

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3200 Fax: (202) 962-3202

Date: February 19, 2014
Time: 12 noon
Place: COG Board Room

AGENDA (BEGINS PROMPTLY AT NOON)

- 12 noon 1. **Public Comment on TPB Procedures and Activities**
..... Vice Chair Lovain
- 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 January 15 Meeting**
..... Vice Chair Lovain
- 12:25 pm 3. **Report of Technical Committee**
..... Mr. Srikanth
Chair, Technical Committee
- 12:30 pm 4. **Report of the Citizen Advisory Committee**
..... Ms. Loh
Chair, Citizens Advisory Committee
- 12:35 pm 5. **Report of Steering Committee**
..... Mr. Miller
Acting Co-Director, Department of
Transportation Planning (DTP)
- 12:40 pm 6. **Chair's Remarks**
..... Vice Chair Lovain

Alternative formats of this agenda and all other meeting materials are available upon request. Email: accommodations@mwcoq.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.mwcoq.org.

ACTION ITEM

- 12:45 pm 7. **Approval of Green Streets Policy for the National Capital Region**
 Mr. Farrell, DTP
 At the January 15 meeting, the Board was briefed and provided comments on a draft Greens Streets Policy document which reflected several months of discussion by state and local government agencies and interested citizens. The Board will be briefed on the enclosed draft final Green Streets Policy and asked to approve it.

Action: Adopt Resolution R10-2014 to approve the Green Streets Policy for the National Capital Region.

INFORMATION ITEMS

- 12:50 pm 8. **Update on Project Submissions and Schedule for the Air Quality Conformity Assessment, and Status of the Financial Analysis for the 2014 CLRP**
 Mr. Griffiths,
 Acting Co-Director, DTP
 The Board will be updated on the major transportation projects under consideration for submission by the implementing agencies. In January it was determined that more time to discuss and refine the financial plan for the 2014 CLRP would be needed, and the schedule for the project submissions and air quality conformity assessment needed to be changed. The project submissions are scheduled to be released on March 13 for a 30-day public comment period that will end April 12. At the April 16 meeting, the Board will be asked to approve the project submissions and scope of work for the air quality conformity analysis of the 2014 CLRP.
- 12:55 pm 9. **Briefing on “Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region”**
Ms. Mintier, DCPS
 In January, the COG Board approved the Place + Opportunity report as a resource to strengthen and enhance Activity Centers throughout metropolitan Washington. The report presents goals, strategies, and tools to assist local governments and other stakeholders with their efforts to create thriving, high-opportunity places. The Board will be briefed on the report and how it relates to the Regional Transportation Priorities Plan.
- 1:20 pm 10. **Briefing on Traffic Signal Timing/Optimization in the Washington Region**
 Ms. Li, VDOT
 Chair, Traffic Signals Subcommittee
 Mr. Meese, DTP
 In response to TPB requests, the Board will be briefed on a staff survey of traffic signal timing/optimization in the Washington region, the context of a related 2002-2005 Transportation Emissions Reduction Measure (TERM), and the overall traffic signal management activities of the region’s transportation agencies.

- 1:35 pm 11. **Review of Draft FY 2015 Commuter Connections Work Program (CCWP)**
.....Mr. Ramfos, DTP
The Board will be briefed on the enclosed draft CCWP for FY 2015 (July 1, 2014 through June 30, 2015). The Board will be asked to approve the FY 2015 CCWP at its March 19 meeting.
- 1:45 pm 12. **Review of Draft FY 2015 Unified Planning Work Program (UPWP)**
..... Mr. Miller, DTP
The Board will be briefed on the enclosed draft Unified Planning Work Program (UPWP) for FY 2015 (July 1, 2014 through June 30, 2015). The Board will be asked to approve the FY2015 UPWP at its March 19 meeting.
- 1:55 pm 13. **Other Business**
- 2:00 pm 14. **Adjourn**

2 hours

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

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

777 North Capitol Street, NE
Washington, D.C. 20002-4226
(202) 962-3200

**MINUTES OF THE
TRANSPORTATION PLANNING BOARD
January 15, 2014**

Members and Alternates Present

Monica Backmon, Prince William County
Melissa Barlow, FTA
Dan Emerine, DC Office of Planning
Dennis Enslinger, City of Gaithersburg
Gary Erenrich, Montgomery County
Lyn Erickson, MDOT
Jay Fisette, Arlington County
Rene'e N. Hamilton, VDOT
Konrad Herling, City of Greenbelt
Cathy Hudgins, Fairfax County
Sandra Jackson, FHWA
John D. Jenkins, Prince William County
Shyam Kannan, WMATA
Julia Koster, NCPC
Bill Lebegern, MWAA
Tim Lovain, City of Alexandria
Phil Mendelson, DC Council
Mark Rawlings, DDOT
Kelly Russell, City of Frederick
Paul Smith, Frederick County
Linda Smyth, Fairfax County
David Snyder, City of Falls Church
Tammy Stidham, National Park Service
Todd M. Turner, City of Bowie
Jonathan Way, City of Manassas
Victor Weissberg, Prince George's County
Patrick Wojahn, City of College Park
Scott K. York, Loudoun County
Sam Zimbabwe, DDOT

MWCOG Staff and Others Present

Gerald Miller
Nicholas Ramfos
Robert Griffiths
Andrew Meese
Eric Randall
John Swanson
Jane Posey
Andrew Austin
Dan Sonenklar
Ben Hampton
Bryan Hayes
Sarah Crawford
Debbie Leigh
Deborah Etheridge
Daivamani Sivasailam

Jane Posey
Judi Gold
Jameshia Peterson
Christine Green
Melanie Bates
Danielle Wesolek
Bob Chase
Jeanette Tejedade Gomez
Monte Edwards
Stu Whitaker
Bill Orleans

Councilmember Bowser
DDOT
Greater Washington Safe Routes to School Regional Network
Councilmember Wells' Office – DC Council
WMATA
Northern Virginia Transportation Alliance
AAA Mid-Atlantic
Committee of 100 on the Federal City
Transiters

1. Public Comment on TPB Procedures and Activities

Mr. Edwards, Vice Chair of the Committee of 100 on the Federal City, spoke in support of the revised Regional Transportation Priorities Plan (RTPP) that now addresses commuter and passenger rail. He said that rail projects in the Washington region are currently being approached in isolation of one another. He said a comprehensive, coordinated planning effort is urgently needed to evaluate the constraints and identify solutions that will allow the expansion of all three modes of rail to better serve metropolitan Washington. Copies of his remarks were distributed for the record.

Mr. Chase of the Northern Virginia Transportation Alliance said that, next to the lack of any project-specific transportation priorities, the RTPP's main shortcoming is its failure to reflect and address the magnitude of the region's transportation challenges as identified by the latest financial assessment of the CLRP. He said the RTPP offers a locally oriented approach with no estimate as to what its implementation might cost, no evidence that its implementation would make a measurable difference on regional mobility in general, and no accountability on the part of this organization for its implementation. Copies of his remarks were distributed for the record.

Mr. Whitaker, of Transisters, commented on the racial disparity between Metrobus and Metrorail users and expressed concern that the transportation investment resulting from the RTPP may not be equitable. He said it seems as though the RTPP outlines a program under which transportation services used by white upper middle class suburbanites will likely receive a disproportionate amount of transportation investment while transportation services used by non-white lower class residents will receive short shrift. Copies of his remarks were distributed for the record.

Mr. Schwartz of the Coalition for Smarter Growth encouraged the TPB to adopt the RTPP. He said the RTPP provides a multimodal and multi-sector approach to address the region's transportation network that combines transportation with land use, energy, and air quality. He referred to the letter from the Metropolitan Washington Air Quality Committee regarding the lack of attention to greenhouse gas emissions in the RTPP and he encouraged the TPB to address ozone and particulate pollution as part of the discussion on the CLRP.

2. Approval of Minutes of December 18 Meeting

Mr. York made a motion to approve the minutes of the December 18 TPB meeting. Ms. Smyth seconded the motion, which passed unanimously.

3. Report of the Technical Committee

Referring to the handout summary, Mr. Srikanth said the Technical Committee met on January 3 and reviewed several items on the TPB's agenda, including an action item on the adoption of the

Regional Transportation Priorities Plan (RTPP). He said the Technical Committee unanimously recommended TPB approval of the RTPP. He said the Committee also reviewed several information items: the schedule update for the CLRP and the air quality conformity analysis of the CLRP; the TPB's draft Green Streets Policy; a list of priority regional bicycle and pedestrian projects developed by the TPB's Bicycle and Pedestrian Subcommittee; the impacts on the transportation network of the newly approved Regional Activity Centers; and the draft 2015 Unified Planning Work Program. He said the Committee also reviewed two additional items not included on the TPB's agenda: MAP-21 requirements for performance-based planning and FHWA's draft designation of a primary freight network for the nation and comments on that designation from TPB staff.

4. Report of the Citizens Advisory Committee

Ms. Davis said the Citizens Advisory Committee (CAC) met on January 9 and received several briefings, including a briefing on moveDC, which is the District of Columbia's multimodal long-range transportation plan. She said the CAC also heard about the TPB's draft Regional Green Streets Policy and suggested thinking about a way to incentivize jurisdictions to think about including green streets policies at the local level. She said the CAC received an update on the RTPP and said that some CAC members were disappointed that there was not more of an integrated discussion of the environmental impacts of transportation. She also noted that the CAC recognized member Allen Muchnick, who is retiring after 21 years of service on the CAC.

5. Report of Steering Committee

Mr. Miller said the Steering Committee met on January 3 and approved a resolution requested by the Virginia Department of Transportation (VDOT) to include funding for the Sycolin Road and Route 1 widening projects. He summarized the materials in the letters sent and received packet. He highlighted an additional letter distributed at the meeting containing staff comments to the Federal Highway Administration on the Congestion Mitigation and Air Quality Program.

6. Chair's Remarks

Chair Wojahn wished everyone a Happy New Year and said he was excited that the final consideration of the Regional Transportation Priorities Plan (RTPP) will occur during his first meeting as Chair. He thanked staff for all the time and energy devoted to the RTPP, as well as the work the TPB and members of the community put into it.

ACTION ITEM

7. Approval of Funding and Transmittal Letter for TPB's 2014 Membership in the Association of Metropolitan Planning Organizations

Mr. Miller introduced the item, noting that staff ask the Board each year to renew the TPB's membership in the Association of Metropolitan Planning Organizations. He said that staff believes that this membership is beneficial on a technical basis and because of the legislative and regulatory advocacy work AMPO does on behalf of metropolitan planning organizations.

A motion to renew the TPB's membership in AMPO was made, seconded, and approved.

8. Approval of Appointments to the TPB Citizens Advisory Committee (CAC) for the Year 2014

Chair Wojahn introduced the item. He reminded Board members about the structure of the Citizens Advisory Committee, with two members from each state-level jurisdiction being elected by the previous year's CAC, and three members from each state-level jurisdiction, plus up to three alternates from each state-level jurisdiction, being appointed by the TPB. He told the Board that he had appointed Tracy Hadden Loh to serve as Chair of the 2014 CAC.

A motion to approve the TPB's appointments to the 2014 CAC, as presented, was made, seconded, and approved.

9. Approval of the TPB Regional Transportation Priorities Plan (RTPP)

Mr. Turner introduced the item. He thanked staff for their work in developing the plan over the last three years and reminded Board members of the major milestones in the development timeline. He turned the floor over to staff to further discuss the item, particularly the comments that were received during the final 30-day public comment period on the plan.

Mr. Miller said that there were eight comments received during the public comment period, and that the full comments were listed in the staff memorandum to the Board. He said that comments were received from COG's Climate, Energy, and Environmental Policy Committee, the Maryland Department of Environment, the Metropolitan Washington Air Quality Committee (MWAQC), Transisters, and one comment received from an individual.

Mr. Miller said that staff did not recommend any substantive text changes to the plan in light of public comments received, explaining that the comments have either been adequately addressed in the draft or can be considered during subsequent updates to the plan. He emphasized the need for further outreach once the plan has been approved to help everyone in the region understand what is in it and how it can be used.

Mr. Turner moved for adoption of Resolution R9-2014 approving the Regional Transportation Priorities Plan.

Mr. Lovain seconded the motion.

Chair Wojahn opened the floor to discussion.

Mr. Snyder called the Board's attention to the comments received from MWAQC, on which he currently serves as Chair. He said that MWAQC was supportive of the plan's focus on providing a wide range of transportation options, but that federal air quality standards are likely to tighten in coming years, meaning that the region will have to work even harder to meet environmental goals and targets. He also said that he views the RTPP as a combination of local and regional initiatives and that he thinks that the region needs to seek greater cooperation from other sources, including the federal government, to help implement the Priorities Plan.

Mr. Wojahn said, in response to Mr. Snyder's comments, that the work of MWAQC demonstrates that a lot of the details and the needs behind the Priorities Plan still need to be worked out.

Mr. Erenrich said he thought that adoption and ultimate implementation of the plan was very important, and that he hoped it would be used in developing projects for future updates to the CLRP. He also reminded Board members that one of the original reasons for developing a Priorities Plan was so that the region could be ready to take advantage of future federal funding opportunities under programs like TIGER. He said that Congress is considering making \$600 million available in the 2014 appropriations for such funding opportunities and encouraged the Board to monitor the availability and timing of such funding.

Mr. Herling asked what the positive motivations are behind the use of toll lanes, as outlined in the Priorities Plan.

Mr. Miller explained that the toll-lane strategy was derived from several years of scenario work at the TPB and that it is a way to generate revenue to support major new transportation investments, especially bus rapid transit.

Mr. Herling asked whether staff had considered the equity and fairness issues of toll lanes.

Mr. Miller said that these concerns had been considered. He said that such toll lanes would offer a choice for drivers, but no one would be required to use them.

Mr. Swanson added that the Priorities Plan does not identify specific routes where toll lanes should be implemented, nor does it specify whether tolls should be charged on existing lanes or only on newly constructed lanes.

Mr. Kannan observed that the Priorities Plan is a vision-setting document for the CLRP that

reflects consumer sentiment – that the strategies in the plan are customer prerogatives from the regional customer base. He encouraged the Board to move forward in adopting the plan, keeping in mind that the public has endorsed the strategies in the plan.

Mr. Emerine said he thought the Priorities Plan is a balanced document that reflects many diverse viewpoints. He drew the Board’s attention to the plan’s statement that maintenance of the region’s existing transportation system and investments in existing communities are real transportation priorities for the region. He reiterated the need for greater attention on environmental issues as part of follow-up implementation work for the plan, and said he thought the plan does reflect the concerns and needs of low-income, minority, and traditionally disadvantaged transportation populations.

Mr. Fisette emphasized the need for further integration of transportation, land-use, and environmental efforts in moving forward after adopting the plan. He asked whether and how staff either track or inventory greenhouse gases in the region.

Mr. Miller said that the annual performance analysis of the CLRP includes a measure of how the projects and programs in the plan affect emissions, including greenhouse gas emissions.

Mr. Fisette said he agreed with Mr. Snyder that many of the strategies in the plan will generally move the region in a positive direction as it relates to environmental concerns.

Mr. Weissberg said he appreciated that the plan mentions the “east-west divide” and emphasized that it is not just a challenge – it is also an opportunity to better utilize the existing transportation network by balancing demand and travel patterns. He also said he appreciated the plan’s strong emphasis on Activity Centers and transit-oriented development.

Ms. Hudgins said that she thinks it is vital and important to move forward now on adopting the plan. She said she hoped that members would go back to their local jurisdictions and measure progress toward achieving the regional priorities laid out in the plan.

Mr. Lovain said he thought the plan is balanced and robust. He emphasized the plan’s purpose in setting broad strategies, goals, and priorities to be used in subsequent regional planning activities. He urged adoption of the plan.

Mr. Zimbabwe proposed a minor amendment to the resolution to approve the plan. In the twelfth “whereas” clause, he proposed changing the second instance of the word “can” to “should,” so that the clause reads, “Whereas, the RTPP identifies priorities that people from all parts of the region can support, and that local, state, and regional agencies should consider regional priorities when making local decisions.”

The motion to amend the resolution was seconded and approved.

Mr. Turner reminded the Board that the plan would be dedicated to the memory of Ron Kirby.

Mr. Wojahn said there is a lot of flexibility in the Priorities Plan and that he was looking forward to working on implementation of the plan during his tenure as Chair.

The Board unanimously adopted Resolution R9-2014 approving the Regional Transportation Priorities Plan.

INFORMATION ITEMS

10. Update on Project Submissions and Schedule for the Air Quality Conformity Assessment, and Status of the Financial Analysis for the 2014 CLRP

Mr. Griffiths explained to Board members that the implementing agencies in the region need more time to refine the financial plan and projects submissions for the 2014 CLRP. He directed Board members to the updated schedule for submissions and the air quality conformity analysis in their Board packets. He said that following the schedule in the Board packet would mean releasing the project submissions and the scope of work for the conformity analysis for a 30-day public comment period beginning on February 13. He said the Board would be asked at its March 19 meeting to approve the project submissions and the scope of work.

11. Briefing on a Draft Regional Green Streets Policy for the Washington Region

Mr. Farrell briefed the Board on a draft regional Green Streets Policy. Referring to handout materials and the presentation, he described the process for developing the policy that included a workshop and stakeholder input. He said that the proposed Green Streets Policy is similar to the Complete Streets Policy that the Board passed in 2012. The Green Streets Policy comes in two parts: the first includes a sample policy statement, and the second part includes examples of green street treatments. He said that when the Green Streets Policy is approved by the Board, there will be an effort to survey TPB member jurisdictions at regular intervals regarding their own Green Streets policies.

Mr. Emerine referenced comments made by the CAC earlier in the meeting. He said that he agreed that the National Park Service should be included in future discussions about the regional Green Streets Policy. He also agreed with the CAC that the TPB should look to use technical assistance programs operated to encourage further adoption of and implementation of the regional Green Streets Policy.

Mr. Farrell responded that TPB technical assistance programs need to balance many regional priorities, but that it is possible for those programs to reference the Green Streets Policy in their application materials. He also said that he will involve the National Park Service in the future.

Ms. Smyth encouraged the Board to consider the cost related to long-term maintenance of green street infrastructure.

Ms. Hudgins expressed concerns about the difference between treating traditional versus Green

Streets for cold weather, and that there is a lot of work to be done to make Green Streets a reality in the Washington Region. She also mentioned that it may be difficult to fund small Green Streets projects.

Mr. Farrell answered that the Green Streets Policy was designed to be flexible in regards to how each individual jurisdiction adopts and implements its own policy. He continued that if Chicago is able to make Green Streets work, even with that city's harsh winters, then the Washington region can too.

Mr. Smith noted the strict stormwater management requirements that have been imposed on the Washington region because of the Chesapeake Bay. He suggest that a Green Streets Policy is one possible tool that the region can use to meet those stormwater requirements.

12. Briefing on Priority Bicycle and Pedestrian Projects Recommended for the FY 2015-2020 TIP

Mr. Farrell presented the priority bicycle and pedestrian projects recommended for the FY 2015-2020 TIP by the Bicycle and Pedestrian Subcommittee of the TPB Technical Committee. He said that the purpose of this list is to raise awareness of the selected projects and to increase their likelihood of becoming fully funded. Referencing his handout, he explained the selection criteria for the projects, and described the selected projects by jurisdiction.

Mr. Fisette asked if there is a regional vision for a bicycle and pedestrian loop that connects trails in and around the Washington area. He suggested that this type of loop could be used to attract people to the region.

Mr. Farrell answered that there currently is not such a plan, but that the Bicycle and Pedestrian Subcommittee could consider working on it.

Mr. Kannan said he was encouraged that the subcommittee was able to identify and recommend bicycle and pedestrian projects for the region. He requested that the subcommittee go further and study the return on investment in terms of vehicle miles traveled for bicycle and pedestrian projects. He also asked that the subcommittee identify places where pedestrian and bicycle paths could have the biggest impact, particularly in transit-oriented locations, for removing vehicles from the road network.

Mr. Farrell said that this list does prioritize projects that connect cyclist and pedestrians to transit.

Mr. Kannan added that bicycle and pedestrian connections to Metro stations provide a low-cost high impact way to reduce congestion.

13. Assessment of the Transportation Impacts of Forecast Growth in Regional Activity Centers

Mr. Griffiths referred to a revised copy of the presentation that was circulated about the impacts of forecast growth on activity centers. He defined activity centers as the focal points of the region's future growth. He added that activity centers provide a useful way to monitor growth and evaluate how well the Constrained Long-Range Plan supports growth in activity centers. He said that the 60% of the Washington region's new residents, and 75% of the region's new jobs, are expected to move to activity centers between now and 2040. This growth in population and jobs will affect how people get around the region, with half of all walking and bicycle trips occurring in activity centers, which represent less than 10% of the region's land area. He also stated that by 2040, two out of every three transit trips will originate in activity centers, and that 88% of new transit trips will end in an activity center.

Mr. Erenrich said that sometimes the best the region can do is maintain the same modal share, because as population increases, shifting the modal share will be extremely difficult.

Ms. Hudgins asked if the analysis identifies affordable housing in activity centers.

Mr. Griffiths responded that the analysis does not address affordable housing, but added that it was an important consideration.

Ms. Hudgins said that without integration of affordable housing into activity centers, there will not be a jobs/housing balance.

Chair Wojahn added that it is important to continually monitor the housing and transportation affordability within activity centers. He also expressed concern that activity centers tend to be unaffordable places to live.

Mr. Snyder said that in the future, he would like to know what strategies other regions are using to make significant shifts in modal share.

Mr. Zimbabwe, to clarify, asked if the presented analysis is based on the CLRP, including the transit constraint.

Mr. Griffiths said that if the transit constraint is lifted from the CLRP, he would anticipate a greater modal shift towards transit.

Mr. Zimbabwe expressed interest in getting more detailed information about activity centers grouped by those that have access to rail, versus bus transit. He continued that he would imagine that the numbers coming from these types of activity centers would be different.

Mr. Griffiths said that he was correct.

Mr. Emerine asked if it was possible to get more details about how specific activity centers differ from others to help display how different types of interventions can affect mode share.

Mr. Griffiths said that was a good suggestion.

14. Review of Outline and Preliminary Budget for the FY 2015 Unified Planning Work Program (UPWP)

Referring to the presentation, Mr. Miller provided a brief overview of the outline of the FY 2015 Unified Planning Working Program (UPWP). This work program assumes the same budget level as the FY 2014 work program. He said that 80% of funding for the UPWP comes from federal sources, 10% comes from state governments, and the final 10% comes from local government COG dues. A draft of the work program will be presented in February, and the board will be asked to approve it in March.

15. Other Business

There was no other business brought before the TPB.

16. Adjourn

The meeting was adjourned at 2:12pm

TPB Technical Committee Meeting Highlights

February 7, 2014

The Technical Committee met on February 7th at COG. Four items were reviewed for inclusion on the TPB agenda for February 19th.

- TPB agenda Item 8

The Committee was updated on the major transportation projects under consideration for submission by the implementing agencies. In January it was determined that more time to discuss and refine the financial plan for the 2014 CLRP would be needed, and the schedule for the project submissions and air quality conformity assessment was changed. The project submissions are scheduled to be released on March 13 for a 30-day public comment period that will end April 12. At the April 16 meeting, the Board will be asked to approve the project submissions and scope of work for the air quality conformity analysis of the 2014 CLRP.

- TPB agenda Item 9

In January, the COG Board approved the Place + Opportunity report as a resource to strengthen and enhance Activity Centers throughout metropolitan Washington. The report presents goals, strategies, and tools to assist local governments and other stakeholders with their efforts to create thriving, high-opportunity places. The Committee was briefed on the report and how it relates to the Regional Transportation Priorities Plan.

- TPB agenda Item 11

The Committee was briefed on the draft Commuter Connections Work Program (CCWP) for FY 2015 (July 1, 2014 through June 30, 2015). The Board will be asked to approve the FY 2015 CCWP at its March 19 meeting.

- TPB agenda Item 12

The Committee was briefed on the first draft Unified Planning Work Program (UPWP) for FY 2015 (July 1, 2014 through June 30, 2015). The final draft of the FY 2015 UPWP will be presented to the Committee for review at its March 7 meeting.

Three items were presented for information and discussion:

- The Committee was briefed on WMATA's Light Rail Transit (LRT) and Streetcar Interoperability study, which is facilitating coordination among project sponsors and stakeholders to maximize the potential compatibility for the surface transit

projects being advanced across the region. The goal is to promote customer convenience and to coordinate system design in order to identify potential cost savings, operating efficiencies, and network connections.

- Staff from the Maryland Transit Administration (MTA) briefed the Committee on the draft update of the MARC system's Growth and Investment plan. The draft update identifies improvements over the next 40 years and is an update to the original 2007 plan.
- The Committee was updated on the latest developments regarding US DOT regulations on performance measures under MAP-21.

**TPB TECHNICAL COMMITTEE MEMBERS AND ALTERNATES
ATTENDANCE - February 7, 2014**

DISTRICT OF COLUMBIA

DDOT Mark Rawlings
 Anthony Foster
DCOP Dan Emerine

MARYLAND

Charles County -----
Frederick Co. Ron Burns
City of Frederick -----
Gaithersburg -----
Montgomery Co. -----
Prince George's Co. Vic Weissberg
Rockville -----
M-NCPPC
 Montgomery Co. -----
 Prince George's Co. Famararz Mokhtari
MDOT Lyn Erickson
 David Rodgers
 Matt Baker
MTA Diane Ratcliffe
 Kevin Quinn
Takoma Park -----

VIRGINIA

Alexandria Pierre Holloman
Arlington Co. Dan Malouff
City of Fairfax -----
Fairfax Co. Mike Lake
 Malcolm Watson
Falls Church -----
Loudoun Co. Robert Brown
Manassas Monica Backmon
Prince William Co. -----
NVTC Claire Gron
PRTC Nick Alexandrow
VRE Christine Hoeffner
VDOT Kanathur Srikanth
 Norman Whitaker
VDRPT Tim Roseboom
NVPDC -----
VDOA -----

WMATA

WMATA Danielle Wesolek
 Robin McElhenny

FEDERAL/OTHER

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

COG Staff

Gerald Miller, DTP
Robert Griffiths, DTP
Michael Farrell, DTP
Ron Milone, DTP
Andrew Austin, DTP
Jane Posey, DTP
Andrew Meese, DTP
Elena Constantine, DTP
Eric Randall, DTP
Rich Roisman, DTP
Nicholas Ramfos, DTP
Dusan Vuksan, DTP
John Swanson, DTP
Sarah Crawford, DTP
Ben Hampton, DTP
Jinchul Park, DTP
Yu Gao, DTP
William Bacon, DTP
Wenjing Pu, DTP
Feng Xie, DTP
Anant Choudhary, DTP
Jessica Mirr, DTP
Nicole McCall, DTP
Paul DesJardin, DCPS
Greg Goodwin, DCPS
Sophie Mintier, DCPS
Sunil Kumar, DEP

Other Attendees

Ashley Robbins, CFTE, APTA, APA
Jameshia Peterson, DDOT
Daniel Turk
Stu Whitaker
Bill Orleans



NATIONAL CAPITAL REGION

TRANSPORTATION PLANNING BOARD

Item #5

MEMORANDUM

February 13, 2014

To: Transportation Planning Board

From: Gerald Miller
Acting Co-Director,
Department of Transportation Planning

Re: Steering Committee Actions

At its meeting on February 7, 2014, the TPB Steering Committee approved the following resolutions:

- SR9-2014: Resolution on an amendment to the FY 2013- 2018 Transportation Improvement Program (TIP) that is exempt from the air quality conformity requirement to include funding for the relocation of utilities at the I-95 interchange at Contee Road and for the resurfacing of US 50/I-595, as requested by the Maryland Department of Transportation (MDOT)

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.”

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

RESOLUTION ON AN AMENDMENT TO THE FY 2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT TO INCLUDE FUNDING FOR THE RELOCATION OF UTILITIES AT THE I-95 INTERCHANGE AT CONTEE ROAD AND FOR THE RESURFACING OF US 50/I-595, AS REQUESTED BY THE MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT)

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 TIP is required by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) as a basis and condition for all federal funding assistance to state, local and regional agencies for transportation improvements within the Washington planning area; and

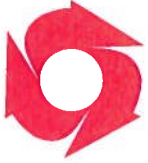
WHEREAS, on July 18, 2012 the TPB adopted the FY 2013-2018 TIP; and

WHEREAS, in the attached letter of January 31, 2014, MDOT has requested an amendment to the FY 2013-2018 TIP to add \$1.167 million for the relocation of utilities at the I-95/Contee Road Interchange and to add \$13.4 million for the resurfacing of US 50/I-595 from south of Lottsford Vista Road to the Anne Arundel County line, as described in the attached materials; and

WHEREAS, these projects are already included in the air quality conformity analysis of the 2013 CLRP and FY 2013-2018 TIP or are exempt from the air quality conformity requirement, as defined in Environmental Protection Agency (EPA) regulations "40 CFR Parts 51 and 93 Transportation Conformity Rule Amendments: Flexibility and Streamlining; Final Rule," issued in the May 6, 2005, *Federal Register*,

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2013-2018 TIP to add \$1.167 million for the relocation of utilities at the I-95/Contee Road Interchange and to add \$13.4 million for the resurfacing of US 50/I-595 from south of Lottsford Vista Road to the Anne Arundel County line, as described in the attached materials.

Adopted by the Transportation Planning Board Steering Committee at its regular meeting on February 7, 2014.



Maryland Department of Transportation
The Secretary's Office

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

January 31, 2014

James T. Smith, Jr.
Secretary

The Honorable Patrick Wojahn, Chair
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street, N.E., Suite 300
Washington DC 20002

Dear Chairman Wojahn:

The Maryland Department of Transportation (MDOT) requests two amendments to the State Highway Administration (SHA) portion of the FY 2013-2018 Transportation Improvement Program (TIP) as described in the attached memo. The amendments are needed to reflect an additional \$1.67 million for the relocation of utilities for the I-95/Contee Road Interchange project and to include a resurfacing project in the FY 2013 TIP. This action will break out and add \$13.4 million to the US 50/I-595 Resurfacing project from its parent project, called the Resurfacing and Rehabilitation Areawide ("grouped") project (TIP ID#3082). Our Federal partners have expressed that all individual projects that are eligible to be included and identified in the "grouped" projects category that cost over \$10 million be treated as a stand-alone project and given its own TIP ID and line item. These projects are either included in the currently approved air quality conformity analysis or do not require a conformity analysis.

