NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD

Date: December 17, 2014
Time: 12 noon
Place: COG Board Room

Meeting Schedule
for Calendar Year 2015

AGENDA
(BEGINS PROMPTLY AT NOON)

12 noon 1. **Public Comment on TPB Procedures and Activities**
..... Chairman Wojahn

Interested members of the public will be given the opportunity to make brief comments on transportation issues under consideration by the TPB. Each speaker will be allowed up to three minutes to present his or her views. Board members will have an opportunity to ask questions of the speakers, and to engage in limited discussion. Speakers are asked to bring written copies of their remarks (65 copies) for distribution at the meeting.

12:20 pm 2. **Approval of Minutes of November 19 meeting**
..... Chairman Wojahn

12:25 pm 3. **Report of Technical Committee**
..... Ms. Erickson
Chair, Technical Committee

12:30 pm 4. **Report of the Citizens Advisory Committee**
..... Ms. Loh
Chair, Citizens Advisory Committee

12:40 pm 5. **Report of Steering Committee**
.....Mr. Srikanth
Director, Department of
Transportation Planning (DTP)

12:45 pm 6. **Chair's Remarks**
..... Chairman Wojahn

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ACTION ITEMS

12:50 pm 7. **Report of Nominating Committee for Year 2015 TPB Officers**

..... Mr. Turner

Chairman Wojahn has appointed a Nominating Committee for year 2015 TPB officers, which includes Mr. Zimbabwe, Mr. Turner, and Mr. York. The TPB Bylaws provide for TPB officers to serve for one calendar year, from January 1 through December 31. The Nominating Committee will present its proposed slate of TPB officers for 2015.

Action: Approve slate of TPB officers for the year 2015.

12:55 pm 8. **Approval of a Resolution to Affirm Support for the 2008 COG Greenhouse Emissions Reduction Goals and for the Establishment of a COG Multi-sector Working Group to Examine Greenhouse Gas Reductions**

.....Mr. Srikanth

At the November 19 meeting, the TPB was briefed on a proposed TPB resolution to affirm the 2008 COG greenhouse gas reduction goals as requested by MWAQC and CEEPC. The TPB was also briefed on COG actions to convene a multi-disciplinary professional working group to develop a multi-sector action plan to reduce greenhouse gas emissions and criteria pollutants. The Board will be briefed on TPB the resolution and on the establishment of the COG working group.

Action: Adopt Resolution R10-2015 to affirm support for the 2008 COG Greenhouse Emissions Reduction Goals and for the establishment of a COG multi-sector working group to examine greenhouse gas reductions.

1:20 pm 9. **Approval of an Amendment to the FY 2015 Unified Planning Work Program (UPWP) to Revise the Budget and Work Elements**

..... Mr. Miller, DTP

Since the FY 2015 UPWP was approved in March, the funding allocations provided by DDOT, MDOT, VDOT and VDRPT have been revised to reflect changes in new FY 2015 funding and adjustments in the unobligated FY 2013 funding. The Board will be briefed on an amendment to revise the budget and work elements to reflect the funding changes.

Action: Adopt Resolution R11-2015 to amend the FY 2015 UPWP to revise the budget and work elements.

INFORMATION ITEMS

1:25 pm 10. **Briefing on the Draft Update of the Bicycle and Pedestrian Plan for the National Capital Region**

..... Mr. Sebastian, DDOT
Chair of the Bicycle and Pedestrian Subcommittee

The draft 2014 *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 plan. The Board will be briefed on the draft plan today and asked to approve the 2014 plan at its January 21 meeting.

1:35 pm 11. **Briefing on the Reconstitution of the Regional Public Transportation Subcommittee**

..... Mr. Randall, DTP

At its September meeting, the TPB approved reconstituting the Regional Bus Subcommittee as the Regional Public Transportation Subcommittee. In November and December, the TPB Technical Committee was briefed on the the proposed goals, mission statement, activities, membership and governance of the new subcommittee and recommended that this information be presented to the TPB. The Board will be briefed on the newly reconstituted subcommittee.

1:45 pm 12. **Update on the TPB Community Leadership Institute**

.....Mr. Swanson, DTP

In November the 13th session of the TPB Community Leadership Institute was held, a three-day workshop that encourages community activists to "think regionally and act locally'' when they get involved in transportation decision making. The TPB will be briefed on the origin and purpose of the CLI, and the role it plays in the TPB's public involvement program.

1:55 pm 13. **Other Business**

2:00 pm 14. **Adjourn**

Lunch will be available for Board members and alternates at 11:30 am

Alternative formats of this agenda and all other meeting materials are available upon request. Email: accommodations@mwcog.org. Phone: 202-962-3300 or 202-962-3213 (TDD). Please allow seven working days for preparation of the material. Electronic versions are available at www.mwcog.org.

National Capital Region Transportation Planning Board

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MEMORANDUM

December 11, 2014

TO: Transportation Planning Board

FROM: Kanti Srikanth
Director, Department of
Transportation Planning

RE: Meeting Schedule for Calendar Year 2015

Scheduled dates for key meetings for calendar year 2015 are as follows:

Month	Technical Committee (9 am to noon) COG Training Center	Steering Committee (noon to 2 pm) Room #1	TPB (noon to 2 pm) COG Board Room
January	9 (COG BOARD ROOM)	9	21
February	6	6	18
March	6	6	18
April	3	3	15
May	1	1	20
June	5	5	17
July	10	10	22
August	-	-	-
September	4	4	16
October	2	2	21
November	6	6	18
December	4	4	16

Item #2

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, NE
Washington, D.C. 20002-4226
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MINUTES OF THE TRANSPORTATION PLANNING BOARD November 19, 2014

Members and Alternates Present

Robert Brown, Loudoun County
Rick Canizales, Prince William County
Marc Elrich, Montgomery County
Dennis Enslinger, City of Gaithersburg
Gary Erenrich, Montgomery County Executive
Lyn Erickson, MDOT
Jay Fisette, Arlington County
Tawanna Gaines, Maryland House of Delegates
Seth Grimes, City of Takoma Park
Jason Groth, Charles County
Rene'e Hamilton, VDOT
Cathy Hudgins, Fairfax County
Sandra Jackson, FHWA
Shyam Kannan, WMATA
Tim Lovain, City of Alexandria
Ellen McCarthy, DC Office of Planning
Phil Mendelson, DC Council
Mark Rawlings, DC DOT
Kelly Russell, City of Frederick
Peter B. Schwartz, Fauquier County
Paul Smith, Frederick County
David Snyder, City of Falls Church
Jonathan Way, City of Manassas
Patrick Wojahn, City of College Park
Sam Zimbabwe, DDOT

MWCOG Staff and Others Present

Robert Griffiths	
John Swanson	
Ron Milone	
Andrew Meese	
Eric Randall	
Mark Moran	
Michael Farrell	
Dusan Vuksan	
Daivamani Sivasailam	
Wenjing Pu	
Andrew Austin	
Wendy Klancher	
Lynn Winchell-Mendy	
Dan Sonenklar	
Ben Hampton	
Bryan Hayes	
Sergio Ritacco	
Lamont B. Cobb	
Erin Morrow	
Debbie Leigh	
Deborah Etheridge	
Marco Trigueros	
Steve Walz	COG/DEP
Jeff King	COG/DEP
Paul DesJardin	COG/DCPS
Matt Kronenberger	COG/OPA
Nancy H. Smith	Northern Virginia Transportation Alliance
Rachel Farbman	AMPO
Jim Dinegar	Board of Trade
Pierre Holloman	Alexandria
Malcolm Watson	Fairfax County DOT
Shweta Dixit	Loudoun County - DOT
Patrick Durany	Supervisor Jenkins' Office
Betsy Massie	PRTC
Stewart Schwartz	CSG
Jim Ponticello	VDOT
Norman Whitaker	VDOT
Maria Sinner	VDOT
Bill Orleans	Resident

1. Public Comment on TPB Procedures and Activities

Carroll George requested the Board consider his idea to eliminate stopping in the incoming acceleration lane on expressways. Drivers in these lanes are under pressure and at risk from the behavior of drivers in through lanes. Mr. George proposed correcting this stopping safety hazard by first, placing large chevron pavement markers in all lanes in the merging area and specifying the legal follow distance with signage and second, extending the lane line between merging lanes from the taper parallel to the outer lane line.

Jim Dinegar asked the Board to consider not having public comment as the first agenda item to ensure that all TPB members have a chance to be seated. Mr. Dinegar expressed the Board of Trade's support for rail run-through between VRE and MARC trains at Union Station to make better use of existing infrastructure. Mr. Dinegar also reiterated support for the Maryland Purple Line as a light rail system to support economic development. He also called to expand Metrorail capacity to all eight-car trains and long-term funding dedicated funding for WMATA.

Stewart Schwartz endorsed the remarks of the Board of Trade and expressed disappointment about the Arlington County Streetcar decision. Mr. Schwartz emphasized that the region needs to rethink growth and do the hard work of making transit corridors succeed. He noted that the existing draft resolution on greenhouse gas emissions does not commit to an emissions reduction target of 80 percent from the transportation and land use sectors and does not include a deadline for reductions. He recommended the region create a new, integrated transit and land use plan for implementation. He also stated that an unconstrained projects list does not offer the fundamental changes the region needs.

Stu Whitaker commended Jay Fisette for cancelling the Columbia Pike and Crystal City streetcar projects in Arlington County. He said he appreciated Mr. Fisette for continuing to work with him and others who disagreed with the projects.

2. Approval of Minutes of October 15 Meeting

A motion was made to approve the minutes of the October 15 meeting. The motion was seconded and was approved unanimously.

3. Report of the Technical Committee

Referring to the mailout item, Lyn Erickson reported that the Committee met on November 7. Their agenda included:

- TPB agenda items, including:
    - the draft update to the Coordinated Human Services Transportation Plan;
    - the draft call for projects and air quality conformity schedule for the 2015 CLRP and FY 2016-2021TIP;
    - a report on the Regional Transportation Priorities Plan Information

Sessions;
    - MWAQC and CEEPC requests regarding the resolution to create a working group on greenhouse gas emissions reductions;
    - an update on the development of a list of unfunded transportation projects in the region;
    - an update to the National Capital Bicycle and Pedestrian Plan; and
    - briefing on the recent federal certification review.

- Informational items, including:
    - the proposed reconstitution of the public transportation subcommittee;
    - development of a GIS-based mapping application for CLRP projects;
    - the kick-off meeting for the vehicle probe users group; and
    - a status update on the development of MAP-21 performance measures.

The committee supports the staff recommendation for approval of the Coordinated Human Services Plan.

4. Report of the Citizen Advisory Committee

Referring to the handout report, Ms. Loh commented that the CAC would like to see public participation integrated into the working group on greenhouse gas emissions, with members of the existing CAC or COG's other citizen committees. She said the CAC would continue to engage the Board on the development of a list of unfunded projects in the region, with recommendations for a public participation component after the list is completed.

Chairman Wojahn commented that he plans to support the CAC's requests in establishing a working group to develop a list of recommendations for principles behind the reauthorization of MAP-21 with the support of the Board. He recommended the group use previously developed Board recommendations for SAFETEA-LU reauthorization as a starting point. He invited Board members to volunteer to join the working group, as well as members of the CAC. He suggested organizing the group before the end of the year.

Ms. Loh said the CAC has provided names of interested members for this working group, but their participation is contingent on the composition of the incoming 2015 CAC.

5. Report of Steering Committee

Mr. Srikanth reported that the committee met on November 7. The committee approved an amendment to the FY 2015–2020 TIP regarding projects and funding for the Federal Highway Administration's Eastern Lands Division. He reported the amendment would not affect the air quality conformity or financial analyses of the 2014 CLRP.

Mr. Erenrich suggested for the future, the TPB might request that FHWA's Eastern Federal

Lands Division submit their TIP changes in sequence with the TPB's TIP development process.

Mr. Srikanth said the Board could make this request. He also commented that the three states have their own TIP schedules that vary based on individual state funding cycles. In addition, the Board occasionally changes its schedule regarding the TIP.

Mr. Srikanth reviewed five letters received by the committee

- a letter from the Commonwealth of Virginia transportation secretary documenting the Commonwealth's approval of the expansion of the TPB's planning area to include an eastern portion of Fauquier County
- a letter with responses from VDOT and WMATA regarding comments from the Access for All committee on some projects in the 2014 CLRP
- letters from WMATA, PRTC, and the City of Alexandria providing information on the status and completion plans for TIGER grant-funded projects.
    - Mr. Srikanth noted that all projects are anticipated to be completed by end of June 2016 and that staff has compiled the project reports and provided it to the FTA as requested
- a letter from WMATA with suggestions on enhancing the TPB's travel demand model.
- a letter from WMATA requesting the Board take action at the regional level to lead a discussion on finding new funds for the unfunded regional transportation needs; projects that are deemed regionally significant but are not funded and as such not included in the CLRP.

Mr. Wojahn requested that staff provide a response to the WMATA letter regarding the TPB's travel demand model.

Mr. Wojahn noted that the region has made significant strides in funding transportation projects and that the 2014 CLRP had for the first time demonstrated full funding for maintaining the highway and transit system in a state of good repair. He noted that the region still has some unfunded transportation projects including those within the WMATA system. He said that he was happy to note that three jurisdictions have continued to identify additional funding especially when federal funding for transportation has been going down. Mr. Wojahn also noted that today state and local funds make up 60 percent of total transportation revenues in the region. He noted that in that context the region should be exploring new and innovative methods of financing to generate new regional funding for a small set of unfunded regional transportation projects the Board could collectively agree to support. Mr. Wojahn suggested that this discussion/exploration should be conducted in a deliberative, consultative and collaborative manner in which a small set of truly regional, multi-modal projects are identified that we can all support. Mr. Wojahn noted that under agenda item 13 today the Board will discuss compiling a list of unfunded projects in this region. Once we have this list together, the Board can then work to review this and work to identify a small set of multi-modal projects that are in need of

funding. TPB then could work with COG as it is just concluding its yearlong examination of infrastructure needs in this region and collectively examine some innovative ways of financing these needs.

Ms. Hudgins noted that such a deliberative and comprehensive approach would be very useful and recalled that the previous such effort in this region was successful in that it led to the WMATA's Metro Matters agreement. She remarked that the Board must have a voice and that the region must come together to find a funding stream with some continuity of time. She also stated this this should include a broad coalition, including the business community and other community leaders.

Mr. Wojahn agreed with Ms. Hudgins comments and noted the business community's stake in the region's transportation process and the participation of the Board of Trade.

Mr. Lovain also expressed support for including the business community. He also commented that the list of unfunded projects would allow for a tough assessment of regionally significant projects. He highlighted two important goals: a funding stream for Metro and transit connections to Metro through BRT or light rail. He stated that many transit systems across the country have a dedicated revenue stream, often via a regional sales tax.

Mr. Kannan thanked the chair and TPB staff for considering WMATA's call to action on finding new revenue streams. He remarked that he looks forward to seeing a thoughtful and reasonable approach that integrates a variety of other efforts. He referred back to the TPB's vision statement regarding enhanced funding and reminded the Board that this applied to funding a range of transportation projects and not just transit projects.

Mr. Way said that evaluating unfunded projects is essential. He noted that the current CLRP does not improve congestion, but rather lessens its growth. He said the list would not just be a long list of projects, but could be used to cull down a list of major projects that have regional significance. He also noted the list would be useful to the NVTA as they decide how to concentrate their efforts.

Mr. Snyder remarked that the Board should not repeat past efforts, where suggestions for dedicated funding did not get far due to political realities. He mentioned looking at better use of existing resources and funds, such as IT improvements to the transportation infrastructure or integration or the region's local and WMATA bus services. He reminded the Board to be realistic in exploring how best to spend the funds considering the unpopularity of proposals for new taxes and simply.

Ms. Loh spoke about the importance of meaningful public participation in the planning process. She said there is a gap between needs in the region's transportation network and the public's trust in decision-making bodies to meet those needs.

6. Chair's Remarks

Mr. Wojahn reserved further comment for later agenda items.

ACTION ITEMS

7. Appointment of Nominating Committee for Year 2015 TPB Officers

Chair Wojahn said that he would appoint a nominating committee that would be tasked with identifying the board members that will lead the TPB in 2015 as chairperson, first vice chairperson, and second vice chairperson. He said that the committee would consist of the most recent chair from the three states.

Approval of the Update of the Coordinated Human Service Transportation Plan for the Section 5310 Enhanced Mobility for Seniors and Individuals with Disabilities Program
Mr. Lovain, chair of the Human Services Transportation Committee, introduced the Coordinated Human Services Transportation Plan update.

Referring to her presentation and the handout presentation, Ms. Klancher described the purpose of the Coordinated Human Services Transportation Plan, which is to remove barriers and improve mobility for older adults and people with disabilities. She described how the plan would be used to guide the selection criteria of the federally required Enhanced Mobility program. She said that Washington area jurisdictions and eligible recipients submitted applications for Enhanced Mobility funding in October, and that the selection panel is expected to award funding in January.

Mr. Way asked why the title of the agenda item referred specifically to seniors and individuals with disabilities when those groups were only eligible for 18 percent of funding.

Ms. Klancher said that the title reflects the federal definition for the program.

Chair Wojahn commended TPB staff, Mr. Lovain, and the Human Services Transportation Coordination Task Force for their work on the plan and Enhanced Mobility program.

Mr. Lovain made a motion to adopt Resolution R9-2015 to approve the entire update to the Coordinated Plan. The motion was seconded and approved.

8. Approval of Final Call for Projects and Schedule for Air Quality Conformity Assessment for the 2015 CLRP and FY 2015-2020 TIP

Mr. Austin briefed the Board on the 2015 CLRP Call for Projects policy document as well as a new summary brochure meant to more explicitly highlight the regional goals, priorities, and needs the TPB is encouraging area transportation agencies to consider when developing new projects to include in the CLRP, or when making changes to projects already in the plan.

Mr. Austin highlighted two key changes made to the Call for Projects summary brochure in response to Board member comments at the October TPB meeting. One was the inclusion of the full schedule for the annual update as an insert to the brochure, and the second was to clearly note public involvement opportunities in the CLRP development process, both at the local and state levels and at the regional level. He also pointed out some changes made in the way regional goals, priorities, and needs were presented in the brochure, including an additional note about tougher new federal air quality standards expected in the next couple of years and the further emissions reductions those changes might require.

One final item Mr. Austin noted was a change to the Project Description Form that agencies will use when submitting projects for inclusion in this year's CLRP update. He told Board members that new questions were added to the form that ask agencies to note how the projects they are submitting help support or advance the regional needs outlined in the Call for Projects as well as other regional goals.

Chair Wojahn opened the floor to comments and questions.

Mr. Kannan commended staff on their work to distill the larger Call for Projects policy document into a clearer, more accessible document for the public and others wishing to better understand the CLRP development process. He also noted that the new brochure and the top regional needs it identifies are a great example of how the TPB is using the Regional Transportation Priorities Plan, approved by the Board in January, and other regional policy documents and studies to inform the CLRP development process.

Chair Wojahn entertained a motion to approve the Call for Projects and analysis schedule. The motion to approve the final Call for Projects document for the 2015 CLRP and FY 2015-2020 TIP for distribution for state, regional and local agencies was seconded and approved.

INFORMATION ITEMS

9. Update on the Washington Region Transportation Planning Process Certification Review

Ms. Jackson from the Federal Highway Administration summarized the federal requirements and process for review and certification of the regional transportation planning process. She thanked TPB staff, regional partners, and FAMPO for their cooperation, ensuring a smooth review process. She said that representatives from FHWA and FTA reviewed the TPB's planning documents, including the UPWP, CLRP, and TIP, and met with members of the public at the Citizens Advisory Committee and Access For All Committee as part of the process. She said that the federal team was impressed with the long-range plan and assessment, congestion management, and the air quality assessment. She said that while public involvement was very good, she said that the TPB needs to work on a regular evaluation of its outreach. Other areas for improvement include the TIP, financial analysis, and the environmental justice analysis. She said

that the final certification review report should be completed in early 2015.

Chair Wojahn commended staff for their work to ensure a successful review. He also asked if staff was going to respond, point by point, to the federal recommendations.

Mr. Srikanth said staff would respond to the recommendations in the review and incorporate them into the UPWP.

Mr. Smith said that since the region is so large and diverse, he did not believe it is possible for the TPB to duplicate the amount of public involvement that happens on a local level.

Mr. Srikanth said that following the 2010 certification review, TPB staff has worked on creative ways to expand access to the public and get the TPB message out. He said that perhaps one way to expand the reach of involvement efforts is to partner with local jurisdictions during their initial outreach on projects.

Ms. Jackson said that the TPB's outreach was good. She said that evaluation was the area that needed improvement.

Ms. Loh stated that effective public participation requires communication in two directions. Not only does effective participation include informing the public, but it also requires that the TPB listen to the public's critiques and questions and respond, letting the public know how their input has shaped the process.

A question was asked if other jurisdictions had model engagement efforts that the TPB could refer to as staff plans for future engagement.

Ms. Jackson said that she could pass along some suggestions.

10. Briefing on the Highlights of Listening Sessions with Staffs of TPB Jurisdictions on How the Region is Achieving the Goals in the Regional Transportation Priorities Plan (RTPP)

Referring to the mailout material and the handout presentation, Mr. Swanson presented a report on a series of ten listening sessions that were conducted between June and October with more than 90 local staffers who work on a range of transportation and land-use planning activities. He said that TPB staff designed the listening sessions to gather information on whether and how the professionals who work in local planning believe we are achieving regional transportation goals. The sessions were also intended to expand awareness among the TPB's member jurisdictions of both the Regional Transportation Priorities Plan and COG's *Place + Opportunity* report, which promotes enhancement of the region's 141 Activity Centers.

Mr. Swanson described themes that emerged from the discussions in the ten listening sessions. He said that the sessions mostly focused on the first three goals of the Priorities Plan. He

concluded by describing follow up activities that were suggested in the listening sessions.

In the interest of time, Chair Wojahn asked that TPB members contact staff after the meeting with their questions and comments regarding this item.

11. Briefing on the Request from the Metropolitan Washington Air Quality Committee (MWAQC) and the Climate, Energy, and Environment Policy Committee (CEEPC) to Affirm the 2008 COG Greenhouse Emissions Reduction Goals

Chair Wojahn said that in November the TPB received a letter from the Metropolitan Washington Air Quality Committee (MWAQC) and the Climate, Energy and Environment Policy Committee (CEEPC) requesting that the TPB participate in a multi-sector working group and that the TPB affirm the region's adopted goals for reducing greenhouse gases. He said that Mr. Freudberg, Deputy Director of COG, would make a presentation on the working group and that Mr. Srikanth would present a draft resolution.

Mr. Freudberg said that COG is open to feedback as it proceeds with establishing this multi-sector technical working group. He said that the purpose of this group is to identify multi-sector strategies for greenhouse gas reduction that can be implemented at local, regional, state, and national levels. The working group would evaluate strategies to quantify greenhouse gas reductions and the anticipated cost of those strategies. He said the group would also evaluate the viability from an implementation timeframe. The group would also explore establishing realistic and attainable greenhouse gas reduction targets for transportation and all other sectors. The product of this working group would be a report, possibly called, "What We Can Do," that analyzes implementation timetables and viable options for reducing greenhouse gas emissions. The process will incorporate public input.

Mr. Freudberg said that the TPB, COG, MWAQC, and CEEPC would provide oversight for the working group. Staff assistance would be provided by COG's departments of transportation, community planning, and environment. Jurisdictions and agencies would suggest staff to participate, and Mr. Bean, Executive Director of COG, would appoint 25 to 35 people to sit on the working group.

Mr. Freudberg said that this group will begin meeting in January and anticipates releasing a finalized report by the end of 2015.

Chair Wojahn asked if it would be possible for there to be citizen representation on the working group.

Mr. Freudberg said that the working group is intended to be technical and staffed by professionals. He said that he anticipates regular check-ins with citizen groups. He added that he would like to find a way to make sure that public input is effective in shaping the process.

Mr. Brown asked for clarification on the difference between "goals" and "targets." He also asked

about the financial implications of this working group.

Mr. Freudberg said that Region Forward sets broad goals and targets. The broad goal, he said, is a significant decrease in greenhouse gas emissions with substantial reductions from the built environment and transportation sectors. He said that the targets are to reduce greenhouse gas emissions by 20 percent below 2005 levels by 2020, and to reduce greenhouse gas emissions by 80 percent below 2005 levels by 2050.

Mr. Srikanth said that the cost of operating the working group would be shared between MWAQC, CEEPC, and the TPB. He said that the exact cost is not known, but suspects the transportation sector's contribution could be approximately $100,000. He added that staff is working to identify this money to be set aside in the work program as part of the regional planning studies activity.

Ms. Loh said that the most meaningful way to engage the public, in this instance, is at the beginning of the process, as the group is identifying strategies and not at the end during a public comment period. She encouraged the working group to engage the public continuously and not reactively at the end of the process.

Mr. Canizales asked if jurisdiction staff would sit on the working group. Mr. Freudberg said yes.

Mr. Fisette asked who would appoint members of the working group. He also asked how many people would sit on the committee.

Mr. Freudberg said that the COG executive director would appoint people to the working group that were recommended by jurisdiction staff. He said that the group is expected to consist of around 30 people.

Mr. Fisette also encouraged the group to be specific about how they define "viable."

Mr. Srikanth said that viable recommendations would be those that are within reach, those that can be reasonably expected to be adopted by local jurisdictions and put into action.

Mr. Erenrich asked if the working group will seek outside assistance from consultants. Mr. Srikanth responded that the working group is expected to have consultants' assistance.

Chari Wojahn asked Mr. Srikanth to present the draft resolution that the TPB will be voting on in December.

Mr. Srikanth referred the TPB to the draft handout of the proposed resolution. He summarized the resolution: describing the context and history of COG's work on greenhouse gas reductions; acknowledging the TPB's earlier work on the matter specifically its "What Would It Take" study; noting that many emissions reductions actions have been taken at federal, state and local levels to help reduce criteria pollutants which also help reduce greenhouse gases; that the TPB

recognizes that tougher air quality standards are anticipated and the continued challenge faced by the region regarding greenhouse gases; and recognizing that the COG will be convening a working of professionals from all different sectors to identify cost-effective and coordinated actions to reduce greenhouse gas emissions. Referring to the resolved clauses he outlined the two specific elements the Board was resolving: first, that the TPB affirms COG's regional multi-sector goals for greenhouse gas reductions in this region, and second that the TPB commits staff and resources to supporting the proposed multi-sector working group.

Mr. Snyder asked if the resolve clause of the resolution does what MWAQC and CEEPC asked for in their letter to the TPB.

Mr. Freudberg said that the CEEPC chair, Mr. Berliner, expressed a desire for the resolve clause to explicitly address CEEPC's and MWAQC's concerns.

Mr. Snyder asked if the resolve clause could explicitly reference the 2008 goals.

Mr. Srikanth said that it was possible to update the resolve to endorse the 2008 goals.

Mr. Zimbabwe asked about the timeline for providing comment on the draft resolution and suggested that the revisions be reviewed with the Technical Committee.

Mr. Srikanth suggested that board comment be submitted within the next week to be able to have the revisions ready for the technical Committee's review.

12. Briefing on the Development of a List of Unfunded Transportation Projects

Referring to the mailout material, Mr. Griffiths said that staff is proposing to use the members of the TPB Technical Committee to develop a list of unfunded transportation projects that are in the locally approved plans but currently not in the CLRP but would be eligible to be in the CLRP if funding were available. He said that once that list has been assembled, staff would bring it back to the TPB for review and further direction.

Mr. Wojahn noted the discussion the Board had regarding identifying a small set of regionally significant project and to explore finding new funding mechanisms for those projects. He stated that the list of unfunded projects could provide an opportunity for the Board to identify these projects, and thanked Mr. Way and the CAC in promoting the idea.

Mr. Canizales said that it is important to look at the reality that funding for new projects is becoming increasingly difficult to secure.

Chair Wojahn agreed. He said that he hoped this effort would help regional decision makers better understand the scope and scale of the challenge so that decision makers can take on this challenge and help their constituents understand it and begin to solve it.

Note: Further discussion about the List of Unfunded Projects occurred during the Steering Committee Report (Item 5) at this meeting.

13. Briefing on the Draft Update of the Bicycle and Pedestrian Plan for the National Capital Region

This item was postponed until the December 17 TPB meeting.

14. Other Business

No other business was brought before the board.

15. Adjourn

The meeting adjourned at 2:15pm.

Item 3

TPB Technical Committee Meeting Highlights

December 5, 2014

The Technical Committee met on December 5 at the Ronald F. Kirby Training Center at COG. Four items were reviewed for inclusion on the TPB agenda for December 17.

- TPB agenda Item 8

  At the November 19 meeting, the TPB was briefed on a proposed draft TPB resolution to affirm the 2008 COG greenhouse gas reduction goals as requested by MWAQC and CEEPC. The TPB was also briefed on COG actions to convene a multi-disciplinary professional working group to develop a multi-sector action plan to reduce greenhouse gas emissions and criteria pollutants. The Committee was briefed on the proposed draft resolution and on the proposed COG actions to establish this working group. The TPB will be asked to approve this draft resolution and the support of the COG working group at its meeting on December 17.

- TPB agenda Item 9

  Since the FY 2015 UPWP was approved in March, the funding allocations provided by DDOT, MDOT and VDOT have been revised to reflect changes in new FY 2015 funding and adjustments in the unobligated FY 2013 funding. The Committee was briefed on an amendment to revise the budget and work elements to reflect the funding changes. The TPB will be asked to approve this amendment at its meeting on December 17.

- TPB agenda Item 10

  The Committee was updated on the draft 2014 Bicycle and Pedestrian Plan for the National Capital Region. The TPB will be briefed on the draft plan at its December 17 meeting and asked to approve the plan at its January 21 meeting.

- TPB agenda Item 11

  At its September meeting, the TPB approved reconstituting the Regional Bus Subcommittee as the Regional Public Transportation Subcommittee. In November the Committee was briefed on the proposed goals, mission, and membership of the reconstituted subcommittee. The Committee was updated on additional details for the new subcommittee, and recommended that the approved goals, mission statement, activities, membership and governance of new subcommittee be presented to the TPB at its December 17 meeting.

Three items were presented for information and discussion:

- At its November meeting, the TPB was briefed on a proposed process to develop of a list of transportation projects which could not be included in the

CLRP because funding has not been identified. TPB staff will request each member jurisdiction and agency to provide its list of recognized priority transportation projects with cost estimates for inclusion in a regional list. The Committee was briefed on the schedule and project details required for the lists.

- The Transportation Emission Reduction Measures (TERMs) that are provided by the Commuter Connections program are evaluated on a three year cycle and the resulting congestion and emission impacts are used to make adjustments to the measures and to document benefits for both regional air quality and congestion management. The Committee was briefed on the results as well as trend data from the most recent FY 2014 evaluation cycle.

- The Committee was updated on the latest developments regarding US DOT regulations on performance measures under MAP-21, including the bridge and pavement condition provisions and the new schedule for the publication of the remaining performance measure rules and the final metropolitan planning regulations.

TPB TECHNICAL COMMITTEE MEMBERS AND ALTERNATES
ATTENDANCE – December 5, 2014

DISTRICT OF COLUMBIA

DDOT	Mark Rawlings
DCOP	Dan Emerine

MARYLAND

Charles County	-------
Frederick County	Ron Burns
City of Frederick	Timothy Davis
Gaithersburg	-------
Montgomery County	John Thomas
Prince George's County	-------
Rockville	-------
M-NCPPC	
Montgomery County	-------
Prince George's County	Faramarz Mokhtari
MDOT	Lyn Erickson
	Matt Baker
Takoma Park	-------

VIRGINIA

Alexandria	Pierre Holloman
Arlington County	Dan Malouff
City of Fairfax	-------
Fairfax County	Malcolm Watson

Falls Church	-------
Fauquier County	-------
Loudoun County	Robert Brown
Manassas	-------
NVTA	-------
NVTC	Claire Gron
Prince William County	James Davenport
PRTC	-------
VRE	Christine Hoeffner
VDOT	Norman Whitaker
	Dan Painter
	Jim Ponticello
VDRPT	Tim Roseboom
NVPDC	-------
VDOA	-------

WMATA Jonathan Parker

FEDERAL/REGIONAL

FHWA-DC	-------
FHWA-VA	-------
FTA	-------
NCPC	-------
NPS	-------
MWAQC	-------
MWAA	-------

COG STAFF

Kanti, Srikanth, DTP
Elena Constantine, DTP
Robert Griffiths, DTP
Gerald Miller, DTP
Ron Milone, DTP
Nicholas Ramfos, DTP
Andrew Austin, DTP
Jen Desimone, DEP
Paul DesJardin, DCPS
Michael Farrell, DTP
Charlene Howard, DTP
Jeff King, DEP
Sunil Kumar, DEP
Jessica Mirr, DTP
Jane Posey, DTP
Eric Randall, DTP
Rich Roisman, DTP
Daivamani Sivasailam, DTP
Dan Sonenklar, DTP
John Swanson, DTP
Steve Walz, DEP
Lynn Winchell Mendy

OTHER

Bill Orleans
Bill Sadler, Safe Routes to School National Partnership
Nancy Smith, Northern Virginia Transportation Alliance

Item #5

MEMORANDUM

December 11, 2014

To: Transportation Planning Board

From: Kanathur Srikanth
Director, Department of Transportation Planning

Re: Steering Committee Actions

At its meeting on December 5, 2014, the TPB Steering Committee approved the following resolution:

- SR8-2015: Resolution to update the 2008 procedures for processing revisions to the Transportation Improvement Program (TIP) and the Constrained Long-Range Transportation Plan (CLRP) to incorporate the 2014 procedures of the Maryland Department of Transportation

The TPB Bylaws provide that the Steering Committee "shall have the full authority to approve non-regionally significant items, and in such cases it shall advise the TPB of its action."

TPB SR8-2015
December 5, 2014

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION TO UPDATE THE 2008 PROCEDURES FOR PROCESSING REVISIONS TO THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP) AND THE CONSTRAINED LONG RANGE TRANSPORTATION PLAN (CLRP) TO INCORPORATE THE 2014 PROCEDURES OF THE MARYLAND DEPARTMENT OF TRANSPORTATION

WHEREAS, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of Moving Ahead for Progress in the 21st Century (MAP-21) for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

WHEREAS, the Federal Planning Regulations implementing the Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) of 2005 SAFETEA-LU, which were by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA), required that TPB procedures for an administrative modification or an amendment to the CLRP and TIP between scheduled periodic updates be documented and be consistent with the District Department of Transportation (DDOT), Maryland Department of Transportation (MDOT) and Virginia Department of Transportation (VDOT) procedures; and

WHEREAS, in January 16, 2008, the TPB approved its procedures for an administrative modification or an amendment to the CLRP and TIP that were developed in consultation with staff at DDOT, MDOT and VDOT and were consistent with their procedures; and

WHEREAS, in October 2014, MDOT in a MOU with the FHWA and FTA revised the funding amount criteria and other aspects of a project for what qualifies as an Administrative Modification in the STIP and TIP; and

WHEREAS, the revised MDOT qualifications for an Administrative Modification are specified in Section 1.2 of the enclosed MOU entitled: Procedures for Maryland Department of Transportation (MDOT) Statewide Transportation Improvement Program (STIP) Modifications, which was effective October 29, 2014; and

WHEREAS, the 2008 TPB Procedures for Revisions to the Constrained Long Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP) need to be updated to incorporate the October 2014 MDOT project information that qualifies as an Administrative Modification in the STIP and TIP;

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board approves the enclosed 2014 Procedures for Revisions to the Constrained Long Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP) which incorporate the MDOT October 2014 revisions regarding Administrative Modifications.

Adopted by the Transportation Planning Board Steering Committee at its regular meeting on December 5, 2014.

PROCEDURES FOR REVISIONS TO THE CONSTRAINED LONG RANGE PLAN (CLRP) AND TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FOR THE NATIONAL CAPITAL REGION

Updated December 2014

INTRODUCTION

The National Capital Region Transportation Planning Board (TPB) will follow these procedures for processing revisions to its Financially-Constrained Long-Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP). A revision is a change to the CLRP or TIP that occurs between scheduled periodic updates. A minor revision is an administrative modification and a major revision is an amendment. These procedures are in accordance with the US DOT planning regulations at 23 CFR 450.

According to 23 CFR 450.326: TIP Revisions and Relationship to the STIP, the regional TIP projects must be included without change in a federally approved state transportation improvement program (STIP) in order for them to receive federal funding. In this region, the District of Columbia Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT) each provide the project descriptions and funding information for the development of the regional TIP and CLRP. Each DOT has adopted procedures for revising its STIP. When it becomes necessary for a DOT to revise the project information in the TIP, its procedures must be consistent with the TPB procedures for revising its regional TIP.

These TPB procedures are based upon the procedures adopted by DDOT, MDOT and VDOT as of December 1, 2007. These procedures were adopted by the TPB on January 16, 2008. Modifications to these procedures will require approval by the TPB.

DEFINITIONS

A. Administrative Modifications are **minor** changes to a project included in the CLRP, TIP or STIP that do the following:

1. Revise a project description without changing the project scope or conflicting with the environmental document;

2. Revise the funding amount listed for a project's phases subject to the applicable definition of the funding limitations adopted by DDOT, MDOT, and VDOT for their respective STIPs.

   - For projects to be included in the DDOT STIP, the additional funding is limited to 20 percent of the project cost.

   - For projects to be included in the MDOT STIP, ~~the additional funding is limited to 20 percent of the project cost~~. **See the funding qualifications and other criteria specified in Section 1.2 Administrative Modifications in the attached MOU entitled: Procedures for Maryland Department of Transportation**

(MDOT) Statewide Transportation Improvement Program (STIP) Modifications, which was effective October 29, 2014.

- For projects to be included in the VDOT STIP, the additional funding is limited based upon a sliding scale that varies by the funding amount listed for the project as follows:

    a. For a project cost of up to $2 million, the additional funding is limited to 100 percent of the cost.
    b. For project costs between $2 million and $10 million, the additional funding is limited to 50 percent of the cost.
    c. For project costs between $10 million and $20 million, the additional funding is limited to 25 percent of the cost.
    d. For project costs between $20 million and $ 35 million, the additional funding is limited to 15 percent of the cost.
    e. For project costs more than $35 million, the additional funding is limited to 10 percent and cannot exceed $10 million.

3. Change the source of funds;
4. Change a project lead agency;
5. Splits or combines individually listed projects; as long as cost, schedule, and scope remain unchanged;
6. Changes required information for grouped project (lump sum) listings; or,
7. Adds or deletes projects from grouped project (lump sum) listings as long as the funding amounts stay within the guidelines in number two above.

An Administrative Modification can be processed in accordance with these procedures provided that:

- It does not affect the air quality conformity determination;
- It does not impact financial constraint; and
- It does not require public review and comment.

B. Amendments are **major** changes to a project included in the CLRP, TIP or STIP that are not Administrative Modifications.

PROCEDURES

When it becomes necessary for a DOT to revise the information for a project in the CLRP or TIP, the agency will review the type of changes to the project and apply the above definitions to determine if it can be processed by the TPB as an administrative modification or an amendment. The DOT will then submit the project changes to the TPB and request that it take the appropriate action to approve either a project administrative modification or a project amendment.

A. Administrative Modifications

The TPB has delegated approval of CLRP and TIP project administrative modifications to the Director, Department of Transportation Planning of the Metropolitan Washington

Council of Governments. Requests for CLRP and TIP project administrative modifications will be submitted to the Director or his designee. The requests will be reviewed and those meeting the definition of administrative modification will be approved and forwarded to the requesting implementing agency. All TPB approved requests for CLRP and TIP project administrative modifications will be posted on the TPB web site. Once approved by the appropriate state DOT, the administrative modification will be incorporated into the STIP and no federal action will be required.

B. Amendments

Requests for CLRP and TIP project amendments will be submitted to the Chairman of the TPB. The requests will be reviewed by TPB staff and those meeting the definition of an amendment will be presented to the TPB Steering Committee. The Steering Committee will consider and be asked to approve project amendments that are non-regionally significant. Under the TPB Bylaws, the Steering Committee "shall have the full authority to approve non-regionally significant items, and in such cases it shall advise the TPB of its action." The Steering Committee will consider and place all other project amendments on the TPB agenda for consideration and approval after meeting the applicable US DOT planning regulations for CLRP and TIP amendments.

All TPB approved requests for CLRP and TIP project amendments will be forwarded to the requesting DOT, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) and posted on the TPB web site. Once the TPB amendment is approved by the requesting DOT, the DOT will forward the amendment to FHWA and FTA for federal approval. After approval by FHWA and FTA, the amendment will be incorporated into the DOT's STIP. The FHWA and FTA approval will be addressed to the DOT with copies to the TPB.

DISPUTE RESOLUTION

If a question arises on the interpretation of the definition of an amendment, the TPB, the requesting DOT, FHWA and FTA (the parties) will consult with each other to resolve the question. If after consultation, the parties disagree on the definition of what constitutes an amendment, the final decision will rest with the FTA for transit projects and FHWA for highway projects.

MEMORANDUM OF UNDERSTANDING (MOU)

PROCEDURES FOR MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT) STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP) MODIFICATIONS

Overview of the MOU

This Memorandum of Understanding (MOU) establishes a set of procedures to be used in the State of Maryland for processing modifications to the Statewide Transportation Improvement Program (Maryland STIP). The Maryland STIP is the aggregation of the Metropolitan Planning Organizations' (MPOs') Transportation Improvement Programs (TIPs), including the Long – Range Transportation Plan (LRTP).

Purpose of the MOU

The Final Rule on Statewide and Metropolitan Transportation Planning and Programming, which took effect on March 16, 2007, contained in 23 CFR Part 450 defines the Amendment and Administrative Modification Process applicable to such planning and programming activities. The following procedures are applicable for processing amendments or modifications to the Maryland STIP. In accordance with the provisions of 23 CFR 450.216(b), the STIP shall be developed in cooperation with the MPO designated for a metropolitan area. Each metropolitan TIP shall be included without change in the STIP, directly or by reference, after approval of the TIP by the MPO and the Governor.

In accordance with 23 CFR 450.216 (n), projects in any of the first four years of the STIP may be advanced in the place of another project to be performed within any other of the first four years of the STIP, subject to the project selection requirements of 23 CFR 450.220.

The following criteria has been developed for processing Technical Corrections, Administrative Modifications, and Amendments to the STIP and is proposed as a model for those processes in the modification of the MPOs' TIPs and LRTPs in accordance with the provisions of the Final Rule found in 23 CFR Part 450.

1. DEFINITIONS

1.1 **Technical Corrections** are **minor** changes that do not require federal or MPO approval, and meets the following qualifications:

1.1.1 Corrects typographical, grammatical or syntactical errors that address, for example, an error in spelling, grammar, deletion of a redundant word or formatting that was inadvertently published. It does not include changes to any funding amounts.

1.1.2 Changes a project lead agency, implementing agency, or sponsor.

1.2. **Administrative Modifications** are **minor** changes to a project included in a STIP that meets the following qualifications:

1.2.1 Revises project status information, justification, or project scope as long as it does not trigger air quality conformity analysis or affect fiscal constraint.

1.2.2 Increases or decreases the funding amount of a phase or shifts funds from one phase to another within a project where the increase or decrease is within the threshold of Modifications identified below by increasing or decreasing the total project cost. The total project cost must show funding in the STIP including previously approved funding, current 4 year funding and future funding required to complete the project.

a. If the total project cost as indicated in the STIP is less than $3 million, an Administrative Modification shall be used for an increase or decrease in cost up to 50% of the total project cost or $1 million, whichever is less.
b. If the total project cost is greater than $3 million but less than $10 million, an Administrative Modification shall be used for an increase or decrease in cost up to 30% of the total project cost.
c. If the total project cost is greater than $10 million, an Administrative Modification shall be used for an increase or decrease of cost up to 20% of the total project cost.

1.2.3 Changes the program year of the funds.

1.2.4 Changes the source of the funds for a phase or a project, provided it does not exceed the threshold later noted in Section 1.2.2. of this MOU.

1.2.5 Splits or combines individually listed projects in Statewide Categories or Grouped Projects.

1.3 **Amendments** are **major** changes to a project included in a LRTP, TIP or STIP that are not Administrative Modifications. An **Amendment** is a modification to the LRTP, TIP or STIP that:

1.3.1 Affects financial constraint.

1.3.2 Affects air quality conformity regardless of the cost of the project or the funding source.

1.3.3 Adds or deletes a project or project phase.

1.3.4 Increases or decreases an existing project phase greater than the threshold established in Section 1.2.2 of this MOU.

1.3.5. Involves a major change in the scope of work of a project that would trigger an air quality conformity evaluation, or result in a revised total project cost that exceeds the threshold established in Section 1.2.2 of this MOU. A major change could include a major change that alters the original project purpose. Examples of such major changes include a change in the project's capacity or an increase or decrease in the project termini of more than 10 percent of the total length of the project.

2. PROCEDURES

2.1 Technical Corrections do not require Federal or MPO approval.

2.1.1 MDOT will notify the MPO, FTA, and FHWA of technical corrections in writing, on a quarterly basis, through a process agreed upon by the parties.

2.1.2 Changes based on technical corrections will be made to the STIP by MDOT.

2.2 Administrative Modifications do not require Federal approval.

2.2.1 MDOT will provide the MPO with an Administrative Modification by letter. An MPO may elect not to process any TIP changes as Administrative Modifications and, as a result, all changes would be processed as Amendments. Each MPO-approved Administrative Modification will be forwarded to MDOT for approval on behalf of the Secretary. The MPO Board may delegate approval of Administrative Modification to the MPO's Executive Director. If the MPO Board delegates approval of Administrative Modification to the Executive Director, the MPO will need to provide copies of the delegation to MDOT, FHWA, and FTA.

2.2.2 Once approved by the MPO and MDOT, the Administrative Modification will be incorporated into Maryland's STIP and no Federal action will be required. Notification of the action shall be made available to the public. MDOT will forward Administrative Modifications to FHWA and FTA for their records. FTA and FHWA reserve the right to disallow an Administrative Modification if it is inconsistent with this procedure.

2.3 Amendments involving major changes to a project **require Federal approval.** Amendments to the STIP must be developed in accordance with the provisions of 23 CFR 450.326 or 23 CFR 450.216.

2.3.1 Each approved MPO TIP Amendment will be forwarded to MDOT from the MPO. MDOT will prepare a STIP Amendment letter and attach the TIP Amendment and forward it to FHWA and FTA for Federal approval. Once approved by FHWA and FTA, the Amendment will be incorporated into Maryland's STIP. The FHWA or FTA approval letter will be addressed to MDOT, with copies to the State Highway Administration (SHA), Maryland Transit Administration (MTA), and any applicable MPOs.

3. FEDERAL REVIEW

Consistent with the MOU between MDOT, FHWA, and FTA STIP Amendment review procedures, all efforts should be made by the Federal parties to approve STIP Amendments within 3 weeks of receiving the Amendments from MDOT. A written response, including emails, shall be provided as provided in Section 2.3.1.

4. DISPUTE RESOLUTION

If a question arises on the interpretation of the definition of an Administrative Modification or Amendment, MDOT, SHA, MTA, the MPO, FHWA and FTA will consult with each other to resolve the question. If, after consultation, the parties disagree on the definition of what constitutes an Administrative Modification or Amendment, the final decision rests with the FTA for transit projects and with FHWA for highway projects.

This MOU is effective 10/29 2014 and remain in effect until it is modified or terminated by mutual consent of the parties.

We, the undersigned hereby agree to the above procedures and principles.

Acknowledged and agreed to:

_____ Date: 10/22/14
Gregory K. Murrill
Division Administrator
Federal Highway Administration

_____ Date: 10/29/14
for Brigid Hynes-Cherin
Regional Administrator
Federal Transit Administration

_____ Date: 10/6/14
Donald A. Halligan
Director
Office of Planning and Capital Programming
Maryland Department of Transportation

NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD

Item #5

MEMORANDUM

December 11, 2014

TO: Transportation Planning Board

FROM: Kanti Srikanth
Director, Department of Transportation Planning

RE: Letters Sent/Received Since the November 19th TPB Meeting

The attached letters were sent/received since the November 19th TPB meeting. The letters will be reviewed under Agenda #5 of the December 17th TPB agenda.

Attachments

777 North Capitol Street NE, Suite 300, Washington, DC 20002-4290
Web: www.mwcog.org/tpb Phone: (202) 962-3315 Fax: (202) 962-3202

NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD

December 3, 2014

Mr. Shyam Kannan
Managing Director, Office of Planning
Washington Metropolitan Area Transit Authority
600 5th Street, NW
Washington, DC 20001

Dear Mr. Kannan:

Thank you for your letter of October 30, 2014 to the Chairman of the National Capital Region Transportation Planning Board (TPB), the Honorable Patrick Wojahn, which provided suggestions for improving the TPB travel model's treatment of transit and non-motorized modes. I am happy to respond to the letter upon advice from the Chairman. I have reviewed the specific recommendations you have advanced and offer the following brief responses. I believe that further discussion is warranted on some specific aspects of some of your suggestions.

TPB staff has already made substantial progress improving the model's treatment of transit and non-motorized modes over the past four years. The currently adopted (Version 2.3) travel model now includes a more detailed Transportation Analysis Zone (TAZ) system, which has increased from 2,191 TAZs to 3,722 TAZs. The model also includes an updated mode choice model that includes a more detailed transit choice set: 11 transit modes (up from 2 previously). While these refinements represent advances to our travel forecasting capabilities, we agree that more can be done.

As you know, TPB staff maintains an ongoing travel model development program with the assistance of a consultant. This arrangement has proved to be an effective approach for identifying best practices and for implementing improved methods into the TPB's travel forecasting process. TPB staff is currently working with Cambridge Systematics, Inc. (CS) to formulate a strategic plan for the TPB's Models Development program. The plan should be completed by June 30. We will share your suggestions with CS as part of the effort.

Technical discussions pertaining to the regional travel demand model normally occur at meetings of the Travel Forecasting Subcommittee (TFS). We welcome WMATA's participation at TFS meetings where these and other such matters can be discussed in detail with TPB staff, as well as the technical staff from the member jurisdictions and the consulting community. The TPB staff appreciates WMATA's past participation with the TFS, including its service in chairing the subcommittee during 2009 and 2013. TPB staff also offers to meet with TPB member agencies to discuss technical modeling issues on an as-needed basis. One such meeting occurred at WMATA headquarters on September 12, 2013 and we will be happy to meet again to further discuss the suggestions in your October 30, 2014 letter.

WMATA Suggestion #1: *In the current model, Metrorail and light rail are grouped together in the same category, whereas BRT and streetcar are grouped with express and local bus in the same category. While differences among these modes are clear in reality, without a model that reflects true differences of each investment, decision makers are unable to truly understand the attractiveness and impacts of each mode.*

TPB Staff Response: The current mode choice model output distinguishes transit trips by access mode and linehaul mode (commuter rail, bus-only, Metrorail-only and Metrorail-bus). You correctly state that the existing choice set assumes "Metrorail" trips include light rail and "bus" trips include BRT. Nonetheless, it is important to note that while light rail and BRT *trips* are grouped into these broader categories, explicit light rail and BRT *link volumes* are currently produced by the model as a standard output, which we believe will help decision makers understand the attractiveness and impacts of these different types of transit.

