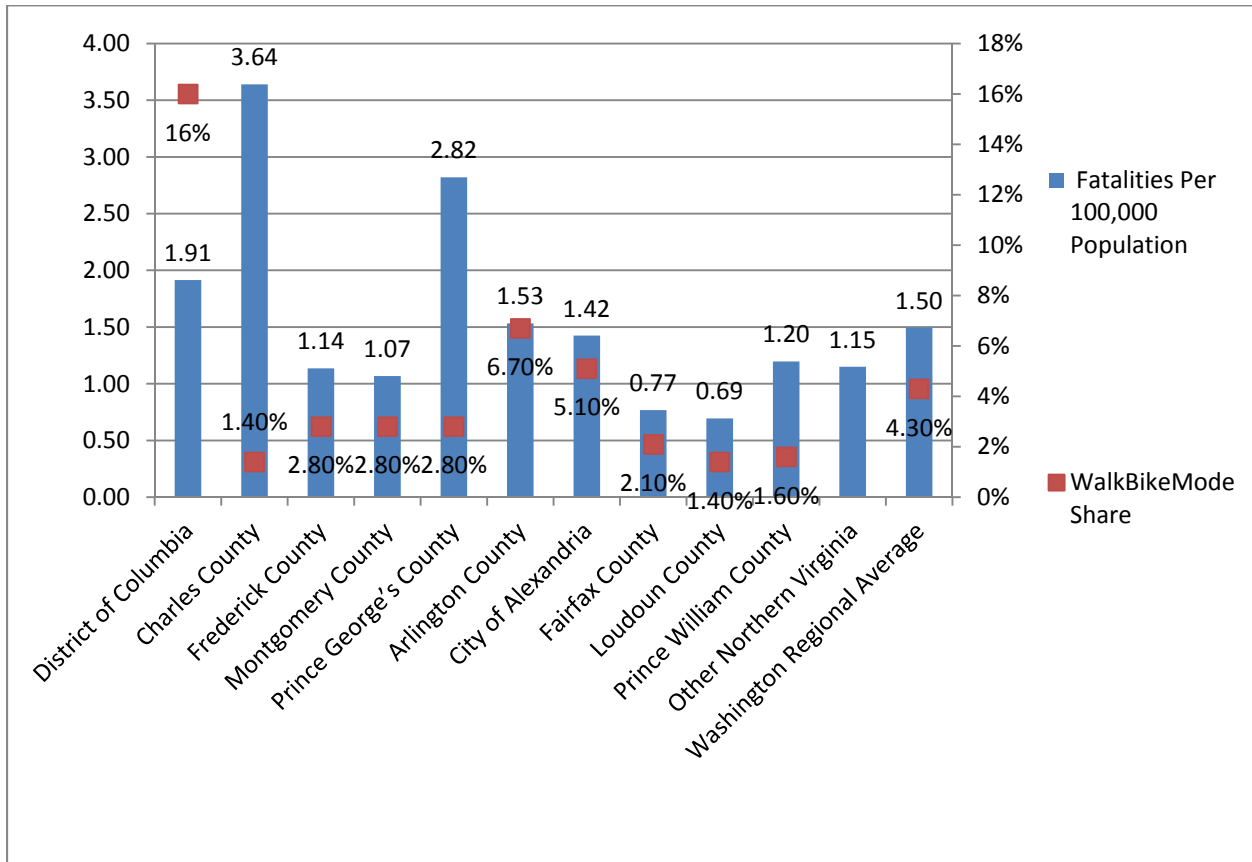
The region is often divided into an urban core, consisting of Arlington, Alexandria and the District of Columbia, the inner suburbs of Fairfax, Montgomery, and Prince George’s Counties, and the outer suburbs, such as Frederick, Charles, Loudoun, and Prince William Counties. The small cities of Manassas, Manassas Park, the City of Falls Church, and the City of Fairfax are shown as “Other Northern Virginia”.⁵

Most of the walking and bicycling occurs in the core, and most of the deaths and injuries occur there as well. Even calculated as a rate per 100,000 population as in Chart 3-3, most of the outer jurisdictions have below-average pedestrian and bicyclist fatality rates.

Charles County is the exception. It has the highest rate of pedestrian and bicyclist fatalities per 100,000 population in the region, and a combined walk and bike mode share that is one of the region’s lowest, at 1.4%.

⁵ Towns in Northern Virginia are not included in the surrounding Counties; their traffic fatalities are tallied separately.

**Chart 3-3:
Average Annual Pedestrian and Bicyclist Fatalities, 2011-2013**



Prince George's County has the second highest fatality rate, with a walk/bike mode share of 2.8%. The District of Columbia has the third-highest fatality rate per population, but also has by far the highest walk/bike mode share in the region, 16%, as well as a high daytime population.

The Virginia jurisdictions all have fatality rates below the regional average. Arlington and Alexandria have average fatality rates but above average walk and bike mode share.

Corrected for exposure, walking and bicycling appear to be safer in the urban core areas with numerous pedestrians than in the inner or outer suburbs. However, some suburban areas appear to be far safer for pedestrians than others.

Table 3-2: Pedestrian and Bicyclist Fatalities by Jurisdiction

Jurisdiction	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Avg
District of Columbia	18	20	15	9	18	14	19	17	27	15	16	16	13	8	14	16
Charles County	6	3	2	5	3	1	6	2	6	1	3	3	9	4	3	4
Frederick County	6	4	0	2	4	2	2	4	1	0	1	3	0	4	4	2
Montgomery County	20	17	11	16	12	15	11	15	17	16	12	15	10	8	14	14
Prince George's County	19	16	30	28	30	19	35	19	29	39	23	23	32	24	18	26
Arlington County	2	5	4	2	3	2	3	1	1	1	4	1	5	4	1	3
City of Alexandria	3	2	2	3	2	1	2	1	2	0	0	2	2	2	2	2
Fairfax County	13	20	18	12	7	16	11	20	17	4	11	13	10	7	8	12
City of Fairfax	0	0	0	1	1	0	1	0	1	0	2	0	1	1	0	1
City of Falls Church	0	1	0	1	0	0	0	0	0	0	0	2	0	0	1	0
Loudoun County	1	1	1	3	3	2	3	1	3	0	1	2	3	3	1	2
City of Manassas	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
City of Manassas Park	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prince William County	2	3	1	3	4	0	4	7	5	6	6	6	1	7	7	4
Total Washington	91	92	84	85	87	72	97	87	110	82	79	86	86	72	73	86

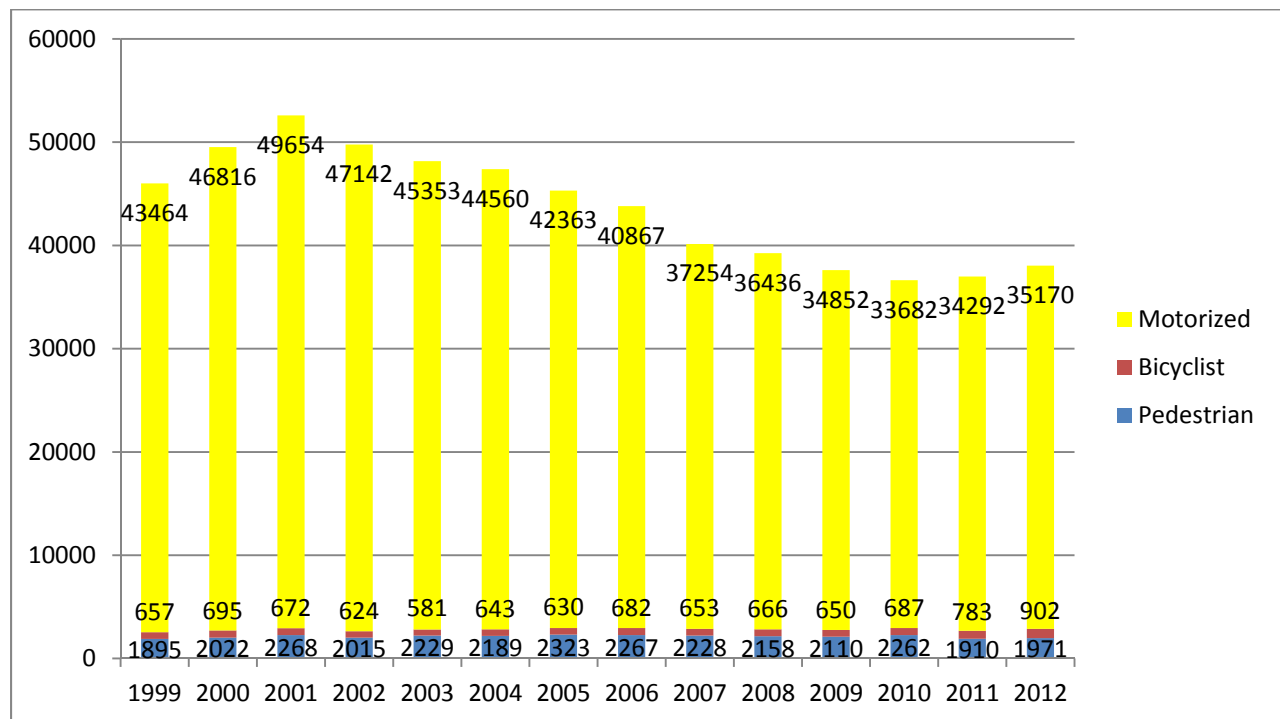
Injuries

Pedestrian injuries exact a steep toll as well. Of the approximately 3000 persons hit by motor vehicles every year in the region, 90% suffer some sort of injury. Approximately 500 injured pedestrians every year require more than 24 hours of hospitalization, which at an average cost of about \$25,000 leads to more than \$12 million in hospitalization charges alone.⁶ This is probably only a fraction of the total financial costs, which would include costs for those hospitalized for less than 24 hours, further medical care, disability, and lost time at work. Many of the people being hit can ill afford such a setback.

Motorized injuries, shown in Chart 3-4, have decreased substantially in the last decade. Unfortunately, pedestrian injuries have declined far more slowly, only 10% from 2001 to 2012, while bicyclist injuries increased, from 695 to 902. The increase in bicycling injuries has been driven largely by the increase in bicycling, and bicycling injuries, in the District of Columbia. Pedestrian and bicyclist trend lines are broken out in Charts 3-5 and 3-7. Bike injuries have been rising sharply since 2010.

While the absolute numbers have remained relatively stable, the proportion of traffic injuries that are pedestrian or bicyclist rose between 2001 and 2012, from 5.5% to 7.6%.

Chart 3-4: Traffic Injuries in the Washington Region, 1999-2012



⁶ Northern Virginia Injury Prevention Prevention Center, INOVA Regional Trauma Center (2005). *Pedestrian Injury in the Washington, D.C. Metropolitan Region*. Page 37.

Chart 3-5: Pedestrian Injuries in the Washington Region, 1999-2012

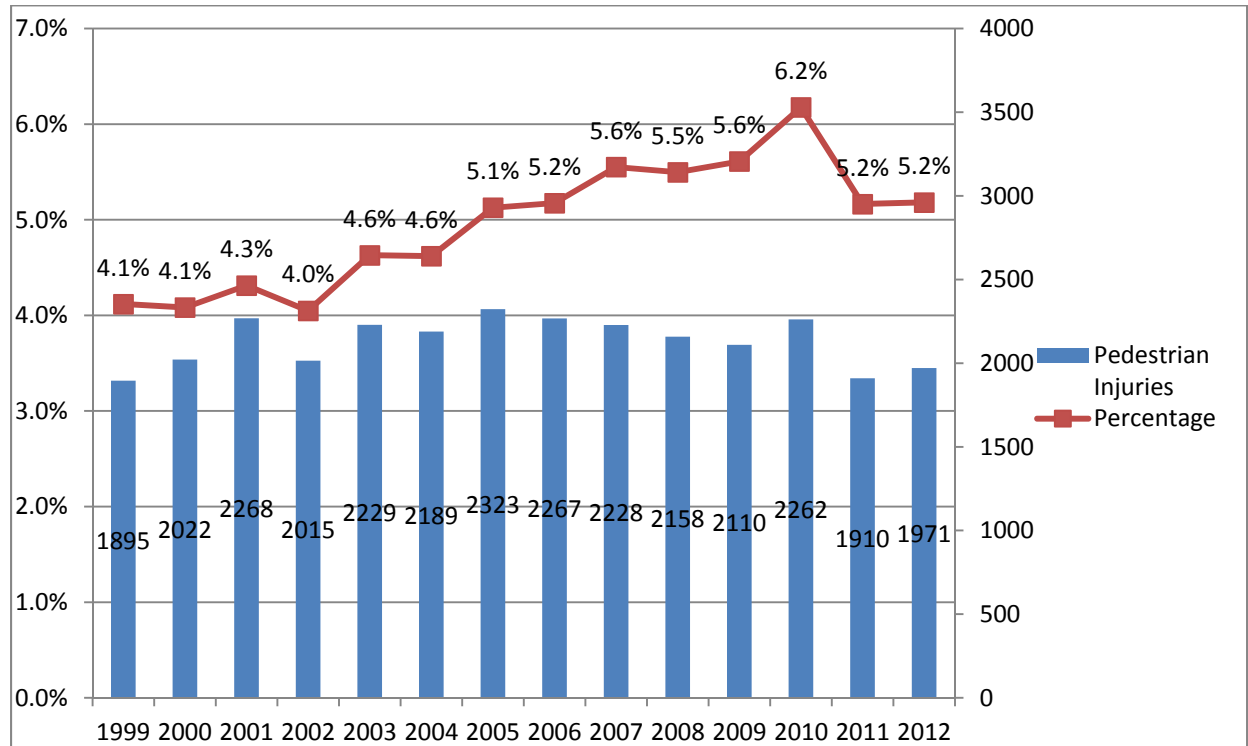
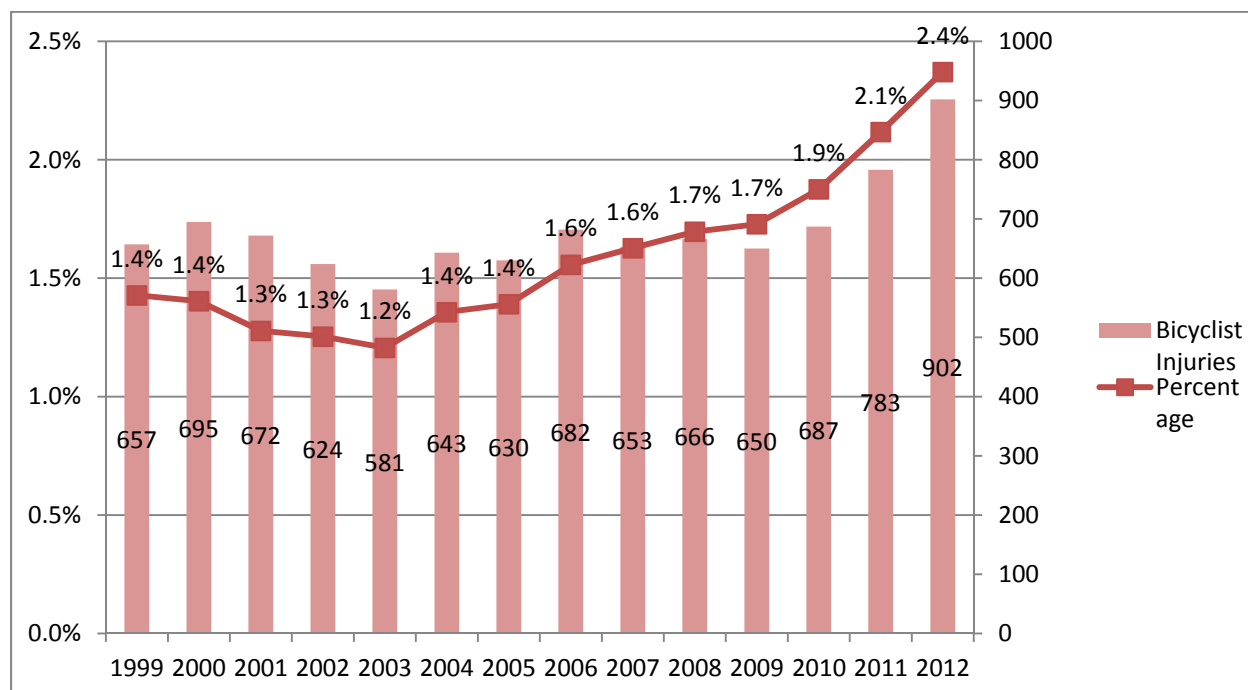


Chart 3-6: Bicyclist Injuries in the Washington Region, 1999-2012

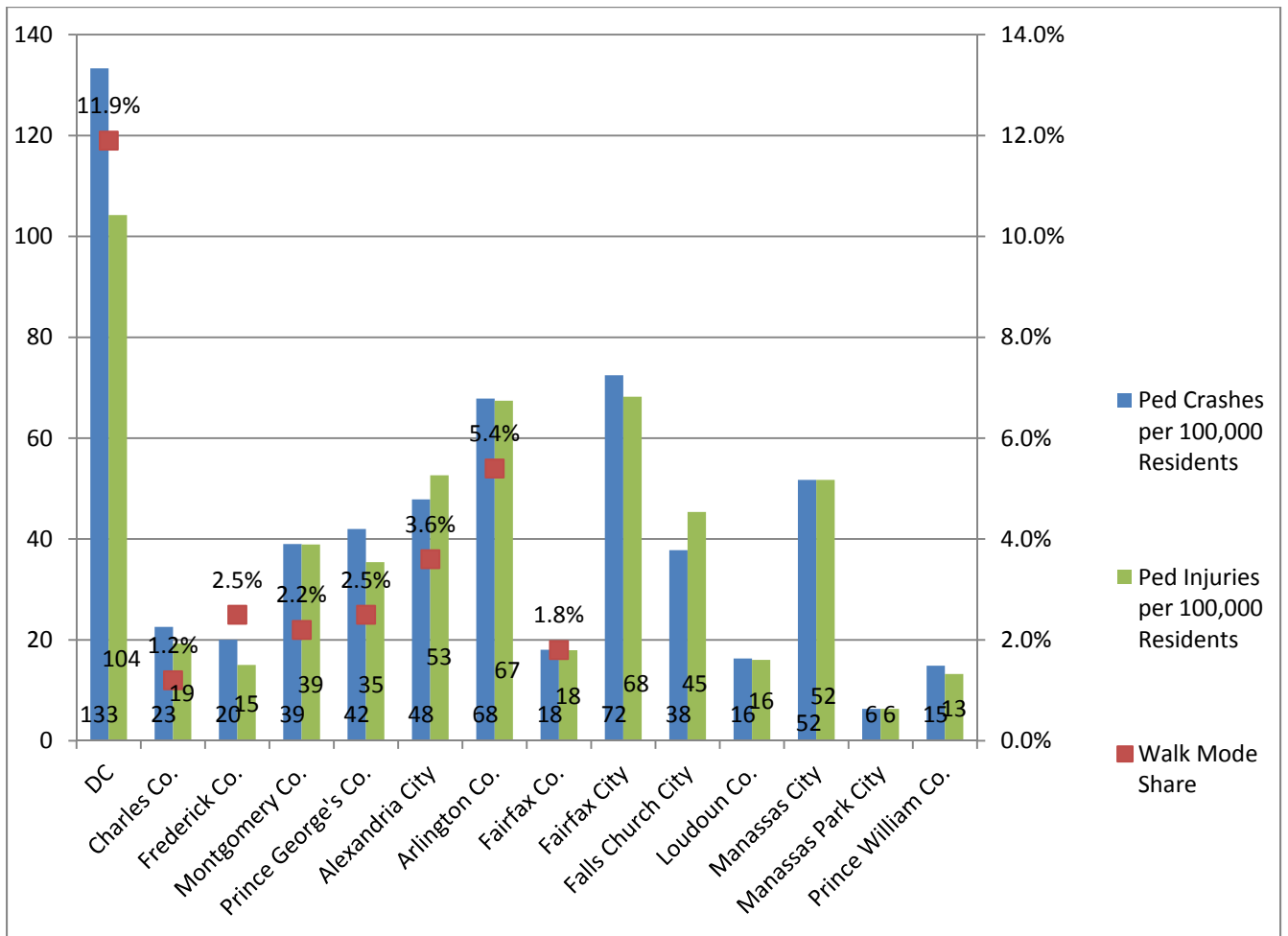


Pedestrian and Bicycle Injuries by Jurisdiction

As seen in Charts 3-7 and 3-8, pedestrian and bicyclist crashes and injuries per 100,000 population generally track mode share as measured by the US census walk to work numbers. The City of Alexandria has few bicyclist injuries but a high bike mode share. And the District of Columbia has a significant number of pedestrian and bicyclist crashes that do not result in injuries.

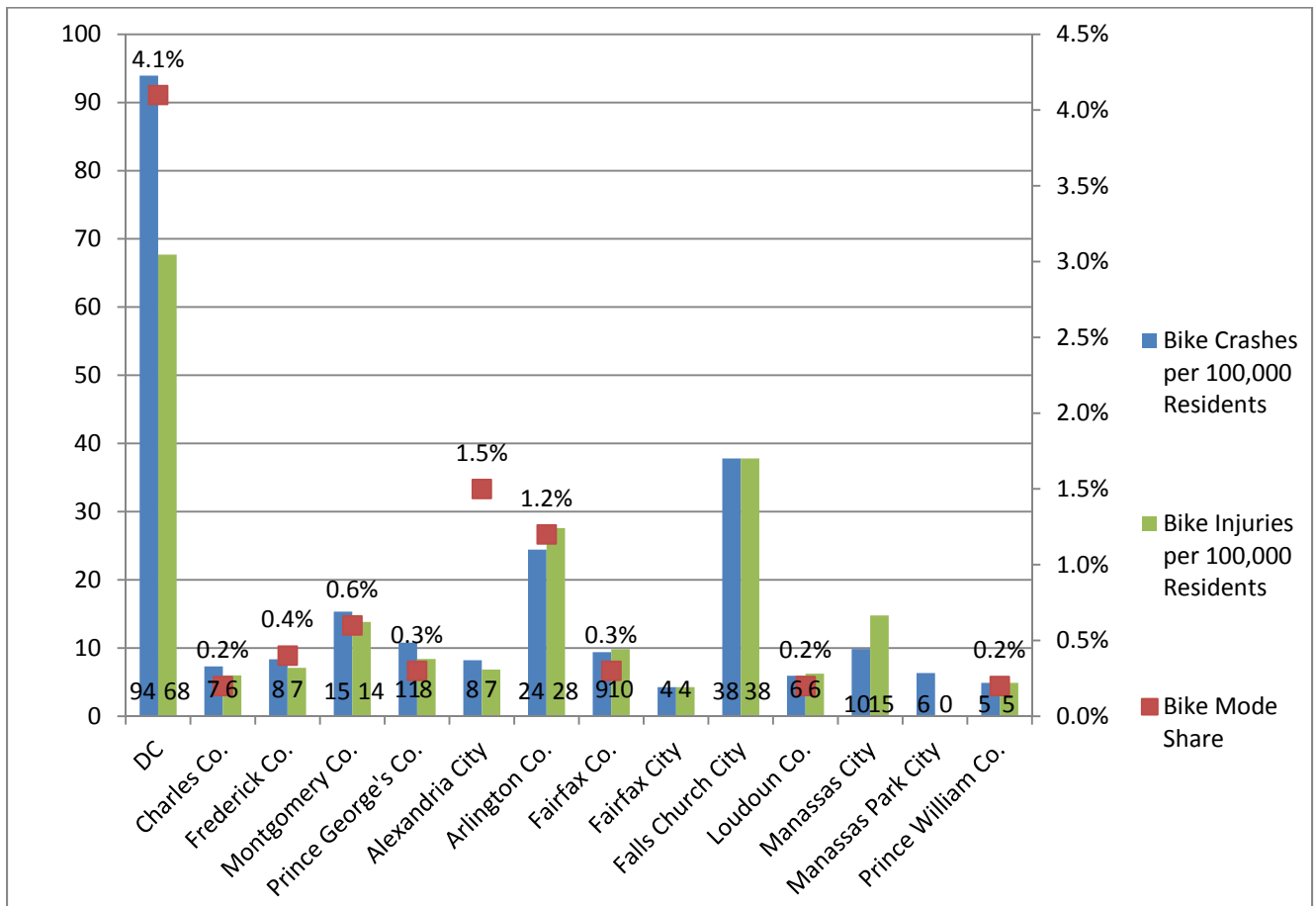
*Bike Injuries
are Rising
Rapidly*

Chart 3-7: 2012 Pedestrian Crashes and Injuries per 100,000 Population in the Washington Region*



*Mode share data not available for smaller jurisdictions

Chart 3-8: 2012 Bicyclist Crashes and Injuries per 100,000 Population in the Washington Region*



*Mode share data not available for smaller jurisdictions

Table 3-3: Pedestrian and Bicyclist Injuries by Jurisdiction

Jurisdiction	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Avg
District of Columbia	718	851	935	779	844	962	998	953	850	776	833	1074	1122	1283	881
Charles County	31	34	60	35	44	53	57	34	50	43	40	49	37	38	44
Frederick County	61	71	62	72	71	55	55	52	59	67	83	68	40	53	65
Montgomery County	482	499	514	477	539	524	532	560	641	632	618	617	401	530	553
Prince George's County	444	469	517	486	505	456	510	479	540	558	493	457	375	386	493
Arlington County	170	185	180	160	154	167	140	178	151	145	137	151	184	210	160
City of Alexandria	107	78	105	90	81	67	104	81	87	75	47	85	68	87	84
Fairfax County	376	379	372	368	388	373	374	402	361	402	341	270	270	311	367
City of Fairfax	21	20	22	22	30	22	16	25	18	13	15	14	20	17	20
City of Falls Church	11	14	13	13	6	9	9	5	4	10	8	4	5	11	9
Loudoun County	42	36	52	47	52	48	49	52	45	48	40	71	93	75	49
City of Manassas	11	13	22	15	19	21	28	20	17	9	21	22	13	27	18
City of Manassas Park	2	7	8	6	2	3	2	5	3	0	2	0	0	1	3
Prince William County	76	61	78	69	75	72	79	103	55	46	82	67	65	78	72
Total	2552	2717	2940	2639	2810	2832	2953	2949	2881	2824	2760	2949	2693	3107	2817

Conclusions

- The decline in overall traffic deaths and injuries over the past ten years has slowed.
- Pedestrian fatalities have fallen slightly, but have increased as a percentage of the total.
- Bicyclist injuries have increased – both in absolute numbers and as a percentage of total. This increase has been driven largely by an increase in bicyclist injuries in the District of Columbia
- Pedestrian and bicyclist death rates vary widely between jurisdictions, and differences which do not correlate well with differences in exposure, as measured by US census walk and bike to work rates.
- Pedestrian and bicyclist injury rates track exposure better than fatalities.