The additional funds for both projects have been made available due to an increase in federal-aid obligational authority. The amendment details are summarized below and in the attached memo.

TIP ID #	Project	Phase	Amount of New Funding	Comment
3033	I-95/Contee Road Interchange – Utility Relocation	RW	\$1,167,000	Add \$1.67 million in NHPP funds to the FY2013 TIP for the relocation of utilities for the I-95/Contee Road Interchange project.
6180	US 50/I-595 - Resurfacing	CO	\$13,400,000	Breakout from parent Resurfacing and Rehabilitation Areawide projects (TIP ID#3082) and add \$13.4 million in NHPP funds to the FY 2013 TIP for construction for the resurfacing of US 50/I-595 from south of Lottsford Vista Road to the Anne Arundel County line.

MDOT requests that this amendment be approved by the Transportation Planning Board (TPB) Steering Committee at its February 7, 2014 meeting.

My telephone number is _____
Toll Free Number 1-888-713-1414 TTY Users Call Via MD Relay
7201 Corporate Center Drive, Hanover, Maryland 21076

The Honorable Patrick Wojahn
Page Two

The revised funding status will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained. The cost does not affect the portion of the federal funding which was programmed for transit, or any allocations of state aid in lieu of federal aid to local jurisdictions.

We appreciate your cooperation in this matter. If you have any questions or comments, please do not hesitate to contact Ms. Lyn Erickson, at 410-865-1279, toll-free at 888-713-1414 or via email at lerickson@mdot.state.md.us. Of course, please feel free to contact me directly.

Sincerely,



Michael W. Nixon, Manager
Office of Planning and Capital Programming

Attachment

cc: Ms. Mary Deitz, Chief, Regional and Intermodal Planning Division, SHA
Ms. Lyn Erickson, Manager, Office of Planning and Capital Programming,
Maryland Department of Transportation
Ms. Heather Murphy, Deputy Director, Office of Planning and Capital Programming
Maryland Department of Transportation

Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor



James T. Smith, Jr., Secretary
Melinda B. Peters, Administrator

MARYLAND DEPARTMENT OF TRANSPORTATION

MEMORANDUM

TO: Mr. Don Halligan
Director of Planning and Capital Programming
Maryland Department of Transportation

ATTN: Mr. Mike Nixon
Ms. Lyn Erickson

FROM: Mary Deitz, Chief *MD*
Regional and Intermodal Planning Division

DATE: January 30, 2014

SUBJECT: Amendment Request to the Fiscal Year (FY) 2013 Transportation Improvement Program (TIP) for the National Capital Region

The State Highway Administration (SHA) hereby requests an amendment of the FY 2013 National Capital Region Transportation Improvement Program (TIP). The additional funding that has been programmed for two projects in the National Capital Region as summarized below and detailed in the attached TIP sheets. The amendment is needed to reflect additional funding for the relocation of utilities for the I-95/Contee Road Interchange project and to include a resurfacing project on US 50/I-595 in the FY 2013 TIP. The US 50/I-595 Resurfacing project has been broken out of the Resurfacing and Rehabilitation Areawide projects (TIP ID: 3082). Because the cost of this project exceeds the \$10 million threshold, this project is being removed from the Resurfacing and Rehabilitation Areawide projects. The additional funds for both projects are available due to an increase in federal - aid obligational authority.

TIP ID#	Project	Phase	Previously Programmed Funding	Amount of New Funding	Comment
3033	I-95/Contee Road Interchange - Utility Relocation	RW	\$3,831,000	\$1,167,000	Add \$1.2 million in NHPP funds to the FY 2013 TIP for the relocation of utilities for the I-95/Contee Road Interchange project.
N/A	US 50/I-595 - Resurfacing	CO	\$0	\$13,400,000	Breakout from parent Resurfacing and Rehabilitation Areawide projects (TIP ID: 3082) and add \$13.4 million in NHPP funds to the FY 2013 TIP for construction for the resurfacing of US 50/I-895 from south of Lottsford Vista Road to the Anne Arundel County Line.

Mr. Don Halligan
Page Two

The proposed action will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained. The cost does not affect the portion of the federal funding, which was programmed for transit or any allocations of state aid in lieu of federal aid to local jurisdictions.

After your review, please forward this request to the Washington Metropolitan Council of Governments. Upon approval of the requested TIP administrative modification, please process an administrative modification to the FY 2013 STIP using the funding information provided in the attachment. If you have any questions, please do not hesitate to contact Mr. David Rodgers, Assistant Regional Planner, SHA at 410-545-5670 or via email at drodger1@sha.state.md.us.

Attachment

cc: Mr. Matt Baker, Assistant Regional Planner, SHA
Ms. Felicia Haywood, Deputy Director of Planning and Preliminary Engineering, SHA
Mr. David Rodgers, Assistant Regional Planner, SHA
Mr. Brian Young, District Engineer, SHA

**SUBURBAN MARYLAND
TRANSPORTATION IMPROVEMENT PROGRAM
CAPITAL COSTS (in \$1,000)**

FY 2013 - 2018

Source	Fed/St/Loc	Previous Funding	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Source Total
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MDOT/State Highway Administration

Interstate

I 95

TIP ID: 3033	Agency ID: PG4191	Title: I 95								Complete: 2014	
Facility: I 95 Contee Road Relocated w/ C/D Roads	IM	90/10/0	3,887 a	2,025 b	11,000 c					21,116	
From:			2,000 b	8,091 c							
To:			2,803 c								
		NHPP	80/20/0			1,167 e					1,167
		NHS	80/20/0	2,050 b	2,025 b	11,001 c					21,117
				2,804 c	8,091 c						

Total Funds: 43,400

Description: Construct a new interchange at Contee Road Relocated with two lane collector-distributor roads northbound and southbound at I-95 and Contee Road Relocated. 


Amendment: I-95/Contee Road Interchange Utility Relocation **5 ddfc j ed on: 2/7/2014**
 Add \$1.2 million in NHPP funds to the FY 2013 TIP for the relocation of utilities for the I-95/Contee Road Interchange project. These funds include \$0.6 million for FY14 and \$0.6 million for FY 15.

Other

System Preservation Projects

TIP ID: 6180	Agency ID:	Title: US 50, John Hanson Highway								Complete:	
Facility: US 50 US 50, John Hanson Highway	NHPP	80/20/0			5,731 c	7,669 c					13,400
From: Lottsford Vista Road											
To: Anne Arundel County Line											

Total Funds: 13,400

Description: Resurfacing and safety improvements from south of Lottsford Vista Road to Anne Arudnel County line. 

Amendment: US 50/I-595 - Resurfacing **Approved on: 2/7/2014**
 Breakout from parent Resurfacing and Rehabilitation Areawide projects (TIP ID: 3082). Add \$13.4 million in NHPP funds to FY 2013 TIP for Construction phase of the resurfacing of US 50/I-895 from south of Lottsford Vista Road to the Anne Arundel County Line. These funds include \$5.7 million for FY 15 and \$7.7 million for FY 16.



NATIONAL CAPITAL REGION

TRANSPORTATION PLANNING BOARD

Item #5

MEMORANDUM

February 13, 2014

To: Transportation Planning Board

From: Gerald Miller
Acting Co-Director,
Department of Transportation Planning

Re: Letters Sent/Received Since the January 15th TPB Meeting

The attached letters were sent/received since the January 15th TPB meeting. The letters will be reviewed under Agenda #5 of the February 19th TPB agenda.

Attachments



U.S. Department
of Transportation

Federal Transit Administration
Region III
1760 Market Street, Suite 500
Philadelphia, PA 19103
215-656-7100
215-656-7260 (fax)

Federal Highway Administration
DC Division
1990 K Street, N.W., Suite 510
Washington, DC 20006
202-219-3570
202-219-3545 (fax)

JAN 22 2014

The Honorable Patrick Wojahn, Chairman
National Capital Region Transportation Planning Board
c/o Gerald Miller and Robert Griffiths, Co-Directors of Transportation Planning
Metropolitan Washington Council of Governments
777 North Capital Street, NW, Suite 300
Washington, DC 20002-4201

Re: Air Quality Conformity Determination for the 2013 Constrained Long Range Plan (CLRP) and the Fiscal Year (FY) 2013-2018 Transportation Improvement Program (TIP) for the Washington Metropolitan Region

Dear Chairman Wojahn:

The 1990 Amendments to the Clean Air Act require transportation air quality conformity determinations for Metropolitan Transportation Plans, Transportation Improvement Programs (TIP), sections of a State Transportation Improvement Program (STIP) covering rural nonattainment/maintenance areas, and projects in areas that are designated as air quality nonattainment and maintenance areas. Section 176 (d) of the Clean Air Act establishes priority requirements for programs supported by the Federal government that target nonattainment or maintenance areas in order to provide for timely implementation of eligible portions of air quality plans.

The Federal Transit Administration (FTA) and Federal Highway Administration (FHWA) coordinated the transportation air quality conformity determinations submittal with the Environmental Protection Agency (EPA) and are jointly making this air quality conformity determination. This determination was triggered as a result of having completed the review of the 2013 Constrained Long Range Plan (CLRP) and the Fiscal Year (FY) 2013-2018 TIP for the Washington Metropolitan Region. The last air quality conformity determination for the 2012 CLRP and 2013-2018 TIP was made on May 30, 2013. On November 26, 2013, in a letter to FHWA's District of Columbia Division regarding the review of the 1997 8-Hour Ozone, 2008 8-hour Ozone, Carbon Monoxide and 1997 Fine Particulate Matter (PM 2.5) Standards Conformity (enclosed), the EPA acknowledged its review and included technical documentation that supports the conformity finding of the region's 2013 CLRP.

FTA and FHWA find that the analytical results provided by the Transportation Planning Board (TPB) to demonstrate conformity are consistent with EPA's Transportation Conformity Rule (40

Re: Air Quality Conformity Determination for the 2013 CLRP and the FY 2013-2018 TIP for the Washington Metropolitan Region

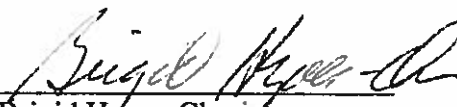
performed in accordance with the requirements specified in the Transportation Conformity Rule (40 CFR Part 93), as amended.

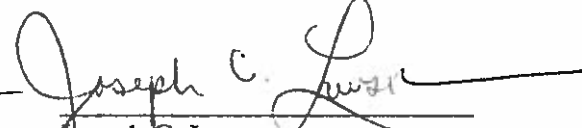
FTA and FHWA find that the TPB 2013 CLRP was developed based on a continuing, cooperative, and comprehensive transportation planning process carried on cooperatively by the TPB, the Washington Metropolitan Area Transit Authority (WMATA), the states of Maryland and Virginia, and the District of Columbia in accordance with the requirements of 23 USC 134 and Section 5303 of the Federal Transit Act (49 USC).

Based on our transportation planning regulatory requirements, our day-to-day involvement, and extensive review of technical analysis reports, and in accordance with the provisions of Section 134(h)(2)(B), Title 23 USC, FTA and FHWA find the financial information needed to support our fiscal constraint determination is complete.

Any questions concerning this determination should be directed to Ms. Ms. Melissa Barlow, Community Planner of the FTA DC Metropolitan Office, at (202) 219-3565 or Ms. Sandra Jackson, Community Planner of the FHWA District of Columbia Division, at (202) 219-3521.

Sincerely,


Brigid Hynes-Cherif
Regional Administrator, Region III
Federal Transit Administration

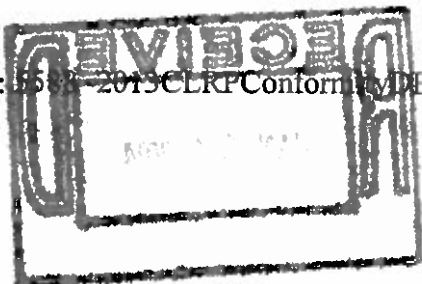

Joseph C. Lawson
District of Columbia Division Administrator
Federal Highway Administration

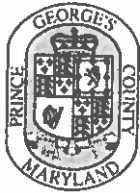
Enclosure

cc:

Kwame Arhin, FHWA Maryland Division
Ivan Rucker, FHWA Virginia Division
Edward Sundra, FHWA Virginia Division

File: 158-2013-CLRPConformityDET.docx 12/5/13





THE PRINCE GEORGE'S COUNTY GOVERNMENT

(301) 952-3820

Chairman

Mel Franklin

Councilman District 9

Honorable Barbara A. Mikulski
United States Senate
503 Hart Senate Office Building
Washington, D.C. 20510

Dear Senator Mikulski:

The Prince George's County Council voted unanimously to strongly urge our Senate and House of Representatives to support restoring the transit tax benefit to encourage the use of mass transit in the Washington D.C. Metropolitan region.

As you are aware in 2012 Congress passed American Taxpayer Relief Act, which among other provisions, restored parity between the mass transit and parking pre-tax benefits for 2013 at \$245 per month. However, the transit tax benefit expired as of January 1, 2014 and has been reduced to \$130 per month. At the same time, the tax benefit for parking benefits rose to \$250 per month, thereby creating an unfair disparity amongst modes and discouraging the use of public mass transit amongst those using the program.

This Federal tax credit benefit is critical to the efficient movement and maintaining a safe and reliable transit system used by Americans from all over our country and in the Washington D.C. Metropolitan region. Together METRO and MARC provides over 1.3 million trips a day with much of it to carry County and regional residents to and from work with the Federal government. According to Maryland Transit Administration (MTA) information, over 9,000 MARC and bus commuters take part in the program. The program benefits both employers and employees who participate in the pre-tax dollar program.

Thank you in advance for your continued support and attention to this matter. The members of the Prince George's County Council are available to discuss how we can support your efforts to restore this critical tax benefit to our regional workforce. We stand ready to work with you to support Congressional action to restore and continue this cooperative funding for the residents of the National Capital Region.

14741 Governor Oden Bowie Drive
County Administration Building – Upper Marlboro, Maryland 20772
CouncilDistrict9@co.pg.md.us – Fax (301) 952-5275

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Mel Franklin', with a stylized flourish extending to the right.

Mel Franklin
Chairman

cc: Hon. Martin O'Malley, Governor
Hon. Anthony G. Brown, Lt. Governor
Hon. James Smith, Secretary, Maryland Department of Transportation
Hon. Patrick Wojahn, Chair, COG Transportation Planning Board
Hon. Tom Downs, Chair, WMATA Board of Directors
Hon. Rushern Baker, III, Prince George's County Executive
Mr. Darrell Mobley, Acting Director, Prince George's County DPWT

ITEM 7 - Action
February 19, 2014

Approval of Green Streets Policy for the National Capital Region

Staff

Recommendation: Adopt Resolution R10-2014 to approve the Green Streets Policy for the National Capital Region.

Issues: None

Background: At the January 15 meeting, the Board was briefed and provided comments on a draft Greens Streets Policy document which reflected several months of discussion by state and local government agencies and interested citizens.

TPB R10-2014
February 19, 2014

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

RESOLUTION APPROVING
THE GREEN STREETS POLICY FOR THE NATIONAL CAPITAL REGION

WHEREAS, the National Capital Region Transportation Planning Board (TPB) has been designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia as the Metropolitan Planning Organization (MPO) for the Washington Metropolitan Area; and

WHEREAS, the TPB Vision, the Bicycle and Pedestrian Plan for the National Capital Region, and the Metropolitan Washington Council of Government's (COG) Region Forward have goals that support a transportation system that enhances the region's natural environmental quality and the appearance of its communities, makes alternate travel modes such as walking and bicycling more attractive, and focuses economic development in walkable activity centers; and

WHEREAS, TPB member jurisdictions are required under federal and state laws and regulations to mitigate the water quality impacts of stormwater runoff; and

WHEREAS, the concept of "Green Streets" is defined in this resolution and attachments 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"; and,

WHEREAS, on December 18, 2012, the Anacostia Watershed Restoration Partnership requested that the TPB develop and approve a regional policy on Green Streets, similar to the TPB regional policy on Complete Streets; and

WHEREAS, a number of successful Green Streets activities have already been implemented by TPB member jurisdictions and agencies, and region-level information exchange on these activities is beneficial; and

WHEREAS, at the direction of the TPB Technical Committee, on April 8, 2013 a public workshop with regional state and local transportation and environmental agency representatives reviewed their existing stormwater runoff and Green Streets policies and experiences; and

WHEREAS, the workshop participants concluded that Green Streets can often be the most cost-effective response to stormwater runoff regulations, can provide other benefits; and that a Green Streets policy directive from the top of a government can help ensure that various agencies within a government will cooperate to implement Green Streets; and

WHEREAS, following from the discussions at the April 8, 2013 workshop, TPB staff and COG Department of Environmental Programs staff jointly developed a *Green Streets Policy* and supporting materials; and

WHEREAS, the TPB Technical Committee, the Bicycle and Pedestrian Subcommittee, the TPB Citizens Advisory Committee, the Anacostia Watershed Management Committee, and the COG Climate, Energy and Environmental Policy Committee were briefed and provided comments on draft versions of the *Green Streets Policy* and supporting materials; and

WHEREAS, at its January 15, 2014 meeting, the TPB was briefed on the draft *Green Streets Policy* and supporting materials.

NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD approves the attached Green Streets Policy for the National Capital Region.

Green Streets Policy for the National Capital Region

I. Background

The National Capital Region Transportation Planning Board (TPB) supports a transportation system that enhances the region's natural environmental quality and the appearance of its communities, makes alternate travel modes such as walking and bicycling more attractive, and focuses economic development in walkable activity centers. These goals are embodied in COG's *Region Forward* (2010), the TPB *Vision* (1998), and the draft Regional Transportation Priorities Plan.

Stormwater runoff from impervious surfaces, including urban streets and roads is a major threat to water quality in the Washington region. Urban roads, along with sidewalks and parking lots, are estimated to constitute almost two-thirds of the total impervious surface cover and contribute a similar ratio of stormwater runoff.

On December 18, 2012, the Anacostia Watershed Restoration Partnership requested that the TPB develop and approve a regional policy on Green Streets, similar to the regional policy on Complete Streets. At the direction of the TPB Technical Committee, a stakeholder workshop was held on April 8th, 2013 to review current Green Streets policies and practices. Workshop participants concluded that Green Streets are often the most cost-effective response to stormwater runoff regulations, and that a directive from the top of a government can help ensure that various agencies within a government will cooperate to implement Green Streets.

Department of Transportation Planning and Department of Environmental Programs staff then drafted *Green Streets Policy, Guidance, and Resources* documents with input from the TPB Technical Committee and other stakeholders.

II. Definitions

(1) GREEN STREET

Green Streets are 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.

(2) GREEN STREETS POLICY—The term “green streets policy” means

A directive at the local, state, regional, or federal level that requires the use of green streets techniques to manage stormwater runoff from transportation facilities in a manner appropriate to the function and context of the relevant facility.

(3) GREEN STREETS PRINCIPLE —The term “green streets principle” means

A specific component of a Green Streets policy.

III. Policy Statement

The National Capital Region Transportation Planning Board endorses the concept of Green Streets and strongly encourages its member jurisdictions and agencies that do not already have a Green Streets policy, or who are revising an existing policy, to adopt a Green Streets policy that includes common elements that the TPB believes reflect current best practices, such as the attached *A: Green Streets Guidance* and *B: Green Streets Resources*.

IV. Documentation and Reporting

1. Within six months of the adoption of this policy, and every two years thereafter, Transportation Planning Board staff will conduct a survey of the TPB member jurisdictions and agencies regarding their adoption and implementation of Green Streets policies.
2. Within two years of the adoption of this policy, the TPB will create a regional information clearinghouse, which will provide access to state and local project websites where detailed and timely information on the design of transportation projects can be found, so that the public may judge whether and how well such projects implement Green Streets principles.

V. Promotion

With six months of the adopting of this policy, the TPB will sponsor training on Green Streets best practices for personnel responsible for the design, construction, and maintenance of streets.

Within two months of the training event, the TPB will produce a summary and resource guide on Green Streets best practices as identified by the training speakers and participants.

February 19, 2014

Attachment A

Green Streets Policy Guidance

I. Elements of an Ideal Green Streets Policy

The following elements should be part of a comprehensive Green Streets policy. An ideal Green Streets policy:

- Includes a vision for how and why the community wants to green its streets.
- Covers all transportation facilities.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Directs the use of the latest and best design standards while recognizing the need for flexibility in balancing user needs.
- Directs that green streets solutions will complement the context of the community.
- Establishes performance standards with measurable outcomes.
- Includes specific next steps for implementation of policy, such as
 - Revising agency procedures and regulations to reflect the policy
 - Developing or adopting new design guides
 - Offering training for staff responsible for implementing the policy
 - Gathering data on how well streets are serving the goals of the policy

II. Sample Policy Statement

Beginning on the effective date of this policy, all (insert jurisdiction or agency) financed and approved transportation projects in (insert Jurisdiction or Agency) shall, where practicable, use trees, landscaping and related environmental site design features to capture and filter stormwater runoff within the right of way, in a manner appropriate to the function and context of the facility.



Rain garden: District of Columbia

What is a Green Street?

Green streets incorporate trees, landscaping features, and related site design elements to capture and filter stormwater runoff within the right of way, while cooling and enhancing the appearance of the street.

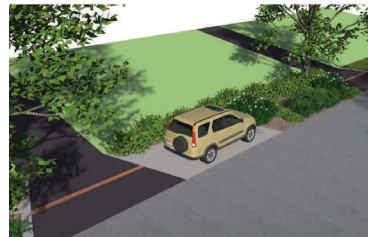
Green Streets Features



Bioretention: Arlington Co.



Tree Plantings: MDSHA



Bioswale, tree planters & permeable pavement: Fairfax Co.



Permeable pavement: District of Columbia

Benefits of Green Streets

- Managing stormwater - may be more cost effective than traditional stormwater approaches
- Enhancing aesthetics
- Improving local air quality - absorbing and intercepting air pollution
- Enhancing economic development and property values
- Improving the road user experience
- Reducing urban heat island effect and associated health and energy costs
- Linking green spaces to improve ecological resilience; can include native plants

Green Streets may also incorporate energy efficient lighting, recycled materials, signage, and other sustainable transportation and environmental features.

Adapted from [Water Environment Research Foundation](#)



Bioretention in median: Prince George's Co.



Raingarden: Montgomery Co.

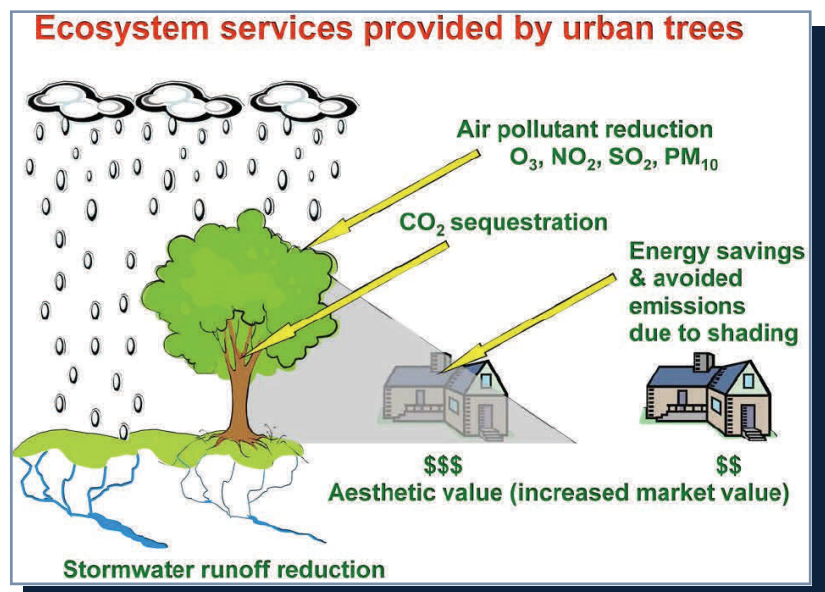


Figure 1. Trees & vegetation perform a variety of ecological services. iTreetools.org.

Green Streets Policies

[Prince George's County, Maryland](#) *Complete and Green Streets Policy*

The County requires road, sidewalk, trail and transit related construction/reconstruction projects to include environmental site design where practicable.

[District of Columbia](#) *Green Streets Policy*

The District of Columbia's stormwater rules and the Department of Transportation's Low Impact Development Action Plan inform the city's Green Streets Policy.

[Maryland](#) *Stormwater Management Act*

Maryland requires all new and reconstructed state and federal projects to implement environmental site design to the maximum extent practicable.

[Cleveland, Ohio](#) *Complete and Green Streets Ordinance*

"The City of Cleveland is committed to the creation of a network of Complete and Green Streets that will improve the economic, environmental and social well-being."

[Portland, Oregon](#) *Green Streets Policy*

"Goal: City of Portland will promote and incorporate the use of green street facilities in public and private development."

[Tucson, Arizona](#) *Green Streets Policy*

Tucson's Green Streets Policy requires stormwater-harvesting features to be integrated into all publicly-funded roadway development and re-development projects.

Green Streets Guidebooks, Standards and Manuals

Charles River Watershed Association [Green Streets manual](#), PowerPoint presentation

City of Portland's [Green Streets Construction Guide](#)

City of Seattle's [Right of Way Improvements Manual: Green Streets](#)

City of Philadelphia's Green City Clean Waters: [Green Streets Design Manual](#), p. 55

Environmental Protection Agency's (EPA) Municipal Handbook [Managing Wet Weather with Green Infrastructure: Green Streets](#)

EPA's [Conceptual Guide to Green Streets Design Standards](#)

[Great Lakes Green Streets Guidebook](#)

Maryland [Stormwater Design Manual](#), Volume 1 & 2

Water Environment Research Foundation's [Green Streets Basics and Design](#)

Additional Resources

EPA's [Green Highway's Partnership](#) aims to achieve environmental stewardship goals through collaboration, voluntary participation and public/private partnerships.

[National Complete Streets Coalition](#) "...a Complete Streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind – including bicyclists, public transportation vehicles and riders, and pedestrians of all ages and abilities."

[Re:Streets](#) is a partnership that "explore[s] the future of streets and what America's roadways would be like if they were designed for living, instead of just driving."

Inventory of Great Streets Policies in the Washington Region

Federal Government-- [Federal Highway Administration](#)

Federal regulations

- All FHWA actions must follow the [National Environmental Policy Act](#) procedures set forth in CEQ regulations and 23 CFR 771.
- Federal highway-related activities, like all federal projects, must also comply with other environmental regulations such as the Endangered Species Act and Coastal Zone Management Act.

State and Local Requirements and Compliance

- Permits for discharges are required from USCE, state agency, or municipal separate storm sewers for large or medium (over 100,000) populations.
- Projects must be consistent with state Non-Point Source Pollution Management Program (Section 319).
- Water quality certification is required from State Water Resource Agency (Section 401).
- Transportation plans, programs, and projects must conform with State Implementation Plan (SIPs) that provide for attainment of the national ambient air quality standards.
- At least 0.25% of funds expended on a landscaping project on the Federal-aid highway system must be used to plant native wildflowers.
- 20% of asphalt funded with Federal-Aid in each State is required to include recycled rubber by 1997.

Green Highways Partnership

Green Highways Partnership is a voluntary, public/private network focusing on effective, green transportation partnering, innovation and collaboration. *Green highways* reflects a new paradigm, one that bridges the gap between the environmental and transportation communities. This bridge is the result of an unprecedented collaboration between the Environmental Protection Agency and the Federal Highway Administration.

District of Columbia

[The Green Streets program](#) is part of several programs [including the Low Impact Development \(LID\) Action Plan for SW management, Great Streets, and Sustainable DC Plan.](#)

The Complete Streets Policy includes Green Streets principles such as [creating more green space in transportation, improving pedestrian environment, and environmental enhancement.](#)

Maryland

State [Stormwater Management Requirements](#) for State and Federal Projects¹:

1. New

At a minimum, runoff from 1 inch of rainfall must be treated with environmental site design.

2. Reconstructed

Environmental site design (ESD) must be implemented to the *maximum extent practicable* to provide water quality treatment for the first one inch of rainfall for a minimum of 50 percent of the existing impervious area within the limit of disturbance.

Additional Information

- The [Stormwater Management Act of 2007](#) defines ESD as "...using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources."
- Maryland State Highways Administration (MD SHA) is a leading partner in the [Green Highways Partnership](#). MD SHA is involved in a number of demonstration projects promoting innovative stormwater management practices, including low impact development strategies and water quality banking.

Jurisdiction	Summary of policies related to Green Streets
Charles County	Implemented Stormwater Management Retrofits incorporated dry swales, bioretention systems, and shallow wetlands. Developed LID/ESD Design Manual and state required stormwater ordinance .
City of Bowie	Plans and objectives include: Increased tree canopy coverage, more trees planted on streets (150 annually), and LID stormwater management . Environmental Infrastructure Action Plan states that the city adopted a resolution that supports conservation landscaping and LID.
City of Frederick	The 2009 Sustainable Practice Action Plan calls for exploring an LID stormwater management policy employing bioretention facilities, filter/buffer strips, and grassed swales. ESD Treatment Practices were approved in 2010 to follow ESD to the maximum extent practicable. Urban Forestry Master Plan describes stormwater benefits of street trees.
City of Gaithersburg	Gaithersburg Master Plan describes enhancement strategies for green infrastructure, LID, street trees, and increased street light efficiency. The city's ESD stormwater policies include bio-retention swales and curb inlets, enlarged sidewalk tree boxes, and green roofs and façades.
City of Rockville	Implemented a Street Tree Master Plan . Sediment Control and Stormwater Management code complies with Maryland requirements.

¹ These requirements presumably apply to state highways. In Maryland, local roads fall under local authority.