We agree that a more detailed mode choice set that explicitly distinguishes light rail and BRT trips separately would be desirable. However, the lack of locally observed travel data for these two sub-modes is an obstacle to estimating a model incorporating these two sub-modes explicitly. It is also important to note that providing the model with the explicit capability to "truly understand the attractiveness" of light rail and BRT is a challenge, given that conventional mode choice modeling focuses solely on relative times, costs and modal bias constants as a basis for estimating a choice probability. Other service attributes that are relevant to light rail and BRT (for example reliability and comfort) are not explicitly addressed by conventional models. A review of how other metropolitan areas are addressing light rail and BRT modes within the mode choice process in their regional travel demand models is a worthy endeavor.

WMATA Suggestion #2: *As traffic grows, bus speeds continue to slow, and reliability and capital and operating costs are affected. In the current model, bus run times are independent of the level of traffic and subsequent traffic speeds. By further developing the model to integrate bus speeds with that of general traffic, decision makers will have a better understanding of the impacts of the myriad of the bus priority measures, especially right-of-way improvements, and their effect on ridership.*

TPB Staff Response: The current modeling process includes procedures for linking bus speeds to forecasted highway speeds. However, the current approach moderates bus speeds based on a global factoring approach rather than an approach that considers detailed highway network link-level speeds. There are benefits and potential problems with moving toward a more detailed approach. We agree that a review of how other areas are treating transit speed degradation would be useful. No matter how future bus speeds are related to highway speeds, the ability to reflect bus priority measures will be a challenge in a regional travel demand model, given the aggregate scale of the network used in the model. In general, TPB staff would submit that this type of analysis is better conducted in a project-planning context. In cases where one choses to use the regional model for such analyses, one must keep in mind that incorporating bus priority measures will add complexity to network coding procedures.

WMATA Suggestion #3: *Bicycling and walking to transit is the main mode of access for much of our ridership. It is also increasing in mode share across the region, especially in the core and central jurisdictions and some of the regional activity centers. In the past two years, the TPB's geographically-focused survey on non-motorized transit has provided a better understanding of bicycling and walking mode shares, especially in regional activity centers. WMATA would like to see this effort integrated into the model. Additionally, adding a non-motorized mode to the mode choice model would better reflect walking and biking when changes to surrounding land use are made. A better representation of biking and walking in the model would help the accuracy of station access modes.*

TPB Staff Response: Non-motorized modes are represented in the current TPB travel demand in two ways. First, they are represented as one of the access modes to transit. Second, they are represented as a primary mode in the trip generation step of the model, though they are not carried forth into subsequent modeling steps. You are advocating that we 1) incorporate data from the geographically focused (GF) household travel survey into the travel model; and 2) add non-motorized modes to the mode choice model. Regarding your first point, TPB staff has used the GF survey data to enhance the way that non-motorized travel is represented in trip generation. We agree that the GF survey data, combined with data from the 2012 Metrorail Passenger Survey, can further be used to enhance the model.

Regarding your second point, the proposal to add biking and walking trips, as a primary mode, to the mode choice model has been considered by TPB staff in the past. Staff has been hesitant to proceed with adding non-motorized travel to the distribution and mode choice steps because most of these trips occur beneath the scale of the regional TAZ system and the transportation network. TPB's recent migration to a more detailed TAZ system may make this proposal more viable. We will follow up on this suggestion with our consultant.

In closing, as noted earlier, TPB staff would be happy to meet with you and your travel demand modeling staff to discuss your recommendations in greater detail, and we appreciate your interest in our technical methods. In the meantime, we urge WMATA to maintain a presence at our TFS meetings to ensure that TPB staff considers your needs, along with those of the other TPB member agencies, as we move forward with the TPB's travel model development plans.

Sincerely,

Ronald Milone
Travel Forecasting Program Director, COG/TPB

CC: Kanathur Srikanth, COG/TPB
Mark Moran, COG/TPB
Patrick Wojahn, TPB Chair

ITEM 8 - Action
December 17, 2014

Approval of a Resolution to Affirm Support for the 2008 COG Greenhouse Emissions Reduction Goals and for the Establishment of a COG Multi-sector Working Group to Examine Greenhouse Gas Reductions

Staff Recommendation: Adopt Resolution R10-2015 to affirm support for the 2008 COG Greenhouse Emissions Reduction Goals and for the establishment of a COG multi-sector working group to examine greenhouse gas reductions.

Issues: None

Background: At the November 19 meeting, the TPB was briefed on a proposed draft TPB resolution to affirm the 2008 COG greenhouse gas reduction goals as requested by MWAQC and CEEPC. The TPB was also briefed on COG actions to convene a multi-disciplinary professional working group to develop a multi-sector action plan to reduce greenhouse gas emissions and criteria pollutants.

TPB R10- 2015
December 17, 2014

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION ON THE METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS' REGIONAL MULTI SECTOR GOALS FOR REDUCING GREENHOUSE GASES

WHEREAS, the National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the National Capital Region (Region), has the responsibility under the provisions of Moving Ahead for Progress in the 21st Century (MAP-21) to carry out continuing, cooperative and comprehensive transportation planning for the Region; and

WHEREAS, the TPB is committed to preserving and enhancing the Region's environment through transportation plans focused on reducing congestion and emphasizing projects and programs that move more people and goods efficiently and reduce reliance on single-occupant vehicles; and

WHEREAS, the TPB, which is associated with the Metropolitan Washington Council of Governments (COG) as an independent policy committee, works closely with COG's Board of Directors ("COG Board") and its regional policy advisory committees, including the Climate, Energy, and Environment Policy Committee, and the *Region Forward* Coalition, as well as the Metropolitan Washington Air Quality Committee on matters of regional multi-sectorial planning; and

WHEREAS, in November 2008 the COG Board, through resolution R60-08, adopted the *National Capital Region Climate Change Report* that included voluntary goals to reduce greenhouse gases by 10 percent below business as usual projections by 2012 to encourage early action, by 20 percent below 2005 levels by year 2020 to encourage expansion of recommended policies and programs, and by 80 percent below 2005 levels by year 2050 to stimulate support for research into technologies and clean fuels needed to stabilize greenhouse gas emissions; and

WHEREAS, in January 2010 the COG Board, through Resolution R9-10, adopted the *Greater Washington 2050 Coalition Report And Voluntary Regional Compact* that set out goals in nine areas and incorporated the previously adopted regional greenhouse gas emission reduction goals; and

WHEREAS, TPB's *What Would it Take* scenario analysis in 2010 quantified the effects of transportation sector specific actions for reducing greenhouse gas emissions; and

WHEREAS, the recommended greenhouse gas reduction actions in the *National Capital Region Climate Change Report* and the *What Would it Take* scenario analysis provide significant co-benefits and enhance the future of the Region's quality of life; and

WHEREAS, the Region has benefited from federal, state and local actions across sectors that, even while accommodating considerable growth, have achieved significant reductions in emissions of criteria pollutants including ozone, fine particulate matter, and carbon monoxide; and

WHEREAS, actions taken to address criteria pollutants in the Region have also reduced greenhouse gas emissions; and

WHEREAS, TPB recognizes achieving reductions in criteria pollutants and greenhouse gas emissions as a priority and has been reporting projected on-road greenhouse gas emissions in the CLRP Performance Report; and

WHEREAS, there is a need to identify additional cost-effective, coordinated actions that may be taken across all sectors of the Region's economy to further reduce criteria pollutants and greenhouse gas emissions and optimize the economic well-being and environmental quality of our region; and

WHEREAS, COG now intends to convene a multi-sector, multi-disciplinary professional working group to identify implementable local, regional and state actions in all four sectors (Energy, Transportation, Land Use, Built Environment) and quantify benefits, costs and implementation timeframes, to inform exploration of greenhouse gas reduction goals for the transportation sector.

NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD:

1. Affirms the Region's greenhouse gas reduction goals set out in the November 2008 National Capital Region Climate Change Report and adopted by the Council of Governments Board of Directors (COG Resolution R60-08), incorporated in Region Forward through adoption of the Greater Washington 2050 Coalition Report and Voluntary Compact (January, 2010, COG Resolution R09-10), and as guided by jurisdictional endorsements of the Greater Washington 2050 Compact.

2. Commits TPB staff and resources to supporting the multi-sector, multi-disciplinary professional working group convened by the Council of Governments, which has been charged with:

    a. identifying viable, implementable local, regional, and state actions in each of the four sectors (noted above);
    b. quantifying benefits, costs and implementation timeframes;
    c. jointly developing an action plan for the region; and
    d. exploring specific greenhouse gas emission reduction targets for the transportation and other sectors (noted above).

ITEM 9 - Action
December 17, 2014

Approval of an Amendment to the FY 2015 Unified Planning Work Program (UPWP) to Revise the Budget and Work Elements

Staff Recommendation: Receive briefing on an amendment to the FY 2015 UPWP to revise the budget and work elements to reflect funding changes and adopt Resolution R11-2015 to approve the amendment.

Issues: None

Background: Since the FY 2015 UPWP was approved in March 2014, the funding allocations provided by DDOT, MDOT VDOT and VDRPT have been revised to reflect changes in new FY 2015 funding and adjustments in the unobligated FY 2013 funding.

TPB R11-2015
December 17, 2014

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 North Capitol Street, N.E.
Washington, D.C. 20002

RESOLUTION TO AMEND
THE FY 2015 UNIFIED PLANNING WORK PROGRAM (UPWP)
TO REVISE THE BUDGET AND WORK ELEMENTS

WHEREAS, the National Capital Region Transportation Planning Board (TPB), which is the metropolitan planning organization (MPO) for the Washington Region, has the responsibility under the provisions of Moving Ahead for Progress in the 21st Century (MAP-21) for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area;

WHEREAS, the Joint Planning Regulations issued in February 2007 by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) require a Unified Planning Work Program for Transportation Planning (UPWP); and

WHEREAS, the UPWP is required as a basis and condition for all funding assistance for transportation planning to state, local, and regional agencies by the FHWA and FTA; and

WHEREAS, the FY 2015 UPWP for the Washington Metropolitan Area was approved by the TPB on March 19, 2014; and

WHEREAS, the approved budget for the FY 2015 UPWP was based upon allocations of FTA Section 5303 and FHWA funding from the District of Columbia Department of Transportation (DDOT), Maryland Department of Transportation (MDOT), Virginia Department of Transportation (VDOT), and the Virginia Department of Rail and Public Transportation (VDRPT) that were assumed to be similar to the previous year; and

WHEREAS, by November, the final federal FY 2014 MPO planning allocations, which determine the new FY 2015 funding for the UPWP, were determined by DDOT, MDOT, VDOT, and the VDRPT; and

WHEREAS, the changes in commitments are shown in italics for each "New FY 2015" row in the attached Table 1 AMEND from the FY 2015 UPWP that was approved by the TPB in March, and these allocations provide a **net decrease of $165,179** (including state and local matching funds) in new FY 2015 funding for the UPWP relative to the totals included in the FY 2015 UPWP approved in March; and

WHEREAS, based upon information provided by DOTs, adjustments to the "unobligated FY 2013" funding totals, shown for each "unobligated FY 2013" row in the attached Table 1 AMEND from the FY2015 UPWP, provide a **net increase of $336,084** in the

total unobligated FY2013 funding; and

WHEREAS, the net result is **an increase of $170,905** for the total FY 2015 UPWP budget as shown in italics in the attached Table 1 AMEND from the FY 2015 UPWP approved by the TPB on March 19, 2014; and

WHEREAS, the technical assistance funding level for each state is an agreed percentage of the total new FY 2015 funding provided through the respective state and the technical assistance funding level for WMATA is an agreed percentage of the new FTA 2015 funding, and therefore the funding budgets for the District, Maryland and WMATA will increase by $1,757, $13,776 and $4,905 respectively, while the Virginia level will decrease by $37,832, as shown in italics in the attached Table A, and

WHEREAS, because the technical assistance program funding decreases by a net of $17,394, the net total funding for the core work program increases by $188,301; and

WHEREAS, a 1 percent across the board increase is proposed for the FY 2015 budgets in the core program as shown in italics in the attached Table A; and

WHEREAS, the 1 percent increase will account for $111,301 of the $188,301 total increase, the remaining $77,000 is proposed to be allocated to two specific work activities in the core work program as shown in Table A and summarized in Table B; and

WHEREAS, the changes to the budgets and work activities in the program are shown in Appendix A; and

WHEREAS, at its December 5 meeting, the TPB Technical Committee was briefed on the proposed amendment to the budget and work activities in the FY 2015 UPWP;

NOW, THEREFORE, BE IT RESOLVED THAT the NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD amends the FY 2015 UPWP to include the budget revisions shown on the attached Table 1 AMEND and Table A, and to work activity budgets and narratives as presented in Appendix A.

National Capital Region Transportation Planning Board
777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

M E M O R A N D U M

December 9, 2014

TO: Transportation Planning Board

FROM: Gerald Miller
Acting Deputy Director
Department of Transportation Planning

SUBJECT: Briefing on Amendment to the FY 2015 Unified Planning Work Program (UPWP) to Revise the Budget

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Proposed FY 2015 UPWP Budget Revisions

Since the FY 2015 UPWP was approved in March, the funding allocations provided by DDOT**,** MDOT, VDOT and VDRPT have been revised to reflect changes in new FY 2015 funding and adjustments in the unobligated FY 2013 funding. This memorandum describes an amendment to revise the budget and work activities to reflect the funding changes. The TPB will be asked to approve this amendment at its meeting on December 17.

On March 19, 2014, the TPB approved the budget for the FY 2015 UPWP, which includes "new FY 2015 funds**"** that come from the federal FY 2014 budget and "unobligated FY 2013 funds" that are unexpended funds from the completed FY 2013 UPWP. As described below, the new funding total needs to be decreased by $165,179 and the unobligated FY 2013 total needs to be increased by $336,084. **The net result is an increase of $170,905 (1.2 percent) for the total FY 2015 UPWP budget.**

Changes to the New FY 2015 Funding Totals

Because the federal FY 2014 budget had not been finalized in February in time for the FY 2015 UPWP to be approved by the TPB in March, we assumed the allocations of new FY 2015 FTA Section 5303 and FHWA PL funding to be provided by the DOTs would be similar to the previous year. After the federal FY 2014 MPO planning allocations were finalized, DDOT, MDOT, VDOT, and VDRPT determined their new FY 2015 funding commitments for the UPWP. The commitments are shown in italics for each "New FY 2015" row in the attached Table 1 AMEND from the FY 2015 UPWP that was approved by the TPB in March. These allocations provide **a net decrease of $165,179** (including state and local matching funds) in new FY 2015 funding for the UPWP relative to the totals included in the FY 2015 UPWP approved in March.

Changes to the Unobligated FY 2013 Funding Totals

Based upon information from the DOTs some adjustments to the "unobligated FY 2013" assumed funding totals are needed. The adjustments to the FTA and FHWA totals are shown in for each "unobligated FY 2013" row in the attached Table 1 AMEND from the

FY2015 UPWP. These adjustments result in a **net increase of $336,084** in the total unobligated FY2013 funding.

Changes to the Technical Assistance and Core Program Budgets

As shown in Table 1 AMEND, the FY 2015 UPWP budget **is increased by a total of $170,905** relative to the total approved by the TPB in March.

The technical assistance funding level for each state is an agreed percentage of the total new FY 2015 funding provided through the respective state. The technical assistance funding level for WMATA is an agreed percentage of the new FTA 2015 funding. Therefore, the budgets for the technical assistance programs in the District, Maryland and WMATA will increase by $1,757, $13,776 and $4,905 respectively, while the Virginia program will decrease by $37,832.

Because the total for all of the **technical assistance programs decreases by $17,394, the net total funding for the core work program increases by $188,301**.

Proposed Work Activity Budget Increases

A 1 percent across the board increase is proposed for the current work activity budgets in the core work program (not including the carryover budgets from FY 2014) for increases in salaries and other costs during the fiscal year. The 1 percent will account for $111,301 of the $188,301 total increase. The remaining $77,000 is proposed to be allocated to two work activities in the core work program. For the 1.E Public Participation activity, a $27,000 increase is proposed to initiate an evaluation of the current public involvement process as recommended during the recent Federal planning certification review. For the 3.C Regional Studies activity, a $50,000 increase is proposed to provide resources for supporting the multi-disciplinary professional working group to be convened by COG to develop a multi-sector action plan to reduce greenhouse gas emissions.

The proposed 1 percent increases and the increases to Public Participation, Regional Studies and the Technical Assistance Program budgets are shown in the attached Table A. Table B provides a summary of the proposed work activities utilizing the additional funding. The changes to the budgets and work activities in the core program and technical assistance programs are shown in Appendix A.

TABLE 1 AMEND
FY 2015 TPB PROPOSED FUNDING BY FEDERAL, STATE AND LOCAL SOURCES
(July 1, 2014 to June 30, 2015)

	CHANGE IN FTA FUNDING	FTA SECT 5303 80% FED & 20% STA/ LOC	FHWA SECT 112 80% FED & 20% STA/ LOC	CHANGE IN FHWA FUNDING	TOTALS	CHANGE IN TOTAL FUNDING
ALLOTMENTS PROVIDED BY DDOT						
NEW FY 2015	*+11,152*	**521,703**	**2,148,445**	*+1,862*	**2,670,148**	*+13,014*
UNOBLIGATED FY 2013	*-4,130*	**28,123**	**116,540**	*-8,884*	**144,663**	*-13,014*
CARRYOVER FY 2014		**61,337**	**232,005**		**293,342**	
SUBTOTAL	*+7022*	**611,163**	**2,496,990**	*-7022*	**3,108,153**	*0*
ALLOTMENTS PROVIDED BY MDOT						
NEW FY 2015	*+23,521*	**1,253,735**	**3,531,767**	*+78,521*	**4,785,502**	*+102,042*
UNOBLIGATED FY 2013	*+97,222*	**152,328**	**374,130**	*+176,420*	**526,458**	*+273,642*
CARRYOVER FY 2014		**208,833**	**554,435**		**763,269**	
SUBTOTAL	*+120,743*	**1,614,896**	**4,460,332**	*+254,941*	**6,075,229**	*+375,684*
ALLOTMENTS PROVIDED BY VDRPT & VDOT						
NEW FY 2015	*+26,645*	**1,010,540**	**3,168,679**	*-306,879*	**4,179,219**	*-280,234*
UNOBLIGATED FY 2013		**72,000**	**332,689**	*+75,456*	**404,689**	*+75,456*
CARRYOVER FY 2014		**191,848**	**571,198**		**763,046**	
SUBTOTAL	*+26,645*	**1,274,388**	**4,072,566**	*-231,423*	**5,346,954**	*-204,778*
TPB BASIC PROGRAM						
TOTAL NEW FY 2015	*+61,317*	**2,785,978**	**8,848,891**	*-226,496*	**11,634,869**	***-165,179***
TOTAL UNOBL FY 2013	*+93,092*	**252,451**	**823,359**	*+242,992*	**1,075,810**	***+336,084***
SUBTOTAL	*+154,409*	**3,038,429**	**9,672,250**	*+16,496*	**12,710,679**	***+170,905***
TOTAL CARRYOVER FY 2014		**462,019**	**1,357,638**		**1,819,657**	
TOTAL BASIC PROGRAM	*+154,409*	**3,500,448**	**11,029,888**	*+16,496*	**14,530,336**	*+170,905*
GRAND TOTAL	*+154,409*	**3,500,448**	**11,029,888**	*+16,496*	**14,530,336**	*+170,905*

"New FY2015 funds" are newly authorized funds for the FY2015 UPWP

"Unobligated FY2013 funds" are unexpended funds from the completed FY2013 UPWP

"Carryover FY2014 funds" are programmed from the FY2014 UPWP to complete specific work tasks in the FY2015 UPWP

TABLE A WORK ACTIVITY BUDGET INCREASES FOR TABLE 2 **DRAFT 12/9/2014**

TPB FY 2015 WORK PROGRAM BY FUNDING SOURCES

WORK ACTIVITY	No Carryover CURRENT TOTAL COST	1 PERCEN INCREASE	OTHER CHANGE	AMENDED BUDGET	FINAL INCREASE
1. PLAN SUPPORT					
A. Unified Planning Work Program (UPWP)	72,800	***750***		73,550	**750**
B. Transp Improvement Program (TIP)	247,800	***2,500***		250,300	**2,500**
C. Constrained Long-Range Plan	636,100	***6,400***		642,500	**6,400**
D. Financial Plan	64,900	***650***		65,550	**650**
E. Public Participation	434,700	***4,360***	**27,000**	466,060	**31,360**
F. Private Enterprise Participation	18,800	***200***		19,000	**200**
G.Annual Report	82,500	***850***		83,350	**850**
H. Transportation/Land Use Connection Program	430,300	***4,600***		434,900	**4,600**
I. DTP Management	482,800	***5,541***		488,341	**5,541**
Subtotal	2,470,700	***25,851***		2,523,551	**52,851**
2. COORDINATION PLANNING					
A. Congestion Management Process (CMP)	211,000	***2,150***		213,150	**2,150**
B. Management, Operations, and ITS Planning	350,500	***3,550***		354,050	**3,550**
C. Transportation Emergency Prepardeness Planning	77,600	***800***		78,400	**800**
D. Transportation Safety Planning	128,800	***1,300***		130,100	**1,300**
E. Bicycle and Pedestrian Planning	125,000	***1,250***		126,250	**1,250**
F. Regional Bus Planning	160,000	***1,600***		161,600	**1,600**
G. Human Services Transportation Coordination	141,200	***1,500***		142,700	**1,500**
H. Freight Planning	154,500	***1,550***		156,050	**1,550**
I. MATOC Program Planning & Support	123,600	***1,250***		124,850	**1,250**
Subtotal	1,472,200	***14,950***		1,487,150	**14,950**
3. FORECASTING APPILICATIONS					
A. Air Quality Conformity	584,600	***5,900***		590,500	**5,900**
B. Mobile Emission Analysis	707,200	***7,300***		714,500	**7,300**
C. Regional Studies	531,800	***5,400***	***50,000***	587,200	**55,400**
D. Coord Coop Forecasting & Transportation Planning	831,000	***8,400***		839,400	**8,400**
Subtotal	2,654,600	***27,000***		2,731,600	**77,000**
4. DEVELOPMENT OF NETWORKS/MODELS					
A. Network Dvelopment	792,800	***8,000***		800,800	**8,000**
B. GIS Technical Support	565,300	***5,700***		571,000	**5,700**
C. Models Development	1,103,400	***11,100***		1,114,500	**11,100**
D. Software Support	184,300	***1,900***		186,200	**1,900**
Subtotal	2,645,800	***26,700***		2,672,500	**26,700**
5. TRAVEL MONITORING					
A. Cordon Counts	258,400	***2,600***		261,000	**2,600**
B. Congestion Monitoring and Analysis	360,500	***3,600***		364,100	**3,600**
C. Travel Survey and Analysis		***0***		0	**0**
Household Travel Survey	727,500	***7,300***		734,800	**7,300**
D. Regional Transportation Clearinghouse	327,400	***3,300***		330,700	**3,300**
Subtotal	1,673,800	***16,800***		1,690,600	**16,800**
Core Program Total (1 to 5)	10,917,100	***111,301***	**77,000**	**11,105,401**	**188,301**
6. TECHNICAL ASSISTANCE					
A. District of Columbia	360,470		1,757	362,227	**1,757**
B. Maryland	646,043		13,776	659,819	**13,776**
C. Virginia	564,195		(37,832)	526,363	**-37,832**
D. WMATA	222,878		4,905	227,783	**4,905**
Subtotal	1,793,586		-17,394	**1,776,192**	**-17,394**
Total, Basic Program	12,710,686	***111,301***	**59,606**	**12,881,593**	**170,907**

TABLE B: Proposed Work Activity Budget Increases in FY 2015 UPWP

Work Task	Budget Change	Activity
1. Plan Support		
E. Public Participation	**$27,000**	Increase would initiate an evaluation of the current public involvement process as recommended during the recent Federal planning certification review.
3. FORECASTING APPLICATIONS		
C. Regional Studies	**50,000**	Increase would provide resources for supporting the multi-disciplinary professional working group to be convened by COG to develop a multi-sector action plan to reduce greenhouse gas emissions.
Core Program Total	**77,000**	
6. TECHNICAL ASSISTANCE		
A. District of Columbia B. Maryland C. Virginia D. WMATA	1,757 13,776 -37,832 4,905	To be programmed
Subtotal	**-17,394**	
Total, Basic Program	**170,907**	

APPENDIX A: AMENDMENTS TO FY 2015 UPWP

Deletions to text are shown in ~~strikeout~~ and **additions in bold**.

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E. PUBLIC PARTICIPATION

The Participation Plan which was updated in the spring of 2014 will guide all public involvement activities to support the development of the TIP, the CLRP, the Regional Transportation Priorities Plan, and all other TPB planning activities.

Work activities include:

- Support implementation of the TPB Participation Plan.

- Provide public outreach support for the Regional Transportation Priorities Plan. Through a variety of public outreach activities, citizens will discuss the benefits, desirability and feasibility of potential projects and plan components.

- Develop and conduct workshops or events, as needed, to engage the public and community leaders on key regional transportation issues, including challenges reflected in the CLRP and TIP.

- Ensure that the TPB's website, publications and official documents are timely, thorough and user-friendly.

- Develop new written materials, tools and visualization techniques to better explain to the public how the planning process works at the local, regional and state levels.

- Conduct at least one session of the Community Leadership Institute, a two-day workshop designed to help community activists learn how to get more actively involved in transportation decision making in the Washington region.

- Effectively use technology, including social media and other web-based tools, to spread information about regional transportation planning and engage the public in planning discussions and activities.

- Provide staff support for the TPB Citizens Advisory Committee (CAC), including organizing monthly meetings and outreach sessions, and drafting written materials for the committee.

- Provide staff support for the TPB Access for All Advisory (AFA) Committee that includes leaders of low-income, minority and disabled community groups.

- Prepare AFA Committee memo to the TPB with comments on the CLRP related to projects, programs, services and issues that are important to community groups, such as providing better transit information for limited English speaking populations, improved transit services for people with disabilities, pedestrian and bike access and safety, and potential impacts of transit-oriented development and gentrification.

- Conduct regular public involvement procedures, including public comment

sessions at the beginning of each TPB meeting and official public comment periods prior to the adoption of key TPB documents.

- **Initiate an evaluation of the current public involvement process as recommended during the recent Federal planning certification review. It is anticipated that a consultant will be utilized and additional funding will be identified for this activity in the FY 2016 UPWP.**

Oversight:	Transportation Planning Board
Cost Estimate:	$434,700 **+ $4,360 +$27,000**
Products:	TPB Participation Plan with a proactive public involvement process; CAC and AFA Committee Reports
Schedule:	On-going, with forums and meetings linked to preparation of CLRP and TIP

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C. REGIONAL STUDIES

Regional Transportation Priorities Plan

Development of the Regional Transportation Priorities Plan (RTPP) began in July 2011. In January 2014, the TPB approved the RTPP.

In FY 2015, TPB staff will conduct outreach and analysis activities related to the RTPP. Tasks will include:

- *RTPP/ CLRP Comparative Assessment* – COG/TPB staff will conduct a qualitative assessment of how well the three overarching priorities identified in the RTPP are being met by the transportation system laid out in the 2014 CLRP. This analysis will begin in the spring and end in the fall of 2014.

- *Outreach on the RTPP* – COG/TPB staff will engage policy officials and staff of the TPB's member jurisdictions to promote dialogue on the RTPP and to further the realization of its objectives. Outreach activities will promote discussion that connects the regional policy framework provided by the RTPP with the planning and decision-making activities conducted by the TPB's members. Staff will also conduct outreach with members of the general public that will seek input from a variety of constituencies, including representative citizens, historically disadvantaged communities, opinion leaders and community activists, as well as stakeholders who are already involved in the TPB process.

- *Enhanced Linkages to COG's Place + Opportunity Plan* – Many of the strategies and priorities laid out in the RTPP are closely connected to COG's Place + Opportunity Plan, which focuses on enhancing the region's 141 Activity Centers. In FY2015, COG/TPB staff will identify ways to further promote those linkages through analysis and outreach.

- *Conduct Other Planning Activities and Analysis Related to the RTPP* – In addition to the work identified above, staff will identify and conduct other analysis and planning activities related to key issues and themes identified in the RTPP. Activities may include developing new/revised transportation and land-use scenarios, conducting analysis of those scenarios, and other research and analysis efforts, such as benefit-cost analysis.

- ***Identify Cost-Effective Actions to Reduce Greenhouse Gas Emissions -- P*rovide resources for supporting the 2015 multi-disciplinary professional working group to be convened by COG to develop a multi-sector action plan to reduce greenhouse gas emissions.**

Support for COG's Region Forward

Since FY 2011, TPB staff has provided support for the Metropolitan Washington Council of Government's (COG) Region Forward regional planning efforts involving transportation. Region Forward is supported by a voluntary compact signed by all of

the

COG member jurisdictions, and outlines a series of targets and indicators that measure progress towards creating and attaining a more accessible, sustainable, prosperous, and livable future.

In FY 2015, TPB staff will continue to provide support for these regional planning efforts involving transportation. As noted above, staff will particularly seek to promote linkages with the Place and Opportunity Plan, approved by the COG board in January 2014.

Prepare Grant Applications for US DOT Grant Funding Programs

In February 2010, the TPB was awarded $58.8 million for a regional priority bus network under the TIGER I grant program. In September 2012, the TPB was awarded a $200,000 Transportation, Community, and System Preservation (TCSP) Grant to identify strategic bicycle and pedestrian access improvements for rail station areas in the region. In FY2015, TPB staff will respond to promising opportunities for submitting project grant applications for USDOT grant funding programs, as approved by the TPB.

Oversight:	Transportation Planning Board
Cost Estimate:	$531,800 **+ $5,400 +$50,000**
Products:	RTPP/ 2014 CLRP Baseline Comparison - November
	Project grant applications for USDOT grant funding programs as approved by TPB
Schedule:	On-going throughout the year

6. TECHNICAL ASSISTANCE

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A. DISTRICT OF COLUMBIA

4. Other Tasks To Be Defined

Cost Estimate: $115,470 **+1,757**
19,833 carryover from FY 2014
~~135,303 total~~ **137,060**

TOTAL DISTRICT OF COLUMBIA COST ESTIMATE: $360,470
19,833 carryover from FY 2014
~~$380,303~~ $**382,060**

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B. MARYLAND

1. Other Tasks yet to be defined

Other tasks are anticipated but not yet defined. This project is established to account for TPB staff time spent in responding to requests for technical assistance by MDOT, SHA, other modal agencies and jurisdictions whose scope of work or characteristics do not conform to the other work tasks of the Maryland Technical Assistance Program. Work under this project will be performed upon authorization by MDOT, SHA and/or other modal agencies and jurisdictions.

Cost Estimate: $6,043 **+13,776**
10,024 carryover from FY 2014
$16,067 total

TOTAL MARYLAND COST ESTIMATE: $646,043 **+13,776**
$270,024 carryover from FY 2014
~~$916,067 total~~ **929,843**

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C. VIRGINIA

4. Regional and Sub-regional Studies

This project provides support for technical analysis for planning studies throughout the year as identified and requested VDOT and/or VDRPT. Work may include but not be limited to technical support in ongoing corridor/subarea studies, and initiation of new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities. Tasks undertaken under this work element

may involve staff assisting VDOT in the review and/or analysis of Section 527 reports. Staff may also assist VDOT in its work on a system-wide evaluation designed to provide information relating to the effectiveness of ongoing and planned projects and programs aimed at addressing the congestion and mobility challenges in Northern Virginia.

Cost Estimate: $240,000 **-37,832**
256,119 carryover from FY 2014
$505,119 total

Products: Travel demand modeling and technical analysis in support of Northern Virginia regional and sub-regional planning studies

TOTAL VIRGINIA COST ESTIMATE: $564,195 **-37,832**
333,091 carryover from FY 2014
~~$897,286 total~~ **859,463**

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D. WMATA

4. Other Tasks to be Defined

Other tasks anticipated but not yet defined

Cost Estimate: $26,700 carryover from FY 2014

TOTAL WMATA COST ESTIMATE: $222,895 **+4,905**

26,700 carryover from FY 2014
~~$249,595 total~~ **254,483**

ITEM 10 - Information
December 17, 2014

Briefing on the Draft Update of the Bicycle and Pedestrian Plan for the National Capital Region

Staff Recommendation: Receive briefing on the draft 2014 Bicycle and Pedestrian Plan for the National Capital.

Issues: None

Background: The draft 2014 Bicycle and Pedestrian Plan 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 plan. The Board will asked to approve the 2014 plan at its January 21 meeting.

Bicycle and Pedestrian Plan for the National Capital Region

DRAFT November 7, 2014

National Capital Region Transportation Planning Board

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2. BICYCLING AND WALKING IN THE WASHINGTON REGION

3. PEDESTRIAN AND BICYCLE SAFETY

4. EXISTING FACILITIES FOR BICYCLISTS AND PEDESTRIANS

Executive Summary

Prologue

The Washington region has seen rapid changes in the four years since the last regional bicycle and pedestrian plan was adopted. New neighborhoods have grown up and old ones have been revitalized. The people living and working in these new urban neighborhoods are mostly walking, bicycling and using transit for their daily needs. Bicycle infrastructure in the urban core is better than ever, with protected bicycle lanes, paths, on-street bike parking to meet surging demand, and better support facilities at the workplace. Car-sharing, on-line shopping, and delivery services have made it easier to live without a personal automobile. Bike-sharing, which existed only as a pilot program in 2010, has succeeded beyond expectations, providing an option for those who prefer not to own their own bicycle.

Walkable and bikeable activity centers are also growing in the inner suburbs, especially near Metrorail. New Metrorail stations are opening, and old ones are being made more accessible by foot and bicycle. While the automobile still dominates travel and living patterns in the greater Washington region, walkable urban living is growing faster than anticipated.

Overview of the Plan

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 2000 miles of bicycle lanes, nearly 2000 miles of shared-use paths, hundreds of miles of signed bicycle routes (signage without additional construction), 31 pedestrian intersection

improvements, and fifteen 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, 27 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 approximately 4500 miles of bike lanes and multi-use paths, nearly seven times the current total.

Progress since the 2010 Bicycle and Pedestrian Plan

Fifty-four 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 50 miles of multiuse path and 45 miles of bike lanes. This does not include many 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.

Figure 1: Green Bike Lane

A key goal of the *Vision*, and of subsequent regional plans, 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 Urban Core has a Growing Network of Bicycle Lanes

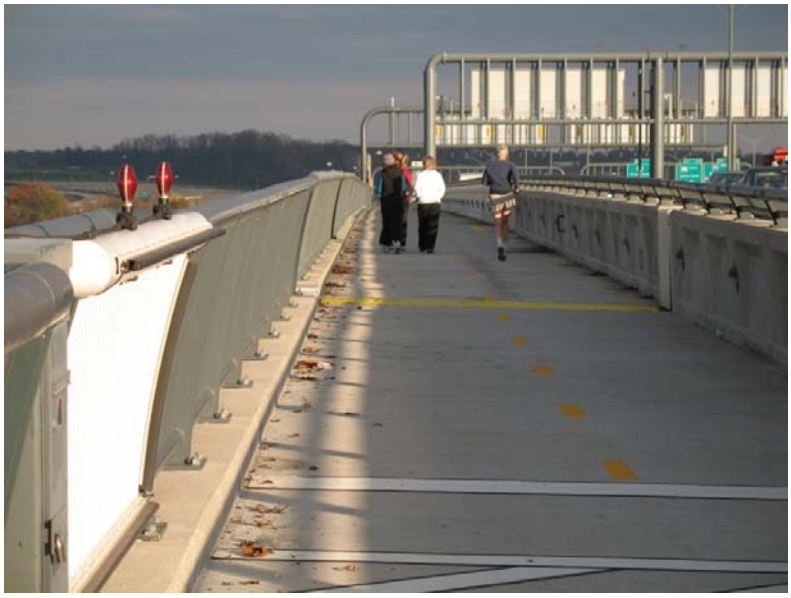


Figure 2: Woodrow Wilson Bridge Trail

The Woodrow Wilson Bridge Trail opened in 2009

Region Forward 2050

In 2010 the Metropolitan Washington Council of Governments adopted *Region Forward*, a vision for the National Capital region in 2050. *Region Forward* built 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. The policy defined a complete street as one that safely and adequately accommodates motorized and nonmotorized users, including pedestrians, bicyclists, motorists, freight vehicles, emergency vehicles, and transit riders of all ages and abilities, in a manner appropriate to the function and context of the facility. The TPB endorsed the concept of Complete Streets and encouraged its member governments, 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, insofar 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* (RTPP) 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.

Walking and Bicycling account for 9% of all trips in the region

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.

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. Bicycling to Work in the District of Columbia nearly quadrupled, from 1.16% in 2000 to 4.1% in 2012.

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] Capital Bikeshare, which launched in September 2010, has been a dramatic success, and now features over 2500 bicycles at over 300 stations.

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

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.

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] Green Bike Lane Photo: City of Alexandria
[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 New York Avenue Metro Station Incorporates a Shared-Use Path and Bicycle Parking

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.

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

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 21 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-6.

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 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

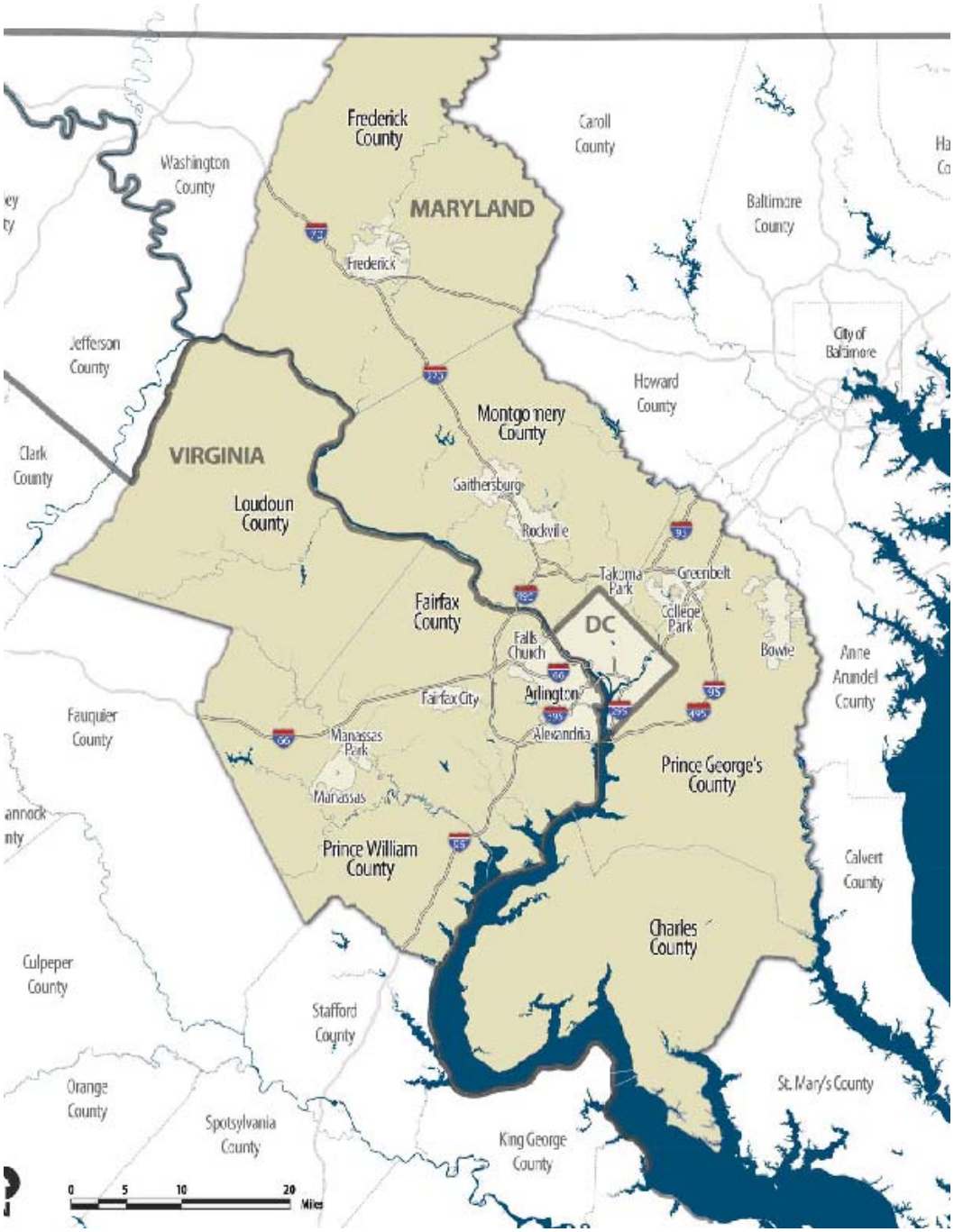
[4] National Capital Regional Transportation Planning Board, *1994COG/TPB Household Travel Survey: Summary of Major Findings*, January, 1998. Page 5.

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 more attention in this update, reflecting increased involvement in transportation safety planning by the TPB. . 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 Vision of the TPB calls for more Walking and Biking

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* 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

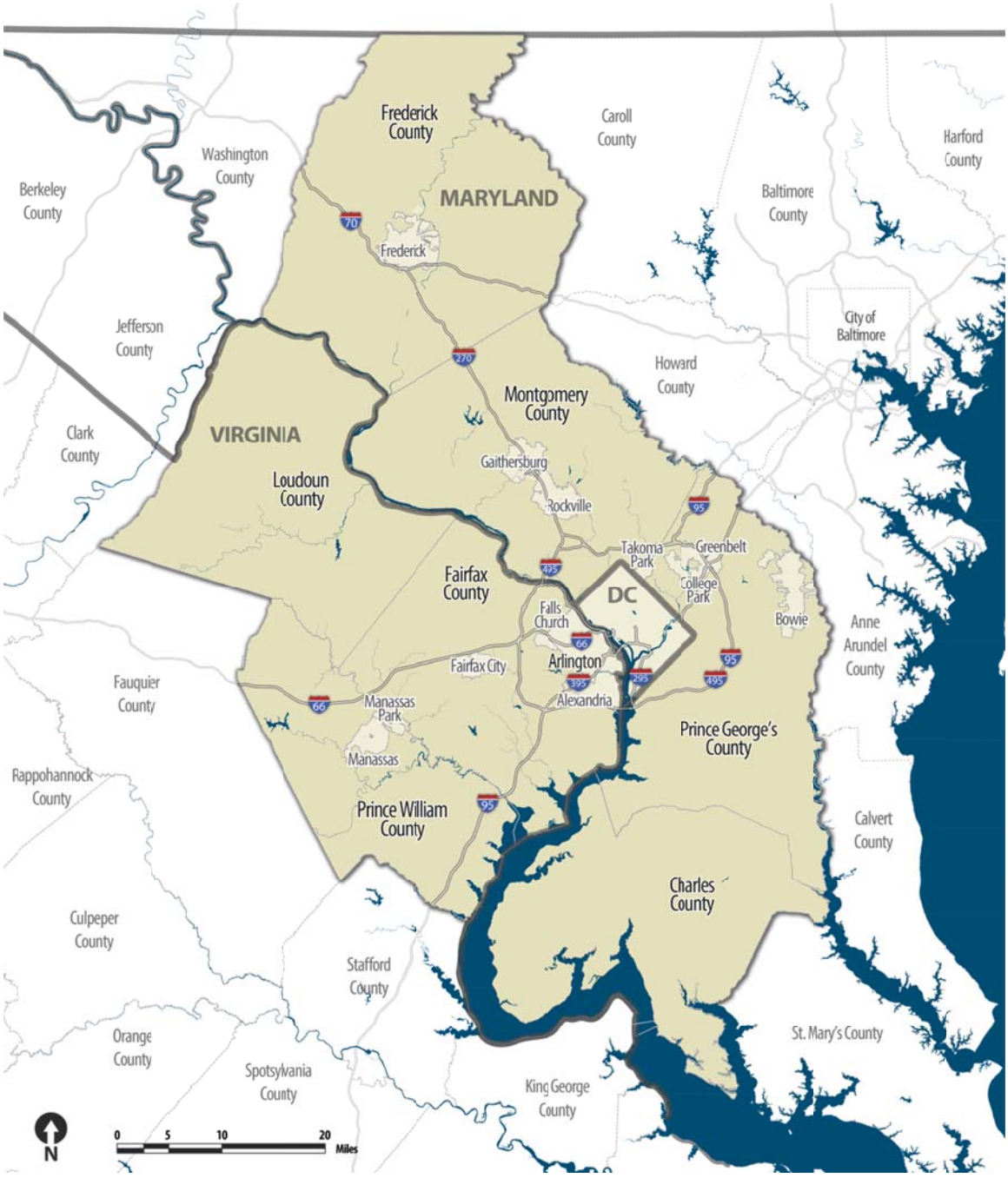


Figure 1-1: TPB Member Jurisdictions

in Table 1-1.

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

Goal 1. The Washington metropolitan region's transportation system will provide reasonable access at reasonable cost to everyone in the region.

Objective 4: Convenient **bicycle and pedestrian** access.

Strategy 3: Make the region's transportation facilities safer, more accessible and less intimidating for **pedestrians, bicyclists**, and persons with special needs.

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**.

Objective 2: Economically strong regional activity centers with a mix of jobs, housing, services, and recreation **in a walkable environment.**

Objective 4: Improved internal mobility with reduced **reliance on the automobile** within the regional core and within regional activity centers.

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.

Objective 3: Increased transit, ridesharing, **bicycling and walking** mode shares.

Strategy 7: Implement a regional **bicycle/trail/pedestrian plan** and include **bicycle and pedestrian facilities** in new transportation projects and improvements.

Region Forward 2050

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

The Council of Governments is a regional organization of Washington area local governments. COG comprises 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.

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.

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

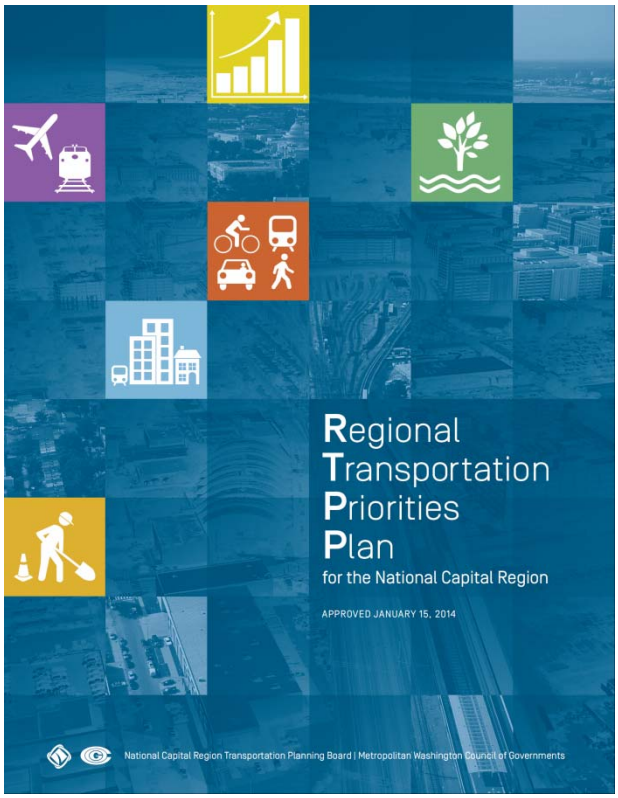
- Build sidewalks, bike lanes, and other improvements
- Narrower local streets
- Better crossings
- Lower speeds for vehicles on local streets and arterials
- More education and enforcement

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

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, not just 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.

As a follow-up action, TPB staff held an implementation workshop on Complete Streets for agency staff. Implementation of State and local Complete Streets policies in the Transportation Improvement Program, the regional information clearing house to provides 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.

Green Streets

In February 2012 the TPB adopted a voluntary regional Green Streets Policy. The policy defines a Green Street as an "alternative to conventional street drainage systems designed to more closely mimic the natural hydrology of a particular site by infiltrating all or a portion of local rainfall events". A green street uses trees, landscaping, and related environmental site design features to capture and filter stormwater runoff within the right of way, while cooling and enhancing the appearance of the street.

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

Air Quality and Greenhouse Gases

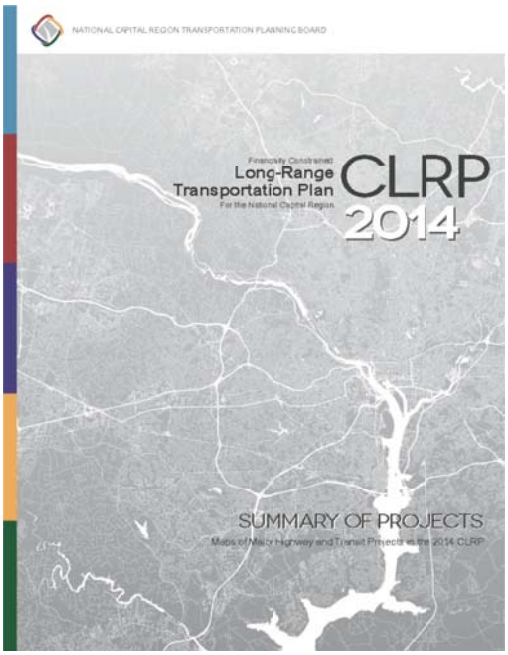
The region has been very successful in reducing emissions relating to Ozone. "Code Red" bad air days have fallen from 65 in 1999 to four in 2014. Total NOx (Nitrous Oxide) emissions from the region's transportation sector have fallen more than 70% since 1990, and that VOC (Volatile Organic Compounds) emissions have fallen more than 80%. These declines have come even as population has swelled some 40% and as total driving, measured in vehicle-miles traveled (VMT), has grown by a similar margin.

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

Walk and bike trips can help reduce greenhouse gas emissions. Bicycling is the most energy-efficient mode of transportation available, more efficient than walking. To the extent that the region can divert motorized trips to walking and bicycling, it can help reduce these emissions.

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 may under-estimate 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. 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 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 in the TIP, $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.

Bicycle and Pedestrian Subcommittee of the TPB Technical Committee

The Bicycle and Pedestrian Subcommittee of the TPB Technical Committee advises the TPB, TPB Technical Committee, and other TPB committees on bicycle and pedestrian considerations in overall regional transportation planning. It meets six times per year. One its most important functions is information exchange, at regular meetings, and at sponsored training events.

The Subcommittee also helps coordinate planning efforts which require inter-jurisdictional coordination. It is currently developing a vision for a regional circumferential bicycle route, or "bicycle beltway".

Transportation Safety Planning

The Bicycle and Pedestrian Subcommittee coordinates with the Transportation Safety Subcommittee of the TPB Technical Committee on issues relating to pedestrian and bicycle safety, including the Street Smart safety campaign, and the safety element of the Constrained Long Range Plan. TPB staff also participate in the State Strategic Highway Safety Planning processes.

Top Priority Unfunded Bicycle and Pedestrian Projects

The Bicycle and Pedestrian Subcommittee periodically identifies 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.

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.

The regional travel forecasting model is based on traffic analysis zones, which are large enough that many pedestrian and bicyclist trips begin and end within a single zone, and thus are not modelled. Adding many more traffic analysis zones, to capture more pedestrian trips, would make the model much more complicated and require more computing power. Also, pedestrian and bicyclist trips are likely to occur on local streets or paths that are not part of the modelled network. Therefore the travel forecasting model which MWCOG currently uses does not assign pedestrian or bicyclist trips to particular links in the transportation network, but only predicts in which traffic analysis zone in which they will start.