Safety in Numbers

In the Washington region the jurisdictions with the most 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.⁷ Similar effects have been noted for cyclists, with cities having the highest rates of bicycling also having the lowest crash rate per bicycle trip.⁸ High levels of walking and bicycling are associated, in advanced industrialized nations, with very low auto-involved crash rates.⁹ The Netherlands has half the overall traffic fatality rate of the United States, despite a very high walk and bike mode share.

*Pedestrians
find some
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 don't guarantee safety, however. The region's most dangerous areas for walking have high-speed roads and poor pedestrian facilities, together with people who

⁷ 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.

⁸ Denmark Ministry of Transport (1994) *Safety of Cyclists in Urban Areas: Danish Experiences*.

⁹ Pucher, John. "Making Walking and Bicycling Safer: Lessons from Europe," *Transportation Quarterly*, Summer 2000.

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.

Ethnicity and Hospitalization Rates in the Washington Region

There are large differences in the rates of hospitalization for pedestrian injury by ethnicity. The rate of hospitalization per 100,000 population for pedestrian injuries for Hispanics is nearly three times as high as that for Whites, and twice that for African-Americans.¹⁰

Geographically, the highest rates of hospitalization are found in the area east of the Anacostia river in the District of Columbia, most of Prince George's County inside the beltway, the Columbia Pike corridor in Arlington, the area between Fairfax City and Falls Church in Fairfax County, and Dumfries in Prince William County.¹¹

*Hispanics are
three times as
likely as Whites
to be
hospitalized for
a Pedestrian
Injury*

Factors contributing to Pedestrian and Bicycle Crashes

Data from the Washington region indicate that drivers are about as likely as pedestrians to be at fault in a crash. Drivers were cited for a violation in about half the crashes.¹² Males aged 25 to 34 are most likely to hit pedestrians, while pedestrians who are hit are most likely to be males aged 25 to 44. Pedestrian crashes are most likely to occur at the evening rush hour, 5-7 p.m., with 6-9 a.m. the second most likely.¹³ Alcohol is a serious problem for both pedestrians and motorists, affecting approximately one third of crashes.

¹⁰ Northern Virginia Injury Prevention Prevention Center, INOVA Regional Trauma Center (2005). *Pedestrian Injury in the Washington, D.C. Metropolitan Region*. Page 35.

¹¹ *Ibid*, pp. 40-42.

¹² INOVA study, page 23.

¹³ *Ibid*, page 12.

Legal Status of Bicyclists

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. Rules relating to bicycles are summarized on page E-4 of the Metropolitan Washington Council of Governments' *Bike to Work Guide*, on the [Washington Area Bicyclist Association](#) web site, and in Table 3-1 below.¹⁴ Laws for motorist, pedestrians and bicyclists are also listed on <http://bestreetsmart.net>.

Table 3-4: Selected Bicycle Rules in the Washington Area¹⁵

	District of Columbia	Maryland	Virginia
General	Bicyclists traveling on roadways have all the general rights and duties of drivers of vehicles.		
Where to Ride & Lane Use	Ride with the flow of traffic on the right half of the roadway.	Ride with the flow of traffic as far right as practicable and safe.	Ride as close as safely practicable to the right curb or edge of the roadway.
	Operate a bicycle in a safe and non-hazardous manner... so as not to endanger himself or herself or any other person.	Riding to the right not required when traveling at the speed of traffic, operating on a one-way street, passing, preparing for a left turn, avoiding hazards, avoiding a mandatory turn lane or traveling in a lane too narrow to share.	Full lane use allowed when traveling at the normal speed of traffic, passing, preparing for a turn, avoiding hazards, traveling in a lane too narrow to share and avoiding a mandatory turn lane.
Passing Cars	Allowed to pass on left or	Exercise due care when	Same as DC.

¹⁴ See www.commuterconnections.org

¹⁵ See <http://www.waba.org/resources/laws.php>

	right, in the same lane or changing lanes, or pass off road.	passing.	
Cars passing bikes	A person driving a motor vehicle shall exercise due care by leaving a safe distance, but in no case less than 3 feet, when overtaking and passing a bicycle.	The driver of a vehicle overtaking another vehicle, including a bicycle, which is going in the same direction, shall pass to the left of the overtaken vehicle at a safe distance..Drive must not pass any closer than three feet from the bicycle.	Motorists must "pass at a reasonable speed at least two feet to the left of the overtaken bicycle".
Dooring	No person shall open any door of a vehicle unless it is safe to do so and can be done without interfering with moving traffic.	Same as DC.	Not mentioned.
Bicycling Two Abreast	Allowed when it does not impede traffic. May not ride more than two abreast.		
Mandatory Use of Bike Lanes	Not required.	Use of bike lanes required where available except when passing, preparing for a turn or avoiding hazards.	Not required.
Cycling on Sidewalks	Yield right of way to pedestrians.		
	Prohibited in the central business district (bounded by Massachusetts Ave. NW, 2nd St NE-SE, D St SE/SW, 14th St NW, Constitution Ave and 23rd St NW). Allowed where posted in this area, and prohibited where posted outside this area. View Map>>	Allowed by local ordinance in unincorporated MoCo, Rockville, Takoma Park, designated sections in PG Co, other towns; prohibited in Gaithersburg, Kensington, Poolesville, Laytonsville, Washington Grove, most of PG Co. When riding on a sidewalk, where such riding is permitted, or a bike path, a bicyclist may ride in a	Allowed except where prohibited by local ordinance, such as Alexandria. Must give audible signal before passing pedestrian.

		crosswalk to continue on their route. Motorists are required to yield right of way to a bicyclist operating lawfully in a crosswalk at a signalized intersection.	
Audible Warning Devices	Bell or other device required, sirens prohibited.	Bells allowed, sirens and whistles prohibited.	Must give audible signal before passing pedestrians.
Helmets	Required for any operator or passenger under 16 years of age.	Same as DC.	Required by local ordinance for any operator or passenger 14 years of age or younger in Alexandria, Arlington Co., Fairfax Co. Falls Church, Vienna and other jurisdictions.
Lights at Night	Front white light and rear red reflector (or rear red light) required when dark, may be attached to operator.	Front white light and rear red reflector (or rear red light) required when dark.	Front white light and rear red reflector required when dark; extra rear red light allowed- required on roads 35 mph and up, may be attached to operator
Motorist - Doorings	No person shall open a door of a vehicle on the side where traffic is approaching unless it can be done without interfering with moving traffic or pedestrians and with safety to himself or herself and passengers.	A person may not open the door of any motor vehicle with intent to strike, injure, or interfere with any person riding a bicycle, an EPAMD, or a motor scooter. Don't open door into traffic.	

Legal Status of Pedestrians

Pedestrians are not vehicle operators and are not subject to the same rules. Persons on rollerblades, skateboards, etc. operating on the street are considered pedestrians, but bicyclists are not. Motorists must yield to pedestrians when making turns across adjacent crosswalks. “Jaywalking” is legal in most locations, but pedestrians must yield to motorists if they are crossing at a location other than a crosswalk. Pedestrians may not cross at mid-block if they are between two signal-controlled intersections; they must use the crosswalk. The rules in each state regarding pedestrians are summarized below.

Table 3-2: Pedestrian Traffic Law—Motor Vehicles Drivers

	DISTRICT OF COLUMBIA	MARYLAND	VIRGINIA ¹⁶
Crosswalk Definition	Same as Maryland	Any intersection of two roadways is a legal crosswalk, whether marked or not. Pedestrians have the same rights in marked crosswalks as in unmarked crosswalks	Same as Maryland
Blocking a Crosswalk	Pedestrians have the right of way in the sidewalk. Parking on the sidewalk prohibited.	A motorist may not park or stop in a crosswalk	Same as Maryland
Sidewalk	Pedestrians have the right of way in the sidewalk	Pedestrians have the right of way in the sidewalk	Pedestrians have the right of way in the sidewalk.
Right Turn on Red	Allowed, after coming to a complete stop and yielding right-of-way to pedestrians and other vehicles	When turning right on red after stopping, drivers shall yield the right of way to pedestrians lawfully within the crosswalk	Same as Maryland
Turn on Green	A pedestrian who has begun crossing on the walk signal shall be given the right-of-way by the driver of any vehicle to continue to the opposite sidewalk or safety island, whichever is nearest.	Vehicles turning either right or left on a green light must yield to pedestrians in the adjacent crosswalk	Same as Maryland

¹⁶ <http://www.virginiadot.org/programs/bk-default.asp>, www.bikewalkvirginia.org

Red Light	A driver of any vehicle shall STOP and give right-of-way to a pedestrian who has begun crossing on the “Walk” signal to continue to the opposite sidewalk or safety island, whichever is nearest.	Motorist should stop before the crosswalk, or if no crosswalk is striped, before the intersection	Same as Maryland
Stop-Controlled or Uncontrolled Intersection	The driver of a vehicle shall STOP and give right-of-way to a pedestrian crossing the roadway within any marked crosswalk or unmarked crosswalk at an intersection.	Motorist must stop for any pedestrian in the same half of the roadway as the motorist, or who is approaching from the adjacent lane in the other half of the roadway. No motorist may pass another vehicle which has stopped for a pedestrian	The drivers of vehicles entering, crossing, or turning at intersections shall change their course, slow down, or <i>stop if necessary</i> to permit pedestrians to cross such intersections safely. Pedestrians have the right of way unless the speed limit is more than 35 mph, in which case the motorist has the right of way.
Overtaking at a crosswalk	Whenever any vehicle is stopped at a marked crosswalk or at an unmarked crosswalk at any intersection to permit a pedestrian to cross the roadway, the driver of any vehicle approaching from the rear shall not overtake and pass the stopped vehicle.		

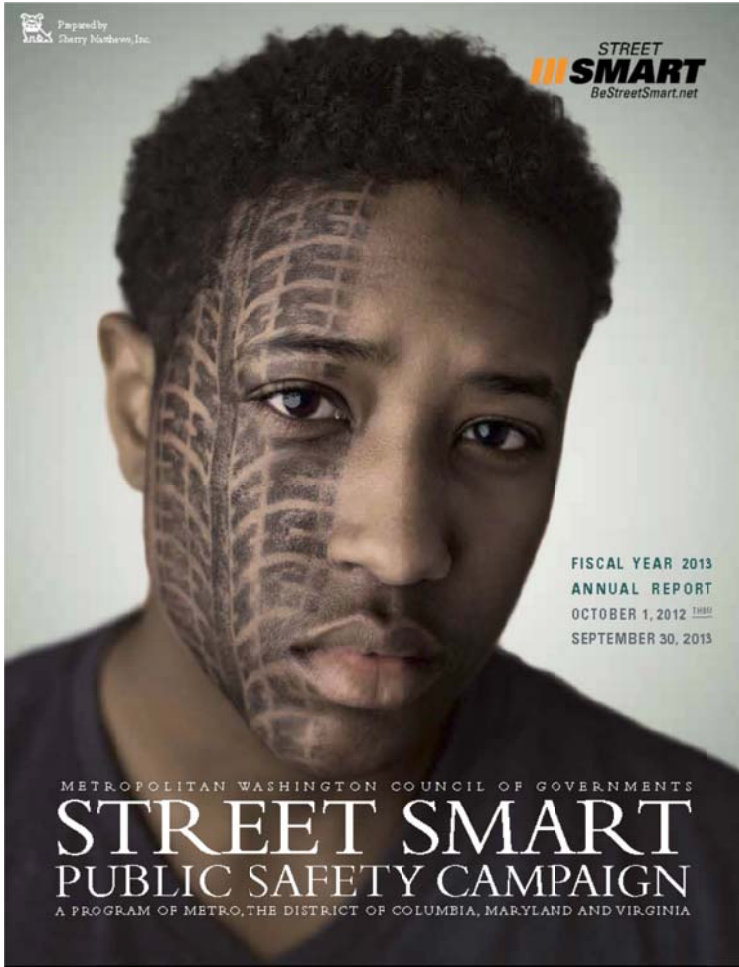
**Table 3-3:
Pedestrian Traffic Law—Pedestrians**

	DISTRICT OF COLUMBIA	MARYLAND	VIRGINIA
Green light	A pedestrian facing a green light (other than a turn arrow) may cross the roadway, within a marked or an unmarked crosswalk	A pedestrian facing a green light (other than a turn arrow) may cross the roadway, within a marked or an unmarked crosswalk	Same as Maryland
Red light	Pedestrians shall not enter the roadway on a steady red light.	Pedestrians shall not enter the roadway on a steady red light	Same as Maryland
Pedestrian Control Signal	Pedestrians shall not enter the roadway when there is a flashing “Don’t Walk” or “Wait” indicator	Pedestrians shall not enter the roadway when there is a flashing “Don’t Walk” or “Wait” indicator	Same as Maryland
Stop-controlled or uncontrolled	Essentially the same as Maryland, but with a specific	Pedestrians may cross the roadway within a marked or	Same as Maryland, except the pedestrian must yield to motor

<p>intersection</p>	<p>prohibition on walking suddenly into the path of a vehicle:</p> <p>(a) No pedestrian shall suddenly leave a curb, safety platform, safety zone, loading platform or other designated place of safety and walk or turn into the path of a vehicle which is so close that it is impossible for the driver to yield.</p>	<p>unmarked crosswalk</p>	<p>vehicle traffic if the speed limit is 35 mph or more. Pedestrians may not disregard approaching traffic when entering or crossing an intersection.</p>
<p>Crossing at Other Than Crosswalks</p>	<p>Between adjacent intersections controlled by traffic control signal devices or by police officers, pedestrians shall not cross the roadway at any place except in a crosswalk.</p> <p>Each person crossing the roadway at any point other than within a marked crosswalk, or within an unmarked crosswalk at an intersection, shall yield the right-of-way to all vehicles upon the roadway.</p>	<p>(a) If a pedestrian crosses a roadway at any point other than in a marked crosswalk or in an unmarked crosswalk at an intersection, the pedestrian shall yield the right-of-way to any vehicle.</p> <p>(b) If a pedestrian crosses a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing is provided, the pedestrian shall yield right of way to any vehicle.</p> <p>(c) Between adjacent intersections at which a traffic control signal is in operation, a pedestrian may cross a roadway only in a marked crosswalk.</p> <p>(d) A pedestrian may not cross a roadway intersection diagonally.</p>	<p>“Where intersections contain no marked crosswalks, pedestrians shall not be guilty of negligence as a matter of law for crossing at any such intersection or between intersections when crossing by the most direct route.”</p> <p>Pedestrians may not enter the roadway at any point where drivers view of them is blocked by a parked vehicle or other obstruction.</p>
<p>Pedestrians on Roadways</p>	<p>Where sidewalks are provided, it shall be unlawful for any pedestrian to walk along and upon an adjacent roadway.</p>	<p>(a) A pedestrian may not walk on a roadway where sidewalks are provided.</p> <p>(b) Where no sidewalk is provided, a pedestrian may walk only on the left side of the roadway, facing traffic.</p>	<p>Same as Maryland.</p>

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, from WMATA, and is administered by the National Capital Region Transportation Planning Board.

The Street Smart campaign is a twice-yearly, month-long blitz of radio, transit, gas station, and internet advertising, supported by public relations activities and by concurrent law enforcement. The goal of the campaign is to change driver and pedestrian behavior in order to reduce deaths and injuries. Motorists are urged to “Slow Down and Watch for Pedestrian”, bicyclists to “Obey Signs and Signals”, pedestrians to “Use Crosswalks. Wait for the Walk Signal” and transit riders to “Don’t Run for the Bus”. 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>.

Figure 13-3: Fall 2013 Press Event



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. Research shows that fear of fines and legal consequences is more effective at changing behavior than fear of death or injury. Also the TV and press media often covers enforcement stings, increasing the public’s perception that they are likely to be ticketed for breaking the law.

The Street Smart campaign sponsors annual seminars on best practices in pedestrian enforcement for law enforcement officers. Participating agencies report the number of warnings and citations issued.

Evaluation

Pre and post-campaign surveys show that the public is hearing and remembering the Street Smart messages. 50% of pedestrians and 27% of

drivers were aware of at least once of the campaign messages. High pedestrian awareness is likely due to the large amount of free PSA placement on transit properties which the campaign received. Overall PSA value was nearly twice the paid media budget.

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. As the population of car-less immigrants and poor people grows in suburban areas that were designed for driving, pedestrian and bicyclist safety will remain a challenge.

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

The Street Smart campaign is yielding positive results, but it is meant to complement, not replace, local three “E” safety efforts. States, cities, and counties need to continue engineering and building safer streets, enforcing the pedestrian safety laws, and educating motorists and pedestrians. We know that the streets can be made safe for pedestrians and bicyclists, because some of our jurisdictions have already done it. Agencies that make pedestrian safety a priority are getting results, while those that do not, are not.

Chapter 4
Existing Facilities for Bicyclists and Pedestrians

Draft September 2014

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. On the other hand, many activity centers, not originally designed with pedestrians in mind, have grown dense enough to generate significant



Figure 1: Informal foot path

Informal Foot- Paths Show where People Walk

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.¹

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.

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.

¹ Photo of Informal Path, Southern Avenue, Prince George's County, MD: COG/TPB, Michael Farrell

Draft September 2014

Shared-Use Paths²



Figure 2: Mount Vernon Trail

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 <http://www.commuterconnections.org/commuting-resources/bicycling-resources>.

The region continues to build new trails along stream valleys and in conjunction with major highway projects, but the remaining inventory of disused rail lines, which often provide the best opportunities for shared-use paths, is fairly small.

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. Shared-use paths are eight to twelve feet in width. The region has approximately 200 miles of major shared-use paths, either paved or level packed gravel surface suitable for road



Figure 3: Side Path on Fairfax County Parkway

Side-Paths³

Side-paths differ from shared-use paths in that they do not have their own right of way, but are closely adjacent to a non-limited access roadway and thus subject to more

² Photo of Mt. Vernon Trail, Arlington, VA: COG/TPB, Michael Farrell

³ Photo of Sidepath on the Fairfax County Parkway: Photographer Unknown

Draft September 2014

frequent conflict with driveways, side streets, and turning traffic. Side-paths differ from sidewalks in that they must be at least eight feet wide and are designed to meet the needs of bicyclists.

The Washington region has approximately 300 miles of side-paths, and there are plans to expand that mileage considerably.

Side-paths meet the need for a separated pedestrian facility and provide separation from traffic that is valued by child and slow-moving cyclists, especially in places where the road has speeds of 40 mph or more and high traffic volumes. 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. Since 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 4 feet for roadways with no curb or gutter; next to a curb or parked cars 5 feet. Six feet is preferred where there is a curb or on-street parking. 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 lanes are generally much less expensive than separated paths. Bike lanes

Figure 4: Green Bike Lane



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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

Figure 5: Bike Lane



adequate for pedestrians, though in rural areas without sidewalks the roadway shoulder serves as both a bicycle lane and as a pedestrian facility.⁴

Bike lanes may be colored green for conspicuity.

The number of bicycle lanes is growing rapidly. The District of Columbia currently has 60 miles of bicycle lanes, up from 19 miles in 2006, and three in 1995, Arlington County has 24 miles, up from three in 1995, and Montgomery County has 17 miles.⁵ The regional

mileage of bicycle lanes can be expected to expand significantly in the future as the District of Columbia, Arlington County, and Montgomery County all have ambitious plans to build more. Google maps shows 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 there is higher than normal speeds, traffic volumes or truck volumes, or high-turnover parking. It allows additional space to be provided for bicyclists without creating something that looks like a travel lane to motorists. The example above is from Arlington.



Figure 4: Buffered Bike Lane

⁴ Bike lane photo: www.pedbikeimages.org / Dan Burden

⁵ *Countywide Bikeways Functional Master Plan*, March 2005. Maryland-National Capital Park and Planning Commission. Page 12.

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Protected Bicycle Lane

A protected bike lanes, sometimes call a “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, bollards, curbs/medians, parked cars, or a combination of these elements. Protected lanes can either incorporate bicycle-only signal phases at intersections (for 100% separation) or utilize “mixing zones” to merge bicycle and motor vehicle traffic.⁶

Figure 5: 15th Street NW Protected Bike Lane



Protected bike lanes have long been viewed skeptically in the United States, and notably in the AASHTO Guide for the Development of Bicycle Facilities, due to the potential conflicts with turning vehicles, and lack of visibility of cyclists to turning vehicles when separated by parked cars. However, these facilities are generating interest.

Figure 6: 1st Street NE Protected Bike Lane



*The 15th Street
Protected Lane
has increased
Ridership by
more than 200%*

Protected lanes have been used in numerous cities in Europe with mixed results.⁷ Installation 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%.

⁶ National Association of City Transportation Officials. <http://www.nacto.org/cycletracks.html>

⁷ 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

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However, the same study showed that installing increased bicycle (and moped) ridership 18 to 20 percent.⁸ Installing bike lanes resulted in a 5 to 7% increase in ridership, and a 5% increase in crashes. For both protected bike lanes and bike lanes the number of riders can be expected to increase more than the number of crashes.

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

Following New York City, and Cambridge, MA, the District of Columbia is actively installing protected bike lane, 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.⁹

More recent projects include one-way couplet of protected bike lanes on L Street and M Street NW (not yet complete) in downtown, and the 1st Street NE protected bike lane, which connects the Metropolitan Branch Trail to Union Station.

To help prevent turning conflicts, protected bike lanes may be equipped with separate [signals](#) for bicycles.

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.¹⁰ Under the new routine accommodation policy, VDOT is to provide adequate facilities for pedestrians and bicyclists even if not called for in the local plan.

Where bicycle and pedestrian volume 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

⁸ *Cycle Tracks: Lessons Learned*. February 2009. Alta Planning and Design. Page 1.

⁹ *Bicycle Facility Evaluation, Final Report*. April, 2012, p. 12.

¹⁰ *Northern Virginia Regional Bikeway and Trail Network Study*. November, 2003. Virginia Department of Transportation, Northern District Office. Page 19.