College Park	Letter of support for Green Infrastructure Master Plan Coordination and Implementation for the Anacostia River Watershed . Energy-efficient street lights are among the Green Initiatives .
Frederick County	The Green Infrastructure Plan outlines a framework to revitalize natural resource gaps, support development patterns, and meet water quality standards. The plan includes Storm Water Action Items , with a goal to ‘Incorporate the use of non-structural stormwater management, including vegetated swales and bio-retention.’
Montgomery County	Very extensive LID program including bioretention, bioswales, curb extensions, tree boxes, rain gardens, and pervious sidewalks. Numerous implemented projects throughout the county.
Prince George’s County	Adopted a Complete and Green Streets Policy in 2012. Countywide Green Infrastructure Functional Master Plan supports street planters, curb extensions, tree box filters, bioswales and bioretention.
Takoma Park	At least one Green Street project in progress.

Virginia
<p>State Requirements for Stormwater Management for Roads and Highways:²</p> <p>1. New</p> <p><i>Technology approach:</i> Determine the required best management practice to treat the entire post construction impervious area within the right of way plus permanent easement area per outfall.</p> <p>2. Reconstructed</p> <p><i>Performance approach:</i> Design the best management practice for a water quality volume based on net increase in impervious area plus 10% of pre-construction impervious area. The goal is to determine the best management practice that would remove pounds of phosphorus to 10% less than existing loading</p> <p>Additional Information</p> <p>Currently DCR does not have published credits for using LID practices to meet water quality requirements. However, such practices are being requested as a means to improve water quality. Language in the VDOT Subdivision Street Acceptance Policies is encouraging LID practices, even to the allowance of such inside VDOT right of way. For those items inside the right of way, maintenance provisions are agreed upon either through VDOT or the Locality.</p> <p>VDOT holds a Municipal Separate Storm Sewer System (MS4) permit for facilities located in 13 urbanized areas in Virginia. VDOT’s Watershed Implementation Plan includes a provision to encourage LID where appropriate.</p>

²In Northern Virginia, most roads are built and maintained by the state. However this group does not include those roads within the Cities, some Towns, some private subdivision streets, and the secondary roads in Arlington County. Local governments can partner with the state in some cases on Secondary Roadways to implement stormwater management in state rights of way with execution of maintenance agreement as per VDOT’s Subdivision Street Acceptance Requirements (SSAR).

Jurisdiction	Summary of policies related to Green Streets
Arlington County	Transportation Master Plan Streets Element emphasizes environmental sustainability and stormwater management. Green Streets website and several projects in progress and implemented. Green streets FAQ page . Efficient streetlight program.
City of Alexandria	Alexandria's Eco-City Charter and Environmental Action Plan incorporate green street principles. Environmental elements such as trees are included in City Master Plan and associated small area plans ; and Transportation Master Plan . Implemented several green infrastructure and Low Impact Development (LID) projects, including a pervious trail .
City of Falls Church	The city has several green infrastructure projects . The Watershed Management Plan describes proposed changes to support LID implementation in street design. Department of Environmental Services implements LID projects .
City of Manassas	Urban tree canopy plan and sustainability best practices for stormwater management are part of sustainability plan . Green infrastructure included in the Old Town street plan .
Fairfax County	Comprehensive Plan contains several ecological and water resources objectives and policies that support stormwater treatment through Low Impact Development. Environmentally-sensitive streetscaping concepts were implemented in several neighborhood stormwater improvement projects and incorporated in design guidelines for Tysons Corner.
Loudoun County	The General Plan's Green Infrastructure chapter includes green stormwater management. Stormwater Management Plan details BMPs.
Prince William County	The County's stormwater management program lists Low Impact Development among its methods. The County's Comprehensive Plan's Environment chapter encourages street tree space and LID use in site plans.

Acronyms

BMPs

Best Management Practices-

Stormwater facilities such as rain gardens (a small depressed area with amended soils and native plants designed to capture and filter runoff), grassed swales, infiltration trenches, permeable pavement, stormwater planters, tree box filters, and vegetated roofs. (http://www.epa.gov/oaintrnt/stormwater/best_practices.htm)

ESD

Environmental Site Design- Same as Low Impact Development.

LID

Low Impact Development-

An approach to land development (or re-development) that works with nature to manage stormwater as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat stormwater as a resource rather than a waste product. LID incorporates practices such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions. (<http://water.epa.gov/polwaste/green/>)

Note: ESD and LID are contrasted with **Traditional Stormwater Management design** which focused on collecting stormwater in piped networks and transporting it off site as quickly as possible, either directly to a stream or river, to a large stormwater management facility (basin), or to a combined sewer system flowing to a wastewater treatment plant. (<http://www.epa.gov/oaintrnt/stormwater/>)

MS4

Municipal Separate Storm Sewer System-

An MS4 is a conveyance or system of conveyances that is:

- Owned by a state, city, town, village, or other public entity that discharges to waters of the U.S.;
- Designed or used to collect or convey stormwater (including storm drains, pipes, ditches, etc.);
- Not a combined sewer; and
- Not part of a Publicly Owned Treatment Works (sewage treatment plant).

MS4 jurisdictions must complete a permit and develop a stormwater management plan under Clean Water Act regulations.

ITEM 8 - Information

February 19, 2014

Update on Project Submissions and Schedule for the Air Quality Conformity Assessment, and Status of the Financial Analysis for the 2014 CLRP

Staff

Recommendation: Receive update on the major transportation projects under consideration for submission by the implementing agencies.

Issues: None

Background: In January it was determined that more time to discuss and refine the financial plan for the 2014 CLRP would be needed, and the schedule for the project submissions and air quality conformity assessment needed to be changed. The project submissions are scheduled to be released on March 13 for a 30-day public comment period that will end April 12. At the April 16 meeting, the Board will be asked to approve the project submissions and scope of work for the air quality conformity analysis of the 2014 CLRP.



NATIONAL CAPITAL REGION

TRANSPORTATION PLANNING BOARD

MEMORANDUM

February 13, 2014

To: Transportation Planning Board

From: Gerald Miller and Robert Griffiths
Acting Co-Directors,
Department of Transportation Planning

Subject: Major Projects under Consideration for Inclusion in the 2014 Financially
Constrained Long-Range Transportation Plan (CLRP)

Background

At the January 15 meeting, the Board was updated on the delay in the schedule for 2014 CLRP. In late January it was determined that more time to discuss and refine the financial plan for the 2014 CLRP would be needed, and the schedule for the project submissions and air quality conformity assessment needed to be changed. As shown in the attached schedule, the project submissions are scheduled to be released on March 13 for a 30-day public comment period that will end April 12. At the April 16 meeting, the Board will be asked to approve the project submissions and scope of work for the air quality conformity analysis of the 2014 CLRP.

Preliminary View of Project Submissions

This memo provides a preliminary view of project submissions to date that are under consideration by the implementing agencies. When these projects are finalized for public comment, TPB staff will prepare a list of major projects for the 2014 CLRP which will include full project descriptions including costs, completion dates and maps where appropriate.

In the **District of Columbia**, the District of Columbia Department of transportation (DDOT) is considering the inclusion of three Streetcar extensions: from H Street NE at Union Station to Georgetown, from Anacostia to Southwest DC, and an additional spur of the planned Benning Road line that will extend to the Minnesota Avenue Metro Station. DDOT has also identified three studies to be included in their 2014 CRLP submissions to examine the introduction of managed lanes on the 14th Street/Rochambeau Bridge, I-295, and I-395/I-695 (SE/SW Freeway).

In **Maryland**, the Maryland Department of Transportation (MDOT) is updating the MARC Growth and Investment Plan and is identifying portions of it in the TPB planning area for the 2014 CLRP. MDOT is resubmitting the construction of an interchange on I-95/I-495, the Capital Beltway at

the Greenbelt Metro Station in Prince George's County. This project had previously been included in the CLRP, but was removed in 2010 to meet the CLRP financial constraint.

In **Virginia**, VDOT is proposing to widen a segment of US 1 in Prince William County and to widen a portion of VA 123, Chain bridge Road in Fairfax County. VDOT is also proposing three alternatives for the Dulles Air Cargo, Passenger, Metrorail Access Highway project. VDOT anticipates releasing the three alternatives for public comment in March, but expects that the Virginia Commonwealth Transportation Board will select a preferred alternative prior to the TPB's approval of project inputs in April so only one alternative will be carried forward into the Air Quality Conformity Analysis.

The **Washington Metropolitan Area Transit Authority** (WMATA) plans on submitting seven elements of the Metro 2025 plan. Which of these elements are included in the project submissions approved by the TPB for the 2014 CLRP will depend on the outcome of ongoing discussions on the update to the Financial Plan for the 2014 CLRP.



Schedule for the 2014 Financially Constrained Long-Range Transportation Plan (CLRP) and the FY2015-2020 Transportation Improvement Program (TIP)

*October 16, 2013	TPB is Briefed on Draft Call for Projects
*November 20, 2013	TPB Releases Final Call for Projects - Transportation Agencies Begin Submitting Project Information through On-Line Database
December 13, 2013	<u>DEADLINE</u> : Transportation Agencies Complete On-Line Submission of Draft Project Inputs.
March 7, 2014	Technical Committee Reviews Draft CLRP & TIP Project Submissions and Draft Scope of Work for the Air Quality Conformity Assessment
March 13, 2014	CLRP & TIP Project Submissions and Draft Scope of Work Released for Public Comment
*March 19, 2014	TPB is Briefed on Project Submissions and Draft Scope of Work
April 8, 2014	TPB Staff Briefs MWAQC TAC on Project Submissions and Scope of Work
April 12, 2014	Public Comment Period Ends
*April 16, 2014	TPB Reviews Public Comments and is asked to Approve Project Submissions and Draft Scope of Work
June 6, 2014	<u>DEADLINE</u> : Transportation Agencies Finalize Congestion Management Documentation Forms (where needed) and CLRP & TIP Forms. (Submissions must not impact conformity inputs; note that the deadline for changes affecting conformity inputs was April 16, 2014).
September 5, 2014	Technical Committee Reviews Draft CLRP & TIP and Conformity Assessment
September 11, 2014	Draft CLRP & TIP and Conformity Assessment Released for Public Comment at Citizens Advisory Committee (CAC)
*September 17, 2014	TPB Briefed on the Draft CLRP & TIP and Conformity Assessment
September ??, 2014	TPB Staff Briefs MWAQC TAC on the Draft CLRP & TIP and Conformity Assessment
October 10, 2014	Public Comment Period Ends
*October 15, 2014	TPB Reviews Public Comments and Responses to Comments, and is Presented the Draft CLRP & TIP and Conformity Assessment for Adoption
*TPB Meeting	

ITEM 9 - Information

February 19, 2014

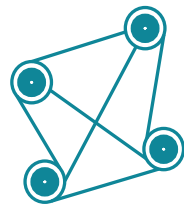
Briefing on “Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region”

Staff

Recommendation: Receive briefing on the Place + Opportunity report and how it relates to the Regional Transportation Priorities Plan.

Issues: None

Background: In January, the COG Board approved the Place + Opportunity report as a resource to strengthen and enhance Activity Centers throughout metropolitan Washington. The report presents goals, strategies, and tools to assist local governments and other stakeholders with their efforts to create thriving, high-opportunity places.



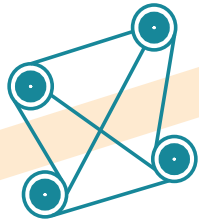
Place + Opportunity

STRATEGIES FOR CREATING GREAT COMMUNITIES
AND A STRONGER REGION



Metropolitan Washington
Council of Governments





Place + Opportunity

STRATEGIES FOR CREATING GREAT COMMUNITIES AND A STRONGER REGION

Approved by the COG Board January 8th, 2014



Metropolitan Washington Council of Governments

Project Partners: RCLCO | Reconnecting America | Urban Imprint | Mobility Lab



About this Report

Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region is an initiative by the Metropolitan Washington Council of Governments (COG) to strengthen Activity Centers, the places that will accommodate much of the region's growth in coming decades. This project identifies goals, strategies, and tools to assist local governments and other regional stakeholders in making investments in Activity Centers that enhance quality of life and strengthen the local and regional economy.

About the Metropolitan Washington Council of Governments

The Metropolitan Washington Council of Governments (COG) is an independent, nonprofit association that brings area leaders together to address major regional issues in the District of Columbia, suburban Maryland, and Northern Virginia. COG's membership is comprised of 300 elected officials from 22 local governments, the Maryland and Virginia state legislatures, and U.S. Congress.

Region Forward is COG's vision. It's a commitment by COG and its member governments, who together seek to create a more accessible, sustainable, prosperous, and livable National Capital Region. COG's mission is to advance *Region Forward* by being a discussion forum, expert resource, and catalyst for action.

Metropolitan Washington Council of Governments

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Executive Summary



Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region is an initiative to strengthen and enhance Activity Centers throughout metropolitan Washington. Activity Centers—the places that will accommodate much of the region’s growth in the coming decades—attract residents, businesses, and visitors to the area, and are critical to ensuring the region’s future competitiveness and success. Incorporating in-depth research on market, physical, and socioeconomic characteristics of the region’s Activity Centers, **this report offers goals, strategies, and tools to assist local governments and other stakeholders working to create thriving, high-opportunity places.**

Strong Activity Centers are the foundation of a strong region. While they take many different forms throughout the region, strong, dynamic Centers share some common characteristics: communities that offer a range of housing, transportation options, jobs, services, and amenities. Most importantly, they provide access to opportunity for residents, workers, and businesses.

The importance of these places to local communities and the region is increasingly clear. Activity Centers will more efficiently accommodate the significant growth projected for metropolitan Washington. Centers with a mix of uses, amenities, and good pedestrian infrastructure have been shown to attract more people and growth, perform better economically, and prove more resilient during recessions than less mixed-use and walkable neighborhoods.

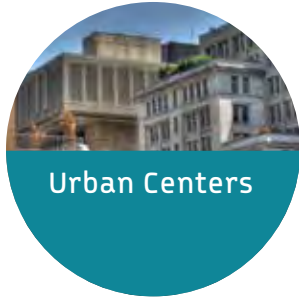
The region’s Activity Centers are diverse, ranging from highly urban places to suburban town centers to traditional towns. Each community has its own aspirations, and there is no one-size-fits-all approach to achieving success.

However, Centers with common characteristics can benefit from similar strategies and investments. **This report presents a regional framework to understand common challenges and opportunities among Activity Centers in our region. It provides analysis, implementation strategies, and resources to complement local planning and development efforts and help communities meet their aspirations for their Activity Centers.**

This report examines a cross section of the region’s 141 Activity Centers. The *Place + Opportunity* Project Team, led by COG in partnership with RCLCO, Reconnecting America, Urban Imprint, and Mobility Lab, conducted detailed analysis of each Center’s market, urban form, and socioeconomic characteristics to identify six common Activity Center ‘place types’ and four ‘opportunity types.’ The six place types and four opportunity types provide a starting point to help local communities make sound decisions for their Centers and navigate potential actions and investments.



Activity Center Place Types



Urban Centers

Examples:
Downtown DC,
Bethesda,
Tysons East



Dense Mixed-Use Centers

Examples:
Shirlington,
Columbia Heights,
Silver Spring



Suburban Multi-Use Centers

Examples:
City of Falls
Church,
Fairfax City,
Greenbelt Metro



Close-In & Urbanizing Centers

Examples:
Columbia Pike,
Rhode Island Avenue,
West Hyattsville
Metro



Revitalizing Urban Centers

Examples:
Prince George's Plaza,
Landmark/Van Dorn,
Minnesota Avenue



Satellite Cities

Examples:
Downtown Frederick,
City of Manassas,
Bowie Town Center



Activity Center Opportunity Types



Transforming

Examples:
H Street,
Poplar Point,
Langley Park



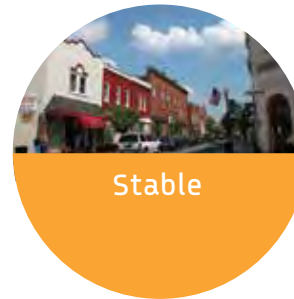
Transitioning

Examples:
Wheaton,
Braddock Road,
U/14th Street Corridor



Connected Core

Examples:
Crystal City,
West End,
Bethesda



Stable

Examples:
Beacon/Groveton,
Georgetown,
National Harbor



For each place and opportunity type, the project team developed a set of development goals, strategies, and tools to support implementation of key priorities. Guided by the place and opportunity types, the following fifteen key strategies present a framework for enhancing economic development, urban form, and access to opportunity in Activity Centers:

Place Strategies

- **Zoning Intervention**

Zoning tools play a critical role in accommodating and encouraging development, and in facilitating desired land use mix and densities. In locations with transit stations, having appropriate zoning is crucial to the success of the transit-oriented development.

- **Public Finance Options**

Public finance options include tools for financing or encouraging development and infrastructure investment, such as special tax districts that help finance improvements or reduce tax burdens for developers or property owners.

- **Development Incentives**

These include financial and other incentives to encourage development in particular locations or at higher intensities.

- **Public-Private Partnerships**

Public-private partnerships can help finance and implement infrastructure, redevelopment, or economic development projects that would not be possible without private sector investment. They can reduce costs and risks for local governments while allowing them to benefit from the capacity and experience of private sector partners.

- **Development Stewardship Entities**

These are organizations used to fund and manage improvements and promote the economic competitiveness of a particular district, generally funded by property owners located within the district. Organizations may be involved in planning and urban design, physical infrastructure improvements, business recruitment, maintenance and beautification, and branding.

- **Market Studies**

Market studies can provide analysis of development feasibility, evaluation of development and revitalization opportunities, and guidance for economic development plans and policies.

- **Branding/ Marketing**

Branding and marketing can help identify and communicate the character and identity of a community, usually to enhance economic development and competitiveness.

- **Acquisition of Key Parcels**

Acquiring land in key locations may be a necessary step in the redevelopment process.



Opportunity Strategies

• **Planning & Community Building**

Community or issue-specific plans (such as housing or transit-oriented development plans) can identify and build support for priorities, immediate actions, strategies, and responsibilities for implementation. Outreach and engagement efforts are an essential component of these planning processes, and are also particularly important in communities facing significant neighborhood change.

• **Affordable Housing Preservation**

Potential loss of affordable housing stock is a major challenge in the region, particularly in communities experiencing gentrification. Preservation strategies and tools are often directed at subsidized housing stock, but may also apply to market-rate affordable housing stock and to homeowners and renters living in such properties.

• **Affordable Housing Development**

Local jurisdictions may use a number of programs, zoning tools, development incentives, and partnerships to encourage the creation of new affordable housing stock.

• **Diversification of Housing Stock**

Some Activity Centers need a greater variety of housing types to provide more options for current and future residents and workers, and increase affordability and income diversity. This may include adding multi-family rental, condominiums, townhouses, duplexes, or even single-family homes.

• **Business Retention & Promotion**

Preserving and supporting businesses in communities facing significant growth pressures or other types of changing conditions is important to neighborhood stabilization. Small and locally-owned businesses may be particularly vulnerable as neighborhood rents increase. Strategies for business retention and promotion include both bricks-and-mortar investments and policies that provide assistance or opportunities to local businesses.

• **Commercial & Job Base Diversification**

Many Activity Centers could benefit from and support a greater range of community services, such as retail stores, grocery stores, childcare, and service-oriented businesses. These businesses and services provide additional jobs within Activity Centers and generate additional revenue because residents can shop in their own communities. Workforce development efforts to train workers and connect them with key industries and occupations are also important to local and regional economic development.

• **Transportation Access & Infrastructure Improvements**

Programs and investments to improve access and infrastructure can help communities with transit make the most of their infrastructure, and help communities without transit expand transportation options. In all communities, these types of tools can enhance safety and vitality, and can facilitate more walking, bicycling, and transit ridership.

Strategies for Combined Place Types & Opportunity Types

Each Activity Center has a place type and an opportunity type. Considering both types together highlights the interplay between an individual Center's place and opportunity characteristics, and provides a more comprehensive understanding of common features and themes among Activity Centers region-wide. The Activity Centers were studied side-by-side to identify the most common place type and opportunity type combinations and key patterns. Six major place and opportunity type pairings were identified, and broad development strategies were then developed to accompany them.

- **Connected Core + Urban Centers**

Overall Strategy: Expand Access and Housing Choice

These Centers have the strongest real estate markets, as well as strong physical infrastructure and amenities. While meeting the demand for more affordable housing may be challenging given market conditions, there may be opportunities to leverage their strong real estate markets to create broader affordability through subsidized and workforce housing.

- **Connected Core or Stable + Dense Mixed-Use Centers**

Overall Strategy: Infill and Enhance

These Centers have strong urban forms and markets, and are well-connected internally and externally. They may be ideal locations for targeted place-making investments such as infill development that complements the current mix of land uses, and additional parks and public spaces. Opportunity-focused strategies may include diversifying housing stock to serve a range of households.

- **Stable + Suburban Multi-Use Centers**

Overall Strategy: Connect and Catalyze

These Centers have a mix of uses, but may need public intervention to catalyze more intensive mixed-use and walkable development. In Centers with transit stations, pedestrian features and other walkability improvements that increase station and corridor accessibility can help make the most of existing infrastructure and enhance connectivity to other job centers; these improvements could also serve to catalyze more mixed-use development.

- **Stable + Close-in and Urbanizing Centers**

Overall Strategy: Build and Urbanize

Centers in this category tend to have a variety of uses, but may have urban form and infrastructure challenges. These Centers may benefit most from targeted public investment and capital improvements to support existing uses, attract complementary uses, and strengthen accessibility.

- **Transforming or Transitioning + Revitalizing Urban Centers**

Overall Strategy: Protect and Grow

These Centers typically need incentives to catalyze development, and have high proportions of low-income residents. Many provide strong transit access to jobs because of the presence of Metro stations, suggesting opportunities for transit-oriented development. While redevelopment is not imminent, establishing proactive strategies to preserve affordability and capture community benefits from growth would benefit these Centers. This may include community-based partnerships for economic development, preservation of existing market-rate and subsidized affordable housing, and public/private partnerships to catalyze development.

- **Stable + Satellite City**

Overall Strategy: Partner and Stimulate Demand

These Centers would generally benefit from creating a framework for redevelopment, identifying catalytic sites, and assessing community needs and assets. Some of these Centers, particularly historic towns, already exhibit strong physical form and may benefit from partnership-type collaborations that brand or market the place to the broader region.

Building on *Region Forward*, the regional vision, and *Economy Forward*, a call to action on economic development needs, this report represents the next step in COG's work on Activity Centers. *Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region* is a resource guide to support local governments and other stakeholders in implementing their visions and aspirations for their Activity Centers.



Tysons, Virginia

I. Introduction





Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region is an initiative to strengthen

and enhance Activity Centers throughout metropolitan Washington. Activity Centers—the places that will accommodate much of the region’s growth in the coming decades—are a key factor that attracts residents, businesses, and visitors to the area, and are critical to ensuring the region’s future competitiveness and success.

Incorporating in-depth analysis of market, physical, and socioeconomic characteristics of the region’s Activity Centers, **this report presents goals, strategies, and tools to assist local governments and other stakeholders working to create thriving, high-opportunity places.**

Strong Activity Centers are the foundation of a strong region. While Activity Centers take many different forms throughout the region, *strong* Centers share some common characteristics: mixed-use communities that offer a range of housing and transportation choices, jobs, services, and amenities. They are dynamic and distinct places that provide access to opportunity for residents, workers, and businesses.

The idea of concentrating growth in specific locations called Activity Centers was considered a visionary goal for metropolitan Washington over a decade ago. Today, after years of promotion and cooperation by area leaders, this idea is increasingly embraced throughout the region. From the District of Columbia to the inner and outer suburbs, vibrant, mixed-use communities have been developed and redeveloped as support for Activity Centers has grown among elected officials, local governments, business leaders, and other stakeholders.

Origin of Activity Centers

Activity Centers emerged from the Transportation Planning Board’s 1998 Vision, which called for a strong regional economy, including a healthy regional core and dynamic Activity Centers. Following the Vision, the Metropolitan Washington Council of Governments (COG), in cooperation with local planning officials, produced the first regional map of Activity Centers in 2002 and an update in 2007. For the last 10 years, Activity Centers were mostly used for technical analysis and transportation planning purposes, such as developing growth forecasts, measuring commercial construction activity, and modeling transportation capacity.

In 2010, area leaders convened by the Council of Governments developed *Region Forward*, a vision for a more accessible, sustainable, prosperous, and livable metropolitan Washington. The vision called for a mix of housing, jobs, and services in Activity Centers, as well as efficient transportation connections within and between Centers. **Most importantly, *Region Forward* re-emphasized Activity Centers as the best strategy for accommodating future growth.**

Activity Centers are existing urban centers, priority development areas, transit hubs, suburban town centers, and traditional towns. They are the locations that will accommodate much of the region’s future growth and development in the coming decades. Their success is critical to advancing the *Region Forward* vision.

2013 Activity Centers Map

Following the endorsement of *Region Forward* by all of COG's jurisdictions, officials focused on how Activity Centers could more effectively shape policy, planning, and investment decisions at the regional and local levels. In addition, COG leaders identified Activity Centers as a priority in *Economy Forward*, a call to action related to the region's economic development needs. *Economy Forward* called Activity Centers a key competitive advantage that help the region attract and retain workers and businesses.

In 2012, COG worked with local planning officials and with the Region Forward Coalition, a public-private group established by the COG Board to implement the vision, to carry out an extensive redesign of the regional Activity Centers map to more accurately reflect local plans. Using more specific and targeted criteria, planners focused on identifying smaller, more walkable places with a mix of uses. While the 141 Activity Centers on the new map still include major employment centers, mixed-use centers, from highly urbanized places to traditional downtowns, account for a majority of the Centers. Every COG jurisdiction has at least one place designated as an Activity Center. The new Centers were approved by the COG Board of Directors in January 2013. The 2013 Activity Centers map is shown in Figure 1.

Local jurisdictions have a strong track record of creating distinctive, successful Activity Centers, from urban places like Downtown DC and Clarendon to suburban communities like Tysons and National Harbor, to traditional towns like City of Frederick and Manassas. Despite increasing support and demand for such places, balancing growth and investment with affordability and access remains a significant challenge. Much of the region's new development is occurring in communities that are increasingly expensive for many families and individuals, while other communities struggle to attract needed jobs and services due to market challenges and outdated development patterns, infrastructure, and regulations.

No two Activity Centers are alike. Each community has its own aspirations and challenges, and there is no one-size-fits-all approach to achieving success. However, Centers with common characteristics can benefit from similar strategies and investments. By studying a wide range of Activity Centers, identifying different types of Centers, and developing strategies targeted for each type, this approach can facilitate regional knowledge sharing among similar communities. Building from analysis of individual Centers, this report presents a regional perspective on Activity Centers, and provides strategies and tools to help local jurisdictions to create thriving, complete communities.