Other tools are available for modelling local walk and bike trips.

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.[1]

Americans with Disabilities Act

The ADA Requires that all New and Altered Pedestrian Facilities be made Accessible to the Handicapped

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.

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. [2]

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

MAP-21 and the Transportation Alternatives Progam

Under MAP-21 (Moving Ahead for Progress in the 21st Century Act) the federal

[1] Southworth, Michael and Eran Ben-Josesph, *Street Standards and the Shaping of Suburbia,* Journal of the American Planning Association, Volume 61, Number One, Winter 1995.
[2] American Council for the Blind, *Pedestrian Safety Handbook: A Handbook for Advocates.* www.acb.org

transportation legislation 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.

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

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

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 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 school, 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 now 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 are listed on the Transportation/Land-Use Connections program web site.

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 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.

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

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 was programmed for streetscaping and sidewalk construction, $4 million for Safe Routes to School, and a $3 million for 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.

Maryland programmed $4.6 million for ADA improvements. Maryland stimulus funds largely went to resurfacing and bridge rehabilitation projects, often on limited-access highways. 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

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

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 much to encourage walking and bicycling. District of Columbia Department of Transportation intends to create a "walk-centric, bike-centric" city. DDOT's 2010 "Action Agenda" called for

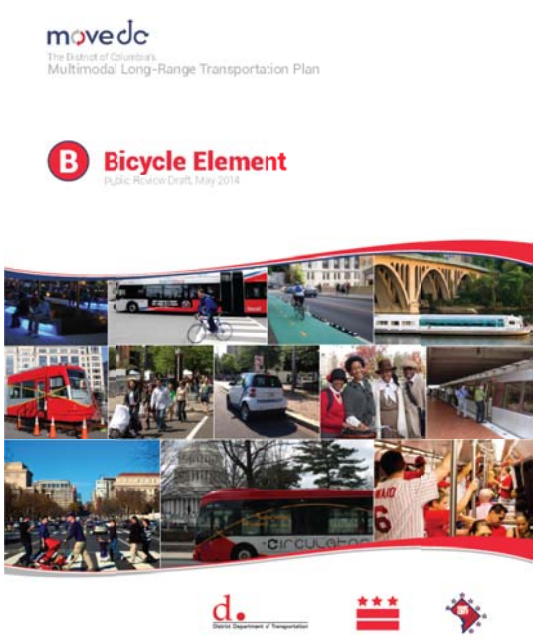
safety, sustainability, and increasing livability and prosperity by creating great spaces that are the "living room" of the city.

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

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

DDOT's strategy for shifting auto trips to transit, walk, and bike trips encompasses both transportation and land development elements. The District of Columbia 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**

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

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

- 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 outmoded 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.

Maryland will address the needs of all users, including pedestrians and bicyclists

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.

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 Faclitilies 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 requires "routine accommodation" of pedestrians and bicyclists in transportation projects

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

[3] www.virginiadot.org

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 new developments to connect with the surrounding streets

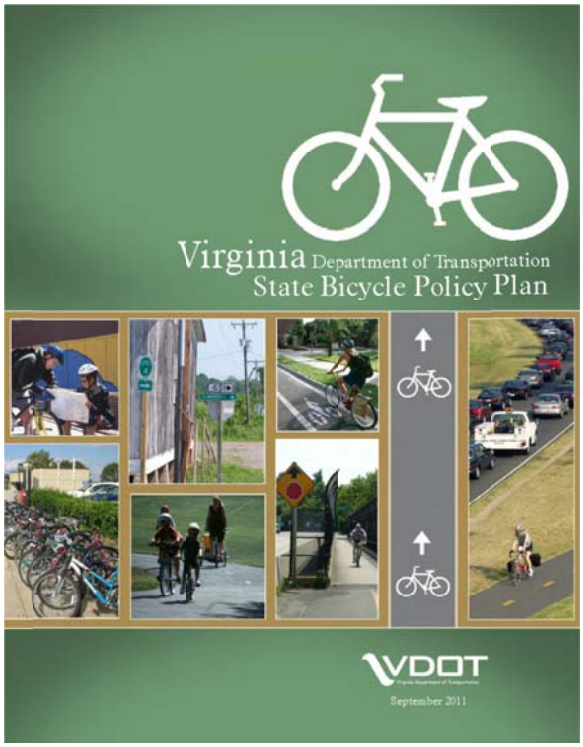
VDOT maintains all roads in Virginia outside of urban areas, including thousands of miles of residential streets originally built by developers. In view of the importance of secondary streets for vehicular, pedestrian, and bicycle movement, VDOT has revised its Secondary Street Acceptance Requirements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

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.

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 1-3:
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 Gaithersburg	Transportation Plan, Bikeways and Pedestrian Plan	2010, 1999
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 1-4:
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	1	0.5	0.5
City of College Park	0.5		
City of Frederick	0.5	0.5	
City of	0.5	0.5	

Rockville			
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	1	
Virginia Department of Transportation, Northern Virginia Office	1	1	

Safe Routes to School

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

In the Washington DC region, Safe Routes to School programs have flourished. The majority of school systems in the region have access to a Safe Routes to School coordinator either within the school district or in the department of transportation. In 2013, northern Virginia school districts gained four new coordinators due to a unique partnership between the Virginia Department of Transportation Safe Routes to School program and the Department of Education. This partnership utilized remaining Safe Routes to School funding from the 2005 federal transportation bill the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Table 1-5. Safe Routes to School Coordinators in the region

School District	Safe Routes to School Coordinator
Arlington County Public Schools	Full-time, school district
Alexandria City Public Schools	Contracted coordinator with school district 2008-2013, current designated point person for continuation of activities
District of Columbia Public Schools	Full-time, District Department of Transportation
Fairfax County	Full-time, school district
Frederick County	2010-2011, full-time, school district
Loudoun County	Full-time, school district
Montgomery County Public Schools	One full-time position, Montgomery County Department of Transportation and one part-time position, City of Takoma Park
Prince George's County Public Schools	Grant application pending, full-time, Prince George's County Department of Public Works and Transportation
Prince William County Public Schools	Full-time, school district

All school districts have schools that have registered for either Bike to School Day in May or Walk to School Day in October.

Table 1-6. Schools Registered for Walk to School Day (WTSD) and Bike to School Day (BTSD), 2012-2014

	2012	2013		2014
	WTSD	**BTSD**	**WTSD**	**BTSD**
Arlington County Public Schools	11	13	20	8
Alexandria City Public Schools	4	31	4	31
District of Columbia Public Schools	22	17	22	16
Fairfax County	14	35	29	32
Falls Church City Public Schools	2		5	
Frederick County	4	2	2	1
Loudoun County	3		16	10
Manassas City Schools	1		3	1
Montgomery County Public Schools	15	2	43	9
Prince George's County Public Schools	4	1	3	0
Prince William County Public Schools	3	0	16	2
Total	**83**	**101**	**163**	**110**

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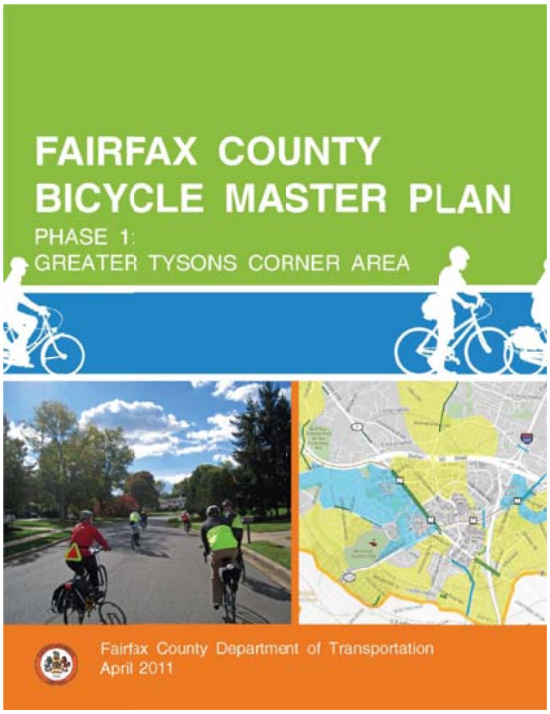
Safe Routes to School leadership comes from many different places. In 2013 and 2014, BikeArlington coordinated Bike to School Days at all 31 Arlington Public Schools. In Fairfax County Public Schools, parents in the Town of Vienna have coordinated weekly and monthly Safe Routes to School activities including an annual Walk/Bike Challenge. In 2014, more than 5,400 students at seven elementary schools participated.

In 2012, the City of Takoma Park won national recognition from the Oberstar Award Committee for their comprehensive Safe Routes to School program.

The first Safe Routes to School regional meeting was held in October 2013 with more than 70 Safe Routes to School, transportation, health, school and planning professionals as well as parents and advocates. This is an opportunity to share information and best practices across the region and provide a learning opportunity for those interested in Safe Routes to School.

The Bicycle and Pedestrian Subcommittee and the Safe Routes to School Regional Partnership co-sponsor an annual Safe Routes to School regional workshop. The most recent workshop was held in October 2014 with more than 70 Safe Routes to School, transportation, health, school and planning professionals as well as parents and advocates. These workshops provide an opportunity to share information and best practices across the region.

Metrorail Silver Line



Since 2010 one of the most significant changes in the region has been the extension of the Metrorail to Tysons Corner and Reston in Fairfax County. This Metrorail extension is generating new, walkable development. A future phase of the project will extend the line to Dulles Airport and beyond.

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.

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

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 long builds fences to keep pedestrians out of its rail stations.

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 and staff 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

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 stabilized. 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

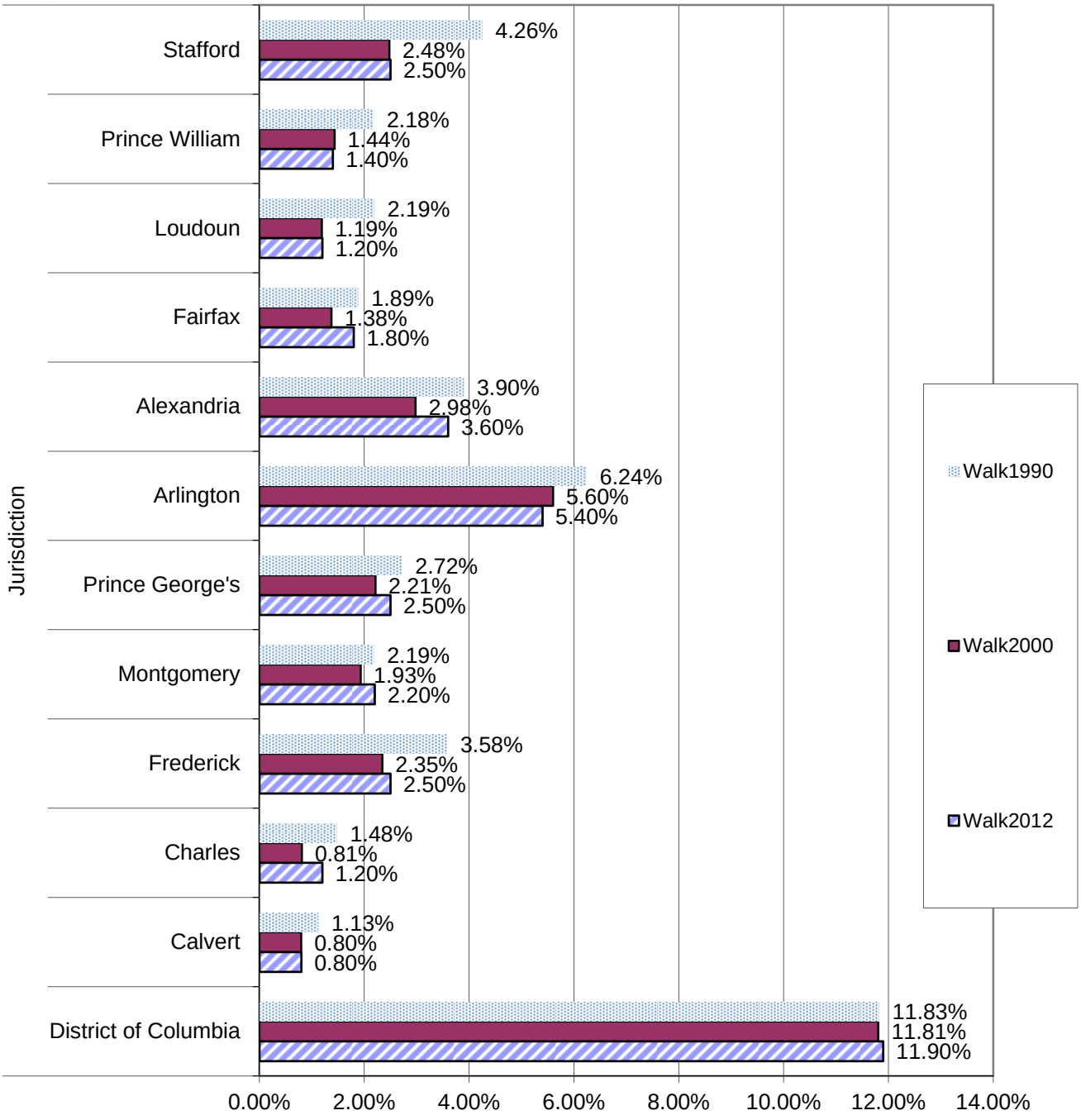
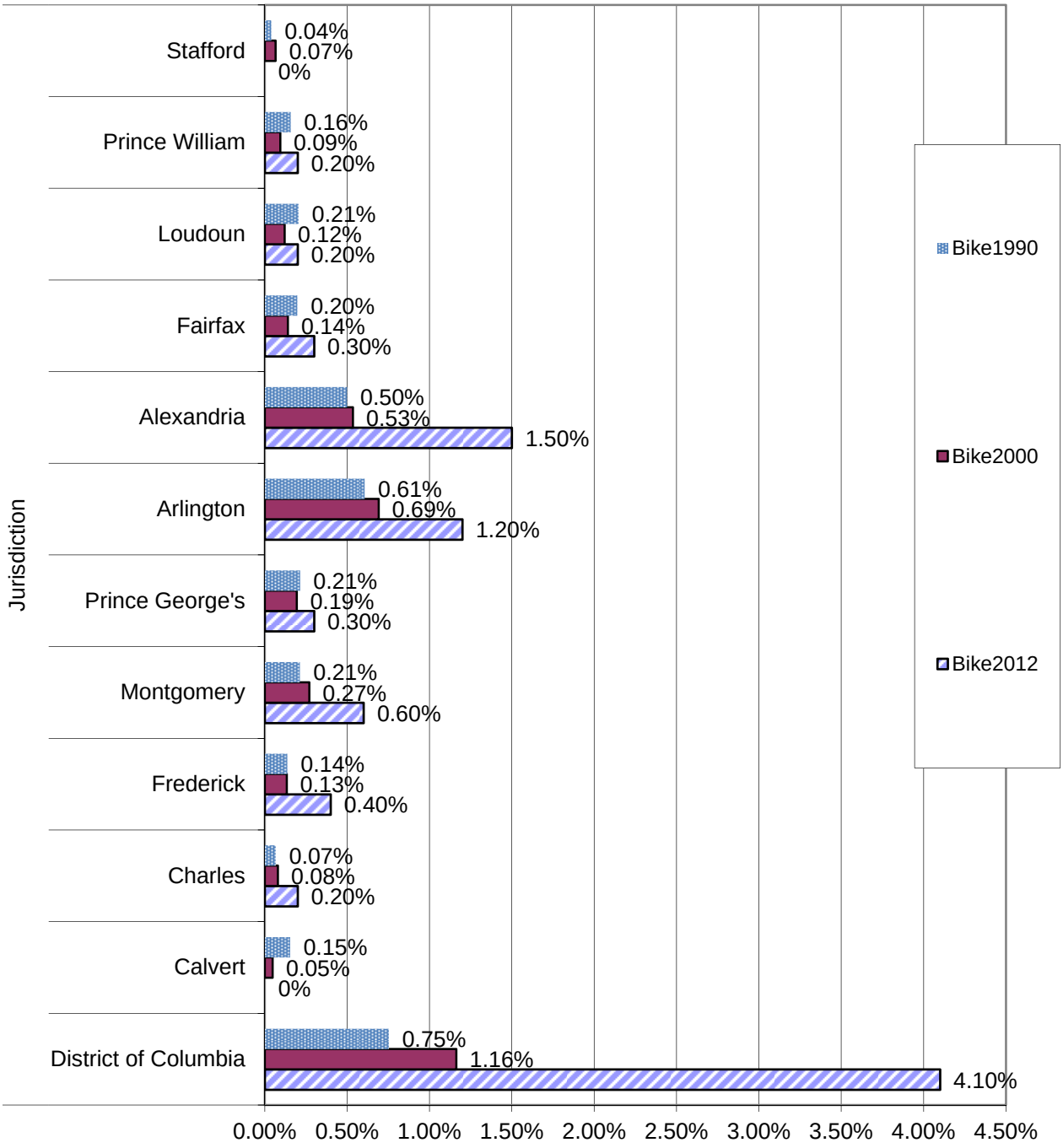


Chart 2-15: Percentage of Workers Biking to Work



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.

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

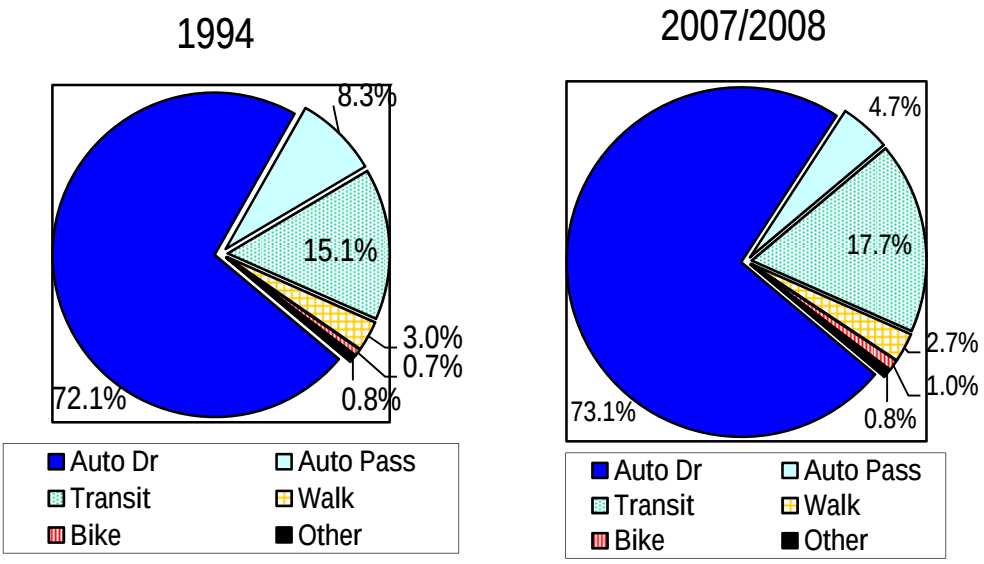


Chart 2-2: Walk Commute Share by Jurisdiction

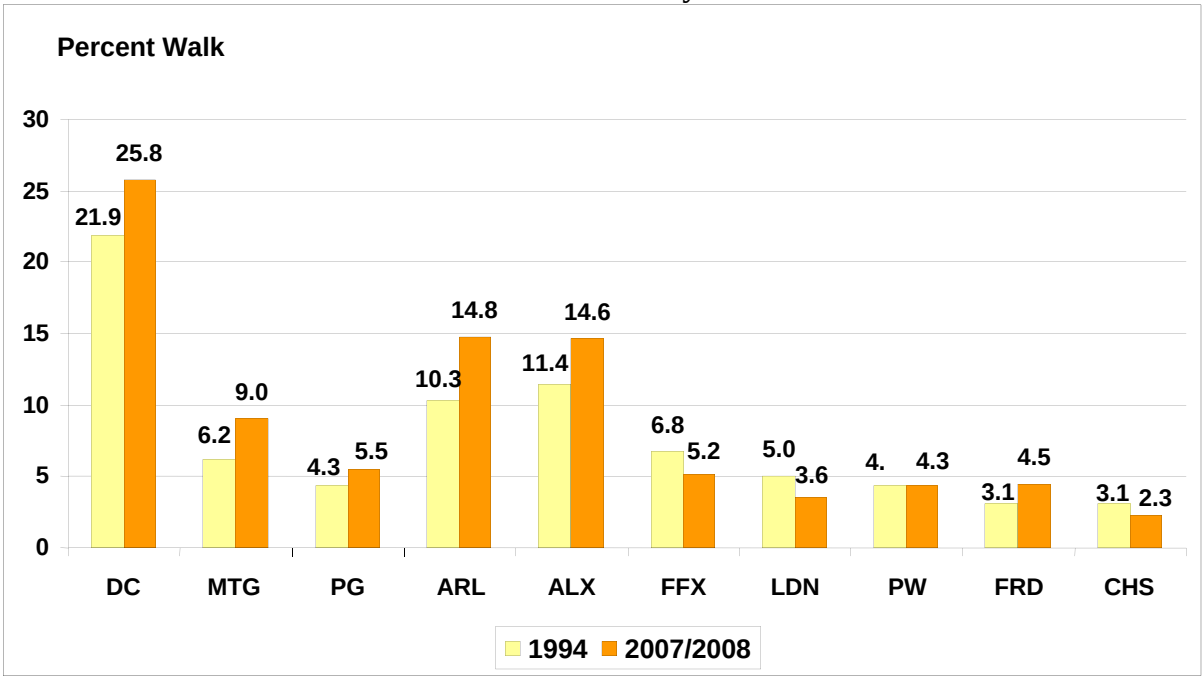
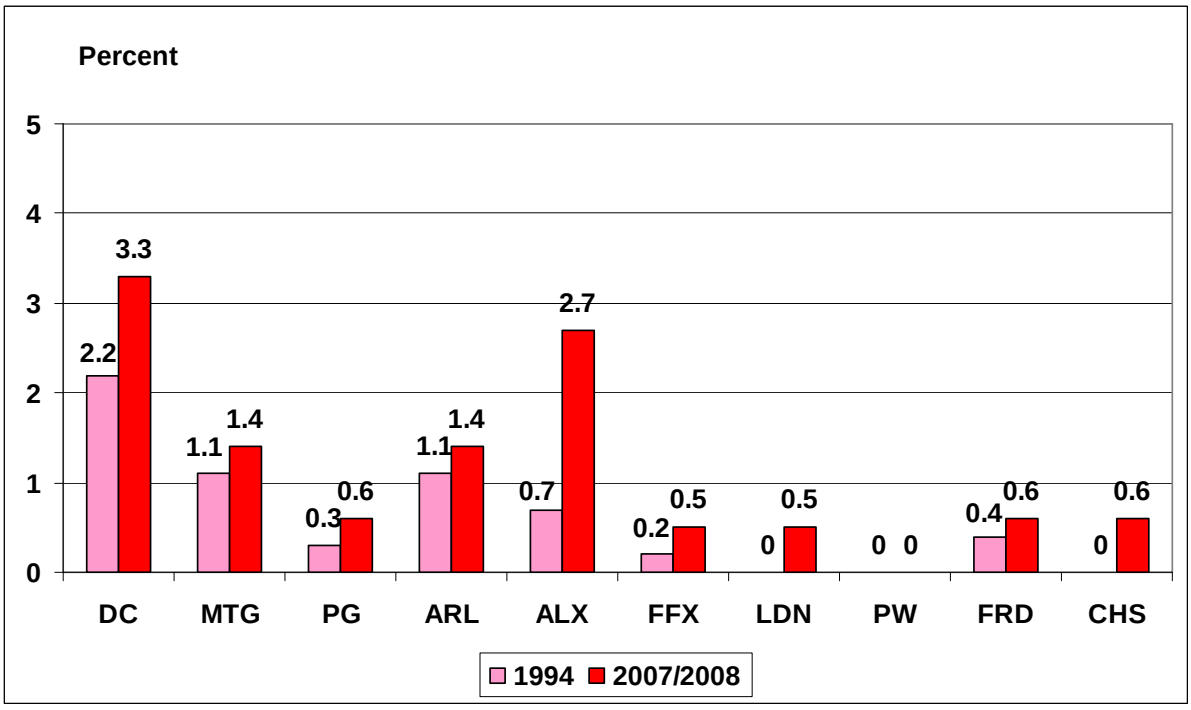


Chart 2-3: Bike Commute Mode Share by Jurisdiction



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.

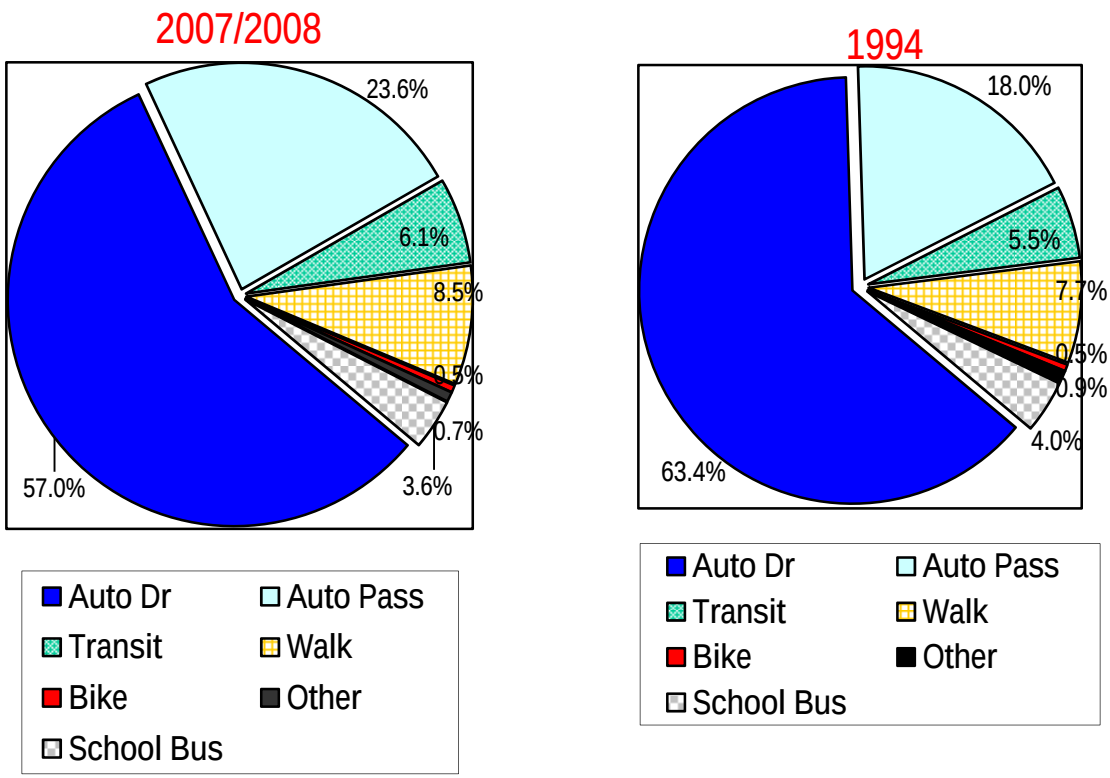
Bike commuting grew in most jurisdictions from a low base, with the biggest increases in the District of Columbia and Alexandria.

Mode Share Trends for All Trips in the Washington Region

Commute 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.

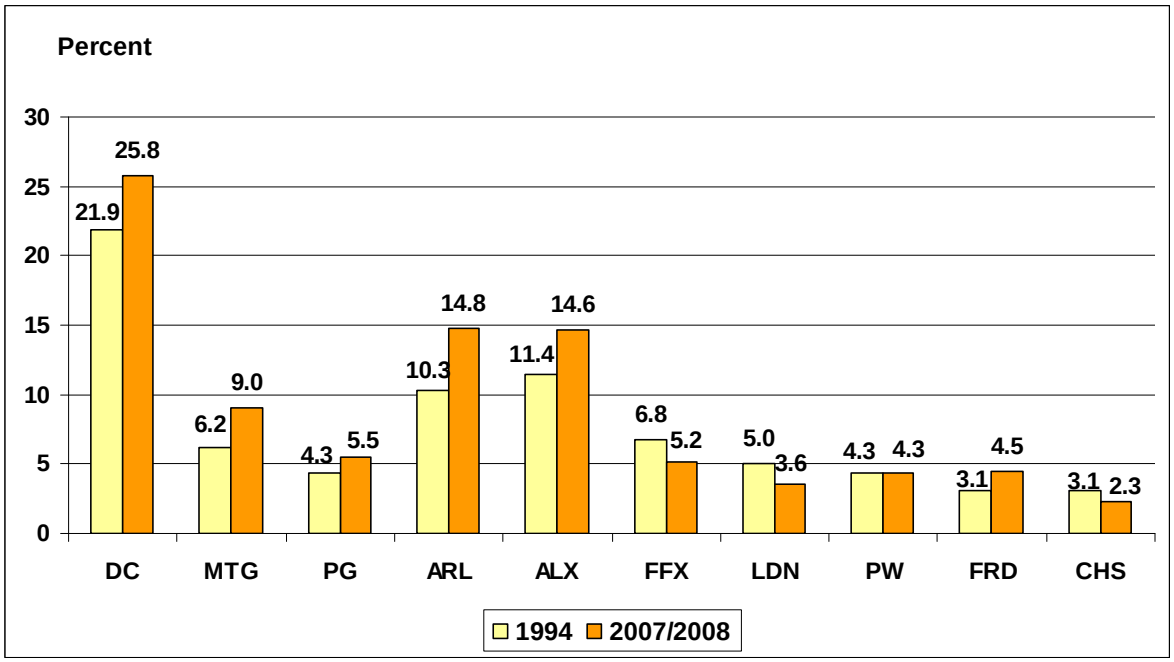
Chart 2-4: Mode Share for All Trips



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)

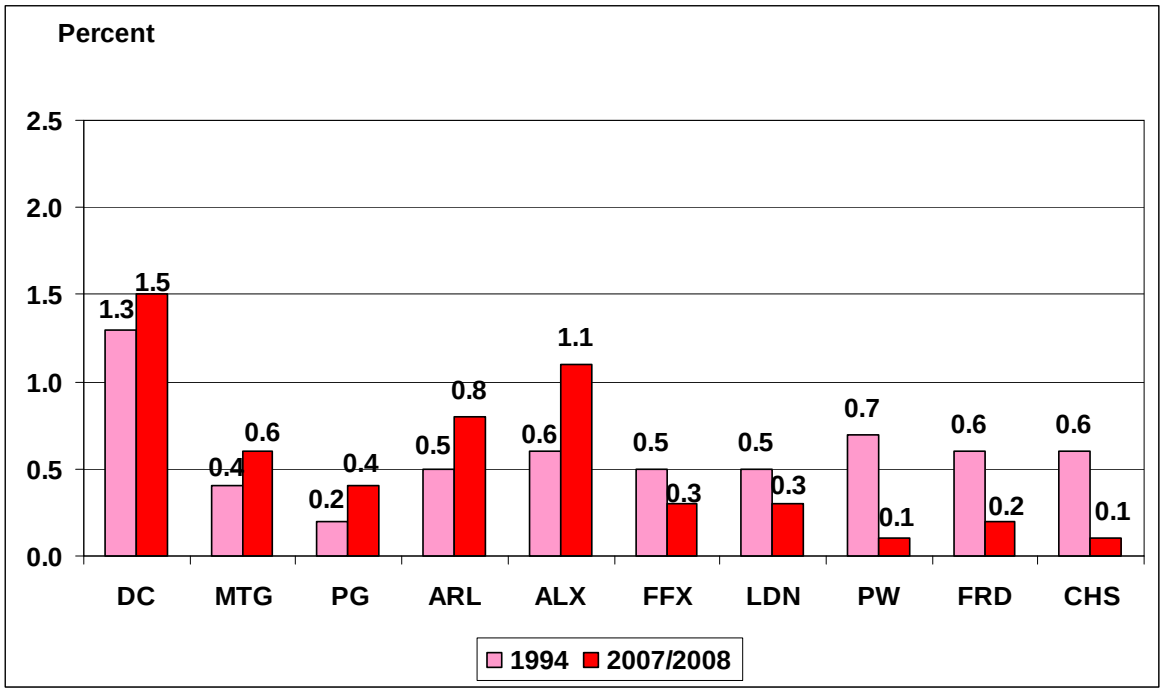


Bike mode share grew in the urban core, but fell steeply from low starting levels in the outer surburban counties. .Growth in bicycling in the core has been offset by an equal decline in the outer suburbs, adding up to zero growth at the metropolitan level. The outer counties have experienced greatly 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, 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 2-7: Daily Trips by Trip Purpose

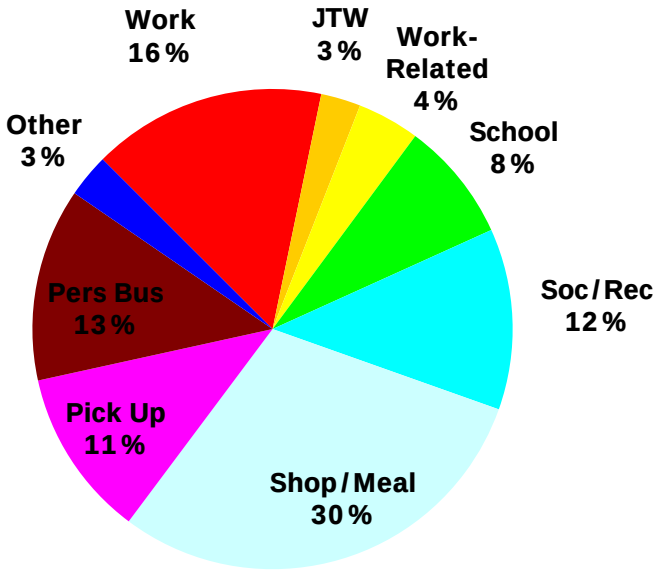
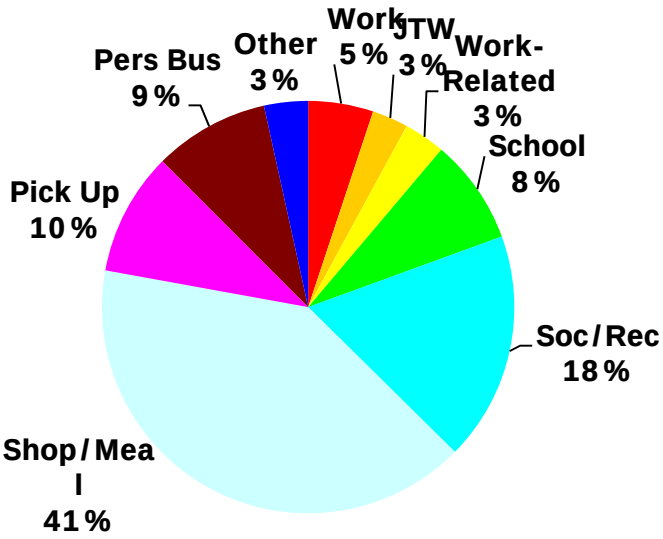
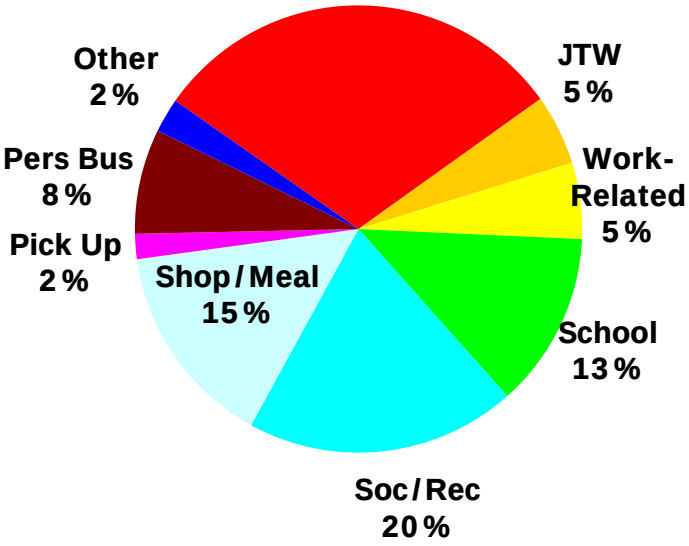


Chart 2-8: Walk Trips by Purpose



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)

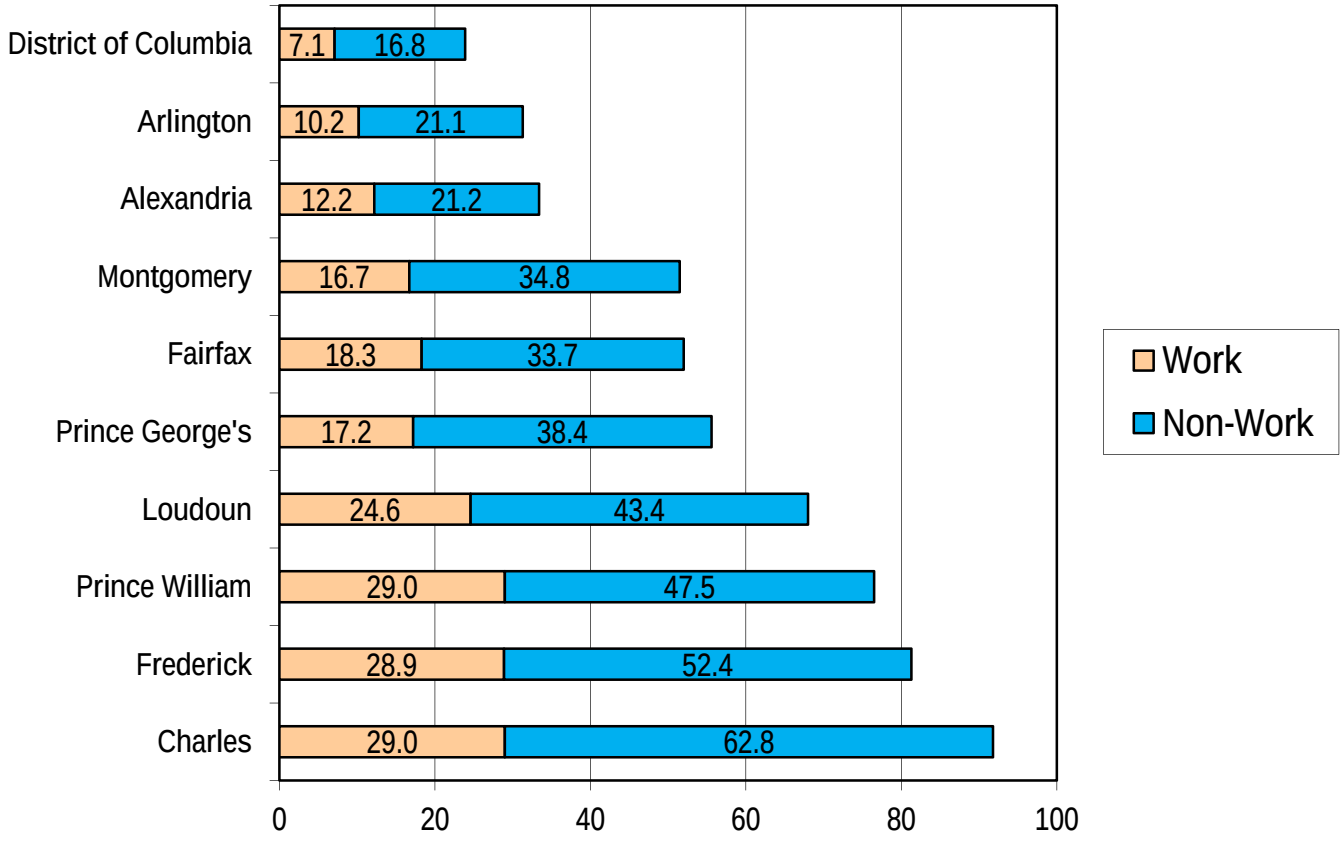
Mode	25%	Median	75%	90%
Auto Driver	1.5	4.0	9.7	18.7
Auto Passenger	1.2	2.8	6.4	12.9
Transit	3.5	6.9	14.1	23.4
School Bus	1.2	2.3	4.6	8.2
Walk	0.1	0.3	0.5	0.9
Bike	0.8	1.5	4.1	7.3

Average Daily Miles Traveled By Jurisdiction

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

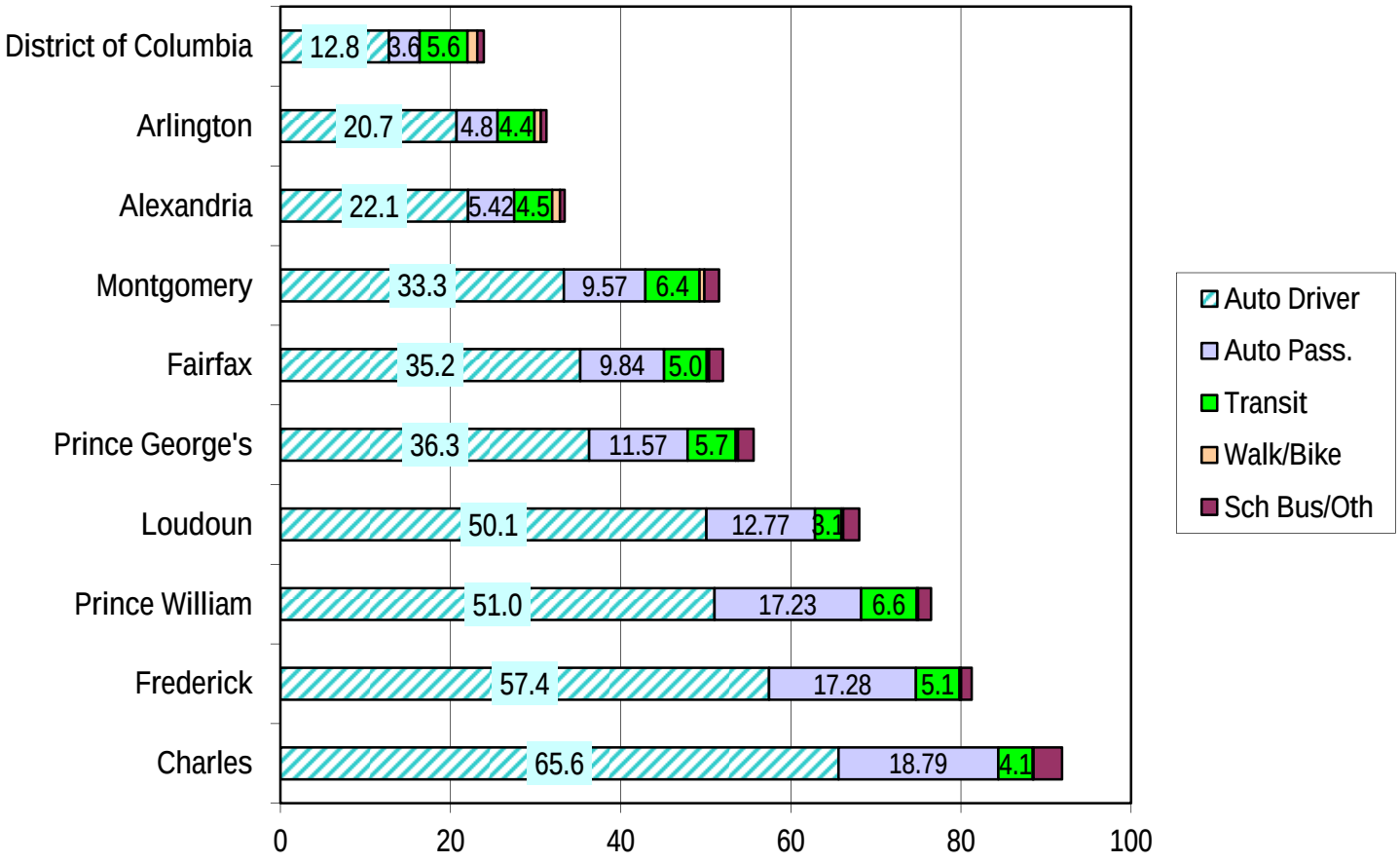
makes seven trips per day and travels 23.9 miles, while the average Charles County household makes nine trips per day, and travels 91.8 miles, or nearly four times as far.

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

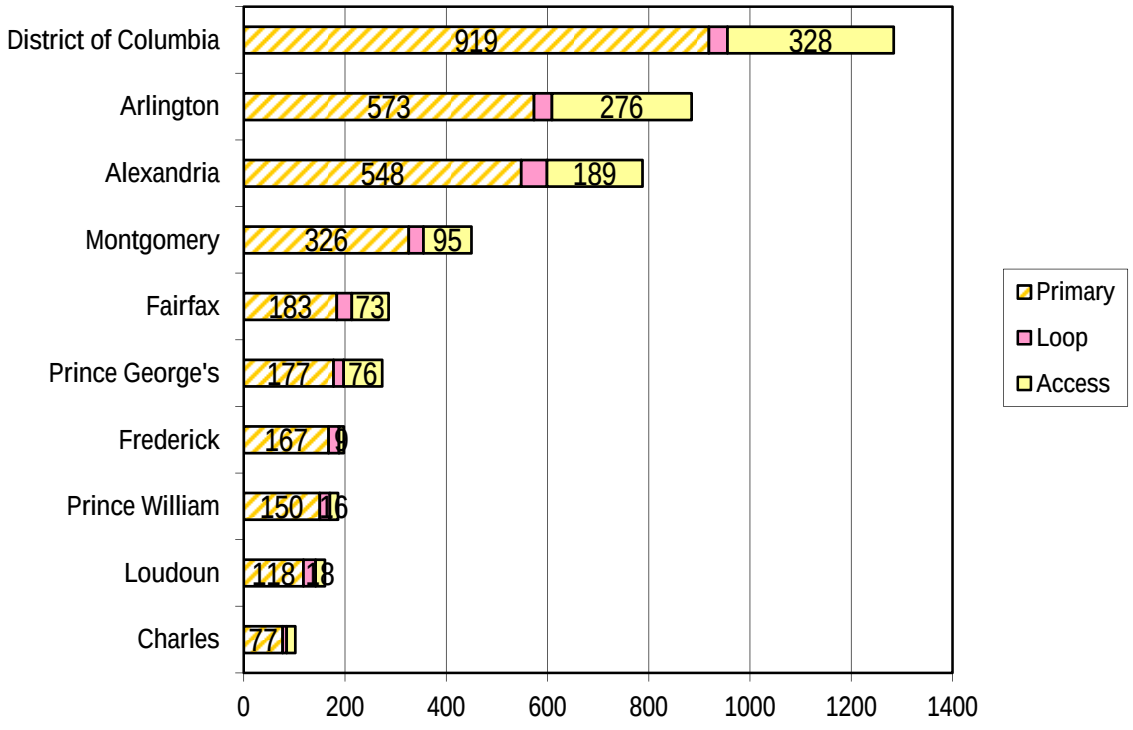
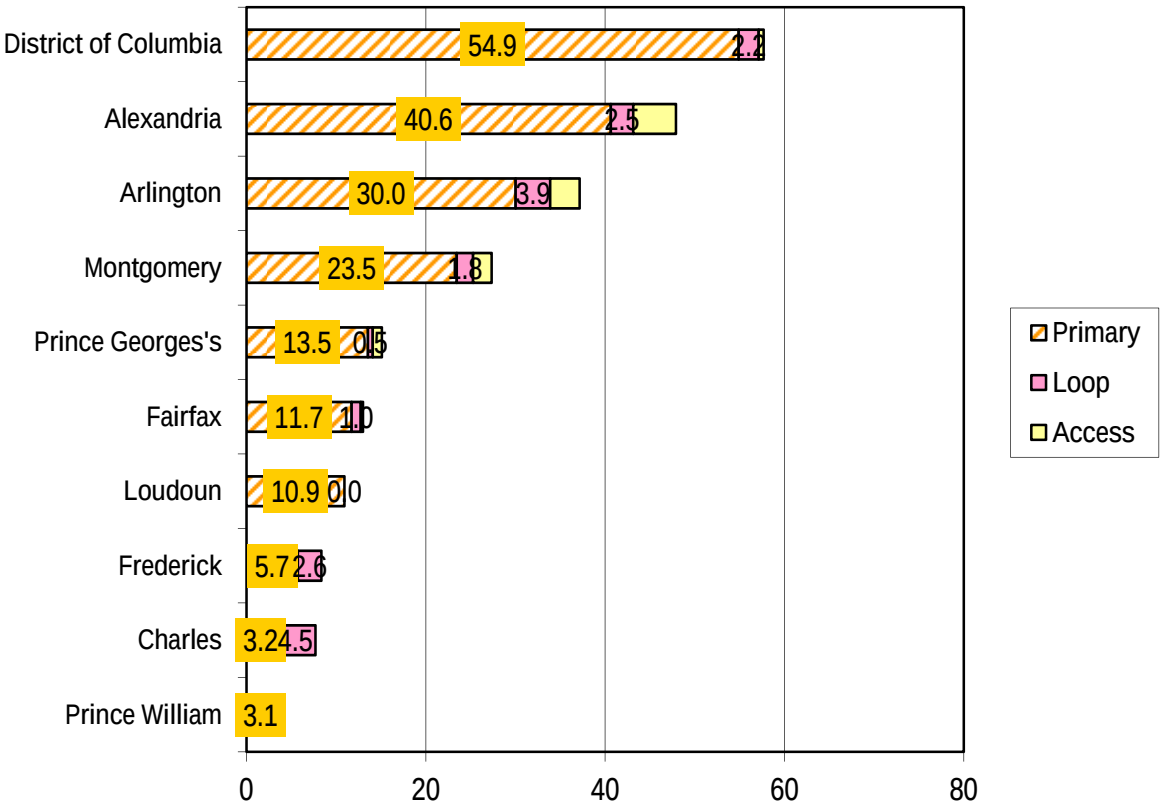


Chart 2-13: Weekday Bike Trips by Jurisdiction of Residence and Type Per 1,000 Population in Households



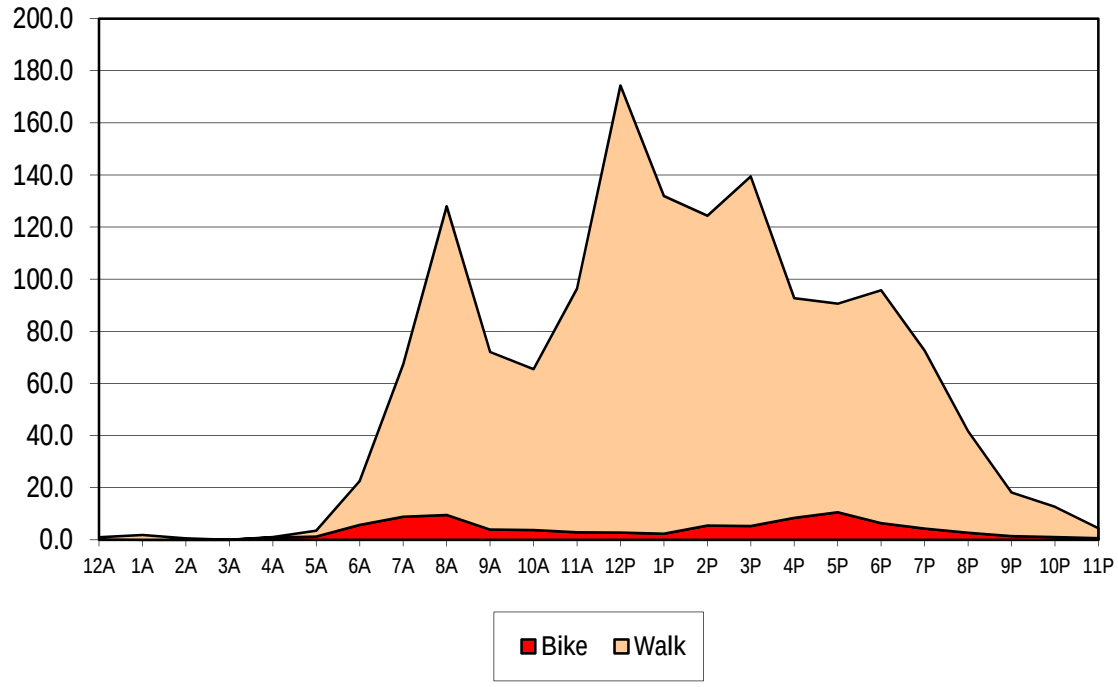
While DC residents are most likely to bicycle, Alexandria and Arlington are most likely to use bicycle to access Metrorail. Charles County has the highest rate of "loop" bicycle trips.