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Washington & Old Dominion Trail in Northern Virginia includes several sections with gravel pedestrian paths that parallel the paved shared-use path.

Sharrows

A sharrow is a pavement marking showing a suggested line of travel for the bicyclist. They are typically used on lower-speed streets where bicyclists may safely share the lane with automobiles.



Figure 7: Sharrow

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. The trend with bicycle route signs is to include information on distances to 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, 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. With the exception of the National Capital Mall, the proposed route through the Washington region is not yet signed. Bicycle Route 1 is part of a national network of low-traffic road routes promoted by the Adventure Cycling Association. 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 8: DC Bike Route Sign

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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.

Bridges

With the completion of the Woodrow Wilson Bridge trail 2009, cyclists were able 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 Harborplace development in Prince George’s County without going on street. Connections are also provided an on-street network of bicycle routes in Prince George’s County.



Figure 7: East Coast Greenway in DC



Figure 8: Woodrow Wilson Bridge Trail

The 14th Street Bridge, the Memorial Bridge, the Theodore Roosevelt Bridge, the Key Bridge, and the Chain Bridge all have bicycle and pedestrian facilities. In the north, cyclists and pedestrians may use the ferry at White’s Ferry, which connects Montgomery County and Loudoun County. 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 in 2013, bicyclists and pedestrian now have a first rate multi-use path connection from Anacostia to the Navy Yard area of SE DC.

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

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, but other options include bbbike.org, and [RidetheCity](#), which allow cyclists to point and click their proposed origins and destinations, and choose various routing alternatives.

Google maps also provides walking and bicycling directions. The bicycling directions show paths, bike lanes, and on-street bike routes, but offer no options for selecting more direct or safer routes.

Accessed via smart phone, these and other on-line applications can replace paper maps for most purposes.

Bicycles and Public Transit

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

Metrorail Guidelines

- Bicycles are permitted on Metrorail (limited to two bicycles per car) weekdays except 7-10 a.m. and 4-7 p.m. Bicycles are permitted all day Saturday and Sunday as well as most holidays (limited to four bicycles per car). Bicycles are not permitted on Metrorail on July 4th or other special events or holidays when large crowds use the system.
- Folding bikes are permitted on Metrorail during rush hours if fully enclosed in a carrying bag.
- No tricycles, training wheels, tandem bicycles or recumbent bicycles are allowed on Metrorail.
- For other Bike on Rail guidelines see:
http://www.wmata.com/getting_around/bike Ride/bikes_rail.cfm

Draft September 2014

Metrorail Facilities

- **Bike & Ride** is a secure, enclosed bicycle parking facility with card access and space for over 100 bikes, on the first floor of the Metro garage at College Park-U of MD station. Bike & Ride is more flexible, secure, and space efficient than racks or individual lockers.
- For the most up to date information on bicycle parking at Metrorail, go to the [WMATA web site](http://www.wmata.com/getting_around/bike_ride/) and click on the stations tab. You can see which stations have bike racks and lockers. Or go to http://www.wmata.com/getting_around/bike_ride/ for a list of stations with bike racks and lockers, and information on how to rent a bike locker.
- Systemwide, WMATA maintains about 1,280 single bike lockers and about 1,700 bike racks. Racks are first come, first served. At many downtown stations, local jurisdictions provide additional bike parking near stations. WMATA continues to add and upgrade racks.

Figure 9: New Bike Racks (WMATA photo)



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 http://www.wmata.com/getting_around/bike_ride/bikes_bus.cfm
 - Metro has adopted guidelines for the design and placement of bus stops to improve their safety, comfort, accessibility, and efficiency.
-

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Park and Ride

Of the 175 park and ride lots in the Washington DC-MD-VA Metropolitan Statistical Area, about 50 have bike lockers or racks. [Commuter Connections](#) lists information on Park and Ride lots.

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.

Collapsible bicycles are permitted on [MARC](#), but not full-size bicycles. No bag or case is required.

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 a.m. peak walk mode of access, which is the best measure of how people originally get into the system, is 37%.

The quality of pedestrian access to Metrorail and Metrobus is uneven. 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. Inventorying conditions and making recommendations for specific locations is beyond the scope of this plan, but there have been a number of efforts to do so, such as MTA's Access 2000 Study, COG/TPB's Walkable Communities Workshops, and efforts in Fairfax County and Montgomery County to improve bus stop safety.

[WMATA](#) has developed a set of *Guidelines for Station Site and Access Planning*, and WMATA has plans to upgrade pedestrian access at Metrorail stations and carry out station-area development. WMATA also finished an inventory of conditions at all its bus stops in 2008. The inventory included information on the presence of bus shelters, sidewalks, and location at a controlled intersection.¹¹ Suburban bus stops often lack a nearby controlled intersection for safe street crossing, and may also be missing sidewalks. A study on [bicycle and pedestrian access](#) to Metrorail provides details on pedestrian access.

¹¹ *WMATA Bus Stop Inventory Project*. Kristin Haldeman, Presentation to TPB Access for All Subcommittee, November 2008.

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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.

- **Bike Corrals**

As demand grows in congested areas, DC has added bike corrals, which are bike racks placed in the street, and protected by flexi-wands in 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, result in no loss of car parking.

Tire stops are necessary to prevent cars from backing into the racks.

Figure 10: Bike Parking Demand is Growing



Figure 11: Solution: Bike Corral



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- [DC Bike Station](#)

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. It is staffed 66 hours per week and available to members 24/7 for self-service parking. In addition to secure bike parking, the



Figure 12: DC Bike Station at Union Station
Photo Credit: COG/TPB



Figure 13: DC Bike Station Interior

facility also provides a changing room, lockers, bike rental, bike repair, bike rental, and retail sales. The Bikestation location at Union Station allows commuters to take public transportation to the station, pick up their bicycles and go to work, shopping or entertainment.

The DC bike station 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. WMATA is moving to install secure bike parking in its garages.

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.

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Bike sharing became common and popular first in Europe and then the United States, with programs in [dozens of cities](#).

Capital Bikeshare has over 2500 bicycles and 300 stations

Since it opened in 2010, the regional bike sharing program, [Capital Bikeshare](#) has grown to include 2500 bicycles at over 300 stations across Washington, D.C., Arlington and Alexandria, VA and Montgomery County, MD. 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.

The Institute for Transportation Development and Policy has published a [bike share planning guide](#) which offers best practices for bike share, based on the experiences of over 600 bike share systems worldwide.

Figure 14: Capital Bikeshare Station



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.

Chapter 5
Goals and Indicators

Introduction

As seen in Chapter One, both the Vision of the Transportation Planning Board (1998) and the Region Forward (2010) vision plan of the Council of Governments encourage walking and bicycling. *Region Forward*, a vision for the National Capital region in 2050, was adopted in January 2010. *Region Forward* builds on the TPB *Vision*, calling for more rapid implementation of the regional bicycle and pedestrian plan, increased walking and bicycling, and reduced pedestrian and bicyclist fatalities. The goals of *Region Forward* are broader than those of the TPB *Vision*, encompassing areas such as public safety, land use, economic development, housing, and the environment. New development is to be concentrated in walkable, mixed-use activity centers.

Goals

Region Forward 2050 includes a set of goals, and targets and indicators that will help measure whether those goals are being met. Many of those goals relate to walking and bicycling:

Transportation

1. A broad range of public and private transportation choices for our region which maximizes accessibility and affordability to everyone and **minimizes reliance upon single occupancy use of the automobile.**
2. A transportation system that maximizes community connectivity and walkability, and minimizes ecological harm to the region and the world beyond.

Land Use

1. Enhancement of established neighborhoods of differing densities with **compact, walkable infill development**, rehabilitation and retention of historic sites and districts, and preservation of open space, farmland and environmental resource land in rural areas.
2. **Transit-oriented and mixed-use communities** emerging in regional activity centers that **will capture new employment and household growth.**

Energy & Environment

1. Significant **decrease in greenhouse gas emissions**, with substantial reductions in the built environment and transportation sector.
 2. Protect and enhance region's environmental resources by meeting and exceeding standards for our air, water, and land.
-

Public Safety & Health

1. Safe communities for residents and visitors.
2. ...protect the public health, safety, welfare, and preserve the lives, property, and economic well-being of the region and its residents.
3. Healthy communities with ...**a focus on wellness and prevention**

Targets and Indicators

In order to measure progress towards the broad transportation goals, *Region Forward* recommends that certain indicators be tracked. Table 5-1 below shows some of the targets and primary indicators from *Region Forward* that relate to walking and bicycling as well as corresponding, additional indicators which the bicycle and pedestrian subcommittee believes will give a more complete and timely picture of the region's progress. A (?) designates an indicator for which a practical data source has not yet been identified.

Table 5-1:

Region Forward 2050 Targets & Indicators

Suggested Supporting Indicators

Region Forward Targets	Primary Indicators	Data Source/Freq.	Baseline	Suggested Supporting Indicators	Data Sources/Freq.	Baseline
Increase the share of walk, bike, and transit trips.	Mode split – Percent of Walk, Bike and Transit Trips	2007/2008 household travel survey/10 years	Bike: 0.5% Walk: 8.5% Transit: 6.1% Auto: 81.6%	<ol style="list-style-type: none"> 1. Walk and bike commute mode share 2. Pedestrian and bicyclist counts 3. Pedestrian Access to Transit Mode Share *AM peak access 4. Bike Access to Transit mode share *AM peak access 5. Bike share trips Number of bike share trips per day & per bike share bike. 6. % Female cyclists <p>Adopt complete streets policies - Jurisdictions with complete streets policies</p>	<ul style="list-style-type: none"> • US Census – American Community Survey (ACS) five year rolling average/ Annual • DC, Arlington counts/annual • WMATA rail passenger survey/5 years • Regional Bike Share trip numbers/annual 	<ul style="list-style-type: none"> • ACS available in 2010 • DC Average 2009 Peak hour count = 69 • female bicyclists = 19% • 0.55% bicycle mode of access to Metro in 2007 • 62.12% walk mode of access to Metro in 2007 • 33.3% am peak walk mode, 0.7% bike mode
Reduce VMT per capita	VMT per capita	2008 CLRP/Annual	Vehicle Miles Traveled per capita = 22.94	Share of VMT reduction attributable to increase in walking and bicycling	Estimate from mode shift to walking and bicycling/Annual	ACS 2010

<p>Increase the rate of construction of bicycle and pedestrian facilities from the TPB plan.</p>	<p>Number of bicycle and pedestrian projects from the CLRP</p>	<p>Number of bicycle and pedestrian projects in the CLRP</p>	<p>CLRP/Annual</p>	<p>Pedestrian and Bicycle Infrastructure Construction 1. Centerline mileage of bike lane built 2. Mileage of Side Path Built 3. Mileage of Multiuse path built 4. Bicycle and pedestrian bridges and underpasses built 5. Public bicycle parking • Staffed bike stations 7. Number of Streetscaping projects completed/ Number of pedestrian intersection improvement projects completed Access to Transit 8. Bike share stations and bike share bikes at rail stations and transit hubs 9. Bike share stations and bike share bikes within 3 miles of a transit hub 10. Bike parking - Rack spaces, lockers bike cage, bike parking structure spaces 11. Parking usage rates (?) Bike Sharing 1. Number of bike sharing stations 2. Number of bike sharing bicycles</p>	<ul style="list-style-type: none"> • Bicycle and Pedestrian Regional Project Database/ Annual • WMATA rail passenger survey/5 years • WMATA web site – Bike ‘N Ride • WMATA Bus Stop Inventory/? • Capital Bikeshare 	<p>9 miles bike lane/year 13 miles shared use path/year 5 bridges/tunnels 1 staffed bike station 9 streetscaping projects 16 pedestrian intersection projects 77 Metro Stations have racks and/or lockers. 1,280 single bike lockers and about 1,600 bike racks - with capacity for about 3,150 bikes Zero bike cage spaces, bike parking structure spaces 10 bike sharing stations 100 bike sharing bikes</p>
<p>Targets</p>	<p>Primary Indicators</p>	<p>Data Source/Freq.</p>	<p>Baseline</p>	<p>Suggested Supporting Indicators</p>	<p>Data Sources/Freq.</p>	<p>Baseline</p>
<p>Reduce pedestrian and bicyclist fatalities and</p>	<p>Pedestrian and Bicyclist Injuries and</p>	<p>Virginia DMV, DDOT, and Maryland Office of</p>	<p>2004-2008: 84 pedestrian deaths 7 bicyclist</p>	<p>Education</p> <ul style="list-style-type: none"> • Number of school children trained in safe walking and bicycling (?) • Recognition of key safety 	<p>1. Safe Routes to School Program/Annual</p>	<ul style="list-style-type: none"> • 3500 children trained in DC in 2008, 2700 in Rockville.

injuries	Fatalities	Highway Safety/Annual	deaths 2007: 1962 pedestrian injuries 653 bicyclist injuries	<p>messages by the general public</p> <ul style="list-style-type: none"> • Number of Bike to Work day participants <p>Enforcement: Number of pedestrian-related and bicycle-related citations and warnings issued as part of the Street Smart campaign.</p> <ol style="list-style-type: none"> 1. Speeding 2. Speeding, school zone 3. Reckless driving 4. Passing stopped school bus 5. Failure to yield to pedestrian or bicyclist 6. Cross against the signal (pedestrian) 7. Walk into the path of motor vehicle outside marked or unmarked crosswalk. 8. Ignore traffic signal (bicyclist) 9. Wrong way riding 10. Ride on sidewalk where prohibited 	<ol style="list-style-type: none"> 2. Street Smart Annual Report 3. Bike to Work Day Annual Report 4. Street Smart Enforcement Reports/annual 	<p>Virginia SRTS does not tally such numbers.</p> <ul style="list-style-type: none"> • 8500 Bike to Work Day participants in 2010 • 30,221 ped-related citations • 7,804 warnings
Targets	Primary Indicators	Data Source/Freq.	Baseline	Suggested Indicators	Data Sources/Freq.	Baseline

Chapter 6
Best Practices

The *TPB Vision*, *Region Forward*, and *Regional Transportation Priorities* plans 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.

1. Include bicycling and walking, including provisions for persons with disabilities, in all stages of the transportation and land use planning process, from initial concept through implementation.¹



2. 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.

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.

“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.”

¹ Ft. Totten, DC Photo: COG/TPB, Michael Farrell

- 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.
- 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.

3. **Take into account likely future demand** for bicycling and walking facilities in planning transportation projects; do not adopt designs that would preclude future improvements.
4. **Encourage public participation** by bicyclists and pedestrians and other community groups in the planning process.
5. Ensure **adequate funding** for bicycle and pedestrian transportation staff and facilities, including land acquisition, design, construction, and proper maintenance.

6. **Integrate bicycling and walking** into new development.
 - Require land developers to **finance and construct sidewalks**, shared-use paths, and bicycle parking facilities within their developments.
 - Require land developers to design developments in a way that facilitates internal and external bicycle and pedestrian access. 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.
 7. Design, construct, operate, and maintain sidewalks, shared-use paths, street crossings (including over- and undercrossings), 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.
 8. Improve inter-jurisdictional coordination to identify, plan, construct and preserve **multi-jurisdictional routes**, and provide connecting links for existing routes to assure the establishment of a continuous bicycle and pedestrian transportation system throughout the Washington metropolitan area.
 - a. 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.
 - b. Identify shared-use path corridors before they are developed, and preserve opportunities for development as shared-use paths.
 - c. 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.
 - d. Implement uniform wayfinding and/or designation for inter-jurisdictional routes that will provide easily understood instructions and information.
 - e. 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 guide signage guidelines, and develop of recommended bikeway alignments within travel corridors.
-

B. Develop and adhere to consistent bicycle and pedestrian facility design and construction standards in each jurisdiction:

1. Assure adequate planning, construction and maintenance standards for comfortable and safe bicycling on both on-street routes and off-street paths, as well comfortable and safe walking on paths and sidewalks.
 - a. 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.
 - b. Establish and maintain **minimum design and maintenance standards** for each type of facility.
 - c. 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.

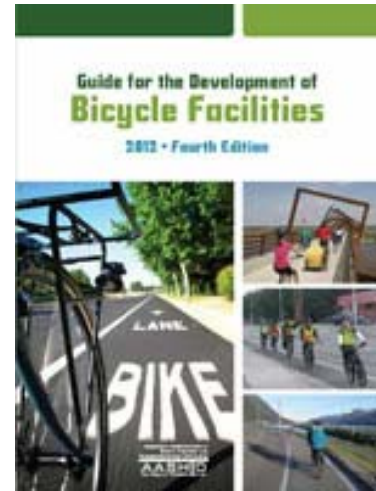


Figure 2: AASHTO Guide for the Development of Bicycle Facilities

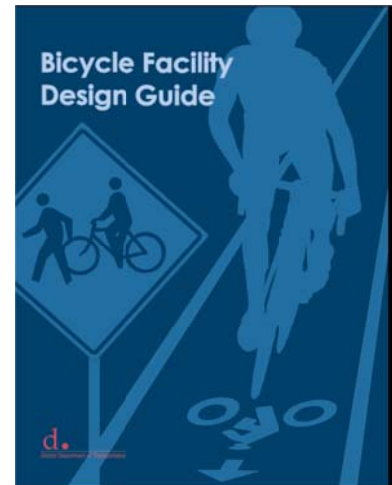


Figure 3: DDOT Bicycle Facility Design Guide

- d. Endorse and 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 pilots, under the MUTCD experimentation process.

The NACTO guides were developed, and are most applicable, for dense urban centers with low-traffic speeds and relatively high levels of bicycling and walking.

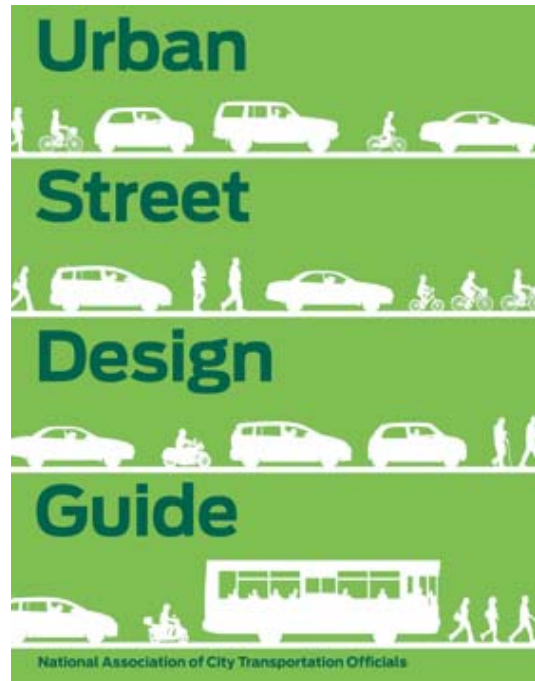


Figure 4: Urban Street Design Guide

2. Improve Access for Persons with Disabilities to Pedestrian Facilities²

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

- a. Sidewalks should have curb ramps. Ramps should be well-maintained, well-placed, and not too steep in order to permit their use by persons in wheelchairs.³
- b. The height of wheelchair users should be considered when placing shrubs or other objects where they might block them from the view of motorists.
- c. 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.
- d. The placement of crosswalk buttons must take into consideration the needs of people with disabilities.

² “Lessons Learned” fact sheet for Disability Awareness Day. National Capital Region Transportation Planning Board Access for All Committee, October 20, 2004.

³ Wheelchair ramp photo: COG/TPB, Access for All Committee

- e. Audible pedestrian signals make communities safer for all pedestrians, including seniors and children as well as people with visual impairments.
- f. 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.

C. Minimize roadway width, curb radii & crossing distance.⁴

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.

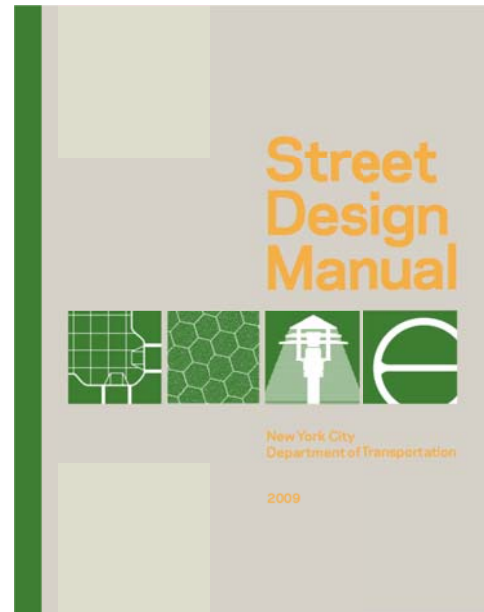


Figure 4: New York City Street Design Manual

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.

D. 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.⁵ 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

⁴ New York City Department of Transportation, [Street Design Manual](#), 2009. Page 46.

⁵ NACTO, [Urban Street Design Guide](#), 2013.

adjacent to schools, senior or disabled pedestrian trip generators; 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.⁶

E. Improve bicycle and pedestrian circulation within and between regional activity centers and the urban core.

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



Figure 5: Bike Racks and Lockers at New York Avenue Metro Station

F. Integrate bicycling and walking into the public transportation system.⁷

1. Make it easier and safer to walk and bike to bus stop and rail stations.
 - Build sidewalks and pedestrian crosswalks and/or overpasses that connect transit stops to nearby neighborhoods, commercial areas, and existing pedestrian infrastructure.
 - Improve lighting, signage, and wayfinding around transit stations.

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

⁶ Ibid, pp. 76-91.

⁷ Photo of NY Avenue Metro Bike Lockers: COG/TPB, Michael Farrell

- Improve bicycle parking at Metro, commuter rail stations, and park and ride lots. Replace broken and obsolete bicycle racks with current models. Add more [Bike & Ride](#) secure bicycle parking facilities at Metrorail stations.



Figure 6: Bike on Metrobus.

- 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. If/when capacity constraints permit, expand the hours when bicycles are permitted on Metrorail.

4. Provide bicycle racks on all transit buses.⁸
5. 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 the [River light rail line](#) in New Jersey are a good model.

G. Provide adequate bicycle support facilities.

1. 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.



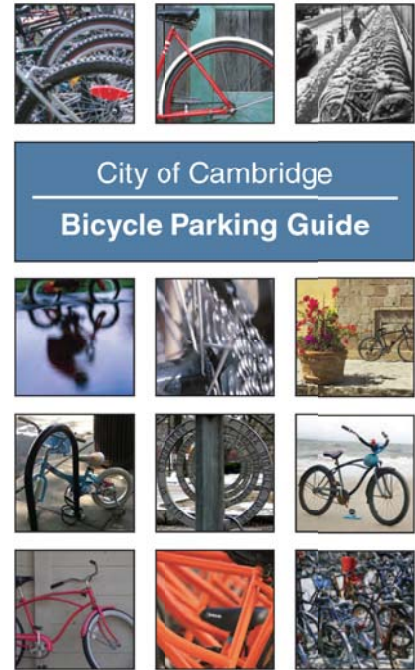
- Construct bicycle parking facilities in well-traveled and lighted areas. Facilities should be covered and secure.

Figure 7: On-Street Bike Parking, New York

⁸ Photo of Bike on Bus by WABA/Eric Gilliland

- 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.
- The District of Columbia requires bike parking in any building that has automobile parking. However, bicycle parking requirements need not be tied to auto parking. The City of Cambridge, MA has developed a [model ordinance](#).
- Ensure the provision of showers and changing facilities in all new or renovated commercial developments.

2. **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.⁹



H. 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. 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 took hold first in Europe, but has now [become common](#) in North America, with programs in dozens of cities.

Figure 9: City of Cambridge Bike Parking Guide

See Chapter 4 for details on bike sharing in the Washington region. The bike sharing system for the Washington region is [Capital Bikeshare](#).

I. Develop pedestrian and bicycle safety education and enforcement programs in all jurisdictions.

1. Promote pedestrian and bicycle safety education programs for children, beginning at the earliest possible age.

⁹ Photo of bike cage on Stanford Campus, COG/TPB, Michael Farrell

- Establish 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.



**Figure 8: Cyclist training
Photo Credit: WABA**

2. 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.

3. 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.

*Volunteer Patrols
can help with
Trail Security*

- Coordinate public media campaigns with law enforcement



Figure 9: Trail Patrol, C & O Canal Park

4. Encourage jurisdictional uniformity of traffic laws relating to bicycling and walking. Encourage conformity with such regulations as the Uniform Vehicle Code.

5. Encourage consistent bicycle law enforcement to assure safe bicycling and walking.

- 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.
6. 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.
 7. Provide increased 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.