2013 Update

The Centers were identified by COG in cooperation with local jurisdictions through a combination of criteria that included:

- Identification as a priority development area in a locally- adopted land use plan
- Above-average densities
- Mixed-use development
- Existing or planned high-capacity transit
- A grid of connected streets
- Combined housing and transportation costs of no more than 45% of Area Median Income

Activity Centers Map 2013 Update

Figure 1

District of Columbia

- Brookland*
- Capitol Hill
- Capital Riverfront
- Columbia Heights
- Convention Center
- Downtown DC
- Dupont
- Farragut Square
- Fort Totten
- Friendship Heights*
- Georgetown
- H Street
- McMillan / Old Soldiers Home*
- Minnesota Ave
- Monumental Core
- New York Avenue Corridor
- NoMa
- Rhode Island Ave Metro
- Poplar Point
- St. Elizabeths
- Stadium Armory*
- Southwest Waterfront*
- U / 14th Street Corridor
- Walter Reed
- West End

Town of Bladensburg

- Port Towns

City of Bowie

- Bowie Town Center

Charles County

- La Plata*
- Waldorf

City of College Park

- College Park

Frederick City

- Downtown Frederick
- East Frederick Rising
- Fort Detrick *
- Golden Mile *

Frederick County

- Brunswick
- Francis Scott Key Mall
- Jefferson Tech Park *
- Urbana

City of Gaithersburg

- Gaithersburg - Central
- Gaithersburg - Kentlands
- Gaithersburg - Metropolitan Grove
- Life Sciences Center/ Gaithersburg Crown

City of Greenbelt

- Greenbelt Metro

Montgomery County

- Bethesda
- Clarksburg*
- Germantown
- Glenmont
- Grosevnor*
- Kensington
- NIH/ Walter Reed National Military Medical Center
- Olney *
- Rock Spring*
- Silver Spring
- Wheaton
- White Flint
- White Oak / FDA*

Prince George's County

- Bowie MARC*
- Branch Ave
- Capitol Heights / Addison Road
- Konterra *
- Landover Mall*
- Landover Metro
- Langley Park
- Largo Town Center / Morgan Blvd
- National Harbor
- Naylor / Southern Ave
- New Carrollton
- Oxon Hill*
- Prince George's Plaza
- Suitland*
- West Hyattsville Metro
- Westphalia*

City of Rockville

- King Farm / Rockville Research Center / Shady Grove

- Rockville - Montgomery College *
- Rockville - South / Twinbrook
- Rockville - Tower Oaks*
- Rockville - Town Center

City of Takoma Park

- Takoma Park

City of Alexandria

- Beauregard
- Braddock Road Metro Area
- Carlyle / Eisenhower East
- King Street / Old Town
- Landmark / Van Dorn
- Potomac Yard

Arlington County

- Bailey's Crossroads / Western Gateway
- Ballston
- Clarendon
- Columbia Pike Town Center
- Columbia Pike Village Center*
- Courthouse
- Crystal City
- Pentagon*
- Pentagon City
- Rosslyn
- Shirlington
- Virginia Square

City of Fairfax

- Fairfax City

Fairfax County

- Annandale*
- Beacon / Groveton
- Beltway South*
- Centreville *
- Dulles East
- Dulles South*
- Fairfax Center*
- Fairfax Innovation Center*
- Fort Belvoir*
- Fort Belvoir North Area *
- George Mason University*
- Herndon
- Huntington/ Penn Daw
- Hybla Valley/ Gum Springs*
- McLean*

- Merrifield / Dunn Loring*
- Reston Town Center
- Seven Corners*
- Springfield
- Tysons Central 7
- Tysons Central 123
- Tysons East
- Tysons West
- Vienna
- Wiehle / Reston East

City of Falls Church

- City of Falls Church

Loudoun County

- Arcola*
- Dulles Town Center
- Leesburg
- One Loudoun*
- Route 28 Central*
- Route 28 North*
- Route 28 South
- Route 606 Transit Area*
- Route 772 Transit Area*

City of Manassas

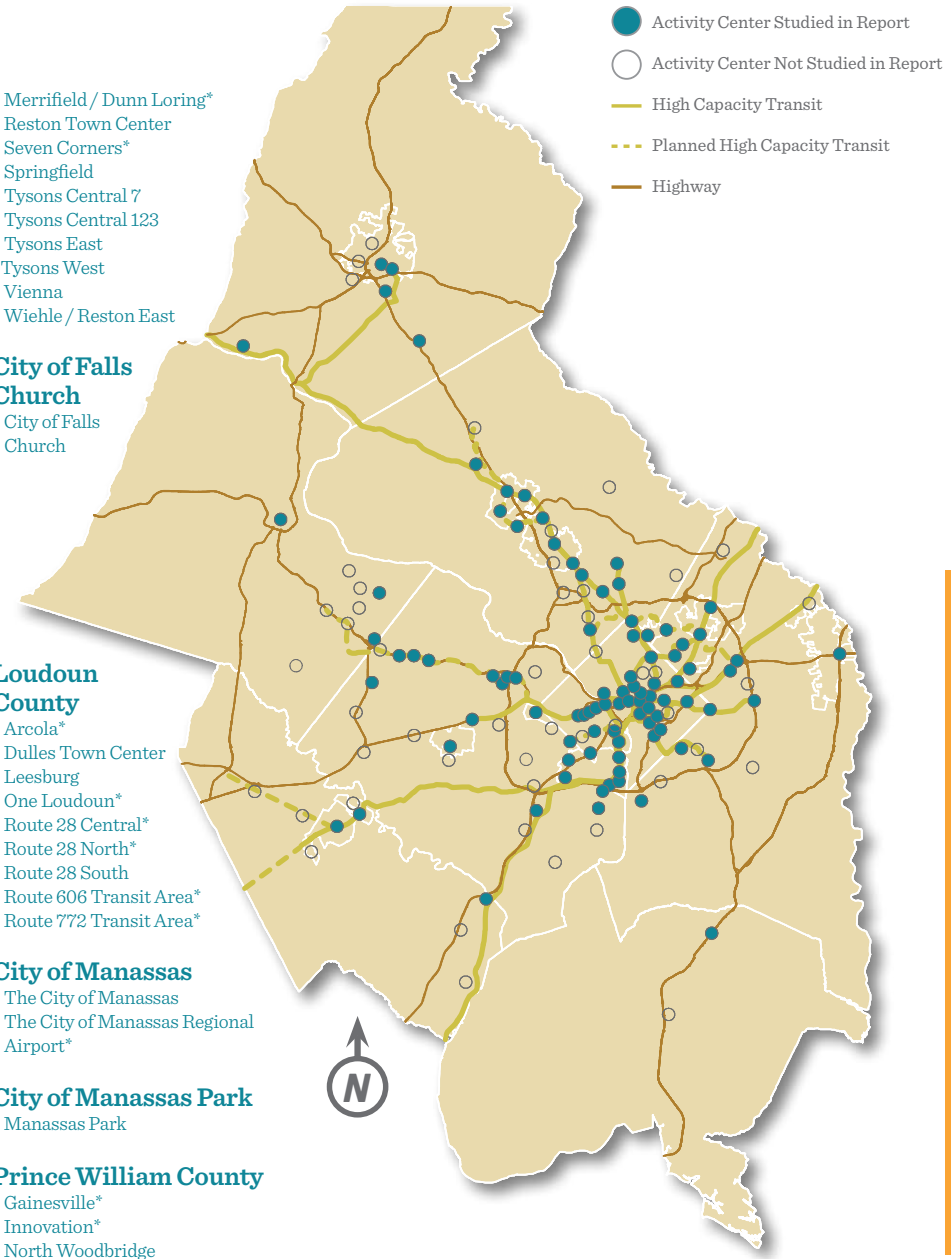
- The City of Manassas
- The City of Manassas Regional Airport*

City of Manassas Park

- Manassas Park

Prince William County

- Gainesville*
- Innovation*
- North Woodbridge
- Potomac Shores*
- Potomac Town Center*
- Yorkshire*



*Center not studied in this report

Project Objectives

The objectives of *Place + Opportunity* are to:

- **Assist local planning and development efforts by providing targeted economic and community development strategies for Activity Centers.**

Based on analysis of each Center's existing conditions, the report identifies strategies to help local governments build on their assets, address needs, and use public dollars strategically to achieve community aspirations.

- **Provide a “common playbook” to help COG, local governments, and other regional stakeholders support the region’s Activity Centers in a coordinated way.**

Place + Opportunity is a resource to help stakeholders understand common challenges and opportunities throughout the region and coordinate actions and partnerships to strengthen Centers.

- **Identify investments to improve walkability, accessibility, and quality of place.**

The report identifies opportunities to improve the built environment, including installing or improving sidewalks, street trees, and traffic measures—urban features that are linked to economic performance, facilitate walkability, and enhance the effectiveness of transportation infrastructure.

- **Identify transit-oriented development opportunities.**

Place + Opportunity provides recommendations to advance development for communities trying to accelerate transit-oriented development for future transit stations and underutilized Metro and commuter rail stations.





How to Use This Report

Place + Opportunity provides the following components to assist planning and development efforts in Activity Centers:

- **Activity Center Place & Opportunity Types (Section III):** The report analyzes 92 of the region's 141 Activity Centers according to physical, market, and socioeconomic attributes, and groups the Centers into six place types and four opportunity types based on common characteristics and needs. Each Activity Center has a place type and an opportunity type, which provide a starting point for identifying priorities and navigating potential implementation approaches.
- **Implementation Approaches (Section IV):** For each place and opportunity type, the report provides development goals, strategies, and tools to address place-making, economic development, and access to opportunity. The section also identifies overall regional strategies for the most common place and opportunity type combinations.
- **Transit Corridor Implementation Priorities (Section V):** This section summarizes place and opportunity findings and key development strategies along three transit corridors.
- **Activity Center Case Studies (Section VI):** Case studies of three Activity Centers illustrate how the types, goals, strategies, tools, and resources in the report can be applied to individual Centers.
- **Local Planning & Development Highlights (Section VII):** This section describes how each local government is supporting and strengthening their Activity Centers.
- **Programs & Resources for Implementation (Appendix A):** *Place + Opportunity* identifies existing funding and technical assistance programs and resources at the regional, state, and federal levels that can be used to support the implementation approaches in Section IV.
- **Activity Center Profile Pages (provided directly to local government staff):** In addition to the full report, jurisdictions will also receive profile pages summarizing the analysis of existing conditions and needs, place and opportunity types, and key strategies for each of their Activity Centers.

II. Regional Context



Challenges

This section summarizes some of the major challenges and constraints across the region that relate to Activity Centers and the region's growth.

Limited Affordable Housing Choices

As one of the most expensive regions in the country, metropolitan Washington faces significant affordable housing challenges. The region is losing a substantial amount of existing affordable housing stock near jobs, services, and transportation options. Since 2000, the number of low-cost rental units in the District of Columbia has fallen by half, while the number of lower-value homes has fallen by nearly three quarters, according to the DC Fiscal Policy Institute.¹ According to 2009-2011 American Community Survey data, approximately half of renter households in the District of Columbia, Montgomery County, Prince George's County, and Frederick County are cost burdened, spending more than 30 percent of their income on housing costs.² Beyond the urban core, many of the region's suburban job centers are just starting to add housing and most of the new construction will not be affordable.³

The High Cost of Transportation

Transportation costs and commute times have risen considerably over the last twenty years, making Metropolitan Washington an expensive region in which to travel. Many households in the region spend well over 15 percent of their income on transportation costs, typically the largest household expenditure after housing. A study by the Center for Housing Policy and the Center for Neighborhood Technology found that moderate-income families in the Washington Metro area now spend an average of \$1,099 a month, or \$13,188 a year, for transportation costs.⁴

Underutilized Activity Centers

Many Activity Centers in both urban and suburban locations have struggling commercial areas and high vacancy rates. These problems commonly occur in aging commercial shopping strips, malls, and office parks. And while the region is known for many examples of successful transit-oriented development (TOD), other Activity Centers in the region have Metrorail stations but lack the land use, zoning, regulatory policies, and strong market dynamics to fully harness the potential of their infrastructure. Without the appropriate policies in place, these

Centers struggle to accelerate development and attract desired investment, services, and amenities.

Benefits

Despite significant challenges, there are also many promising opportunities and trends in the region that could be leveraged to support Activity Centers:

A Second Generation of Regional Transit Investments

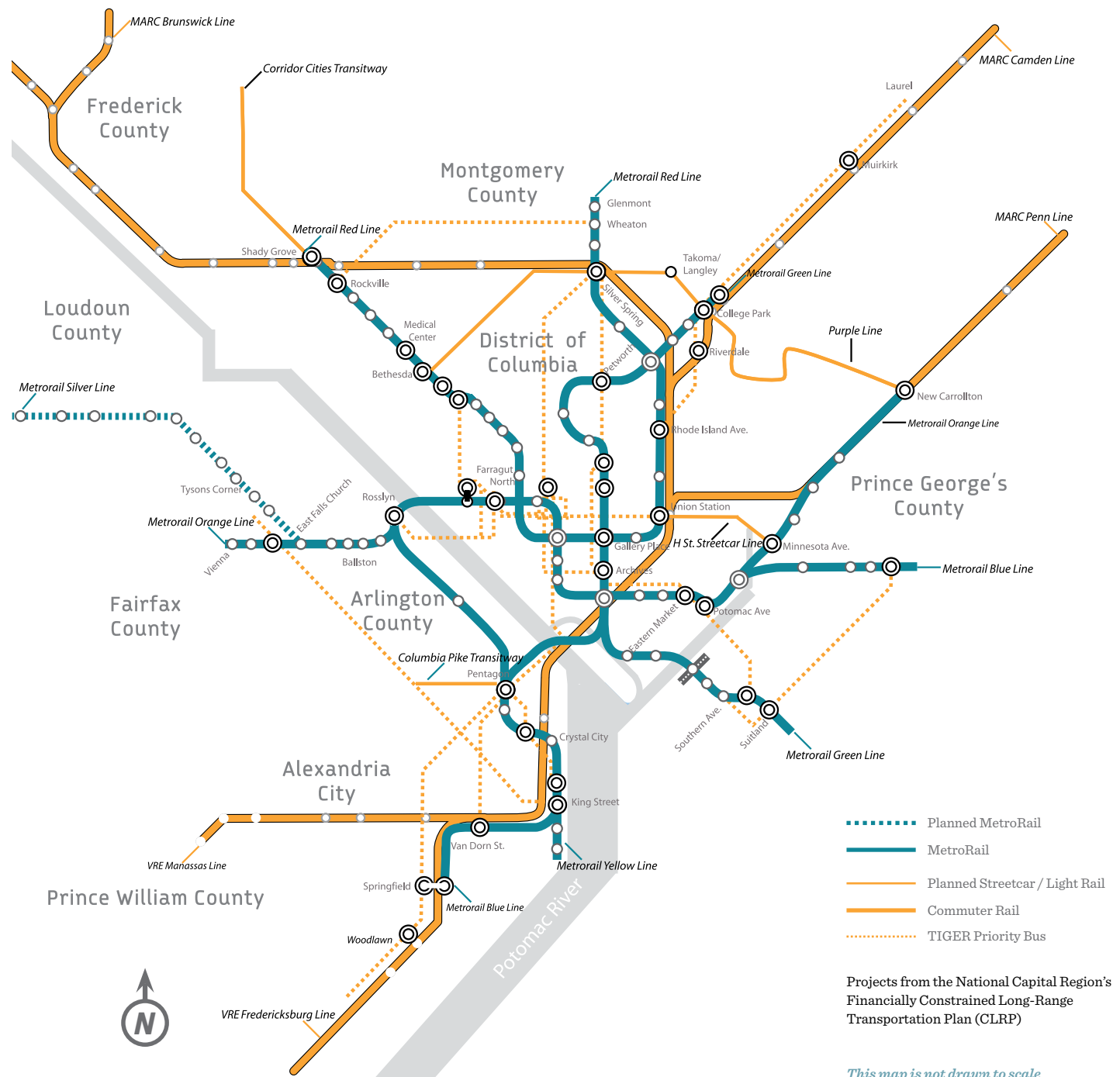
The region is undertaking major investments in Metrorail and laying the groundwork for new modes of transit that include streetcar, light rail, and bus-rapid transit lines. In 2011, the Washington Metropolitan Area Transit Authority (WMATA) launched Metro Forward, a \$5 billion program to address deferred maintenance of the Metrorail and Metrobus system. This includes investments to existing stations, ties, platforms, escalators, signs, lighting, and communication systems, representing the largest capital investment since the system's construction. In addition to this annual maintenance, WMATA has also identified essential capital investments between now and 2025 in its strategic plan, Momentum. Momentum emphasizes safety and the importance of ensuring state of good repair and maximizing the current transit network by utilizing every bit of capacity available.

In addition, new regional transit investments, totaling around \$4 billion, are also planned or underway. These transit expansion efforts include the Metro Silver Line, which will increase the size of the rail system by 25 percent; new light rail such as the Purple Line in Maryland; several street car lines in Virginia and DC; and bus-rapid transit lines such as the Corridor Cities Transitway in Montgomery County.

These new transit investments present a unique opportunity to catalyze development and create mixed-use, walkable Activity Centers in many of the region's aging commercial corridors. If planned well, these new transit investments have the potential to stimulate real estate markets in many of these

Transit Projects Underway & Upcoming

Figure 2



Centers. However, affordability impacts of new transit must be considered. Investments to make Activity Centers more transit-oriented and walkable will likely drive up housing costs and affect housing costs for existing and/or future residents. This challenge is not new to the region. But the region needs new tools and approaches to planning and investing in these Activity Centers to make the most of these ongoing and proposed transit projects.

Growing Demand for Walkable, Transit-Accessible Communities

Changing demographics and market preferences are creating greater demand for walkable communities throughout the region. New consumer preference surveys reveal a majority of Americans would like to live in walkable, transit-served communities and are willing to trade a bigger house for a better neighborhood.⁵ The growing demand for walkable, mixed-use communities is largely driven by demographic shifts among both Baby Boomers and Millennials. Many seniors will want to age in place, but others will want to downsize and live in more walkable locations in cities and suburban town centers where they can be close to family, friends, work, public transportation, and health care.⁶ Millennials, the generation born between the early 1980s and the early 2000s, are also looking for walkable, mixed-use communities that give them access to economic, social, and recreational opportunities while making large expenses like owning an automobile an option, not a necessity. These trends are generating a growing need for multi-family housing, and researchers at George Mason University estimate that multi-family housing will account for 60 percent of the region's future housing needs over the next twenty years.⁷

Better Economic Performance and a Resilient Tax Base

Activity Centers with a mix of uses, sidewalks, and attractive public spaces encourage walking and attract more people, activity, and growth. A recent Brookings study, *Walk this Way: The Economic Promise of Walkable Places in Metropolitan Washington, D.C.* found that more walkable neighborhoods perform better economically, generating higher real estate values and rents for office, residential, and retail developments than less walkable neighborhoods. The study, co-authored by Christopher Leinberger and Mariela Alfonzo (a member of the project team for this report), also found that, in general, these walkable Centers not only retained their value better than comparable car-dependent locations during the recent recession, but some locations experienced rent and value increases.⁸

The study also found that compared to neighborhoods with poor walkability, walkable neighborhoods have higher housing costs (but lower transportation costs), and that residents tend to be more affluent and have higher educational attainment. Over the past decade, walkable neighborhoods in the region have also become more gentrified.⁹

These findings present an opportunity to strengthen the local economy and create a more resilient property tax base for local jurisdictions by developing more walkable places. During the recession, reduced tax revenues due to lower property values forced many cities and counties to make painful budget cuts in areas of education and social services. However, other jurisdictions with dense, mixed-use, walkable Activity Centers proved more resilient, holding their property values better and attracting jobs and residents.¹⁰ By focusing on investments that improve an Activity Centers' walkability, vibrancy, marketability, and public realm, local governments can position their Centers to capture a larger share of the growing demand for walkable places and strengthen their tax base.

This research also highlights that while making communities more walkable through investments in urban form can provide real economic and quality of life benefits, these efforts can also contribute to gentrification and displacement of existing residents and businesses. It underscores the need for comprehensive development strategies that foster inclusion and access to opportunity, such as affordable housing, along with economic development and urban form. These findings have influenced how this report was created.

“More walkable places perform better economically. For neighborhoods within Metropolitan Washington, as the number of environmental features that facilitate walkability and attract pedestrians increase, so do office, residential, and retail rents, retail revenues, and for-sale residential values.”

– Christopher Leinberger and Mariela Alfonzo, *Walk This Way: The Economic Promise of Walkable Places in Metropolitan Washington, D.C.*

III. Place & Opportunity Types





Place + Opportunity groups the 92 Activity Centers studied in the report into place types and opportunity types based on shared characteristics to identify common needs and prioritize implementation strategies. Given the large number of Activity Centers in the region, and limited resources to address their needs, this approach is designed to provide a regional framework to support strategic investment and development in the Centers.

The place types and opportunity types were developed simultaneously and are designed to work together to help leaders leverage this region's strong growth and build more vibrant and equitable communities. The place and opportunity types are a starting point to help local communities identify priorities and navigate potential actions and investments. Specifically, the place types identify market and placemaking characteristics that support economic development and improve quality of life in the Centers, and the opportunity types identify assets that enhance inclusiveness and access to opportunity. Given the interconnected nature of these components, there is some overlap of the characteristics identified in the two profiles.



Place Types

Activity Centers were studied according to detailed urban form and market characteristics. Both quantitative and qualitative techniques were used to determine the appropriate category for each Center. Details on the methodology used to analyze and group Centers can be found in the Technical Appendix. Based on this analysis, six place types were identified and are described below:

Urban Centers

These are the strongest markets across multiple land uses and are dense, mixed-use, and urban in nature. These places consistently capture their fair share or more of development activity and command the highest rents and occupancies in the region. In these Centers, there is little need for “market mover” type incentives to mitigate development risk, but a strong opportunity exists to capture value from development activity and shape future growth.

Examples:

- Bethesda
- Clarendon
- Downtown DC
- King Street/ Old Town
- Tysons East





Dense Mixed-Use Centers

These Centers are strong markets but tend to be stronger in either office or residential. These Centers are likely capturing above their fair share of development, with a deep pipeline of future development, or conversely, represent a high barrier-to-entry submarket with little ability to realize pent-up demand. These Centers contain high-performing properties, but have more variation in asset type than Urban Centers. They will be most responsive to targeted, project- or site-specific market interventions and the creation of place-based organizations like Business Improvement Districts, if not already in place.

Examples:

- Columbia Heights
- H Street
- Reston Town Center
- Shirlington
- White Flint

Suburban Multi-Use Centers

These are moderate-rent, suburban markets in established locations that have the potential to become the “next generation” of denser, multiple-use Centers with the right strategies to encourage future development. These markets today likely support horizontal multiple-use development, but will not see mixed-use vertical development (multiple uses within buildings) without help, especially if structured parking is required.

Examples:

- City of Falls Church
- Fairfax City
- Gaithersburg- Metropolitan Grove
- Greenbelt Metro
- Rockville-Town Center





Close-in and Urbanizing Centers

Centers in this category are close-in market areas with the fundamentals to become stronger regional locations with some help. These locations likely have other, non-market-related challenges that need to be addressed. These Centers may have similar market challenges to those categorized as Suburban Multi-Use Centers, but generally speaking, the market is not yet as strong as it is in the other Center type. These markets may gain the most market momentum from targeted public investment.

Examples:

- Columbia Pike Town Center
- Rhode Island Avenue
- Takoma Park
- West Hyattsville Metro

Revitalizing Urban Centers

Centers in this group are close-in markets with little or no recent development. Their primary challenges may not be market-based and present other issues that need to be addressed, such as urban form or public safety, to set the stage for future growth opportunities.

Examples:

- Landmark/ Van Dorn
- Minnesota Avenue
- New Carrollton
- Prince George's Plaza



Satellite Cities

These Centers are located on the edge of regional activity today, and include many former historic cities with downtown cores. They may have a mix of uses and activities, but with different underlying growth fundamentals than closer-in locations. These markets may benefit the most by branding and positioning themselves now for future growth opportunities.

Examples:

- Bowie Town Center
- City of Manassas
- Downtown Frederick
- Germantown
- North Woodbridge



Opportunity Types

To better understand the human side of Activity Centers, the project team used a mixed method to assess potential vulnerability and access to opportunity, including data on household income, income diversity, access to jobs via transit, and housing affordability. Details on the methodology used to analyze and group Centers can be found in the Technical Appendix. Based on this analysis, four opportunity types were identified and are described below:

Transforming

Activity Centers in this category have high housing affordability, a high proportion of low-income residents, and high income diversity. All of these Centers either have Metrorail stations and currently have high job access by transit, or are located along proposed streetcar lines (Columbia Pike, DC Streetcar, or Purple Line) and consequently will become highly accessible with the addition of the new transit. These Centers are likely to undergo significant neighborhood change in coming years due to planned transit or other major redevelopment projects, and relatively higher levels of affordability. In these Centers, immediate strategies to maintain affordability and ensure neighborhood stability are highest-priority.



Examples:

- Columbia Pike Town Center
- H Street
- Langley Park
- Poplar Point



Transitioning

Centers in this group share many characteristics with Transforming Centers, such as having a high proportion of low-income residents, and high income diversity. For the most part, they are not facing the immediate development pressures of the Transforming Centers. In these locations, implementing proactive preservation and community stabilization strategies will help these Centers prepare for medium-term change.

Examples:

- Naylor Road/ Southern Avenue
- Silver Spring
- Waldorf
- Wheaton



Connected Core

Connected Core Centers have strong assets and amenities, particularly the highest levels of job access by transit among the region's Centers. They are also major job centers. These locations tend to have moderate housing affordability, moderate concentrations of low-income households, and lower income diversity than Centers in the Transforming or Transitioning groups. A greater mix of housing types will help them diversify the housing and employment base, and expand access to opportunity for low- and moderate-income households.

Examples:

- Bethesda
- Crystal City
- Downtown DC
- West End

Stable

The majority of Activity Centers studied fall in the Stable category. Overall, Centers in this group have lower concentrations of low-income households, job access by transit, and housing affordability. While needs for Centers in this group vary, market- and place-based strategies to enhance quality of life are likely to be a higher priority than neighborhood stabilization or preservation efforts. Many have suburban Metro stations, commuter rail stations, or planned transit (such as the Silver Line) that could provide opportunities for increased transit-oriented development and enhancing accessibility.

Examples:

- Beacon/ Groveton
- Dulles Town Center
- Georgetown
- King Farm/ Rockville Research Center/ Shady Grove
- National Harbor



IV. Implementation Strategies





The analysis of Activity Center conditions and resulting place and opportunity types were used to develop a series of implementation goals, strategies, and tools. Each Center is unique, and has its own set of strengths and weaknesses that will help drive future opportunities. At the same time, the Centers within each type share certain characteristics. Implementation approaches provided here are not exhaustive, but were developed to focus on the goals, strategies, and tools most relevant to the urban form, market, and opportunity characteristics studied, such as addressing land use mix, public space, housing, or transit access.

Implementation Strategies by Place Type

Strategies for each place type were developed by utilizing the urban form factors studied for the Centers. For example, Urban Centers consistently had fewer parks and public spaces than other place types; accordingly, adding parks and public spaces is identified as a goal for these Centers. Close-In and Urbanizing Centers had low performance in proximity, density, and human-scale factors such as pedestrian amenities. These challenges were then translated into goals, such as “strengthen existing land uses,” and “create a stronger brand/image.” The potential goals focus on the needs for each place type that relate to their urban form and market attributes. A set of possible strategies to achieve these goals was selected from possible solutions. Table 1 shows the selected goals and strategies for each place type, followed by a list of detailed tools for each strategy.

Goals & Strategies by Place Type

Table 1

Place Type	Goal	Strategies
Urban Centers	Maximize Market Potential: These types of Centers have the highest market potential, and the most opportunity to push the market into creating better design, providing additional parks, etc.	<ul style="list-style-type: none"> • Zoning Intervention
	Add Parks & Public Space: In these Centers, public space would primarily be plazas and useable open space and public facilities such as libraries or recreational opportunities.	<ul style="list-style-type: none"> • Zoning Intervention • Public Finance Options • Development Incentives
Dense Mixed-Use Centers	Add Parks & Public Space: In these Centers, parks may take the form of useable open space for surrounding residents, and would vary in size based upon the Center. Lack of public facilities also related to recreational opportunities. It may also include additional public facilities to provide recreational opportunities.	<ul style="list-style-type: none"> • Zoning Intervention • Public Finance Options • Development Incentives
	Encourage Additional Mix of Uses: While many of these Centers have a mix of uses, they do tend to favor one land use over the other. The goal would be to appropriately add in a mix of uses that would complement the existing Center. In some Centers, this would entail adding in uses closer together or developing a vertical mix of uses.	<ul style="list-style-type: none"> • Public-Private Partnership • Development Incentives
Suburban Multi-Use Centers	Add Parks & Public Space: This would be similar to the needs from above, but parks would likely be larger (depending on Center) and focused on residents.	<ul style="list-style-type: none"> • Zoning Intervention • Public Finance Options • Development Incentives
	Encourage Additional Mix of Uses: These Centers are also often mixed-use, but not as dense as their urban counterparts. For many of the Centers, adding in vertical mixed-use would be the next step, but is often not financially feasible without public assistance.	<ul style="list-style-type: none"> • Public-Private Partnership • Development Incentives
	Add Pedestrian Features: This includes items such as curbcuts, sidewalks, street furniture, and bike racks. As a whole, this group of Centers would benefit from more pedestrian features.	<ul style="list-style-type: none"> • Zoning Intervention • Public Finance Options • Develop Stewardship Entities

Place Type	Goal	Strategies
Close-in and Urbanizing Centers	Create New/Strengthen Existing Land Uses: These Centers often have a variety of uses that are not linked together and/or have land uses that are not thriving in the market – for each Center, this would suggest determining new land uses and/or ones that need support, understanding the market potential, determining the appropriate location for future land uses, and/or working with existing residents and businesses to improve their property.	<ul style="list-style-type: none"> • Public-Private Partnership • Incentivize Development
	Create Stronger Brand/Image: Many of these Centers would benefit from determining what is their unique brand/image and working with existing businesses and residents to strengthen and promote that brand.	<ul style="list-style-type: none"> • Branding/Marketing • Develop Stewardship Entities
Revitalizing Urban Centers	Incentivize Development: Many of these areas need incentives to help spur development. Each Center is different, but they key is to determine what could catalyze the area, and have the public and private sector work together to improve the area.	<ul style="list-style-type: none"> • Development Incentives
	Identify Catalytic Sites: For many of these Centers, identifying the strengths, and building off of them is a way to encourage development. Focusing efforts on one or two key sites within the Center could spur redevelopment.	<ul style="list-style-type: none"> • Market Studies • Acquisition of Key Parcels
	Create Framework for Redevelopment: This would include creating and/or updating existing plans, paying attention to both physical and market realities.	<ul style="list-style-type: none"> • Zoning Intervention • Public Finance Options
Satellite Cities	Create Framework for Redevelopment: Many of the older Centers would benefit from having a plan with associated implementation steps. Some Centers would benefit from changing zoning to match future goals.	<ul style="list-style-type: none"> • Zoning Intervention • Public Finance Options • Branding/Marketing
	Encourage Additional Mix of Uses: Add in additional uses as warranted by the market. Some of the Centers would benefit from determining catalytic sites that could spur redevelopment.	<ul style="list-style-type: none"> • Public-Private Partnership • Public Finance Options • Incentivize Development

Strategy: Zoning Intervention

Zoning tools play a critical role in accommodating and encouraging development, and in facilitating desired land use mix and densities. In locations with transit stations, having appropriate zoning is particularly important to the success of the transit-oriented development.

- New code/classification such as planned development districts & overlays
- Allow for flexibility within master plans and sites
- Realign zoning code to market realities
- Create a plan for a specific site or district, such as small area plans
- Adopt urban design guidelines for new development that address the other State of Place dimensions (e.g. buildings that front the street, no monolithic buildings, fenestration, interesting signage, etc.)
- Minimum densities
- Planned densification
- Streamline regulatory/entitlement process (“green taping” or expediting)
- Require additional open space

Strategy: Public Finance Options

Public finance options include tools for financing or encouraging development and infrastructure investment, such as special tax districts that help finance improvements or reduce tax burden for developers or property owners.

- Special assessment district (including set cash contribution, supplemental tax rate, and supplemental Floor-Area Ratio (FAR) options)
- Permitting fee district
- Tax increment finance (TIF)
- Tax Credits
- Tax Abatements
- Payment in lieu of taxes (PILOT)
- Tenant incentives for property improvements
- Low-interest loans
- Site specific: brownfield programs, enterprise zones, HUB zones
- Leverage State and federal money

Strategy: Development Incentives

These include financial and other incentives to encourage development in particular locations or at higher intensities.

- Density bonuses

- Reduced impact fees
- Tiered incentives
- Land acquisition/land banking
- Establish development selection criteria
- Transfer of Development Rights (TDR)
- Target underutilized, low-density retail areas for mixed-use or multi-use redevelopment
- Prioritize catalyst projects

Strategy: Public-Private Partnerships

Public-private partnerships can help finance and implement infrastructure, redevelopment, or economic development projects that would not be possible without private sector investment. They can reduce costs and risks for local governments while allowing them to benefit from the capacity and experience of their private sector partners.

- Land swaps/donations
- Joint development/development assistance
- Increase access to existing public recreational facilities through partnerships with schools and other owners
- Form public/private partnerships to develop quasi-public spaces
- Parking

Strategy: Development Stewardship/Place Management Organizations

These are organizations used to fund and manage improvements and promote the economic competitiveness of a particular district, generally funded by businesses located within the district. Organizations may be involved in planning and urban design, physical infrastructure improvements, business recruitment, maintenance and beautification, and branding.