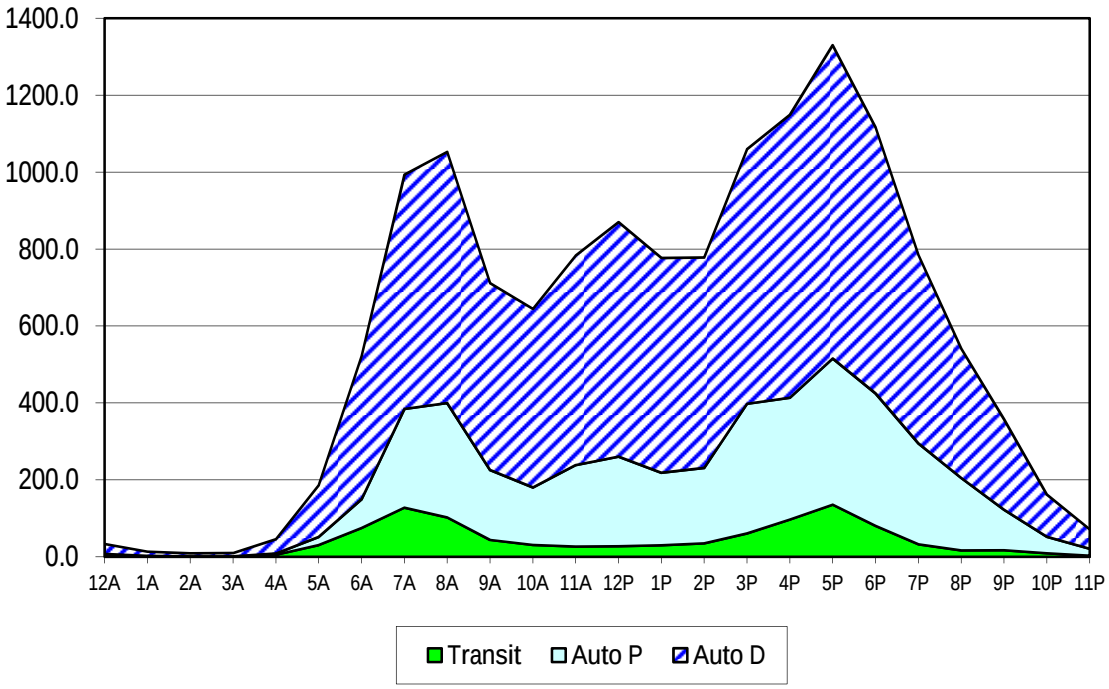
Walking and Bicycling by Time of Day

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





Walking and Bicycling in the Geographically Focused Household Travel Surveys

As a follow-up to the 2008 regional Household Travel Survey, COG/TPB carried out a series of household surveys in geographically focused areas around the Washington region. These case studies addressed a need expressed by local planners, to provide some small area community-level socio-economic data that are no longer available from the Decennial Census

The project sought to analyze daily travel behavior in communities with different densities, physical characteristics and transportation options, including Regional Activity Centers, and eventually track changes in behavior over time. Data on 17 focused areas have been collected so far.

Chart 2-16: **Commute Mode Share** 2010/2011
In Selected Neighborhoods in the Washington Region

		Drive Alone (SOV)	Carpool (HOV)	Transit	Walk	Bike	Other
Core	Logan Circle	21%	4%	28%	33%	10.6%	2%
	Crystal City	22%	4%	53%	19%	0.7%	2%
Inner	Largo	70%	11%	13%	3%	2.8%	--
	Reston	70%	17%	8%	3%	0.7%	2%
Outer	Woodbridge	76%	13%	8%	1%	0.3%	2%
	Frederick	78%	12%	4%	4%	1.5%	--

Logan Circle had by far the most walking and bicycling of the neighborhoods surveyed. Density, proximity to transit, distance to the central business district, and urban design appear to affect mode choice.

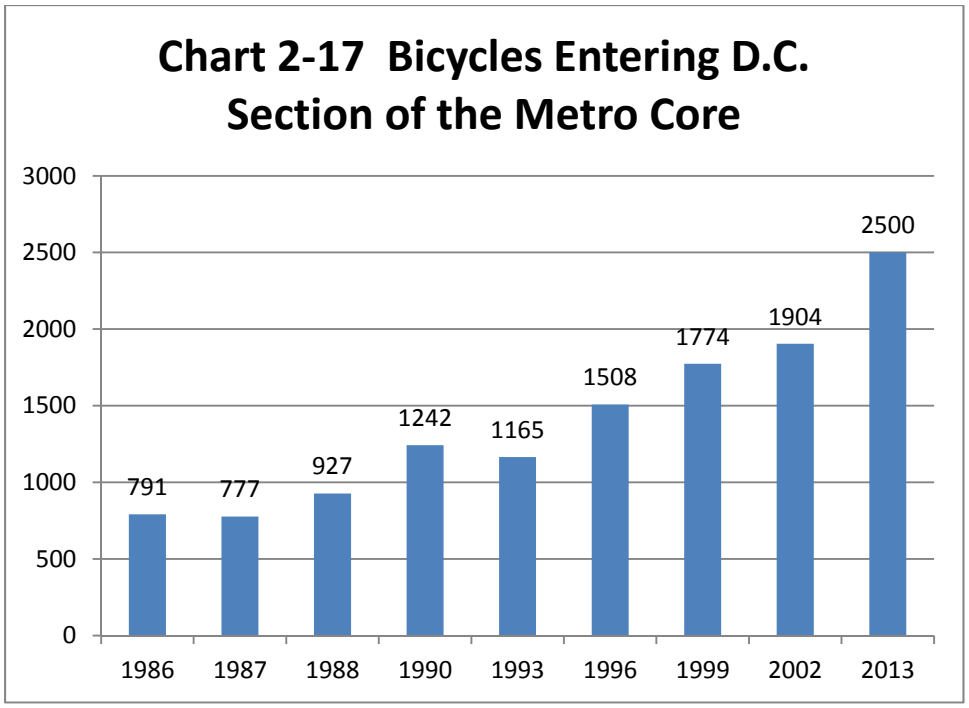
Bicycling in the Metro Core Cordon Counts

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. 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.

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

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.

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.

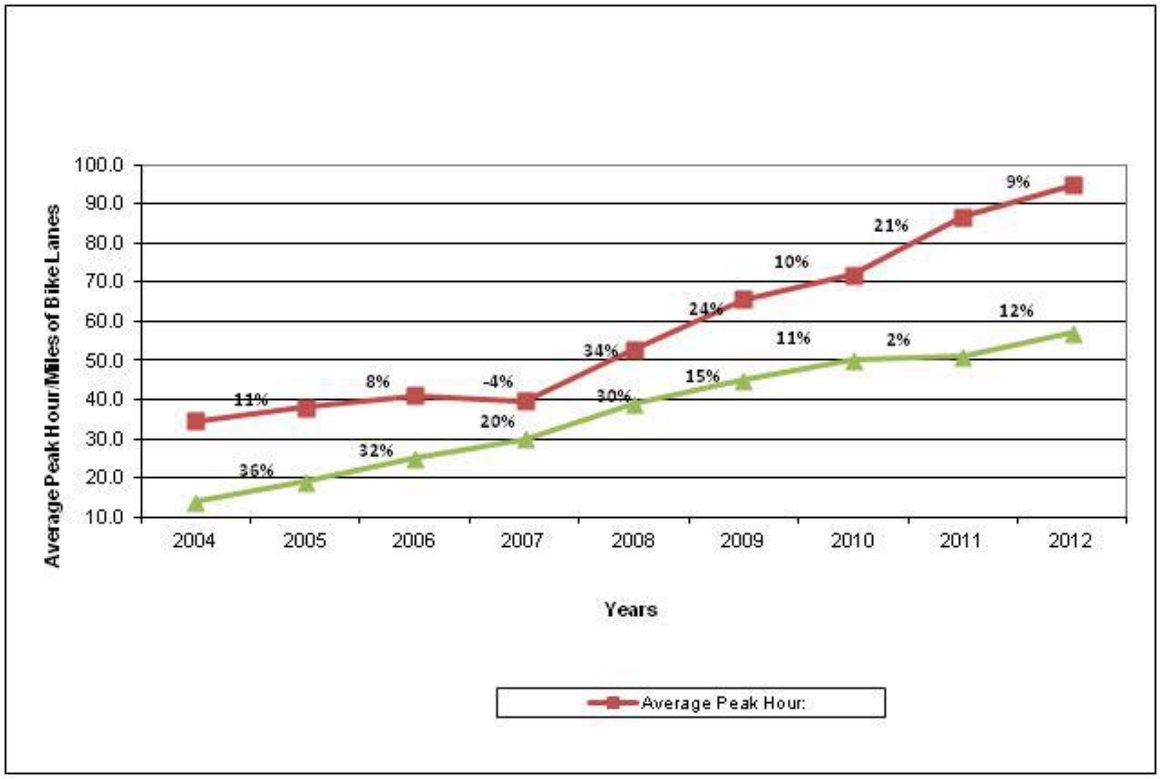


District of Columbia Bicycle Counts

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 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

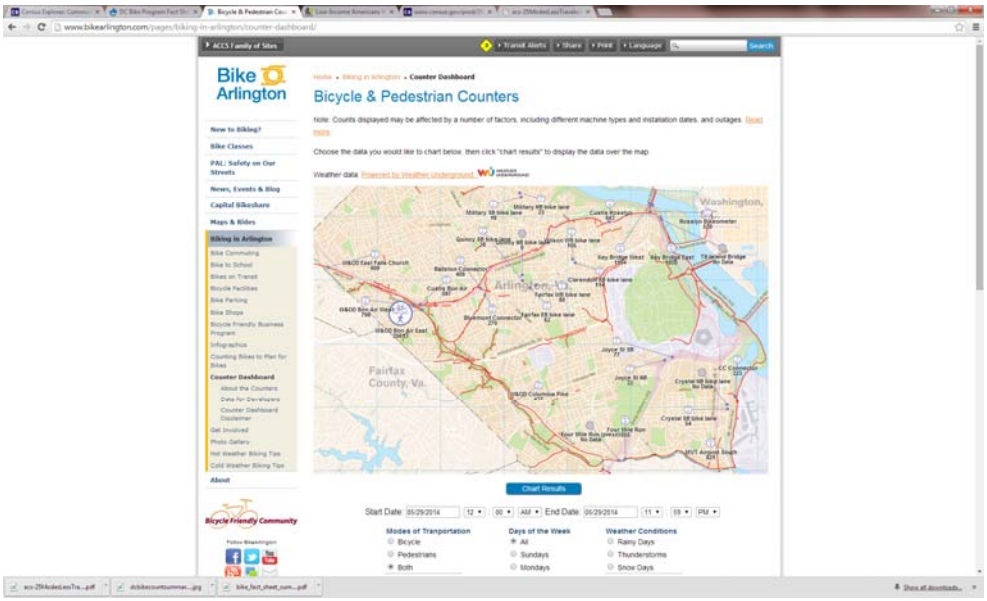
Manual counts have a number of disadvantages, notably cost, an inherently limited time window, unrepresentative counts due to weather events, and a lack of data on cyclists' and pedestrians' off-peak presence. There is strong interest among planners in automated bicycle and pedestrian counters.

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.



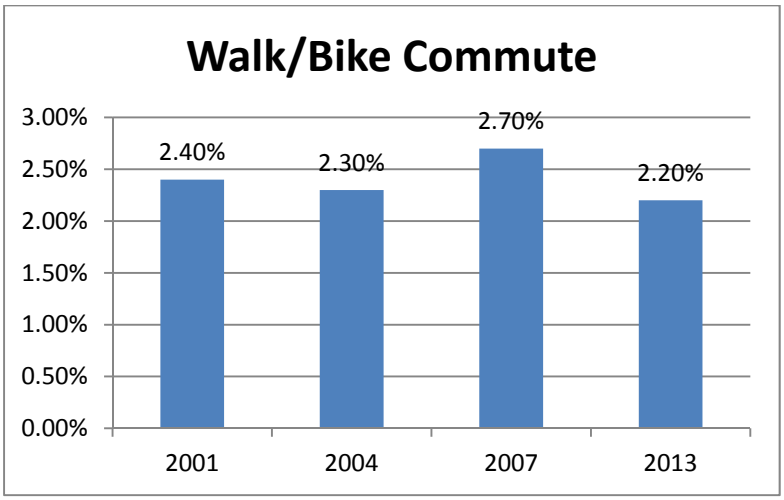
Demographic Characteristics of Pedestrians and Bicyclists

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.

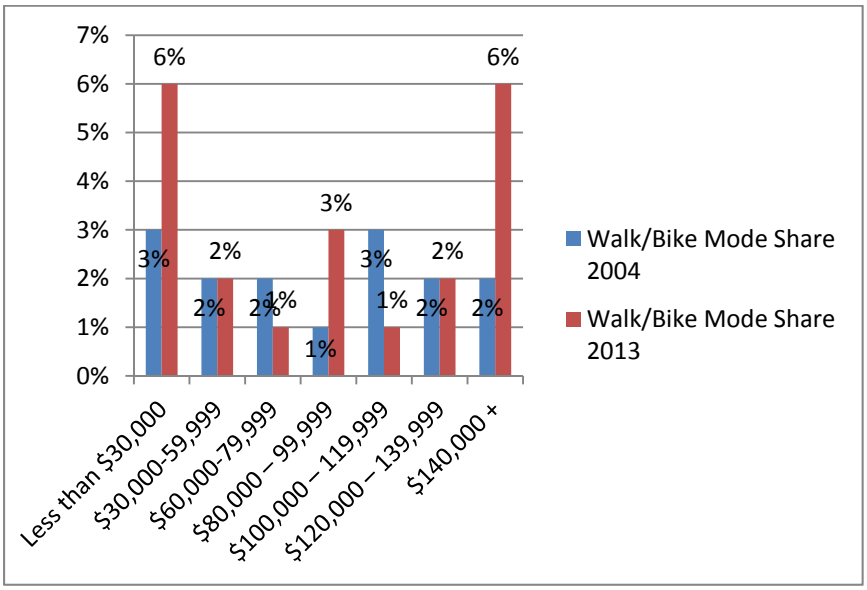
Chart 2-19: Walk/Bike Commute Mode Share



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.

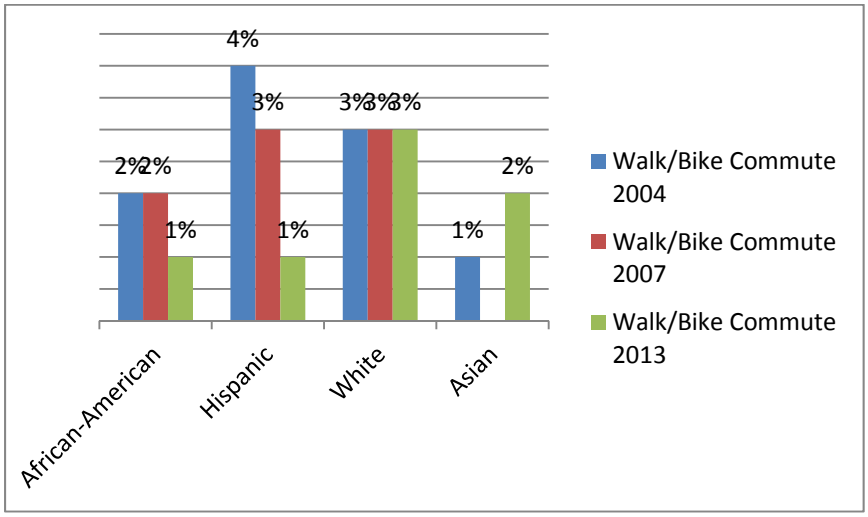
Chart 2-20: Walk/Bike Mode Share by Income



B. Ethnicity

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

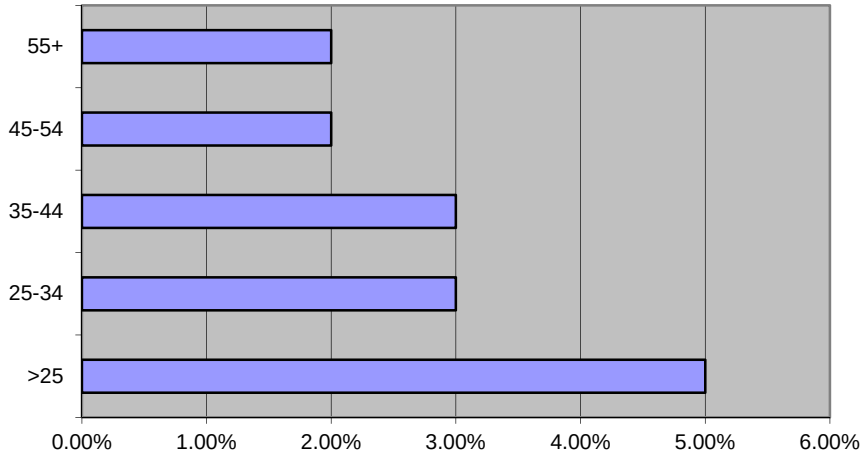
Chart 2-21: Walk/Bike Commute Mode Share by Ethnicity



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 of mode share, 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	11.4%	3.7%	1.2%	2%

Share 2004				
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

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.

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.

Appendix E shows mode of access to Metrorail by station.[5]

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

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.

62% of Metrorail Passengers Walk to the Station

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.

5 2012 WMATA Rail Passenger Survey,from the table "Origin Station by Mode of Access".

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

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.[6]

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

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

31 stations.[7] 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.

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

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 often 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.

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

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.[8] Under "Complete Streets" policies new development should accommodate pedestrians and bicyclists.

The most prominent example of this trend is the planned transformation of Tysons Corner, a classic auto-oriented commercial center, into a walkable downtown built around Metrorail.

If growth occurs in ways that are consistent with the TPB *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.

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

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 Nationally

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

Pedestrians over age 75 are at high risk

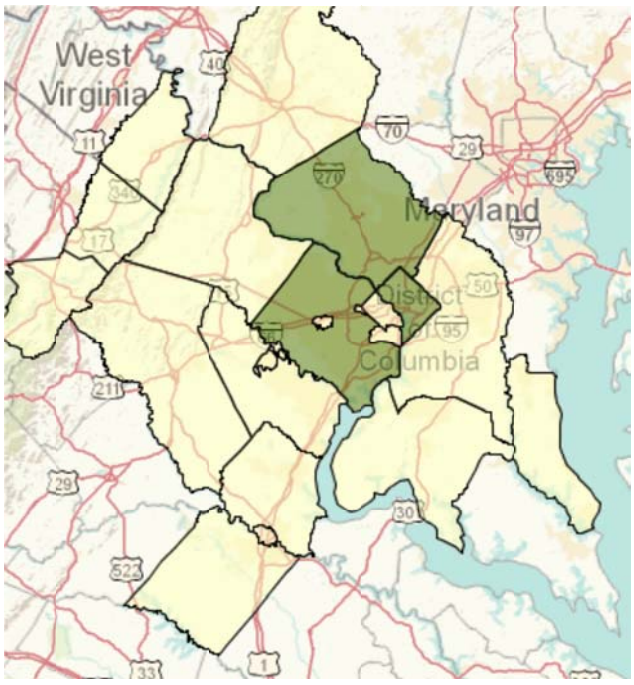
American Indians, Blacks, Hispanics, and people over the age of 65 are over-represented among pedestrian fatalities relative to their share of the population.

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]

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



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

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

traffic fatalties.[i3]

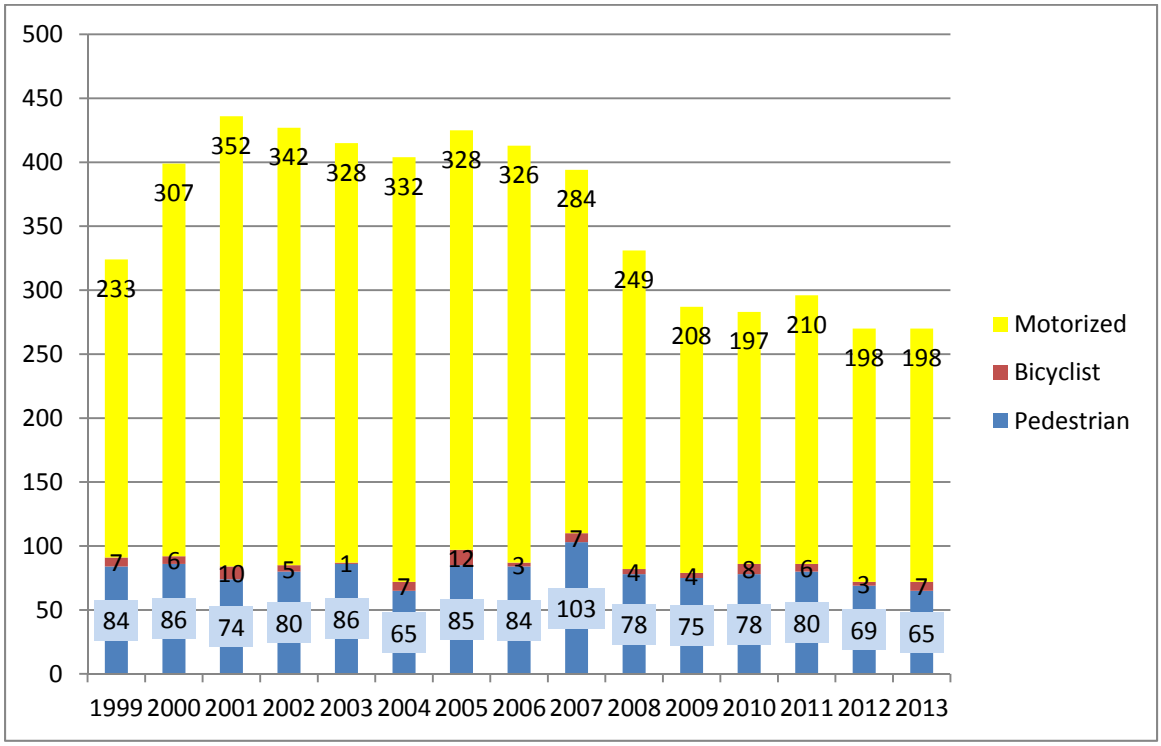
Fatalities in the TPB Member Jurisdictions

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

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 fatalties, and five bicyclist fatalities per year in the Washington region.[4]

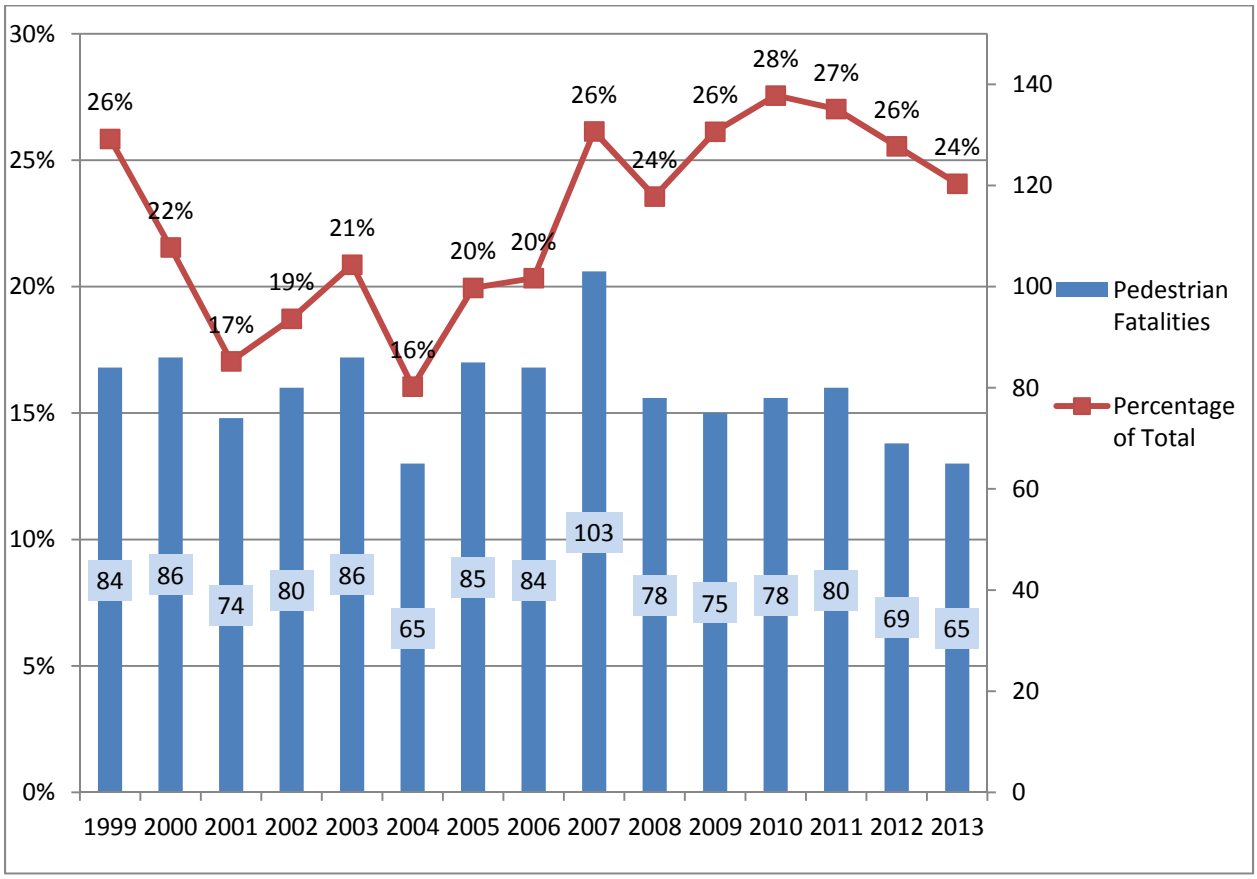
Chart 3-1 shows the yearly variations in traffic fatalities from 1999-2013. Motorized traffic fatalities have declined sharply since 2006, while pedestrian and bicyclist fatalities have declined only slightly, from 87 to 73. The *proportion* of total fatalities that are pedestrian or bicyclist has risen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



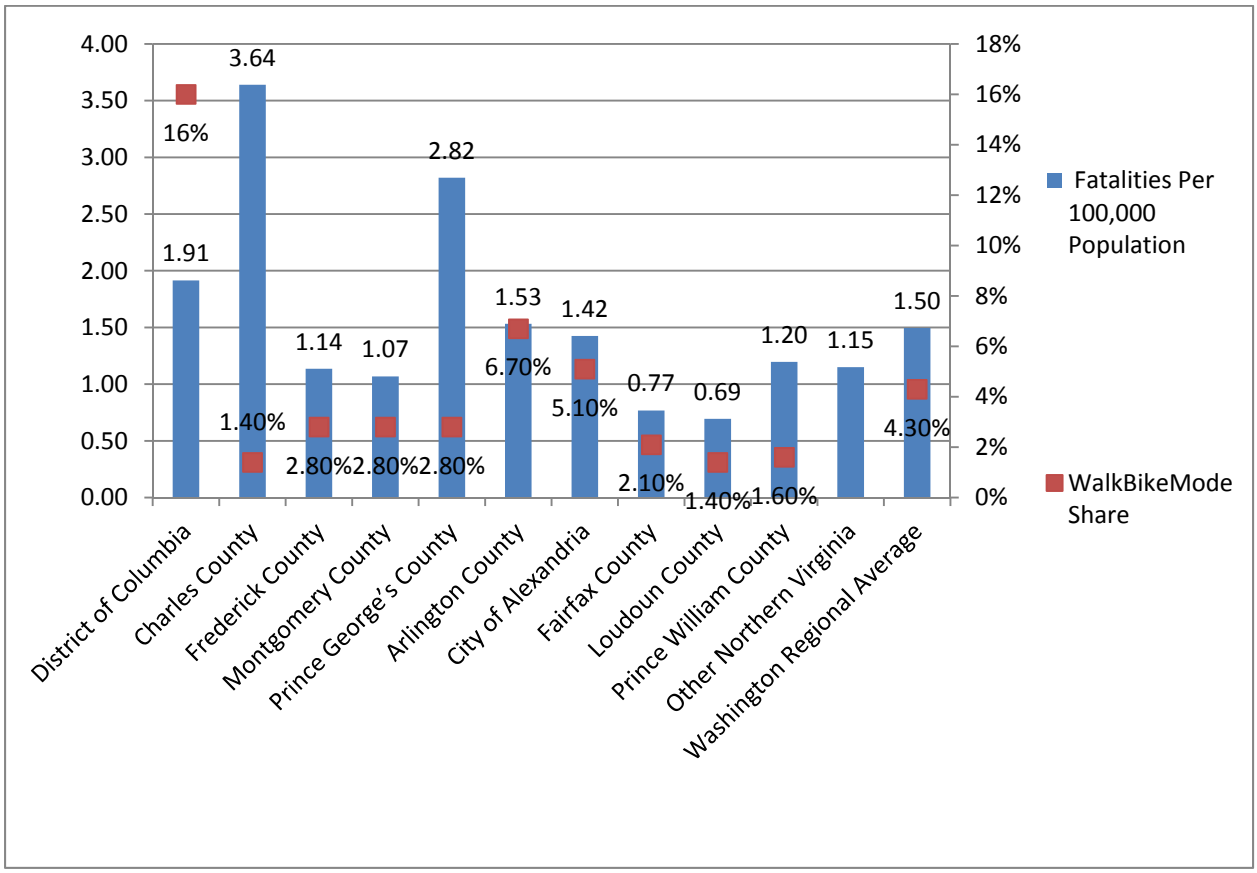
Pedestrian and Bicyclist Fatalities by Jurisdiction

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 independent 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.

[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



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	5	**2**
Montgomery County	20	17	11	16	12	15	11	15	17	16	12	15	10	8	13	**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	0	**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**

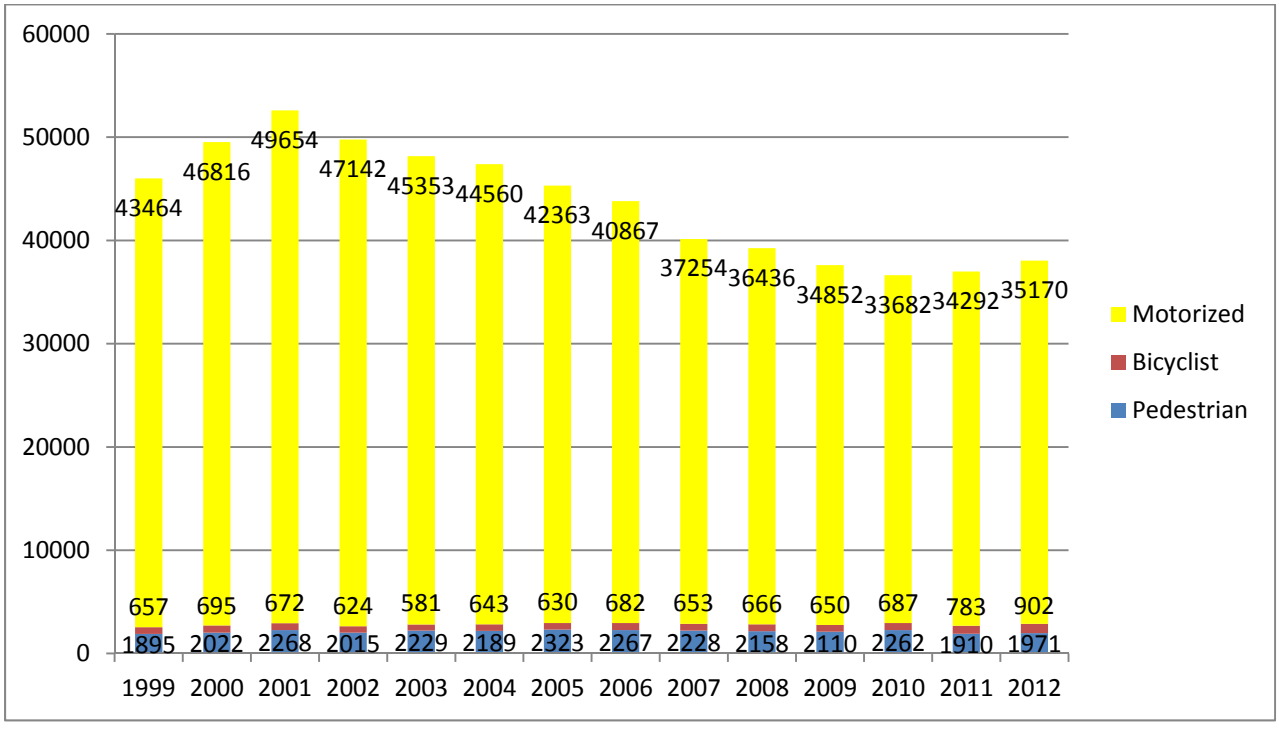
Injuries

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

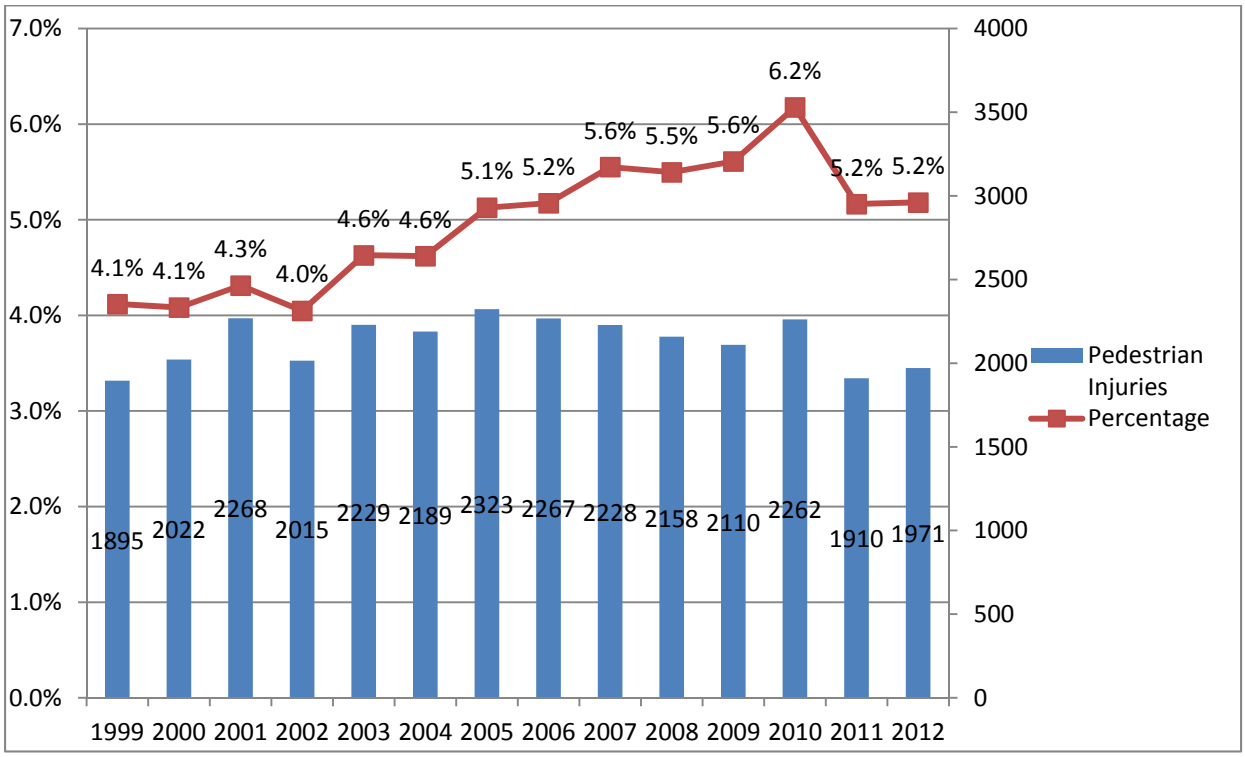
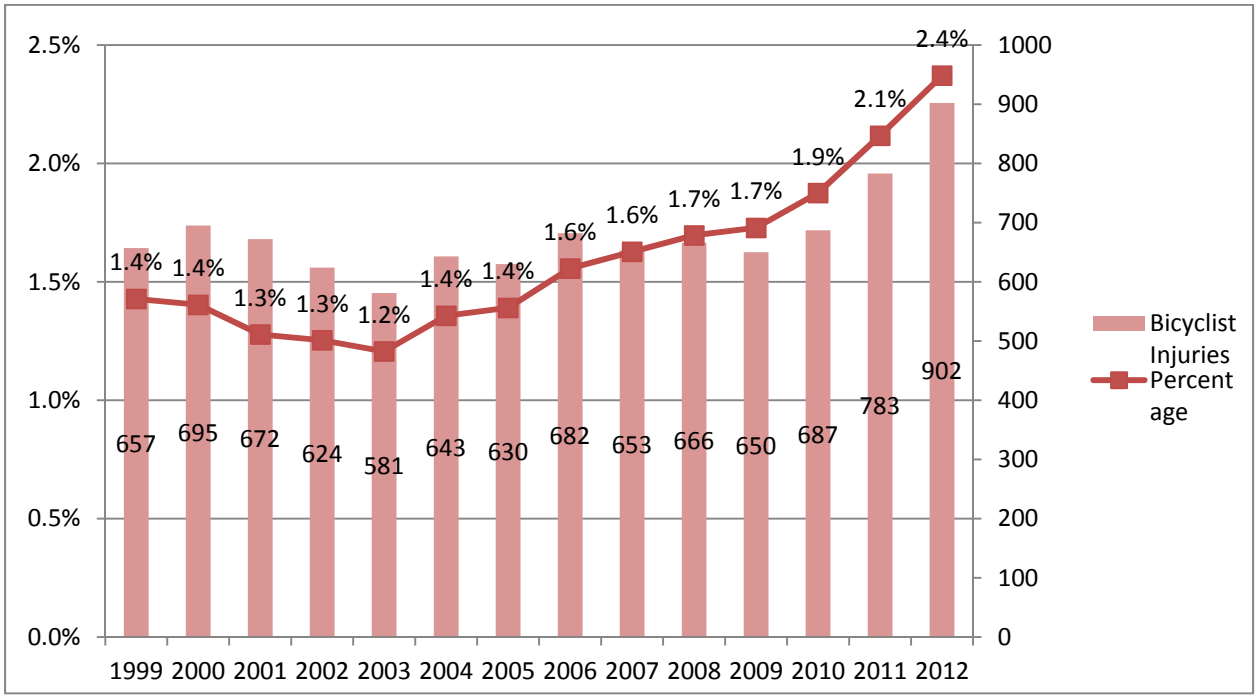


Chart 3-6: Bicyclist Injuries in the Washington Region, 1999-2012

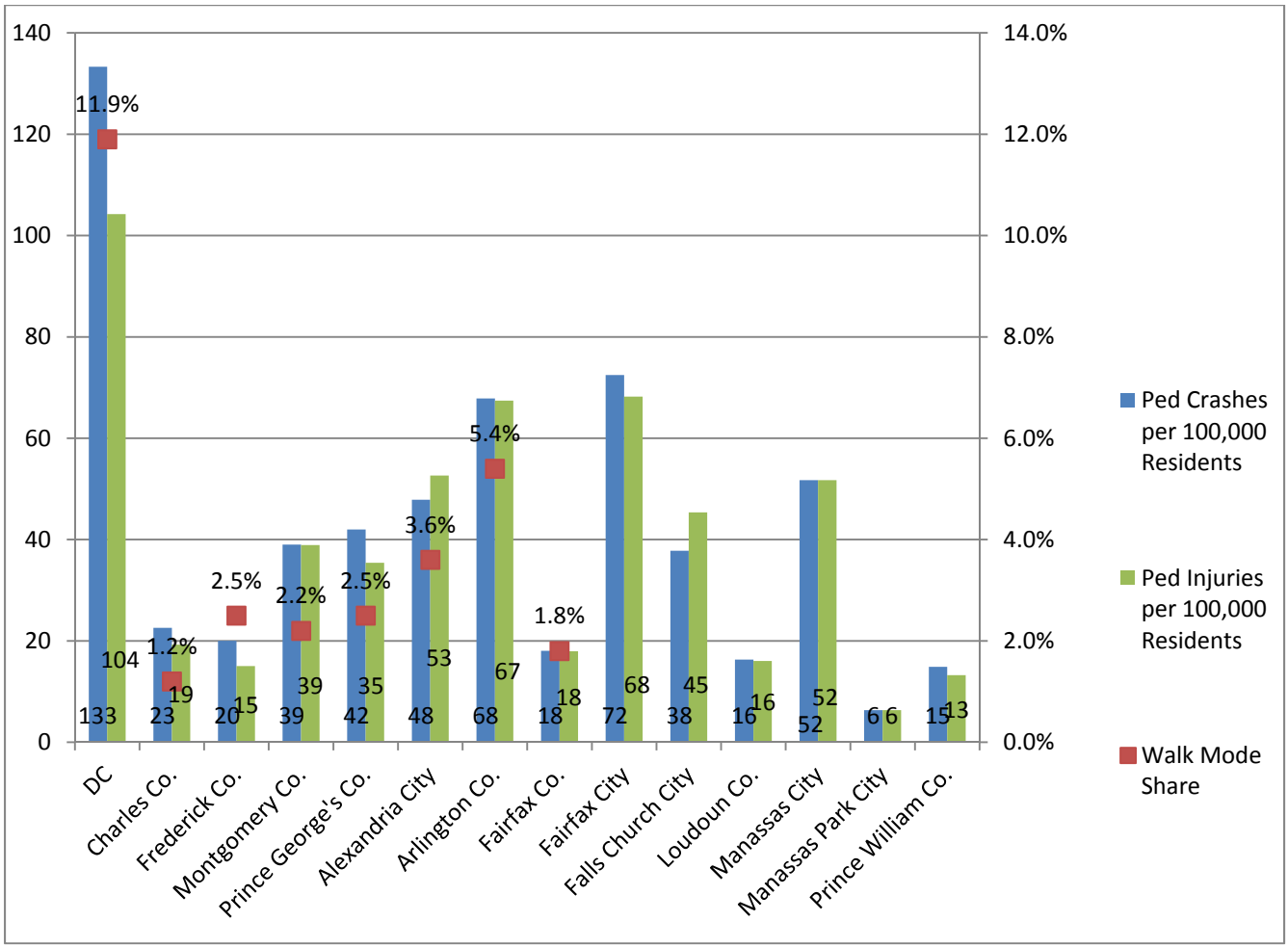


Pedestrian and Bicycle Injuries by Jurisdiction

Bike Injuries are Rising Rapidly

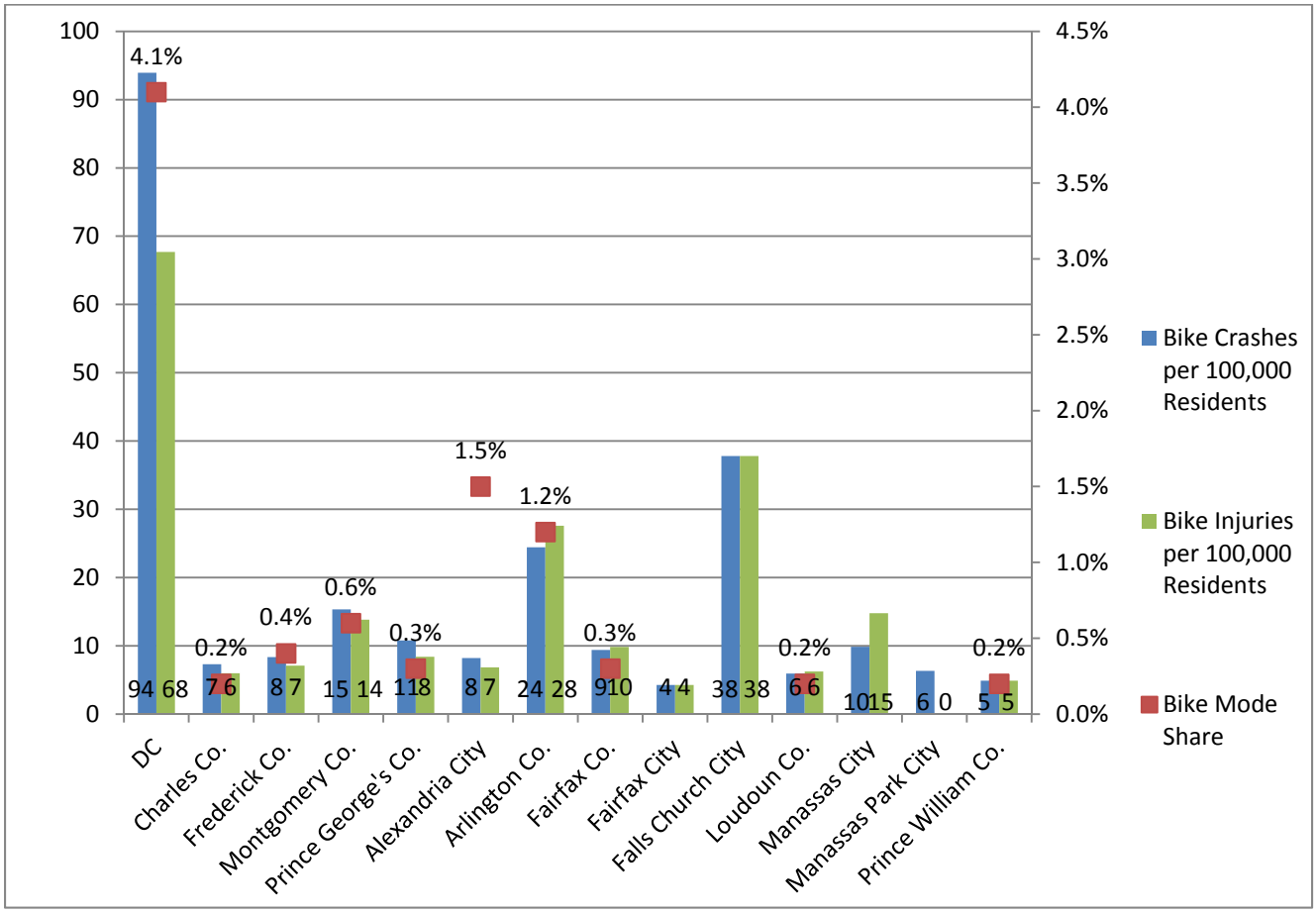
As seen in Charts 3-7 and 3-8, pedestrian and bicyclist crashes and injuries per 100,000 population generally track mode share as measured by the US census walk to work numbers. The City of Alexandria has few bicyclist injuries but a high bike mode share. And the District of Columbia has a significant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

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

Pedestrians find some 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.

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

Numbers alone do not guarantee safety, however. The region's most dangerous areas for walking have high-speed roads and poor pedestrian facilities, together with people who

[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

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

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]

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 Area[15]

	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 inAlexandria, 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 - Dooring	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 *stop if necessary* 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

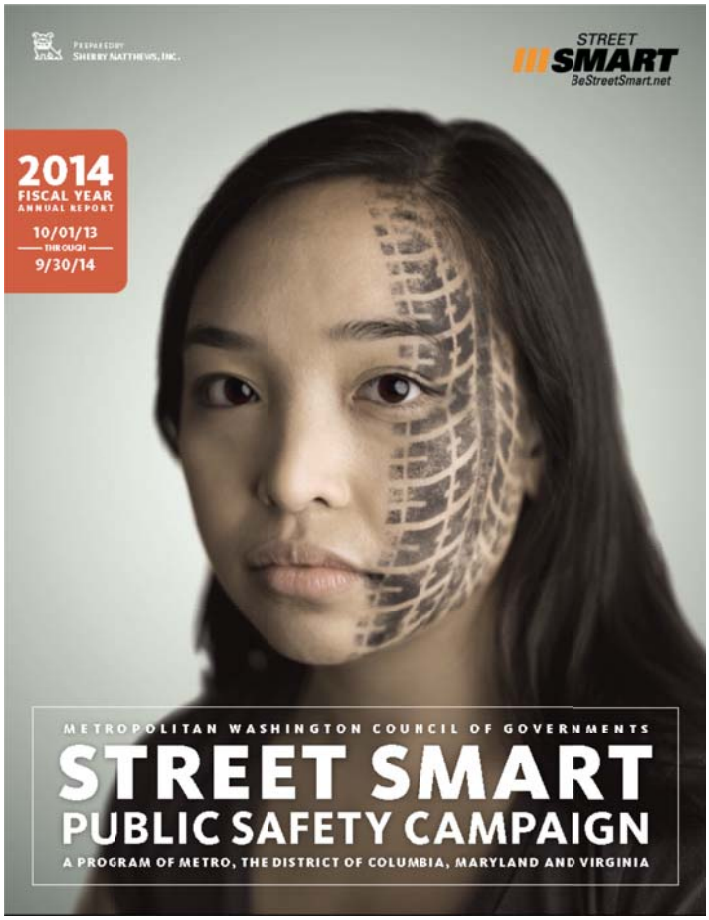
	DISTRICT OF COLUMBIA	MARYLAND	VIRGINIA
Green light	A pedestrian facing a green light (other than a turn arrow) may cross the roadway, within a marked or an unmarked crosswalk	A pedestrian facing a green light (other than a turn arrow) may cross the roadway, within a marked or an unmarked crosswalk	Same 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

intersection	prohibition on walking suddenly into the path of a vehicle: (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.	unmarked crosswalk	vehicle traffic if the speed limit is 35 mph or more. Pedestrians may not disregard approaching traffic when entering or crossing an intersection.
Crossing at Other Than Crosswalks	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. 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.	(a) If a pedestrian crosses a roadway at any point other than in a marked crosswalk or in an unmarked crosswalk at an inter section, the pedestrian shall yield the right-of-way to any vehicle. (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. (c) Between adjacent intersections at which a traffic control signal is in operation, a pedestrian may cross a roadway only in a marked crosswalk. (d) A pedestrian may not cross a roadway intersection diagonally.	"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." Pedestrians may not enter the roadway at any point where drivers view of them is blocked by a parked vehicle or other obstruction.
Pedestrians on Roadways	Where sidewalks are provided, it shall be unlawful for any pedestrian to walk along and upon an adjacent roadway.	(a) A pedestrian may not walk on a roadway where sidewalks are provided. (b) Where no sidewalk is provided, a pedestrian may walk only on the left side of the roadway, facing traffic.	Same as Maryland.

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.

Figure 3-2: Street Smart Annual Report



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.

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.