The regional “[Street Smart](#)” Pedestrian and Bicycle Safety Campaign urges motorists and pedestrians to “Slow Down” and “Use Crosswalks”

J. 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](#).
- 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 transportation demand management program, provide financial incentives for employees to walk and bicycle.
- For States and Metro regions, consider investing in paid media campaigns.

K. 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 11: Lawyers Road Before Road Diet
Photo credit: VDOT



Figure 12: Lawyers Road After Road Diet

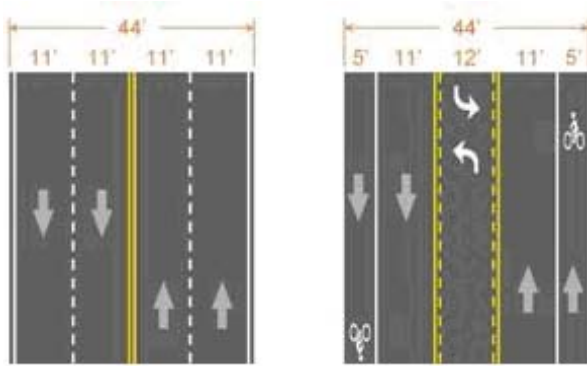


Figure 13: Before and After Illustration

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

- L. 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 over 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 designate a lead staff person or coordinator.

Chapter 7

The 2040 Bicycle and Pedestrian Network

The Regional Bicycle and Pedestrian Network in 2040

The *Bicycle and Pedestrian Plan for the National Capital Region* includes approximately ~~47563~~ bicycle and pedestrian facility improvement projects from across the region. If every project in the plan is implemented, in 2040 the region will have added approximately ~~77057~~ miles of bicycle lanes and ~~730640~~ miles of shared-use path. The overall network length (allowing for some dual bike lane/sidepath facilities) will increase by ~~approximately nearly 13001,400~~ miles.

In addition, hundreds of miles of signed on-road bicycle routes will be created. In many cases roads are designated for improvement as bicycle routes, but the exact nature of the improvement – bike lane, widened shoulders, wide outside lane, shared lane markings, signs – has not yet been determined.

Twenty-~~six~~five major pedestrian intersection improvements will be carried out, and ~~sixteen~~fifteen pedestrian/bicycle bridges or tunnels will be built. Hundreds of intersections will receive new crosswalk signals, and ongoing sidewalk improvement programs will retrofit sidewalks in areas where they are missing.

A new bicycle and pedestrian crossing over the Potomac will be created at the American Legion Bridge, and the bridges over the Anacostia River will be improved for pedestrians and bicyclists. In addition, twenty-five major streetscaping projects will improve pedestrian and bicycle access and amenities in places such as Atlantic Boulevard, Tysons ~~Corner~~, Maryland Avenue NE~~Ballston-Rosslyn~~, and downtown Bethesda~~Columbia Pike~~.

Table 7-1 below summarizes the new facility mileage that will be added by 2040 if this plan is implemented in full.

Table 7-1: Miles of Bicycle/Pedestrian Facilities in the Washington Region					
Facility Type	Total in 2005	Completed 2006- 2010 May	Completed June 2010 May 2014	Planned New Facilities/ Upgrades	Total in 2040
Bicycle Lane	56	35	65	77757	874544
Shared-Use Path	490	53	3024	738640	13114204
Total	546	88	3626	15154397	21852057

Progress Since 2010

~~Fifty-two~~Thirty-four projects from the 2010 Bicycle and Pedestrian Plan have been completed. This total does not count projects on which significant progress has been

made, unless for reporting purposes the project was split into phases, and the earlier phases reported as complete.

The region is currently adding about ~~eight~~¹³ miles of shared-use path and ~~two~~^{nine} miles of bike lane per year. At the current pace of construction the region will have completed about ~~208~~³⁹⁰ miles of shared use path, and ~~42~~²⁷⁰ miles of bike lane by 2040, or ~~about one fifth of little more than half~~ the planned network.

At the same time ~~ten~~^{sixteen} major pedestrian intersection improvements, ~~seven~~^{nine} streetscaping projects, and ~~two~~^{five} pedestrian bridges or tunnels were completed.

Notable projects finished since 2010 include Capital Bikeshare in the District of Columbia and Arlington, the L Street NW ~~protected bike lane~~^{Cycle Track} in DC.

Mileage of sidewalk construction was not tracked, but there are ongoing sidewalk retrofit and pedestrian safety programs in all the major inner jurisdictions. Privately provided facilities are also not counted.

~~Of the 34 projects completed, 28 had a total reported cost of \$60,967,000. The rest were part of larger projects, or had no cost reported.~~

Funding

While many of these projects have no identified funding source, and are not expected to be built soon, some are very close to being realized. Of the ~~48~~⁵⁴~~63~~ planned projects, ~~seventeen~~^{nineteen} are under construction, ~~ninety-one~~^{seventy-nine} are fully funded, and another ~~ninety-nine~~^{eighty} have some funding identified.

Under “Complete Streets” policies, most bicycle and pedestrian projects are now built as part of larger transportation projects. Of the transportation projects in the [FY 2013-2018 Transportation Improvement Program](#), 133 include some form of bicycle and pedestrian accommodation, while 30 projects were identified as being specifically bicycle or pedestrian.

Cost Estimates

Cost estimates were provided by the agencies for about 30% of the planned projects. For most of the planned projects that have not yet been designed, no meaningful project-level estimates can be made. Many of the projects which have cost estimates are part of a larger project. In a combined project it is nearly impossible to disentangle the portion of the cost attributable to bicycle or pedestrian features.

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 [assumed typical cost per mile](#) or per

project.¹ The total cost of improvements listed in the plan is estimated at about \$~~21~~ billion (2014 dollars).

Table 7-2 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	\$300 - \$4,000	480	77760 miles	\$233444,000 - \$34108,900,000
Bicycle Lane	\$5 \$500	133	73857 miles	\$37004,500 - \$370,00013,500
Pedestrian/Bicycle Bridge/Tunnel	\$1,000 - \$6,000		165 projects	\$165,000 - \$960,000
Pedestrian Intersection Improvement	\$300 - \$600		25 projects	\$7,500 - \$15,000
Streetscape	\$2,000 - \$4,000		254 project	\$5042,000 - \$100\$84,000
Total				\$300213,000 - \$3,700,0002,402,500

No comparable “financially unconstrained” plan exists for other types of transportation projects over the next 30 years. The six-year, FY 2013-2018 Transportation Improvement Program includes \$15.6 billion worth of transportation projects and programs, an amount which is widely seen as inadequate for the region’s transportation needs. Assuming the region continues to fund transportation at the same real level for the next 30 years, fully funding the bicycle and pedestrian plan over the same period would cost about 2.5% of the total transportation budget.

Explanation of Project listings

Appendix A lists the plan projects, organized alphabetically by state and jurisdiction. Facility type, responsible agencies, limits, length, and cost are also included. Note that due to the nature of bicycle and pedestrian facility improvements, the list in Appendix A is expected to change annually, as projects are added or removed.

The project list is drawn from a database that includes more extensive information, including project status, agency project ID number, facility lengths, facility alignment, description, project status, project web site, date of (projected) completion, date the record was last updated, and project manager name and contact information. Agency staff may enter via a password-protected web site to enter, edit, and delete project information, making the process of keeping the database accurate simple. A public

¹ *Costs for Pedestrian and Bicyclist Infrastructure Improvements*” UNC Highway Safety Research Center, October 2013.

access version of this on-line version of this database can be found at <http://www.mwcog.org/bikepedplan/>.

Over time the database has proven useful in tracking the progress of bicycle and pedestrian projects at a regional level. A sample database entry and a data dictionary are found in Appendix B.

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.

Figures 7-1 and 7-2 show the location of major bicycle and pedestrian projects throughout the region. Pedestrian/bicycle bridge or tunnel projects, multi-use paths greater than three miles in length, and projects estimated by their sponsors to cost more than \$500,000 are mapped, except for area projects that cannot be mapped in a meaningful way. About a quarter of the plan projects are mapped. Project details can be found in the project list in Appendix A, which groups the projects by state and jurisdiction.

~~Projects are labeled on the maps with their “Project ID”, a permanent identification number. To find the project name from the Project ID number on the label, use Table 7-3, which lists the mapped projects by Project ID number, cross-referenced to the line number for Appendix A.~~

Table 7-3: Mapped Bicycle and Pedestrian Projects

COG Project ID	Project Name	Lead Agency
608	Columbia Pike Complete Streets	Arlington County
34	Eisenhower Multi-Use Trail	City of Alexandria
37	I-95/I-495 Woodrow Wilson Memorial Bridge - Trail	City of Alexandria
64	Transit Facilities Pedestrian Improvements	City of Alexandria
563	On-Street Bikeways	City of Alexandria
385	College Park Trolley Trail	City of College Park
531	Rock Creek Trail	City of Frederick
532	Carroll Creek Trail	City of Frederick
551	East Street Rail Trail	City of Frederick
143	Sidewalks	City of Rockville
173	Anacostia Riverwalk Trail	DDOT
178	Rock Creek Park Trail	DDOT
197	Metropolitan Branch Trail	DDOT
215	Bicycle Lanes	DDOT
622	District-Wide Bicycle and Pedestrian Program	DDOT
829	South Capitol Street Trail	DDOT
264	Accotink Stream Valley Trail - Dam to Hunter Villa	Fairfax County Park Authority
530	Ballenger Creek Trail	Frederick County
533	Tuscarora Creek Trail	Frederick County
534	Monocacy River Greenway Phase I	Frederick County
535	Monocacy River Greenway Future Phases	Frederick County
536	Sugarloaf – Little Bennett Trail	Frederick County
537	I-270 Transitway	Frederick County
538	Bush Creek Trail	Frederick County
540	Walkersville – Woodsboro Corridor I	Frederick County
546	Emmitsburg Greenway Trail	Frederick County
547	On-Street Bikeways Countywide	Frederick County
1	Georgia Avenue (MD97) - Upcounty	MCDOT
2	Matthew Henson Trail	MCDOT
9	ADA Compliance: Transportation	MCDOT
10	Seven Locks Road	MCDOT
17	Bowie Mill Road	MCDOT
20	Briggs Chaney Road East	MCDOT
22	Frederick Road (MD355)-Upcounty	MCDOT
25	Doctor Bird Road/Norwood Road (MD182)	MCDOT

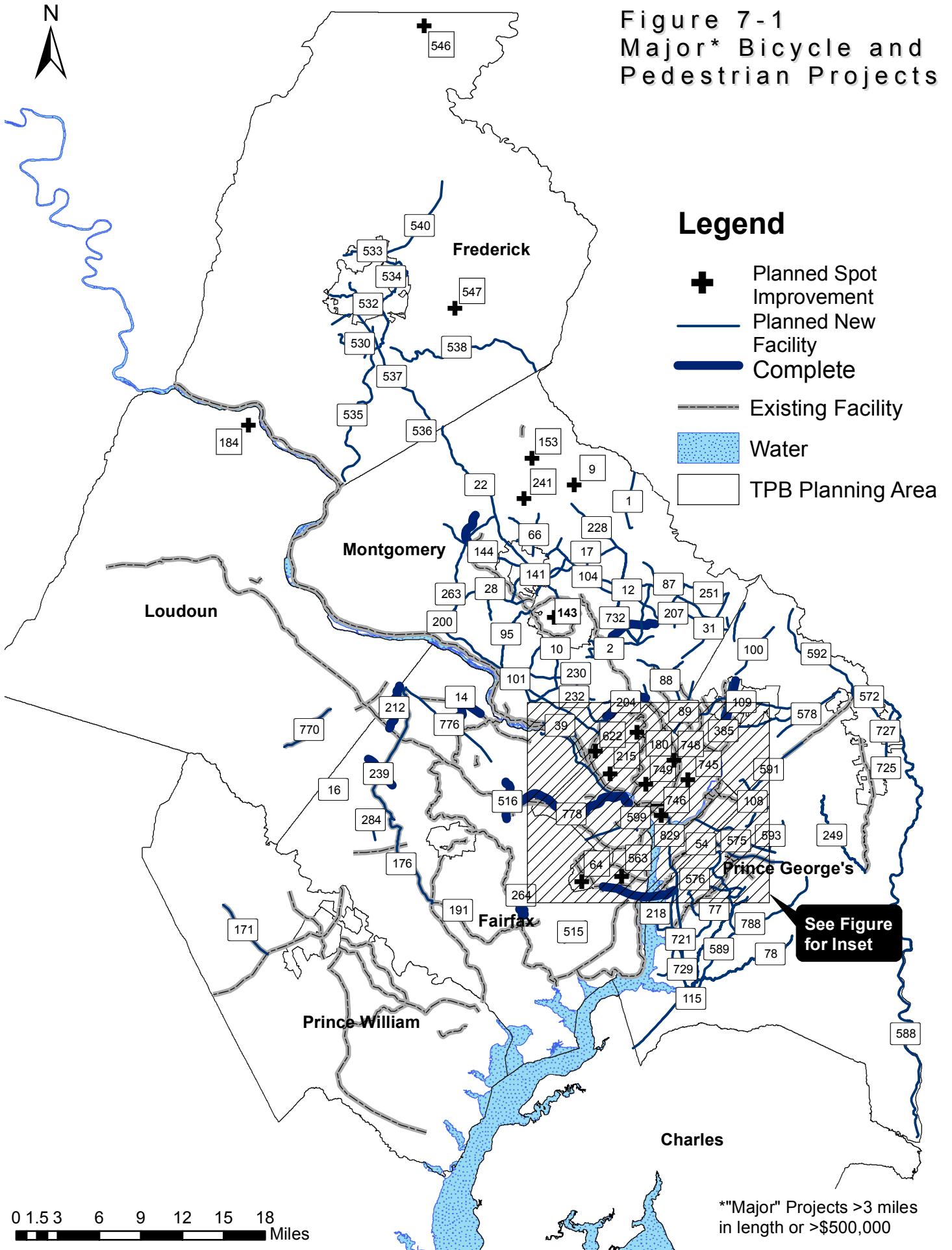
28	Darnestown Road (MD28) - North	MCDOT
39	MacArthur Boulevard Bikeway Improvements	MCDOT
44	Greencastle Road - east	MCDOT
47	Nicholson Lane/Parklawn Drive	MCDOT
66	Goshen Road	MCDOT
87	Norbeck Road (MD28)	MCDOT
88	University Boulevard	MCDOT
89	New Hampshire Avenue	MCDOT
90	Muddy Branch Road	MCDOT
94	Georgia Avenue (MD97) - North	MCDOT
95	Piney Meetinghouse Road	MCDOT
101	River Road (MD190)	MCDOT
104	Muncaster Mill Road (MD115)/ Norbeck Road (MD28)	MCDOT
112	Quince Orchard Road	MCDOT
119	Randolph Road - east	MCDOT
126	Persimmon Tree Road	MCDOT
128	Lockwood Drive	MCDOT
141	Frederick Road (MD355)	MCDOT
144	Clopper Road/Diamond Avenue (MD117)	MCDOT
152	Shady Grove Road - east	MCDOT
153	Bikeway Program – Minor Projects	MCDOT
158	Democracy Boulevard	MCDOT
200	Seneca Road	MCDOT
203	Briggs Chaney Road West	MCDOT
204	Georgetown Branch Trail	MCDOT
206	Randolph Road - west	MCDOT
207	New Hampshire Avenue (MD650) - Colesville	MCDOT
223	Falls Road East Side Hiker-Biker Path	MCDOT
228	Olney-Laytonsville Road (MD108) - Laytonsville	MCDOT
229	Watkins Mill Road	MCDOT
230	Westlake Terrage/Fernwood Road/Green Tree Road	MCDOT
232	Bradley Boulevard (MD191)	MCDOT
240	Father Hurley Boulevard/Ridge Road	MCDOT
241	Bethesda Bikeway and Pedestrian Facilities	MCDOT
251	MD198/MD28 shared use path	MCDOT
263	Germantown Road (MD118)	MCDOT
743	MD124, Woodfield Road	MCDOT
12	ICC bike path	MDOT
31	Columbia Pike (US29) North	MDOT

45	Layhill Road (MD182)	MDOT
100	US 1	MDOT
109	MD 193	MDOT
575	Silver Hill Road Sidewalks and Bike Lanes	MDOT
578	MD 564 Sidepath and Bike Lanes	MDOT
589	MD 223 Sidepath	MDOT
590	MD 4 Sidepath	MDOT
591	MD 704 Sidepath and Bike Lanes	MDOT
592	MD 197 Sidepath	MDOT
721	MD210, Indian Head HWY	MDOT
722	MD 4, Pennsylvania Ave.	MDOT
724	US 1, Baltimore Ave	MDOT
725	US 301, Crain Highway	MDOT
727	MD 3, Robert Crain HWY	MDOT
729	MD 210, Indian Head HWY	MDOT
732	MD 9, Georgia Ave Wheaton to Onley	MDOT
733	MD 355, RockvillePike	MDOT
735	Jones Bridge Rd	MDOT
737	MD 117, Clopper Road	MDOT
738	MD 85, Buckey's Town Pike	MDOT
741	MD 97, Georgia Ave (Forest Glen Road to 16th St)	MDOT
754	MD 180/MD 351, Jefferson Creek Pike	MDOT
788	MD 223 Piscataway Rd	MDOT
5	Collington Branch Trail	M-NCPPC, Prince Georges County
52	Henson Creek Trail extension	M-NCPPC, Prince Georges County
78	Piscataway Creek Trail	M-NCPPC, Prince Georges County
108	Cabin Branch Trail	M-NCPPC, Prince Georges County
124	Chesapeake Beach Rail-Trail	M-NCPPC, Prince Georges County
213	Tinkers Creek Trail	M-NCPPC, Prince Georges County
249	Western Branch Trail	M-NCPPC, Prince Georges County
588	Charles Branch Trail	M-NCPPC, Prince Georges County
593	Ritchie Branch Trail	M-NCPPC, Prince Georges County

54	Suitland Parkway Trail	National Park Service
192	Mount Vernon Trail Extension	National Park Service
21	Temple Hills Road	Prince Georges County
77	Allentown Road	Prince Georges County
115	Potomac Heritage On-Road Bicycle Route	Prince Georges County
116	MD 564 Sidepath and Bike Lanes	Prince Georges County
133	Brinkley Road	Prince Georges County
163	Fort Washington Road	Prince Georges County
168	Good Luck Road	Prince Georges County
218	Fort Foote Road	Prince Georges County
253	Tucker Road	Prince Georges County
569	Gunpowder Road Sidepath and Bike Lanes	Prince Georges County
572	Race Track Road Sidepath and Bike Lanes	Prince Georges County
576	St. Barnabas Road Sidewalks and Bike Lanes	Prince Georges County
14	Walker Road Trail	VDOT
16	US 50 widening	VDOT
71	Woodrow Wilson Bridge Project	VDOT
102	VA 234 Bike Trail	VDOT
164	Route 28 Trail Extension	VDOT
171	Linton Hall Road Widening	VDOT
176	Fairfax County Parkway	VDOT
180	Interstate Bicycle Route 1	VDOT
184	Ped & Bike Path Network	VDOT
189	VA 193 - Georgetown Pike Trail	VDOT
191	Burke Lake Road Widening	VDOT
211	123 Widening	VDOT
212	Dranesville Road Widening	VDOT
239	West Ox Road (route 608)	VDOT
284	Stringfellow Road	VDOT
309	Old Ox Road Widening (Rt. 606)	VDOT
515	Telegraph Road Widening	VDOT
516	Gallows Road On Road Bicycle Facility	VDOT
770	Rt. 606 Loudoun County Parkway/Old Ox Rd.	VDOT
776	Rt.7 widen to 6 lanes - PE only	VDOT
778	I-66 Corridor Multimodal study	VDOT
745	WMATA Maryland Metrorail Sidewalk/ Pathway Project	WMATA
746	WMATA Virginia Metrorail Sidewalk/ Pathway Project	WMATA
748	WMATA Maryland Metrorail Sharrows and Bike	WMATA

	Lanes	
749	WMATA Virginia Metrorail Sharrow and Bike Lanes	WMATA

Figure 7-1
Major* Bicycle and
Pedestrian Projects



Legend

- +** Planned Spot Improvement
- Planned New Facility
- Complete
- - - Existing Facility
- Water
- TPB Planning Area

See Figure for Inset

0 1.5 3 6 9 12 15 18 Miles

*"Major" Projects >3 miles in length or >\$500,000

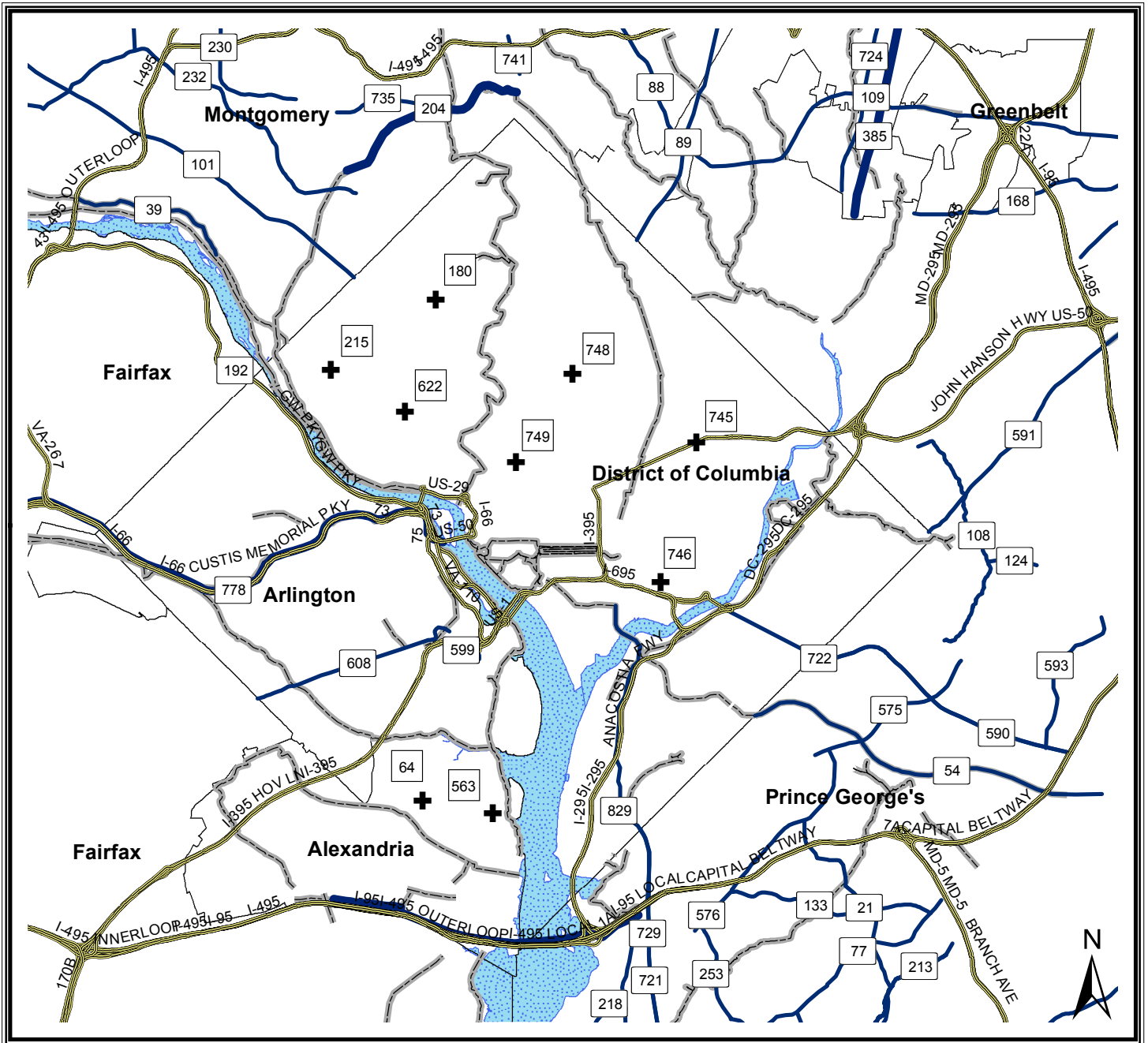






Figure :7-2
 Major* Bicycle
 and Pedestrian Projects in
 the Central Washington Region

Legend

- +** Planned Jurisdiction Wide Improvement
-  Complete
-  Existing Facility
-  Water
-  TPB Planning Area

*"Major" Projects >3 miles
 in length or >\$500,000

Appendix A

Bicycle and Pedestrian Projects

Of the Long-Range Bicycle and Pedestrian Plan
For the National Capital Region

This appendix contains a complete list of the projects in the Bicycle and Pedestrian Plan for the National Capital Region. Below is a guide to the printed project list. Appendix B contains a data dictionary for the electronic database, which contains more information than this printed list, as well as a sample data entry form.