- Special services district (SSD, often in conjunction with TIF)
- Business Improvement District (BID)
- Community improvement district (CID)
- Community redevelopment area (CRA)
- Downtown development authority (DDA)
- Catalytic development entity (CDE)

Strategy: Branding/Marketing

Branding and marketing relate to identifying and communicating the character and identity of a community, usually to enhance economic development and competitiveness.

- Research on community attributes and perceptions
- Market scan
- Categorize businesses
- Create marketing/branding campaign
- Integrate branding and marketing with economic development efforts
- Strategic initiatives to reinforce branding/marketing
- Revise signage standards to reinforce branding

Strategy: Market Studies

Market studies can provide analysis of the economic importance of an area, evaluation of development and revitalization opportunities, and guidance for economic development plans and policies.

- Complete market studies to understand the potential of the Center
- Conduct local charrette to identify community needs (RE destinations)

Strategy: Acquisition of Key Parcels

Acquiring land in key locations may be a necessary step in the redevelopment process.

- Land assembly
- Land banking
- Land trusts
- Property donation



Implementation Strategies by Opportunity Type

Implementation approaches for each opportunity type were developed by incorporating factors used to study opportunity types, such as housing affordability, income diversity, and job and transit access. Challenges and needs were identified for each opportunity type. For example, while Centers in the Stable category don't have high job access by transit overall, many Stable Centers have existing or planned transit stations that could provide a foundation for greater accessibility and transit-oriented development with the right development approach. This theme was translated into the goal of "leverage existing assets." Broad strategies and more detailed tools were developed and selected to respond to the goals. Some strategies correspond to multiple types, and the exact mix and type of investment needed in each Activity Center will vary based on local conditions. These approaches offer a starting point for understanding how different strategies could fill the unique needs of specific Activity Centers. Table 2 shows key goals and strategies corresponding to each opportunity type, followed by a list of tools for each strategy.

Strategy: Planning & Community Building

Community or issue-specific plans (such as housing or transit-oriented development plans), can identify and generate buy-in on priorities, immediate actions, strategies, and roles and responsibilities for implementation. Outreach and engagement efforts are an essential component of these planning processes, and are also highly important in communities facing significant neighborhood change.

- Community visioning
- Needs assessment (housing, infrastructure, community facilities, etc.)
- Scenario planning
- Development visualization tools
- Community engagement, education, and outreach, including multilingual outreach
- Economic development plans
- Neighborhood/community specific plans
- Station/corridor/transit-oriented development plans

Strategy: Affordable Housing Preservation

Potential loss of affordable housing stock is a major challenge in the region, particularly in communities experiencing gentrification. Preservation strategies and tools are often directed at subsidized housing stock, but may also apply to market-rate affordable housing stock and to homeowners and renters living in such properties.

- Track and monitor subsidized housing to identify units at risk of conversion
- Incentive programs for developers to preserve/replace affordable units
- Provide/target funding for rehabilitation & renovation of affordable housing stock
- Shared-equity homeownership
- Build long-term affordability covenants into inclusionary zoning regulations
- Acquisition fund to allow developers to acquire properties in danger of opting out of subsidized housing programs
- Tax abatement for seniors, disabled, and/or low-income households
- Weatherization, maintenance, and/or utility costs assistance for homeowners
- Provide information to residents on tenants rights, property values, and foreclosure
- Tax incentives to property owners who accept Housing Choice Vouchers
- Just-cause eviction controls to protect tenants

Strategy: Affordable Housing Development

Local jurisdictions may use a number of programs, zoning tools, development incentives, and partnerships to encourage the creation of new affordable housing stock.

- Create or enhance inclusionary zoning policies
- Provide development incentives, e.g. density bonuses
- Make surplus lands available for affordable housing
- Land acquisition through community land trusts, land acquisition funds, other financing mechanisms
- Target housing subsidies to support transit-dependent populations and high-vulnerability areas
- Expedite permitting and streamline development review process for affordable projects

Goals and Strategies by Opportunity Type

Table 2

Opportunity Type	Goal	Strategies
Transforming	Stabilize & Preserve: These Centers have the most potential vulnerability and may need immediate actions to prevent displacement of residents and businesses.	<ul style="list-style-type: none"> • Planning & Community Building • Affordable Housing Preservation • Business Retention & Promotion
Transitioning	Invest in Future Stability: Centers in this group do not face the immediate development pressures of those in the Transforming group, but would benefit from proactive strategies that lay the foundation for long-term affordability.	<ul style="list-style-type: none"> • Planning & Community Building • Affordable Housing Preservation • Affordable Housing Development • Business Retention & Promotion
Connected Core	Expand Affordability: Strategies that expand affordability for more residents would increase access to the assets and amenities these Centers offer.	<ul style="list-style-type: none"> • Diversification of Housing Stock • Affordable Housing Development
Stable	Leverage Existing Assets: Stable Centers could benefit from strategies to add jobs, services, and amenities to serve residents and businesses. Many Centers have existing or planned transit stations that could provide opportunities for transit-oriented development and greater accessibility.	<ul style="list-style-type: none"> • Planning & Community Building • Diversification of Housing Stock • Commercial & Job Diversification • Transportation Access & Infrastructure Improvements

- Provide development/use/impact fee waivers
- Create TIF districts with set-asides for affordable housing
- Assess linkage fees on non-residential developments
- Offer low-interest construction loans (e.g. State-level financing)
- Reduce parking requirements in location-efficient areas
- Create and fully fund an affordable housing trust fund
- Promote TOD joint development policies, such as WMATA's guidelines
- Infill housing
- Manufactured housing
- Expand value-capture financing as a tool for affordable housing creation

Strategy: Diversification of Housing Stock

Some Activity Centers need a greater variety of housing types to provide more options for current and future residents and workers, and increase

affordability and income diversity. This may include adding multi-family rental, condominiums, townhouses, duplexes, or even single-family homes.

- Conduct housing supply and needs assessments to evaluate whether supply is adequate to meet needs
- Attract catalytic affordable mixed-use programs to areas with weaker markets
- Incentivize provision of resident-supportive services to address community needs through State LIHTC qualified allocation plan
- Build or modify homes to universal design to allow for aging in place
- Review and revise zoning policies to remove barriers to development of certain types of housing stock (e.g. accessory dwelling units)
- Encourage and promote awareness of co-housing developments
- Leverage private sector involvement by encouraging employer-assisted housing

Strategy: Business Retention & Promotion

Preserving and supporting businesses in communities facing significant growth pressures or other types of changing conditions is important to neighborhood stabilization. Small and locally-owned businesses may be particularly vulnerable as neighborhood rents. Strategies for business retention and promotion include both bricks-and-mortar investments such as façade improvements, and policies that provide assistance or opportunities to local businesses.

- Business technical assistance for small, locally-, and minority-owned businesses
- Revolving micro loan fund
- Encourage local institutions to seek local contractors and suppliers
- Community Benefits Agreements that require a living wage, support locally-owned small businesses, etc.
- Local hiring and job training programs for major developments
- Local hiring provisions
- Façade improvements

Strategy: Commercial & Job Diversification

Many Activity Centers could benefit from and support a greater range of community services, such as retail stores, grocery stores, childcare, and service-oriented businesses. These businesses and services provide additional jobs within Activity Centers and generate additional revenue because residents can shop in their own communities. Workforce development efforts to train workers and connect them with key industries and occupations, are also important to local and regional economic development.

- Review retail and services mix to identify gaps and complementary uses
- Target economic incentives to attract needed jobs and services
- Develop partnerships with area community colleges with courses targeting needed industry-specific skills
- Sponsor mentorship relationships for individuals and firms
- Support internship and apprenticeship programs in key industries
- Work with major employers to identify workforce needs and link to existing workforce development programs
- Encourage temporary, pilot, or flexible businesses, such as pop-up shops, food trucks, farmers markets, etc., including in vacant or underutilized parcels

Strategy: Transportation Access & Infrastructure Improvements

Programs and investments to improve access and infrastructure can help communities with transit make the most of their infrastructure, and help communities without transit expand transportation options. In all communities, these types of tools can enhance safety and vitality, and can facilitate more walking, bicycling, and transit ridership.

- Evaluate “last mile” infrastructure to identify and address barriers that may limit transit ridership, particularly for transit-dependent populations
- Pedestrian activated/automated signals in large and/or busy intersections
- Crosswalk markings in large/busy intersections
- Curb cuts
- Station pedestrian path improvements
- New sidewalks/ sidewalk enhancements or buffers (such as street trees, landscaping, onstreet parking)
- New/enhanced bicycle lanes and supportive facilities
- Station wayfinding
- Consider opportunities for new walkable destinations (e.g. markets, gathering places, and services)
- Safe Routes to School
- Improved street lighting, especially in public places and commercial areas
- Parking management
- Create or expand Access for All programs
- Paratransit
- Linkage of real estate development projects to adjacent public realm improvements



Strategies for Combined Place & Opportunity Types

Each Activity Center has a place type and an opportunity type. Considering both types together highlights the interplay between an individual Center's place and opportunity characteristics, and provides a more comprehensive understanding of common features and themes among the region's Activity Centers. The Activity Centers were studied side-by-side to identify the most common place type and opportunity type combinations and key patterns. Six major place and opportunity type pairings were identified, and broad development strategies were then developed to accompany them.

Connected Core + Urban Centers

Examples: Downtown DC, Crystal City, Bethesda

Overall Strategy: Expand Access and Housing Choice

These Centers have the strongest real estate markets of the Centers, as well as strong physical infrastructure and amenities, and moderate proportions of low-income households. While meeting the demand for more affordable housing may be challenging given market conditions, there may be opportunities to leverage their strong real estate markets to create broader affordability through subsidized and workforce housing.

Connected Core or Stable + Dense Mixed-Use Centers

Examples: Shirlington, Georgetown, White Flint

Overall Strategy: Infill and Enhance

These Centers have strong physical forms and markets, and are well-connected internally and externally. These are ideal locations for targeted place-making investments that may include infill development that complements the current mix of land uses, and adding parks and public spaces. Opportunity-focused strategies may include diversifying housing stock to serve a range of households.

Stable + Suburban Multi-Use Centers

Examples: Greenbelt Metro, Fairfax City, Rockville Town Center

Overall Strategy: Connect and Catalyze

This is the most common combination, applying to nearly 20 of the Centers studied in the report. While these Centers have a mix of uses, they may need public intervention to catalyze more intensive mixed-use and walkable development. In Centers with transit stations, pedestrian features and other walkability

improvements that increase station and corridor accessibility can help make the most of existing infrastructure and better connect these areas to other job centers; these investments could also serve to catalyze more mixed-use development.

Stable + Close-in and Urbanizing Centers

Examples: Kensington, Bailey's Crossroads/Western Gateway

Overall Strategy: Build and Urbanize

Centers in this category tend to have a variety of uses, but may have urban form and infrastructure challenges that limit their future growth potential. These Centers may benefit most from targeted public investment and capital improvements to support existing uses, attract complementary uses, and strengthen accessibility.

Transforming or Transitioning + Revitalizing Urban Centers

Examples: Minnesota Avenue, Naylor Road/Southern Avenue, Langley Park

Overall Strategy: Protect and Grow

These Centers typically need incentives to catalyze development, and have high proportions of low-income residents. However, many provide strong transit access to jobs because of the presence of Metro stations, which suggests future opportunities for transit-oriented development. While redevelopment is not imminent, establishing proactive strategies to preserve affordability and capture community benefits from growth would benefit these Centers. This may include community-based partnerships for community economic development, preservation of existing market-rate and subsidized affordable housing, and public/private partnerships to catalyze development.

Stable + Satellite City

Examples: North Woodbridge, Germantown, Bowie Town Center

Overall Strategy: Partner and Stimulate Demand

These Centers would generally benefit from creating a framework for redevelopment, identifying catalytic sites, and assessing community needs and assets. Some of these Centers, particularly historic towns, already exhibit good physical environments may benefit from partnership-type collaborations that brand or market the place to the broader region.

V. Transit Corridor Implementation Priorities



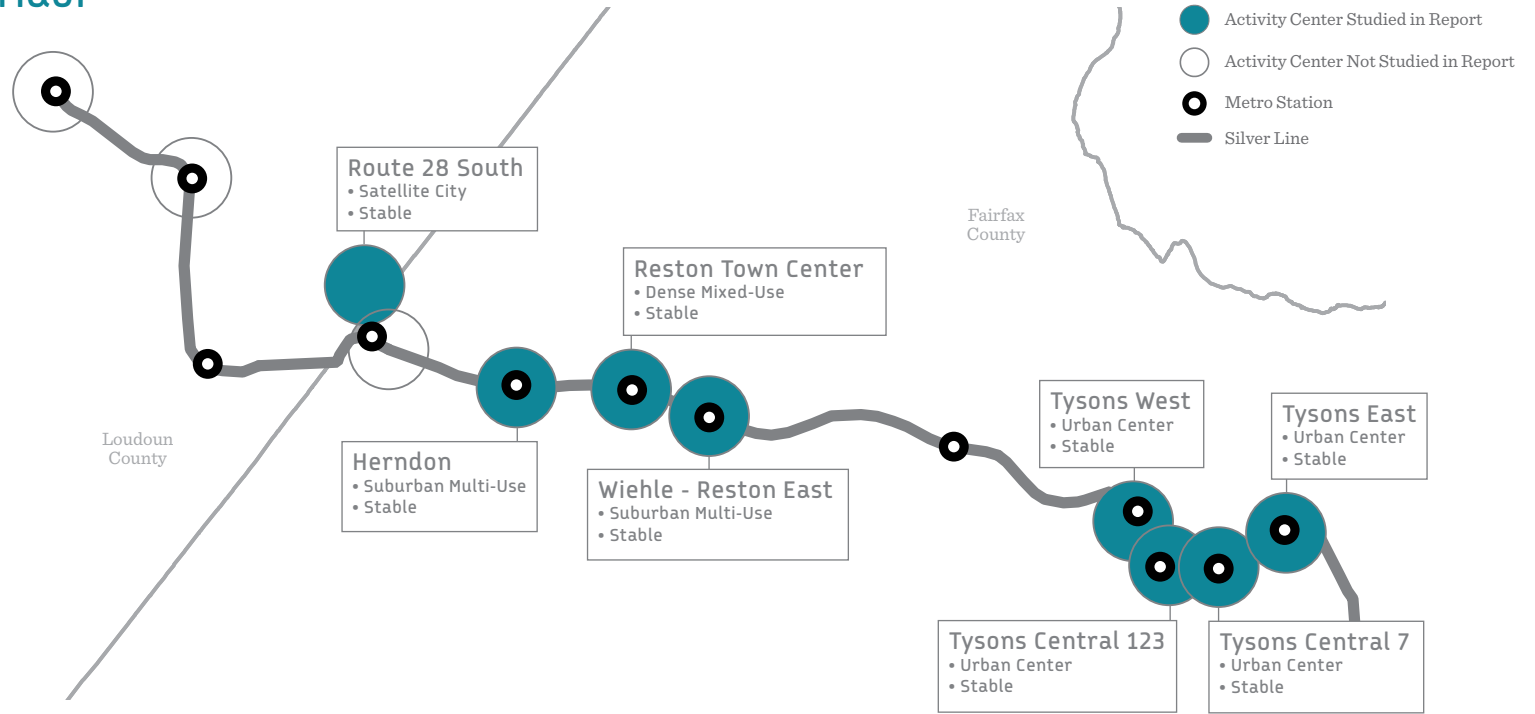


Region Forward calls for connecting Activity Centers by transit, and several new and proposed transit lines in the region will help achieve this regional goal. Each of these planned transit lines is unique and at a different stage of planning, funding, or construction. Many of them will cross jurisdictional lines and touch a variety of communities that differ in their demographic composition, real estate market conditions, and urban form.

This section provides a regional view of Activity Centers in three planned transit corridors in the region. These transit corridors, along with key priorities for stations areas and specific sections of the corridor, are described below. These priorities respond to the opportunities and challenges for attracting development and economic growth, providing housing choices, and increasing access to opportunity.

Silver Line Corridor

Figure 3



Silver Line

The Silver Line, shown in Figure 3, is an extension of Metrorail that will link Tysons and the Dulles International Airport to the regional core and greater Metrorail system. The first phase of the project, which includes the Tysons stations and Reston East station, is currently under construction and expected to begin service in 2014. Phase II, which will include connections to Dulles Airport and extend into Loudoun County, is scheduled to open in 2018.

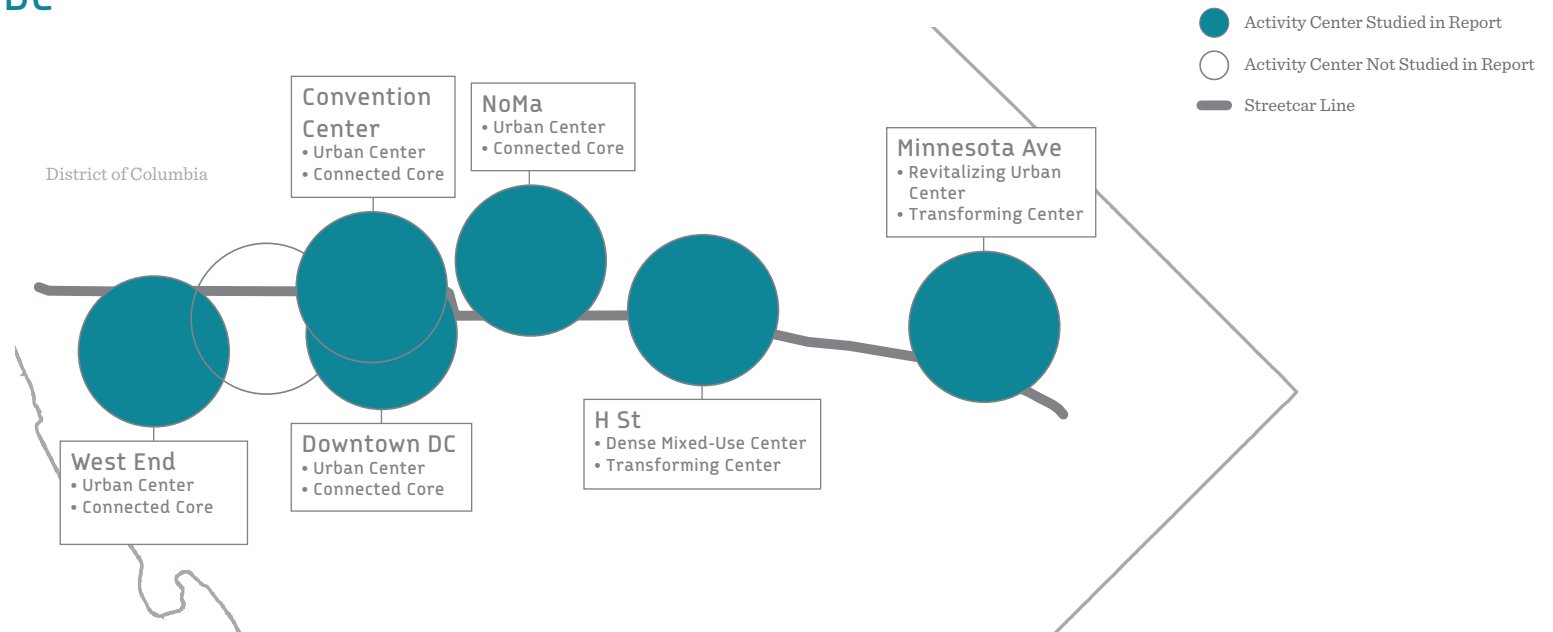
Tysons Segment: The Tysons segment of the Silver Line is a strong, urban market and one of the region’s major job centers. The Tysons segment will have four new Metrorail stations (and four Activity Centers) on the Silver Line, and priorities for these Centers include expanding all housing types (particularly to provide more affordable housing options) and community resources and investing in infrastructure to improve the public realm and walkability. The development of more affordable and workforce housing in Tysons would provide low-to-moderate income households with access to its many

employers. Amenities and infrastructure such as grocery stores, parks, public spaces, and pedestrian features will help lay a strong foundation for a dynamic urban environment. Tysons is one of the region’s most prominent examples of a planned transformation from an auto-oriented employment center to a walkable, mixed-use urban community.

Reston–Herndon Segment: This segment of the Silver Line includes Wiehle-Reston East, Reston Town Center, and Herndon. Reston Town Center is the most urbanized area and is classified as a Dense Mixed-Use Center. Wiehle-Reston East and Herndon are both mixed-use suburban neighborhoods characterized by a horizontal mix of uses. This section of the corridor has good real estate market fundamentals and is urbanizing in character. Wiehle-Reston East and Herndon may need more incentives to realize mixed-use vertical development

H St Corridor DC

Figure 4



H Street NE/ Benning Road Streetcar

The H Street NE and Benning Road Streetcar, shown in Figure 4, will be the first segment of the District of Columbia’s new streetcar system. The streetcar line is scheduled to begin service in 2014 along H Street NE, and will ultimately connect the Benning Road Metro station to Georgetown. The streetcar will be the first line to run in the District of Columbia since the previous streetcar system was dismantled in 1962.

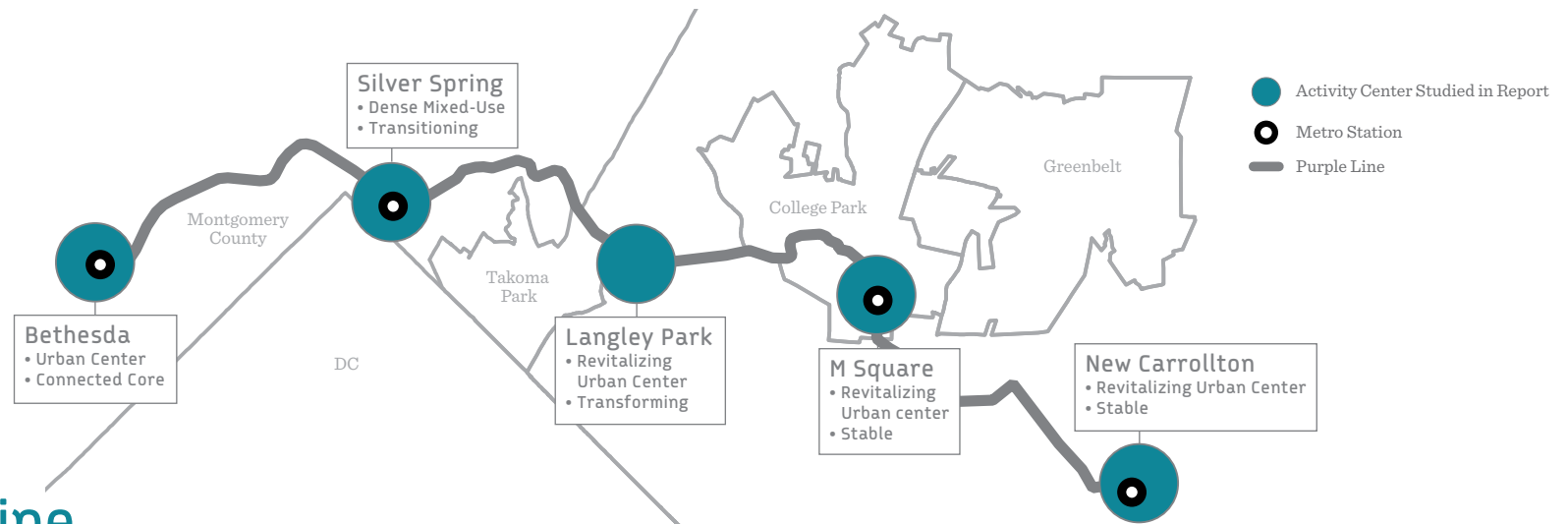
NoMa: NoMa is an Urban Center that has undergone a dramatic transformation in the past decade and continues to add new office and residential construction. This area has strong job and transit access. As more development breaks ground greater market pressures will begin to affect H Street due to their close proximity. This part of the corridor should focus on expanding housing and where possible leverage market momentum to create new affordable housing units. While the area has good pedestrian and bicycle infrastructure, adding parks, public spaces, and other amenities will further enhance walkability.

H Street: H Street is a mixed-use dense neighborhood experiencing recent revitalization and demonstrating increasing real estate market strength and potential. The area is adding new market rate housing and commercial development, which is increasing nearby housing prices and rents. Opportunity strategies should focus first on preserving affordable housing. With the area’s improving real estate market, there may also be opportunities for creating new affordable housing units on vacant or redeveloping parcels.

Minnesota Avenue: The Minnesota Avenue segment is a Revitalizing Urban Center with the large concentration of low-income household potentially vulnerable to displacement. Preserving affordable housing and community stabilization efforts can help ensure the community is prepared when the streetcar line opens.

Purple Line

Figure 5



Purple Line

The Purple Line, shown in Figure 5, is a proposed 16-mile east-west Light Rail Transit line extending from New Carrollton to Bethesda. The line will connect a number of Activity Centers and business districts such as Bethesda, Silver Spring, Takoma/ Langley Crossroads, University of Maryland, and New Carrollton. The project's east-west alignment addresses a critical regional need that would better connect people to jobs and facilitate east-west travel in suburban Maryland.

The transit line will pass through a number of diverse communities ranging from some of the most affluent areas in suburban Maryland to low-to-moderate income neighborhoods. The transit line's alignment through job centers and historically under-represented communities provides a unique opportunity for the region to engage around east-west equitable economic development challenges at station areas and along the corridor as whole.

Bethesda Segment: Bethesda is a major regional job center, with strong walkability and urban amenities. A key strategy for this segment is expanding housing options to provide low-to-moderate income households better access to the area's jobs and amenities.

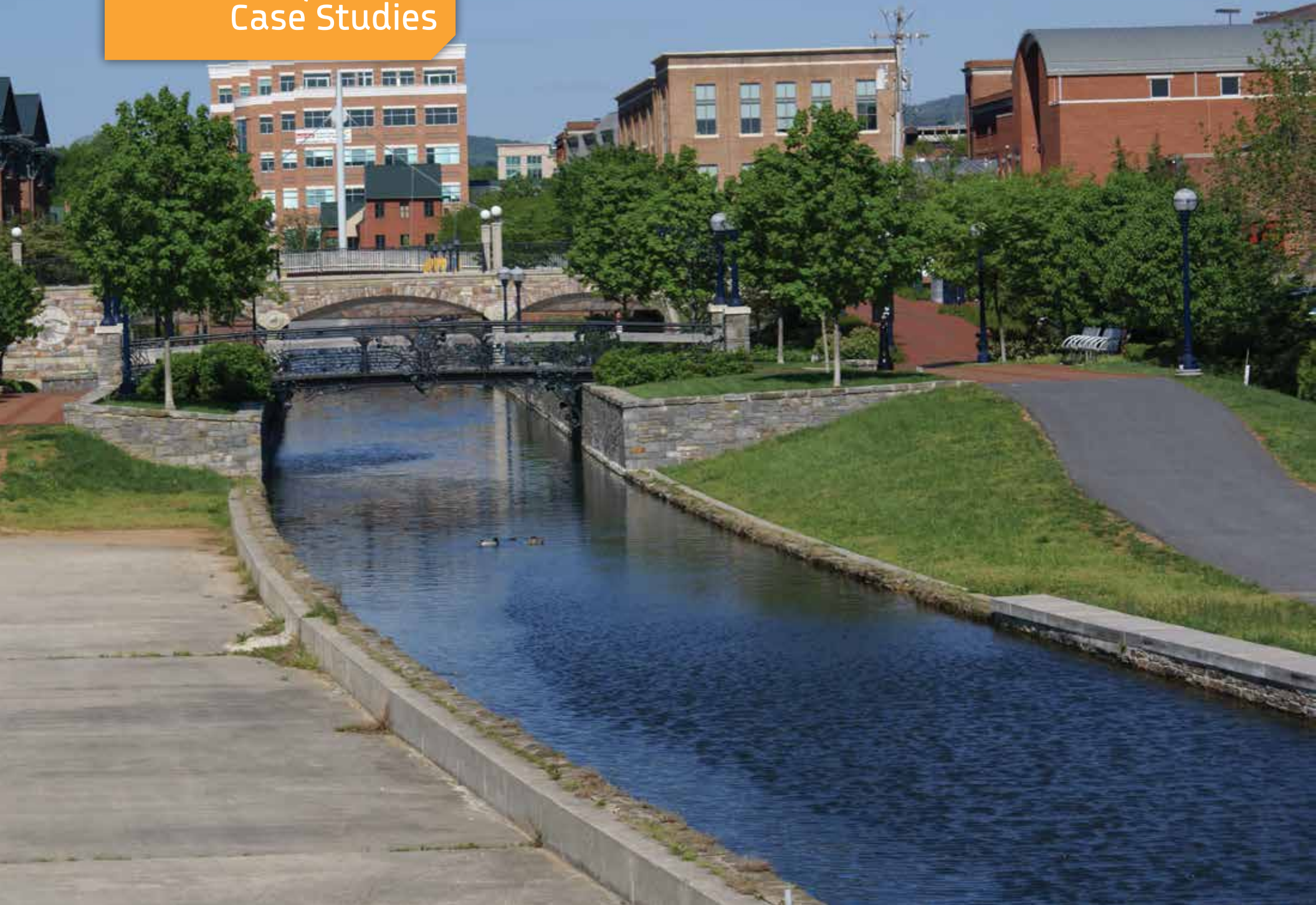
Silver Spring Mixed-Use Segment: Silver Spring is a Dense Mixed-Use Center that has experienced recent revitalization. Given the area's income diversity, preserving existing affordable housing and expanding housing choice through a mix of market rate and affordable housing would be key strategies in this part of the corridor. Due to strong momentum, this segment of the corridor could benefit from partnerships such as a Business Improvement District or Community Improvement District, which manage and improve the public realm, market the neighborhood, and promote economic development.

Takoma-Langley Park Segment: This segment of the corridor includes Takoma/Langley Crossroads, a revitalizing urban neighborhood that has a large concentration of low-income and immigrant households potentially vulnerable to displacement. Prioritizing existing affordable housing (particularly rental housing) and local and small businesses, are critical for this Center. Many existing residents are transit-dependent, and improving access to transit and existing amenities through walkability improvements are also a priority.

New Carrollton Segment: New Carrollton, a Revitalizing Urban Center, already has strong transit connections with Metro and MARC, but could benefit from place-based strategies that incentivize market-rate development, add community amenities, and create a stronger public realm.