Figure 1-3: Fall 2013 Press Event

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.

Chapter 4

Existing Facilities for Bicyclists and Pedestrians

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. The Washington region is at the forefront of innovation in bicycle facility design. On the other hand, many activity centers, not originally designed with pedestrians in mind, have grown dense enough to generate significant pedestrian traffic, and face challenges in terms of providing safe facilities and crossing locations for pedestrians and bicyclists. Other parts of the region have developed at low densities, with separated land uses and indirect routes, which increase pedestrian and bicycle travel time. Pedestrian and bicycle accommodations are not always provided.[1]

Figure 1: Informal foot path

Informal Foot-Paths Show where People Walk

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

Shared-Use Paths[2]

Figure 2: Mount Vernon Trail

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 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.

Figure 3: Side Path on Fairfax County Parkway

Side-Paths[3]

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

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

decrease wrong-way riding, define the road space that cyclists are expected to use, increase cyclists' comfort level, and call attention to the presence of cyclists on the roadway. Bicycle lanes are not generally considered safe or adequate for pedestrians, though in rural areas without sidewalks the roadway shoulder serves as both a bicycle lane and as a pedestrian facility.[4]

Figure 5: Bike Lane

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.

Figure 4: Buffered Bike Lane

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.

[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.

Protected Bike Lanes (Cycle Track)

Figure 5: 15th Street NW Protected Lane

A protected bike lane or cycle track is a bicycle-only facility that provides physical separation within the right of way from vehicle travel lanes. Protected lanes can be either one-way or two-way, on one or both sides of a street, and are separated from vehicles by wands, bollards, curbs/medians, parked cars, or a combination of these elements. Protected bike lanes can either incorporate bicycle-only signal phases at intersections (for 100% separation) or utilize "mixing zones" to merge bicycle and motor vehicle traffic.[6] The District of Columbia Department of Transportation has been an innovator in the development of protected bike lanes in the United States.

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

Figure 6: 1st Street NE Protected Lane

They have been used in numerous cities in Europe with mixed results.[7] Installation of protected bike lanes was found to result in an increase in collisions at intersections in Copenhagen, which more than offset a decrease in motorist-overtaking collisions and collisions with parked cars, for a net increase in the number of collisions of 9%. However, the same study showed that installing protected bike lanes increased bicycle (and moped) ridership 18 to 20 percent.[8] Installing bike lanes resulted in a 5 to 7% increase in ridership, and a 5% increase in crashes. For both protected bike

The 15th Street Cycle Track has increased Ridership by more than 200%

[6] Nactional 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

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

lanes and bike lanes the number of riders can be expected to increase more than the number of crashes.

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

Figure 7: Protected Lane at Union Station

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]

Protected Bike Lanes Attract Users of All Ages and Abilities

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.

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

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.

Figure 8: DC Bike Route Sign

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

Signed Bicycle Routes

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

Figure 9: East Coast Greenway in DC

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

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

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.

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

Figure 7: Woodrow Wilson Bridge Trail

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

The 14th Street Bridge, the Memorial Bridge, the Theodore Roosevelt Bridge, the Key Bridge, and the Chain Bridge all have bicycle and pedestrian facilities. In the north, cyclists and pedestrians may use the ferry at White's Ferry, which connects Montgomery County and L oudoun 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 local traffic 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 Southeast DC.

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

Figure 10: 11th Street Bridge

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 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 folded. No case is required.

- 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

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 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.

Figure 11: Bike & Ride Entrance (WMATA photo)

- 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 12: 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.

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.

Figure 13: Bike Parking Demand is Growing

Bike Parking

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

Figure 14: Corner Bike Corral

- **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 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 at some locations.

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

- **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 15: DC Bike Station at Union Station
Photo Credit: COG/TPB

Figure 16: 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.

Capital Bikeshare has over 2500 bicycles and 300 stations

Capital Bikeshare

Bike sharing is self-service public bicycle rental. It is similar to a car-sharing system, such as ZipCar, where members pay a fee and have access to any available bike throughout the regional system. Unlike earlier "public bicycle" or "yellow bike" programs, which failed due to lack of means of preventing theft, modern bicycle sharing links rentals to a user's

credit card, which can be charged if the bicycle is not returned. Bike sharing became common and popular first in Europe and then the United States, with programs in dozens of cities.

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.

Figure 17: 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%	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 Adopt complete streets policies - Jurisdictions with complete streets policies	• 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	• 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

Increase the rate of construction of bicycle and pedestrian facilities from the TPB plan.	Number of bicycle and pedestrian projects from the CLRP	Number of bicycle and pedestrian projects in the CLRP	CLRP/Annual	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	• 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	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
Targets	**Primary Indicators**	**Data Source/Freq.**	**Baseline**	**Suggested Supporting Indicators**	**Data Sources/Freq.**	**Baseline**
Reduce pedestrian and bicyclist fatalities and	Pedestrian and Bicyclist Injuries and	Virginia DMV, DDOT, and Maryland Office of	2004-2008: 84 pedestrian deaths 7 bicyclist	Education • Number of school children trained in safe walking and bicycling (?) • Recognition of key safety	1. Safe Routes to School Program/Annual	• 3500 children trained in DC in 2008, 2700 in Rockville.

injuries	Fatalities	Highway Safety/Annual	deaths 2007: 1962 pedestrian injuries 653 bicyclist injuries	messages by the general public • Number of Bike to Work day participants Enforcement: Number of pedestrian-related and bicycle-related citations and warnings issued as part of the Street Smart campaign. 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	2. Street Smart Annual Report 3. Bike to Work Day Annual Report 4. Street Smart Enforcement Reports/annual	Virginia SRTS does not tally such numbers. • 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

Recommended 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.

Figure 1: Missing sidewalk near Ft. Totten Metro

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.

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

- 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.

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, including new schools.

   - Require land developers to **finance and construct sidewalks**, shared-use paths, and bicycle parking facilities within their developments.

Students who walk to school behave and perform better

   - 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.[2]

   - Locate new schools in walkable communities. Use the EPA school siting guidelines.[3]

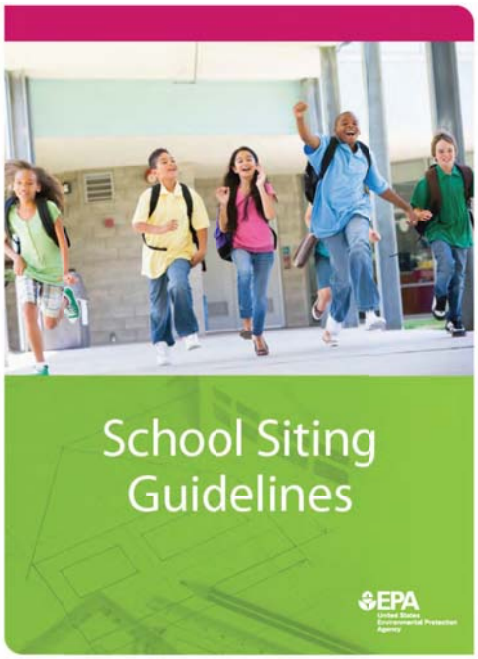


Figure 2: EPA School Siting Guidelines

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-**

[2] http://www.virginiadot.org/info/secondary_street_acceptance_requirements.asp
[3] http://www.epa.gov/schools/guidelinestools/siting/

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.

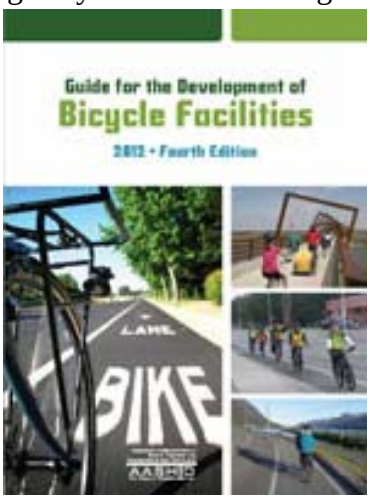


Figure32: AASHTO Guide for the Development of Bicycle Facilities

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.

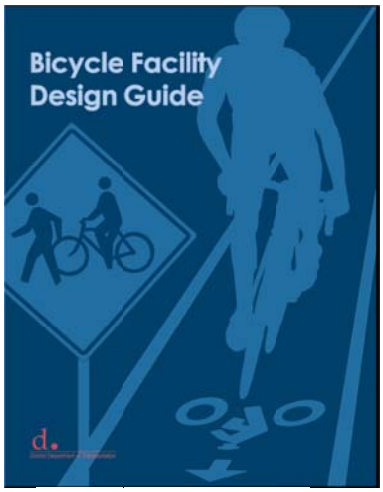


Figure 3: DDOT Bicycle Facility Design Guide

b. Establish and maintain **minimum design and maintenance standar**ds 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 is the AASHTO guides.

d. 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.

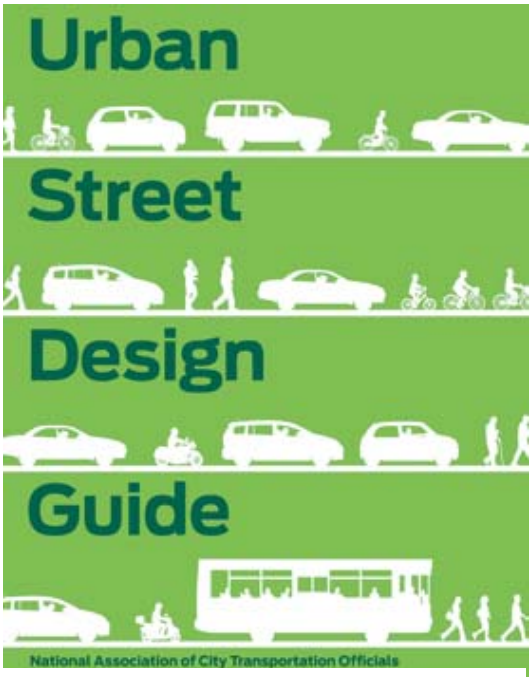


Figure 4: Urban Street Design Guide

2. Improve Access for Persons with Disabilities to Pedestrian Facilities[4]

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 hand-

[4] "Lessons Learned" fact sheet for Disability Awareness Day. National Capital Region Transportation Planning Board Access for All Committee, October 20, 2004.

rails 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.[5]
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.
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.[6]

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.

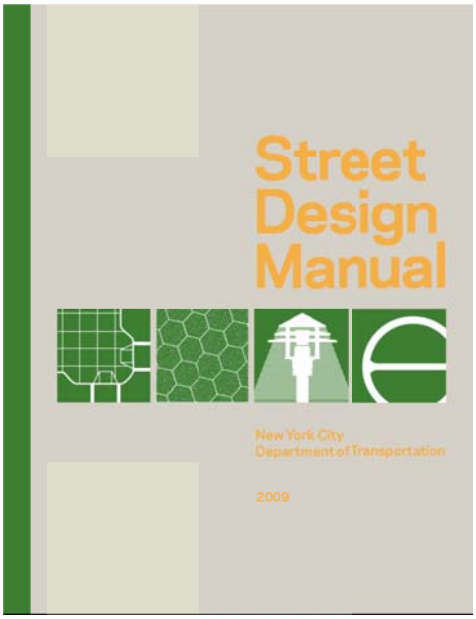


Figure 4: New York City Street Design Manual

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.

[5] Wheelchair ramp photo: COG/TPB, Access for All Committee
[6] New York City Department of Transportation, *Street Design Manual*, 2009. Page 46.

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.[7] Lower speeds are often needed to enable a street to serve as a comfortable place to gather, shop, work, or live.

Streets should be designed with target speeds and speed limits appropriate to their surrounding uses and desired role in the vehicular network. Slower target speeds and speed limits should be considered on local streets, residential streets, alleys; on streets adjacent to schools, 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.[8]

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

[7] NACTO, *Urban Street Design Guide*, 2013.
[8] Ibid, pp. 76-91.

F. Integrate bicycling and walking into the public transportation system.[9]

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

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.

   - 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.[10]

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.

Figure 7: On-Street Bike Parking, Georgetown

[9] Photo of NY Avenue Metro Bike Lockers: COG/TPB, Michael Farrell
[10] Photo of Bike on Bus by WABA/Eric Gilliland

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.

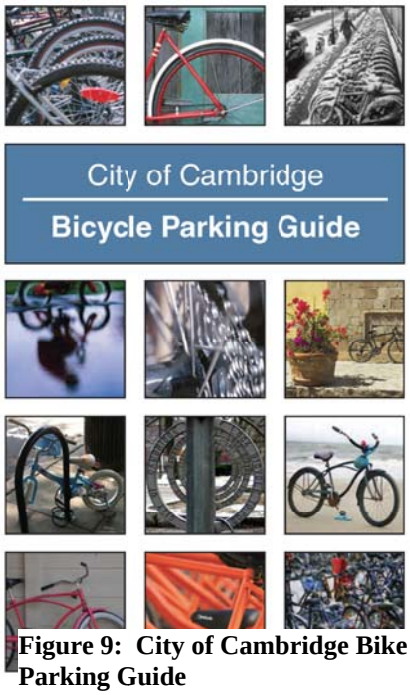


Figure 9: City of Cambridge Bike Parking Guide

- 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.[11]

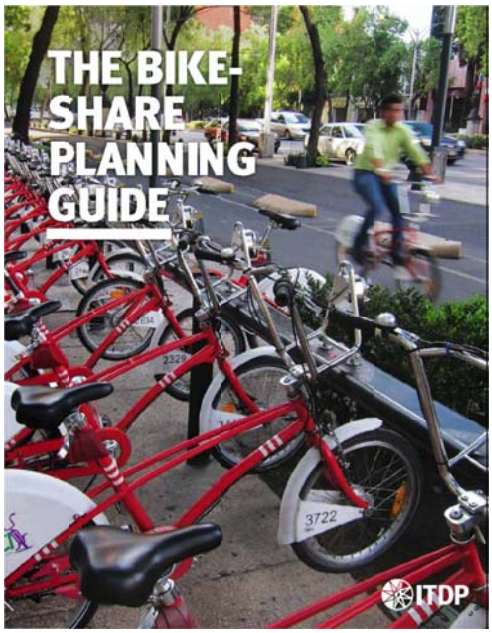


Figure 10: ITDP Bike Share Guide

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.

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

The Institute for Transport Development Policy publishes a detailed bike share planning guide.

Figure 11: Cyclist training
Photo Credit: WABA

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 early ages.

   - 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.

2. Improve cycling skills and pedestrian safety habits of adults and young adults.

   - Produce and distribute information on bicycle usage and safety.

Volunteer Patrols can help with Trail Security

   - Emphasize the use of helmets for rider protection, lights after dark, reflectors, and reflective clothing for pedestrians.

Figure 12: Trail Patrol, C & O Canal Park

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.

    - Coordinate public media campaigns with law enforcement

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.

The regional "Street Smart" Pedestrian and Bicycle Safety Campaign urges motorists and pedestrians to "Slow Down" and "Use Crosswalks"

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 significant law enforcement presence along regional off-road trail networks and encourage inter-jurisdictional cooperation and coordination to provide for the safety and security of all pedestrians and bicyclists.

Figure 8: Street Smart Poster

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. Designate a Safe Routes to School coordinator for every community.

- Provide high-quality information to the public on the benefits of walking and bicycling, and where and how it can be done in your community, through programs such as WalkArlington and BikeArlington. Partner with employers, transportation demand managers, and advocacy groups.

- As part of a comprehensive 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 9: Lawyers Road Before Road Diet
Photo credit: VDOT

Figure 10: Lawyers Road After Road Diet

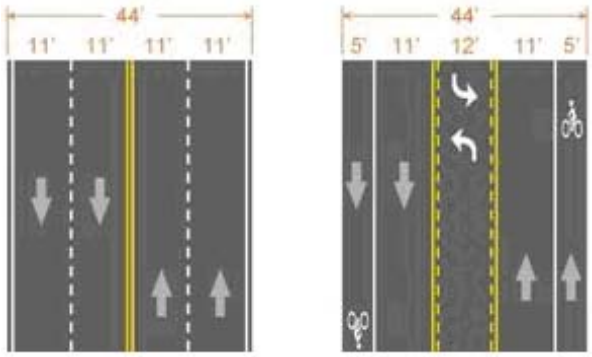


Figure 11: Before and After Illustration

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 643 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 2100 miles of bicycle lanes and 2000 miles of shared-use path. The overall network length (allowing for some dual bike lane/sidepath facilities) will increase by approximately 4000 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.

Thirty-one major pedestrian intersection improvements will be carried out, and 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-seven major streetscaping projects will improve pedestrian and bicycle access and amenities in places such as Atlantic Boulevard, Tysons, Maryland Avenue NE, and downtown Bethesda.

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- May 2010	Completed June 2010 May 2014	Planned New Facilities/ Upgrades	Total in 2040
Bicycle Lane	56	35	45	2090	2226
Shared-Use Path	490	53	50	1990	2583
Total	546	88	95	4080	4809

Progress Since 2010

Fifty-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.

Ten major pedestrian intersection improvements, seven streetscaping projects, and two pedestrian bridges or tunnels were completed.

Notable projects finished since 2010 include Capital Bikeshare in the District of Columbia and Arlington, and the L Street NW protected bike lane 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 generally not counted.

The region is currently adding about twelve miles of shared-use path and eleven miles of bike lane per year. At the current pace of construction the region will have completed about 420 miles of shared use path, and 385 miles of bike lane by 2040, or about one fifth of the planned network.

However, it should be noted that the planned network is twice as large as the one in the 2010 plan. The pace of implementation is increasing, but the agency plans are now much more ambitious.

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 485 planned projects, seventeen are under construction, ninety-one are fully funded, and another ninety-nine 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 $5 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	1990 miles	$600,000 - $8,000,000
Bicycle Lane	$5 $500	133	2090 miles	$10,000 - $1,000,000
Pedestrian/Bicycle Bridge/Tunnel	$1,000 - $6,000		15 projects	$15,000 - $90,000
Pedestrian Intersection Improvement	$300 - $600		31 projects	$10,000 - - $20,000
Streetscape	$2,000 - $4,000		27 project	$54,000 - $108,000
Total				$700,000 - $9,000,000

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 6% 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, funding status, 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

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

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 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.

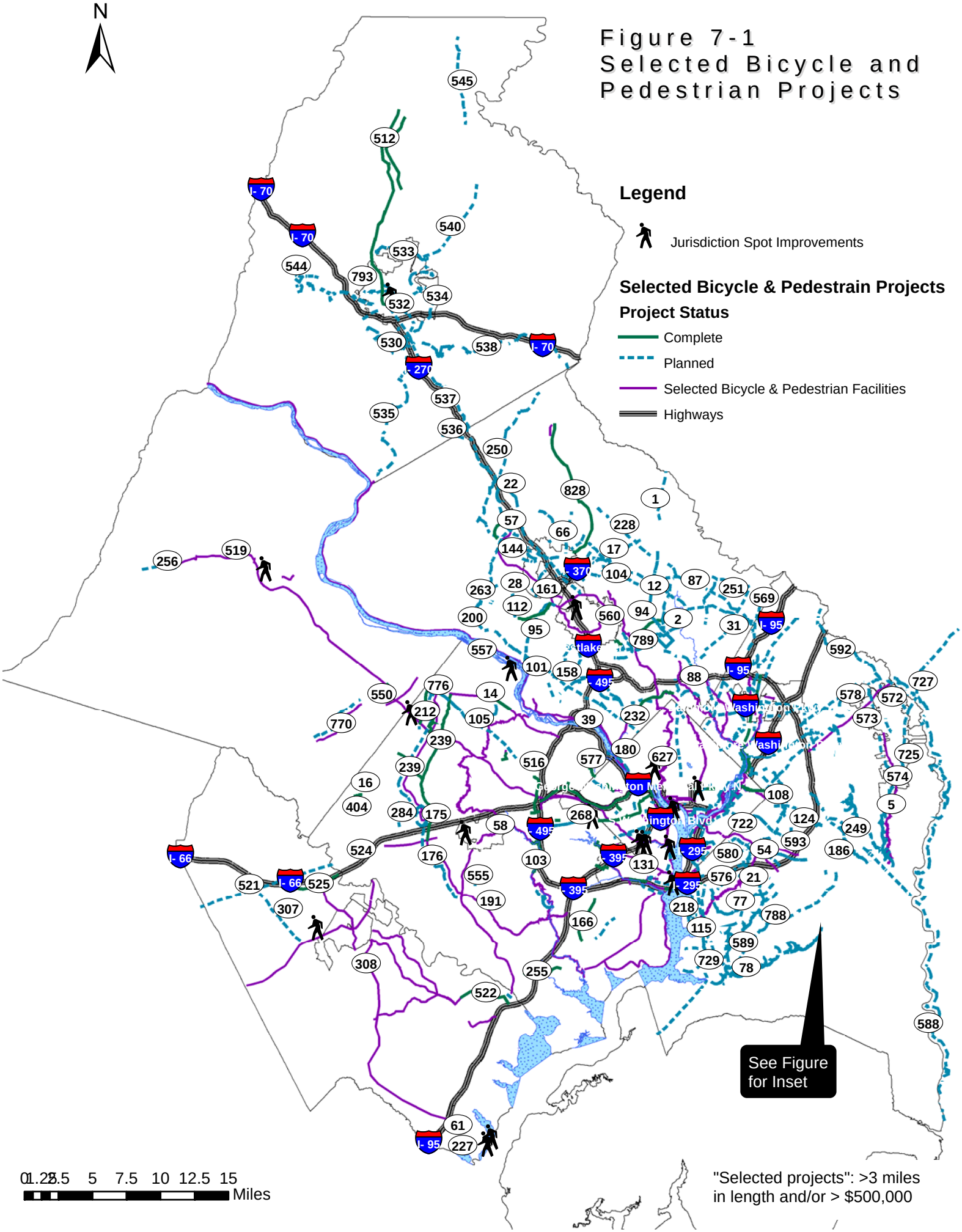

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Figure 7-1
Selected Bicycle and Pedestrian Projects
Legend
Jurisdiction Spot Improvements
Selected Bicycle & Pedestrain Projects
Project Status
Complete
Planned
Selected Bicycle & Pedestrian Facilities
Highways
See Figure for Inset
0 1.25 2.5 5 7.5 10 12.5 15
Miles
"Selected projects": >3 miles in length and/or > $500,000

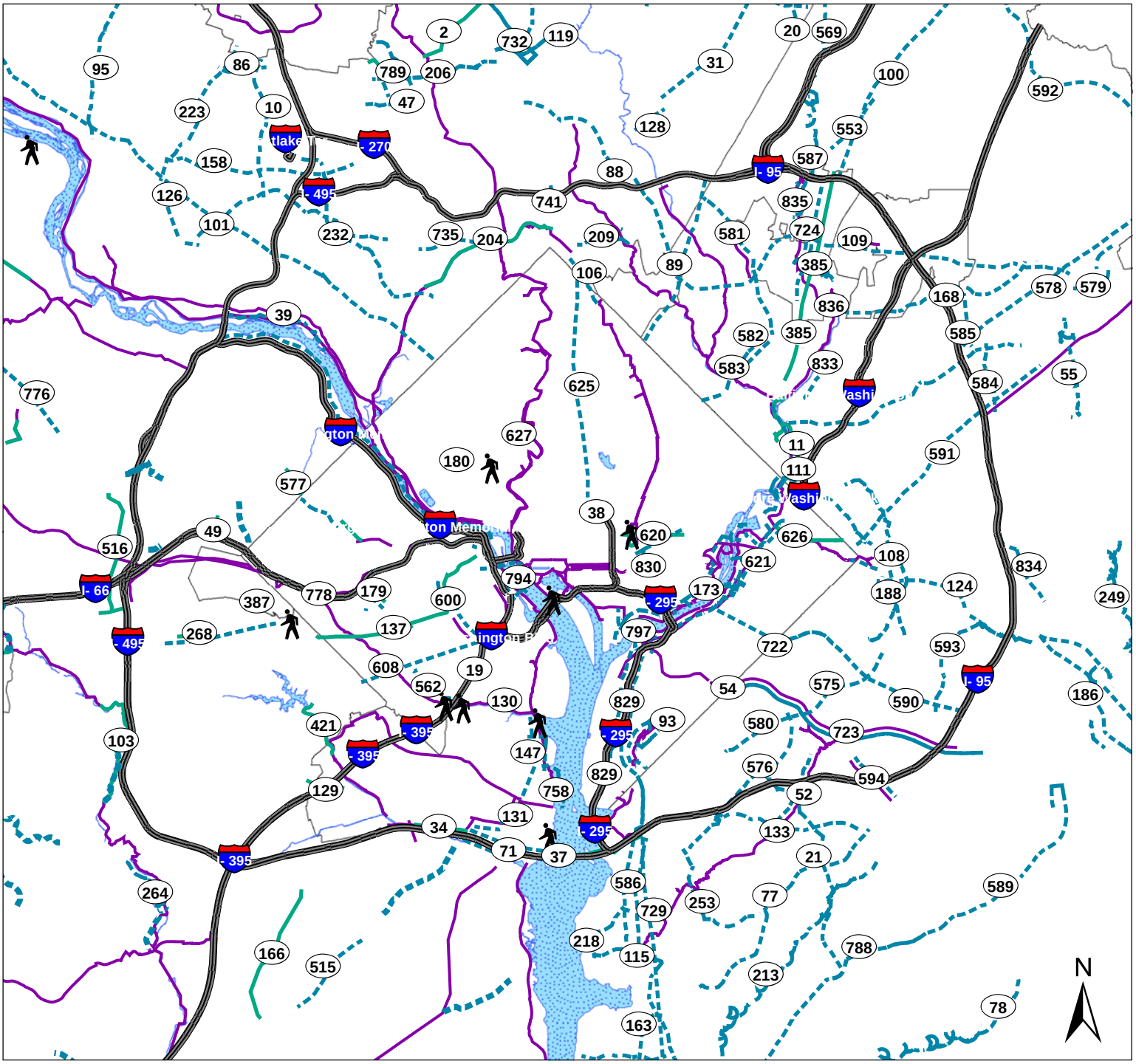

Figure 7-2
Selected Bicycle and Pedestrian Projects

Legend

Selected Bicycle & Pedestrain Projects

Project Status

- Complete
- Planned
- Selected Bicycle & Pedestrian Facilities
- Jurisdiction Spot Improvements
- Highways

"Selected projects": >3 miles in length and/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: 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
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	The pull-down menu offers the following options: 1. Fully Funded[1] — Code Letter F 2. Partially Funded — P 3. Unfunded — U 4. Under Construction — UC 5. Complete — C
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 *not* 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.

[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	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
DC														
Washington														
1	794	14th Street Bridge Multi-use Path Improvements	East Basin Drive	14th Street Bridge	0.02	National Park Service, DDOT	☐	☑	☐	O	☐	☐	P	$515
2	173	Anacostia Riverwalk Trail Phase II	Potomac River	Maryland	20	DDOT	☐	☑	☐		☑	☑	F	$20,000
3	797	Anacostia Trail Support				National Park Service, DDOT	☐	☐	☐		☐	☐		$500
4	215	Bicycle Lanes Phase I			20	DDOT	☑	☐	☐		☐	☑	C	$600
5	843	Bicycle Lanes Phase II			20	DDOT	☑	☐	☐		☐	☐	F	
6	56	Bicycle Parking Racks				DDOT	☐	☐	☐		☑	☑		$500
7	74	Bicycle Route Signs				DDOT	☐	☐	☐		☐	☑	P	$100
8	619	Blagden Avenue Hiker and Biker Trail - EA	Matthewson Drive	Beach Drive	0.4	DDOT, National Park Service	☐	☑	☐		☐	☐	C	
9	613	Capital Bikeshare - District of Columbia				DDOT, Arlington County	☐	☐	☐	O	☑	☑	C	
10	142	Cultural/Heritage Trail System				DDOT	☐	☐	☐		☐	☑	C	$0
11	622	District-Wide Bicycle and Pedestrian Program				DDOT	☑	☐	☑		☐	☑	P	$3,300
12	625	Great Streets - Georgia Avenue				DDOT	☐	☐	☐		☐	☑		$16,140
13	620	Great Streets - H Street NE Streetscape	3rd Street NE	14th Street NE	1	DDOT	☐	☐	☐	S	☐	☑	C	$62,000
14	621	Great Streets - Minnesota Avenue NE	A Street SE	Sheriff Road NE	1	DDOT	☐	☐	☐		☐	☐	F	$7,000
15	626	Great Streets - Nannie Helen Burroughs				DDOT	☐	☐	☐		☐	☑	C	$12,300
16	627	Klingle Trail	Porter Street	Woodley Road	1	DDOT	☐	☐	☐		☐	☑	F	$9,100
17	803	L Street Cycle Track	New Hampshire Avenue	12th Street NW	1	DDOT	☑	☐	☐		☐	☐	C	$300
18	830	Maryland Avenue NE Complete Street Project	2nd	15th	1	DDOT	☑	☐	☑	S	☐	☐	P	$2,000
19	197	Metropolitan Branch Trail Phase I	Union Station	Bates Road NE	4	DDOT	☑	☑	☐		☑	☑	C	$20,000

DRAFT

Key to Codes

B=Bridge or Tunnel C = Complete F = Fully Funded I = Intersection Improvement O = Other P = Partially Funded
PK = Bicycle Parking R = Bicycle Route Marking S = Streetscape U = Unfunded UC = Under Construction

	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
20	842	Metropolitan Branch Trail Phase II	Bates Road NE	Silver Spring	2	DDOT	☑	☑	☐		☑	☑	P	
21	93	Oxon Run Trail Restoration	South Capitol Street	Southern Avenue	2	DDOT	☐	☑	☐		☐	☑		$6,000
22	628	Pavement Markings & Traffic Calming				DDOT	☐	☐	☐	TC	☐	☑	F	$34,390
23	623	Pedestrian Bridge over Kenilworth Ave			1	DDOT	☐	☐	☐	B	☐	☑	F	$12,000
24	178	Rock Creek Park Trail			4	DDOT, National Park Service	☐	☑	☐		☐	☑	P	$2,500
25	629	Safe Routes to School				DDOT	☐	☐	☐		☐	☑		$1,000
26	97	Safe Routes to School Program				DDOT	☐	☐	☐		☐	☑	F	$1,000
27	96	Sidewalk Construction				DDOT	☐	☐	☑		☐	☐		$2,000
28	829	South Capitol Street Trail	Firth Sterling Ave	Oxon Cove	3	DDOT	☐	☑	☐		☑	☑	P	$7,000
29	624	Transportatation Enhancements				DDOT	☐	☐	☐	S	☐	☑	F	$13,800
30	75	Union Station Bike Station	(Union Station)			DDOT	☐	☐	☐		☐	☑	C	$4,000
31	181	Watts Branch Trail	Minnesota Ave	62nd Street, NE	2	DDOT	☐	☑	☐		☐	☑	C	$3,000
32	750	WMATA DC Metrorail Crossing Improvement Projects				WMATA	☐	☐	☐		☐	☐	P	$346
33	747	WMATA DC Metrorail Sharrow Projects			1	WMATA	☐	☐	☐		☐	☐	P	$5
34	744	WMATA DC Metrorail Sidewalk/ Pathway Projects			1	WMATA	☐	☐	☐		☐	☐	P	$623
DC/MD/VA														
Region-wide														
35	617	Capital Bikeshare Region-Wide				DDOT, DDOT, Arlington, City of Alexandria, Montgomery	☐	☐	☐	O	☐	☐	C	$22,284
36	795	Implement Recommendations of NCR Paved Trails Plan				National Park Service	☐	☐	☐		☐	☐		$1,000
37	568	WMATA Bicycle Parking Project			0	WMATA	☐	☐	☐		☐	☐	P	$1,165

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
DC/VA													
Arlington County, District of Columbia													
38	258	Boundary Channel Bridge Trails				National Park Service	☐	☐	☐		☐	☐	

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
MD														
City of College Park														
39	385	College Park Trolley Trail	Paducah Road	Albion Road	4	City of College Park	☑	☑	☐	R	☐	☐	C	$500
City of Frederick														
40	532	Carroll Creek Trail	Rocky Springs Road	Monocacy River	0	City of Frederick, MDOT	☐	☑	☐	O	☐	☑	P	$10,000
41	849	City of Frederick Bike Lanes			6	City of Frederick	☑	☐	☐		☐	☐	C	
42	552	Citywide Sidewalk Retrofit	City of Frederick	City of Frederick	0	City of Frederick	☐	☐	☐		☐	☐	P	$240
43	551	East Street Rail Trail	Carroll Creek	Tuscarora Creek	0	City of Frederick, MDOT & MTA	☑	☑	☐	O	☐	☑	P	$2,000
44	531	Rock Creek Trail	Stonegate Park	US Route 15	0	City of Frederick	☐	☑	☐		☐	☑	P	$1,000
45	793	US15 Undercrossing	Baker Park	Waterford Park	1	City of Frederick, MDSHA	☐	☑	☐	B	☐	☐	F	$2,250
City of Greenbelt														
46	802	Springhill Lake Elementary Safe Routes to School	Cherrywood Lane	Springhill Lane	0.3	City of Greenbelt, SHA	☐	☐	☐	TC	☐	☐	UC	$195
Frederick County														
47	530	Ballenger Creek Trail	Ballenger Creek Park	Monocacy River	5	Frederick County	☐	☑	☐		☐	☑	UC	$3,200
48	538	Bush Creek Trail	Monocacy River	Montgomery County Line	0	Frederick County	☐	☑	☐		☐	☐	U	$1,300
49	558	Frederick County Safe Routes to Schools	Countywide	Countywide	0	Frederick County, Frederick County Public Schools	☐	☐	☐		☐	☐	P	$350
50	754	MD 180/MD 351, Jefferson Creek Pike	MD 180 Stoney Creek Drive	MD 351 Crestwood BLVD	3.1	MDOT	☑	☐	☑		☑	☑	P	2,000,000
51	738	MD 85, Buckey's Town Pike	South of English Muffin Way	North of Grove Road		MDOT	☑	☑	☑		☑	☑	P	5,000,000
52	535	Monocacy River Greenway Future Phases	Ballenger Creek Trail	Potomac River	0	Frederick County	☐	☑	☐		☐	☐	U	$7,000
53	547	On-Street Bikeways Countywide	Countywide	Countywide	0	Frederick County, MD SHA	☑	☐	☐		☐	☑	P	$3,000

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
Frederick County, City of Frederick													
54	512	H&F Trolley Trail Phase II	Water Street	Moser Road	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	☐	☑	☐		☐	☐	C	$7,000
55	534	Monocacy River Greenway Phase I	Tuscarora Creek	Ballenger Creek Trail	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	☐	☑	☐		☐	☐	U	$5,500
56	533	Tuscarora Creek Trail	Yellow Springs Road	Monocacy River	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	☐	☑	☐		☐	☐	U	$2,250
Frederick County, City of Frederick, Town of Thurm													
57	529	H&F Trolley Trail Phase III	Thurmont	Frederick	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	☐	☑	☐		☐	☐	U	$6,000
Frederick County, Montgomery County													
58	537	I-270 Transitway	City of Frederick	Montgomery County Line	0	Frederick County, Frederick County Div. of Parks & Rec	☐	☑	☐		☐	☐	U	$5,000
59	536	Sugarloaf – Little Bennett Trail	Little Bennett Regional Park	Monocacy River	0	Frederick County, Frederick County Div. of Parks & Rec; City of Fred	☐	☑	☐		☐	☐	U	$375
Frederick County, Town of Emmitsburg													
60	545	Emmitsburg Railroad Trail	Rocky Ridge	Emmitsburg	0	Frederick County, Frederick County Div. of Parks & Rec / Emmitsburg	☐	☑	☐		☐	☐	U	$3,250

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
Frederick County, Town of Middletown													
61	543	Middletown – Myersville Trolley Trail	Frederick	Myersville	0	Frederick County	☐	☑	☐		☐	☐	U	$5,000
62	544	Middletown Greenway	Middletown	Middletown	0	Frederick County, Frederick County Div. of Parks & Rec; Middletown	☐	☑	☐		☐	☐	U	$3,000
Frederick County, Town of Mt. Airy, Carroll County													
63	539	B&O Trail	Mount Airy	Mount Airy	0	Frederick County, Town of Mt. Airy, Carroll County	☐	☑	☐		☐	☐	U	
Frederick County, Town of Woodsboro													
64	540	Walkersville – Woodsboro Corridor I	Monocacy River	Israel Creek	0	Frederick County, Frederick County Div. of Parks & Rec; MDOT; Woodsb	☐	☑	☐		☐	☐	U	$2,000
65	542	Walkersville – Woodsboro Corridor III	Monocacy River	Woodsboro - Railroad	0	Frederick County	☐	☑	☐		☐	☐	U	$5,500

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Montgomery County														
66	9	ADA Compliance: Transportation	Countywide			MCDOT	☐	☐	☐	S	☐	☑	F	$450,000
67	41	American Legion Bridge	Macarthur Blvd	Fairfax County Line		MDOT, MCDOT, VDOT	☐	☑	☐		☐	☐		$0
68	234	Bel Pre Road - east	Georgia Avenue (MD97)	Layhill Road (MD182)		MCDOT	☐	☑	☐		☐	☐		$0
69	241	Bethesda Bikeway and Pedestrian Facilities	Bethesda CBD			MCDOT	☑	☐	☐	I	☐	☑	F	$3,520
70	804	Bethesda CBD Streetcape	Bethesda CBD			MCDOT	☐	☐	☐	S	☐	☐	F	$8,214
71	805	Bethesda Metro Station South Entrance				MCDOT	☐	☐	☐	B	☐	☐	F	$80,500
72	190	Bethesda Trolley Trail	South Drive	Twinbrook Metrorail station		MCDOT, MDOT	☑	☑	☐		☐	☐	UC	$0
73	92	Bethesda Trolley Trail	Twinbrook Metro Station	Norfolk/Rugby Ave. intersection (Bethesda)		MCDOT	☑	☑	☐		☐	☑		$0
74	33	Bethesda Trolley Trail-NIH connector	Battery Lane	Cedar Lane		MCDOT	☐	☑	☐		☐	☐		$0
75	153	Bikeway Program – Minor Projects	Countywide		12	MCDOT	☑	☐	☐		☐	☑	F	$3,763
76	851	Black Branch Stream Valley Trail - Oak Creek Club			2	M-NCPPC, Montgomery County	☐	☑	☐		☐	☐	C	
77	848	Black Hill Regional Park Trails			5	M-NCPPC, Montgomery County	☐	☑	☐		☐	☐	C	
78	17	Bowie Mill Road	Muncaster Mill Road (MD115)	Olney-Laytonsville Road (MD108)		MCDOT	☑	☐	☐		☐	☐		$0
79	232	Bradley Boulevard (MD191)	Persimmon Tree Road	Wisconsin Avenue (MD355)	6	MCDOT, MDOT	☑	☐	☐		☐	☐	P	$0
80	20	Briggs Chaney Road East	Old Columbia Pike	Prince George's County line		MCDOT	☐	☑	☐		☐	☐		$0
81	203	Briggs Chaney Road West	New Hampshire Avenue	Old Columbia Pike		MCDOT	☑	☐	☐		☐	☐		$0
82	806	Capital Crescent Trail				MCDOT	☐	☐	☐	B	☐	☐	F	$49,500
83	35	CCT-Black Hill connector	Crystal Rock Drive	Black Hill Regional Park		MCDOT	☐	☑	☐		☐	☐		$0
84	808	Century Boulevard	Dorsey Mill Road		1	MCDOT	☐	☑	☑		☐	☐	F	
85	250	Clarksburg Road (MD121)/ Stringtown Road	Clopper Road (MD117)	MidCounty Highway	5	MCDOT	☐	☑	☐		☐	☐		$0
86	809	Clarksburg Transportation Connections				MCDOT	☐	☑	☑		☐	☐	P	
87	144	Clopper Road/Diamond Avenue (MD117)	Summit Avenue	Clarksburg Road (MD121)	3	MCDOT, MDOT	☑	☑	☐		☐	☐		$0

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88	31	Columbia Pike (US29) North	New Hampshire Avenue/ Lockwood Drive	Spencerville Road (MD198)	7	MDOT, MCDOT	☐	☑	☐		☐	☐		$0
89	57	Corridor Cities Transitway bike path	Shady Grove Metrorail Station	Frederick Road (MD355)		MCDOT, MTA	☐	☑	☐		☐	☐		$0
90	810	County Service Park Infrastructure Improvements	Shady Grove Metro		1	MDOT	☐	☑	☑		☐	☐	F	
91	261	Crabbs Branch Way	Gude Drive	Shady Grove Road		MCDOT	☐	☑	☐		☐	☐		$0
92	630	Dale Drive Sidewalk	Mansfield Road	Hartsford Avenue	0.4	MCDOT	☐	☐	☑		☐	☑	F	$5,370
93	140	Darnestown Road - south	Key West Avenue (MD28)	Wootton Parkway		MCDOT	☐	☑	☐		☐	☐		$0
94	28	Darnestown Road (MD28) - North	Seneca Road	Great Seneca Highway (MD119)	5	MCDOT, MDOT	☑	☑	☐		☐	☐		$0
95	158	Democracy Boulevard	Falls Road (MD189)	Old Georgetown Road		MCDOT	☐	☑	☐		☐	☐		$0
96	25	Doctor Bird Road/Norwood Road (MD182)	Layhill Road (MD182)	Olney-Sandy Spring Road (MD108)		MCDOT, MDOT	☐	☑	☐		☐	☐		$0
97	807	East Gude Drive Roadway Improvements	Crabbs Branch Way	Southlawn Lane	1	MCDOT	☐	☐	☑		☐	☐	P	
98	174	East Jefferson Street	Montrose Road	Rollins Avenue		MCDOT	☐	☑	☐		☐	☐		$0
99	238	Ednor Road/Layhill Road	Norbeck Road (MD28)	New Hampshire Avenue (MD650)		MCDOT	☐	☑	☐		☐	☐		$0
100	244	Elm Street	Exeter Road	Wisconsin Avenue (MD355)		MCDOT	☑	☐	☐		☐	☐		$0
101	165	Executive Boulevard	Woodglen Road/North Bethesda Trail	Montrose Road		MCDOT	☑	☐	☐		☐	☐		$0
102	67	Fairland Road - West	Randolph Road	Columbia Pike (US 29)		MCDOT, MDOT	☑	☐	☐		☐	☐		$0
103	107	Fairland Road East	Columbia Pike (US29)	Prince George's County line		MCDOT	☐	☑	☐		☐	☐		$0
104	223	Falls Road East Side Hiker-Biker Path	River Road	Dunster Road	4	MCDOT, MDOT	☐	☑	☐		☐	☑	F	$22,340
105	240	Father Hurley Boulevard/Ridge Road	Germantown Road (MD118)	Brink Road		MCDOT	☐	☑	☐		☐	☐	C	$0
106	245	Fieldcrest Road	Woodfield Road (MD124)	Olney-Laytonsville Road (MD108)		MCDOT	☑	☐	☐		☐	☐		$0
107	811	Flower Avenue Sidewalk	Piney Branch Road	Carroll Avenue	1	MCDOT, Takoma Park	☐	☐	☑		☐	☐	F	
108	136	Forest Glen Pedestrian Bridge	west side of Georgia Avenue at Locust Grove Road	west side of Georgia Avenue at Forest Glen Road		MCDOT	☐	☐	☐		☐	☑	C	$0
109	43	Forest Glen Road - central	Belvedere Place	Sligo Creek Trail		MCDOT, M-NCPPC	☐	☑	☐		☐	☐		$0
110	141	Frederick Road (MD355)	Gude Drive	Watkins Mill Road	5	MCDOT, MDOT	☐	☑	☐		☐	☐		$0

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111	22	Frederick Road (MD355)-Upcounty	Watkins Mill Road	Frederick County line		MCDOT, MDOT, M-NCPPC	☐	☑	☐		☐	☐		$0
112	812	Frederick Road Bike Path	Stringtown Road	Milestone Manor Lane	2.5	MCDOT	☐	☑	☐		☐	☐	F	$5,536
113	204	Georgetown Branch Trail	Bethesda CBD	Silver Spring Metrorail station		MCDOT	☐	☑	☐		☐	☐	C	$0
114	94	Georgia Avenue (MD97) - North	Olney-Laytonsville Road (MD108)	Glenmont Metrorail station	6	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
115	1	Georgia Avenue (MD97) - Upcounty	Brookeville Bypass	Howard County line		MCDOT, MDOT	☑	☐	☐		☐	☐		$0
116	242	Georgia Avenue (MD97)-Brookeville	Olney-Sandy Spring Road (MD108)	Brookeville Road	2	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
117	263	Germantown Road (MD118)	Darnestown Road (MD28)	Frederick Road (MD355)	7	MCDOT, M-NCPPC	☐	☑	☐		☐	☐		$0
118	127	Glenallen Avenue	Randolph Road	Kemp Mill Road		MCDOT	☐	☑	☐		☐	☐		$0
119	813	Gold Mine Road Bridge				MCDOT	☐	☐	☐	B	☐	☐	F	
120	151	Goldboro Road (MD614)	MacArthur Boulevard	Bradley Boulevard (MD191)	2	MCDOT, MDOT	☑	☐	☐		☐	☐		$0
121	66	Goshen Road	Girard Street	Warfield Road	4	MCDOT	☑	☑	☐		☐	☐	F	$0
122	44	Greencastle Road - east	Robey Road	Prince George's County line		MCDOT, M-NCPPC	☐	☑	☐		☐	☐		$0
123	814	Greentree Road Sidewalk	Old Georgetown Road	Fernwood Road	1	MCDOT	☐	☐	☑		☐	☐	UC	$3,486
124	122	Grosvenor Connector	Beach Drive	Metro station		MCDOT, MDOT	☐	☑	☐		☐	☐		$0
125	113	Hines Road-North Branch connector	Rock Creek's North Branch Trail	Cashell Road		MCDOT	☐	☑	☐		☐	☐		$0
126	736	I-270 Watkins Mill Road Extended	Watkins Mill Road, MD 124 Great Seneca Crossing		1	MDOT	☑	☑	☑		☑	☑	P	2,000,000
127	12	ICC bike path	I-370 terminus	Prince George's County line		MDOT, M-NCPPC, MCDOT	☐	☑	☐		☐	☐		$0
128	735	Jones Bridge Rd			1	MDOT	☐	☐	☑		☑	☑	F	0,000,000
129	45	Layhill Road (MD182)	Georgia Avenue (MD97)	Norbeck Road (MD28)	2	MDOT, Montgomery County	☑	☐	☐		☐	☐		$0
130	128	Lockwood Drive	Columbia Pike (US29)	New Hampshire Avenue (MD650)		MCDOT	☐	☑	☐		☐	☐		$0
131	146	Long Draft Road	Quince Orchard Road	Clopper Road (MD117)		MCDOT	☐	☑	☐		☐	☐		$0
132	39	MacArthur Boulevard Bikeway Improvements	I-495	Oberlin Avenue	4	MCDOT	☐	☑	☐		☐	☐	F	$8,710

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133	2	Matthew Henson Trail	Rock Creek Trail (west of Viers Mill Rd.)	East of Georgia Ave. (Alderton Road)		MCDOT, M-NCPPC	☐	☑	☐		☐	☑	C	$5,142
134	737	MD 117, Clopper Road	Seneca Creek Park Entrance	Metropolitian Grove Road	1.7	MDOT	☑	☑	☑		☑	☑	P	2,000,000
135	734	MD 185			1	MDOT	☐	☐	☑		☑	☑	UC	1,000,000
136	733	MD 355, RockvillePike	Randolph Road Maple/Chapman Ave.	Parklawn Drive	0.6	MDOT	☑	☑	☑		☑	☑	P	7,370,000
137	732	MD 9, Georgia Ave Wheaton to Onley	Wheaton	Onley		MDOT	☐	☐	☐		☑	☑	P	5,000,000
138	731	MD 97 (Brookeville Bypass)	South of Brookeville	North of Brookeville	0.7	MDOT	☑	☐	☐		☑	☑	P	$630,000
139	741	MD 97, Georgia Ave (Forest Glen Road to 16th St)	16th Street	Forest Glen Road	0.7	MDOT	☑	☑	☐		☑	☑	P	2,000,000
140	789	MD Georgia, Ave	Randolph Road		0.4	MDOT, MCDOT	☑	☑	☑	O	☑	☑	F	$63,000
141	743	MD124, Woodfield Road	Midcounty Highway	Airpark Road	1.6	MCDOT	☑	☐	☑		☑	☑	P	7,000,000
142	251	MD198/MD28 shared use path	New Hampshire Avenue (MD 650)	Old Columbia Pike	3	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
143	42	MD384 connector to Silver Spring Metro Station	16th Street	East-West Highway	1	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
144	106	Metropolitan Branch Trail	Silver Spring Metro Station	DC Line		MCDOT	☐	☑	☐		☐	☐		$0
145	15	Metropolitan Branch Trail	Silver Spring Metro/Transit Center	Montgomery College Campus Takoma Park	1	MCDOT	☐	☑	☐		☐	☐	F	$0
146	72	MidCounty Highway	ICC	Frederick Road (MD355)		MCDOT, M-NCPPC	☐	☑	☐		☐	☐		$0
147	172	Middlebrook Road	Father Hurley Boulevard	MidCounty Highway		MCDOT	☐	☑	☐		☐	☐		$0
148	86	Montrose Road/Parkway East	Falls Road	Veirs Mill Road (MD586)	2	MCDOT, M-NCPPC	☐	☑	☐		☑	☐	F	$119,890
149	90	Muddy Branch Road	Darnestown Road (MD28)	Clopper Road (MD117)		MCDOT	☐	☑	☐		☐	☐		$0
150	104	Muncaster Mill Road (MD115)/ Norbeck Road (MD28)	Woodfield Road	Georgia Avenue (MD97)	5	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
151	169	Nebel Street - north	Old Georgetown Road	Randolph Road		MCDOT	☑	☐	☐		☐	☐		$0
152	160	Nebel Street - south	Nicholson Lane	Old Georgetown Road		MCDOT	☑	☐	☐		☐	☐		$0
153	149	Nebel Street extended	Randolph Road	Chapman Avenue	1	MCDOT	☐	☑	☐		☐	☐	C	$13,906