PROJECT LIST DATA DICTIONARY																	
Field	Explanation																
Line Number	Short ID number used to label projects on the maps																
Agency Project ID	The sponsoring agency's project identifying number																
Project Name	Descriptive name provided by the sponsoring agency																
From	Project Limits																
To	Project Limits																
Length (Miles)	Length of the project from start to finish in miles. Example: if a project consists of four miles of road with a continuous bike lane and sidewalk, the project length is four miles. For projects that have no length, such as bicycle racks, the listed length is zero.																
Responsible Agencies	Agencies responsible for implementing the project or otherwise involved																
Bike Lane	Bike lanes are striped lanes at least 4' wide in the public right-of-way, marked for the exclusive use of bicyclists																
Multi-Use Path	A paved or hard-surface path separated from traffic, officially designated for bicycles and other non-motorized users. Should be at least 8' wide.																
Sidewalk	Sidewalks are usually less than 8' wide, and are not designed for bicyclists.																
Type of Spot/Area Improvement	For non-linear projects. The pull-down menu gives the following options: <table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;">Type of Improvement</th> <th style="text-align: left;">Code Letter</th> </tr> </thead> <tbody> <tr> <td>1. Pedestrian Intersection Improvement</td> <td>I</td> </tr> <tr> <td>2. Pedestrian/Bicycle Bridge or Tunnel</td> <td>B</td> </tr> <tr> <td>3. Traffic Calming</td> <td>TC</td> </tr> <tr> <td>4. Streetscape/Pedestrian Improvements</td> <td>S</td> </tr> <tr> <td>5. Bicycle Parking</td> <td>PK</td> </tr> <tr> <td>6. Bicycle Route Marking</td> <td>BR</td> </tr> <tr> <td>7. Other</td> <td>O</td> </tr> </tbody> </table>	Type of Improvement	Code Letter	1. Pedestrian Intersection Improvement	I	2. Pedestrian/Bicycle Bridge or Tunnel	B	3. Traffic Calming	TC	4. Streetscape/Pedestrian Improvements	S	5. Bicycle Parking	PK	6. Bicycle Route Marking	BR	7. Other	O
Type of Improvement	Code Letter																
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3. Traffic Calming	TC																
4. Streetscape/Pedestrian Improvements	S																
5. Bicycle Parking	PK																
6. Bicycle Route Marking	BR																
7. Other	O																
In CLRP	Project is in the Financially Constrained Long-Range Transportation Plan for the National Capital Region, and therefore is officially considered to have funding available to support project completion.																
In TIP	Project is in the most recent National Capital Region Transportation Improvement Program with specific funding amounts identified for program completion.																

Field	Explanation												
Status	<p>The pull-down menu offers the following options:</p> <table border="0"> <thead> <tr> <th></th> <th style="text-align: right;"><u>Code Letter</u></th> </tr> </thead> <tbody> <tr> <td>1. Fully Funded¹</td> <td style="text-align: right;">F</td> </tr> <tr> <td>2. Partially Funded</td> <td style="text-align: right;">P</td> </tr> <tr> <td>3. Unfunded</td> <td style="text-align: right;">U</td> </tr> <tr> <td>4. Under Construction</td> <td style="text-align: right;">UC</td> </tr> <tr> <td>5. Complete</td> <td style="text-align: right;">C</td> </tr> </tbody> </table>		<u>Code Letter</u>	1. Fully Funded ¹	F	2. Partially Funded	P	3. Unfunded	U	4. Under Construction	UC	5. Complete	C
	<u>Code Letter</u>												
1. Fully Funded ¹	F												
2. Partially Funded	P												
3. Unfunded	U												
4. Under Construction	UC												
5. Complete	C												
Cost	<p>In thousands of dollars. As many projects in the plan may not be built for many years, and have not been fully scoped, this can be a very rough estimate. If a project is part of a larger project the total project cost is <i>not</i> listed, only that portion of the cost which is attributable to the bicycle or pedestrian facility. Use of a rule of thumb for such estimates was acceptable, i.e. 3% of total project cost. Many projects do not have a cost estimate available.</p>												

¹ “Funded” indicates that the sponsoring agency has considered funding for completion of this project to be reasonably available within projected funding sources. “Unfunded” indicates, that while the project has been identified, there is no projected funding to support its completion at this time.

2014 Draft Bike/Ped Plan Project List

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
1	14th Street Bridge Multi-use Path Improvements	East Basin Drive	14th Street Bridge	0.02	National Park Service, DDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	\$515
2	Anacostia Riverwalk Trail	Potomac River	Maryland	20	DDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$20,000
3	Anacostia Trail Support				National Park Service, DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$500
4	Bicycle Lanes			30	DDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$600
5	Bicycle Parking Racks				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$500
6	Bicycle Route Signs				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$100
7	Blagden Avenue Hiker and Biker Trail - EA	Matthewson Drive	Beach Drive	0.4	DDOT, National Park Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	
8	Capital Bikeshare - District of Columbia				DDOT, Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	
9	Cultural/Heritage Trail System				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
10	District-Wide Bicycle and Pedestrian Program				DDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$3,300
11	Great Streets - Georgia Avenue				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$16,140
12	CD054A, Great Streets - H Street NE Streetscape	3rd Street NE	14th Street NE	1	DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$62,000
13	Great Streets - Minnesota Avenue NE	A Street SE	Sheriff Road NE	1	DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$7,000
14	Great Streets - Nannie Helen Burroughs				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$12,300
15	CKTC0 Klinge Trail	Porter Street	Woodley Road	1	DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$9,100
16	L Street Cycle Track	New Hampshire Avenue	12th Street NW	1	DDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$300
17	Maryland Avenue NE Complete Street Project	2nd	15th	1	DDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Streetscape/Pe	\$2,000
18	Metropolitan Branch Trail	Union Station	Takoma Park	7	DDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$20,000
19	Oxon Run Trail Restoration	South Capitol Street	Southern Avenue	2	DDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$6,000
20	CE301C - Pavement Markings & Traffic Calming				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Traffic Calming	\$34,390
21	CD052A Pedestrian Bridge over Kenilworth Ave			1	DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$12,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
22	Pedestrian Passageway/Tunnel	1st Street Metro Station Kiosk	1st Street, N.E. (Under H Street Overpass)	1	DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pedestrian/Bicy	\$13,000
23	Rock Creek Park Trail			4	DDOT, National Park Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,500
24	Safe Routes to School				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
25	Safe Routes to School Program				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
26	Sidewalk Construction				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$2,000
27	South Capitol Street Trail	Firth Sterling Ave	Oxon Cove	3	DDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$7,000
28	CM047, C Transportatation Enhancements				DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$13,800
29	ZU0 Union Station Bike Station	(Union Station)			DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$4,000
30	Watts Branch Trail	Minnesota Ave	62nd Street, NE	2	DDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$3,000
31	WMATA DC Metrorail Crossing Improvement Projects				WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$346
32	WMATA DC Metrorail Sharrow Projects			1	WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$5
33	WMATA DC Metrorail Sidewalk/ Pathway Projects			1	WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$623

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
34	Capital Bikeshare Region-Wide				DDOT, DDOT, Arlington, City of Alexandria, Montgomery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	\$22,284
35	Implement Recommendations of NCR Paved Trails Plan				National Park Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
36	WMATA Bicycle Parking Project			0	WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$1,165

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
37	Boundary Channel Bridge Trails				National Park Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
38	College Park Trolley Trail	Paducah Road	Albion Road	4	City of College Park	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Bicycle Route	\$500

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
39	Carroll Creek Trail	Rocky Springs Road	Monocacy River	0	City of Frederick, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	\$10,000
40	Citywide Sidewalk Retrofit	City of Frederick	City of Frederick	0	City of Frederick	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$240
41	Rock Creek Trail	Stonegate Park	US Route 15	0	City of Frederick	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
42	US15 Undercrossing	Baker Park	Waterford Park	1	City of Frederick, MDSA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$2,250

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
43	Springhill Lake Elementary Safe Routes to School	Cherrywood Lane	Springhill Lane	0.25	City of Greenbelt, SHA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Traffic Calming	\$195

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
44	507017	Intersection and Spot Improvements			MDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
45		WMATA Maryland Metrorail Crossing Improvements			WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,363
46		WMATA Maryland Metrorail Sharrows and Bike Lanes		8	WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$341
47		WMATA Maryland Metrorail Sidewalk/ Pathway Project		5	WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,073

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
48	Ballenger Creek Trail	Ballenger Creek Park	Monocacy River	5	Frederick County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$3,200
49	Bush Creek Trail	Monocacy River	Montgomery County Line	0	Frederick County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,300
50	Frederick County Safe Routes to Schools	Countywide	Countywide	0	Frederick County, Frederick County Public Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$350
51	FR649_1 MD 180/MD 351, Jefferson Creek Pike	MD 180 Stoney Creek Drive	MD 351 Crestwood BLVD	3.1	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	212,000,000
52	FR388_2 MD 85, Buckey's Town Pike	South of English Muffin Way	North of Grove Road		MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	305,000,000
53	Monocacy River Greenway Future Phases	Ballenger Creek Trail	Potomac River	0	Frederick County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$7,000
54	On-Street Bikeways Countywide	Countywide	Countywide	0	Frederick County, MD SHA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$3,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
55	East Street Rail Trail	Carroll Creek	Tuscarora Creek	0	City of Frederick, MDOT & MTA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	\$2,000
56	H&F Trolley Trail Phase II	Water Street	Moser Road	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$7,000
57	Monocacy River Greenway Phase I	Tuscarora Creek	Ballenger Creek Trail	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,500
58	Tuscarora Creek Trail	Yellow Springs Road	Monocacy River	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,250

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
59	H&F Trolley Trail Phase III	Thurmont	Frederick	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$6,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
60	I-270 Transitway	City of Frederick	Montgomery County Line	0	Frederick County, Frederick County Div. of Parks & Rec	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,000
61	Sugarloaf – Little Bennett Trail	Little Bennett Regional Park	Monocacy River	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$375

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
62	Emmitsburg Railroad Trail	Rocky Ridge	Emmitsburg	0	Frederick County, Frederick County Div. of Parks & Rec / Emmitsburg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$3,250

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
63	Middletown – Myersville Trolley Trail	Frederick	Myersville	0	Frederick County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,000
64	Middletown Greenway	Middletown	Middletown	0	Frederick County, Frederick County Div. of Parks & Rec; Middletown	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$3,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
65	B&O Trail	Mount Airy	Mount Airy	0	Frederick County, Town of Mt. Airy, Carroll County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
66	Walkersville – Woodsboro Corridor I	Monocacy River	Israel Creek	0	Frederick County, Frederick County Div. of Parks & Rec; MDOT; Woodsb	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,000
67	Walkersville – Woodsboro Corridor III	Monocacy River	Woodsboro - Railroad	0	Frederick County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,500

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
68	509325	ADA Compliance: Transportation	Countywide		MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$450,000
69	SP-76	American Legion Bridge	Macarthur Blvd	Fairfax County Line	MDOT, MCDOT, VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
70	SP-30	Bel Pre Road - east	Georgia Avenue (MD97)	Layhill Road (MD182)	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
71	500119	Bethesda Bikeway and Pedestrian Facilities	Bethesda CBD		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$3,520
72	500102	Bethesda CBD Streetcape	Bethesda CBD		MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$8,214
73	500929	Bethesda Metro Station South Entrance			MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$80,500
74	509922	Bethesda Trolley Trail	Twinbrook Metro Station	Norfolk/Rugby Ave. intersection (Bethesda)	MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
75	SP-41	Bethesda Trolley Trail	South Drive	Twinbrook Metrorail station	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
76	SP-3	Bethesda Trolley Trail-NIH connector	Battery Lane	Cedar Lane	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
77	507596	Bikeway Program – Minor Projects	Countywide	12	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$3,763
78	BL-20	Bowie Mill Road	Muncaster Mill Road (MD115)	Olney-Laytonsville Road (MD108)	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
79	DB-4	Bradley Boulevard (MD191)	Persimmon Tree Road	Wisconsin Avenue (MD355)	6 MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
80	SP-19	Briggs Chaney Road East	Old Columbia Pike	Prince George's County line	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
81	BL-14	Briggs Chaney Road West	New Hampshire Avenue	Old Columbia Pike	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
82	501316	Capital Crescent Trail			MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$49,500
83	SP-75	CCT-Black Hill connector	Crystal Rock Drive	Black Hill Regional Park	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
84	501115	Century Boulevard	Dorsey Mill Road		1 MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	
85	DB-18	Clarksburg Road (MD121)/ Stringtown Road	Clopper Road (MD117)	MidCounty Highway	5 MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
86	501315	Clarksburg Transportation Connections			MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	
87	DB-17	Clopper Road/Diamond Avenue (MD117)	Summit Avenue	Clarksburg Road (MD121)	3 MCDOT, MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
88	DB-9	Columbia Pike (US29) North	New Hampshire Avenue/ Lockwood Drive	Spencerville Road (MD198)	7 MDOT, MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
89	SP-66	Corridor Cities Transitway bike path	Shady Grove Metrorail Station	Frederick Road (MD355)	MCDOT, MTA	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
90	501317	County Service Park Infrastructure Improvements	Shady Grove Metro		1 MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
91	SP-53	Crabbs Branch Way	Gude Drive		Shady Grove Road	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
92	500904	Dale Drive Sidewalk	Mansfield Road	0.4	Hartsford Avenue	MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$5,370
93	SP-59	Darnestown Road - south	Key West Avenue (MD28)		Wootton Parkway	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
94	DB-16	Darnestown Road (MD28) - North	Seneca Road	5	Great Seneca Highway (MD119)	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
95	SP-2	Democracy Boulevard	Falls Road (MD189)		Old Georgetown Road	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
96	SP-38	Doctor Bird Road/Norwood Road (MD182)	Layhill Road (MD182)		Olney-Sandy Spring Road (MD108)	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
97	501309	East Gude Drive Roadway Improvements	Crabbs Branch Way	1	Southlawn Lane	MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	
98	SP-44	East Jefferson Street	Montrose Road		Rollins Avenue	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
99	SP-31	Ednor Road/Layhill Road	Norbeck Road (MD28)		New Hampshire Avenue (MD650)	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
100	BL-7	Elm Street	Exeter Road		Wisconsin Avenue (MD355)	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
101	BL-25	Executive Boulevard	Woodglen Road/North Bethesda Trail		Montrose Road	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
102	BL-13	Fairland Road - West	Randolph Road		Columbia Pike (US 29)	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
103	SP-18	Fairland Road East	Columbia Pike (US29)		Prince George's County line	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
104	500905	Falls Road East Side Hiker-Biker Path	River Road	4	Dunster Road	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$22,340
105	SP-68	Father Hurley Boulevard/Ridge Road	Germantown Road (MD118)		Brink Road	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
106	BL-31	Fieldcrest Road	Woodfield Road (MD124)		Olney-Laytonsville Road (MD108)	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
107	501206	Flower Avenue Sidewalk	Piney Branch Road	1	Carroll Avenue	MCDOT, Takoma Park	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	
108	509976	Forest Glen Pedestrian Bridge	west side of Georgia Avenue at Locust Grove Road		west side of Georgia Avenue at Forest Glen Road	MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
109	SP-13	Forest Glen Road - central	Belvedere Place		Sligo Creek Trail	MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
110	SP-64	Frederick Road (MD355)	Gude Drive	5	Watkins Mill Road	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
111	SP-72	Frederick Road (MD355)-Upcounty	Watkins Mill Road		Frederick County line	MCDOT, MDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
112	501118	Frederick Road Bike Path	Stringtown Road	2.5	Milestone Manor Lane	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,536
113	SP-6	Georgetown Branch Trail	Bethesda CBD		Silver Spring Metrorail station	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	

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114	SP-29	Georgia Avenue (MD97) - North	Olney-Laytonsville Road (MD108)	Glenmont Metrorail station	6	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
115	BL-22	Georgia Avenue (MD97) - Upcounty	Brookeville Bypass	Howard County line		MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
116	SP-39	Georgia Avenue (MD97)-Brookeville	Olney-Sandy Spring Road (MD108)	Brookeville Road	2	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
117	SP-67	Germantown Road (MD118)	Darnestown Road (MD28)	Frederick Road (MD355)	7	MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
118	SP-24	Glenallen Avenue	Randolph Road	Kemp Mill Road		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
119	501302	Gold Mine Road Bridge				MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	
120	BL-1	Goldboro Road (MD614)	MacArthur Boulevard	Bradley Boulevard (MD191)	2	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
121	501107	Goshen Road	Girard Street	Warfield Road	4	MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
122	SP-23	Greencastle Road - east	Robey Road	Prince George's County line		MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
123	500506	Greentree Road Sidewalk	Old Georgetown Road	Fernwood Road	1	MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$3,486
124	SP-43	Grosvenor Connector	Beach Drive	Metro station		MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
125	SP-33	Hines Road-North Branch connector	Rock Creek's North Branch Trail	Cashell Road		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
126	MO351_2	I-270 Watkins Mill Road Extended	Watkins Mill Road, MD 124 Great Seneca Crossing		1	MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	152,000,000
127	SP-40	ICC bike path	I-370 terminus	Prince George's County line		MDOT, M-NCPPC, MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
128	MO5821	Jones Bridge Rd			1	MDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$10,000,000
129	BL-18	Layhill Road (MD182)	Georgia Avenue (MD97)	Norbeck Road (MD28)	2	MDOT, Montgomery County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
130	DB-10	Lockwood Drive	Columbia Pike (US29)	New Hampshire Avenue (MD650)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
131	SP-60	Long Draft Road	Quince Orchard Road	Clopper Road (MD117)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
132	500718	MacArthur Boulevard Bikeway Improvements	I-495	Oberlin Avenue	4	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$8,710
133		Matthew Henson Trail	Rock Creek Trail (west of Viers Mill Rd.)	East of Georgia Ave. (Alderton Road)		MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$5,142
134	MO671_2	MD 117, Clopper Road	Seneca Creek Park Entrance	Metropolitan Grove Road	1.73	MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	502,000,000
135	MO5821	MD 185			1	MDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$51,000,000

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136	MO344_2 MD 355, RockvillePike	Randolph Road	Maple/Chapman Ave.	Parklawn Drive	0.62	MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$7,370,000
137	MO373_1 MD 9, Georgia Ave	Wheaton	Wheaton	Onley		MDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,000,000
138	MO746_2 MD 97 (Brookeville Bypass)	South of Brookeville	South of Brookeville	North of Brookeville	0.7	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$630,000
139	MO224_1 MD 97, Georgia Ave (Forest Glen Road to 16th St)	16th Street	16th Street	Forest Glen Road	0.7	MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$32,000,000
140	MO854_1 MD Georgia, Ave	Randolph Road	Randolph Road		0.4	MDOT, MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Other	\$63,000
141	MO632_2 MD124, Woodfield Road	Midcounty Highway	Midcounty Highway	Airpark Road	1.6	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	577,000,000
142	SP-21 MD198/MD28 shared use path	New Hampshire Avenue (MD 650)	New Hampshire Avenue (MD 650)	Old Columbia Pike	3	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
143	DB-6 MD384 connector to Silver Spring Metro Station	16th Street	16th Street	East-West Highway	1	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
144	501110 Metropolitan Branch Trail	Silver Spring Metro/Transit Center	Silver Spring Metro/Transit Center	Montgomery College Campus Takoma Park	1	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
145	SP-12 Metropolitan Branch Trail	Silver Spring Metro Station	Silver Spring Metro Station	DC Line		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
146	SP-70 MidCounty Highway	ICC	ICC	Frederick Road (MD355)		MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
147	SP-71 Middlebrook Road	Father Hurley Boulevard	Father Hurley Boulevard	MidCounty Highway		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
148	P500717 Montrose Road/Parkway East	Falls Road	Falls Road	Veirs Mill Road (MD586)	2	MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$119,890
149	SP-62 Muddy Branch Road	Darnestown Road (MD28)	Darnestown Road (MD28)	Clopper Road (MD117)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
150	SP-28 Muncaster Mill Road (MD115)/ Norbeck Road (MD28)	Woodfield Road	Woodfield Road	Georgia Avenue (MD97)	5	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
151	BL-26 Nebel Street - north	Old Georgetown Road	Old Georgetown Road	Randolph Road		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
152	DB-13 Nebel Street - south	Nicholson Lane	Nicholson Lane	Old Georgetown Road		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
153	P500401 Nebel Street extended	Randolph Road	Randolph Road	Chapman Avenue	1	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$13,906
154	501304 Needwood Road Bike Path	Deerlake Road	Deerlake Road	Muncaster Mill Road (MD115)	2	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$4,200
155	P509523 Neighborhood Traffic Calming					MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Traffic Calming	\$2,424
156	SP-11 New Hampshire Avenue	DC Line	DC Line	I-495	4	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
157	SP-15 New Hampshire Avenue (MD650) - Ashton	Ednor Road	Ednor Road	Olney-Sandy Spring Road (MD108)	2	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
158	BL-11	New Hampshire Avenue (MD650) - Colesville	Randolph Road	Spencerville Road (MD198)	4	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
159	DB-8	New Hampshire Avenue (MD650) - Ednor	Spencerville Road (MD198)	Ednor Road	2	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
160	DB-7	New Hampshire Avenue (MD650) - Hillandale	I-495	Lockwood Drive	1	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
161	BL-27	Nicholson Lane/Parklawn Drive	Nebel Street	Twinbrook Parkway		MCDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
162	DB-12	Norbeck Road (MD28)	Georgia Avenue (MD97)	Layhill Road	3	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
163	509587	North Bethesda Trail Bridges	crossings of I-495 and I-270			MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
164	BL-21	Norwood Road	Layhill Road (MD182)	New Hampshire Avenue (MD650)		MCDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
165	SP-69	Observation Drive	Germantown Road (MD118)	Frederick Road (MD355)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
166	SP-73	Old Baltimore Road/New Cut Road	Clarksburg Road (MD121)	Frederick Road (MD355)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
167	509953	Old Columbia Pike	E. Randolph Road	MD 198		MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
168	SP-36	Olney-Laytonsville Road (MD108) - Laytonsville	Laytonsville Town boundary	Olney Mill Road		MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
169	SP-37	Olney-Sandy Spring Road (MD108) - Ashton	Layhill Road (MD182)	Howard County line	2	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
170	500333	Pedestrian Safety Program	Countywide			MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$9,600
171	SP-5	Persimmon Tree Road	Oaklyn Drive	Falls Road (MD189)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
172	SP-56	Piney Meetinghouse Road	River Road (MD190)	Darnestown Road		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
173	SP-58	Quince Orchard Road	Dufief Mill Road	Darnestown Road (MD28)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
174	BL-15	Randolph Road - central	Parklawn Drive	Veirs Mill Road (MD586)		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
175	SP-26	Randolph Road - east	Veirs Mill Road (MD586)	Kemp Mill Road/ Northwest Branch Trail		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
176	SP-25	Randolph Road - west	Rockville Pike (MD355)	Parklawn Drive		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
177	BL-29	Redland Road - east	Needwood Road	Muncaster Mill Road (MD115)		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
178		Redland Road - west	Shady Grove Metrorail station	Needwood Road	1	MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
179	SP-65	Richter Farm Road	Great Seneca Highway (MD119)	Clopper Road (MD117)		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
180	BL-34	Riffleford Road	Darnestown Road (MD28)	Germantown Road (MD118)		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0
181	DB-2	River Road (MD190)	DC line	Seneca Road (MD112)	13	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
182	P509274	Robey Road	Greencastle Road	Briggs Chaney Road	1	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$8,142