VI. Activity Center Case Studies





This section takes a closer look at three Activity Centers studied in *Place + Opportunity*: East Frederick Rising in the City of Frederick, St. Elizabeths in the District of Columbia, and Huntington/ Penn Daw in Fairfax County. The case studies illustrate how stakeholders can apply the analysis and resources provided in the guide for their Centers.

East Frederick Rising

Located adjacent to Downtown Frederick, East Frederick Rising is a manufacturing and industrial area that the City has identified as a prime location for infill development, redevelopment, and reuse over the long term. In addition to industrial and manufacturing uses, East Frederick Rising contains a variety of historic housing, retail, and office uses. The area is also home to the Frederick Municipal Airport, the MARC commuter rail station, and the historic Frederick Fairgrounds.

CURRENT PLANNING & INVESTMENT

The East Frederick Rising Vision Plan, adopted in 2011, was developed to identify opportunities and potential for the development of the East Side. The Plan identifies its vision for East Frederick as “a revitalized east end of the city that is a vibrant, safe, and diverse place where residential and commercial opportunities flourish and expand in accordance with smart growth principles.” Building on the Vision Plan, the East Frederick Rising Small Area Plan, beginning in 2014, will provide policy guidance on the current mix of land uses and the redevelopment of the East Street and East Patrick Street corridors.

Three major projects underway as of Fall 2013 are the Monocacy Canning Building renovation, an office/ retail development, construction of the linear park from Carroll Street to Patrick Street, and Frederick Brickworks, a mixed-use project on a 50-acre site.

Infrastructure improvements include the recently-completed East Street extension. The East Street Trail Project Design, funded by the Transportation/ Land Use Connections (TLC) Program in 2012-2013, includes bicycle lanes, sidewalk upgrades, and development of a shared-use path, and will connect to the MARC station. Construction on the Monocacy Boulevard Interchange, which will include a Park-and-Ride lot for the MARC station, as well as bicycle and pedestrian facilities, is anticipated to begin in 2014. A Rails to Trails project and the extension of Carroll Creek Linear Park are currently planned.

EXISTING CONDITIONS

- Place Type = **Satellite City**
- Opportunity Type = **Stable**

DEVELOPMENT APPROACH FOR EAST FREDERICK RISING

Based on current planning efforts and its place and opportunity types, development goals and strategies are identified below.

Development Goals:

- **Create a Framework for Redevelopment:** East Frederick Rising has already created a vision for its future. With the Small Area Plan and other policy documents, it will benefit by identifying implementation steps to achieve the vision, which may include changing zoning to align with the goals of the Vision Plan.
- **Encourage Additional Mix of Uses:** With the Monocacy Canning Building and Frederick Brickworks, East Frederick Rising has already begun the process of adding new uses to the Center. Adding additional uses and identifying catalytic sites could spur further redevelopment.
- **Leverage Existing Assets:** Building on its proximity to the MARC station and Downtown Frederick and mix of building types, East Frederick Rising can increase jobs, services, and other amenities to serve existing residents and businesses. Enhancing multi-modal access to the MARC station and within the area through the East Street Trail Project and the Monocacy Boulevard Interchange will help make transit, walking, and bicycling more viable options for residents and workers.

Key Strategies & Tools:

Zoning Intervention

- Design guidelines
- Realign zoning code to market realities

Public Finance Options

- Tax credits
- Tax increment finance (TIF)

Public-Private Partnership

- Joint development/ development assistance
- Land swaps/ donations

Development Incentives

- Land acquisition/ land banking
- Prioritize catalyst projects

Commercial & Job Base Diversification

- Review retail and services mix to identify gaps and complementary uses
- Target economic incentives to attract needed jobs and services
- Develop small business technical assistance programs

RESOURCES

In Fall 2013, a ULI Technical Assistance Panel (TAP) focused on East Frederick Rising was launched to examine redevelopment opportunities in conjunction with development of the East Frederick Rising Small Area Plan. In addition, a number of Maryland state and federal programs that could be used to support implementation of the strategies listed above, including:

- Maryland Strategic Demolition and Smart Growth Impact Fund (SGIF)
- Maryland Office and Commercial Space Conversion Initiative
- Section 108 Loan Guarantees (HUD)
- MAP-21 Transportation Alternatives (DOT)
- Building Blocks for Sustainable Communities (EPA)

St. Elizabeths

Located in Ward 8 in the District of Columbia, the St. Elizabeths Activity Center includes a historic former mental hospital campus, as well as the Congress Heights, Barry Farm, Sheridan Terrace, and Douglass neighborhoods. At over 350 acres, the St. Elizabeths campus is the largest redevelopment site in the District. The redevelopment of the historic campus will have two distinct parts: the West Campus will become the new headquarters of the US Department of Homeland Security, and the East Campus will become a community hub offering residential, employment, educational, and commercial opportunities for the surrounding neighborhoods.

CURRENT PLANNING & INVESTMENT

With the transformation of St. Elizabeths, the District aims to leverage a once-in-a-generation redevelopment opportunity to revitalize the surrounding areas and Ward 8 overall. Completed in 2012, the District of Columbia Office of Planning (OP), Office of Deputy Mayor for Planning and Economic Development (DMPED), and Department of Transportation (DDOT) collaborated on the St. Elizabeths East Master Plan and Design Guidelines to guide the physical development of the site, including land use mix, transportation investments, infrastructure improvements, and recruitment of anchor institutions. Public investment on East Campus includes \$58 million in infrastructure upgrades. DMPED has been spearheading implementation and has issued some public solicitations in furtherance of the plan. The agencies are also working with the General Services Agency (GSA), which is overseeing the West Campus redevelopment, to ensure that the new Department of Homeland Security Headquarters becomes a catalyst to grow the innovation economy and provide jobs, amenities, and retail to serve nearby residents and businesses.

The communities near the St. Elizabeths campus, including Anacostia and Congress Heights, account for a large portion of the District's subsidized units, market-rate affordable housing, and housing choice voucher holders, making inclusion of existing residents a central focus of area planning efforts. In 2008, a comprehensive housing analysis for Ward 8 was created to guide a strategy for preserving existing affordable housing and adding hundreds of new affordable units in mixed-income communities. More recently, the District has used the DC Vibrant Retail Streets Toolkit and Technical Assistance Program to evaluate current conditions and identify strategies to strengthen retail districts along

Martin Luther King Jr. Avenue SE in both Anacostia and Congress Heights. The CHASE (Congress Heights, Anacostia, and St. Elizabeths) Action Agenda is an initiative designed to strengthen the Congress Heights and Anacostia neighborhoods by developing a community priorities implementation blueprint and economic development strategy, and connecting residents to needed services and resources for housing, employment, small business development, and transportation.

The District is striving to ensure the redevelopment provides both immediate and long-term opportunities for area residents. For example, provisions for local hiring and job training have been incorporated into the scope of the construction solicitation for the campus's infrastructure and transportation improvements. The Gateway Pavilion, a flexible structure on East Campus opened in Fall 2013, is designed to be a community gathering place and a catalyst for additional neighborhood-serving businesses. The Gateway Pavilion will serve a range of interim uses during the early phases of redevelopment such as “pop up” retail opportunities, and will help draw the first DHS employees into the community. A future education hub located on the campus will help connect nearby residents with science, technology, engineering, and mathematics fields.

EXISTING CONDITIONS

- Place Type = **Revitalizing Urban Center**
- Opportunity Type = **Transforming**



DEVELOPMENT APPROACH FOR ST. ELIZABETHS

Based on St. Elizabeths' current planning efforts and its place and opportunity types, development priorities and strategies are described below.

Development Goals:

- **Create a Framework for Redevelopment and Incentivize Development:** Building on the campus Master Plan and related infrastructure improvements, finance tools will be next steps to encourage private investment.
- **Stabilize and Preserve:** St. Elizabeths has an immediate need for strategies to preserve housing affordability by maintaining and expanding homeownership and diversifying rental housing opportunities.

Key Strategies & Tools:

Public Finance Options

- Tenant incentives for property improvements
- Low-interest loans
- Tax abatements and tax credits

Development Incentives

- Prioritize catalyst projects
- Reduced impact fees
- Establish development selection criteria

Affordable Housing Preservation

- Shared-equity homeownership
- Loan and grant programs for housing rehabilitation and renovation
- Programs to help tenants purchase their rental properties

Business Retention & Promotion

- Business technical assistance for small, locally-, and minority-owned businesses
- Façade improvements

RESOURCES

The District is applying a number of local and federal programs to support the redevelopment, including the DC Vibrant Retail Streets Program, local and minority business preferences, and HUD Choice Communities. Other federal programs that could be considered include:

- Section 108 Loan Guarantees (HUD)
- New Markets Tax Credits (CDFI)
- Building Blocks for Sustainable Communities (EPA)
- Transportation Infrastructure Finance and Innovation Act (DOT)
- Our Town Initiative (NEA)

Huntington/Penn Daw

The Huntington/Penn Daw Activity Center is located south of Interstate 495 between Telegraph Road and Richmond Highway (Route 1) in Fairfax County. The Center contains three nodes of development: North Gateway Community Business Center (CBC), the Penn Daw CBC, and the Huntington Transit Development Area, centered on the Huntington Metro station. While the area has traditionally been dominated by auto-oriented uses, Fairfax County's development focus in recent years has shifted to encouraging mixed-use infill development and better pedestrian access while maintaining well-defined edges with nearby residential neighborhoods.

CURRENT PLANNING & INVESTMENT ACTIVITY

In recent years, Fairfax County has completed Comprehensive Plan amendments and subsequent rezonings for the North Gateway CBC, the Penn Daw CBC, and the Huntington Transit Development Area to facilitate more transit- and pedestrian-oriented, mixed-use development in these historically auto-oriented areas. The Penn Daw Special Study, adopted in 2012, is another significant plan amendment, allowing for the development of up to 735 residential units and 40,000 square feet of retail use on the Penn Daw Plaza site along Richmond Highway.

As of August 2013, a number of development projects replacing single-use commercial or residential properties with higher density mixed-use development were underway. These include 240 multifamily units under construction in the area of the Penn Daw Special Study, and the first phase of redevelopment of the VSE Building across from the Huntington Metro Station for multifamily, hotel, and office mixed use. A 1960s-era condominium development adjacent to the Huntington Transit Station Area was replanned in 2013 for a mixed-use community of up to 1,800 dwellings and 1 million square feet of office, as well as retail and hotel uses.

EXISTING CONDITIONS

- Place Type = **Suburban Multi-Use Center**
- Opportunity Type = **Stable**



DEVELOPMENT APPROACH FOR HUNTINGTON/ PENN DAW

Based on planning and development projects underway in Huntington/Penn Daw and its place and opportunity type, development goals and strategies to meet key needs are described below.

Development Goals:

- **Encourage Additional Mix of Uses:** While Huntington/Penn Daw is already multi-use in nature, the development of more vertical-mixed use is the next step to strengthening the market and street environment. Several new projects planned or underway will bring higher-density mixed-use to Huntington/Penn Daw.
- **Add Parks & Public Space:** In addition to adding public space through the mixed-use developments, adding parks and public facilities focused on local residents would strengthen the quality of place and help balance the additional development occurring in the area.
- **Add Pedestrian Features:** Addressing items such as crosswalks, curb cuts, and street furniture would improve pedestrian safety and enhance walkability.
- **Leverage Existing Assets:** Adding new jobs, services, and amenities at the Huntington Metro station and along Route 1 would build on the Center's assets and improve opportunity and quality of life for residents.

Key Strategies & Tools:

Zoning Intervention

- Design guidelines
- Realign zoning code to market realities
- Require additional open space

Public Finance Options

- Tax credits
- Tax increment finance

Development Incentives

- Land acquisition/ land banking
- Prioritize catalyst projects



Transportation Access & Infrastructure Improvements

- Evaluate “last mile” infrastructure to identify and address barriers that may limit transit ridership
- New sidewalks/sidewalk enhancements
- Street lighting

Commercial & Job Base Diversification

- Review retail and services mix to identify gaps and complementary uses
- Target economic incentives to attract needed jobs and services
- Develop small business technical assistance programs

RESOURCES

Huntington/Penn Daw is currently the focus of several transportation and land use studies that are expected to result in recommendations consistent with many of the suggested development goals and strategies. The area could be an ideal location for a Transportation/Land Use Connections (TLC) grant to examine redevelopment opportunities or provide additional planning or urban design studies. There are also federal programs that could be used to support implementation of the strategies listed above. These include:

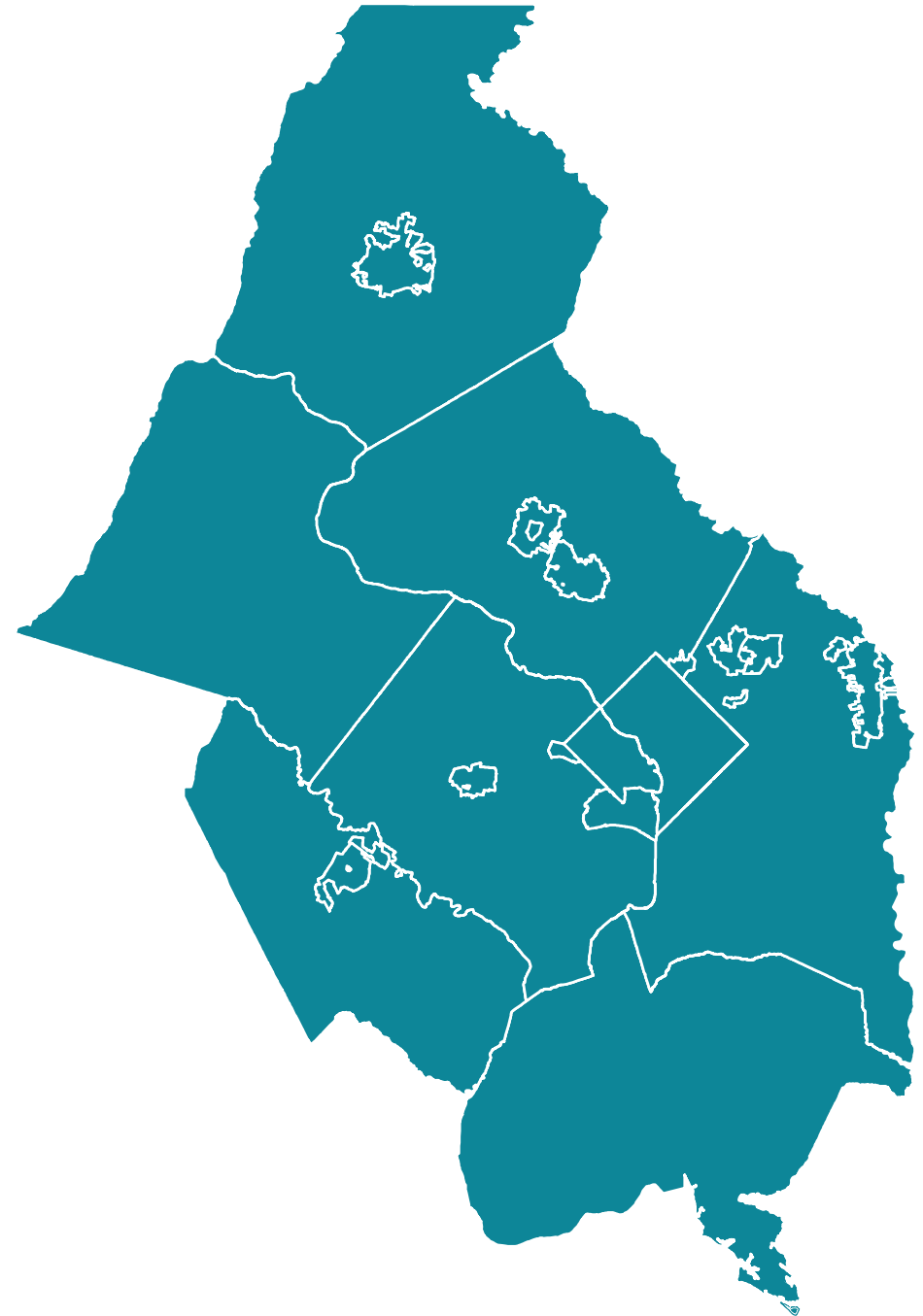
- MAP-21 Transportation Alternatives (DOT)
- Transportation, Community, and System Preservation (DOT)
- Pedestrian and Bicycle Safety Program (DOT FHWA)
- Smart Growth Technical Assistance Grants (EPA)

VII. Local Planning & Development Highlights





In addition to the major transit infrastructure projects described in *Place + Opportunity*, there are numerous local projects and initiatives currently underway in the Activity Centers. These include many large-scale visionary planning, development, and infrastructure projects, as well as dozens of smaller, more focused efforts. The analysis in this report primarily focuses on current conditions and doesn't evaluate plans underway or projects in the pipeline, but many of these current efforts at the local level address the needs and implementation identified for their Activity Centers. While a thorough analysis of proposed plans and projects for each Center is beyond the scope of this guide, this section summarizes some of these efforts to highlight the numerous ways in which local jurisdictions are strengthening and enhancing their Centers. The projects listed in this section were gathered with help from city and county planning departments in August 2013.



District of Columbia

The District of Columbia has been experiencing a revival, with billions of dollars in new investment in its downtown and neighborhoods, and over 50,000 new residents between 2006 and 2012. Since 2001, the District has added more office space and multi-family units than any other jurisdiction in metropolitan Washington. High-density, mixed-use development has been concentrated in Activity Centers including Downtown, Convention Center, NoMa, Capitol Riverfront, H Street, and U/14th Street, with plans to leverage public assets for development at St. Elizabeths and Walter Reed. The extensive and expanding transportation options, including Metrorail and Metro bus, DC Circulator, Capital Bikeshare, carshare, and a streetcar system, are a key element supporting the District's growth. The District has also focused on recreational amenities such as new parks and trails, and entertainment facilities like stadiums and event spaces that attract visitors from across the region. The District has emphasized inclusion and equity goals through its policy and planning framework (e.g., One City Action Plan, Comprehensive Plan, and Sustainable DC Plan), Housing Production Trust Fund, first source hiring agreements, Neighborhood Stabilization Program, and a commitment to create or preserve 10,000 units of affordable housing between 2013 and 2020.

The District has used a number of development tools and partnerships to incentivize development and revitalization. Where supported by the Comprehensive Plan, higher density zoning, with bonuses to achieve broader District objectives and combined lot and inclusionary provisions, has spurred development in new districts and created more affordable housing. From 2006 to 2013, over 100 Planned Unit Developments were approved by the Zoning Commission, totaling approximately 50 million square feet of development. Infrastructure investments, including the Great Streets Initiative and the reconstruction or rehabilitation of several bridges and street corridors, will support new transit and enhance development, safety, and accessibility. Nine Business Improvement Districts (BIDs) provide economic development, marketing, programming, and street cleaning to enhance the local districts.

Highlights

- Sustainable DC Plan released in early 2013
- Zoning Regulations Review (comprehensive revision of the zoning code that began in 2008) has been submitted to the Zoning Commission
- DC Streetcar, expected to begin service on the H/Benning Line in early 2014
- New and expanding Capital Bikeshare system
- Anacostia Waterfront Initiative
- New DC United soccer stadium planned at Buzzard Point
- CHASE Action Agenda, focused on the Congress Heights, Anacostia, and St. Elizabeths neighborhoods
- Plan development and establishment of zoning for a number of large, formerly federal parcels for mixed-use development, including Southeast Federal Center, Hill East, St. Elizabeths, Walter Reed, Armed Forces Retirement Home, and the Southwest Ecodistrict



City of Bowie

The City of Bowie is focusing on enhancing Bowie Town Center and Old Town Bowie adjacent to Bowie State University. The Bowie Town Center Activity Center is currently a walkable lifestyle retail center that is planned to become an urban, mixed-use community. New infrastructure enhancements and surrounding development are helping to realize this vision. The City built a new City Hall in 2006 and other nearby developments such as Harmony Place, Melford, and Mill Branch Crossing are adding more households, jobs, and retail amenities close to the Town Center. The City has been focused on supporting new development in the area through a Prince George's County zoning update and recently adopted Master Plan for the Bowie area.

Highlights

- Harmony Place, Melford, and Mill Branch Crossing developments
- Interchange improvements to US 301 and MD 197
- Bowie and Vicinity Master Plan



Charles County

Charles County has been updating its Comprehensive Plan, which focuses on development opportunities in designated locations like the Waldorf and La Plata Activity Centers and the preservation of rural areas. Waldorf, an unincorporated community, is the County's main commercial area and has been a major focus for County planning efforts. The 2010 Waldorf Urban Design Study provided a Vision Plan, design guidelines, and the creation of two new transit-oriented zoning districts to allow for walkable, dense-mixed use development. The County Commissioners approved 18 billion dollars of water, sewer, and roadway improvements to provide the necessary infrastructure to make Waldorf redevelopment feasible, and the County is seeking public/private partnership opportunities to identify a catalyst project.

The County is also coordinating with Prince George's County and Maryland Transit Administration on development of fixed-route, high-capacity transit service between Waldorf and Branch Avenue Metro Station. The Southern Maryland Transit Corridor Preservation Study identified a conceptual alignment, station locations, environmental impacts, and cost estimates for Bus Rapid Transit and Light Rail Transit services. In 2013, the Maryland Department of Transportation advanced the project into the Project Planning Stage. Together with the redevelopment of downtown Waldorf, the construction of a transit line will complete the vision for an economically viable and sustainable community in Waldorf.

Highlights

- New County Comprehensive Plan, adoption expected in 2014
- Waldorf Urban Design Study, 2010
- Waldorf Urban Transportation Improvement Plan, 2010
- Southern Maryland Transit Corridor Preservation Study, 2010



City of College Park

The City of College Park is experiencing a surge of development activity along US Route 1. The City recently worked with the Prince George's County Planning Department to complete the new Central US 1 Corridor Sector Plan, which calls for compact, mixed-use development in nodes and reconstruction of Route 1 as an urban boulevard. The University of Maryland is planning to construct a new conference hotel as part of a new Innovation District on the east campus area along Route 1, and is working with the City on other redevelopment projects in downtown College Park. Around College Park's Metrorail station, plans are underway for new buildings at M Square Research Park, a public-private partnership with the University of Maryland to provide nearly 2 million square feet of new office and research space. In anticipation of the Purple Line, the College Park-Riverdale Park Transit District Development Plan is being updated to promote new transit-oriented development.

Highlights

- New Central US 1 Corridor Sector Plan
- The Purple Line (expected to begin service in 2020)
- New mixed-use developments along US 1/Baltimore Ave.
- M Square Research Park
- College Park-Riverdale Park Transit District Development Plan Update



City of Frederick

The City of Frederick has been focused on enhancing its downtown and connecting surrounding neighborhoods. The City recently completed planning efforts for East Frederick Rising and an aging commercial strip called Golden Mile. The City's most prominent success story is the revitalization of the downtown and the development of the Carroll Creek Park, which mitigated flooding downtown and restored economic vitality to the historic district through new open space and urban amenities. New elements to the park include brick pedestrian paths, water features, art installations, trees, and an amphitheater for outdoor performances. The new amenities spurred development with more housing, office, and retail serving the downtown. The City is continuing investment in the downtown through new capital improvements, grants, and other resources.

The Downtown Frederick Partnership is supporting these efforts through branding, outreach, event planning, and urban design enhancements. The City is using Downtown Frederick Partnership as the model for both the Golden Mile and East Frederick Rising revitalization.

Highlights

- City of Frederick Comprehensive Plan, adopted in 2010
- East Frederick Rising Vision Plan, adopted in 2011
- Golden Mile Small Area Plan, adopted in 2013
- Carroll Creek Linear Park and improvements

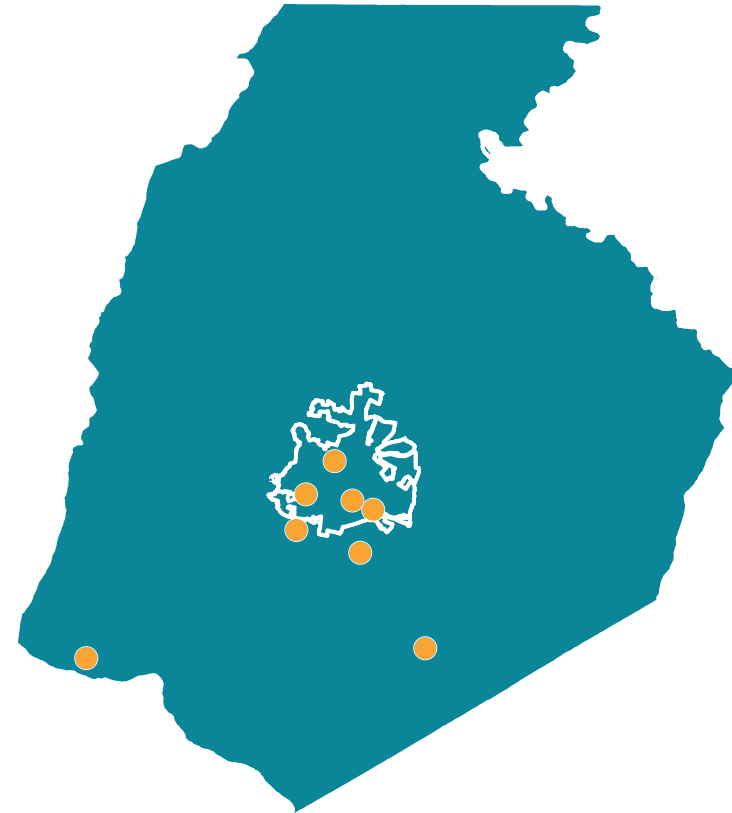


Frederick County

Frederick County is planning for development in designated municipal growth areas including Brunswick, Urbana, and locations adjacent to the City of Frederick. The County's recently-updated Comprehensive Plan and updated City of Brunswick Master Plan address these areas. Urbana and Brunswick both have active development projects underway or in the review stage. Urbana has several mixed-use town center developments that propose an additional 1,000 dwellings and approximately 4 million square feet of employment development. The Francis Scott Key Mall area has been the subject of initial planning efforts that will address redevelopment opportunities.

Highlights

- Updated Frederick County Comprehensive Plan, adopted in 2010
- Updated City of Brunswick Master Plan, adopted in 2011
- Mixed-use town center developments in Urbana underway

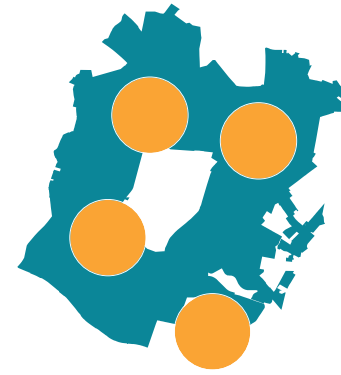


City of Gaithersburg

The City of Gaithersburg has been planning a series of mixed-use urban villages along the Corridor Cities Transitway, a proposed bus-rapid transit line that once complete, will connect the Gaithersburg/ Metropolitan Grove Activity Center to the King Farm/Rockville Research Center/Shady Grove Center through the City of Gaithersburg. The City's main planned development sites along the corridor include Watkins Mill Town Center, Kentlands Commercial District, and the Crown development. Over time, these Activity Centers are expected to accommodate new housing, retail, office, and healthcare research facilities. In Gaithersburg Central, located east of I-270, a number of capital improvements and an Enterprise Zone designation have been developed to provide development incentives for businesses.

Highlights

- Corridor Cities Transitway, expected to begin construction in 2018
- Crown development underway



City of Greenbelt

The City of Greenbelt is focusing on development around the Greenbelt Metrorail station. Recently Prince George's County approved a new Sector Plan for the Greenbelt Metro Area and MD 193 Corridor. The Sector Plan envisions the development of Greenbelt Metro as an interconnected, vibrant, and diverse mixed-use, transit-oriented eco-community that builds on the local area's historic commitment to sustainability. At the time of this publication, the City was also vying for a major GSA office consolidation project at the Greenbelt Metro station.

Highlights

- Greenbelt Metro Area and MD 193 Corridor Sector Plan
- City of Greenbelt Pedestrian and Bicyclist Master Plan, underway



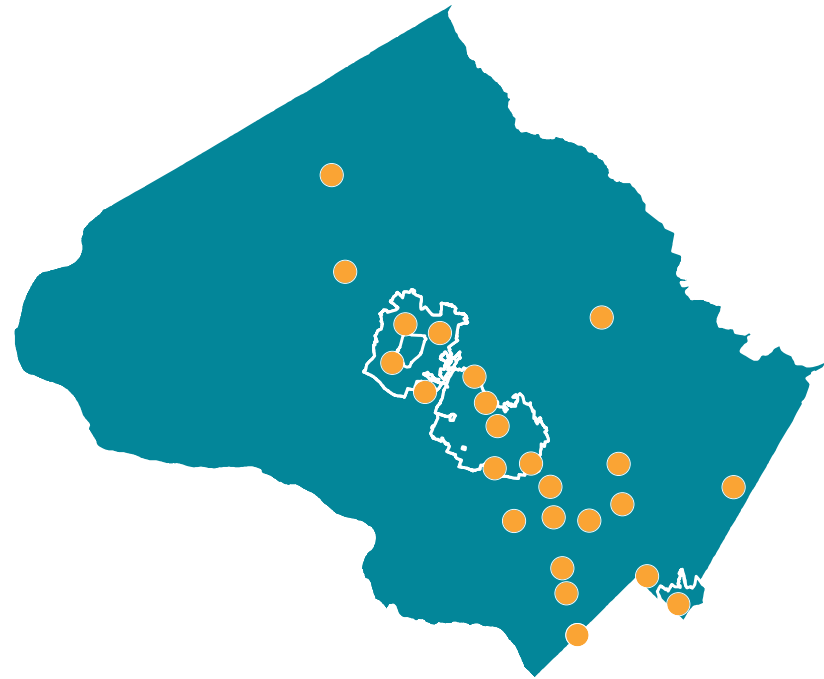
Montgomery County

Montgomery County's planning has focused on Activity Centers along both sections of the Red Line, the proposed Purple Line, and the proposed Corridor Cities Transitway. One of the County's most significant planning efforts is the Countywide Transit Corridor Functional Master Plan, the first comprehensive update of the Master Plan of Highways since 1955. The plan focuses on bus rapid transit, but also addresses bicycle, pedestrian, and MARC improvements to create a fully-functioning network of transportation options. This approach will fundamentally shift expectations and services for suburban transportation. The County recently got a boost from the State of Maryland's commitment to invest a billion dollars in new transportation projects in the County, with significant funding going to the Purple Line and Corridor Cities Transitway.