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154	154	Needwood Road Bike Path	Deerlake Road	Muncaster Mill Road (MD115)	2	MCDOT	☐	☑	☐		☐	☐	F	$4,200
155	816	Neighborhood Traffic Calming				MCDOT	☐	☐	☐	TC	☐	☐	F	$2,424
156	89	New Hampshire Avenue	DC Line	I-495	4	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
157	134	New Hampshire Avenue (MD650) - Ashton	Ednor Road	Olney-Sandy Spring Road (MD108)	2	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
158	207	New Hampshire Avenue (MD650) - Colesville	Randolph Road	Spencerville Road (MD198)	4	MCDOT, MDOT	☑	☐	☐		☐	☐		$0
159	252	New Hampshire Avenue (MD650) - Ednor	Spencerville Road (MD198)	Ednor Road	2	MCDOT, MDOT	☑	☐	☐		☐	☐		$0
160	120	New Hampshire Avenue (MD650) - Hillandale	I-495	Lockwood Drive	1	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
161	47	Nicholson Lane/Parklawn Drive	Nebel Street	Twinbrook Parkway		MCDOT, M-NCPPC	☑	☐	☐		☐	☐		$0
162	87	Norbeck Road (MD28)	Georgia Avenue (MD97)	Layhill Road	3	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
163	205	North Bethsda Trail Bridges	crossings of I-495 and I-270			MCDOT	☐	☐	☐		☐	☑	C	$0
164	79	Norwood Road	Layhill Road (MD182)	New Hampshire Avenue (MD650)		MCDOT, M-NCPPC	☑	☐	☐		☐	☐		$0
165	208	Observation Drive	Germantown Road (MD118)	Frederick Road (MD355)		MCDOT	☐	☑	☐		☐	☐		$0
166	62	Old Baltimore Road/New Cut Road	Clarksburg Road (MD121)	Frederick Road (MD355)		MCDOT	☐	☑	☐		☐	☐		$0
167	257	Old Columbia Pike	E. Randolph Road	MD 198		MCDOT	☐	☐	☐		☐	☑		$0
168	228	Olney-Laytonsville Road (MD108) - Laytonsville	Laytonsville Town boundary	Olney Mill Road		MCDOT, MDOT	☐	☑	☐		☐	☐		$0
169	236	Olney-Sandy Spring Road (MD108) - Ashton	Layhill Road (MD182)	Howard County line	2	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
170	194	Pedestrian Safety Program	Countywide			MCDOT	☐	☐	☐		☐	☑	F	$9,600
171	126	Persimmon Tree Road	Oaklyn Drive	Falls Road (MD189)		MCDOT	☐	☑	☐		☐	☐		$0
172	95	Piney Meetinghouse Road	River Road (MD190)	Darnestown Road		MCDOT	☑	☐	☐		☐	☐		$0
173	112	Quince Orchard Road	Dufief Mill Road	Darnestown Road (MD28)		MCDOT	☐	☑	☐		☐	☐		$0
174	150	Randolph Road - central	Parklawn Drive	Veirs Mill Road (MD586)		MCDOT	☑	☐	☐		☐	☐		$0
175	119	Randolph Road - east	Veirs Mill Road (MD586)	Kemp Mill Road/ Northwest Branch Trail		MCDOT	☐	☑	☐		☐	☐		$0
176	206	Randolph Road - west	Rockville Pike (MD355)	Parklawn Drive		MCDOT	☐	☑	☐		☐	☐		$0
177	183	Redland Road - east	Needwood Road	Muncaster Mill Road (MD115)		MCDOT	☑	☐	☐		☐	☐		$0

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
178	59	Redland Road - west	Shady Grove Metrorail station	Needwood Road	1	MCDOT, M-NCPPC	☐	☑	☐		☐	☐		$0
179	156	Richter Farm Road	Great Seneca Highway (MD119)	Clopper Road (MD117)		MCDOT	☐	☑	☐		☐	☐	C	$0
180	221	Riffleford Road	Darnestown Road (MD28)	Germantown Road (MD118)		MCDOT	☑	☐	☐		☐	☐		$0
181	101	River Road (MD190)	DC line	Seneca Road (MD112)	13	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
182	817	Robey Road	Greencastle Road	Briggs Chaney Road	1	MCDOT	☐	☑	☐		☐	☐	C	$8,142
183	157	Rock Creek Trail-Forest Glen Metro connector	Stoneybrook Road	Seminary Road		MCDOT, Montgomery County, M-NCPPC	☐	☑	☐		☐	☐		$0
184	138	Rock Springs Connector	Democracy Boulevard	Tuckerman Lane		MCDOT	☐	☑	☐		☐	☐		$0
185	200	Seneca Road	River Road (MD190)	Darnestown Road (MD28)		MCDOT, MDOT	☑	☐	☐		☐	☐		$0
186	10	Seven Locks Road	Montrose Road	Bradley Blvd.	5	MCDOT	☑	☑	☐		☐	☐	P	$27,000
187	152	Shady Grove Road - east	Frederick Road (MD355)	Muncaster Mill Road (MD115)		MCDOT	☑	☐	☐		☐	☐	UC	$0
188	170	Shady Grove Road - west	Darnestown Road	Frederick Road (MD355)		MCDOT	☑	☑	☐		☐	☐	P	$0
189	819	Sidewalk and Infrasturcture Revitalization				MCDOT	☐	☐	☐	S	☐	☐	F	$44,762
190	231	Sidewalk Program - minor projects	countywide			MCDOT	☐	☐	☐		☐	☑	F	$10,027
191	209	Silver Spring Green Trail	Silver Spring Metro Station	Sligo Creek Hiker-Biker Trail		MCDOT	☑	☐	☐		☐	☑	F	$6,334
192	820	Snouffer School Road	Sweet Autumn Drive	Centerway Road	1	MCDOT	☑	☑	☑		☐	☐	P	$23,710
193	68	Spencerville Road (MD198) - Fairland	Old Columbia Pike	Prince George's County line	2	MCDOT, MDOT	☐	☑	☐		☐	☐		$0
194	823	Street Tree Preservation				MCDOT	☐	☐	☐	S	☐	☐	F	$24,900
195	821	Streetlight Enhancements - CBD/Town Center				MCDOT	☐	☐	☐	O	☐	☐	F	$3,430
196	117	Tilden Lane	Nicholson Lane	Hounds Way		MCDOT	☑	☐	☐		☐	☐		$0
197	822	Traffic Signals				MCDOT	☐	☐	☐	O	☐	☐	F	$35,106
198	824	Transportation Improvements for Schools				MCDOT	☐	☐	☐	S	☐	☐	F	$1,796
199	825	Travilah Road	Darnestown Road	Dufief Mill Road	2	MCDOT	☐	☑	☑		☐	☐	C	$13,601
200	46	Tuckerman Lane	Old Georgetown Road	Rockville Pike (MD355)		MCDOT	☑	☐	☐		☐	☐		$0
201	76	Twinbrook Parkway	Frederick Road (MD355)	Veirs Mill Road (MD586)		MCDOT	☑	☐	☐		☐	☐		$0
202	88	University Boulevard	Georgia Avenue	Prince George's County Line		MCDOT, MDOT	☐	☑	☐		☐	☐		$0

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203	220	Viers Mill Road (MD586) - west	Twinbrook Parkway	Matthew Henson Trail	2	MCDOT, MDOT	☑	☐	☐		☐	☐		$0
204	229	Watkins Mill Road	Frederick Road (MD355)	MidCounty Highway		MCDOT	☐	☑	☐		☐	☐		$0
205	81	Wayne Avenue Green Trail	Spring Street	Sligo Creek Trail		MCDOT, M-NCPPC	☐	☑	☐		☐	☐		$0
206	233	West Cedar Lane	Old Georgetown Road	Beach Drive		MCDOT	☐	☑	☐		☐	☐	P	$0
207	40	Western Avenue	River Road	Chevy Chase Circle		MCDOT	☐	☑	☐		☐	☐		$0
208	185	Westlake Drive	Westlake Terrace	Tuckerman Lane		MCDOT	☑	☐	☐		☐	☐	C	$0
209	230	Westlake Terrage/Fernwood Road/Green Tree Road	Rockledge Drive	Old Georgetown Road		MCDOT	☑	☐	☐		☐	☐		$0
210	826	White Flint District East				MCDOT	☑	☑	☑	B	☐	☐	F	$29,400
211	827	White Flint District West				MCDOT	☑	☑	☑		☐	☐	F	$98,642
212	84	Willard Avenue Bike Lanes	Willard Avenue Park	Wisconsin Avenue		MCDOT	☑	☐	☐		☐	☐		$0
213	121	Wilson Lane (MD188) - west	MacArthur Boulevard	Elmore Lane	2	MCDOT, MDOT	☑	☐	☐		☐	☐		$0
214	260	Wisconsin Avenue Path	Bradley Lane	Oliver Lane		MCDOT, M-NCPPC	☑	☐	☐		☐	☐		$0
215	828	Woodfield Road Extended	Main Street	Ridge Road	1	MCDOT	☐	☑	☐		☐	☐	C	$13,842
216	83	Woodmont Avenue	Bethesda Avenue	Battery Lane		MCDOT	☑	☐	☐		☐	☐		$0

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Prince George's County														
217	188	Addison Road	MD 214	Walker Mill Road		Prince Georges County	☑	☐	☑		☐	☐	P	$2,343
218	581	Adelphi Road Sidewalks and Bike Lanes	MD 193	MD 410	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	U	$1,400
219	77	Allentown Road	MD 5	Old Fort Road		Prince Georges County	☑	☐	☐		☐	☐	U	
220	111	Anacostia River Trail	Bladensburg Marina	Wash. D.C. line		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	C	$500
221	247	Auth Road	MD 337 (Allentown Road)	MD 5 (Branch Avenue)		Prince Georges County	☑	☑	☐		☐	☐	F	$450
222	594	Auth Road Sidewalks and Bike Lanes	MD 337	Auth Way	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	U	$1,000
223	155	Bock Road	Livingston Road	Tucker Road		Prince Georges County	☑	☐	☐		☐	☐		
224	133	Brinkley Road	Allentown Road	St. Barnabas road		Prince Georges County	☑	☐	☐		☐	☐	U	
225	53	Cabin Branch Trail	MD 214	Cheverly Metro		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐		$260
226	108	Cabin Branch Trail	Presidential Corporate Center	Western Branch		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐		$1,350
227	588	Charles Branch Trail	Rosaryville Creek	Western Branch	0	M-NCPPC, Prince Georges County, M-NCPPC	☐	☑	☐		☐	☐	U	$4,000
228	125	Chesapeake Beach Rail-Trail	MD 214	Capital Beltway		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	U	$650
229	135	Chesapeake Beach Rail-Trail	MD 704	Addison Road Metro		M-NCPPC, Prince Georges County, City of Seat Pleasant	☐	☑	☐		☐	☐	U	$200
230	124	Chesapeake Beach Rail-Trail	Capital Beltway	Upper Marlboro		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	U	$1,080
231	573	Chestnut Avenue/Highbridge Road Sidepath	MD 450	MD 564	0	Prince Georges County, M-NCPPC	☑	☑	☐		☐	☐	U	$1,512

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232	5	Collington Branch Trail	MD 214	Upper Marlboro	6	M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	P	$2,000
233	23	East Coast Greenway American Discovery Trail	Washington D.C.	Anne Arundel County		MDOT, M-NCPPC, Prince Georges County	☑	☑	☐		☐	☐		$0
234	833	Edmonston Road Complete and Green Street	MD 201	51st Street	0.5	Prince Georges County	☑	☐	☑		☐	☐	P	$4,379
235	839	Evarts Street Bike Lanes	I-495	Ruby Lockhart Boulevard	0.2	Prince Georges County	☑	☐	☑		☐	☐	C	
236	55	Folly Branch Trail	Bald Hill Branch	Glenwood Park Neighborhood Park		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	P	$1,000
237	218	Fort Foote Road	Oxon Hill Road (north)	Oxon Hill Road (south)		Prince Georges County	☑	☐	☐		☐	☐		
238	163	Fort Washington Road	MD 210	Fort Washington National Park		Prince Georges County	☑	☐	☐		☐	☐	U	
239	168	Good Luck Road	MD 193	MD 201		Prince Georges County	☑	☐	☐		☐	☐	U	
240	569	Gunpowder Road Sidepath and Bike Lanes	MD 212	MD 198	0	Prince Georges County, M-NCPPC	☑	☑	☐		☐	☐	P	$2,000
241	834	Harry S Truman Drive Complete and Green Street	Mt. Lubentia Way	Lottsford Road	1.6	Prince Georges County	☑	☐	☑		☐	☐	P	$15,075
242	52	Henson Creek Trail extension	Brinkley Road	Branch Avenue Metro		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	P	$1,367
243	739	I-95/I-495 Capital Beltway	Auth Way	I-495/I-95 Phase 2 (Acces Road	1	MDOT	☑	☑	☑		☑	☑	P	3,000,000
244	798	Improve Ped Crossing at Suitland Pkwy Forestville				National Park Service	☐	☐	☐	I	☐	☐		$367
245	580	Iverson Street Sidewalks and Bike Lanes	MD 5	Iverson Place	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	U	$700
246	582	Jamestown Road Sidewalks and Bike Lanes	MD 500	Ager Road	0	Prince Georges County, M-NCPPC	☐	☐	☐		☐	☐	U	$1,000
247	571	Jericho Park Road Sidepath and Bike Lanes	MD 197	Race Track Road	0	Prince Georges County, M-NCPPC	☑	☑	☐		☐	☐	U	$385

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248	587	Little Paint Branch Trail Extension	Cherry Hill Road	Sellman Road	0	M-NCPPC, Prince Georges County, DPW&T	☑	☑	☐		☐	☐	P	$5,000
249	6	Livingston Road	Oxon Hill Road	MD 210		Prince Georges County	☑	☐	☐		☐	☐	U	
250	726	MD 117, Collington Road	Kenhill Dr.	MD 450	1.4	MDOT	☑	☐	☑		☑	☑	P	4,100,000
251	109	MD 193	MD 564	Montgomery Co. line		MDOT	☑	☑	☐		☐	☐		$0
252	592	MD 197 Sidepath	MD 198	Rockledge Drive	0	MDOT, M-NCPPC	☑	☑	☐		☐	☐	U	$18,000
253	753	MD 201 (Edmonston Road/US 1 Balimore Ave.)	I-95	Muirkirk Road	18	MDOT	☑	☐	☑		☑	☑	P	6,000,000
254	729	MD 210, Indian Head HWY				MDOT	☑	☐	☑		☑	☑	F	4,574,000
255	788	MD 223 Piscataway Rd	Steed Rd	MD 4	8	MDOT	☐	☐	☐		☑	☑	F	$1,140
256	589	MD 223 Sidepath	MD 4	Livingston Road	0	MDOT, M-NCPPC	☑	☑	☐		☐	☐	U	$15,000
257	728	MD 28, Norbeck Rd/MD 198 Spencerville Road	MD 97	I-95	11	MDOT	☐	☐	☐		☑	☑	U	5,000,000
258	727	MD 3, Robert Crain HWY	US 50	MD 32	8.9	MDOT	☑	☐	☑		☑	☑	U	6,400,000
259	590	MD 4 Sidepath	I-495	Southern Avenue	0	MDOT, M-NCPPC	☑	☑	☐		☐	☐	U	$4,000
260	723	MD 4, Pennsylvania Ave (Suitland PKWY Interchange)	MD 4 Suitland PKWY			MDOT	☑	☑	☐	O	☑	☑	P	0,000,000
261	722	MD 4, Pennsylvania Ave.	I-95/I-495	MD 223	3.1	MDOT	☑	☐	☐	O	☑	☑	P	7,300,000
262	730	MD 450 Annapolis Road	Stoneybrook Dr.	West of MD	1.7	MDOT	☐	☑	☑	O	☑	☑	U	1,000,000
263	570	MD 450 Sidepath and/or wide sidewalks	Seabrook Road	US 1	0	MDOT, SHA	☑	☑	☐		☐	☐	U	$3,000
264	740	MD 5 Branch Ave (Interchange at MD 373/Brandywine)	At BrandyWine Road (MD 373/381)		0.9	MDOT	☐	☑	☑		☑	☑	P	3,000,000
265	578	MD 564 Sidepath and Bike Lanes	MD 197	MD 450	0	MDOT, M-NCPPC	☑	☑	☐		☐	☐	U	$10,000
266	116	MD 564 Sidepath and Bike Lanes	MD 197	MD 450		Prince Georges County, M-NCPPC	☑	☑	☐		☐	☐	U	$4,000
267	591	MD 704 Sidepath and Bike Lanes	MD 450	Eastern Avenue	0	MDOT, M-NCPPC	☑	☑	☐		☐	☐	U	$60,000
268	721	MD210, Indian Head HWY	I-95/I-495	MD 228	10	MDOT	☐	☐	☐	O	☑	☑	U	2,700,000

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269	574	Mitchellville Road Sidepath	Mt. Oak Road	US 301	0	Prince Georges County, M-NCPPC	☑	☑	☐		☐	☐	U	$768
270	838	Montpelier Road Complete and Green Street	MD 197	200 feet south of Carland Place	1.4	Prince Georges County	☑	☐	☑		☐	☐	P	
271	577	Old Chapel Road Sidewalk and Bikeway	MD 197	Race Track Road	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	C	$2,000
272	235	Old Fort Road	MD 210	Fort Washington Road		Prince Georges County	☑	☐	☐		☐	☐		
273	51	Oxon Hill Road	MD 210	Livingston Road		Prince Georges County, DPW&T	☑	☐	☐		☐	☐	UC	$0
274	139	Oxon Hill Road (MD 414)	MD 210	St. Barnabas Road		MDOT	☑	☐	☐		☐	☐		$350
275	586	Oxon Run Trail	Southern Avenue	Naylor Road	0	M-NCPPC, Prince Georges County, M-NCPPC	☐	☑	☐		☐	☐	U	$1,100
276	835	Paint Branch Parkway Complete and Green Street	River Road	MD 201	0.9	Prince William Co. DPW	☑	☐	☑		☐	☐	F	$2,540
277	836	Paint Branch Parkway Complete and Green Street	MD 201	River Road	0.8	Prince Georges County	☑	☐	☑		☐	☐	P	$2,540
278	78	Piscataway Creek Trail	Dower House Branch near Cheltenham	Potomac River		M-NCPPC, Prince Georges County, National Park Service	☐	☑	☐		☐	☐	P	$2,300
279	115	Potomac Heritage On-Road Bicycle Route	Oxon Cove Park	Piscataway		Prince Georges County, DPW&T	☑	☐	☐		☐	☐	P	$0
280	198	Prince George's Connector	Chillum Road	Gallatin Street		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	P	$400
281	585	Princess Garden Parkway Sidewalks and Bike Lanes	MD 450	Good Luck Road	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	U	$700
282	579	Prospect Hill Sidewalks and Bike Lanes	Hillmeade Road	MD 953	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	U	$800
283	583	Queen Chapel Road Sidewalks and Bike Lanes	MD 410	Eastern Avenue	0	MDOT, M-NCPPC	☑	☐	☐		☐	☐	U	$5,000
284	572	Race Track Road Sidepath and Bike Lanes	MD 450	MD 197	0	Prince Georges County, M-NCPPC	☑	☑	☐		☐	☐	U	$1,900

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285	850	Rhode Island Avenue Trolley Trail Ext. Phase I	Queensbury Road	US 1	1	M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	C	
286	553	Rhode Island Avenue Trolley Trail Ext. Phase II	Farragut Street	Armentrout Drive	0	M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	P	$1,500
287	593	Ritchie Branch Trail	Marlboro Pike	Walker Mill Road	0	M-NCPPC, Prince Georges County, M-NCPPC	☐	☑	☐		☐	☐	U	$2,000
288	186	Ritchie Marlboro Road	Old Marlboro Pike	Capital Beltway		Prince Georges County	☐	☑	☐		☐	☐		$1,100
289	840	Ruby Lockhart Boulevard	Evarts Street	St. Joseph's Drive	0.6	Prince Georges County	☑	☑	☑		☐	☐	C	
290	575	Silver Hill Road Sidewalks and Bike Lanes	MD 5	Walker Mill Road	0	MDOT, DPW&T	☑	☐	☐		☐	☐	U	$1,680
291	576	St. Barnabas Road Sidewalks and Bike Lanes	Silver Hill Road	Livingston Road	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	U	$2,500
292	54	Suitland Parkway Trail	Washington D.C.	MD 4	6	National Park Service	☐	☑	☐		☐	☐		$0
293	837	Swan Road Complete and Green Street	MD 458	200 feet south of Swann Place	0.7	Prince Georges County	☑	☐	☑		☐	☐	P	$4,885
294	21	Temple Hills Road	Saint Barnabas Road	Piscataway Road		Prince Georges County	☑	☐	☐		☐	☐	U	
295	213	Tinkers Creek Trail	MD 5	Piscataway Creek		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐		$1,600
296	253	Tucker Road	Saint Barnabas Road	Allentown Road		Prince Georges County	☑	☐	☐		☐	☐		
297	100	US 1	Sunnyside Avenue	Contee Road		MDOT	☑	☑	☐		☐	☐		$1,000
298	118	US 1 (College Park)	Sunnyside Avenue	Albion Road		MDOT	☑	☑	☐		☐	☐		$0
299	724	US 1, Baltimore Ave	College Ave	I-95/I-495	4.6	MDOT	☑	☐	☑		☑	☑	U	0,000,000
300	725	US 301, Crain Highway	Mount Oak Road	US 50	2	MDOT	☑	☐	☑		☑	☑	U	3,800,000
301	841	Walker Mill Road bike lanes	Southwest Branch	Beechnut Road	0.7	M-NCPPC, Prince Georges County	☑	☐	☐		☐	☐	C	
302	852	WB&A Spur Trail			1	M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	C	

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
303	201	WB&A Spur Trail	WB&A Trail	Fran Uhler Natural Area		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐	UC	
304	249	Western Branch Trail	Lottsford Road	Upper Marlboro		M-NCPPC, Prince Georges County	☐	☑	☐		☐	☐		$3,100
305	584	Whitfield Chapel Road Sidewalks and Bike Lanes	MD 704	MD 450	0	Prince Georges County, M-NCPPC	☑	☐	☐		☐	☐	U	$800
306	196	Woodrow Wilson Bridge	Oxon Hill Road	Virginia		M-NCPPC, Prince Georges County, MDOT	☐	☑	☐	B	☑	☑	C	$0
Region-wide														
307	751	WMATA Maryland Metrorail Crossing Improvements				WMATA	☐	☐	☐		☐	☐	P	$1,363
308	748	WMATA Maryland Metrorail Sharrows and Bike Lanes			8	WMATA	☐	☐	☐		☐	☐	P	$341
309	745	WMATA Maryland Metrorail Sidewalk/ Pathway Project			5	WMATA	☐	☐	☐		☐	☐	P	$2,073
Rockville														
310	559	Accessible Pedestrian Signals	Citywide project		0	City of Rockville	☐	☐	☐	I	☐	☐	UC	$1,129
311	24	Bicycle Route System Improvements	Citywide project			City of Rockville	☐	☐	☐		☐	☐	C	$1,057
312	167	Millennium Trail South - Wootton Parkway	W. Edmonston Dr	Veirs Mill Rd	1	City of Rockville, Maryland State Highway Administration	☐	☑	☐		☐	☐	C	$905
313	161	Ped/Bike Bridge Over I-270 along MD 28	Adclare Rd and Nelson Street	Darnestown Road	2	City of Rockville, Maryland State Highway Administration	☐	☑	☐	B	☐	☐	C	$4,714
314	216	Pedestrian Safety	Citywide project			City of Rockville	☐	☐	☐		☐	☐	UC	$1,366
315	560	Rockville Intermodal Access - Baltimore Road	Rockville Town Center	City limit	0	City of Rockville	☐	☐	☐		☐	☑	F	$6,393
316	818	Rockville Sidewalk Extensions			1	MCDOT	☐	☐	☑		☐	☐	F	$532
317	143	Sidewalks	Citywide project		2	City of Rockville	☐	☐	☑		☐	☐	UC	$1,422

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
Takoma Park													
318	50	Carroll Avenue Bike Lanes	DC Line	Piney Branch Road		MDOT, Takoma Park	☐	☐	☐		☐	☐		$0
Town of Emmitsburg													
319	546	Emmitsburg Greenway Trail	Emmitsburg	Emmitsburg	0	Frederick County, Town of Emmitsburg	☐	☑	☐		☐	☐	U	$2,500

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
VA														
320	801	Mt Vernon Trail Bridges				National Park Service	☐	☐	☐	B	☐	☐		$1,500
321	796	North Park Trail Connection				National Park Service, VDOT	☐	☐	☐		☐	☐	P	$1,200
322	799	Re-alignment of Mt. Vernon Trail at Daingerfield I				National Park Service	☐	☐	☐	O	☐	☐		$713
323	800	Theodore Roosevelt Island Trailhead Improvements				National Park Service	☐	☐	☐		☐	☐	F	$500
Alexandria, Fairfax County, Falls Church, Loudoun														
324	651	VA 7 Trail	Leesburg	Alexandria		NVTA	☐	☐	☐		☐	☐		

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
Arlington County														
325	384	ADA sidewalk upgrades				Arlington County, VDOT	☐	☐	☑	I	☐	☐	UC	$100
326	859	Arlington Bicycle Network				Arlington County, NVTA	☐	☐	☐		☐	☐	U	$10,000
327	609	Arlington Blvd. Irving St. HSIP	Arlington Boulevard	Irving Street		Arlington County, VDOT	☐	☐	☐	I	☑	☑	F	$473
328	610	Arlington Blvd. Park Drive HSIP	Arlington Boulevard	Park Drive		Arlington County, VDOT	☐	☐	☐	I	☑	☑	F	$495
329	601	Arlington Blvd. Trail improvements	Pershing Drive	Washington Blvd.	1	Arlington County, VDOT	☐	☑	☐		☐	☑	P	$800
330	123	Arlington Boulevard Trail Improvements	10th Street overpass	Washington Boulevard	0.8	Arlington County, Arlington County	☐	☑	☐	S	☐	☐	F	$670
331	19	Army Navy Country Club Emergency Access Drive	S. Queen St.	Army Navy Country Club (Private Drive)	0.2	Arlington County	☐	☐	☑	O	☐	☐	U	$5,000
332	599	Army Navy Drive/Joyce St. bike facilities	S. Joyce Street	12th Street South	1	Arlington County, FHWA, VDOT	☑	☐	☐		☐	☐	U	$1,000
333	611	Arterial Street Safety improvements				Arlington County	☐	☐	☐	S	☐	☐	F	$800
334	618	Capital Bikeshare - Arlington				Arlington County, DDOT	☐	☐	☐	O	☐	☐	UC	$5,423
335	604	Carlin Spring Rd. bridge replacement	Carlin Springs Rd.	North George Mason Drive	0	Arlington County	☐	☐	☐	B	☐	☐	F	$550
336	686	Clarendon Blvd Trail	Wilson Blvd	Washington Blvd		NVTA	☐	☐	☐		☐	☐		
337	608	Columbia Pike Complete Streets	Frederick St.	Fairfax County Line	3	Arlington County	☑	☐	☐	S	☑	☑	P	$2,000
338	612	Complete Streets (R-B corridor)				Arlington County	☐	☐	☐	S	☐	☐	F	$300
339	865	Crystal City Complete Streets				NVTA	☐	☐	☐	S	☐	☐	P	$2,000
340	383	CUSTIS TRAIL WESTOVER UNDERPASS @ I-66				Arlington County	☐	☐	☐		☐	☐	C	$75
341	605	Doctor's Run Trail	South Quincy Street	South George Mason Drive	0	Arlington County	☐	☐	☐		☐	☐	U	$500
342	653	Four Mile Run Trail	Shirlington Road	Glebe Road		NVTA	☐	☐	☐		☐	☐		
343	313	General Trail Improvements			0	Arlington County	☐	☐	☐		☐	☐	UC	$100

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344	698	George Mason Drive Trail	Old Dominion Drive	Four Mile Run Drive		NVTA	☐	☐	☐		☐	☐	U	
345	514	Glebe Road Bridge Replacement	500' south of Route 50	500' north of route 50	0	VDOT	☐	☐	☐		☐	☐	C	$1,950
346	518	Glebe Road Pedestrian Crossings	Fairfax Drive	North Carlin Springs Road	0	VDOT	☐	☐	☐		☑	☑	C	$2,780
347	311	I-395 Shirlington Underpass, Four Mile Run Trail	Shirlingotn Rd	West Glebe Rd	0	Arlington County, VDOT	☐	☐	☐		☐	☐	C	$2,000
348	602	Kirkwood Rd. sidewalks	Lee Highway	14th Street North	1	Arlington County	☐	☐	☑		☐	☑	P	$400
349	598	Long Bridge Park Esplanade Bridge	Boundary Drive	GW Parkway	0	Arlington County, FHWA, VDOT, NPS	☐	☐	☐	B	☐	☐	U	$2,000
350	644	Metrorail Trail	Cameron Street	Cyrstal City		NVTA	☐	☐	☐		☐	☐		
351	607	Old Dominion Drive Complete Streets	N. Glebe Rd.	Fairfax Co. line	1	Arlington County, VDOT	☐	☐	☑	S	☑	☑	P	$2,000
352	310	Old Dominion Drive Complete Streets (phase I)	Lee Highway	N. Glebe Rd.	0	Arlington County, VDOT	☐	☐	☐	S	☐	☐	C	$1,000
353	219	Old Jefferson Davis Highway/ Mount Vernon Trail CO				National Park Service	☐	☐	☐		☐	☐		
354	147	Potomac Yard/Four Mile Run Trail	Potomac Avenue	Four Mile Run Trail	0.1	Arlington County, City of Alexandria	☐	☑	☐	O	☐	☐	P	$1,500
355	606	Priority Bus Stop improvements				Arlington County, WMATA	☐	☐	☐	S	☑	☑	F	$450
356	110	Route 110 Trail	Memorial Dr	Pentagon North Parking Lot	0.7	Arlington County, National Park Service	☐	☑	☐	O	☐	☐	F	$734
357	603	Shirlington Rd. bridge replacement	Shirlington Rd.	Four Mile Run		Arlington County	☐	☐	☐	B	☐	☐	U	$1,000
358	692	US 50 Trail	Wilson BLVD	Nottingham Street		NVTA	☐	☐	☐		☐	☐		
359	179	VA 120 (Glebe Road)	N. Randolph Street	Fairfax Drive		Arlington County, VDOT	☐	☐	☐	I	☐	☑	F	$2,500
360	664	VA 237 Trail	Glebe Road	Washington BLVD		NVTA	☐	☐	☐		☐	☐		
361	699	VA 27 Trail	Arlington Blvd	Columbia Pike		NVTA	☐	☐	☐		☐	☐		
362	315	Washington Blvd Trail Phase I	Arlington Blvd	Walter Reed	0	Arlington County, VDOT	☐	☐	☐		☐	☐	C	$350
363	600	Washington Blvd. Trail (phase II)	S. 2nd Street	Columbia Pike	1	Arlington County,	☐	☑	☐		☐	☑	F	$1,500

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
						FHWA, VDOT							
364	685	Wilson blvd Trail	Wilson Blvd	Key Bridge		NVTA	☐	☐	☐		☐	☐		
Arlington County, District of Columbia													
365	27	Rosslyn Circle & Lynn Street improvements	N. Lynn St	Ft. Myer Dr	0.3	Arlington County, VDOT	☐	☑	☐	I	☐	☐	F	$5,500
Arlington County, Fairfax County													
366	192	Mount Vernon Trail Extension	Beltway	Theodore Roosevelt Island		National Park Service, Fairfax County	☐	☑	☐		☐	☐		

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City of Alexandria														
367	844	Access to Transit	King Street	Callahan Drive	0	City of Alexandria	☐	☐	☐	I	☐	☐	F	$1,200
368	633	Alexandria Local Trail	Eisenhower	Reinkers		NVTA	☐	☐	☐		☐	☐	U	
369	564	Bicycle Parking and Racks-on-Buses	various	various	0	City of Alexandria	☐	☐	☐		☑	☐	C	$2,300
370	847	Bicycle Parking at Major Transit Stops	various	various		City of Alexandria, VDOT	☐	☐	☐	P	☐	☐	F	$400
371	759	Capital Bikeshare	Citywide	Citywide		City of Alexandria, VDOT	☐	☐	☐		☐	☑	P	$3
372	761	Crystal City to Cameron Street Trail	Crystal City	Cameron Street	4	NVTA, WMATA	☐	☐	☐		☐	☐	U	$1,000
373	129	Duke Street Pedestrian Bridge	Cameron Station	Ben Brennman Park	1	City of Alexandria	☐	☐	☐		☑	☑	C	$750
374	80	Duke Street Pedestrian Improvements	Duke Street	Carlyle Avenue	1	City of Alexandria	☐	☐	☐		☐	☐	C	$195
375	64	Duke Street Sidewalk Improvements at I-395	Oasis Drive	Walker Street	0.5	City of Alexandria, VDOT	☐	☐	☑		☑	☑	F	$1,210
376	845	Edsall Rd and S Picket St Pedestrian Improvements	Edsall Road	South Pickett Street		City of Alexandria, VDOT	☐	☐	☐	I	☐	☐	F	$400
377	561	Eisenhower Ave Complete Street	Stovall	Holland	0	City of Alexandria, VDOT	☑	☐	☐		☑	☑	F	$14,000
378	34	Eisenhower Multi-Use Trail	Cameron Run East	Telegraph Road	2	City of Alexandria	☐	☑	☐		☑	☑	C	$1,600
379	860	Holland Avenue Trail				NVTA	☐	☑	☐		☐	☐	U	$5,000
380	98	Holmes Run Greenway Tunnels/Grade Separation	N Ripley	Beauregard	1	City of Alexandria	☐	☑	☐		☑	☑	F	$4
381	777	I-395 Seminary Road HOV Ramp and Ped bridge			0.4	VDOT	☐	☑	☐	B	☑	☑	F	
382	37	I-95/I-495 Woodrow Wilson Memorial Bridge - Trail	Prince George's County, MD	Mount Vernon Trail, Alexandria	2	City of Alexandria	☑	☑	☐		☑	☑	C	$24,400
383	217	King Street/Beauregard Intersection	Beauregard/Walter Reed Dr.	28th Street	1	City of Alexandria, VDOT	☐	☐	☐		☑	☑	F	$11,000
384	758	Mount Vernon Trail at Abingdon	Slater's Lane	Pendleton Street	1	City of Alexandria, VDOT	☐	☐	☐		☐	☐	F	$750
385	565	Old Cameron Run Channel Trail	Mill Road	South Payne Street	0	City of Alexandria	☐	☑	☐		☑	☑	F	$1,000

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386	563	On-Street Bikeways	various	various	0	City of Alexandria	☑	☐	☐		☑	☐	P	$1,000
387	130	Pedestrian Improvements on Mount Vernon	Reed	Reed	0	City of Alexandria	☐	☐	☐		☑	☐	C	$500
388	26	Potomac Yard Park/Landbay K	Braddock Road Metro	Four Mile Run	2	City of Alexandria, VDOT	☐	☑	☐		☐	☐	UC	$9,000
389	862	Reconstruct Holmes Run Trail	North Ripley Street	I-395	1	NVTA, City of Alexandria	☐	☑	☐		☐	☐	F	$5,000
390	780	Rt. 7/King Street bridge over I-395	0.3 miles East	0.3 miles West	0.6	VDOT	☐	☑	☐	B	☐	☑	P	
391	773	Rt. 95 Jones Point Reforestation - w/ trails	0.4 miles east of Rt. 1	0.8 miles east of Rt. 1	0.9	VDOT	☐	☑	☐	S	☐	☑	C	
392	562	Safe Routes to School	Charles Barrett Elementary School	Charles Barrett Elementary School	0	City of Alexandria, VDOT	☑	☑	☐		☑	☑	C	$4,300
393	757	Safe Routes to Schools	Citywide	Citywide		City of Alexandria	☐	☐	☐	I	☐	☐	F	$275
394	99	Sidewalk/Trail Construction- Holmes Run/Chambliss	Citywide	Citywide	1	City of Alexandria, VDOT	☐	☐	☑		☑	☑	UC	$750
395	691	VA 236 Trail	Wakefeild Drive	Van Dorn Street		NVTA	☐	☐	☐		☐	☐		
396	756	Wilkes Street Bikeway	Royal Street	N Fayette Street	1	City of Alexandria	☐	☐	☐		☐	☐	F	$180
397	131	Wilkes Street Tunnel	South Royal	South Union	0	City of Alexandria	☐	☐	☐		☐	☐	C	$770
City of Alexandria, Arlington County														
398	566	Four Mile Run Pedestrian and Bicycle Bridge	S Eads	Commonwealth Ave	0	Arlington County, VDOT	☐	☐	☐		☑	☑	P	$6,000
City of Alexandria, Fairfax County														
399	71	Woodrow Wilson Bridge Project	Md State Line	Telegraph Road	2	VDOT	☐	☑	☐	B	☑	☑	C	
City of Fairfax														
400	58	Accotink Gateway Connector Trail	Daniel's Run	Pickett Road	1	VDOT, City of Fairfax	☐	☑	☐		☑	☑	C	$1,762
401	521	Route 29 Spot Improvements			0	VDOT	☐	☐	☐		☑	☑	F	$6,677
402	175	US 29 (Lee Highway) Fairfax Circle	@ US 50			VDOT, City of Fairfax	☐	☐	☐	I	☑	☑	F	$11,586
City of Falls Church														
403	858	Falls Church Complete Streets				City of Falls Church, NVTA	☐	☐	☐	S	☐	☐	U	$2,000

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City of Manassas														
404	262	Old Town Manassas City Square, Walkways, & Crosswa	Phase I and Phase II			VDOT	☐	☐	☐	I	☑	☑	C	$557
City of Manassas Park														
405	63	Manassas Drive Sidewalk	Andrew Drive	Euclid Avenue		VDOT, City of Manassas Park	☐	☐	☐	S	☑	☑	C	$195
District-wide														
406	8	Bicycle Parking (M-70A)	District-wide			VDOT	☐	☐	☐	P	☐	☐	C	
407	180	Interstate Bicycle Route 1	14th street bridge Arlington County	Southern Prince William County border	54	VDOT	☐	☐	☐	O	☐	☐	F	$100
408	225	NOVA signal Program	District-wide			VDOT	☐	☐	☐	I	☐	☐	C	$9,000
Fairfax County														
409	674	Old Ox Road Trail	Old Ox Road	Herndon Parkway		NVTA	☐	☐	☐		☐	☐		
Fairfax and Arlington Counties, City oFalls Church														
410	778	I-66 Corridor Multimodal study	I-495	Theodore Roosevelt Bridge	17	VDOT	☐	☑	☐	O	☐	☑	C	

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Fairfax County													
411	103	Accotink Gateway Connector Trail	King Arthur Drive	Wakefield Park	1	VDOT, Fairfax County	☐	☑	☐		☑	☑	C	$2,619
412	264	Accotink Stream Valley Trail - Dam to Hunter Villa	Lake Accotink Park	Hunter Village Drive	0	Fairfax County Park Authority	☐	☑	☐		☐	☐	C	$400
413	386	Arlington Boulevard	Patrick Henry Drive		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
414	267	Arlington Boulevard	Graham Road		0	Fairfax County	☐	☐	☐	I	☐	☐	F	
415	268	Arlington Boulevard (US 50)	Jaguar Trail	Seven Corners	0	VDOT	☐	☐	☐	I	☑	☑	F	$3,000
416	387	Arlington Boulevard Pedestrian Bridge	Peyton Randolph Drive	Seven Corners Shopping Center	0	Fairfax County, VDOT	☐	☐	☐	B	☐	☐	C	$5,200
417	785	ARRA-C, Fairfax County Parkway(with 95549)	0.64 miles north of exit 166	).16 miles west of exit 166	3.1	VDOT	☐	☑	☐	O	☑	☑	F	
418	648	Backlick Road Trail	Lee Highway	Capital Beltway		NVTA	☐	☐	☐		☐	☐	U	$9,900
419	640	Backlick Run Trail	Backlick Road	Clermont Ave	5	NVTA	☐	☑	☐		☐	☐	U	$15,900
420	638	Beltway Trail	Dolley Madison Boulevard	Live Oak Drive		NVTA	☐	☑	☐		☐	☐	U	$11,900
421	918	Beulah Road Walkway			1.0	Fairfax County	☐	☐	☐		☐	☐	F	$2,650
422	166	Beulah Street	Franconia Road	Franconia-Springfield Parkway	1	VDOT	☐	☑	☐		☐	☐	C	$15,094
423	946	Bobann Drive Bikeway			0.9	Fairfax County	☐	☐	☐		☐	☐	C	$1,400
424	392	Braddock Road	Wakefield Chapel Road		0	Fairfax County	☐	☐	☐	I	☐	☐	F	
425	391	Braddock Road	Rolling Road		0	Fairfax County	☐	☐	☐	I	☐	☐	F	
426	389	Braddock Road	Guinea Road		0	Fairfax County	☐	☐	☐	I	☐	☐	F	
427	639	Braddock Road Trail	Guinea Road	Little River Turnpike		NVTA	☐	☐	☐		☐	☐		
428	114	Burke Center Parkway	Marshall Pond Road	Burke Lake Road	1	VDOT	☐	☑	☐		☐	☐	C	$1,900
429	191	Burke Lake Road Widening	Fairfax County Parkway	Lee Chapel Road	1	VDOT	☐	☑	☐		☐	☐	C	$7,000
430	965	Burke Road Lane Diet and On-Road Bike Lanes			1.3	Fairfax County	☐	☐	☐		☐	☐	F	$40
431	646	Capital Beltway Ramp Trail	I-95	US 1		NVTA	☐	☐	☐		☐	☐		
432	394	Centreville Road	Compton Road		0	Fairfax County Park Authority	☐	☐	☐	I	☐	☐	C	
433	395	Centreville Road	Green Trails Boulevard		0	Fairfax County	☐	☐	☐	I	☐	☐	C	

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434	397	Centreville Road	Sunrise Valley Drive		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
435	396	Centreville Road	New Braddock Road		0	Fairfax County	☐	☐	☐		☐	☐	C	
436	867	Cinderbed Bikeway	Fort Belvoir	Franconia-Springfield Metrorail Station.	3	Fairfax County	☐	☑	☐		☐	☐	U	
437	557	Clarks Branch Bridge at Riverbend Park	Clarks Branch		0	Fairfax County Park Authority	☐	☐	☐		☐	☐	C	$500
438	402	Columbia Pike	Powell Lane	Homes Run	0	Fairfax County, VDOT	☐	☐	☐	S	☐	☐	C	$1,106
439	30	Cross County Trail	Great Falls Park to Alban Road	Lake Accotink Dam to Hunter Village Drive segment	5	VDOT, Fairfax County	☐	☑	☐		☑	☑	C	$1,060
440	403	Cross County Trail			0	Fairfax County Park Authority	☐	☐	☐		☐	☐		
441	960	Cross County Trail (CCT) Pavement Upgrades			2	Fairfax County	☐	☐	☐		☐	☐	F	$876
442	404	Cub Run Valley Stream Connections	Samuels Pine Rd	Cub Run Rec Center / Schneider's Branch	0	Fairfax County Park Authority	☐	☐	☐		☐	☐	C	$625
443	405	Danbury Forest	Lake Accotink Park	Danbury Forest Dr	0	Fairfax County Park Authority	☐	☐	☐		☐	☐	C	$376
444	407	Dolley Madison Boulevard	Great Falls Street/Lewinsville Road		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
445	212	Dranesville Road Widening	Herndon	Route 7	2	VDOT	☑	☐	☐		☑	☑	C	$18,000
446	176	Fairfax County Parkway	123	7	10	VDOT, Fairfax County	☐	☑	☐		☑	☑	P	$122,000
447	408	Fairfax County Parkway	Old Keene Mill Road		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
448	595	Fairfax County Pedestrian Program			0	Fairfax County	☐	☐	☐	I	☐	☐	F	$58,000
449	666	Fairview Avenue Trail	Center Street	Oakview Dr		NVTA	☐	☐	☐		☐	☐		
450	967	Fox Mill Road Walkway from Fairfax County Parkway			1.1	Fairfax County	☐	☐	☐		☐	☐	F	$2,400
451	636	Franconia-Springfield Parkway Trail	Loisdale Road	Beulah		NVTA	☐	☐	☐		☐	☐		
452	516	Gallows Road On Road Bicycle Facility	Lee hwy	Old Courthouse Road	0	VDOT	☑	☐	☐		☑	☑	C	$1,099
453	304	Georgetown Pike Multi-Use Path	I-495	Route 7	2	VDOT	☐	☑	☐		☐	☐	F	$845
454	955	GMU-Fairfax City-Vienna Metrorail Bike Route			5.1	Fairfax County	☐	☐	☐		☐	☐	F	$10

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
455	966	Government Center Area Bicycle Demonstration Proje			3.1	Fairfax County	☐	☐	☐		☐	☐	F	$180
456	49	Great Falls Street Trail	Crutchfeild Street	Hutchinson Street		Fairfax County, VDOT	☐	☐	☐		☐	☐	C	$596
457	655	Haycock Road Trail	Broad Street	I-66		NVTA	☐	☐	☐		☐	☐		
458	637	Hayfield Road Trail	Manchester Road	Telegraph Road		NVTA	☐	☐	☐		☐	☐		
459	421	Holmes Run Stream Valley	Columbia Pike	Glenn Hills Park / Alexandria	0	Fairfax County Park Authority	☐	☑	☐		☐	☐	C	$1,268
460	954	Hunter Village Drive Shoulder Widening			0.9	Fairfax County	☐	☐	☐		☐	☐	F	$1,600
461	18	Huntington Metro Station Vicinity	Pedestrian Improvements			VDOT, Coalition for Smarter Growth	☐	☐	☐	S	☑	☑	C	$174
462	947	I-495 Express Lanes Ped/Bike at Chain Bridge Road			1.3	VDOT	☐	☐	☐		☐	☐	F	$1,750
463	548	I-495 HOT Lanes	Hemming Avenue	Old Dominion Road	0	VDOT	☐	☐	☐	B	☑	☑	C	
464	689	I-66 Trail	Sully Road	Paddington Lane	3	NVTA	☐	☑	☐		☐	☐	U	$6,000
465	779	I-95NB directional off ramp to NB Ffx Co. Pkway	Exit 166	0.6 miles from Exit 166	0.6	VDOT	☐	☑	☐	B	☐	☐	P	
466	948	Idylwood Road Trail (TMSAMS)			0.7	Fairfax County	☐	☐	☐		☐	☐	F	$1,050
467	951	Lake Braddock Drive Road Diet			2.3	Fairfax County	☐	☐	☐		☐	☐	F	$40
468	428	Lee Highway	Monument Drive		0	Fairfax County	☐	☐	☐		☐	☐	C	
469	443	Leesburg Pike	Tyco Road/Westwood Center Drive		0	Fairfax County, WMATA	☐	☐	☐		☐	☐	F	
470	442	Leesburg Pike	South Jefferson Street		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
471	439	Leesburg Pike	Magarity Road		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
472	444	Leesburg Pike	Tysons Square Center Entrance		0	Fairfax County	☐	☐	☐	I	☐	☐	F	
473	445	Lewinsville Road	Balls Hill Road		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
474	449	Little River Turnpike	Oasis Drive	Beauregard	0	VDOT, Fairfax County	☐	☐	☐	I	☑	☑	C	$933
475	448	Little River Turnpike	Braddock Road		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
476	255	Lorton Road Widening	US 1	Route 748	1	VDOT	☑	☑	☐		☑	☑	C	$9,000

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477	682	Manassas Clifton Trail	Park Center Ct	South County East West Trail		NVTA	☐	☐	☐		☐	☐		
478	337	Manchester Road Trail	Beulah Street	Hayfield		NVTA	☐	☐	☐		☐	☐	U	
479	957	Mason Neck Trail 2B			1.9	Fairfax County	☐	☐	☐		☐	☐	F	$2,290
480	681	Mt Vernon Trail Ext.	Potomac Heritage Trail	GW Parkway		NVTA	☐	☐	☐		☐	☐		
481	455	North Kings Highway	Huntington Metro		0	Fairfax County	☐	☐	☐	I	☐	☐	F	
482	193	NoVi (Northern Vienna) Trail	Phase I			VDOT, Fairfax County	☐	☐	☐		☑	☑	C	$303
483	460	Old Keene Mill Road	Shiplett Boulevard		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
484	461	Old Keene Mill Road	Sydenstricker Road		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
485	774	Phase 1 - Maintenance of FFx County Parkway Trail				VDOT	☐	☐	☐		☐	☐	F	$350,000
486	775	Phase 2 - Maintenance of Ffx County Pkwy Trail				VDOT	☐	☐	☐	O	☐	☐	F	$350,000
487	554	Pohick Stream Valley CCT reroute	Dominion Powerline Easement	Forest View	0	Fairfax County Park Authority	☐	☐	☐		☐	☐	C	$650
488	555	Pohick VRE Trail (Pohick Stream Valley Rail-Trail)	Burke Station VRE	Burke Village Shopping Center	1	Fairfax County Park Authority, Fairfax County	☐	☑	☐		☐	☐	C	$1,270
489	642	Potomac Heritage Trail	Northern End fo Beltway Trail	american legion bridge		NVTA	☐	☐	☐		☐	☐	U	$235,100
490	484	Richmond Highway	Old Mill Road/Mt. Vernon Memorial Highway		0	Fairfax County	☐	☐	☐	I	☐	☐	C	
491	945	Richmond Highway from Old Mill Road/Jeff Todd Way			3.4	Eastern Federal Lands Highway Division	☐	☐	☐		☐	☐	UC	$180,000
492	479	Richmond Highway Pedestrian Safety Improvements	Ladson Ln, Lukens Ln, Backlick Rd, Kings,	Belford Drive S., Frye Road, Mohawk Lane	0	Fairfax County	☐	☐	☐	I	☐	☐	P	
493	280	Roberts Road	Braddock Road	Shenandoah Lane	0.3	Fairfax County	☐	☐	☐		☐	☐	P	
494	214	Route 1 widening	Telegraph Road	Lorton Road	1	VDOT	☐	☑	☐		☑	☑	C	$23,326
495	524	Route 29 Bridge Replacement over Rocky Run			0	VDOT	☐	☐	☐		☑	☑	UC	$15,000
496	527	Route 50 Intersection Improvements @ Patrick Henry			0	VDOT	☐	☐	☐		☐	☐	C	$786

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
497	959	Route 50 Trail from West Ox Road to East of Lee Ro			4.9	Fairfax County	☐	☐	☐		☐	☐	F	$1,400
498	949	Route 7 Walkway (TMSAMS)			4.4	Fairfax County	☐	☐	☐		☐	☐	F	$5,375
499	105	Route 7 Widening	Rolling Holly Drive	Tyco Road	1	VDOT	☐	☑	☐		☑	☑	F	$37,263
500	776	Rt.7 widen to 6 lanes - PE only	Reston Ave	Jarrett Valley	6.9	VDOT	☐	☑	☐		☑	☑	P	
501	952	Scotts Run Walkway (TMSAMS)			0.6	Fairfax County Park Authority	☐	☐	☐		☐	☐	F	$2,300
502	961	Sherwood Hall Lanes Marking Plans			1.8	Fairfax County	☐	☐	☐		☐	☐	F	$50
503	963	Shipplett Boulevard On-Road Bike Lanes			1.2	Fairfax County	☐	☐	☐		☐	☐	F	$40
504	950	Silverbrook Road Walkway from Hooes Road to South			1.1	Fairfax County	☐	☐	☐		☐	☐	F	$2,300
505	650	South County East West Trail	Manassas Clifton Trail	I-395		NVTA	☐	☐	☐		☐	☐		
506	556	Spring Hill Rec Center Connector	Spring Hill Recreation Center	Spring Hill Farm HOA	0	Fairfax County Park Authority	☐	☐	☐		☐	☐		$120
507	861	Springfield to Tysons Corner Trail	Springfield	Tysons		NVTA	☐	☐	☐		☐	☐	P	$1,900
508	284	Stringfellow Road	Fair Lakes Boulevard	Route 50	2	VDOT, Fairfax County	☐	☑	☑		☐	☐	UC	$46,000
509	958	Sunrise Valley Drive Sidewalk (RMAG)			1.9	Fairfax County	☐	☐	☐		☐	☐	F	$4,284
510	953	Sunrise Valley Drive Walkway (DCBPA)			1.0	Fairfax County	☐	☐	☐		☐	☐	F	$1,750
511	956	Sunrise Valley Drive Walkway (DCBPA)			1.0	Fairfax County	☐	☐	☐		☐	☐	F	$2,000
512	285	Sunset Hills Road	Plaza America		0	Fairfax County	☐	☐	☐		☐	☐	UC	
513	645	Telegraph Road Trail	Richmond Highway	King Highway	2	NVTA	☐	☐	☐		☐	☐		
514	962	Telegraph Road Walkway from Huntington Avenue to R			2.4	Fairfax County	☐	☐	☐		☐	☐	F	$2,100
515	515	Telegraph Road Widening	Leaf Road	South Kings Hwy	0	VDOT	☑	☑	☐		☑	☑	P	$97,000
516	199	Trail and Pedestrian Improvements	Fairfax County wide			VDOT, Fairfax County	☐	☐	☐	S	☑	☑	F	$1,600
517	29	Trail Construction/Linway Terrace Safety Upgrade	6330 Linway Terrace	6332 linway Terrace		Fairfax County	☐	☐	☐		☐	☐	C	$43
518	290	Trap Road	Wolf Trap Farm Park	Beulah Road	1	VDOT	☐	☐	☑		☑	☑	C	$2,242