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
183	SP-14	Rock Creek Trail-Forest Glen Metro connector	Stoneybrook Road	Seminary Road		MCDOT, Montgomery County, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
184	SP-48	Rock Springs Connector	Democracy Boulevard	Tuckerman Lane		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
185	BL-33	Seneca Road	River Road (MD190)	Darnestown Road (MD28)		MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
186	501303	Seven Locks Road	Montrose Road	Bradley Blvd.	5	MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$27,000
187	BL-30	Shady Grove Road - east	Frederick Road (MD355)	Muncaster Mill Road (MD115)		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
188	DB-15	Shady Grove Road - west	Darnestown Road	Frederick Road (MD355)		MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
189		Sidewalk and Infrastructure Revitalization				MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$44,762
190	506747	Sidewalk Program - minor projects	countywide			MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$10,027
191	509975	Silver Spring Green Trail	Silver Spring Metro Station	Sligo Creek Hiker-Biker Trail		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$6,334	
192	P501109	Snouffer School Road	Sweet Autumn Drive	Centerway Road	1	MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$23,710
193	SP-20	Spencerville Road (MD198) - Fairland	Old Columbia Pike	Prince George's County line	2	MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
194	500700	Street Tree Preservation				MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$24,900
195	500512	Streetlight Enhancements - CBD/Town Center				MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	\$3,430
196	BL-24	Tilden Lane	Nicholson Lane	Hounds Way		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
197	507154	Traffic Signals				MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	\$35,106
198	P509036	Transportation Improvements for Schools				MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$1,796
199	500101	Travilah Road	Darnestown Road	Dufief Mill Road	2	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$13,601
200	SP-42	Tuckerman Lane	Old Georgetown Road	Rockville Pike (MD355)		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
201	BL-28	Twinbrook Parkway	Frederick Road (MD355)	Veirs Mill Road (MD586)		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
202	DB-5	University Boulevard	Georgia Avenue	Prince George's County Line		MCDOT, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
203	BL-16	Viers Mill Road (MD586) - west	Twinbrook Parkway	Matthew Henson Trail	2	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
204	SP-74	Watkins Mill Road	Frederick Road (MD355)	MidCounty Highway		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
205	SP-10	Wayne Avenue Green Trail	Spring Street	Sligo Creek Trail		MCDOT, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
206	SP-4	West Cedar Lane	Old Georgetown Road	Beach Drive		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	
207	SP-7	Western Avenue	River Road	Chevy Chase Circle		MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$0	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)		
208	BL-5	Westlake Drive	Westlake Terrace		Tuckerman Lane	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0		
209	BL-4	Westlake Terrace/Fernwood Road/Green Tree Road	Rockledge Drive		Old Georgetown Road	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0		
210	501204	White Flint District East				MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Pedestrian/Bicy	\$29,400	
211	501116	White Flint District West				MCDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$98,642	
212	BL-8	Willard Avenue Bike Lanes	Willard Avenue Park		Wisconsin Avenue	MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0	
213	BL-2	Wilson Lane (MD188) - west	MacArthur Boulevard		Elmore Lane	2	MCDOT, MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
214	SP-8	Wisconsin Avenue Path	Bradley Lane		Oliver Lane		MCDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	
215	P500151	Woodfield Road Extended	Main Street		Ridge Road	1	MCDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$13,842
216	BL-6	Woodmont Avenue	Bethesda Avenue		Battery Lane		MCDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	\$0	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
217	Addison Road	MD 214	Walker Mill Road		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$2,343
218	31.00 Adelphi Road Sidewalks and Bike Lanes	MD 193	MD 410	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$1,400
219	Allentown Road	MD 5	Old Fort Road		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
220	Anacostia River Trail	Bladensburg Marina	Wash. D.C. line		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$500
221	Auth Road	MD 337 (Allentown Road)	MD 5 (Branch Avenue)		Prince Georges County	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$450
222	59.00 Auth Road Sidewalks and Bike Lanes	MD 337	Auth Way	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$1,000
223	Bock Road	Livingston Road	Tucker Road		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
224	Brinkley Road	Allentown Road	St. Barnabas road		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
225	Cabin Branch Trail	Presidential Corporate Center	Western Branch		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,350
226	Cabin Branch Trail	MD 214	Cheverly Metro		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$260
227	142.00 Charles Branch Trail	Rosaryville Creek	Western Branch	0	M-NCPPC, Prince Georges County, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$4,000
228	Chesapeake Beach Rail-Trail	MD 704	Addison Road Metro		M-NCPPC, Prince Georges County, City of Seat Pleasant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$200
229	Chesapeake Beach Rail-Trail	Capital Beltway	Upper Marlboro		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,080
230	Chesapeake Beach Rail-Trail	MD 214	Capital Beltway		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$650
231	16.0 Chestnut Avenue/Highbridge Road Sidepath	MD 450	MD 564	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,512

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
232	Collington Branch Trail	MD 214	Upper Marlboro	6	M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,000
233	East Coast Greenway American Discovery Trail	Washington D.C.	Anne Arundel County		MDOT, M-NCPPC, Prince Georges County	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
234	Edmonston Road Complete and Green Street	MD 201	51st Street	0.5	Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$4,379
235	Evarts Street Bike Lanes	I-495	Ruby Lockhart Boulevard	0.16	Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	
236	Folly Branch Trail	Bald Hill Branch	Glenwood Park Neighborhood Park		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
237	Fort Foote Road	Oxon Hill Road (north)	Oxon Hill Road (south)		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
238	Fort Washington Road	MD 210	Fort Washington National Park		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
239	Good Luck Road	MD 193	MD 201		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
240	4 Gunpowder Road Sidepath and Bike Lanes	MD 212	MD 198	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$2,000
241	Harry S Truman Drive Complete and Green Street	Mt. Lubentia Way	Lottsford Road	1.6	Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$15,075
242	Henson Creek Trail extension	Brinkley Road	Branch Avenue Metro		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,367
243	PG494_2 I-95/I-495 Capital Beltway	Auth Way	I-495/I-95 Phase 2 (Acces Road	1	MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$48,000,000
244	Improve Ped Crossing at Suitland Pkwy Forestville				National Park Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$367
245	28.00 Iverson Street Sidewalks and Bike Lanes	MD 5	Iverson Place	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$700
246	32.00 Jamestown Road Sidewalks and Bike Lanes	MD 500	Ager Road	0	Prince Georges County, M-NCPPC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$1,000
247	10.0 Jericho Park Road Sidepath and Bike Lanes	MD 197	Race Track Road	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$385

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
248	121.00 Little Paint Branch Trail Extension	Cherry Hill Road	Sellman Road	0	M-NCPPC, Prince Georges County, DPW&T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,000
249	Livingston Road	Oxon Hill Road	MD 210		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
250	PG691_1 MD 117, Collington Road	Kenhill Dr.	MD 450	1.4	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$74,100,000
251	MD 193	MD 564	Montgomery Co. line		MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
252	90.00 MD 197 Sidepath	MD 198	Rockledge Drive	0	MDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$18,000
253	PG949_1 MD 201 (Edmonston Road/US 1 Balimore Ave.)	I-95	Muirkirk Road	17.8	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	526,000,000
254	PG700_2 MD 210, Indian Head HWY				MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$74,574,000
255	PG084_1 MD 223 Piscataway Rd	Steed Rd	MD 4	8	MDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,140
256	80.00 MD 223 Sidepath	MD 4	Livingston Road	0	MDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$15,000
257	MO886_1 MD 28, Norbeck Rd/MD 198 Spencerville Road	MD 97	I-95	10.5	MDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	255,000,000
258	AT198_1 MD 3, Robert Crain HWY	US 50	MD 32	8.89	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	716,400,000
259	77.00 MD 4 Sidepath	I-495	Southern Avenue	0	MDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$4,000
260	PG618_2 MD 4, Pennsylvania Ave (Suitland PKWY Interchange)	MD 4 Suitland PKWY			MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	120,000,000
261	PG917_1 MD 4, Pennsylvania Ave.	I-95/I-495	MD 223	3.08	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	247,300,000
262	PG654_2 MD 450 Annapolis Road	Stoneybrook Dr.	West of MD	1.68	MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Other	\$51,000,000
263	6.0 MD 450 Sidepath and/or wide sidewalks	Seabrook Road	US 1	0	MDOT, SHA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$3,000
264	PG175_2 MD 5 Branch Ave (Interchange at MD 373/Brandywine)	At BrandyWine Road (MD 373/381)		0.94	MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$63,000,000
265	25.0 MD 564 Sidepath and Bike Lanes	MD 197	MD 450		Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$4,000
266	25.00 MD 564 Sidepath and Bike Lanes	MD 197	MD 450	0	MDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$10,000
267	85.00 MD 704 Sidepath and Bike Lanes	MD 450	Eastern Avenue	0	MDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$60,000
268	PG221_1 MD210, Indian Head HWY	I-95/I-495	MD 228	10	MDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	302,700,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
269	17.0	Mitchellville Road Sidepath	Mt. Oak Road	US 301	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$768
270		Montpelier Road Complete and Green Street	MD 197	200 feet south of Carland Place	1.4	Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	
271	23.00	Old Chapel Road Sidewalk and Bikeway	MD 197	Race Track Road	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,000
272		Old Fort Road	MD 210	Fort Washington Road		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
273		Oxon Hill Road	MD 210	Livingston Road		Prince Georges County, DPW&T	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
274		Oxon Hill Road (MD 414)	MD 210	St. Barnabas Road		MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$350
275	84.00	Oxon Run Trail	Southern Avenue	Naylor Road	0	M-NCPPC, Prince Georges County, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,100
276		Paint Branch Parkway Complete and Green Street	MD 201	River Road	0.75	Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$2,540
277		Paint Branch Parkway Complete and Green Street	River Road	MD 201	0.85	NVTA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$2,540
278		Piscataway Creek Trail	Dower House Branch near Cheltenham	Potomac River		M-NCPPC, Prince Georges County, National Park Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,300
279		Potomac Heritage On-Road Bicycle Route	Oxon Cove Park	Piscataway		Prince Georges County, DPW&T	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
280		Prince George's Connector	Chillum Road	Gallatin Street		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$400
281	39.00	Princess Garden Parkway Sidewalks and Bike Lanes	MD 450	Good Luck Road	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$700
282	26.00	Prospect Hill Sidewalks and Bike Lanes	Hillmeade Road	MD 953	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$800
283	35.00	Queen Chapel Road Sidewalks and Bike Lanes	MD 410	Eastern Avenue	0	MDOT, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$5,000
284	11.0	Race Track Road Sidepath and Bike Lanes	MD 450	MD 197	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,900

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
285	76.00	Ritchie Branch Trail	Marlboro Pike	Walker Mill Road	0	M-NCPPC, Prince Georges County, M-NCPPC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,000
286		Ritchie Marlboro Road	Old Marlboro Pike	Capital Beltway		Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,100
287		Ruby Lockhart Boulevard	Evarts Street	St. Joseph's Drive	0.63	Prince Georges County	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	
288	29.0	Silver Hill Road Sidewalks and Bike Lanes	MD 5	Walker Mill Road	0	MDOT, DPW&T	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,680
289	30.0	St. Barnabas Road Sidewalks and Bike Lanes	Silver Hill Road	Livingston Road	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,500
290		Suitland Parkway Trail	Washington D.C.	MD 4	6	National Park Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$0
291		Swan Road Complete and Green Street	MD 458	200 feet south of Swann Place	0.66	Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$4,885
292		Temple Hills Road	Saint Barnabas Road	Piscataway Road		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
293		Tinkers Creek Trail	MD 5	Piscataway Creek		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,600
294		Tucker Road	Saint Barnabas Road	Allentown Road		Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
295		US 1	Sunnyside Avenue	Contee Road		MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
296		US 1 (College Park)	Sunnyside Avenue	Albion Road		MDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$0
297	PG253_1	US 1, Baltimore Ave	College Ave	I-95/I-495	4.6	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$60,000,000
298	PG288_1	US 301, Crain Highway	Mount Oak Road	US 50	2	MDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	308,800,000
299		Walker Mill Road bike lanes	Southwest Branch	Beechnut Road	0.7	M-NCPPC, Prince Georges County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
300		WB&A Spur Trail	WB&A Trail	Fran Uhler Natural Area		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	
301		Western Branch Trail	Lottsford Road	Upper Marlboro		M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$3,100
302	38.00	Whitfield Chapel Road Sidewalks and Bike Lanes	MD 704	MD 450	0	Prince Georges County, M-NCPPC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$800

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
303	Woodrow Wilson Bridge	Oxon Hill Road	Virginia		M-NCPPC, Prince Georges County, MDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$0

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
304	Rhode Island Avenue Trolley Trail Extension	College Park	Armentrout Drive	0	M-NCPPC, Prince Georges County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,500

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
305 0A70	Accessible Pedestrian Signals	Citywide project		0	City of Rockville	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$1,129
306 9C61	Bicycle Route System Improvements	Citywide project			City of Rockville	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$1,057
307 3C60	Millennium Trail South - Wootton Parkway	W. Edmonston Dr	Veirs Mill Rd	1	City of Rockville, Maryland State Highway Administration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$905
308 3E60	Ped/Bike Bridge Over I-270 along MD 28	Adclare Rd and Nelson Street	Darnestown Road	2	City of Rockville, Maryland State Highway Administration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$4,714
309 4B71	Pedestrian Safety	Citywide project			City of Rockville	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,366
310 8A11	Rockville Intermodal Access - Baltimore Road	Rockville Town Center	City limit	0	City of Rockville	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$6,393
311 P501430	Rockville Sidewalk Extensions			1	MCDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$532
312 6B21	Sidewalks	Citywide project		2	City of Rockville	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$1,422

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
313 BL-10	Carroll Avenue Bike Lanes	DC Line	Piney Branch Road		MDOT, Takoma Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$0

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
314	Emmitsburg Greenway Trail	Emmitsburg	Emmitsburg	0	Frederick County, Town of Emmitsburg	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,500

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
315	TransActi VA 7 Trail	Leesburg	Alexandria		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
316	ADA sidewalk upgrades				Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pedestrian Inte	\$100
317	Arlington Blvd. Irving St. HSIP	Arlington Boulevard	Irving Street		Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$473
318	Arlington Blvd. Park Drive HSIP	Arlington Boulevard	Park Drive		Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$495
319	BK-87 Arlington Blvd. Trail improvements	Pershing Drive	Washington Blvd.	1	Arlington County, VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$800
320	BK87 Arlington Boulevard Trail Improvements	10th Street overpass	Washington Boulevard	0.8	Arlington County, Arlington County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$670
321	Army Navy Country Club Emergency Access Drive	S. Queen St.	Army Navy Country Club (Private Drive)	0.2	Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other	\$5,000
322	Army Navy Drive/Joyce St. bike facilities	S. Joyce Street	12th Street South	1	Arlington County, FHWA, VDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
323	Arterial Street Safety improvements					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$800
324	Capital Bikeshare - Arlington				Arlington County, DDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	\$5,423
325	Carlin Spring Rd. bridge replacement	Carlin Springs Rd.	North George Mason Drive	0	Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$550
326	TransActi Clarendon Blvd Trail	Wilson Blvd	Washington Blvd		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
327	P07D Columbia Pike Complete Streets	Frederick St.	Fairfax County Line	3	Arlington County	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$2,000
328	Complete Streets (R-B corridor)				Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$300
329	BK59 CUSTIS TRAIL WESTOVER UNDERPASS @ I-66				Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$75
330	Doctor's Run Trail	South Quincy Street	South George Mason Drive	0	Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$500
331	TransActi Four Mile Run Trail	Shirlington Road	Glebe Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
332	BK93 General Trail Improvements			0	Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$100
333	TransActi George Mason Drive Trail	Old Dominion Drive	Four Mile Run Drive		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
334	18860 Glebe Road Bridge Replacement	500' south of Route 50	500' north of route 50	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,950
335	52284 Glebe Road Pedestrian Crossings	Fairfax Drive	North Carlin Springs Road	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,780

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
336	BK39 I-395 Shirlington Underpass, Four Mile Run Trail	Shirlington Rd	West Glebe Rd	0	Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,000
337	P20S Kirkwood Rd. sidewalks	Lee Highway	14th Street North	1	Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$400
338	Long Bridge Park Esplanade Bridge	Boundary Drive	GW Parkway	0	Arlington County, FHWA, VDOT, NPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$2,000
339	TransActi Metrorail Trail	Cameron Street	Cyrstal City		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
340	TBOD Old Dominion Drive Complete Streets	N. Glebe Rd.	Fairfax Co. line	1	Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Streetscape/Pe	\$2,000
341	TAOD Old Dominion Drive Complete Streets (phase I)	Lee Highway	N. Glebe Rd.	0	Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$1,000
342	Old Jefferson Davis Highway/ Mount Vernon Trail CO				National Park Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
343	B10K Potomac Yard/Four Mile Run Trail	Potomac Avenue	Four Mile Run Trail	0.1	Arlington County, City of Alexandria	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	\$1,500
344	MA50 Priority Bus Stop improvements				Arlington County, WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$450
345	BK91 Route 110 Trail	Memorial Dr	Pentagon North Parking Lot	0.7	Arlington County, National Park Service	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	\$734
346	Shirlington Rd. bridge replacement	Shirlington Rd.	Four Mile Run		Arlington County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$1,000
347	Theodore Roosevelt Island Trailhead Improvements				National Park Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$500
348	TransActi US 50 Trail	Wilson BLVD	Nottingham Street		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
349	PD59 VA 120 (Glebe Road)	N. Randolph Street	Fairfax Drive		Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$2,500
350	TransActi VA 237 Trail	Glebe Road	Washington BLVD		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
351	TransActi VA 27 Trail	Arlington Blvd	Columbia Pike		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
352	BK88 Washington Blvd Trail Phase I	Arlington Blvd	Walter Reed	0	Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$350
353	BK-98 Washington Blvd. Trail (phase II)	S. 2nd Street	Columbia Pike	1	Arlington County, FHWA, VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,500
354	TransActi Wilson blvd Trail	Wilson Blvd	Key Bridge		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
355	Mt Vernon Trail Bridges				National Park Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$1,500
356	PW23 Rosslyn Circle & Lynn Street improvements	N. Lynn St	Ft. Myer Dr	0.3	Arlington County, VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$1,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
357	Mount Vernon Trail Extension	Beltway	Theodore Roosevelt Island		National Park Service, Fairfax County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
358	TransActi Alexandria Local Trail	Eisenhower	Reinkers		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
359	Bicycle Parking and Racks-on-Buses	various	various	0	City of Alexandria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,300
360	Capital Bikeshare	Citywide	Citywide		City of Alexandria, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$3
361 d	Duke Street Pedestrian Bridge	Cameron Station	Ben Brennman Park	1	City of Alexandria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$750
362 b	Duke Street Pedestrian Improvements	Duke Street	Carlyle Avenue	1	City of Alexandria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$195
363	Eisenhower Ave Complete Street	Stovall	Holland	0	City of Alexandria, VDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$14,000
364 e	Eisenhower Multi-Use Trail	Cameron Run East	Telegraph Road	2	City of Alexandria	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,600
365 f	Holmes Run Greenway Tunnels/Grade Separation	N Ripley	Beauregard	1	City of Alexandria	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$4
366 96261	I-395 Seminary Road HOV Ramp and Ped bridge			0.4	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	
367 i	I-95/I-495 Woodrow Wilson Memorial Bridge - Trail	Prince George's County, MD	Mount Vernon Trail, Alexandria	2	City of Alexandria	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$24,400
368 j	King Street/Beauregard Intersection	Beauregard/Walter Reed Dr.	28th Street	1	City of Alexandria, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$11,000
369	Mount Vernon Trail at Abingdon	Slater's Lane	Pendleton Street	1	City of Alexandria, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$750
370	Old Cameron Run Channel Trail	Mill Road	South Payne Street	0	City of Alexandria	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,000
371	On-Street Bikeways	various	various	0	City of Alexandria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,500
372 h	Pedestrian Improvements on Mount Vernon	Reed	Reed	0	City of Alexandria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$500
373 g	Potomac Yard Park/Landbay K	Braddock Road Metro	Four Mile Run	2	City of Alexandria, VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$9,000
374	Re-alignment of Mt. Vernon Trail at Daingerfield I				National Park Service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	\$713
375 104406	Rt. 7/King Street bridge over I-395	0.3 miles East	0.3 miles West	0.6	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	
376 64616	Rt. 95 Jones Point Reforestation - w/ trails	0.4 miles east of Rt. 1	0.8 miles east of Rt. 1	0.9	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	
377	Safe Routes to School	Charles Barrett Elementary School	Charles Barrett Elementary School	0	City of Alexandria, VDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$4,300

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
378	Safe Routes to Schools	Citywide	Citywide		City of Alexandria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$275
379 m	Sidewalk/Trail Construction- Holmes Run/Chambliss	Citywide	Citywide	1	City of Alexandria, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$750
380 c	Transit Facilities Pedestrian Improvements	citywide	citywide	6	City of Alexandria, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$750
381	TransActi VA 236 Trail	Wakefeild Drive	Van Dorn Street		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
382	Wilkes Street Bikeway	Royal Street	N Fayette Street	1	City of Alexandria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$180
383 l	Wilkes Street Tunnel	South Royal	South Union	0	City of Alexandria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$770

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
384	Four Mile Run Pedestrian and Bicycle Bridge	S Eads	Commonwealth Ave	0	Arlington County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$6,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
385	Woodrow Wilson Bridge Project	Md State Line	Telegraph Road	2	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
386 00016090	Accotink Gateway Connector Trail	Daniel's Run	Pickett Road	1	VDOT, City of Fairfax	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,762
387 71614	Route 29 Spot Improvements			0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$6,677
388 16632	US 29 (Lee Highway) Fairfax Circle	@ US 50			VDOT, City of Fairfax	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$11,586

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
389 00018782	Old Town Manassas City Square, Walkways, & Crosswa	Phase I and Phase II			VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$557

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
390 00056456	Manassas Drive Sidewalk	Andrew Drive	Euclid Avenue		VDOT, City of Manassas Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$195

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
391	Bicycle Parking (M-70A)	District-wide			VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bicycle Parking	
392	Interstate Bicycle Route 1	14th street bridge Arlington County	Southern Prince William County border	54	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	\$100
393	70661 + 1 NOVA signal Program	District-wide			VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$9,000
394	WMATA Virginia Metrorail Crossing Improvements				WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$510
395	WMATA Virginia Metrorail Sharrow and Bike Lanes			3	WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$79
396	WMATA Virginia Metrorail Sidewalk/ Pathway Project			2	WMATA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$753