In recent years, the County has completed major planning efforts along the Red Line to revitalize White Flint and Wheaton, and a plan to encourage mixed-use development around the underutilized Glenmont Metro station is currently under review. The White Flint, Rockville South/Twinbrook, and Wheaton Activity Centers and other areas along the Red Line have seen major mixed-use, urban development proposals advance under the newly-adopted plans. In White Flint, the County plans to transform Rockville Pike into a boulevard with street trees, improved pedestrian amenities, and a grid of walkable streets connecting the Pike to surrounding neighborhoods. In Wheaton, the County adopted in 2012 the Wheaton Central Business District Sector Plan, which aims to celebrate the community's diversity and character through improvements to the urban environment. Several catalytic mixed-use development projects underway in Wheaton will bring new retail amenities, housing, and office space. The Maryland-National Park and Planning Commission is also considering moving the Montgomery County Planning and Parks Departments to Wheaton in order to advance revitalization efforts.

Highlights

- The Purple Line, expected to begin service in 2020
- Corridor Cities Transitway, expected to begin construction in 2018
- Glenmont Sector Plan, draft approved 2013
- Wheaton Central Business District and Vicinity Sector Plan Update, approved 2012
- White Flint Sector Plan, adopted 2010



City of Rockville

Implementation of the Town Center Master Plan remains a focus. In 2007, Rockville Town Square opened with a new public plaza, a library, restaurants, an arts center, a business incubator, residences, and offices. The City and County invested \$100 million in Town Square, leveraging well over \$300 million in private investment. More recent development in Town Center includes a new office building housing the headquarters of Choice Hotels International, and a mixed-use project that will include Choice's headquarters hotel, new residences, and retail.

The City of Rockville is focused on transforming Rockville Pike into an attractive, economically-vital mixed-use corridor, offering an improved environment for pedestrians, drivers, transit, and cyclists. Key development projects in the Rockville Pike corridor include Twinbrook Station, Twinbrook Metro Place, and Twinbrook Square, which will bring a mix of uses, including new affordable housing and a full-service grocery store, near the Twinbrook Metro.

Other Activity Centers in the City continue to see investment, including Montgomery College Rockville, King Farm/Rockville Research Center/Shady Grove, and Tower Oaks.

Highlights

- Updated Rockville Pike Plan, and new development
- Rockville Town Center
- Expansion at the Montgomery College Rockville Campus
- New residential and office development in King Farm, Upper Rock, and Tower Oaks



City of Takoma Park

The City of Takoma Park is encouraging development and revitalization in two priority areas: around the historic Main Street area adjacent to the Takoma Metro station in the District of Columbia, and along the New Hampshire Avenue corridor. Along Main Street, three large mixed-use developments are underway adjacent to the City's boundary in DC. On New Hampshire Avenue, the City is improving multi-modal facilities at the intersection with East-West Highway, and recently developed sector plans with Montgomery County and Prince George's County to enhance the Takoma/Langley Crossroads on the northeast edge of the city. The Crossroads will be site of a new bus transit station and future stop on the proposed Purple Line line. The City is also making pedestrian and environmental improvements on Flower Avenue, adjacent the Washington Adventist Hospital and University. Recent and proposed grant programs have supported façade improvements, pedestrian amenities, and green building practices on several redevelopment projects across the City, leveraging millions in private investment.

Highlights

- Takoma/Langley Crossroads Sector Plan, approved by Montgomery and Prince George's Counties
- Takoma/Langley Crossroads Transit Center, funded for construction
- Ethan Allen Gateway Streetscape project, funded for construction
- Flower Avenue Green Street, funded for construction

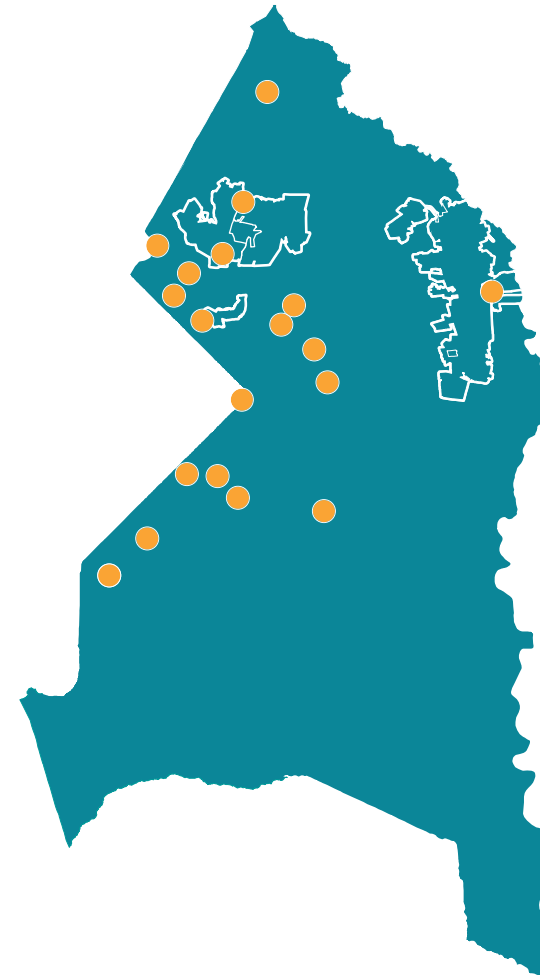


Prince George's County

Prince George's County is working to focus development around its Metrorail stations and planning for the long-awaited Purple Line. To encourage development, the County is updating its General Plan and engaging residents about the most appropriate place to create a new downtown for the County. The County is also planning around key Metrorail corridors such as the Green Line and Blue Line. In recent years, a number of catalytic development projects have helped kick-start development activity in the County. These include National Harbor, the Arts District in Hyattsville, Woodmore Town Center, and University Town Center. Other catalytic projects in the works include a new mixed-use development at New Carrollton that will be home to Maryland's Department of Housing and Community Development, a new Cafritz mixed-use project in Hyattsville anchored by Whole Foods, a new County Hospital, and potential Casino. The County is also utilizing various incentives to attract new development at transit, such as a new \$50 million economic development incentive fund and state and local incentives that give priority consideration and financial assistance to projects around transit stations.

Highlights

- Plan Prince George's 2035, General Plan update currently underway
- The Purple Line, expected to begin service in 2020
- New Hospital
- New Casino



City of Alexandria

The City of Alexandria is currently managing revitalization and redevelopment transformations throughout the City, particularly in major transportation corridors. Several projects at Metrorail stations include a new National Science Foundation headquarters at Carlyle, boutique hotels in Old Town, and plans around the Braddock Road Metro station, which will redevelop aging public housing stock into a larger mixed-income, mixed-use development.

Areas along Interstate 395, which include Beauregard and Landmark/Van Dorn, have major redevelopment proposals underway. A plan was adopted for Beauregard in 2012 and the Mark Center has served as a catalyst for redeveloping the area into a series of new urban neighborhoods containing a mix of uses, open space, a variety of housing opportunities, and integrated transit. The City is working to advance new transit lines that will connect a redeveloped Landmark Mall and Van Dorn Metro station to Beauregard using a dedicated right-of-way.

Another major redevelopment site is Potomac Yard, where the City is planning for a new infill Metro station and bus-rapid transit line along Route 1. The Potomac Yard Plan is an ambitious redevelopment proposal that aims to add 4 million square feet of office, 3,000 new residential units, hotels, and retail amenities on a new grid of streets. The redevelopment has been underway for several years and is occurring in phases. To accommodate and incentivize new development in many of these Activity Centers, the City is building new transit, streetscape improvements, and water/sewer infrastructure.

Highlights

- Proposed Potomac Yard Metro Station
- Proposed bus-rapid transit line along Route 1 in Potomac Yards
- Proposed bus-rapid transit line connecting Van Dorn Metro station to Beauregard
- Updated Beauregard Small Area Plan
- Relocation of the National Science Foundation at Carlyle/Eisenhower East



Arlington County

Arlington County has been focusing on enhancing its existing Metrorail corridors and planning for new transit and revitalization along Columbia Pike. New development projects continue to reshape the Rosslyn-Ballston Corridor, and the County recently launched a planning effort focusing on improving Rosslyn. The Base Realignment and Closure (BRAC) process, which will result in the loss of approximately 13,000 jobs from Crystal City, prompted Arlington County to initiate the Crystal City Sector Plan to reconsider the area's future. The County used the opportunity to redefine the community's vision for the area, which includes replacing and modernizing the aging building stock and transportation network. Through partnerships with area stakeholders, including the Crystal City Business Improvement District, Arlington helped create a revitalization plan envisioning the area as an urban community with better transit options, new urban streets, open spaces, and neighborhood-oriented services.

The County has also focused its planning efforts on Columbia Pike, where the addition of a proposed streetcar line is expected to spur significant new development. Since 1998, the County has developed a number of plans and studies to support the Columbia Pike Streetcar and revitalization of the corridor; plans include the retention of over 6,000 affordable housing units and form-based code zoning.

Highlights

- New Crystal City Sector Plan and Crystal City Business Improvement District
- Proposed Columbia Pike Streetcar
- New Columbia Pike Neighborhoods Area Plan and Neighborhoods Form Based Code
- Transportation Capital Fund
- Newly added Capital Bikeshare and bikeway enhancements

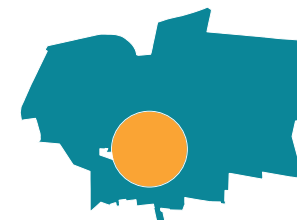


City of Fairfax

The City of Fairfax adopted a new Comprehensive Plan in 2012, which encourages opportunities to enhance its old town character and connect surrounding neighborhoods. Key projects in the downtown area include the Layton Hall Apartments and a new park/public square. The Fairfax City Activity Center is close to George Mason University, making the area attractive to both families and younger households.

Highlights

- City of Fairfax Comprehensive Plan, adopted 2012
- Layton Hall Apartments, approved 2013
- Planned Park/Public Square



Fairfax County

Fairfax County is focused on development opportunities along the Silver Line, Route 1, and Route 28 corridors, in Fairfax Center, and adjacent to Arlington and Alexandria. A main priority in recent years has been the creation and implementation of the Tysons Comprehensive Plan, which aims to redevelop Tysons into a walkable, sustainable urban center with up to 100,000 residents. The area has four new Silver Line Metro stations, and new infrastructure including a street grid, streetscape improvements, public facilities, and parks. Several development projects adjacent to the Tysons Silver Line stations have been approved or are currently underway. The County is also planning transit-oriented districts at other new Silver Line stations, including Reston Town Center, Wiehle-Reston East, Herndon, and Fairfax Innovation Center. To help finance the Silver Line, the County is using a unique tax district around the station areas to take advantage of rising land values.

Phased mixed-use development is expected and/or underway along the Metro Orange Line and southern end of the Blue Line, including Metro West, Merrifield/Dunn Loring, and the Springfield mall. Baileys Crossroads/Western Gateway, Annandale, Huntington, and areas along Route 1 have also been planned for revitalization, and Fairfax County is working with Arlington County to support the Columbia Pike Streetcar Line, which would connect Baileys Crossroads/Western Gateway to the Pentagon and larger Metrorail system.

The above planning and development activities demonstrate the success of Fairfax County's Concept for Future Development, adopted in the early 1990s, which called for establishment of a hierarchy of centers covering about ten percent of the county.

Highlights

- Silver Line Metrorail Extension, expected completion in 2018
- Reston Master Plan Studies
- Tysons Comprehensive Plan
- Planned Columbia Pike Streetcar route connecting to Baileys Crossroads/Western Gateway
- New Geospatial Intelligence Facility at Fort Belvoir
- Mosaic District at Merrifield/ Dunn Loring
- Baileys Crossroads Planning Study
- Annandale Planning Study
- Penn Daw Special Study



City of Falls Church

The City of Falls Church is developing Small Area Plans to guide the revitalization and redevelopment of its eight Opportunity Areas identified in the City's Comprehensive Plan. These areas, zoned for commercial and industrial uses, are located along West Broad Street - Route 7, Washington Street - Route 29, and Wilson Boulevard near 7 Corners. The City of Falls Church Planning Commission and City Council unanimously approved the North Washington Street and South Washington Street Small Area Plans and the City staff is currently drafting a new plan for the City Center /Downtown Area. The small area plans will promote dense mixed-use, smart growth development in the City's commercial corridors.

Several new mixed-use developments have been recently completed on Route 7, bringing new housing, hotel, office, and retail amenities to implement the City's vision for attractive mixed use retail areas along its major commercial streets. More recently, capital improvements are being considered to enhance the streetscape and envision a future light-rail line on Route 7 that may connect to the East Falls Church Metro Station. The City is also focused on developing linkages with the West Falls Church and East Falls Church Metro stations, both of which are just outside city boundaries. As of January 2014, 36 acres of additional land at Route 7 and Haycock Road will be transferred from Fairfax County and added to the City of Falls Church, including the existing George Mason High School and Mary Ellen Henderson Middle School. Approximately 30 percent of that land area will be available for commercial development. The location near the West Falls Church Metro Station and Route 1-66 adds to the development potential of the new site which will become the next opportunity area to be studied by the City.

Highlights

- Small Area Plan Schedule, approved 2011
- North Washington Street Small Area Plan, adopted 2012
- South Washington Street Small Area Plan, adopted 2013
- City Center/Downtown Plan Draft, adoption anticipated March 2014
- Gateway mixed use development underway
- Hilton Garden Hotel under construction
- South Washington Street transportation improvements and proposed Transit Plaza being designed
- 301 West Broad Street, including Harris Teeter grocery store and Rushmark developments, approved
- South Washington Street, The Reserve at Tinner Hill – Lincoln Properties, approved



Loudoun County

Loudoun County is planning for most of its future development in Activity Centers along the Route 28, Route 7, Route 50, and the Silver Line Metrorail corridors of the eastern part of the County, as well as the Leesburg Activity Center.

Route 28 is a key north-south corridor that links several Activity Centers to Dulles Airport and the new Silver Line. The Route 28 South Activity Center will be home to Dulles World Center, a large mixed-use development with hotel, office, residential, and retail uses in close proximity to Dulles Airport, the Dulles Toll Road, and the future Metrorail Route 28/CIT station.

Along the Silver Line corridor, the County has planned compact, high-density transit-oriented developments including Moorefield Station and Loudoun Station that will provide residential, commercial, public, and employment uses. To implement the vision for the Silver Line corridor, including the Silver Line and a street grid, the County used a mix of zoning incentives, proffers, and a Metrorail Tax District.

Another significant project currently under development is One Loudoun along Route 7, a key east-west corridor in the County. One Loudoun will have several million square feet of office uses, commercial retail, service uses, and residential units, as well as a minor league baseball stadium expected to open in spring 2014.

Highlights

- Silver Line Metrorail Extension, expected completion in 2018
- Approved developments along Silver Line: Dulles World Center, Moorefield Station, Loudoun Station
- One Loudoun project, including a minor league baseball stadium, under development



City of Manassas

The City of Manassas is focusing on strengthening its historic downtown. The Old Town Manassas Sector Plan and Mathis Avenue Sector Plan, along with new capital improvements and revitalization efforts, are resulting in new and expanding development in the City. Streetscape improvements to Main Street and Battle Street improved the pedestrian experience and support new and existing businesses. Additional housing is under development in Old Town to take advantage of the walkable downtown, retail amenities, museums, the historic VRE/Amtrak Manassas Railway station, and the Manassas Regional Airport.

The City of Manassas is also partnering with Historic Manassas, Inc., a nonprofit that focuses on enhancing Old Town Manassas through façade improvements, banners, window displays, and special events programming that draws residents downtown and reinforces the area’s historic identity. New restaurants and amenities such as the Loy E. Harris Pavilion are helping to create a vibrant downtown in Manassas. The Harris Pavilion hosts the farmers market, concert space, and ice skating rink, in addition to other events throughout the year.

Highlights

- Main Street streetscape enhancements
- Old Towne Square Townhouses
- Loy E. Harris Pavilion



City of Manassas Park

Manassas Park is planning for additional residential, office, and retail uses and greater density in the Manassas Park Activity Center, which includes the downtown and the Manassas Park VRE station. The City Center development, completed in 2007, is the first major component in developing a vibrant downtown area for Manassas Park. The City is working on additional capital improvements and tax incentives to encourage more development in the downtown district.

Highlights

- City Center Redevelopment District Plan
- City Center mixed-use development



Prince William County

Prince William County's development and revitalization efforts are focused along Route 1, and in areas surrounding Manassas and Manassas Park. North Woodbridge, an Activity Center located along Route 1 close to a VRE station and Belmont Bay, is part of the Potomac Communities Revitalization Plan. The Plan lays the foundation for redeveloping the area's strip retail and aging manufacturing sites into a vibrant, walkable, mixed-use center supported by natural amenities including the Occoquan River waterfront and regional transportation connections. The plan aims to revitalize the area by bringing a mix of new jobs, retail options, and amenities. Since the plan's adoption, new development projects approved or underway included Belmont Bay, Rivergate, and a new George Mason Biological Research Center. The County is also supporting North Woodbridge's revitalization through new infrastructure enhancements to streets, trails, and the VRE Woodbridge Station.

Highlights

- New multi-family developments in Belmont Bay (underway) and Rivergate (approved) totaling over 1,400 units
- Woodbridge VRE Station Area Improvements
- Interchange improvements to Route 1 and Route 123
- Potomac Heritage National Scenic Trail



VIII. Next Steps





Place + Opportunity: Strategies for Creating Great Communities & a Stronger Region provides goals, strategies, tools, and resources to help the region's Activity Centers "be all they can be." The guide is the result of extensive work and collaboration by Project Team and Steering Committee members, the Region Forward Coalition, local and federal agencies, and private and nonprofit partners. Following approval of the guide by the COG Board of Directors, these partners will need to continue to work together to ensure its successful implementation. While each member will play a unique role in advancing the framework of *Place + Opportunity*, ongoing and expanded partnerships will be needed to help the region's Activity Centers achieve their full potential.



As the regional planning organization and key convenor of public agencies in the region, COG can take a number of actions to expand support for this report and begin implementation. Below are recommended next steps for COG to pursue:

- Through a partnership with Urban Land Institute, help select and fund three Technical Assistance Panels (TAPs) projects each year for three years, beginning in 2014. The TAP projects will all be located in Activity Centers, and will represent DC, Virginia, and Maryland. COG will make an effort to recruit and select projects representing a variety of place and opportunity types.
- Develop toolkits and offer technical assistance to interested jurisdictions on how to apply information in the report. In particular, COG can provide additional assistance to jurisdictions on how to apply the detailed urban form analysis done for each Center to inform placemaking efforts and improve walkability in Activity Centers. Technical assistance can be provided one-on-one and through webinars.
- Analyze performance of individual Activity Centers among other Centers of the same place type or opportunity type, or within the same jurisdiction, to identify "high performers." These high performer Centers will provide a set of diverse, aspirational examples of strong Centers to help communities benchmark their progress, and facilitate regional knowledge sharing and dissemination of best practices.
- Use *Place + Opportunity* to inform strategic grantmaking decisions through the Transportation Planning Board's Transportation and Land Use Connections (TLC) program. The TLC program awards grants of up to \$60,000 for planning and pre-construction activities that address the relationship between land use and transportation. *Place + Opportunity*, particularly its urban form analysis, could be used as a factor in selecting and awarding projects.
- Select a limited number of Activity Center to study on an ongoing basis over the short term, in order to track implementation and measure progress over the next five years.

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Appendix A

Programs & Resources for Implementation

A wide range of stakeholders are involved in the place-making, economic, and community development activities described in Sections IV and V. Traditionally, the public sector has been responsible for the implementation of many of these investments. Local governments have taken the lead in planning and community building and have provided project subsidies through redevelopment and project entitlements; transit agencies have taken the lead on making station area access improvements; state and federal transportation agencies have provided funding for capital projects; and Metropolitan Planning Organizations (MPOs) have distributed federal transportation dollars to localities to make local access improvements and catalyze supportive development.

The private and nonprofit sectors also play critical roles. In addition to providing residential, commercial, and office development, private sector stakeholders have also contributed significant infrastructure and public realm improvements in conjunction with their development projects. Community based organizations and other nonprofit groups often provide assistance to residents and businesses, and advocate for neighborhood revitalization and policy change. Philanthropic foundations fund community investments, as well as the advocacy and policy work necessary to improve access to opportunity and community vitality.

The interdisciplinary nature of community and economic development requires effective collaboration across these public, private, and nonprofit sectors. While stakeholders will continue to play distinct roles, successful development of the region's Activity Centers will require better

coordination and cooperation of all of these stakeholders over a sustained period of time.

Many of implementation strategies and tools needed in Activity Centers can be addressed by resources and grant programs that are already in place. Table 3 summarizes a variety of these resources and programs at the regional, state, and federal levels, and the key stakeholders involved. (Federal programs compiled by Reconnecting America, 2013.)



Implementation Programs & Resources

Table 3

Program/Resource	Description	Eligible Applicants
REGIONAL		
Transportation-Land Use Connections (TLC) Program	The TLC Program provides support to local governments in the Metropolitan Washington region as they work to improve transportation/ land use coordination. Through the program, the Transportation Planning Board provides communities with technical assistance to catalyze or enhance planning efforts.	Any member jurisdiction of the TPB is eligible to apply.
ULI-Washington Technical Assistance Panels (TAPs)	TAPs provide expert, multidisciplinary advice to public agencies and non-profit organizations facing complex land use and real estate issues in the Washington metropolitan area. Drawing from ULI Washington’s extensive membership base of experienced real estate professionals, panels offer objective and detailed advice on a wide variety of land use and real estate issues ranging from site-specific projects to public policy questions.	Local governments, nonprofits, or community-based organizations
STATE		
MARYLAND		
Main Street Maryland	The program strives to strengthen the economic potential of Maryland’s traditional main streets and neighborhoods. Using a competitive process, Main Street Maryland selects communities that have made a commitment to succeed and helps them improve the economy, appearance, and image of their traditional downtown business districts.	Maryland communities with a minimum population of 1,000 and a defined central business district with a significant number of historic commercial buildings
Maryland Local Government Infrastructure Financing	The Maryland Department of Housing and Community Development Community Development Administration (DHCD CDA) issues bonds, on behalf of counties, municipalities, and/or their instrumentalities, to finance projects that serve the community at large. These projects can include, but are not limited to, streetscape improvements, transportation enhancements, and water and sewer treatment facilities.	Local governments and their agencies
Maryland Community Services Block Grant (CSBG)	The CSBG provides a range of services designed to assist low-income people in attaining the skills, knowledge, and motivation needed to achieve self-sufficiency. The services and activities provided by the CSBG agencies vary in accordance with the needs of each community to include: housing, Head Start education for youth, nutrition programs, transportation, employment services, and emergency services.	Maryland Community Action Agencies

Program/Resource	Description	Eligible Applicants
Maryland Downtown Development Association (MDDA)	MDDA is a statewide organization of professionals aggressively promoting the health and vitality of Maryland’s downtowns and traditional commercial business districts through its conferences, newsletter, mentoring, and professional network.	N/A
Maryland Neighborhood Housing Services Program (NHS)	NHS organizations partner with residents, financial institutions, community organizations, local governments, and the State to stabilize and improve the housing market in targeted low- and moderate-income neighborhoods. Through matching grants, Maryland supports a portion of the operating costs of three NHS corporations, each of which has been certified by the Neighborhood Reinvestment Corporation.	NHS Corporations certified by the Neighborhood Reinvestment Corporation
Maryland Office and Commercial Space Conversion Initiative	The Office and Commercial Space Conversion Initiative was created in 1998 to assist in the revitalization of Maryland’s downtown areas by converting older office and commercial space into new, market-rate, rental housing. The program is designed to supplement conventional financing. There are no income limits and processing requirements are limited to those that are necessary in keeping with prudent lending practices and to ensure compliance with the program’s statutory requirements. A recommendation from local government is required as a condition for the submission of an application.	Local governments
Maryland Smart Sites	Smart Sites are site-specific capital projects that encourage public and private investment and green building practices in existing Maryland communities. Smart Sites show how State and local partners can work together to coordinate and align investment in innovative ways that catalyze smart growth in appropriate areas throughout Maryland. Smart Sites is an element in the Governor’s Smart Green and Growing initiative.	Capital projects nominated by local governments and State agencies
Maryland Strategic Demolition and Smart Growth Impact Fund (SGIF)	SGIF seeks to catalyze activities that accelerate economic development, job production, and smart growth in existing Maryland communities. The SGIF aims to improve the economic viability of “grey field development” which often faces more barriers than sprawling “green field development.” Since funds are limited, awards will focus on those smart growth projects that can have a high economic and revitalization impact in their existing communities. Eligible activities include site acquisition and assembly, demolition, site development, including public infrastructure improvements, and construction-level architectural and engineering designs.	Local governments, nonprofit community development organizations
Maryland Sustainable Communities	As a result of the Sustainable Communities Act of 2010, effective June 1, 2010, all previously designated Community Legacy Areas and Designated Neighborhoods will be known as Sustainable Communities. Local governments are eligible to apply for designation as a Sustainable Community, which makes them eligible for benefits including the Neighborhood Business Works, Community Legacy, and Strategic Demolition and Smart Growth Impact Fund.	Local governments

Program/Resource	Description	Eligible Applicants
Maryland Technical Assistance (TAG)	The Technical Assistance Grant program evaluates applications during two application rounds in each fiscal year for grants to nonprofit organizations, local governments, local development agencies, and local development corporations to obtain or provide advisory, consultative, training, information, and other services that will assist or carry out community development activities. Eligible project costs include, but are not limited to, consultants or services, a portion of general operating expenses, and other costs directly associated with community development projects.	Local governments, nonprofits and community-based organizations, local development corporations
VIRGINIA		
Community Development Block Grants (CDBG)	The CDBG program provides funding to eligible units of local government for planning and implementing projects that address critical community development needs, including housing, infrastructure, and economic development. The goal of the CDBG Program is to improve the economic and physical environment in Virginia’s communities through activities that primarily benefit low- and moderate-income persons, prevent or eliminate slums and blighting conditions, or meet urgent needs that threaten the welfare of citizens.	Local governments
Virginia Main Street Program (VMS)	Virginia Main Street Program is a preservation-based economic and community development program that offers a wide range of services and assistance to communities interested in revitalizing their historic commercial districts. The Affiliate Community option is for communities that are exploring downtown revitalization, designation, or that may not be eligible for designation. It provides access to all that are preparing for training and limited on-site assistance, as resources permit.	Local governments, public-private partnerships
Virginia Building Collaborative Communities (BCC)	BCC is a new effort designed to assist regions in creating and sustaining new economic opportunities across Virginia. The program promotes regional economic collaborations in economically-distressed areas to stimulate job creation, economic development, and build community capacity and leadership.	Local governments, regional partnerships, economic development organizations
Building Entrepreneurial Economies (BEE)	BEE provides grants and technical assistance to regional and local micro-enterprise development organizations (MDOs) that specialize in assisting non-traditional entrepreneurs. Assistance includes pre-concept counseling, business plan development, credit repair and counseling, credit access, and continuing technical assistance. To deliver these services, the MDOs also partner with banks, area businesses, educational institutions, each other, and/or other private and public entities within the community. These organizations provide a service that often is not otherwise available and are designed to support the entrepreneur, even after accessing capital. BEE seeks to engage MDOs that provide innovative processes to attract and assist micro-entrepreneurs.	Nonprofits, local governments, and regional agencies

Program/Resource	Description	Eligible Applicants
FEDERAL		
US Department of Housing and Urban Development (HUD)		
Building Neighborhood Capacity Program Training and Technical Assistance (BNCP)	Through the BNCP, five neighborhoods will be competitively selected, in consultation with the federal partners, and offered a range of training and technical assistance (TTA) to help them begin or sustain the process of revitalization, guided by comprehensive neighborhood revitalization plans, in concert with relevant local and state plans and planning processes.	Nonprofits, community-based organizations, universities
Community Development Block Grants (CDBG)	Federal block grant program intended to ensure decent affordable housing, community services for vulnerable neighborhoods, and job creation and retention of businesses	Local governments
Section 108 Loan Guarantees	Provides communities with a source of financing for economic development, housing rehabilitation, public facilities, and large-scale physical development projects	Local governments, CDBG entitlement and non-entitlement communities
HOME Program	Formula funding to create affordable housing for low-income households, in the form of direct assistance or loan guarantees. Funds can be used for most kinds of housing development, including acquisition and rehabilitation in the creation of low-income housing.	State and local governments
HOPE VI Main Street Program	Small community grants to assist with downtown revitalization of a historic or traditional central business district by replacing unused commercial space with affordable housing units.	Local governments with populations of 50,000 or less that currently have fewer than 100 public housing units
Choice Neighborhood Implementation Program	Funding is available to revitalize severely distressed public and/or HUD-assisted multifamily housing in distressed neighborhoods into viable, mixed-income communities with access to well-functioning services, high quality educational programs, public transportation, and jobs.	Local governments, public housing authorities, nonprofits, and some public-private partnerships
Choice Neighborhood Initiative Planning Grant	Funding to help communities develop comprehensive grassroots plans (Transformation Plans) that link affordable housing with quality education, public transportation, good jobs, and safe streets. Neighborhood revitalization plans should achieve three core goals: transform distressed public and assisted housing into energy-efficient and mixed-income housing, support positive outcomes for families who live in the target development (s), and transform high-poverty neighborhoods into viable mixed-income communities.	Local governments, public housing authorities, nonprofits, and some public-private partnerships