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519	177	Tysons Corner	Pedestrian Improvements Identified by	the HJR 276 Committee		VDOT, Fairfax County	☐	☐	☐	I	☑	☑	C	$123
520	292	Tysons Priority Access Improvement Projects			0	Fairfax County	☐	☐	☐		☐	☐		
521	687	US 29 Trail	Dixie Hill Road	Vietch Street		NVTA	☐	☐	☐		☐	☐		$1,900
522	305	US 29 Widening	WEST MERRILEE DRIVE	ROUTE I-495	1	VDOT, Fairfax	☐	☑	☐		☑	☑	C	$119,000
523	137	US 50 install median barrier & fence	VA 7	Patrick Henry Drive	0	VDOT, Fairfax County	☐	☐	☐	S	☑	☑	C	$601
524	256	US 50 Pedestrian Bridge	Vicinity of the Seven Corners Shopping Center			VDOT, Fairfax County	☐	☐	☐	I	☑	☑	C	$5,353
525	85	US 50 Pedestrian Improvements	Jaguar Trail	Seven Corners		VDOT, Fairfax County	☐	☐	☐	S	☑	☑	P	$3,000
526	688	US 50 Trail	Nutley Street	Arlington Blvd		NVTA	☐	☑	☐		☐	☐	U	$19,900
527	669	US Bike 1 Trail	US 1	VA 123		NVTA	☐	☐	☐		☐	☐		
528	189	VA 193 - Georgetown Pike Trail	Innsbruck Road	River Bend Road	4	VDOT, Fairfax County	☐	☑	☐		☑	☑	C	$1,468
529	663	VA 28 Trail	Walney Road	Dulles Toll Road		NVTA	☐	☐	☐		☐	☐		
530	694	VA 638 Trail	South County East West Trail	I-95		NVTA	☐	☐	☐		☐	☐		
531	635	VA 7100 Trail	Monument Drive	Lee Chapel		NVTA	☐	☐	☐		☐	☐		
532	14	Walker Road Trail	Columbine Street	Colvin Run Road	2	VDOT, Fairfax County	☐	☑	☐		☑	☑	C	$447
533	772	Walney Road Bridge Replacement/widening			0.6	VDOT	☑	☑	☑		☐	☑	F	
534	239	West Ox Road (route 608)	Ox Trail Road	Lawyers Road	2	VDOT	☐	☑	☐		☑	☑	C	$11,300
535	964	Westmoreland Street On-Road Bike Lanes			1.1	Fairfax County	☐	☐	☐		☐	☐	F	$40
536	755	Widen Rt. 7 w/ paths on both sides	Reston Ave	Reston Pakway	0.5	VDOT	☐	☑	☐	I	☐	☐	U	
Fairfax County, Prince William County														
537	863	US 1 Bike Trail	Stafford County	I-495	30	NVTA	☐	☑	☐		☐	☐	U	$75,500
Fairfax, Loudoun, Prince William County														
538	659	Tri-County Parkway Trail	Braddock Road	Sudley Road	6	NVTA	☐	☑	☐		☐	☐	U	$1,300

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Loudoun County														
539	678	Algonkian Parkway Trail	Harry Bird Highway	Unnamed 5		NVTA	☐	☐	☐		☐	☐		
540	528	Atlantic Blvd	Church Road (Rt. 625)	Magnolia Road (Rt. 1525)	0	VDOT	☐	☐	☐		☐	☐	C	$24,000
541	715	Atlantic Blvd & Warp Dr Signal				Loudoun County	☐	☐	☐	I	☐	☐	F	
542	709	Atlantic Boulevard Bike & Ped Improvements	VA Route 7	Magnolia Road		Loudoun County	☐	☐	☐	S	☐	☐	P	
543	641	Atlantic Boulevard Trail	Harry Bird Highway	Church Road		NVTA	☐	☐	☐		☐	☐		
544	269	BATTLEFIELD PARKWAY - 4 LANES ON 6 LANE R/W	KINCAID BOULEVARD	ROUTE 7	1	VDOT	☐	☑	☑		☑	☑	C	$30,000
545	857	Belmont Ridge Road Trail	VA 7	Ryan Road	5	NVTA	☐	☑	☐		☐	☐	U	$4,400
546	672	Berlin turnpike Trail	Harpers Ferry Bridge WV	Charles Town Pike		NVTA	☐	☐	☐		☐	☐		
547	719	Cascades Parkway Trails	Old Vestals Gap road	Loudoun Park Lane		Loudoun County	☐	☐	☐	S	☐	☐	F	
548	705	Claiborne Parkway	Ryan Road	Croson Lane		Loudoun County	☐	☐	☐		☐	☐	F	
549	661	Claiborne Parkway Trail	Loudoun County Parkway Trail	Ryan Road		NVTA	☐	☑	☐		☐	☐	U	$300
550	519	Clarks Gap Ped Signals			0	VDOT	☐	☐	☐		☐	☐	C	$1,500
551	703	Crosstrail Boulevard	Sycolin Road	Kincaid Boulevard		Loudoun County	☐	☐	☐		☐	☐	F	
552	652	Dulles Toll Road Trail	Sully Road	Memorial Highway		NVTA	☐	☐	☐		☐	☐		
553	270	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	☐	☑	☑		☑	☑	C	$12,000
554	671	Loudoun County Parkway Trail	Ryan Road	W&OD Trail		NVTA	☐	☐	☐		☐	☐	U	
555	657	Loudoun County Parkway Trail	Mosby highway	Ryan Road		NVTA	☐	☐	☐		☐	☐		
556	714	Loudoun County Pkwy & Center St Signal				Loudoun County	☐	☐	☐	I	☐	☐	P	
557	700	Old Ashburn Sidewalks	Partlow Road	W&OD Trail		Loudoun County	☐	☐	☐	S	☐	☐	F	
558	717	Old Ox Road & US Route 50 Interchange				Loudoun County	☐	☐	☐	O	☐	☐	F	
559	309	Old Ox Road Widening (Rt. 606)	Mills Road (Rt. 621)	Dulles Greenway (Rt. 267)	5	VDOT,	☐	☑	☐		☐	☐	C	$49,450
560	768	Pacific Blvd 4 lane reconstr.-new alignment			0.7	VDOT	☐	☑	☑	I	☑	☑	C	
561	769	Pacific Blvd Loudoun 1036 widen to 4 lanes			0.4	VDOT	☐	☑	☑	I	☑	☑	C	

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562	271	PACIFIC BOULEVARD (MPO PROJECT	AUTOWORLD DRIVE (NORTHERN TERMINUS	SEVERN WAY	1	VDOT	☐	☑	☐		☑	☑	C	$10,000
563	710	Potomac View Road Pedestrian Improvements	S. Cottage Road	Business driveway		Loudoun County	☐	☐	☐	S	☐	☐	F	
564	711	River Creek Parkway Pedestrian Improvements	Fort Evans Road	Potomac Station Drive		Loudoun County	☐	☐	☐	S	☐	☐	P	
565	704	Riverside Parkway	River Creek Parkway	Upper Meadow Riverlook Drive		Loudoun County	☐	☐	☐		☐	☐	F	
566	526	Route 7 Sidewalk	NORTH SIDE OF WEST MAIN STREET; NORTH 28TH STREET;	NORTH 33RD STREET	0	VDOT	☐	☐	☐		☑	☑	C	$845
567	771	Rt. 606 Loudoun County Parkway/Old Ox Rd.	1.6 miles west of Rt. 267	Rt. 267	1.8	VDOT	☐	☑	☐	I	☑	☑	F	
568	770	Rt. 606 Loudoun County Parkway/Old Ox Rd.	Rt. 621	Rt. 267	5.2	VDOT	☐	☑	☐	I	☑	☑	F	
569	786	Rt. 659 - Reconstruct (Belmont) to 4 lanes w/ path	0.26 M south of Portsmount	0.23 M North ofGloucester Parkway	1.4	VDOT	☐	☑	☐	O	☐	☑		
570	701	Rural Splitter at Rt 659 & W&OD Trail				Loudoun County	☐	☐	☐	O	☐	☐	P	
571	702	Russell Branch Parkway	Ashburn Village Boulvard	Ashburn Road		Loudoun County	☐	☐	☐	O	☐	☐	F	
572	658	Shaw Road Trail	W&OD Trail	Dulles Toll Road		NVTA	☐	☐	☐		☐	☐		
573	708	Sterling Boulevard	W&OD Trail	Chase Heritage Circle		Loudoun County	☐	☐	☐		☐	☐	P	
574	712	Sycolin Road & Loudoun Center Place Signal				Loudoun County	☐	☐	☐	I	☐	☐	F	
575	706	Tall Cedars Parkway	Pinebrook Road	Gum Springs Road		Loudoun County	☐	☐	☐		☐	☐	F	
576	713	Tall Cedars Pkwy & Poland Rd Signal				Loudoun County	☐	☐	☐	I	☐	☐	F	
577	690	US 15 Trail	Braddock Road	James Monroe Highway		NVTA	☐	☐	☐		☐	☐		
578	684	US 50 Trail	Fauquier County Line	Pleasant Valley Drive		NVTA	☐	☐	☐		☐	☐		
579	654	VA 690 Trail	Main Street	W&OD Trail		NVTA	☐	☐	☐		☐	☐		
580	670	VA 734 Trail	US 50	Harry Byrd Highway		NVTA	☐	☐	☐		☐	☐		
581	662	VA 772 Trail	Belmont Ridge Road	Ryan Road	1	NVTA	☐	☑	☐		☐	☐	U	$500
582	224	VA 846 (Sterling Boulevard Landscaping)	VA 28	US 7		VDOT, Loudoun County	☐	☐	☐	S	☑	☑	C	$53
583	668	VA 9 Trail	Harpers Ferry Road	Harry Byrd Highway		NVTA	☐	☐	☐		☐	☐		

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584	716	VA Route 7 & Belmont Ridge Rd Interchange				Loudoun County	☐	☐	☐	O	☐	☐	F	
585	718	VA Route 7 & Hillsboro Road Interchange				Loudoun County	☐	☐	☐	S	☐	☐	U	
586	720	VA Route 7 Pedestrian Overpass				Loudoun County	☐	☐	☐	B	☐	☐	U	
587	259	W&OD Trail Extension	W&OD Trail End (Purcellville)	Round Hill	3	VDOT, Loudoun County	☐	☑	☐		☑	☑	F	$1,700
588	69	W&OD/White's Ferry Connection to C&O	W&OD	Potomac River at White's Ferry		VDOT, Northern Virginia Regional Park	☐	☐	☐		☐	☐		
589	707	Waxpool Road Intersection Improvements	Pacific Boulevard	Broderick Drive		Loudoun County	☐	☐	☐	S	☐	☐	F	
Loudoun County, Fairfax County														
590	854	VA 7 Trail from Leesburg to Alexandria	Leesburg	Alexandria	38	NVTA	☐	☑	☐		☐	☐	U	$87,000
591	16	US 50 widening	Pleasant valley Drive	Lee Road	1	VDOT	☐	☑	☐		☑	☑	F	$70,900
Prince William and Fairfax Counties														
592	211	123 Widnening	Davis Road	South Burke Lake Road	9	VDOT	☐	☑	☐		☐	☐	C	$6,181

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
Prince William County													
593	675	234 BYPASS trail	Braddock Road	Lee Highway		NVTA	☐	☐	☐		☐	☐	U	
594	308	234 Off-Road Multi Use Trail	Lake Jackson Drive	PW Parkway	1	VDOT	☐	☑	☐		☑	☑	C	$662
595	525	Balls Ford Road Widening	Bus 234	234	0	VDOT	☐	☑	☐		☑	☑	C	
596	677	Bike Route 1	Fleetwood Drive	Dumfries Road		NVTA	☐	☐	☐		☐	☐	U	
597	306	Bus 234 Add Signalized Crosswalks	All Major Intersections	All Major Intersections		VDOT	☐	☐	☐	I	☐	☐	C	$650
598	307	Bus 234 Sidewalk/Ramps Improvments	Balls Ford Road	Godwin Drive		VDOT	☐	☐	☐	I	☐	☑	C	$1,000
599	660	Godwin Drive Trail	Sudley Road	Nokesville Road	2	NVTA	☐	☑	☐		☐	☐	U	$600
600	695	Gordon Blvd Trail	US 1	Commerce		NVTA	☐	☐	☐		☐	☐		
601	781	I66/Rt.15 interchange reconst. w/ paths & sdwlks			0.8	VDOT	☐	☑	☐	B	☐	☑	F	
602	787	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	☐	☑	☐	O	☐	☑		$450
603	866	John Marshall Highway Trail	I-66	Lee Highway	2	NVTA, Prince William County	☐	☑	☐		☐	☐	U	$500
604	656	Liberia Avenue Trail	Old Bridge Road	Jefferson Davis Highway		NVTA	☐	☐	☐		☐	☐	U	
605	673	Linton Hall Road Trail	Lee Highway	Nokesville Road		NVTA	☐	☐	☐		☐	☐		
606	171	Linton Hall Road Widening	Glenkirk Road	Devlin Road	3	VDOT	☐	☑	☐		☑	☑	UC	$8,000
607	697	Minnieville Road Trail	Dumfries Road	Old Bridge Road		NVTA	☐	☐	☐		☐	☐	U	
608	676	New Cherry Hill Road	Potomac Heritage Trail	Potomac Parkway Trail		NVTA	☐	☐	☐		☐	☐		
609	523	Old Bridge Road Sidewalk	Mohican	Oakwood Drive	0	VDOT	☐	☐	☐		☐	☐	UC	$749
610	522	Old Bridge Road Sidewalk	Titania	Crickett	0	VDOT	☐	☐	☐		☐	☑	C	$1,800
611	679	Old Bridge Road Trail	Prince William Parkway	Poplar Lane	4	NVTA	☐	☑	☐		☐	☐	U	
612	82	Pedestrian Bridge over CSX Railroad	Veterans Memorial Park	DOT #860626C		VDOT	☐	☐	☐	S	☑	☑	C	$3,119
613	647	Potomac Heritage Trail	Wharton Drive	Jefferson Davis Highway		NVTA	☐	☐	☐		☐	☐	U	
614	667	Potomac Parkway trail	Old Stage Coach Road	New Cherry Hill Road		NVTA	☐	☐	☐		☐	☐		
615	634	Prince William Parkway Trail	Prince William Parkway	Signal Hill Road	8	NVTA	☐	☑	☐		☐	☐	C	

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
616	649	Prince William Parkway trail	Nokesville Road	Dumfries Road	4	NVTA	☐	☑	☐		☐	☐	U	$900
617	517	Route 234 and Rotue 1 Interchange	.4 miles east of route 1	.4 Miles west of Route 1	0	VDOT	☐	☑	☐		☑	☑	C	$87,000
618	164	Route 28 Trail Extension	Fauquier Co. Line	Vint Hill Road	7	VDOT	☐	☑	☐		☑	☑	P	$6,500
619	864	South County East-West Trail	Manassas	I-395		NVTA	☐	☑	☐		☐	☐	U	$51,600
620	680	Spriggs Road Trail	Hoadly Road	Dumfries Road		NVTA	☐	☐	☐		☐	☐		
621	643	US 1 Trail	Stafford County	I-495		NVTA	☐	☐	☐		☐	☐		
622	102	VA 234 Bike Trail	US 1 to I-95 &	Montclair to vic. Manassas	9	VDOT, NVTA	☐	☑	☐		☑	☑	P	$1,200
623	665	VA 234 Trail	Dumfries Road	Jefferson Davis Highway		NVTA	☐	☐	☐		☐	☐		
624	693	VA 784 Trail	Delaney Blvd	US 1		NVTA	☐	☐	☐		☐	☐		
Prince William County, Fairfax County														
625	683	VA 123 Trail	Clifton Road	Gordon Boulevard		NVTA	☐	☐	☐		☐	☐		
Purcellville														
626	226	Multiple Sidewalk Enhancements	Purcellville			VDOT	☐	☐	☐	S	☐	☐	C	$500
627	254	PURCELLVILLE - BICYCLE ACCESS TO HIGH SCHOOL & W&O	Main Street	W&OD Trail	1	VDOT	☐	☑	☐		☐	☐	C	$460
Region-wide														
628	752	WMATA Virginia Metrorail Crossing Improvements				WMATA	☐	☐	☐		☐	☐	P	$510
629	749	WMATA Virginia Metrorail Sharrow and Bike Lanes			3	WMATA	☐	☐	☐		☐	☐	P	$79
630	746	WMATA Virginia Metrorail Sidewalk/ Pathway Project			2	WMATA	☐	☐	☐		☐	☐	P	$753
Town of Clifton														
631	248	Pedestrian/Bicycle Plaza & Pathways	Town of Clifton	- Phase II		VDOT	☐	☐	☐	S	☑	☑	C	$70
Town of Hamilton														
632	11	Main Street	Town of Hamilton (Improvements)			VDOT, Town of Hamilton	☐	☐	☐	S	☑	☑	C	$47

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	Project ID	Project/Facility Name	From	To	Length (Miles)	Responsible Agencies	Bike	Path	Side walk	Spot/ Area	In CLRP	In TIP	Status	Cost
Town of Haymarket														
633	210	Town of Haymarket (Streetscaping)	Phase 1			VDOT, Town of Haymarket	☐	☐	☐	S	☐	☐	C	$1,008
634	4	Town of Haymarket Streetscaping	Washington Street	Phase II		VDOT, Town of Haymarket	☐	☐	☐	S	☑	☑	F	$2,026
Town of Herndon														
635	549	Van Buren Street Trail to Dulles Metrorail	North of Herndon Pkwy at existing Folly Lick Trail	Herndon Monroe Metrorail station	0	Town of Herndon, Fairfax County	☐	☑	☐		☑	☐	P	$600
636	631	Herndon Downtown Elden Streetscape	Elden St / Center St intersection	Elden St / Monroe St intersection	0.8	VDOT, Town of Herndon	☐	☑	☑	S	☐	☐	C	$2,100
637	856	Herndon Metro Access Trail	Van Buren Street	Herndon Metrorail	1	Town of Herndon	☐	☑	☐		☐	☐	P	$400
638	60	Sugarland Run Trail	W&OD Trail	Fairfax County's Sugarland Run Trail	1	VDOT, Town of Herndon	☐	☑	☐		☑	☑	C	$531
639	855	Sugarland Run Trail Extension	Sugarland Run Trail Terminus	Herndon Metrorail	1	NVTA	☐	☑	☐		☐	☐	U	$1,000
640	550	W&OD Trail Crossing at Crestview Drive	W&OD Trail at Crestview Drive	W&OD Trail at Crestview Drive	0	Town of Herndon, Northern Virginia Regional Park Authority	☐	☐	☐	I	☐	☐	P	$300
Town of Hillsboro														
641	70	PEDESTRIAN STUDY & IMPROVEMENTS	Town of Hillsboro	On 704		VDOT	☐	☐	☐	S	☐	☐	P	$15,348
Town of Lovettsville														
642	184	Ped & Bike Path Network	Town of Lovettsville		6	VDOT, Town of Lovettsville	☐	☑	☐	S	☑	☑	P	$450
Town of Occoquan														
643	7	Riverfront Boardwalk	on the Occoquan River	in the Town of Occoquan		VDOT, Town of Occoquan	☐	☐	☐	S	☑	☑	C	$296
Town of Quantico														
644	227	Potomac Avenue	CSX Railroad	Potomac River		VDOT, Town of Quantico	☐	☐	☐	S	☑	☑	C	$871
645	61	Potomac Transportation Facility	AMTRAK / VRE Station	Potomac River		VDOT, Town of Quantico	☐	☐	☐	S	☑	☑	C	$512

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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 *not* 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: 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 — 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 drive-ways 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 at 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: Code Letter 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

- Search
- Results List All

Log Out

Bike Ped Plan

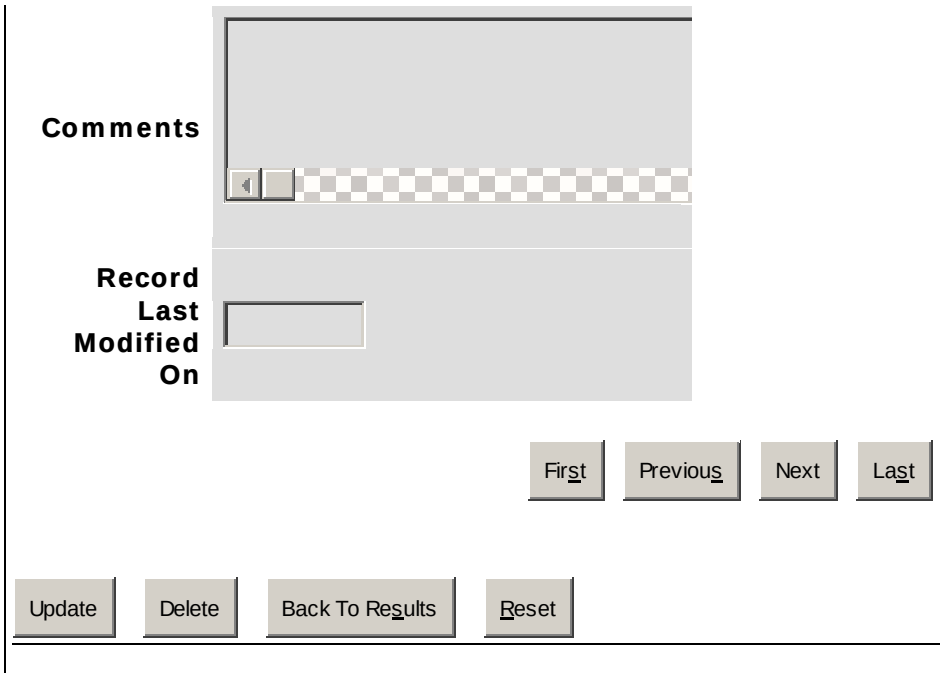
Search
Last Results View
List All

Related Records: Agency

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

Cost	$ 20000 (In Thousands)
URL for More Project Information	www.metbranchtrail.com
Project Manager's Name	Chris Holben
Project Manager's Phone	202 671 2638
Project Manager's Email	chris.holben@dc.gov
Project Is In the CLRP	◉ Yes ○ No
Corresponding CLRP Project ID	
Project Is In the TIP	◉ Yes ○ No
Corresponding TIP Project ID	
Project Is Part of a Larger Project	○ Yes ◉ No
Length of Bike Lane	2 (miles)
Length of Multi-Use Path	5 (miles)
Length of Sidewalk	(miles)
Type of Spot/Area Improveme	

nt	
Path Alignment	
Status	Partially Funded
Year of Completion or Implementation	2009
Project Within a Regional Activity Center	◉ Yes ○ No Information on Regional Activity Centers
Project Is Between Regional Activity Centers	◉ Yes ○ No
Maintenance	○ Yes ◉ No
Project Connects To a Transit Facility	◉ Yes ○ No
BikeNetConnect	◉ Yes ○ No
Pedestrian Safety Project	○ Yes ◉ No
Project Is In Local Plan	◉ Yes ○ No
Project Identified as a 2005 Regional Priority	◉ Yes ○ No


Comments
Record Last Modified On
First
Previous
Next
Last
Update
Delete
Back To Results
Reset

Appendix C

Completed Projects from the 2010 Bicycle and Pedestrian Plan

COG ID	Project Name	From	From	Description
11	Main Street	Town of Hamilton (Improvements)	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.
14	Walker Road Trail	Columbine Street	Columbine Street	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.
34	Eisenhower Multi-Use Trail	Cameron Run East	Cameron Run East	Enhancement and expansion of a 2-mile segment of the existing Eisenhower Avenue Shared Use Trail, including an underpass at Eisenhower Avenue.
71	Woodrow Wilson Bridge Project	Md State Line	Md State Line	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
111	Anacostia River Trail	Bladensburg Marina	Bladensburg Marina	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.
130	Pedestrian Improvements on Mount Vernon	Reed	Reed	Pedestrian improvements to high crash area along Mount Vernon Avenue.
149	Nebel Street extended	Randolph Road	Randolph Road	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
189	VA 193 - Georgetown Pike Trail	Innsbruck Road	Innsbruck Road	Construct a 4.5 mile trail from Innsbruck Road to River Bend Road and Applewood Lane to Seneca Road.
193	NoVi (Northern Vienna) Trail	Phase I	Phase I	Engineering & design for Phase I of Northern Vienna Trail. Study being conducted by Fairfax County

197	Metropolitan Branch Trail Phase I	Union Station	Union Station	Construct a 4 mile trail along the red line from Union Station to Bates Road NE
215	Bicycle Lanes Phase I			20 miles of bicycle lanes
226	Multiple Sidewalk Enhancements	Purcellville	Purcellville	Various Location (6)
248	Pedestrian/Bicycle Plaza & Pathways	Town of Clifton	Town of Clifton	Pedestrian/Bicycle Plaza & Pathways - Phase II in Town of Clifton
254	PURCELLVILLE - BICYCLE ACCESS TO HIGH SCHOOL & W&O	Main Street	Main Street	Access to Loudoun Valley High School
271	PACIFIC BOULEVARD (MPO PROJECT	AUTOWORLD DRIVE (NORTHERN TERMINUS	AUTOWORLD DRIVE (NORTHERN TERMINUS	
305	US 29 Widening	WEST MERRILEE DRIVE	WEST MERRILEE DRIVE	US 29 widening
306	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
307	Bus 234 Sidewalk/Ramps Improvments	Balls Ford Road	Balls Ford Road	Spot inprovements to all intersections(curb ramps, crosswalks, etc.)
308	234 Off-Road Multi Use Trail	Lake Jackson Drive	Lake Jackson Drive	
310	Old Dominion Drive Complete Streets (phase I)	Lee Highway	Lee Highway	CONSTRUCT CURB & GUTTER & SIDEWALKS ON THE WEST SIDE OF OLD DOM. DR. WITH POSSIBLE REALIGNMENT & RECONSTRUCTION OF EAST SIDE TO PROVIDE CONFORMING STREET SECTION TO VDOT REQUIREMENTS WITHIN AVIALBLE R.O.W., ALSO INCLUDES ADDITIONAL PAVEMENT WIDTH FOR ON STREET BIKEWAY. CHANGED TO T2 ON 4/11/03.
386	Arlington	Patrick Henry	Patrick Henry	Intersection improvement, add ped heads, relocate ped heads, block existing

	Boulevard	Drive	Drive	crosswalks.
514	Glebe Road Bridge Replacement	500' south of Route 50	500' south of Route 50	Replace bridge with new structure that will include shared use path and sidewalk
516	Gallows Road On Road Bicycle Facility	Lee hwy	Lee hwy	retro fitting of bike lanes on existing pavement
518	Glebe Road Pedestrian Crossings	Fairfax Drive	Fairfax Drive	
522	Old Bridge Road Sidewalk	Titania	Titania	curb ramps, crosswalks, etc.
525	Balls Ford Road Widening	Bus 234	Bus 234	
526	Route 7 Sidewalk	NORTH SIDE OF WEST MAIN STREET; NORTH 28TH STREET;	NORTH SIDE OF WEST MAIN STREET; NORTH 28TH STREET;	
527	Route 50 Intersection Improvements @ Patrick Henry			
528	Atlantic Blvd	Church Road (Rt. 625)	Church Road (Rt. 625)	
548	I-495 HOT Lanes	Hemming Avenue	Hemming Avenue	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.
555	Pohick VRE Trail (Pohick Stream Valley Rail-Trail)	Burke Station VRE	Burke Station VRE	One mile asphalt trail and 1 bridge in the Pohick Stream Valley connecting Burke Village Shopping Center and Burke Lake Road to the Burke Station VRE.
562	Safe Routes to School	Charles Barrett Elementary School	Charles Barrett Elementary School	Pedestrian and bicycle safety improvements at Charles Barrett Elementary School

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.
613	Capital Bikeshare - District of Columbia			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. 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. 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 Melbourne, Australia. BIXI bike sharing stations are solar powered and use wireless technology to allow for easy installation and adjustments. It may look different, but the BIXI bicycle has many of the same features as the Smartbike: 3-speed, internal hub gears, fenders, chain guard, lights, and a front rack. Annual, monthly, and daily memberships will be available for area residents and visitors. Alta Bicycle Share will operate the system. Alta Bicycle Share is a US-based company focused on management and operation of bicycle share systems globally. Its sister company, Alta Planning + Design, is the largest bicycle and pedestrian consulting company in the United States. Alta Bicycle Share is implementing or consulting on similar programs in Australia, Europe, China, and other locations in the United States.
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.
620	Great Streets - H Street NE Streetscape	3rd Street NE	3rd Street NE	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.
631	Herndon Downtown Elden Streetscape	Elden St / Center St intersection	Elden St / Center St intersection	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. 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. 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 landscaping and streetscape enhancements.
634	Prince William Parkway Trail	Prince William Parkway	Prince William Parkway	Multi Use Path from NVTA 2030 Plan
768	Pacific Blvd 4 lane reconstr.-new alignment			reconstruction to 4 lanes with a 5' sidewalk and a 10' path
769	Pacific Blvd Loudoun 1036 widen to 4 lanes			Widen road to 4 lanes, add 5' sidewalk, add 10 trail
773	Rt. 95 Jones Point Reforestation - w/	0.4 miles east of Rt. 1	0.4 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.

	trails			
778	I-66 Corridor Multimodal study	I-495	I-495	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.
803	L Street Cycle Track	New Hampshire Avenue	New Hampshire Avenue	Separated cycle track.
817	Robey Road	Greencastle Road	Greencastle Road	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.
825	Travilah Road	Darnestown Road	Darnestown Road	Road with side path and sidewalk
828	Woodfield Road Extended	Main Street	Main Street	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). 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 the proposed intersection with Woodfield Road; streetlighting; and landscaping. Woodfield Road Extended and Ridge Road improvements will be constructed within an 80-foot wide right-of-way.
839	Evarts Street Bike Lanes	I-495	I-495	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.
840	Ruby Lockhart Boulevard	Evarts Street	Evarts Street	Designated bike lanes, wide sidewalks, traffic calming, and decorative crosswalks were provided as part of the road construction for Woodmore Town Center.
848	Black Hill Regional Park Trails			Since 2010, M-NCPPC Montgomery Parks has built just over 5 miles of new hard surface park trails, all within Black Hill Regional Park.
849	City of Frederick Bike Lanes			City-wide bike lanes
850	Rhode Island Avenue Trolley Trail Ext. Phase I	Queensbury Road	Queensbury Road	Hyattsville, Riverdale Park
851	Black Branch Stream Valley Trail - Oak Creek Club			(Oak Creek Club development) – 1.74 miles (developer built)
852	WB&A Spur Trail			

Appendix D

2013 Cordon Counts

Potomac River Bridges	Cordon Count Volumes	DDOT Count Volumes
14th Street (Inbound to D.C.)	592	
14th Street (outbound from D.C.)	172	
Arlington Memorial (inbound to D.C.)	160	
Arlington Memorial (outbound from D.C.)	64	
Key (Inbound to D.C.)	103	337
Key (outbound from D.C.)	99	235
Other trails and streets in Arlington County, Va.		
Mount Vernon Trail	332	
Custis Trail	349	

Other trails and streets in D.C.	Cordon Count Volumes	DDOT Count Volumes
Capital Crescent and C&O Canal Towpath	229	
Rock Creek	130	
Connecticut Avenue, N.W.	197	
14th Street, N.W.	274	
11th Street, N.W.	161	
Eckington Place, N.E. (Metropolitan Branch)	15	222
East Capitol Street	275	
Anacostia Trail (M Street, S.E.)	12	
11th Street Bridge, S.E. (local span)	12	

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
14th Street (Inbound to D.C.)	592	
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Other trails and streets in D.C.	C C Vo
Capital Crescent and C&O Canal Towpath	
Rock Creek	
Connecticut Avenue, N.W.	
14th Street, N.W.	
11th Street, N.W.	
Eckington Place, N.E. (Metropolitan Branch)	
East Capitol Street	
Anacostia Trail (M Street, S.E.)	
11th Street Bridge, S.E. (local span)	

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

2013 WMATA Passenger Survey	Bicycle (all day)	Walked (all day)
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 CORRAL	A bike corral transforms a standard parking lane or curbside zone into bike parking, typically by placing bike racks in the space, and using with flexiwands and curb stops to discourage conflicts with automobiles. Often used in areas with narrow and/or busy sidewalks.
BIKE SHARING	Short-term bicycle rental available at a network of unattended locations.
BIKE STATION	A staffed, enclosed bicycle parking facility, usually located at a transit center, which may offer such services as bicycle repair, rental, lockers, and showers.

BIKEWAY	Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless or whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.
BUFFERED BIKE LANE	Buffered bike lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane.
COMPLETE STREETS	Complete streets are designed and operated to enable safe access for all users**.** Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street
CYCLE TRACK (Protected Bike Lane)	A bicycle-only facility that provides physical separation within the right of way from vehicle travel lanes.
CLASS I, II or III BIKEWAY	Terms sometimes used to describe different types of bicycle facilities. Class I is a shared-use path, Class II a bicycle lane, and Class III a shared roadway. However, Since there is some disagreement on the exact meaning of these terms, the AASHTO terms (listed above) should be used.
GREENWAY	A linear park or recreation facility of limited width, located along the length of an existing or former public utility or railroad right-of-way, or along a stream bed.
HIKER-BIKER TRAIL	A paved path designed for use by both pedestrians and bicyclists, which is completely separated from vehicular traffic.
METROPOLITAN STATISTICAL AREA	A core area containing a substantial population nucleus, together with adjacent communities having a high degree of social and economic integration with that core. Metropolitan statistical areas comprise one or more entire counties. They are used by the United States Census for the purpose of tabulating, enumerating and publishing data.
RAILS-TO-TRAILS CONSERVANCY	A national membership organization that works to facilitate the acquisition of abandoned railroad lines for use in creating bicycle and pedestrian trails and linear

	parks.
RAIL-TRAIL	A Shared-Use Path, either paved or unpaved, built within the right-of-way of an existing or former railroad.
REGIONAL ACTIVITY CENTER	A set of locations within the National Capital Region Transportation Planning Board planning area identified by the Council of Government's Planning Director's Technical Advisory Committee as employment centers of regional significance. Five types of Regional Activity Center have been designated, with different employment and residential density criteria for each.
REGIONAL ACTIVITY CLUSTER	An employment center adjacent to a Regional Activity Center, with a lower density than a Regional Acitivity Center
ROAD DIET	A road diet is a technique whereby a road is reduced in number of travel lanes and/or effective width in order to achieve systemic improvements. An example of a road diet would be the conversion of two travel lanes in each direction to a 3-lane section with one travel lane in each direction, optional bicycle lanes, and a two-way turn lane in the middle.
SHARED ROADWAY	A roadway which is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes, or road with paved shoulders.
SHARED-USE PATH	A bikeway, at least 8' in width, physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared-Use Paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Also called a multi-use path.
SHARROW	A shared-lane marking or sharrow is a street marking used to indicate the recommended position and direction of travel for the bicyclist.
SIDE-PATH	A shared-used path built within the right-of-way of a non limited-access highway.
SIDEWALK	The portion of a street or highway right-of-way, at least 4' in width, designed for preferential or exclusive use by pedestrians.

SIGNED SHARED ROADWAY	A shared roadway that has been designated as a 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
MAP-21	Moving Ahead for Progress in the 21st Century Act
MDOT	Maryland Department of Transportation
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MTA	Maryland Transit Administration
MUTCD	Manual on Uniform Traffic Control Devices
NACTO	National Association of City Transportation Officials
NCPC	National Capital Planning Commission
NVTC	Northern Virginia Transportation Commission
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: Legacy for Users
MDSHA	Maryland State Highway Administration
SOV	Single-Occupant Vehicle
SRTS	Safe Routes to School
TCSP	Transportation and Community and System Preservation Pilot Program
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TPB	National Capital Region Transportation Planning Board
US DOT	U.S. Department of Transportation
VDOT	Virginia Department of Transportation
VMT	Vehicle-Miles Traveled
WABA	Washington Area Bicyclist Association
WMATA	Washington Metropolitan Area Transit Authority

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Appendix I
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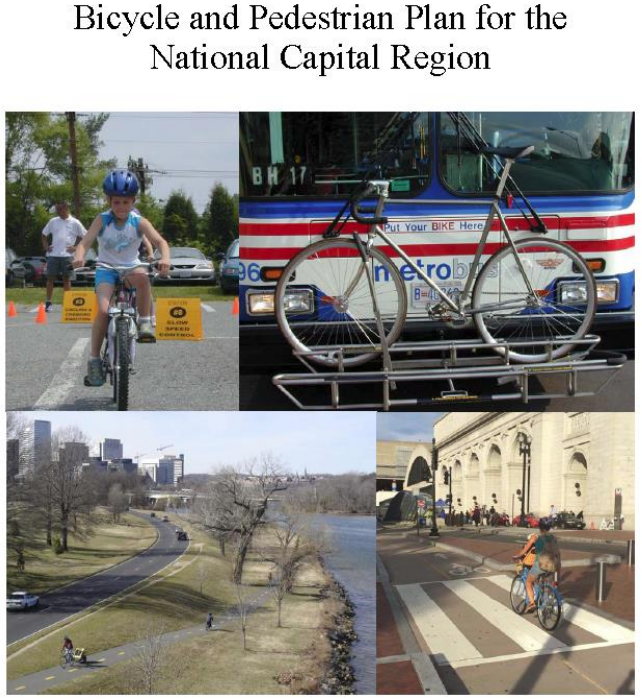
Item 10: Briefing on the Draft Update of the Bicycle and Pedestrian Plan for the National Capital Region

Jim Sebastian
Manager, Active Transportation Branch, DDOT
Chair, Bicycle and Pedestrian Subcommittee of the TPB Technical Committee

Presentation to the
National Capital Regional Transportation Planning Board
December 17, 2014

Background

- Update to the 2010 Plan
  - Updates Every Four Years
- Advisory to the CLRP
  - Not financially constrained
- Identifies:
  - Planned major bicycle and pedestrian projects through 2040
  - “Recommended Practices”
  - Goals and Performance Measures
    - From the TPB *Vision* and from *Region Forward*
  - Trends in policy, mode share, & safety



Plan Development

- Oversight
  - Bicycle and Pedestrian Subcommittee of the TPB Technical Committee
- Project listings
  - Submitted by state and local jurisdictional staffs
  - On-line database
  - As of (roughly) June - October 2014
- Criteria for including projects:
  - Of a size and scope to be regionally significant
    - Regional connectivity
    - Access to transit, pedestrian safety
  - Inclusion in jurisdictional/agency plans

2014 Plan Outline

- Chapter 1: Planning context of federal, state, and local bicycle/pedestrian policies and plans
- Chapter 2: Demographic and geographic overview of bicycling and walking in the region
- Chapter 3: Pedestrian and Bicyclist Safety
- Chapter 4: Overview of existing facilities
- Chapter 5: Goals and Indicators
- Chapter 6: Recommended Practices
- Chapter 7: The 2040 Network

New Since 2010:

Bigger Plans

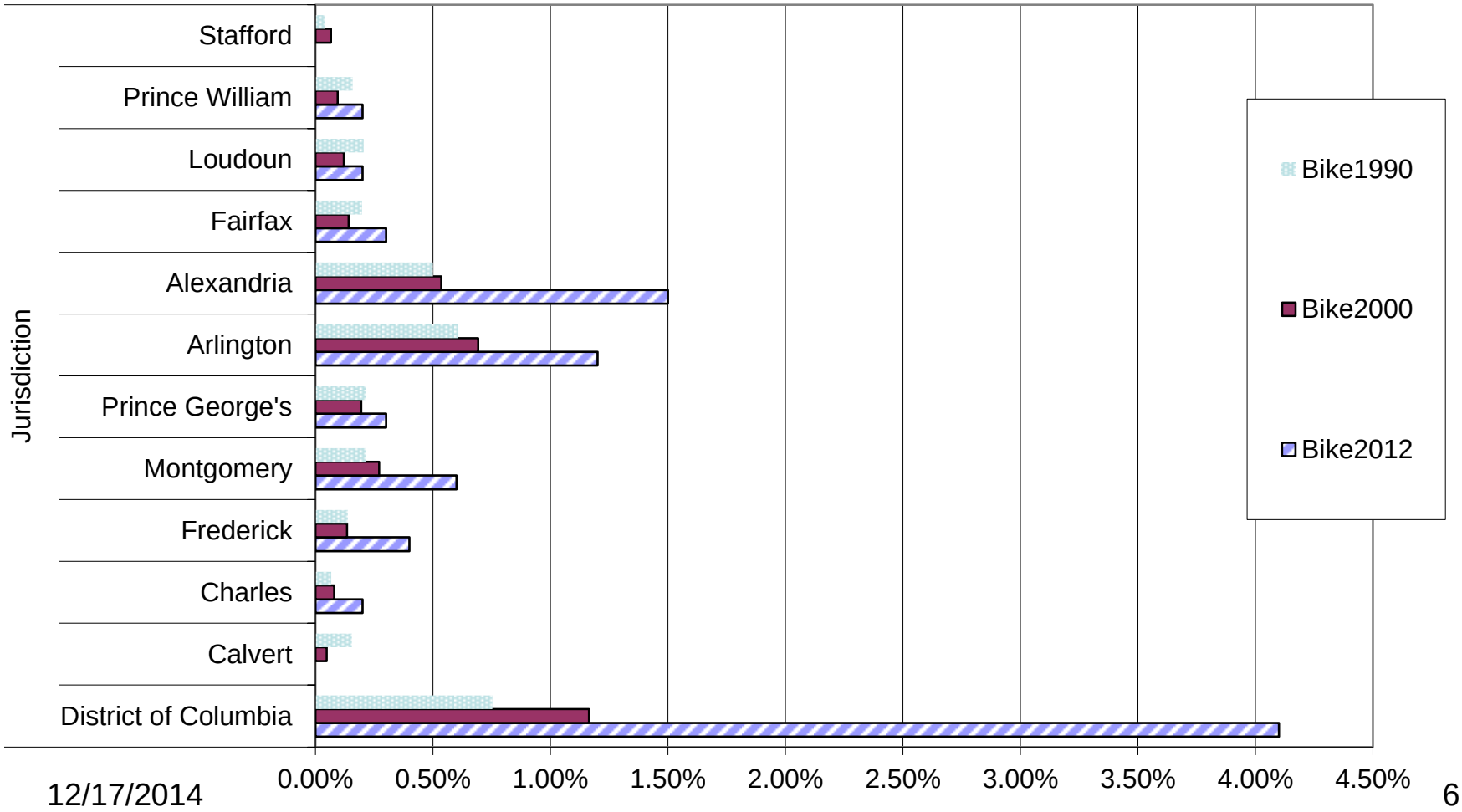
(Chapter 1)

- Regional Transportation Priorities Plan
- MAP-21
  - Transportation Alternatives Program
- TIP
  - B/P funding increased from 1% of total in FY 2010-2015 to 2% of total in FY 2015-2020
- Access to Metrorail
  - Metrorail Expansion
- Complete Streets
  - Regional Policy
  - State and Local Policies

More Bicycling

(Chapter 2)

Chart 2-15: US Census - Percentage of Workers Biking to Work



Better Metrorail Access

Table 2-8: Mode of Access to Metrorail - % of Daily Total	2012	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

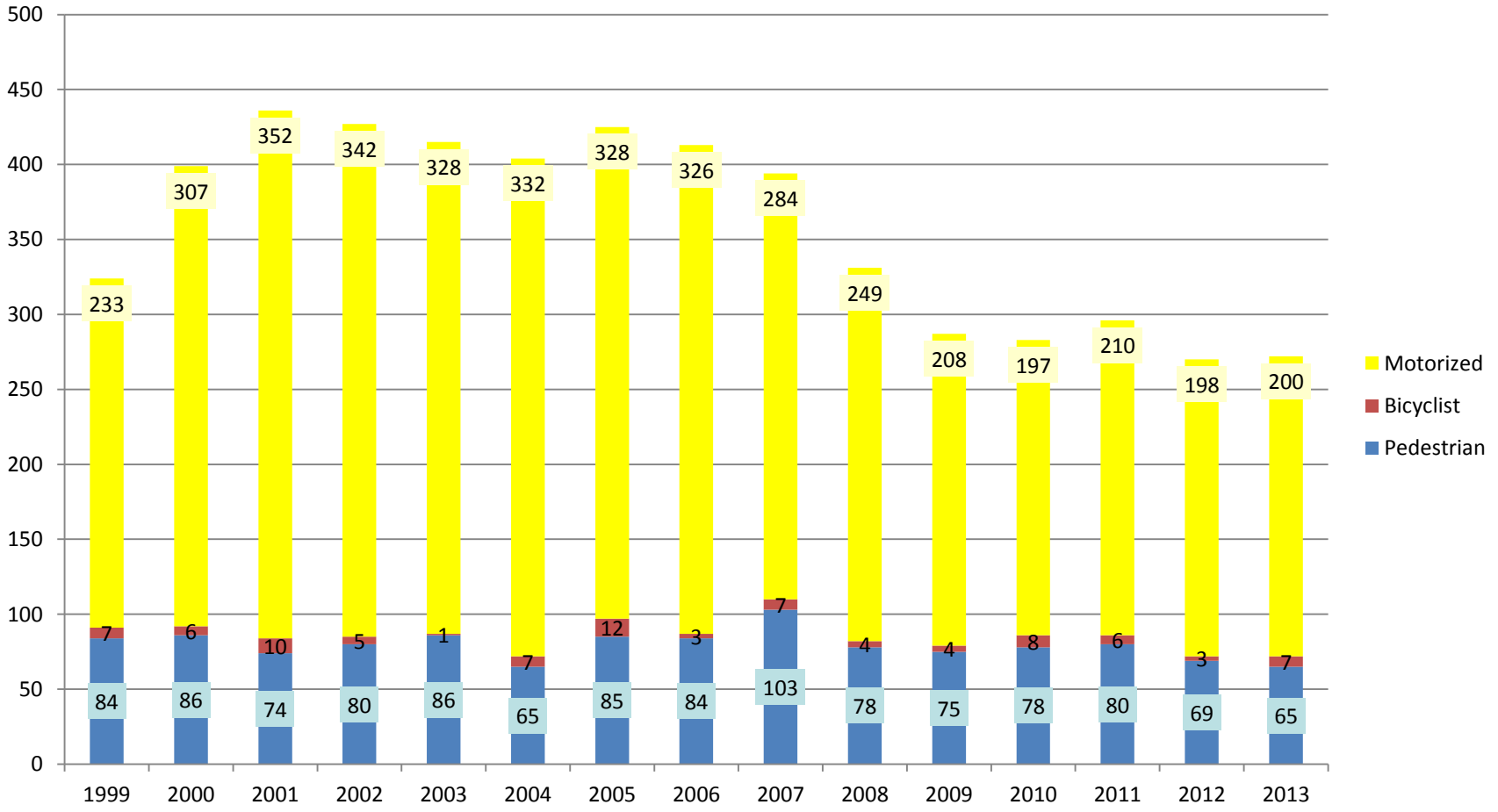
MEDICAL CENTER BEFORE AND AFTER, REPLACING OLD RACKS