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
397 97586	I-66 Corridor Multimodal study	I-495	Theodore Roosevelt Bridge	16.9	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
398	00052472	Accotink Gateway Connector Trail	King Arthur Drive	Wakefield Park	1	VDOT, Fairfax County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$2,619
399	XL	Accotink Stream Valley Trail - Dam to Hunter Villa	Lake Accotink Park	Hunter Village Drive	0	Fairfax County Park Authority	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$400
400	XL	Arlington Boulevard	Graham Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
401	XL	Arlington Boulevard	Patrick Henry Drive		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
402	58601	Arlington Boulevard (US 50)	Jaguar Trail	Seven Corners	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$3,000
403	XL	Arlington Boulevard Pedestrian Bridge	Peyton Randolph Drive	Seven Corners Shopping Center	0	Fairfax County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	\$5,200
404	93528	ARRA -C Fairfax County Parkway @ Fair Lakes	0.64 miles south of Ffx Co. Parkway exit 166	0.16 miles W of Exit 166	3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
405	93528 +	ARRA -C Route 7100 Fairfax Co. Pkway at Fair Lakes	0.64 M south of EB I-66	0.16 miles North of Rt. 750(Rugby)	3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
406	93528 + 9	ARRA-C Route 7100 FFX Pkway @ Fair Lakes	0.64 M south of EB I-66	0.16 M North of Rt. 750(Rugby)	3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
407	93528	ARRA-C, Fairfax County Parkway(with 95549)	0.64 miles north of exit 166	.16 miles west of exit 166	3.1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	
408	TransActi	Backlick Road Trail	Lee Highway	Capital Beltway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
409	TransActi	Backlick Run Trail	Backlick Road	Clermont Ave		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
410	TransActi	Beltway Trail	Dolley Madison Boulevard	Live Oak Drive		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
411	5554	Beulah Street	Franconia Road	Franocia-Springfield Parkway	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$15,094
412	XL	Braddock Road	Guinea Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
413	XL	Braddock Road	Rolling Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
414	XL	Braddock Road	Wakefield Chapel Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
415	TransActi	Braddock Road Trail	Guinea Road	Little River Turnpike		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
416		Burke Center Parkway	Marshall Pond Road	Burke Lake Road	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,900
417	5565	Burke Lake Road Widening	Fairfax County Parkway	Lee Chapel Road	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$7,000
418	TransActi	Capital Beltway Ramp Trail	I-95	US 1		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
419	XL	Centreville Road	New Braddock Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
420	XL	Centreville Road	Compton Road		0	Fairfax County Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
421	XL	Centreville Road	Sunrise Valley Drive	0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte		
422	XL	Centreville Road	Green Trails Boulevard	0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte		
423	XL	Clarks Branch Bridge at Riverbend Park	Clarks Branch	0	Fairfax County Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$500	
424	UPC5010	Columbia Pike	Powell Lane	Homes Run	0	Fairfax County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$1,106
425	XL	Cross County Trail			0	Fairfax County Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
426	00063578	Cross County Trail	Great Falls Park to Alban Road	Lake Accotink Dam to Hunter Village Drive segment	5	VDOT, Fairfax County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,060
427	XL	Cub Run Valley Stream Connections	Samuels Pine Rd	Cub Run Rec Center / Schneider's Branch	0	Fairfax County Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$625
428	XL	Danbury Forest	Lake Accotink Park	Danbury Forest Dr	0	Fairfax County Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$376
429	XL	Dolley Madison Boulevard	Great Falls Street/Lewinsville Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
430	12918	Dranesville Road Widening	Herndon	Route 7	2	VDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$18,000
431	57167	Fairfax County Parkway	123	7	10	VDOT, Fairfax County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$122,000
432	XL	Fairfax County Parkway	Old Keene Mill Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
433		Fairfax County Pedestrian Program			0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$58,000
434	TransActi	Fairview Avenue Trail	Center Street	Oakview Dr		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
435	TransActi	Franconia-Springfield Parkway Trail	Loisdale Road	Beulah		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
436	70590	Gallows Road On Road Bicycle Facility	Lee hwy	Old Courthouse Road	0	VDOT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,099
437	60337	Georgetown Pike Multi-Use Path	I-495	Route 7	2	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$845
438		Great Falls Street Trail	Crutchfeild Street	Hutchinson Street		Fairfax County, VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$596
439	TransActi	Haycock Road Trail	Broad Street	I-66		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
440	TransActi	Hayfield Road Trail	Manchester Road	Telegraph Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
441	XL	Holmes Run Stream Valley	Columbia Pike	Glenn Hills Park / Alexandria	0	Fairfax County Park Authority	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,268
442	TransActi	Holmes Run Trail	Columbia Pike	Larston Drive		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
443	70736	Huntington Metro Station Vicinity	Pedestrian Improvements		VDOT, Coalition for Smarter Growth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$174
444	87771	I-495 HOT Lanes	Hemming Avenue	Old Dominion Road	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	
445	TransActi	I-66 Trail	Sully Road	Paddington Lane		NVTA	<input type="checkbox"/>	<input type="checkbox"/>		
446	93033	I-95NB directional off ramp to NB Ffx Co. Pkway	Exit 166	0.6 miles from Exit 166	0.6	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Pedestrian/Bicy	
447	XL	Lee Highway	Monument Drive		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
448	XL	Leesburg Pike	Tyco Road/Westwood Center Drive		0	Fairfax County, WMATA	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
449	XL	Leesburg Pike	South Jefferson Street		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
450	XL	Leesburg Pike	Magarity Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
451	XL	Leesburg Pike	Tysons Square Center Entrance		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
452	XL	Lewinsville Road	Balls Hill Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
453	XL	Little River Turnpike	Braddock Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
454	63717	Little River Turnpike	Oasis Drive	Beauregard	0	VDOT, Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$933
455	98	Lorton Road Widening	US 1	Route 748	1	VDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		\$9,000
456	TransActi	Manassas Clifton Trail	Park Center Ct	South County East West Trail		NVTA	<input type="checkbox"/>	<input type="checkbox"/>		
457	TransActi	Manchester Road Trail	Beulah Street	Hayfield			<input type="checkbox"/>	<input type="checkbox"/>		
458	TransActi	Mt Vernon Trail Ext.	Potomac Heritage Trail	GW Parkway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>		
459	XL	North Kings Highway	Huntington Metro		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
460	00063577	NoVi (Northern Vienna) Trail	Phase I			VDOT, Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$303
461	XL	Old Keene Mill Road	Shiplett Boulevard		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
462	XL	Old Keene Mill Road	Sydenstricker Road		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
463	TransActi	Old Ox Road Trail	Old Ox Road	Herndon Parkway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>		
464		Phase 1 - Maintenance of FFx County Parkway Trail				VDOT	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$350,000
465		Phase 2 - Maintenance of Ffx County Pkwy Trail				VDOT	<input type="checkbox"/>	<input type="checkbox"/>	Other	\$350,000

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)	
466	XL	Pohick Stream Valley CCT reroute	Dominion Powerline Easement	Forest View	0	Fairfax County Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$650
467	XL	Pohick VRE Trail	Burke Station VRE	Burke Village Shopping Center	0	Fairfax County Park Authority, Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,270
468	TransActi	Potomac Heritage Trail	Northern End fo Beltway Trail	american legion bridge		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
469	XL	Richmond Highway	Old Mill Road/Mt. Vernon Memorial Highway		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
470	XL	Richmond Highway Pedestrian Safety Improvements	Ladson Ln, Lukens Ln, Backlick Rd, Kings,	Belford Drive S., Frye Road, Mohawk Lane	0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
471	XL	Roberts Road	Braddock Road	Shenandoah Lane	0.3	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
472	12906	Route 1 widening	Telegraph Road	Lorton Road	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$23,326
473	77322	Route 29 Bridge Replacement over Rocky Run			0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$15,000
474	86515	Route 50 Intersection Improvements @ Patrick Henry			0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$786
475	52327	Route 7 Widening	Rolling Holly Drive	Tyco Road	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$37,263
476	52404	Rt. 7100(Rt. 286) reconstruction	south of Fair lakes	north of Rt. 50	3.1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
477	52328	Rt.7 widen to 6 lanes - PE only	Reston Ave	Jarrett Valley	6.9	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	
478	TransActi	South County East West Trail	Manassas Clifton Trail	I-395		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
479	XL	Spring Hill Rec Center Connector	Spring Hill Recreation Center	Spring Hill Farm HOA	0	Fairfax County Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$120
480	60864	Stringfellow Road	Fair Lakes Boulevard	Route 50	2	VDOT, Fairfax County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$46,000
481	XL	Sunset Hills Road	Plaza America		0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
482	TransActi	Telegraph Road Trail	Richmond Highway	King Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
483	58435	Telegraph Road Widening	Leaf Road	South Kings Hwy	0	VDOT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$97,000
484	70632	Trail and Pedestrian Improvements	Fairfax County wide			VDOT, Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$1,600
485	C-058/05	Trail Construction/Linway Terrace Safety Upgrade	6330 Linway Terrace	6332 linway Terrace		Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$43
486	72295	Trap Road	Wolf Trap Farm Park	Beulah Road	1	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		\$2,242

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)		
487	70602	Tysons Corner	Pedestrian Improvements Identified by		the HJR 276 Committee				VDOT, Fairfax County	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Pedestrian Inte	\$123
488	XL	Tysons Priority Access Improvement Projects			0	Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
489	TransActi	US 29 Trail	Dixie Hill Road		Vietch Street				NVTA	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
490	11395	US 29 Widening	WEST MERRILEE DRIVE	1	ROUTE I-495		<input checked="" type="checkbox"/>	<input type="checkbox"/>	VDOT, Fairfax	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	N/A	\$119,000
491	56780	US 50 install median barrier & fence	VA 7	0	Patrick Henry Drive				VDOT, Fairfax County	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Streetscape/Pe	\$601
492	56866	US 50 Pedestrian Bridge	Vicinity of the Seven Corners Shopping Center						VDOT, Fairfax County	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Pedestrian Inte	\$5,353
493	58601	US 50 Pedestrian Improvements	Jaguar Trail		Seven Corners				VDOT, Fairfax County	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Streetscape/Pe	\$3,000
494	TransActi	US 50 Trail	Nutley Street		Arlington Blvd				NVTA	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
495	TransActi	US Bike 1 Trail	US 1		VA 123				NVTA	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
496	00052041	VA 193 - Georgetown Pike Trail	Innsbruck Road	4	River Bend Road		<input checked="" type="checkbox"/>	<input type="checkbox"/>	VDOT, Fairfax County	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	N/A	\$1,468
497	TransActi	VA 28 Trail	Walney Road		Dulles Toll Road				NVTA	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
498	TransActi	VA 638 Trail	South County East West Trail		I-95				NVTA	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
499	TransActi	VA 7100 Trail	Monument Drive		Lee Chapel				NVTA	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
500	00052042	Walker Road Trail	Columbine Street	2	Colvin Run Road		<input checked="" type="checkbox"/>	<input type="checkbox"/>	VDOT, Fairfax County	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	N/A	\$447
501	104103	Walney Road Bridge Replacement/widening			0.59				VDOT	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	N/A	
502		West Ox Road (route 608)	Ox Trail Road	2	Lawyers Road		<input checked="" type="checkbox"/>	<input type="checkbox"/>	VDOT	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>		\$11,300
503	99478	Widen Rt. 7 w/ paths on both sides	Reston Ave	0.5	Reston Pakway		<input checked="" type="checkbox"/>	<input type="checkbox"/>	VDOT	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	Pedestrian Inte	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
504	TransActi Tri-County Parkway Trail	Braddock Road	Sudley Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
505	TransActi Algonkian Parkway Trail	Harry Bird Highway	Unnamed 5		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
506	86922 Atlantic Blvd	Church Road (Rt. 625)	Magnolia Road (Rt. 1525)	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$24,000
507	LOCO-ST Atlantic Blvd & Warp Dr Signal				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
508	LOCO-BR Atlantic Boulevard Bike & Ped Improvements	VA Route 7	Magnolia Road		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	
509	TransActi Atlantic Boulevard Trail	Harry Bird Highway	Church Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
510	18992 BATTLEFIELD PARKWAY - 4 LANES ON 6 LANE R/W	KINCAID BOULEVARD	ROUTE 7	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		\$30,000
511	TransActi Berlin turnpike Trail	Harpers Ferry Bridge WV	Charles Town Pike		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
512	LOCO-AL Cascades Parkway Trails	Old Vestals Gap road	Loudoun Park Lane		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	
513	LOCO-D Claiborne Parkway	Ryan Road	Crosos Lane		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
514	TransActi Claiborne Parkway Trail	Loudoun County Parkway Trail	Ryan Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
515	60864 Clarks Gap Ped Signals			0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,500
516	LOCO-CA Crosstrail Boulevard	Sycolin Road	Kincaid Boulevard		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
517	TransActi Dulles Toll Road Trail	Sully Road	Memorial Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
518	58922 Loudoun Cnty Pkwy WIDEN UNPVD 2 LN TO 4 LNS DIV ON	1.9 MILES SOUTH ROUTE	0.5 MILE SOUTH ROUTE 7	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	N/A	\$12,000
519	TransActi Loudoun County Parkway Trail	Ryan Road	W&OD Trail		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
520	TransActi Loudoun County Parkway Trail	Mosby highway	Ryan Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
521	LOCO-D Loudoun County Pkwy & Center St Signal				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
522	LOCO-AS Old Ashburn Sidewalks	Partlow Road	W&OD Trail		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	
523	LOCO-D Old Ox Road & US Route 50 Interchange				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	
524	13096 Old Ox Road Widening (Rt. 606)	Mills Road (Rt. 621)	Dulles Greenway (Rt. 267)	5	VDOT,	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$49,450
525	93144 Pacific Blvd 4 lane reconstr.-new alignment			0.7	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Pedestrian Inte	
526	93889 Pacific Blvd Loudoun 1036 widen to 4 lanes			0.4	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Pedestrian Inte	
527	70760 PACIFIC BOULEVARD (MPO PROJECT	AUTOWORLD DRIVE (NORTHERN TERMINUS	SEVERN WAY	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$10,000
528	LOCO-AL Potomac View Road Pedestrian Improvements	S. Cottage Road	Business driveway		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
529	LOCO-CA River Creek Parkway Pedestrian Improvements	Fort Evans Road	Potomac Station Drive		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	
530	LOCO-CA Riverside Parkway	River Creek Parkway	Upper Meadow Riverlook Drive		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
531	81324 Route 7 Sidewalk	NORTH SIDE OF WEST MAIN STREET; NORTH 28TH STREET;	NORTH 33RD STREET	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$845
532	97529 Rt. 606 Loudoun county parkway					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
533	97529 Rt. 606 Loudoun County Parkway/Old Ox Rd.	Rt. 621	Rt. 267	5.2	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
534	105064 Rt. 606 Loudoun County Parkway/Old Ox Rd.	1.6 miles west of Rt. 267	Rt. 267	1.76	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
535	76244 Rt. 659 - Reconstruct (Belmont) to 4 lanes w/ path	0.26 M south of Portsount	0.23 M North of Gloucester Parkway	1.39	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	
536	97529 Rt.606 loudoun County Parkway/Old Ox Road					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
537	LOCO-AS Rural Splitter at Rt 659 & W&OD Trail				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	
538	LOCO-AS Russell Branch Parkway	Ashburn Village Boulevard	Ashburn Road		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	
539	TransActi Shaw Road Trail	W&OD Trail	Dulles Toll Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
540	LOCO-ST Sterling Boulevard	W&OD Trail	Chase Heritage Circle		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
541	LOCO-CA Sycolin Road & Loudoun Center Place Signal				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
542	LOCO-D Tall Cedars Parkway	Pinebrook Road	Gum Springs Road		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	
543	LOCO-D Tall Cedars Pkwy & Poland Rd Signal				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	
544	TransActi US 15 Trail	Braddock Road	James Monroe Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
545	TransActi US 50 Trail	Fauquier County Line	Pleasant Valley Drive		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
546	TransActi VA 690 Trail	Main Street	W&OD Trail		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
547	TransActi VA 734 Trail	US 50	Harry Byrd Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
548	TransActi VA 772 Trail	Belmont Ridge Road	Ryan Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
549	00063583 VA 846 (Sterling Boulevard Landscaping)	VA 28	US 7		VDOT, Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$53
550	TransActi VA 9 Trail	Harpers Ferry Road	Harry Byrd Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
551	LOCO-AS VA Route 7 & Belmont Ridge Rd Interchange				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
552	LOCO-BL VA Route 7 & Hillsboro Road Interchange				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	
553	LOCO-ST VA Route 7 Pedestrian Overpass				Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	
554	00056454 W&OD Trail Extension	W&OD Trail End (Purcellville)	Round Hill	3	VDOT, Loudoun County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,700
555	W&OD/White's Ferry Connection to C&O	W&OD	Potomac River at White's Ferry		VDOT, Northern Virginia Regional Park	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
556	LOCO-BR Waxpool Road Intersection Improvements	Pacific Boulevard	Broderick Drive		Loudoun County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
557 68757	US 50 widening	Pleasant valley Drive	Lee Road	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$70,900

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
558	TransActi 234 BYPASS trail	Braddock Road	Lee Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
559	72726 234 Off-Road Multi Use Trail	Lake Jackson Drive	PW Parkway	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$662
560	80347 Balls Ford Road Widening	Bus 234	234	0	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	
561	TransActi Bike Route 1	Fleetwood Drive	Dumfries Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
562	71721 Bus 234 Add Signalized Crosswalks	All Major Intersections	All Major Intersections		VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$650
563	71758 Bus 234 Sidewalk/Ramps Improvments	Balls Ford Road	Godwin Drive		VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pedestrian Inte	\$1,000
564	TransActi Godwin Drive Trail	Sudley Road	Nokesville Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
565	TransActi Gordon Blvd Trail	US 1	Commerce		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
566	100566 I66/Rt.15 interchange reconst. w/ paths & sdwlks			0.8	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pedestrian/Bicy	
567	93578 Install asphalt path and crosswalks on Rt. 3000, P	0.03 M East of Cato Hill road	0.017 M East of Honer Corner commuter lot		VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other	\$450
568	TransActi Liberia Avenue Trail	Old Bridge Road	Jefferson Davis Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
569	TransActi Linton Hall Road Trail	Lee Highway	Nokesville Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
570	14932 Linton Hall Road Widening	Glenkirk Road	Devlin Road	3	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$8,000
571	TransActi Minnieville Road Trail	Dumfries Road	Old Bridge Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
572	TransActi New Cherry Hill Road	Potomac Heritage Trail	Potomac Parkway Trail		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
573	71723 Old Bridge Road Sidewalk	Titania	Crickett	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$1,800
574	72635 Old Bridge Road Sidewalk	Mohican	Oakwood Drive	0	VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N/A	\$749
575	TransActi Old Bridge Road Trail	Prince William Parkway	Poplar Lane		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
576	00015172 Pedestrian Bridge over CSX Railroad	Veterans Memorial Park	DOT #860626C		VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$3,119
577	TransActi Potomac Heritage Trail	Wharton Drive	Jefferson Davis Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
578	TransActi Potomac Parkway trail	Old Stage Coach Road	New Cherry Hill Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
579	TransActi Prince William Parkway Trail	Prince William Parkway	Signal Hill Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
580	TransActi Prince William Parkway trail	Nokesville Road	Dumfries Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
581	13525 Route 234 and Rotue 1 Interchange	.4 miles east of route 1	.4 Miles west of Route 1	0	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$87,000
582	17984 + 5 Route 28 Trail Extension	Fauquier Co. Line	Vint Hill Road	7	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$6,500

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
583	TransActi Spriggs Road Trail	Hoadly Road	Dumfries Road		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
584	TransActi US 1 Trail	Stafford County	I-495		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
585	00050009 VA 234 Bike Trail	US 1 to I-95 &	Montclair to vic. Manassas	9	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$1,161
586	TransActi VA 234 Trail	Dumfries Road	Jefferson Davis Highway		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
587	TransActi VA 784 Trail	Delaney Blvd	US 1		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
588	13532 + 1 123 Widening	Davis Road	South Burke Lake Road	9	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$6,181
589	TransActi VA 123 Trail	Clifton Road	Gordon Boulevard		NVTA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
590 77170	Multiple Sidewalk Enhancements	Purcellville			VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$500
591 71734	PURCELLVILLE - BICYCLE ACCESS TO HIGH SCHOOL & W&O	Main Street	W&OD Trail	1	VDOT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	N/A	\$460

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
592 00016636	Pedestrian/Bicycle Plaza & Pathways	Town of Clifton	- Phase II		VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$70

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
593 00063581	Main Street	Town of Hamilton (Improvements)			VDOT, Town of Hamilton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$47

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
594 00016637	Town of Haymarket (Streetscaping)	Phase 1			VDOT, Town of Haymarket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$1,008
595 00064766	Town of Haymarket Streetscaping	Washington Street	Phase II		VDOT, Town of Haymarket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$2,026

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
596	Folly Lick Trail Connection	North of Herndon Pkwy at existing Folly Lick Trail	Future Herndon Monroe Metrorail station	0	Town of Herndon, Fairfax County	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$2,000
597	70321 Herndon Downtown Elden Streetscape	Elden St / Center St intersection	Elden St / Monroe St intersection	0.8	VDOT, Town of Herndon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Streetscape/Pe	\$2,100
598	00052449 Sugarland Run Trail	W&OD Trail	Fairfax County's Sugarland Run Trail	1	VDOT, Town of Herndon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		\$531
599	W&OD Trail Crossing/Crestview Drive Overpass	W&OD Trail at Crestview Drive	W&OD Trail at Crestview Drive	0	Town of Herndon, Northern Virginia Regional Park Authority	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		\$1,125

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
600 70587	PEDESTRIAN STUDY & IMPROVEMENTS	Town of Hillsboro	On 704		VDOT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$15,348

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
601 00017601	Ped & Bike Path Network	Town of Lovettsville		6	VDOT, Town of Lovettsville	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$450

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
602 00056458	Riverfront Boardwalk	on the Occoquan River	in the Town of Occoquan		VDOT, Town of Occoquan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$296

Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Lane	Path	Sidewalk	Spot or Area Improvement	Cost (\$1,000s)
603 00060040	Potomac Avenue	CSX Railroad	Potomac River		VDOT, Town of Quantico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$871
604 00017600	Potomac Transportation Facility	AMTRAK / VRE Station	Potomac River		VDOT, Town of Quantico	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Streetscape/Pe	\$512

Appendix B

Data Dictionary and Sample Database Entry Form

For the Regional Database of Bicycle and Pedestrian Projects in the Long-Range
Bicycle and Pedestrian Plan for the National Capital Region

FIELD	EXPLANATION
COG Project ID	COG's internal identifying number for the project in this database
Agency Project ID	The responsible agency's project identifying number
Project Name	Descriptive name provided by the sponsoring agency
From	Project Limits
To	Project Limits
Length of Project	Length of the project from start to finish. Example: if a project consists of four miles of road with a continuous bike lane and sidewalk, the project length is four miles.
Jurisdiction(s)	Jurisdiction(s) in which the project is located
State	State or States in which the project is located.
Agency	Lead agency that is responsible for implementing the project
Secondary Agency	Other agency involved in the project
Cost	In thousands of dollars. As many projects in the plan may not be built for many years, and have not been fully scoped, this can be a very rough estimate. If a project is part of a larger project the total project cost is <i>not</i> listed, only that portion of the cost which is attributable to the bicycle or pedestrian facility. Use of a rule of thumb for such estimates was acceptable, i.e. 3% of total project cost. Many projects do not have a cost estimate available.
URL for more project information	If the project has a web site, or if the agency has more detail on its web site, the URL may be listed.
Project Manager Name	If the project has a project manager, his or her name may be listed.
Project Manager's Phone	
Project Manager's E-mail	
Project is in the CLRP	Project is in the Financially Constrained Long-Range Transportation Plan for the National Capital Region, and therefore is officially considered to have funding available to support project completion.
Project is in the TIP	Project is in the most recent National Capital Region Transportation Improvement Program with specific funding amounts identified for program completion.

Project is Part of a Larger Project	Is the project part of a larger project, i.e. a highway, bridge, or transit project?																
Length of Bike Lane	Bike lanes are striped lanes at least 4' wide in the public right-of-way, marked for the exclusive use of bicyclists. If a bike lane is found on both sides of the street for four miles, it should be reported as four miles of bike lane, not eight.																
Length of Multi-Use Path	A paved or hard-surface path separated from traffic, officially designated for bicycles and other non-motorized users. Should be at least 8' wide.																
Length of Sidewalk	Sidewalks are usually concrete, less than 8' wide, and have other design characteristics (street furniture, limited sight-lines) that render them unsuitable for all but the slowest bicyclists.																
Type of Spot/Area Improvement	For non-linear projects. The pull-down menu gives the following options: <table border="0" style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;"><u>Type of Improvement</u></th> <th style="text-align: left;"><u>Code Letter</u></th> </tr> </thead> <tbody> <tr> <td>1. Pedestrian Intersection Improvement</td> <td>I</td> </tr> <tr> <td>2. Pedestrian/Bicycle Bridge or Tunnel</td> <td>B</td> </tr> <tr> <td>3. Traffic Calming</td> <td>TC</td> </tr> <tr> <td>4. Streetscape/Pedestrian Improvements</td> <td>S</td> </tr> <tr> <td>5. Bicycle Parking</td> <td>P</td> </tr> <tr> <td>6. Bicycle Route Marking</td> <td>BR</td> </tr> <tr> <td>7. Other</td> <td>O</td> </tr> </tbody> </table>	<u>Type of Improvement</u>	<u>Code Letter</u>	1. Pedestrian Intersection Improvement	I	2. Pedestrian/Bicycle Bridge or Tunnel	B	3. Traffic Calming	TC	4. Streetscape/Pedestrian Improvements	S	5. Bicycle Parking	P	6. Bicycle Route Marking	BR	7. Other	O
<u>Type of Improvement</u>	<u>Code Letter</u>																
1. Pedestrian Intersection Improvement	I																
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3. Traffic Calming	TC																
4. Streetscape/Pedestrian Improvements	S																
5. Bicycle Parking	P																
6. Bicycle Route Marking	BR																
7. Other	O																
Path Alignment	Is the multi-use path along a road, or is it on its own right-of-way? This field is meant to distinguish between side-paths, which are built adjacent to a road and cross numerous driveways and intersections, and a multi-use path on its own right of way, such as an old railroad, canal tow-path, or stream valley. Paths built along limited-access highways and parkways such as the Mount Vernon Trail should be listed as being built on an independent route, since they have few intersection or driveway conflicts, and are set back some distance from the roadway for most of their length.																
Status	The pull-down menu offers the following options: <table border="0" style="margin-left: 40px;"> <thead> <tr> <th></th> <th style="text-align: left;"><u>Code Letter</u></th> </tr> </thead> <tbody> <tr> <td>1. Fully Funded¹</td> <td>F</td> </tr> <tr> <td>2. Partially Funded</td> <td>P</td> </tr> <tr> <td>3. Unfunded</td> <td>U</td> </tr> <tr> <td>4. Under Construction</td> <td>UC</td> </tr> <tr> <td>5. Complete</td> <td>C</td> </tr> </tbody> </table>		<u>Code Letter</u>	1. Fully Funded ¹	F	2. Partially Funded	P	3. Unfunded	U	4. Under Construction	UC	5. Complete	C				
	<u>Code Letter</u>																
1. Fully Funded ¹	F																
2. Partially Funded	P																
3. Unfunded	U																
4. Under Construction	UC																
5. Complete	C																

¹ "Funded" indicates that the sponsoring agency has considered funding for completion of this project to be reasonably available within projected funding sources. "Unfunded" indicates, that while the project has been identified, there is no projected funding to support its completion at this time.