VIENNA STATION BEFORE AND AFTER, NEW ACCESS POINT

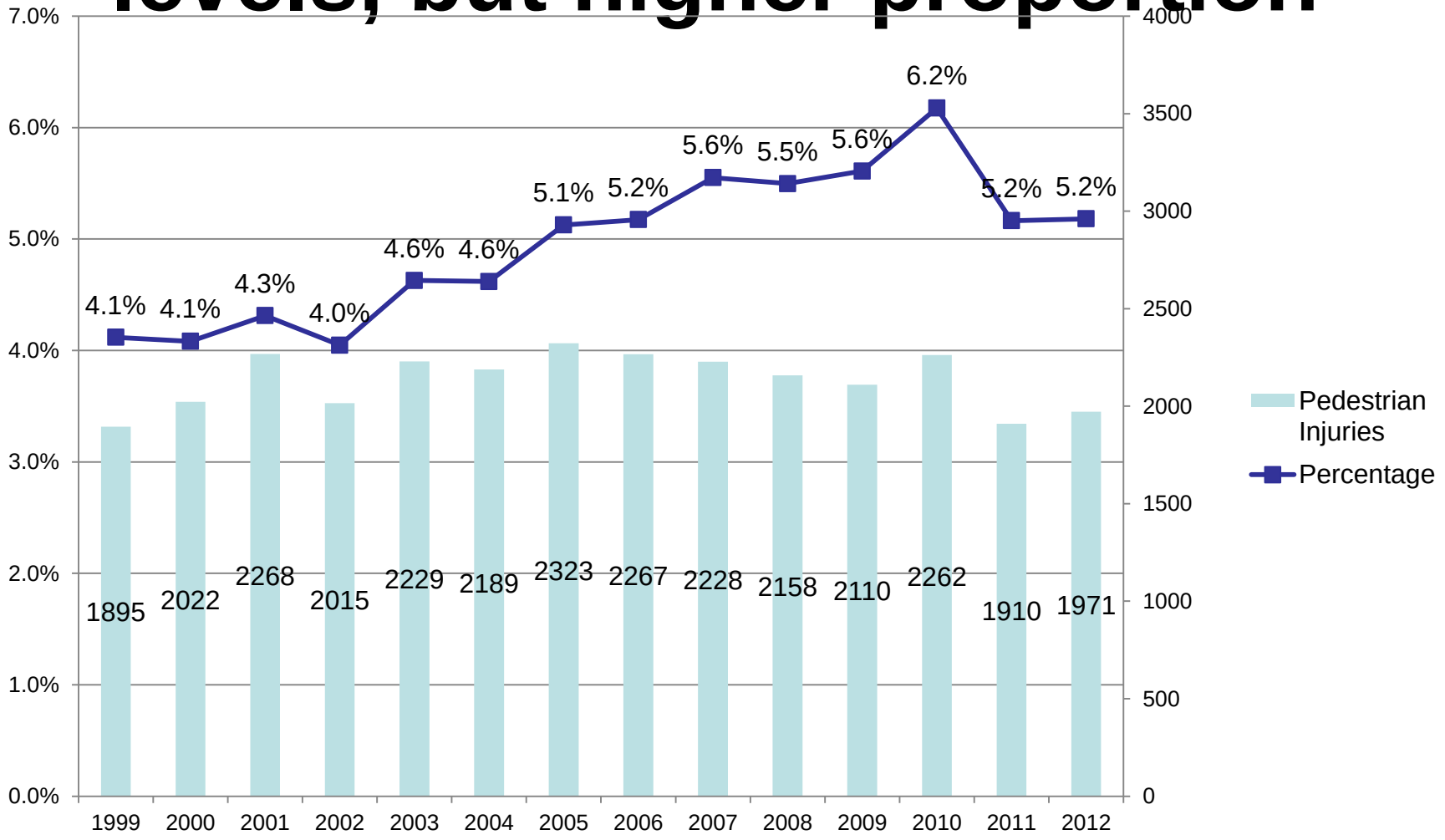
FRANCONIA – SPRINGFIELD BEFORE AND AFTER, NEW SIDEWALK TO IMPROVE SAFETY

Safety: Fewer Fatalities

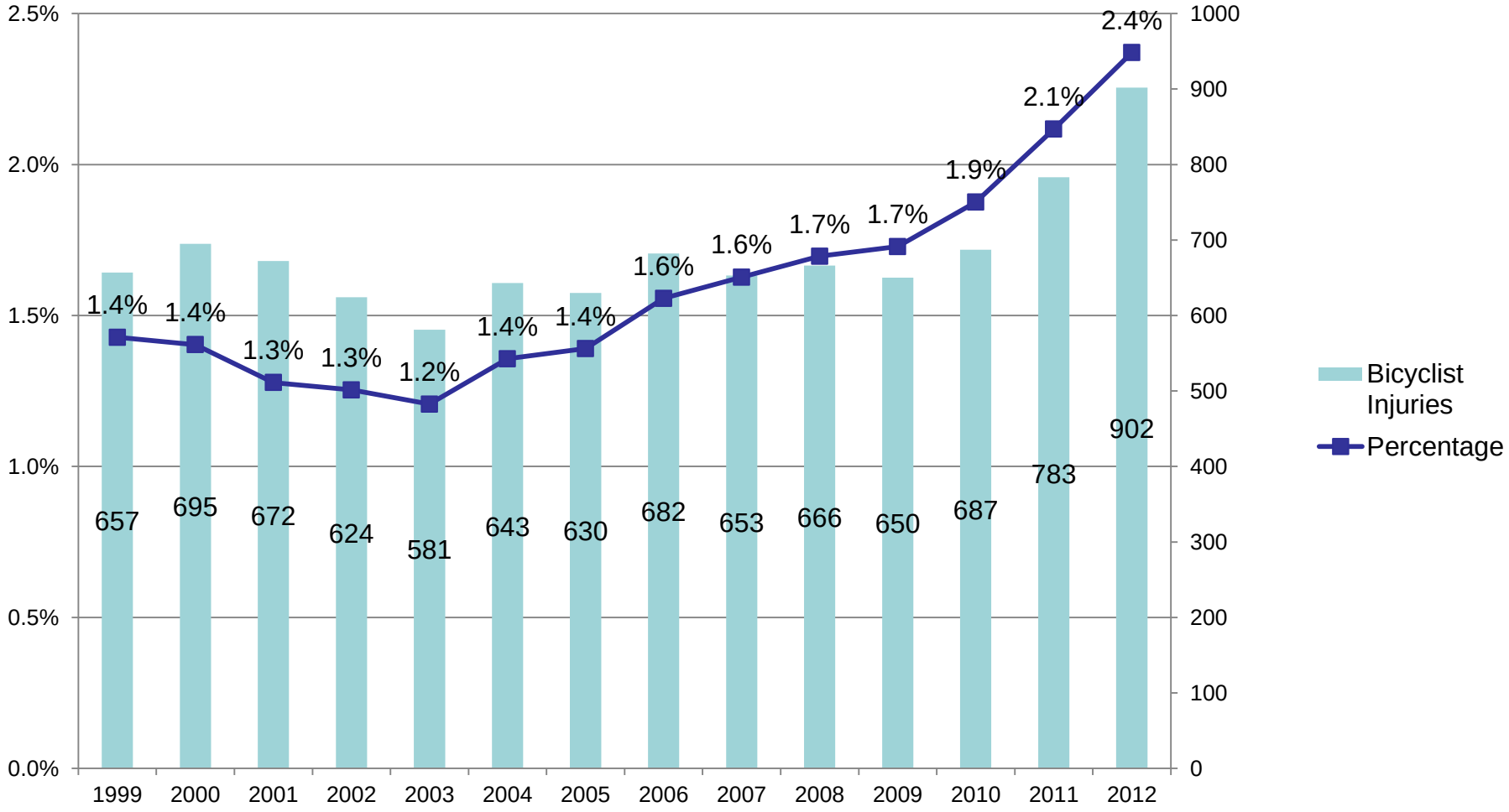
(Chapter 3)



Pedestrian Injuries: Same levels, but higher proportion



Bicyclist Injuries: Higher numbers but lower rates



New Bike Facility Types

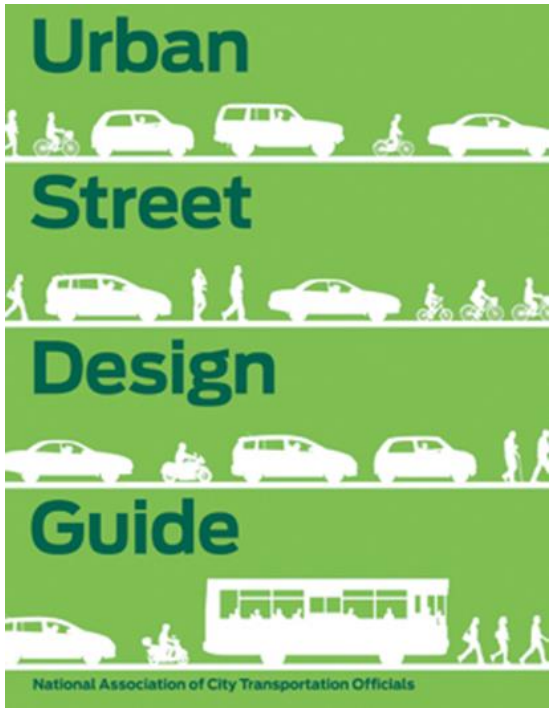
(Chapter 4)

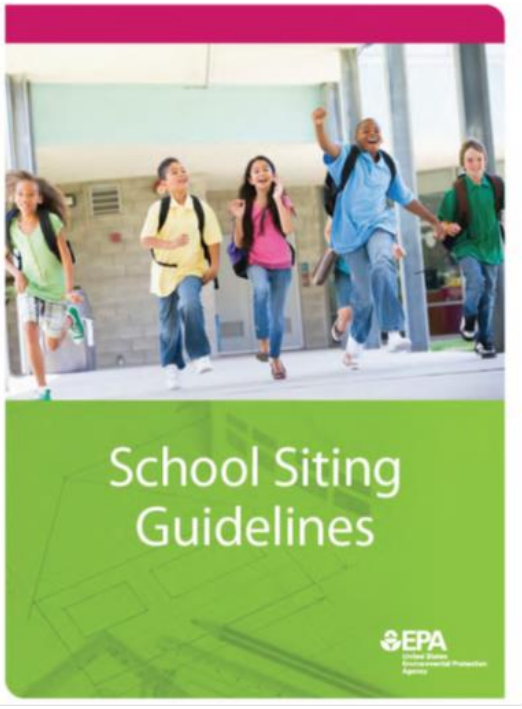
- Protected Bike Lanes
  - Physical buffer
  - Attract users of all ages and abilities
- Green Bike Lanes
- Buffered Bike Lanes
- Bike Corrals
- Metrorail Bike & Ride Facilities

New Recommended Practices

(Chapter 6)

- NACTO *Urban Street Design Guide* and *Urban Bikeway Design Guide*
- EPA School Siting Guidelines
- ITDP Bike Share Planning Guide





More Planned Facilities

(Chapter 7)

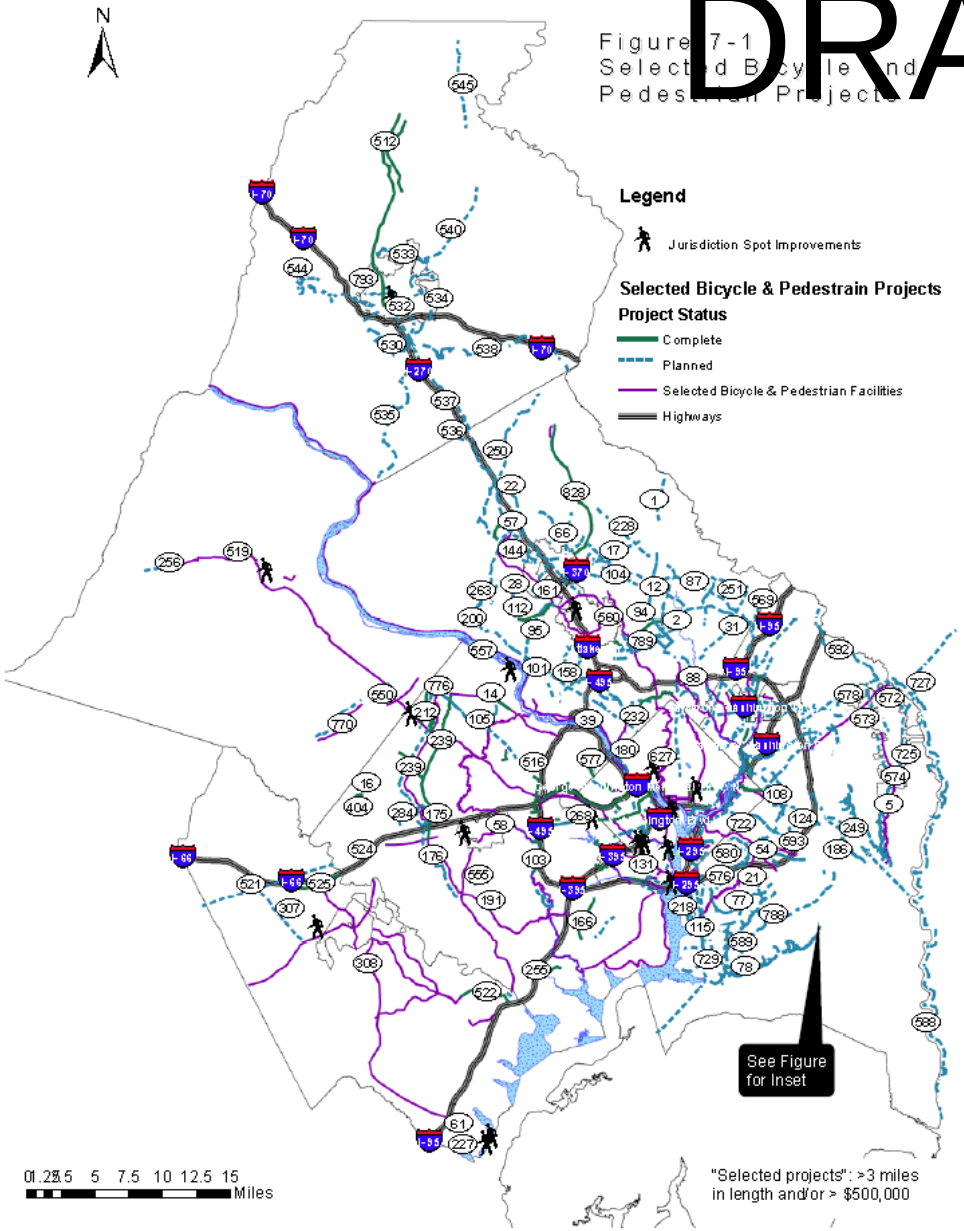
Table 7-1:
Miles of Bicycle/Pedestrian Facilities in the Washington Region (estimated)

Facility Type	Total in 2005	Completed 2006- May 2010	Completed June 2010 – May 2014	Planned New Facilities/ Upgrades	Total in 2040
Bicycle Lane	56	35	45	2090	2226
Shared-Use Path	490	53	50	1990	2583
Total	**546**	**88**	**95**	**4080**	**4809**

- Roughly $6 billion in new facilities proposed
  = Approximately 6% of anticipated regional transportation funding based on FY 2015-20 TIP
- Planned facility mileage is nearly four times what was in the 2010 plan

DRAFT

Figure 7-1
Selected Bicycle and Pedestrian Projects



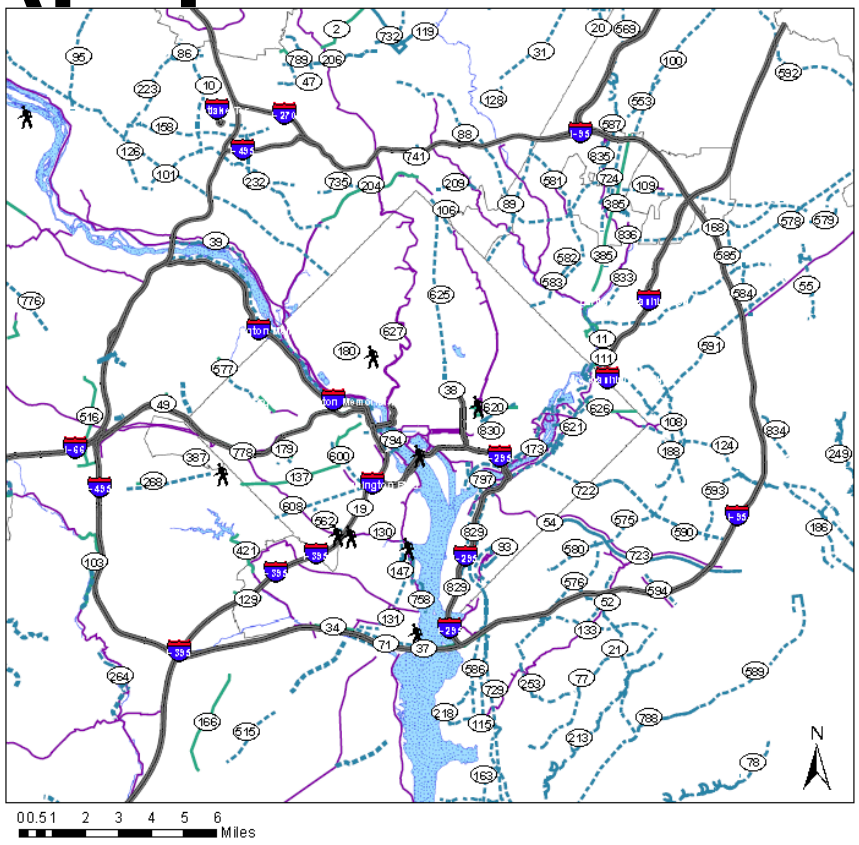


Figure 7-2
Selected Bicycle and Pedestrian Projects

"Selected projects": >3 miles in length and/or > $500,000

Legend
Selected Bicycle & Pedestrain Projects
Project Status
Complete
Planned
Selected Bicycle & Pedestrian Facilities
Jurisdiction Spot Improvements
Highways

Some projects built since 2010

Follow-On Actions

- On-Line Mapping and Visualization
  - Maps linked to project database
  - Other information can be added
  - More accessible to the public
- Database Updates
  - Every 2 years
- Plan Updates
  - Every 4 years

ITEM 11 - Information
December 17, 2014

Briefing on the Reconstitution of the
Regional Public Transportation Subcommittee

Staff Recommendation: Receive briefing on the reconstituted subcommittee.

Issues: None

Background: At its September meeting, the TPB approved reconstituting the Regional Bus Subcommittee as the Regional Public Transportation Subcommittee. In November and December, the TPB Technical Committee was briefed on the proposed goals, mission statement, activities, membership and governance of the new subcommittee and recommended that this information be presented to the TPB.

NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD

M E M O R A N D U M

TO: Transportation Planning Board

FROM: Eric Randall
Department of Transportation Planning

SUBJECT: Briefing on the Reconstitution of the Regional Public Transportation Subcommittee

DATE: December 11, 2014

The purpose of this memorandum is to brief the Transportation Planning Board (TPB) on the mission, goals and membership of the reconstituted Regional Public Transportation Subcommittee (RPTS). The RPTS has replaced the Regional Bus Subcommittee, broadening its scope and responsibilities to cover all modes of public transportation in accordance with a resolution of the TPB and in response to federal regulation under MAP-21.

Background

On June 2, 2014, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) jointly released final guidance on the MAP-21 requirement that providers of public transportation be represented on the MPO policy board. This guidance stems from the MAP-21 requirement that FTA establish safety and state of good repair performance measures and require each provider of public transportation to establish performance targets in relation to these performance measures. The new rules stipulate that the targets must in turn be coordinated with performance targets set by the MPO for these same measures, and that the MPO describe in its Transportation Improvement Plan (TIP) how the programs included in the TIP are expected to affect progress in achieving the targets.

Elements of TPB Resolution R4-2015

On September 17, 2014, the TPB adopted Resolution R4-2015 responding to the MAP-21 requirement and the federal final guidance. The resolution had three elements:

1. TPB is in compliance with the MAP-21 requirement as WMATA is a voting member on the policy board together with the local public transit and commuter bus and rail providers as represented by the respective jurisdiction that provides the funding.
2. Changed the name of the TPB Regional Bus Subcommittee to the **Regional Public Transportation Subcommittee** and broadened its scope to include all eligible public transportation service providers.
3. Committed to continuing a cooperative discussion with the providers of public transportation to determine respective responsibilities in carrying out the metropolitan transportation planning process, and to consider procedures for representation of all eligible providers of public transportation, including the role and responsibilities of the public transportation representation, and to making any mutually agreed changes to the TPB's Board membership and/or its committee process.

The text of TPB Resolution R4-2015 can be found at the following link: http://www.mwcog.org/uploads/committee-documents/fl1YWFZY20140922153142.pdf

Reconstitution of the Regional Public Transportation Subcommittee

In accordance with Resolution R4-2015, the Regional Bus Subcommittee has been reconstituted as the Regional Public Transportation Subcommittee, and is undertaking the following:

1. Broadening attendance and activities to include all eligible public transportation service providers, including:
    - Other public transportation modes operated by existing subcommittee members, including: DC Streetcar, Metrorail, MARC;
    - New members from other public transportation modes, including: Virginia Railway Express;
    - Other providers of public transportation, including: human services transportation providers, private providers.
2. Broadening the scope of the Subcommittee's discussion to include topics of interest and consideration of the needs of all providers of public transportation, in order to ensure these are being met through the federal metropolitan planning process and the MAP-21 performance provisions.

3. Providing input on the work activities in the Transit Planning element of the Unified Planning Work Program (UPWP), including inputs to the Constrained Long-Range Transportation Plan (CLRP), ridership surveys, congestion reports, regional coordination and inter-operability items, accessibility issues, and the MAP-21 performance provisions for state of good repair and transit safety.

In regard to the above, the following mission and activities have been developed for the Regional Public Transportation Subcommittee.

RPTS Mission Statement

The mission of the Regional Public Transportation Subcommittee is to provide a permanent process for the coordination of public transportation planning throughout the Washington region, and for incorporating regional public transportation plans into the Constrained Long Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP), and for implementing the performance provisions of MAP-21.

This mission is based on the belief that high quality public transportation service in the region depends upon successfully linking vehicles, services, stops and stations, running ways, operating facilities, maintenance shops, storage yards, and passenger and operating support systems to produce transit service that is easy to use, provides rider information where and when needed, and facilitates intra- and inter-agency service transfers. Increased customer satisfaction can broaden the appeal of public transportation in the transportation market place and generate increased ridership. Considerable cooperation among the various agencies responsible for transportation in the region is required to implement high-quality public transportation services, owing to the complex nature of public transportation service provision and transportation facility ownership in this multi-state region.

RPTS Activities

The activities of the RPTS will support the TPB's work plan and objectives. TPB studies and the unified planning work program (UPWP) are one of two primary sources for RPTS agenda items, with member-initiated topics the other primary source. Activities of the RPTS include:

1. Facilitation of technology transfer and information sharing, as it relates to regional, state and local public transportation services.

2. Coordination, input definition, and data collection for the TPB's long-range transportation plan (CLRP) and regional travel demand forecasting model.
3. Technical advice and input regarding regional transportation and land use coordination and the development of public transportation assumptions, including service, ridership, finances, safety, and other projections, for TPB planning studies.
4. Consultation and coordination on federal regulations and requirements including future implementation of the MAP-21 performance provisions and processes for data collection and target-setting for transit safety and state of good repair measures.
5. Input on public transportation strategies and projects for consideration by the TPB in the members' project planning process.
6. Coordination with other regional committees regarding transit participation in planning, operations, and training activities, including:
    a. Regional Emergency Support Function (RESF) #1
    b. MATOC Transit Task Force
    c. TPB Management, Operations, and Intelligent Transportation Systems (MOITS) Task Force
    d. Commuter Connections
    e. TPB Private Providers Task Force
    f. TPB Access for All Advisory Committee
    g. TPB's Human Service Transportation Coordination Task Force
    h. Bicycle and Pedestrian Subcommittee
    i. Transportation Safety Subcommittee.

A work activity and budget for Transit Planning is developed annually for inclusion by the TPB in the Unified Planning Work Program (UPWP) and will support the activities of the RPTS.

RPTS Participation and Membership

Participation is encouraged by all providers of public transportation in the TPB Planning Area to support the described planning processes and activities for public transportation activities in the National Capital Region. Participating subcommittee members are ideally public transportation planners for local, state, and regional agencies. RPTS participation is on an as-willing basis, with members attending as responsibilities permit.

The Subcommittee will coordinate with and engage the following public transportation providers in the region:

1. Metrobus and Metrorail
2. Montgomery County Ride On
3. Prince George 's County The Bus
4. DC Circulator and Streetcar
5. Alexandria DASH
6. Arlington Transit (ART)
7. City of Fairfax CUE
8. Fairfax Connector
9. Frederick TransIt
10. Loudoun Commuter Transit
11. PRTC Omni Ride
12. MTA Commuter Bus
13. Virginia Railway Express
14. MARC (Maryland Commuter Rail)
15. Providers of other public transportation services, including human services transportation
16. Private providers of public transportation services

RPTS Governance

Governance of the Subcommittee will follow standard TPB protocols. The RPTS is established as a subcommittee of the TPB Technical Committee, with a regular meeting schedule and members appointed by the transportation agencies of the TPB member jurisdictions. A chair is selected by the subcommittee members, rotating annually. TPB staff support the activities of the subcommittee.

Annual "State of Public Transportation" Report

To provide a means of communication of public transportation provider interests and needs to the TPB, the RPTS will produce an annual report summarizing the state of public transportation in the region. A draft outline of the "State of Public Transportation" report includes:

1. Intro / Overview
2. Past Year Accomplishments / Major Events
    - Projects completed / started, major studies, etc.
3. Operator Profile Page
    - Financial Data – Funding and Operating & Capital Expenditures
    - Ridership and Service Data
    - *in future*…MAP-21 Data (State of Good Repair and Safety)
4. Issues Discussed at RPTS
    - E.g., customer info, commuter bus staging, technology integration, etc.
5. Findings / Recommendations for consideration by the TPB
    - Priority Project Listing
6. Upcoming Year's Projects / Events

The RPTS will provide input on the development of the metropolitan region's performance measures and targets for MAP-21 for transit safety and state of good repair & asset management. These performance provisions are scheduled to be published in draft form in June 2015, finalized in the subsequent year, and become a required part of the metropolitan planning process two years later.

RPTS Relationship with Human Services Transportation Providers and Private Providers

The TPB's Human Service Transportation Coordination Task Force is the main venue for coordination and discussion of the issues and needs of human service providers and their customers. Similarly, private providers of public transportation are typically engaged through the TPB's Private Providers Task Force, the Chair of which sits on the TPB. Members of both committees are welcome to attend meetings of the RPTS and to engage in the topics taken up by the subcommittee. Relevant information for these committees (e.g., major events, studies completed, etc.) would be included in the State of Public Transportation report.

Approval by Technical Committee

The TPB Technical Committee approved this mission statement, goals, activities, membership and governance of the reconstituted Regional Public Transportation Subcommittee at their December 5 meeting.

TPB
National Capital Region
Transportation Planning Board

Item 11

The Reconstitution of the Regional Public Transportation Subcommittee

Transportation Planning Board

December 17, 2014

Eric Randall
Department of Transportation Planning

Structure of Presentation

- Regional Bus Subcommittee
- MAP-21 and TPB Resolution
- Reconstitution of RBS as the Regional Public Transportation Subcommittee (RPTS)
- “State of Public Transportation” Report
- Reconstitution Completed


Regional Bus Subcommittee

- Subcommittee of the TPB Technical Committee since 2007
  - Members are bus transit agency staff and jurisdictional transit planners. Typically meets on a monthly basis.
- Coordinates regional bus planning for the CLRP and TIP
- Advises on TPB studies of public transportation
  - e.g., Commuter Bus Staging, Bus on Shoulders, Bus Hot Spots, etc.
- Forum for discussion of general bus and transit topics
  - e.g., Customer Information, Bus Stop Accessibility, Ridership Surveys, etc.

MAP-21 and TPB Resolution R4-2015

The federal surface transportation act, MAP-21, added a requirement for representation of public transportation providers in the metropolitan planning process and MPO policy boards.

In response, on September 17, 2014 the TPB passed R4-2015. The TPB resolved hereby:

1. The current composition of the policy board… satisfies the requirement of MAP-21...
2. *Changes the name of the TPB Regional Bus Subcommittee to the **Regional Public Transportation Subcommittee** and broadens its scope to include all eligible public transportation service providers*
3. Commits to continuing a cooperative discussion with the providers of public transportation… in carrying out the metropolitan transportation planning process…

http://www.mwcog.org/uploads/committee-documents/fl1YWFZY20140922153142.pdf

Regional Public Transportation Subcommittee (RPTS) Reconstitution Memorandum

Memorandum establishes the following for the RPTS:

- *Mission Statement*: coordinate long-range public transportation planning for the region.
- *Activities*: information sharing, technical inputs, consultation on federal requirements, strategies and projects, coordinate with other committees.
  - In the future, provide input on the measures and targets for the MAP-21 performance provisions for transit state of good repair and safety.
- *Participation and Membership*: jurisdiction staff, providers of public transportation.
- *Governance:* rotating annual chair.

RPTS Annual Report:
"State of Public Transportation"

Annual report each Fall to the TPB to communicate the accomplishments, issues, and recommendations of the region's public transportation providers.

Contents :

1) Past/Upcoming Accomplishments and Major Events
   - Projects started/completed, major studies, etc.
2) Provider Profile Page
   - Financial Data: Funding, Operating & Capital Expenditures
   - Ridership and Service Data
   - MAP-21 Performance Measures (Asset Management and Safety)
3) Topics discussed at RPTS meetings
   - Findings / recommendations for consideration by the TPB

METRO TRANSIT: REGULAR ROUTE BUS

Contact Brian Lamb
Title General manager
Street 560 Sixth Avenue North
City State Zip Minneapolis MN 55411
Telephone 612.373.3333
E-mail brian.lamb@metrotransit.org
Website metrotransit.org

2012 highlights

- Purchased two next-generation hybrid-electric buses
- 33 new hybrid-electric buses began service in St. Paul and communities in the east metro
- Achieved highest maintenance reliability in service history: 7,456 miles between road calls
- Opened 180-space park & ride lot in Little Canada with express service to Minneapolis and St. Paul

System snapshot

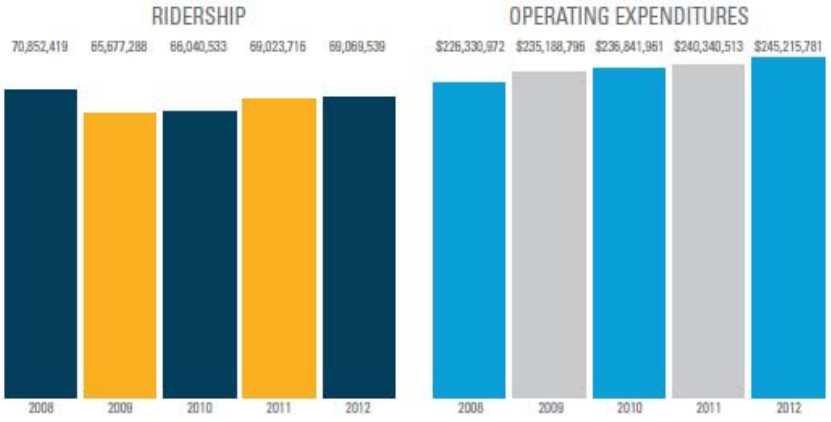
Legal Name	Metro Tranist
Governance	Regional
Area Served	Anoka, Dakota, Hennepin, Ramsey, Washington counties
Legislative District	Metro
Congressional District	2, 3, 4, 5, 6

System characteristics

Vehicle fleet	740 buses, 166 articulated buses, 26 motor coaches
Service type	Fixed route

Hours of Operation	
Monday - Friday	12:00 am - 11:59 pm
Saturday	12:00 am - 11:59 pm
Sunday	12:00 am - 11:59 pm
Base fare	$1.75 - $3.00

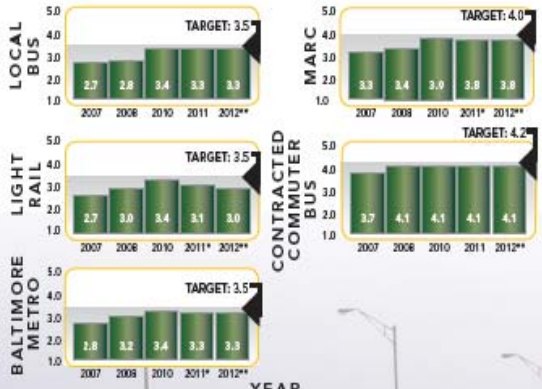
System performance



MinnDOT Annual Transit Report

MTA: Customer Perceptions of Safety on the MTA System

A positive perception of personal safety is correlated with higher ridership and stronger commitment to transit as a mode of travel.

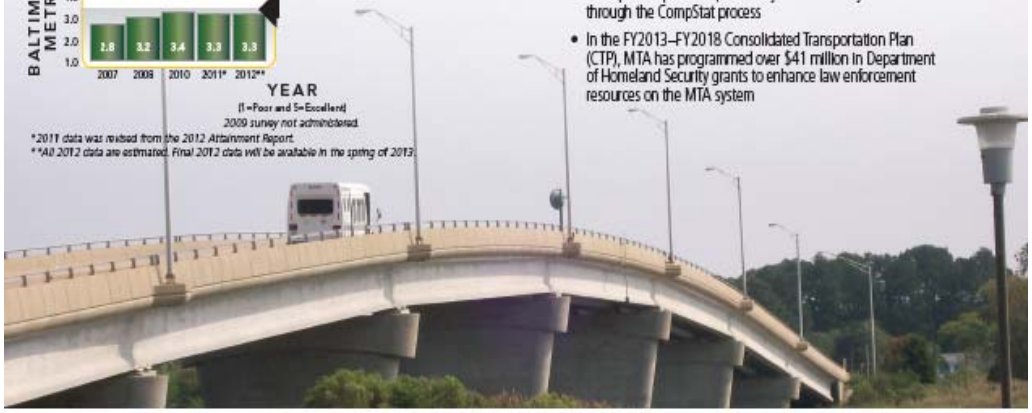


Why Did Performance Change?

- As MTA's crime rate continues to fall, customers continue to feel safe
- Utilized the Police Cadet program to improve the visibility of MTA's Police Forces
- Used Closed Circuit TV (CCTV) and other security measures to ensure the safety of customers at Baltimore Metro stations and on the bus fleet
- Continued safety and security programs, such as the Zone Enforced Uniform Sweeps (ZEUS) and CompStat

What Are Future Performance Strategies?

- Continue to utilize the Police Cadet program to improve the visibility of MTA's Police Forces, make traveling safer and give Maryland youth a point of entry into transit law enforcement
- Utilize CCTV and other security measures to ensure the safety of customers
- Target and prevent criminal activity through both covert and overt police operations, efficiently and effectively launched through the CompStat process
- In the FY2013–FY2018 Consolidated Transportation Plan (CTP), MTA has programmed over $41 million in Department of Homeland Security grants to enhance law enforcement resources on the MTA system



MTA: Preventable Accidents Per 100,000 Vehicle Miles

MTA has developed a baseline from which to reduce preventable accidents, increase efficiency and provide a safer ride to customers.

CALENDAR YEAR	2007	2008	2009	2010	2011	2012*	TARGET
	Accident Rate						
Local Bus	2.50	2.50	2.93	2.86	3.10	2.12	2.0 by CY2013
Light Rail	n/a	n/a	0.06	0.31	0.16	0.19	0.15 by CY2013
Baltimore Metro	n/a	n/a	0.20	0.17	0.05	0.03	0.03 by CY2013
Paratransit/ Taxi Access	n/a	n/a	1.14	0.00	2.31	2.07	2.0 by CY2013

(Baseline year = 2008)
* 2012 data are estima

Why Did Performance Change?

- All MTA modes except Light Rail have experienced a decrease in preventable accident rates (based on estimated 2012 data)
- Significant decreases in the Local Bus accident rate are due to ongoing efforts to increase operator accountability through re-training and corrective action
- Paratransit accidents are slightly higher over the past four years due to a change in how accidents are captured (including accidents from contracted service providers)

What Are Future Performance Strategies?

- Continue accountability efforts to ensure that operators with multiple preventable accidents receive appropriate re-training and corrective action
- Utilize efficient and effective training methodologies, including the bus simulator, operator re-certification programs, and safe operation awards, to give operators the skills they need to perform their duties safely

raphic information
e, operators' times
ve action to further

MDOT Annual Attainment Report

Reconstitution Completed

- The Technical Committee was briefed in November and December on the proposed mission and activities of the RPTS. The Regional Bus Subcommittee also provided comment.
- The reconstitution memorandum was accepted by the Technical Committee on December 5.
- The Regional Public Transportation Subcommittee will next meet in January 2015.


Questions?

ITEM 12 - Information
December 17, 2014

Update on the TPB Community Leadership Institute

Staff Recommendation: Receive briefing on the origin and purpose of the Community Leadership Institute, and the role it plays in the TPB's public involvement program.

Issues: None

Background: In November the 13th session of the TPB Community Leadership Institute was held. The CLI is a three-day workshop that encourages community activists to "think regionally and act locally'' when they get involved in transportation decision making.

NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD

MEMORANDUM

TO: Transportation Planning Board
FROM: John Swanson, Principal Transportation Planner
SUBJECT: Background on the TPB's Community Leadership Institute
DATE: December 11, 2014

The 13th session of the Community Leadership Institute was conducted on November 6, 12, and 15, 2014. This memorandum provides background on the program's purpose and approach.

Overview: What is the CLI?

The TPB's Community Leadership Institute is a three-part workshop in which participants learn how transportation decisions are made in this region and how community leaders can make a difference.

Since it began in 2006, the CLI has brought together more than 250 participants from all the TPB's member jurisdictions. Approximately 20 individuals are invited to each session. They typically represent organizations that have been recognized as forces for change in their communities, including civic groups, local advisory boards, neighborhood associations, business organizations, and other advocacy interests.

The workshops use interactive exercises and discussions to help participants better understand regional challenges and strategies for effecting change. At each step of the way, participants discuss ways in which the interests of their local communities connect with planning issues facing the entire region. By providing this big-picture context, the CLI encourages participants to "think regionally and act locally."

Interactive approach

The CLI includes three sessions – two weekday evenings and a Saturday morning. The program uses exercises to simulate real-world challenges and relationships. A role-playing exercise puts participants in the middle of a fictitious (but familiar) local planning process that involves a state DOT, local agencies and elected officials. The experience emphasizes that there is no magic formula for successful community involvement. Projects often are propelled forward or stalled by unique factors, including funding availability and political circumstances. Successful community leaders know how to influence decisions at the right place and the right time.

The program also encourages leaders and activists to connect the interests of their local communities with the planning issues facing the entire Washington region. A map exercise asks participants to develop scenarios that distribute future jobs and housing, and add new transportation infrastructure. They are then asked to figure out how to pay for their plans. This activity helps participants better understand the relationship between land use and transportation on the regional scale, and the thorny issues of transportation funding.

The sessions are facilitated by former elected officials familiar with the TPB and regional planning. These discussion leaders add a real-world political dimension to the workshops that participants find useful. Recent sessions have been facilitated by Kathy Porter, a former TPB chair and Takoma Park mayor. The original CLI facilitator was Peter Shapiro, who was also a former TPB chair as well as being a Prince George's Councilmember. Mr. Shapiro helped to conceive the program in 2006.

The CLI curriculum has evolved over the years and is frequently adjusted to include topics of current interest. Originally the CLI took place over two days, but it has recently been expanded to a three-day agenda. In addition, sessions of the CLI are now conducted around the region. For the most recent session, the first evening's program was held in College Park, hosted by TPB chair Patrick Wojahn, and the second evening was in Alexandria, hosted by Vice Chair Tim Lovain.

Over the years, several sessions of the CLI have been designed for target audiences, including organizations representing senior citizens and immigrants. Earlier this year, a CLI was conducted specifically for the staff of elected officials.

In context: How the CLI fits into the TPB's public involvement objectives

The CLI was designed to encourage citizens to get involved in transportation decision making at points and times when they can have the greatest impact. The TPB's Participation Plan, which was updated in September 2014, notes that "Given the fact that project-level planning usually occurs at the state and local levels, the TPB's plans and processes are often not the appropriate or most effective venues for public involvement." The CLI fulfills the Participation Plan's call for outreach activities that "build public knowledge about transportation decision-making to encourage meaningful public involvement at various stages of the process." (*TPB Participation Plan*, page 8)

At the same time, the CLI helps to spread the word about regional issues and challenges among local leaders in all corners of the region. Again, this is consistent with the objectives of the TPB's Participation Plan, which called for outreach activities that use "community leaders as conduits to disseminate information about regional issues at the grassroots level." (*TPB Participation Plan*, page 14)

The CLI also performs a vital role in developing cross-jurisdictional understanding and fostering networks. Every session brings together participants from all corners of the region – from inner and outer jurisdictions, and both sides of the Potomac – to look at common challenges. Connections formed at the CLI have been fostered through an Alumni Network and through ad hoc communications.

Finally, the CLI has helped inform current and future participants in the TPB process. Several current members of the TPB and the CAC are graduates of the program. Over the years, TPB staff has tapped participants to organize local forums and to provide input on the Regional Transportation Priorities Plan.

Upcoming session

Although dates have not yet been selected, the next round of the CLI is expected to take place in March or April of 2015.

Attachments:

- CLI Agenda from November 2014
- *TPB Weekly Report* article, December 9, 2014

COMMUNITY LEADERSHIP INSTITUTE

AGENDA

Thursday, November 6, 6-9pm
in College Park, MD

Wednesday, November 12, 6-9pm
in Alexandria, VA

Saturday, November 15, 9am-12:30pm
in Washington, DC

National Capital Region Transportation Planning Board

SESSION 1: TPB and the Regional Transportation Landscape

Thursday, November 6, 2014 | 6:00 pm – 9:00pm
Old Parrish House – 4711 Knox Road, College Park, Maryland 20740

6:00 – 6:30 Registration and Dinner

6:30 – 6:45 Welcome with TPB Chair Patrick Wojahn

6:45 – 7:00 Introductions

7:00 – 7:20 Transportation Prioritization Icebreaker

An ice-breaker and pyramid exercise based on participants' personal priority transportation projects will help to simulate the complexity of regional transportation decision-making

7:20 – 7:30 Welcoming Remarks

Kathy Porter, CLI Facilitator
Board Member, Washington Metropolitan Area Transit Authority
Former Mayor, City of Takoma Park

7:30 – 8:00 Presentation: Overview of TPB

What is the Transportation Planning Board and how does it serve the Metropolitan Washington Region?

8:00 – 8:15 BREAK

8:15 – 8:45 Role-play Activity: Strategizing for Change (Part 1)

This role-playing exercise will guide participants through the process of gathering information on local projects in order to experience the relationships among different agencies, officials, and community leaders.

8:45 – 9:00 Wrap Up and Prepare for Session 2

COMMUNITY LEADERSHIP INSTITUTE

AGENDA

Thursday, November 6, 6-9pm
in College Park, MD

Wednesday, November 12, 6-9pm
in Alexandria, VA

Saturday, November 15, 9am-12:30pm
in Washington, DC

National Capital Region Transportation Planning Board

SESSION 2: Transportation Decision-Making: How does it all work?

Wednesday, November 12, 2014 | 6:00 pm – 9:00pm
City Hall – 301 King Street Alexandria, Virginia 22314

6:00 – 6:25 Arrival and Dinner

6:25 – 6:30 Welcome

6:30 – 7:30 Role-play Activity: Strategizing for Change (Part 2)

Participants will role-play in groups to develop community action plans with specific recommendations to inform policy priorities of locally elected officials.

7:30 – 7:50 Group Debrief on Strategizing for Change and Transportation Project Development

Participants will share their experiences from the role-play activity, have an opportunity to ask questions about the presentation, and debrief through a facilitated discussion.

7:50 – 8:00 BREAK

8:00 – 8:30 Presentation: Transportation Project Development

A basic overview of the regional transportation planning process, including major players and effective involvement strategies.

8:30 – 8:50 Discussion: The Politics of Making Things Happen

Alexandria Councilmember Timothy Lovain discusses the politics and the role that advocacy plays in making transportation projects happen.

8:50 – 9:00 Wrap Up and Prepare for Session 3

COMMUNITY LEADERSHIP INSTITUTE

AGENDA

Thursday, November 6, 6-9pm
in College Park, MD

Wednesday, November 12, 6-9pm
in Alexandria, VA

Saturday, November 15, 9am-12:30pm
in Washington, DC

National Capital Region Transportation Planning Board

SESSION 3: Transportation and Land-Use: Connecting the Dots

Saturday, November 15, 2014 | 9:00 am – 12:30 pm | COG Board Room

9:00 – 9:15 Registration and breakfast

9:15 – 9:30 Presentation: What if the Washington Region Grew Differently

Part I – Regional Challenges
A presentation on the challenges of growth in the region and the factors that influence travel congestion.

9:30 – 10:00 Activity: What Would You Do?

Part I – Accommodating Future Growth
Working in groups with a regional map, participants will create transportation and land-use scenarios that address regional challenges

10:00 – 10:10 BREAK

10:10 – 11:00 Activity: What Would You Do?

Part II – Paying for Transportation
Working in groups, participants will make decisions about how to pay for transportation improvements, including generating new revenue.

11:00 – 11:20 Group Debrief on "What Would You Do?"

11:20 – 11:50 Presentation: What if the Washington Region Grew Differently?

Part II – Exploring Options
A presentation summarizing recent and ongoing efforts by the TPB to analyze options for funding transportation improvements

11:50 – 12:10 Wrap-Up Question & Answer Session

Kanti Srikanth, Director of the Department of Transportation Planning, will answer any final questions relating to the TPB, or to regional transportation issues

12:10 – 12:30 Debrief: Takeaways and Group Evaluation

TPB Weekly Report
An online publication of the National Capital Region Transportation Planning Board

December 2, 2014

2015 CLRP Update to Focus on Addressing Region's Top Needs

Nearly two-dozen community leaders from around the Washington region gathered recently for the Transportation Planning Board's thirteenth Community Leadership Institute (CLI) to learn about and discuss how transportation decisions are made in the region and how community leaders can become more involved in the decision-making process.

Among the recent CLI participants were elected members of local advisory boards, staff of local governments and elected officials, representatives of business and advocacy organizations, and graduate students from area universities.

Participants engaged over the course of three days in numerous experiential learning activities and group discussions to share ideas and build a greater shared understanding of regional transportation issues.

One of the main interactive group activities emphasized the crucial link between transportation and land use and highlighted the challenge of accommodating future growth in the region given ever-present funding constraints.

In the first part of the exercise, groups each proposed on a map where to locate nearly 700,000 new households and more than 1.3 million new jobs that are forecast to come to the region between now and 2040. Participants were also asked to specify what transportation improvements would need to be made to accommodate the growth patterns they proposed.

Groups then had to confront funding constraints in the second part of the exercise by adding up the costs of their proposed improvements and identifying sources of new funding to pay for them.

The activity provided an opportunity for participants to share knowledge and diverse perspectives from different parts of the region in developing

Related Links

COMMUNITY LEADERSHIP INSTITUTE

TPB Community Leadership Institute (CLI) Webpage

Recent Weekly Reports

December 2, 2014
"2015 CLRP Update to Focus on Addressing Region's Top Needs"

November 25, 2014
Holiday - No Report

November 18, 2014
"Researchers Identify Busiest Times, Roadways for Thanksgiving-Week Drivers"

November 11, 2014
Holiday - No Report

November 4, 2014
"'Street Smart' to Spread Important Pedestrian and Bicycle Safety Messages"

Archived Reports

More From TPB

Periodical Publications


TPB News


The Region

team.

a cohesive regional transportation and land use strategy.

Another way participants got to learn about different parts of the region was by experiencing them first hand. The first day of the workshop was held in College Park, Maryland, the second day in Alexandria, Virginia, and the third in the District of Columbia.

On the first day, TPB Chair Patrick Wojahn, who represents the City of College Park on the TPB, welcomed participants and talked about how he became involved in the transportation decision-making process as a city councilmember and later as a member of the TPB. In Alexandria, TPB Vice-Chair Tim Lovain spoke about his city's efforts to work with neighboring jurisdictions to expand transit options to include bus rapid transit (BRT) and streetcars.

This fall's CLI was facilitated by Kathy Porter, a former mayor of the City of Takoma Park and a former TPB Chair. Porter currently serves on the Board of the Washington Metropolitan Area Transit Authority (WMATA), which operates the region's Metrorail and Metrobus system.

CLI got its start in 2006 as a way to help leaders connect the interests of the local communities and organizations they serve with the challenges facing the entire metropolitan area.

The date of the next Community Leadership Institute has not yet been set. However, the workshops typically take place in the spring and fall. TPB staff selects participants from a pool of applicants who have either been nominated by local elected officials or who have chosen to apply individually in response to an invitation by the TPB.

For more information about the TPB's Community Leadership Institute, visit www.mwcog.org/CLI.

Related TPB Weekly Report:

"Staff of Local Elected Officials Participate in Two-Day Community Leadership Institute" (3/25/14)

"At Three-Day Workshop, Citizen Leaders Learn About Regional Transportation Decision-Making" (5/7/13)

Update on the TPB's Community Leadership Institute

Transportation Planning Board

December 17, 2014

John Swanson

Principal Transportation Planner

Overview

- Purpose: Learn about how transportation decisions are made and how community leaders can make a difference.
- Began in 2006
- 13 sessions
- More than 250 participants
- Three-part program – two weeknights and one Saturday morning

A Grasstops Approach

The CLI encourages community leaders to:

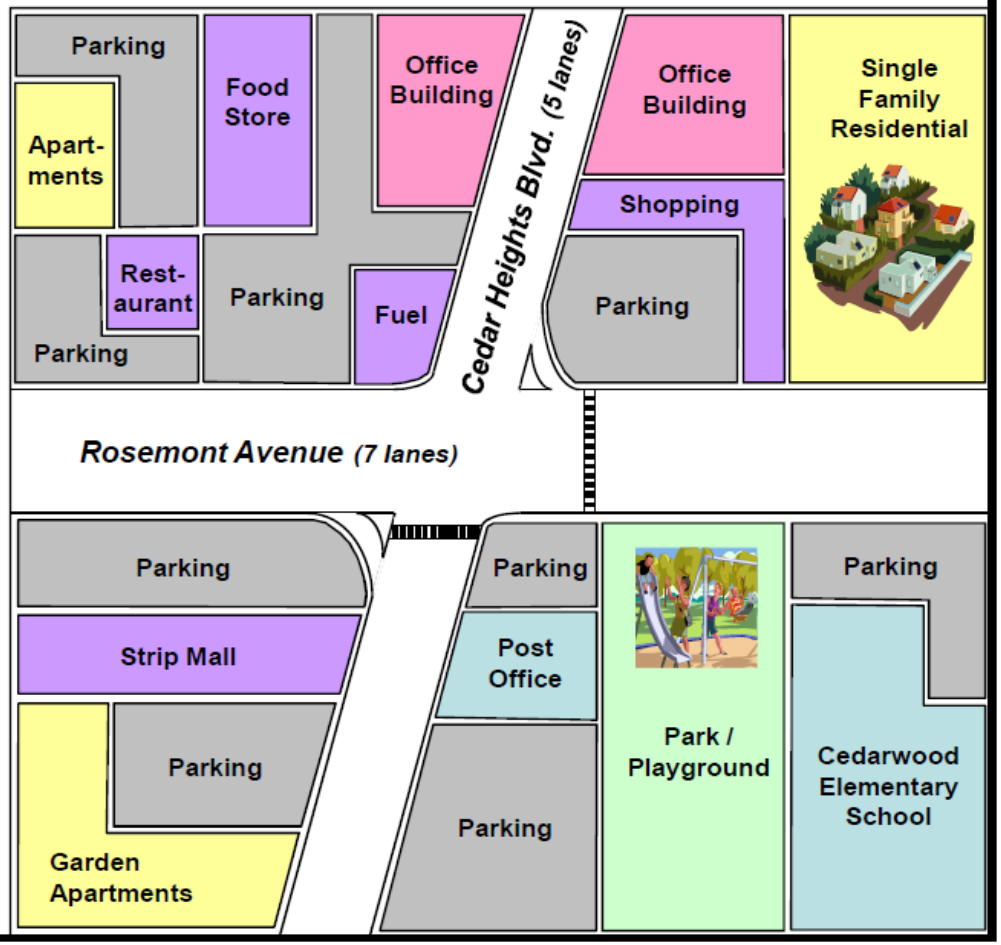
- Think regionally when they act locally
- Be strategic: Get involved when and where they can have the greatest impact
- Expand their networks and learn from other perspectives
- Get involved with the TPB

Interactive Curriculum

Role-Playing Activity

Cedar Heights Town Center Area:
Intersection of Rosemont Avenue and Cedar Heights Blvd.

- Developed primarily in the 1960s-80s
- Potential: Transportation improvements, development options
- Concerns: Major congestion on Rosemont Avenue during rush hour and frequent pedestrian and bicycle injuries



“Map and Chip Game”

Accommodating Growth, Paying for Transportation

Accommodating Growth

"What Would You Do?"
Part I: Accommodating Future Growth

- Propose where forecast job and population growth through 2040 should occur by placing <u>all of the dots</u> on your map.

  = **45,000 jobs** *(29 dots)*

  = **30,000 households**
  or 58,000 people *(23 dots)*

- Propose transportation improvements that will be needed to accommodate the job and population growth pattern you propose.

  ORANGE = 5 miles of **Metrorail**

  PURPLE = 5 miles of **commuter rail**

  YELLOW = 5 miles of **light rail**

  BLUE = 5 miles of **4-lane roadway**

  PINK = 5 miles of **bus rapid transit**

Paying for Transportation

"What Would You Do?" – Part II: Paying for Transportation					
	Through 2040 Planned in CLRP		Through 2040 Your Budget		*Notes*
	Each blue chip represents $5 billion in existing revenues.		Allocate existing revenues (white chips) and raise new revenues (red chips).		*Note any changes you make to the allocation of existing revenues (white chips) and how you plan to raise any new revenues (red chips).*
	Operations & Preservation	Expansion	Operations & Preservation	Expansion	
Highways/Roads 	33% (15 chips)	3% (1 chips)			
Transit 	60% (26 chips)	4% (2 chips)			
Bicycle/Pedestrian 					
Other 					

Discussing the Realities of Planning and Decision-Making

Next session: Spring 2015

For more information:

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- Bryan Hayes, bhayes@mwcog.org