	This database is meant to list planned facilities rather than existing facilities, but since 2006 many of the projects in the plan have been completed.
Year of Completion or Implementation	If the project has been completed or implemented, in what year did that happen?
Project Within a Regional Activity Center	Is the project located with in a regional activity center or cluster? See the link for on-line information on activity centers and clusters. A paper map of centers and clusters, which is easier to read than the one on the web, will be sent to anyone who requests one.
Project is Between Regional Activity Centers	Project connects one regional activity center or cluster with another
Maintenance	Project is primarily maintenance or reconstruction of an existing facility
Project Connects to a Transit Facility	Project connects to a metrorail station, commuter rail station, or transit center
BikeNetConnect	Bicycle Network Connectivity. Does the project improve the connectivity of the regional bicycle network? Does it connect to any existing bicycle facilities?
Pedestrian Safety Project	Is the primary purpose of this project to improve pedestrian safety?
Project Identified as a Regional Priority*	Is the project one of the regional priority unfunded bicycle and pedestrian projects recommended by the Transportation Planning Board for consideration in the TIP?



Transportation Planning Board

National Capital Region Bicycle and Pedestrian Plan

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Bike Ped Plan

Related Records: [Agency](#)

COG Project ID	167967369
Agency Project ID	
Project Name	Metropolitan Branch Trail
From	Union Station
To	Takoma Park
Length of Project	<input type="text" value="7"/> (miles)
Description	Construct a 7 mile trail along the red line from U
Jurisdiction (s)	Washington
State	<input type="text" value="DC"/>
Agency	<input type="text" value="DDOT"/>
Secondary Agency	

Cost	\$ <input type="text" value="20000"/> (In Thousands)
URL for More Project Information	<input type="text" value="www.metbranchtrail.com"/>
Project Manager's Name	<input type="text" value="Chris Holben"/>
Project Manager's Phone	<input type="text" value="202 671 2638"/>
Project Manager's Email	<input type="text" value="chris.holben@dc.gov"/>
Project Is In the CLRP	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Corresponding CLRP Project ID	<input type="text"/>
Project Is In the TIP	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Corresponding TIP Project ID	<input type="text"/>
Project Is Part of a Larger Project	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Length of Bike Lane	<input type="text" value="2"/> (miles)
Length of Multi-Use Path	<input type="text" value="5"/> (miles)
Length of Sidewalk	<input type="text"/> (miles)
Type of Spot/Area Improvement	<input type="text"/>

nt	
Path Alignment	<input type="text"/>
Status	Partially Funded <input type="text"/>
Year of Completion or Implementation	2009 <input type="text"/>
Project Within a Regional Activity Center	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Information on Regional Activity Centers
Project Is Between Regional Activity Centers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Maintenance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Project Connects To a Transit Facility	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
BikeNetConnect	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Pedestrian Safety Project	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Project Is In Local Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Project Identified as a 2005 Regional Priority	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Comments

Record
Last
Modified
On

Appendix C

Completed Projects from the 2010 Bicycle and Pedestrian
Plan

COGProjectID	AgencyID	Project Name	From	To	Description	Jurisdiction	State	Agency
562		Safe Routes to School	Charles Barrett Elementary School	Charles Barrett Elementary School	Pedestrian and bicycle safety improvements at Charles Barrett Elementary School	City of Alexandria	VA	City of Alexandria
564		Bicycle Parking and Racks-on-Buses	various	various	Improve integration of bicycling and transit by improve bicycle commuter parking, and adding bicycle racks at all transit vehicles.	City of Alexandria	VA	City of Alexandria
34 e		Eisenhower Multi-Use Trail	Cameron Run East	Telegraph Road	Enhancement and expansion of a 2-mile segment of the existing Eisenhower Avenue Shared Use Trail, including an underpass at Eisenhower Avenue.	City of Alexandria	VA	City of Alexandria
130 h		Pedestrian Improvements on Mount Vernon	Reed	Reed	Pedestrian improvements to high crash area along Mount Vernon Avenue.	City of Alexandria	VA	City of Alexandria

613		Capital Bikeshare - District of Columbia			<p>The District Department of Transportation (DDOT) and Arlington County have selected “Capital Bikeshare” as the name for the new regional bike sharing program. Capital Bikeshare will launch later this year with roughly 1100 bikes at 114 stations in the District and Arlington, and will be the largest of its kind in the US.</p> <p>Building on the success of DDOT’s SmartBikeDC program, launched in 2008 and concentrated in the downtown DC area, Capital Bikeshare will now make it possible for residents and visitors to conveniently pick up a bike and traverse throughout all 8 wards in the city and Arlington. With 100 stations in DC and 14 in Arlington the bike share program will now become a true regional transportation system. Plans are already underway to expand the network further in Virginia as well as Maryland.</p> <p>The new system will be similar to the one the Public Bike System Company (PBSC), based in Montreal, produced, commonly known as BIXI. The BIXI system has been running in Montreal since 2009 and will be arriving soon in Minneapolis, London, and</p>	Washington	DC	DDOT
620	CD054A, CKTB4A, E	Great Streets - H Street NE Streetscape	3rd Street NE	14th Street NE	<p>This is a Great Street Initiative Project Reconstruction of H St road surface with composite pavements new brick gutters and granite curbs adjacent to the sidewalks. New streetlights, traffic signals, and manholes. Safety improvements including bulb-outs.</p>	Washington	DC	DDOT

803	L Street Cycle Track	New Hampshire Avenue	12th Street NW	Separated cycle track.	Washington	DC	DDOT
617	Capital Bikeshare Region-Wide			The proposed regional system would expand the DC and Arlington planned Capital Bikeshare system from 1,117 bikes to almost 3,600 bikes and would connect to the extensive transit and bicycle networks throughout the region. The planned DC and Arlington bike-sharing systems have already gone forward with a joint decision to use Montreal's Bixi system and have contracts that include opportunities for regional expansion. This joint planning effort strengthens our ability to formulate and implement a regional bike-sharing system.	Region-wide	DC/MD /VA	DDOT

817	P509274	Robey Road	Greencastle Road	Briggs Chaney Road	<p>This project provides for design and reconstruction of Robey Road from the north end of the Greencastle Elementary School site to Greencastle Road (approximately 3,400 feet). The right-of-way will be 70 feet wide from the school site to Ballinger Drive and 60 feet wide from Ballinger Drive to Greencastle Road. The improved roadway will be a two-lane residential roadway with concrete curb and gutter. The roadway will be 36 feet wide from Briggs Chaney Road to Ballinger Drive and 26 feet wide from Ballinger Drive to Greencastle Road. An 8-foot wide bikeway will be constructed along the west side of Robey Road and a 5-foot wide concrete sidewalk will be constructed along the east side of the road. Approximately 620 feet of Greencastle Road, east of the Robey Road intersection, will be widened to provide a leftturn lane onto Robey Road. Appropriate landscaping and stormwater management facilities are included.</p>	Montgomery County	MD	MCDOT
825	500101	Travilah Road	Darnestown Road	Dufief Mill Road	Road with side path and sidewalk	Montgomery County	MD	MCDOT

828	P50015 1	Woodfield Road Extended	Main Street	Ridge Road	<p>This project provides a 3,000-foot extension of Woodfield Road from 1,200 feet north of Main Street, (MD 108), to Ridge Road, (MD 27).</p> <p>The scope of work includes the design, land acquisition, and construction of a 1,450 foot segment of Ridge Road from 450 feet south of the existing Ridge Road / Faith Lane intersection to 300 feet north of the Ridge Road / Gue Road intersection. The roadway improvements include: extension of Woodfield Road as a 28-foot wide closed-section roadway with two 14-foot wide traffic lanes; provision of auxiliary leftturn lanes on Woodfield Road at Faith Lane and Ridge Road; realignment of Faith Lane to intersect Woodfield Road at a point 350 feet south of Ridge Road; construction of a separated 8-foot wide bikeway along the eastern side of Woodfield Road Extended from Main Street to Ridge Road; widening Ridge Road to provide two 12-foot wide travel lanes, two 4-foot wide paved shoulders, an auxiliary left turn lane at</p>	Montgomery County	MD	MCDOT
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149	P50040 1	Nebel Street extended	Randolph Road	Chapman Avenue	<p>This project provides a 1,300-foot extension of Nebel Street from its existing terminus at Randolph Road to a terminus at the Target store site. The proposed roadway improvements include: a 4-lane closed section roadway with a typical cross section that includes four 12-foot travel lanes; a 5-foot concrete sidewalk adjacent to a 7-foot tree panel along the west side of the road; an 8-foot asphalt bike path adjacent to a 7-foot wide tree panel along the east side of the road, streetlighting and landscape trees provided on both sides of the roadway; improvements at the intersection of Nebel Street and Randolph Road; and modification of the existing traffic signal at the intersection of Chapman and Bou Avenues</p>	Montgomery County	MD	MCDOT
111		Anacostia River Trail	Bladensbu rg Marina	Wash. D.C. line	<p>The segment of the Anacostia River Trail has been completed by the M-NCPPC Department of Parks and Recreation from Bladensburg Waterfront Park to the vicinity of New York Avenue, where it will connect to the DC Riverwalk Project.</p>	Prince George's County	MD	M-NCPPC, Prince Georges County

839		Evarts Street Bike Lanes	I-495	Ruby Lockhart Boulevard	Designated bike lanes and continuous sidewalks were provided as part of the road construction for Woodmore Town Center. These bike lanes connect to longer bike lanes along Ruby Lockhart Boulevard.	Prince George's County	MD	Prince Georges County
840		Ruby Lockhart Boulevard	Evarts Street	St. Joseph's Drive	Designated bike lanes, wide sidewalks, traffic calming, and decorative crosswalks were provided as part of the road construction for Woodmore Town Center.	Prince George's County	MD	Prince Georges County
522	71723	Old Bridge Road Sidewalk	Titania	Crickett	curb ramps, crosswalks, etc.	Prince William County	VA	VDOT
307	71758	Bus 234 Sidewalk/Ramps Improvments	Balls Ford Road	Godwin Drive	Spot improvements to all intersections(curb ramps, crosswalks, etc.)	Prince William County	VA	VDOT
548	87771	I-495 HOT Lanes	Hemming Avenue	Old Dominion Road	High Ocupancy Toll Lanes wtih the reconstruction of several bridges. 10 bridge crossings with new or widened bike/ped facilities. One overpass with space for path and bike lanes underneath.	Fairfax County	VA	VDOT
778	97586	I-66 Corridor Multimodal study	I-495	Theodore Roosevelt Bridge	A review of how to increase capacity in this corridor via bus on shoulders, expand HOV, improve adjacent bike volumes with physical improvements on Custis TRail or on trails feeding into the W&OD. Adding some connecting trails were considered.	Fairfax and Arlington Counties, City oFalls Church	VA	VDOT

773	64616	Rt. 95 Jones Point Reforestation - w/ trails	0.4 miles east of Rt. 1	0.8 miles east of Rt. 1	re-construction of park paths to and around ball fields, gardens, fishing pier, historic site and woods. Landscaping and beautification.	City of Alexandria	VA	VDOT
768	93144	Pacific Blvd 4 lane reconstr.- new alignment			reconstruction to 4 lanes with a 5' sidewalk and a 10' path	Loudoun County	VA	VDOT
71		Woodrow Wilson Bridge Project	Md State Line	Telegraph Road	Bicycle Pedestrian Facility on the bridge connecting VA and MD bicycle networks. Pedestrian Improvements to Route 1 and Telegraph road interchanges. Pedestrian Bridge included in Telegraph Road Interchange	City of Alexandria, Fairfax County	VA	VDOT
248	00016636	Pedestrian/Bicycle Plaza & Pathways	Town of Clifton	- Phase II	Pedestrian/Bicycle Plaza & Pathways - Phase II in Town of Clifton	Town of Clifton	VA	VDOT
254	71734	PURCELLVILLE - BICYCLE ACCESS TO HIGH SCHOOL & W&O	Main Street	W&OD Trail	Access to Loudoun Valley High School	Purcellville	VA	VDOT
305	11395	US 29 Widening	WEST MERRILEE DRIVE	ROUTE I-495	US 29 widening	Fairfax County	VA	VDOT

631	70321	Herndon Downtown Elden Streetscape	Elden St / Center St intersection	Elden St / Monroe St intersection	<p>The project consists of streetscape, sidewalk, and Washington and Old Dominion(W&OD)trail bike/ped enhancements, landscaping, traffic-calming, roadway median and turning lane improvements, intersection realignment and intermodal circulation improvements within downtown Herndon's heritage district.</p> <p>Streetscape improvements in the form of underground/relocated utilities, ADA accessible curbing, brick sidewalks and paver crosswalks, bike/ped signalization, improved drainage, landscaped planters, street trees, benches, bus shelter/bus stops, and heritage-street lighting/traffic signalization will greatly enhance the safety and physical environment of downtown.</p> <p>The purpose of this downtown revitalization project is to facilitate access, improve intermodal circulation and bike/pedestrian safety along the W&OD regional park trail, while retaining the historic and small town attributes within the downtown through surface transportation improvements as well as</p>	Town of Herndon	VA	VDOT
11	000635 81	Main Street	Town of Hamilton (Improvements)		Construct curb ramps, perform pavement striping, landscape, and erect gateway signage on Main Street in the Town of Hamilton. Pedestrian and Bicycle Facilities.	Town of Hamilton	VA	VDOT

193	00063577	NoVi (Northern Vienna) Trail	Phase I		Engineering & design for Phase I of Northern Vienna Trail. Study being conducted by Fairfax County	Fairfax County	VA	VDOT
226	77170	Multiple Sidewalk Enhancements	Purcellville		Various Location (6)	Purcellville	VA	VDOT
514	18860	Glebe Road Bridge Replacement	500' south of Route 50	500' north of route 50	Replace bridge with new structure that will include shared use path and sidewalk	Arlington County	VA	VDOT
516	70590	Gallows Road On Road Bicycle Facility	Lee hwy	Old Courthouse Road	retro fitting of bike lanes on existing pavement	Fairfax County	VA	VDOT
518	52284	Glebe Road Pedestrian Crossings	Fairfax Drive	North Carlin Springs Road		Arlington County	VA	VDOT
14	00052042	Walker Road Trail	Columbine Street	Colvin Run Road	Construct a 4' natural surface path from Columbine Street to Colvin Run Road and a 6' stone dust path from the G.F. School to Beach Mill Road.	Fairfax County	VA	VDOT
189	00052041	VA 193 - Georgetown Pike Trail	Innsbruck Road	River Bend Road	Construct a 4.5 mile trail from Innsbruck Road to River Bend Road and Applewood Lane to Seneca Road.	Fairfax County	VA	VDOT
306	71721	Bus 234 Add Signalized Crosswalks	All Major Intersections	All Major Intersections	Add signalized crosswalks to all major intersections of Business Route 234 in Prince William County	Prince William County	VA	VDOT

526	81324	Route 7 Sidewalk	NORTH SIDE OF WEST MAIN STREET; NORTH 28TH STREET;	NORTH 33RD STREET		Loudoun County	VA	VDOT
271	70760	PACIFIC BOULEVARD (MPO PROJECT	AUTOWORLD DRIVE (NORTHERN TERMINUS	SEVERN WAY		Loudoun County	VA	VDOT
308	72726	234 Off-Road Multi Use Trail	Lake Jackson Drive	PW Parkway		Prince William County	VA	VDOT
525	80347	Balls Ford Road Widening	Bus 234	234		Prince William County	VA	VDOT
527	86515	Route 50 Intersection Improvements @ Patrick Henry				Fairfax County	VA	VDOT
528	86922	Atlantic Blvd	Church Road (Rt. 625)	Magnolia Road (Rt. 1525)		Loudoun County	VA	VDOT

Appendix D

2013 Cordon Counts

Potomac River Bridges	Cordon Count Volumes	DDOT Count Volumes	Other trails and streets in D.C.	Cordon Count Volumes	DDOT Count Volumes
14th Street (Inbound to D.C.)	592		Capital Crescent and C&O Canal Towpath	229	
14th Street (outbound from D.C.)	172		Rock Creek	130	
Arlington Memorial (inbound to D.C.)	160		Connecticut Avenue, N.W.	197	
Arlington Memorial (outbound from D.C.)	64		14th Street, N.W.	274	
Key (Inbound to D.C.)	103	337	11th Street, N.W.	161	
Key (outbound from D.C.)	99	235	Eckington Place, N.E. (Metropolitan Branch)	15	222
			East Capitol Street	275	
			Anacostia Trail (M Street, S.E.)	12	
Other trails and streets in Arlington County, Va.			11th Street Bridge, S.E. (local span)	12	
Mount Vernon Trail	332				
Custis Trail	349				

Notes:

(1) Cordon Count Volumes taken any day between March and June 2013

(2) DDOT Count Volumes taken in late May or June 2013

(3) One day count at each location

Potomac River Bridges	Cordon Count Volumes	DDOT Count Volumes	Other trails and streets in D.C.	C C Vo
14th Street (Inbound to D.C.)	592		Capital Crescent and C&O Canal Towpath	
14th Street (outbound from D.C.)	172		Rock Creek	
Arlington Memorial (inbound to D.C.)	160		Connecticut Avenue, N.W.	
Arlington Memorial (outbound from D.C.)	64		14th Street, N.W.	
Key (Inbound to D.C.)	103	337	11th Street, N.W.	
Key (outbound from D.C.)	99	235	Eckington Place, N.E. (Metropolitan Branch)	
			East Capitol Street	
Other trails and streets in Arlington County, Va.			Anacostia Trail (M Street, S.E.)	
			11th Street Bridge, S.E. (local span)	
Mount Vernon Trail	332			
Custis Trail	349			

Notes:

(1) Cordon Count Volumes taken any day between March and June 2013

(2) DDOT Count Volumes taken in late May or June 2013

(3) One day count at each location

Appendix E
Metrorail Origin Station by All Day Walk and Bike Mode of Access

	Bicycle (all day)	Walked (all day)
2013 WMATA Passenger Survey		
Capitol South	0.6%	95.0%
Federal Center SW	0.2%	94.4%
Judiciary Square	0.2%	93.0%
Waterfront-SEU	0.0%	91.6%
U Street/African-Amer Civil War Memorial/Cardozo	1.0%	90.9%
Navy Yard	0.1%	90.2%
Mt. Vernon Square 7th St-Convention Center	0.8%	90.0%
Farragut North	0.3%	89.9%
Metro Center	0.3%	89.7%
Court House	0.6%	89.5%
Federal Triangle	0.1%	89.3%
Archives-Navy Memorial-Penn Quarter	0.1%	89.2%
Smithsonian	0.3%	88.2%
Gallery Place-Chinatown	0.2%	87.9%
Farragut West	0.1%	87.6%
Foggy Bottom-GWU	0.5%	87.4%
Shaw-Howard University	0.2%	86.9%
Virginia Square-GMU	0.4%	86.6%
McPherson Square	0.6%	86.3%
Woodley Park-Zoo/Adams Morgan	1.5%	85.9%
New York Ave-Florida Ave-Gallaudet U	1.6%	85.9%
Cleveland Park	0.7%	85.8%
Dupont Circle	0.8%	84.4%
Eastern Market	2.5%	84.2%
Van Ness-UDC	0.3%	83.8%
Clarendon	1.1%	81.3%
L'Enfant Plaza	0.3%	77.7%
Columbia Heights	1.6%	76.8%
Crystal City	0.7%	76.3%
Bethesda	1.3%	72.2%
Arlington Cemetery	0.0%	71.5%
Medical Center	1.6%	71.0%
Rosslyn	0.4%	70.8%
Friendship Heights	0.6%	70.7%
Stadium-Armory	0.0%	69.7%
Georgia Avenue-Petworth	0.3%	69.5%
Eisenhower Avenue	0.5%	69.4%
King Street	0.5%	68.4%
Ballston-MU	1.0%	67.5%
Ronald Reagan Washington National Airport	0.6%	66.6%
Grand Total	0.7%	62.2%
White Flint	1.8%	61.2%
Tenleytown-AU	0.7%	60.9%

Union Station	0.8%	60.0%
Silver Spring	0.5%	59.9%
Potomac Avenue	0.3%	59.6%
Braddock Road	3.2%	58.0%
Benning Road	0.0%	55.3%
Takoma	1.9%	55.3%
Pentagon City	0.6%	55.2%
Brookland-CUA	0.7%	53.1%
Twinbrook	2.3%	50.4%
Deanwood	0.0%	48.2%
Congress Heights	0.9%	43.1%
Forest Glen	2.2%	42.1%
Prince George's Plaza	2.3%	42.1%
West Hyattsville	1.5%	41.6%
Minnesota Avenue	0.0%	39.4%
East Falls Church	3.6%	39.3%
Rhode Island Ave-Brentwood	0.0%	38.2%
Pentagon	0.2%	37.5%
Suitland	0.0%	37.5%
Rockville	0.9%	35.4%
Grosvenor-Strathmore	0.8%	35.1%
Wheaton	0.9%	33.9%
Capitol Heights	0.0%	32.9%
Dunn Loring-Merrifield	2.6%	31.1%
Fort Totten	0.0%	29.3%
Morgan Boulevard	0.0%	24.9%
Huntington	0.2%	23.1%
Anacostia	0.0%	19.6%
College Park-U of MD	2.0%	19.0%
Cheverly	1.6%	18.2%
Naylor Road	0.5%	18.2%
Van Dorn Street	0.3%	14.4%
Glenmont	0.4%	12.9%
Southern Avenue	0.0%	12.9%
Vienna/Fairfax-GMU	0.8%	11.4%
Largo Town Center	0.0%	10.8%
Addison Road-Seat Pleasant	0.0%	9.7%
New Carrollton	0.2%	8.2%
Greenbelt	2.0%	7.7%
Branch Ave	0.3%	7.6%
West Falls Church-VT/UVA	0.7%	6.9%
Shady Grove	0.4%	6.2%
Landover	0.0%	5.8%
Franconia-Springfield	1.2%	5.7%

Appendix F

Links and Resources

ADC Regional Bicycle Map
www.adcmap.com

Alexandria Rideshare
www.alexride.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.

Coalition for Smarter Growth
www.smartergrowth.net

An advocacy group for transit-oriented development in the Washington region.

College Park Area Bicycle Coalition
www.cpabc.org

Advocacy group for bicycling in the College Park, MD area.

Fairfax Advocates for Better Bicycling
<http://www.fabb-bikes.org/>

Advocacy Group for bicycling in Fairfax County, VA.

League of American Bicyclists
1612 K Street NW, Suite 800
Washington, D.C. 20006
(202) 822-1333
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 ridematching and Guaranteed Ride Home services through its Commuter Connections program, publishes a Bike to Work Guide.

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.

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.

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

2599 Ontario Rd. NW

Washington, DC 20009 (202) 518-0524

www.waba.org

Advocacy group for cycling in the Washington region. Runs a pedestrian and bicycle safety education program.

Appendix G

Glossary of Terms

BIKE-ON-RAIL PERMIT	Permit issued by the Washington Metropolitan Area Transit Authority permitting transportation of bicycles on Metrorail trains during night and weekend service periods. (no longer required)
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 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.

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	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.
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 preferred 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.

WASHINGTON AREA
BICYCLIST ASSOCIATION

A regional membership organization devoted to improving bicycling opportunities and promoting bicycle usage in the metropolitan Washington area.

Appendix H

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
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
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 I

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