Program/Resource	Description	Eligible Applicants
US Department of Commerce, Economic Development Administration (EDA)		
Strong Cities, Strong Communities Visioning Challenge (SC2)	Funding will support the development and implementation of comprehensive economic development strategic plans. Grant recipients run a local Challenge Competition, inviting multidisciplinary teams to submit proposals for comprehensive economic development strategic plans establishing and promoting a vision and approach to stimulate local economic development.	Cities
Planning and Local Technical Assistance Programs	These programs will help communities develop the planning and technical expertise to support communities and regions in their comprehensive, entrepreneurial, and innovation-based economic development efforts. Under the Planning Program, EDA provides assistance to eligible recipients to create regional economic development plans in order to stimulate and guide the economic development efforts of a community or region.	States, local governments, universities, and nonprofits
US Department of Transportation (DOT)		
Congestion Mitigation Air Quality Improvement Program (CMAQ)	Support for transportation projects or programs that improve air quality and relieve congestion in areas that do not meet National Ambient Air Quality Standards. Includes capital transportation investments and pedestrian/bicycle facilities and programs.	States, public entities and public-private partnerships
MAP-21 Transportation Alternatives	MAP-21 provides funding for programs and projects defined as transportation alternatives, including: on- and off-road pedestrian and bicycle facilities; infrastructure projects for improving non-driver access to public transportation and enhanced mobility; community improvement activities; environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.	COG's Transportation Planning Board, State and local governments
Pedestrian and Bicycle Safety Program (DOT FHWA)	Conduct research and develop guidelines, tools, and safety countermeasures to reduce pedestrian and bicycle fatalities.	State/MPO allocated
Safe Routes to School	Funding to improve sidewalks, crosswalks, bicycle infrastructure, and street improvements near elementary and middle schools.	State DOTs
Section 5303 Metropolitan Planning; Section 5304-Statewide Planning; Section 5305-Planning Programs	These programs provide funds to support planning for transportation investment decisions in metropolitan areas and statewide; they are typically used to support planning for new and extension fixed rail projects paid for by New Starts. Eligible uses include planning for projects that protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.	State DOTs and MPOs

Program/Resource	Description	Eligible Applicants
Transportation Enhancements (DOT FHWA)	Helps expand transportation choices and enhance transportation through 12 eligible transportation enhancement surface transportation activities, including pedestrian and bicycle infrastructure and safety programs, landscaping beautification, historic preservation, and environmental mitigation.	State/MPO allocated
Transportation, Community, and System Preservation	Livability is a criterion that will be used to evaluate candidate projects. Planning grants, implementation grants, and research, could include transit projects, complete streets, streetscaping, ped/bike improvements or plans, implementation of transit-oriented development plans, traffic calming measures, and much more. Very flexible program— projects must improve relationships among transportation, community, and system preservation plans and practices.	States, MPOs, local governments
Transportation Infrastructure Finance and Innovation Act (TIFIA)	Provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA can help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues.	States, local governments, transit agencies, special partnerships/consortia
Transit Investment in Greenhouse Gas and Energy Reduction (TIGGER)	Provides funding for capital investments that assist in reducing the energy consumption of a transit system and capital investments that will reduce greenhouse gas emissions of a public transportation system.	Transit agencies or state DOTs
US Environmental Protection Agency (EPA)		
Building Blocks for Sustainable Communities	EPA will provide technical assistance to selected communities to implement development approaches that protect the environment, improve public health, create jobs, expand economic opportunity, and improve overall quality of life. Funding will also be given to communities facing community development challenges. Support provided by EPA or through non-profit organizations.	States, local governments, universities, hospitals, labs, public and private nonprofit institutions
Smart Growth Technical Assistance Grants	Annual, competitive solicitation open to state, local, regional, and tribal governments (and non-profits that have partnered with a governmental entity) that want to incorporate smart growth techniques into their future development.	Local governments
Environmental Justice Small Grants Program	The Environmental Justice Small Grants Program supports and empowers communities working on solutions to local environmental and public health issues. The program assists recipients in building collaborative partnerships to help them understand and address environmental and public health issues in their communities. Successful collaborative partnerships involve not only well-designed strategic plans to build, maintain, and sustain the partnerships, but also efforts to address local environmental and public health issues.	Nonprofits

Program/Resource	Description	Eligible Applicants
US Department of Health and Human Services		
The Community Transformation Grant Small Communities Program	The purpose of the grant is to reduce the rate of chronic diseases and to make improvements to the built environment in order to promote healthier lifestyles.	Government agencies and NGOs across a variety of sectors including transportation, housing, education, and public health
Health Impact Assessment to Foster Health Community Design	Seeks to promote an evidence-based approach toward community design decision-making through three major activities: first, improving surveillance related to community design so communities have reliable local data they can use; second, encouraging Health Impact Assessments (HIAs) of policies, programs, and projects that will affect community design; and finally, supporting evaluation within the field.	State and local governments, nonprofits, for-profit organizations, and universities
US Department of Treasury		
Low-Income Housing Tax Credits	Federal tax credits for affordable and mixed-income housing.	Developers
National Endowment for the Arts		
Our Town Initiative	Through Our Town, the NEA supports creative placemaking projects that help transform communities into lively, beautiful, and sustainable places with the arts at their core. The grantee projects will improve quality of life, encourage creative activity, create community identity and a sense of place, and help revitalize local economies. Grant awards are made to partnerships that consist of a minimum of a not-for-profit organization and a local government entity.	Local governments and nonprofit partners

Appendix B

Methodology for Place Types

Place + Opportunity builds on 1) typology approaches developed by Reconnecting America, which are currently in use by several metropolitan regions throughout the country, and 2) Brookings' *Walk This Way* study, which established the connection between walkable communities and economic performance.

Place types were identified based on analysis of:

- Urban form
- Market strength

Urban Form

The built environment of each Activity Center was assessed using the Irvine Minnesota Inventory (IMI) and the State of Place™ index, which have been used in numerous studies nationally and internationally to measure walkability and quality of place overall. The IMI is an audit tool applied at the street block level that measures 162 built environment characteristics tied to physical activity and walking. IMI data was collected for each of the 92 Activity Centers studied in this report. The State of Place™ index, a place rating and walkability diagnostic tool, was then used to evaluate these characteristics along ten urban design dimensions that are empirically linked to walkability, listed in Table 4 below.

The State of Place™ index was used to generate a profile for each Activity Center that graphs its performance for each dimension, allowing users to identify each Center's assets (high-scoring dimensions) and needs (low-scoring dimensions). State of Place™ performance for each Activity Center is summarized on the Activity Center profile pages, provided to each jurisdiction individually.

Jurisdictions can identify low scoring dimensions from the State of Place™ profile and choose which dimension is most important to address based on their capacity and aspirations. The urban form performance and needs for each Center can be found in the Activity Center profiles, which are provided to each jurisdiction.

State of Place™ Urban Design Dimensions

Table 4

State of Place™ Dimension	Description
Density	Measure of intensity based on building concentrations and height
Form	Measure of streetscape discontinuity (e.g. drive-thrus)
Connectivity	Measure of disconnectivity, potential barriers (e.g. six-lane roads)
Proximity	Presence of non-residential land uses
Parks & Public Space	Parks, playgrounds, plazas, playing fields
Physical Activity Facilities	Gym/fitness facilities and other recreational uses
Pedestrian & Bicycle Infrastructure/ Amenities	Curbscuts, sidewalks, street furniture, bicycle racks
Traffic Safety	Traffic signals, speed limit, traffic calming
Aesthetics	Attractiveness, open views, outdoor dining, maintenance
Personal Safety	Graffiti, litter, windows with bars

Market Strength

The strength of an Activity Center’s real estate market is a key indicator of the type and level of investment and development it can attract. Activity Centers with limited market activity require a focus on planning, partnerships, and new regulatory measures to spur development, and potentially an investment in basic infrastructure. Areas with stronger markets, however, may not need help attracting development, but instead need other improvements such as workforce housing or an enhanced public realm. Finally, emerging areas are Activity Centers that have some of the basic infrastructure in place and are gaining momentum in their ability to attract development. These areas may be good candidates for affordable housing or infrastructure improvements that may catalyze development.

Market strength was assessed on the basis of both market performance and market potential. Current market performance was assessed using residential rents (REIS data) and office rents (Costar data).

Market potential was evaluated using MetroLogic™, a model created by RCLCO that forecasts the market potential for future residential and office development by analyzing a location’s regional competitiveness to attract households and jobs. Metrologic™ combines consumer research and trend-spotting knowledge with market analytics and real estate economics to score the entire region based on a grid of one square mile cells. The MetroLogic™ model incorporates three sets of factors to determine market potential: regional access, location qualities, and supply characteristics. For the purpose of the Activity Center analysis, MetroLogic™ factors that overlapped with those underpinning the State of Place™ index were removed so that the MetroLogic™ score would be distinct from State of Place™. Table 5 summarizes the site selection factors analyzed in RCLCO’s MetroLogic™ scores for the Activity Centers:

Metrologic Factors

Table 5

Residential Factors	Office Tenant Factors
Regional Access (by Travel Time)	
<ul style="list-style-type: none"> • Number of jobs accessible by driving and transit • Number of amenities accessible by driving and transit (arts & entertainment, restaurants, and bars) • Number of major retail centers accessible by driving and transit 	<ul style="list-style-type: none"> • Number of executive housing units accessible by driving • Number of educated workers accessible by driving and transit
Location Qualities	
<ul style="list-style-type: none"> • <i>Amenities</i> • Poverty level • <i>Density of jobs and households</i> • Percent residential • School quality • <i>Parks and recreation</i> • <i>Walkability</i> 	<ul style="list-style-type: none"> • <i>Services/amenities</i> • Proximity to other employment • <i>Density of jobs and households</i> • <i>Walkability</i> • Transit accessibility • Office employment • Industry employment (by analyzed sector)
Supply Factors	
<ul style="list-style-type: none"> • For-sale affordability 	<ul style="list-style-type: none"> • Full-service rental rate • Submarket prestige

Note: Factors in italics were removed from the analysis due to overlap with State of Place™.



Methodology for Opportunity Types

To better understand the human side of Activity Centers, the project team used a mixed method to assess potential vulnerability and access to opportunity.

Vulnerability

The percentage of households below 40 percent of area median income (AMI) was selected to assess the potential vulnerability of residents in each Center. According to the American Community Survey, the Metropolitan Washington region's median household income for 2009-2011 was \$87,653¹¹. Forty percent of AMI is approximately \$35,000. This indicator was selected because it is one of the most reliable and consistent measures of economic vulnerability.

Opportunity Assets

Three indicators were combined to create an index of assets that promote equity and provide access to opportunity: **income diversity, housing affordability, and job access via transit.**

Income diversity is well-established as a key indicator of a healthy economy. An economy with few lower-income households is likely to have higher labor costs and consequently a less competitive market, while Centers with few moderate- and upper-income households often have difficulty attracting jobs and services. This indicator identifies how income-diverse each Center is relative to the region as a whole.

Housing affordability was measured using housing cost data from Housing + Transportation Index developed by the Center for Neighborhood Technology (CNT). Housing costs account for the largest portion of a typical household's expenses. Most experts agree that housing costs that exceed thirty percent of household income constitute a housing burden. A housing burden can have many adverse effects, including low household savings rate, lower educational attainment, high stress levels, and relying on or consuming lower quality food.¹²

Job access via transit was measured using an accessibility model developed and maintained by the Transportation Planning Board staff at COG that estimates the number of jobs currently accessible by transit from each Transportation Analysis Zone (TAZ) in the region within a given period of time. The project team chose 45 minutes as the commute time threshold, meaning that the model was used to determine the total number of jobs that can be accessed via a 45-minute transit commute from each Activity Center.

Each Activity Center was evaluated using a three-point scale for income diversity, housing affordability, and job access via transit. The scores were weighted to more accurately reflect the impact of each asset level, and the weighted score for each indicator was compiled into a composite asset score for each Center. The vulnerability and opportunity asset dimensions were then pulled together for each Center. Centers were then grouped into the four opportunity types based on similar scores. Additional factors, such as major planned transit projects (such as the Columbia Pike Streetcar) and redevelopment efforts were also considered in the process of grouping Centers into types.

Strategies to Address Urban Form, by State of Place™ Dimension

In addition to the place strategies and opportunity strategies in Section IV, a set of strategies were developed to directly respond to State of Place analysis. Using the primary placemaking needs identified on their Activity Center profile pages, jurisdictions can find the corresponding dimension on Table 6 to review potential urban form strategies.

Urban Form Strategies

Table 6

Primary Placemaking Need	Strategies
Form	Encourage redevelopment or reuse of empty and underutilized parcels
Density	Target underutilized, low-density retail areas for mixed-use or multi-use redevelopment
	Add/incentivize new mixed-use development
	Adopt urban design guidelines for new development that address the other State of Place dimensions (e.g. buildings that front the street, no monolithic buildings, fenestration, interesting signage, etc.)
Connectivity	Identify temporary uses for underutilized land, including farmer’s markets, community events, community gardens, etc.
	Mitigate barriers within the neighborhood (e.g. 6+ lane roads, blocks > 1000ft long, excessive driveways, etc.)
Proximity	Create wayfinding system to help pedestrians overcome/avoid barriers
	Consider opportunities for new walkable destinations, e.g. markets, gathering places, and services.
	Conduct local charrette to identify community needs (RE destinations)
Parks & Public Space	Consider opportunities and locations for temporary/flexible programming, e.g. food trucks, farmers markets, and public events
	Identify locations for parks and public spaces
	Form public/private partnerships to develop quasi-public spaces
Physical Activity Facilities	Provide for better programming/upkeep of existing parks and public spaces
	Increase access to existing public recreational facilities through partnerships with schools and other owners
	Provide additional recreational opportunities within existing parks

Primary Placemaking Need

Strategies

Personal Safety	Organize a “clean-up” campaign to address litter, graffiti, over-flowing/visible dumpsters
	Create a “beautification program” for abandoned lots/buildings
	Improve lighting, especially in public places/commercial centers
	Organize a community safety organization/group
Aesthetics	Address façade improvements for buildings in commercial centers/public spaces
	Organize community event/organization around public art
	Revise signage standards and consider signage/community-branding campaign
	Add street trees/flowers, etc.
Traffic Safety	Add pedestrian activated/automated signals in large and/or busy intersections; consider the most vulnerable pedestrians when allotting crossing time
	Add crosswalk markings in large and/or busy intersections
	Install traffic calming features in residential areas, especially those that are used as thru-fares
	Add curb bulb-outs in both residential and commercial roads
	Where needed/possible, upgrade traffic standards with additional signals and stop signs
	Add pedestrian islands in large, busy intersections
	In large or busy intersections, add protected left-hand turns; prohibit turning on red; or adjust turning radius to 90 degree angle
	Add, repair, and upgrade curb cuts as needed
Identify and evaluate traffic “trouble spots” in the neighborhood	
Bike/Pedestrian Amenities & Infrastructure	Address the availability and adequacy of sidewalks
	Add sidewalk buffers, e.g. street trees, landscaping, on-street parking, etc.
	Add bike lanes where feasible
	Consider the addition of bikeshare stations
	Adopt urban design guidelines that address streetscape/pedestrian amenities
	Plant street trees that provide shade
	Allow and encourage food vendors and other street vendors
	Add public restroom facilities in large commercial centers



Endnotes

- ¹ Disappearing Act: Affordable Housing in DC is Vanishing Amid Sharply Rising Housing Cost. DC Fiscal Policy Institute. May 2012.
- ² Update from the American Community Survey: Housing Affordability in the Washington, DC Metropolitan Area. Center for Regional Analysis, George Mason University, April 2013, 3.
- ³ Housing the Region's Future Workforce: Policy Challenges for Local Jurisdictions. Center for Regional Analysis, George Mason University. October 2011, page 23.
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- ⁶ Urban Land Institute, John McIlwain, 2012, Housing in America: The Baby Boomers Turn 65.
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- ⁹ Leinberger and Alfonzo.
- ¹⁰ Leinberger and Alfonzo.
- ¹¹ U.S. Census Bureau, 2009-2011 American Community Survey, Table B19013, Medium Household Income in the last 12 months (in 2011 Inflation-Adjusted Dollars).
- ¹² U.S. Department of Housing and Urban Development website, affordable housing portal http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/.

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ITEM 10 - Information

February 19, 2014

Briefing on Traffic Signal Timing/Optimization in the Washington Region

Staff

Recommendation:

Receive briefing on a COG/TPB survey on traffic signal timing/optimization in the Washington region, plus a practitioner perspective on signals activities. Today's presentation will focus on slides 2, 7 through 11, 13, 14, 17, and 18, with the remaining slides provided as background.

Issues:

None

Background:

In response to the TPB request for a signal timing/optimization status report, staff conducted a regional survey in spring 2013. The attached memorandum summarizing results was prepared and included in the Letters Sent/Received packet for the September 18, 2013 TPB meeting, and is the basis for today's presentation. Also included as background is a District Department of Transportation blog item on DDOT's signals activities.

Item #10

Briefing on Traffic Signal Timing/ Optimization in the Washington Region



Ling Li, P.E.
VDOT
and Chair, Traffic Signals Subcommittee

Andrew J. Meese, AICP
COG/TPB Staff

Transportation Planning Board
February 19, 2014

Background

- TPB requested a regional traffic signal optimization status report at the February 20, 2013 meeting
- A memo was presented at the September 18, 2013 meeting with the presentation being deferred to today
- Originated from the 2002-2005 signal optimization Transportation Emissions Reduction Measure (TERM)
- Periodic updates document ongoing regional practices

What Does It Mean for Signals to Be Optimized?

- Traffic signals re-timed for optimal performance, considering
 - traffic loads
 - cross traffic, left and right turns
 - pedestrians
- Coordination of multiple signals (e.g., downtown areas, corridors)
- Engineering rule-of-thumb: re-time every 3 years

Optimized Does Not Always Mean Minimal Delay for an Individual Motorist

- If there are high traffic volumes / left and right turns / high cross-traffic volumes
- If traveling in the opposite direction of predominant flow
- Ensuring the safety of and sufficient crossing time for pedestrians
- Sporadic issues (e.g. emergency vehicle movements) can temporarily impact signal timing

How Do We Know that Signals are Optimized?

- Engineers do not rely solely on the “raw” computer output
- Before and after field observations help verify that the optimization process has been successful
- Ongoing field observations and monitoring from the traffic control center are important, with fine-tuning if necessary
- These monitoring and spot checks activities, as well as responding to citizen inquiries and complaints, all help ensure the system remains working properly

Traffic Signals in Real Time

- Improved technologies make it easier for engineering staff to monitor traffic flow and make real-time adjustments
- Computer algorithms and technicians monitoring traffic can detect upstream conditions and anticipate signal timing adjustments to minimize delay
- Particularly effective in addressing non-recurring congestion caused by incidents and special events

TERM Context of Signal Timing/ Optimization: Then and Now

- In 2002, the regional Signal Optimization TERM offered a way to close a gap between the projected air quality performance/conformity of the CLRP and what was required
- In the years since, the air quality analysis context has changed:
 - Previous optimization achievements are now in the “baseline” conditions of CLRP air quality analysis and cannot be re-counted
 - There is no current gap to be filled between CLRP performance and target conformity requirements
 - Today’s EPA-mandated analysis methodology does not readily accommodate TERMS of this type (“MOVES” model vs. “MOBILE” model)
 - Today’s cleaner-running cars reduce air quality benefits of projects of this type
- Though the air quality conformity motivation for optimization may have been reduced, there are still congestion management and other reasons to continue optimization efforts

Survey

- TPB staff surveyed transportation agencies in April 2013
- 21 different agencies have ownership and/or maintenance responsibility for traffic signals in the Washington region
 - Not including military facilities/bases, excluded from the survey since their roads are not open to the public
- Survey focused on whether signals were optimized or checked within calendar years 2009-2012
 - Follows the 3-year engineering rule-of-thumb
- Responses reflect approximately 98% of all signals in the region that are subject to optimization
- Signals not subject to optimization were not included in the survey (e.g., firehouse emergency signals, pedestrian crosswalk flashers)

Timing/Optimization Methods

- **A signal was counted as re-timed/optimized if one or more of the following methods was utilized during the three-year 2009-2012 reporting period:**
 - **Computer optimized:** Use of software packages and detailed input data to pre-determine recommended timing plans
 - **Engineering Judgment:** Field-based observation by traffic engineers to verify timing
 - **Active Management:** Observation and adjustment of specially-equipped signals from a central control center by engineering staff, on a real-time basis, responding to quickly-changing traffic conditions
- **Not checked:** If none of the above methods were used in the three-year period for a given signal
- **No report:** For signals documented on regional lists but for which no report was received in this time frame

Timing Results (2009-2012)

- Approximate total signals in region: **5,500**
- Total optimized, checked, or adjusted in the three-year period: **76%**
 - Computer optimized: **47%**
 - Engineering Judgment: **7%**
 - Active Management: **22%**
- Not checked: **22%**
- No report: **2%**

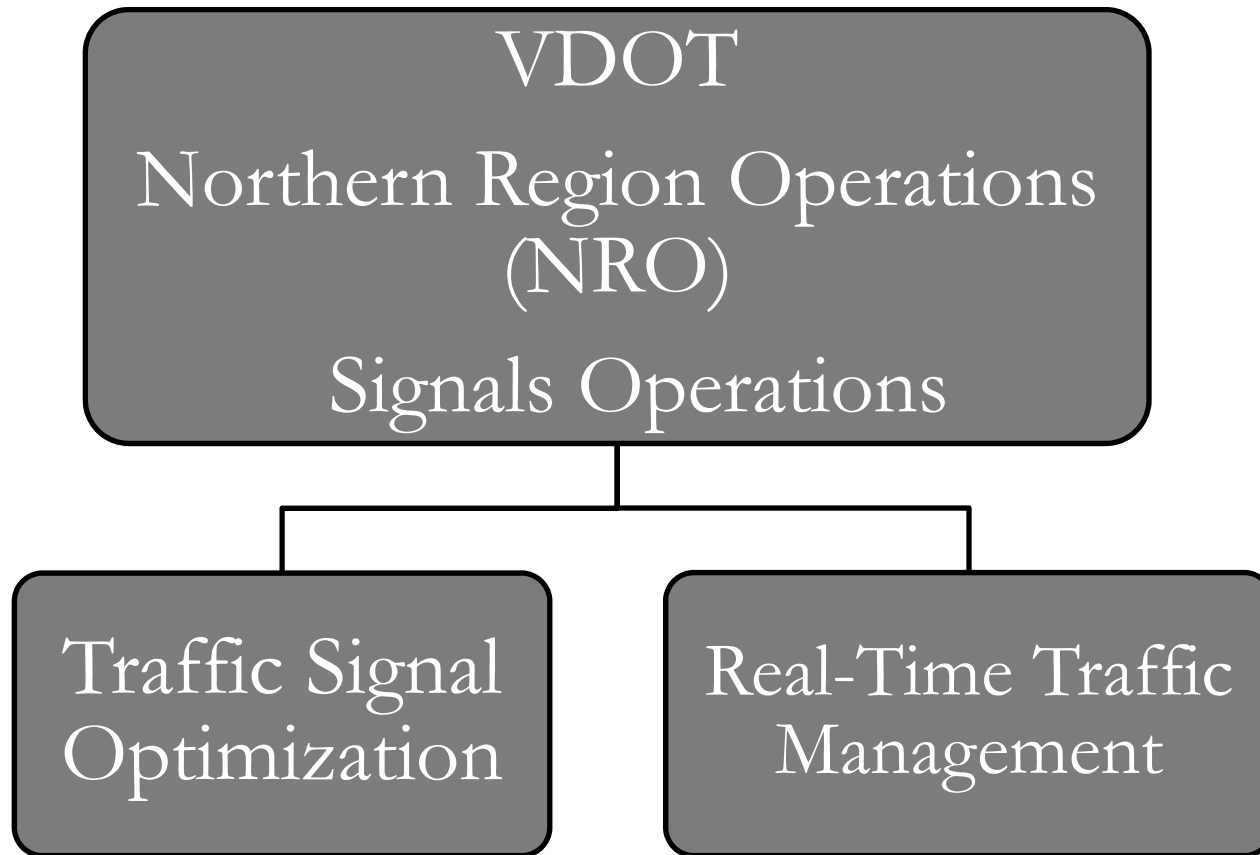
How is the Region Doing on Optimization Compared to 2009?

- Regional results overall held to a similar albeit lower level than three years ago (76% vs. 80%)
 - Regional results, though lower, perhaps better than expected due to this having been an especially difficult “belt-tightening” period for state and local agencies
 - Regional total of 4,200 optimized/timed signals compares favorably to the original TERM target of 2,946
- DDOT currently has a five-year signal re-timing project that will boost the regional average as of 2014
- The proliferation of advanced signal control technology has allowed agencies to improve traffic flow beyond what is possible with computerized pre-timed optimization methods alone

Outlook

- Continuing awareness of and commitment to safe and effective signals operations
- Effective interagency coordination through the Traffic Signals Subcommittee and other forums
- The benefits of providing sufficient resources to ensure good signals operations are widely recognized

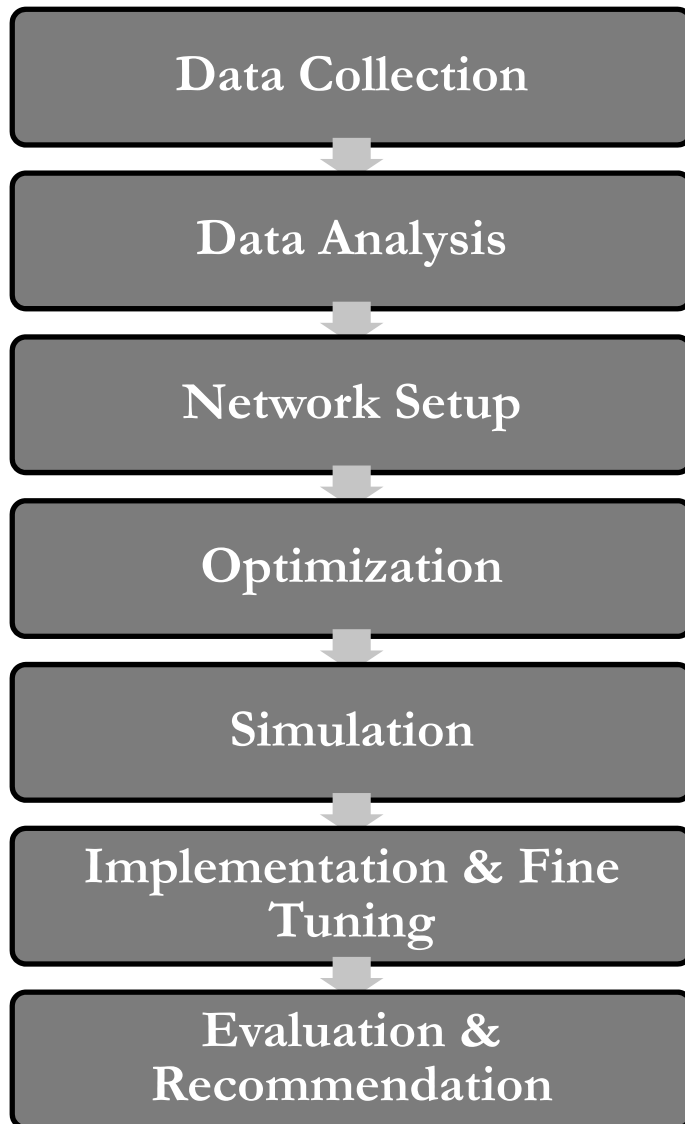
Example: VDOT



Traffic Signal Optimization

- Nearly 1,350 Signals
- 21 Networks
- 3 Counties - Fairfax, Loudoun and Prince William Counties.
- 8 Timing Plans
 - AM Peak, PM Peak, Midday Peak, Off-Peak, Weekend AM, Weekend PM, Saturday Peak and Sunday Peak.
- Special Timing Plans
 - Holiday Plans, 4th of July Plans, and other event plans

Traffic Signal Optimization Process



Traffic Signal Optimization Benefits

- Economic Benefits
 - Stop, Delay and Fuel Consumption
 - Benefit to Cost Ratio – 49:1 (Fourth Round)
 - Overall Savings - \$97,742,104 (Fourth Round)
- Environmental Benefits
 - Annual Emission Reductions of 555.24 metric tons (Fourth Round)
- Travel Time and Level of Service Improvements
- Update of Pedestrian and Vehicular Clearance times based on the latest MUTCD and VDOT guidelines
- Digital Library
- Operational and Geometric Recommendations

Real-Time Traffic Management

- Manage nearly 1,350 traffic signals.
- Implement real time signal timing changes in response to incidents, congestion, work zones, weather events, special events and emergency conditions.
- Coordinate with TOC (Transportation Operation Center) and local agencies during incidents.
- Monitor the performance of arterials using CCTV's, VICADS and MIST Central Signal System.
- Maintain the health of the arterial signal network system.

Real-Time Traffic Management

- **CCTV Cameras – 111 cameras**
- **SOC Hours**
 - Monday to Friday: 5:00 am to 9:00 pm
 - Saturday and Sunday: 9:30 am to 6:00 pm
- **Coverage during major events**
- **Staff on call to handle emergency situations**



Signal Operations Center (SOC)

SIGNAL OPERATIONS CENTER

REAL-TIME TRAFFIC NETWORK MANAGEMENT

- Arterial Networks Monitoring
- Real-Time Incident Management
- Congestion Management
- Work zone Management
- Weather Events and Emergency Management
- Special Event Management

SIGNAL SYSTEM HEALTH MANAGEMENT

- Monitoring & Reporting of CCTVs Status
- Monitoring Signals on Flash, Detector Status and Pedestrian Signal Status using MIST.
- Dispatching of Signal Technicians as per the need of the issue.
- Coordinating with Signal Contractors to Resolve Problems relating to Signals Under Construction.

COMMUNICATION AND INFORMATION PASS-DOWNS

- Documentation of Incidents
- Coordination with TOC Personnel, Traffic Engineers and Customer Service Center
- Discussion with the Management on critical and major operational issues
- Transferring of any on-going incidents to the oncoming shift personnel and TOC personnel.

National Capital Region Transportation Planning Board

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TO: Transportation Planning Board

FROM: Ling Li
Virginia Department of Transportation
and Chair, Traffic Signals Subcommittee

Andrew J. Meese
COG/TPB Staff

DATE: September 12, 2013

SUBJECT: Status Report on Traffic Signal Timing/Optimization in the Washington Region

Executive Summary

At the February 20, 2013 meeting, the Transportation Planning Board requested a status report on traffic signal timing/optimization in the region, as well as a review of the TPB's discussions of the topic in conjunction with a 2002-2005 Transportation Emissions Reduction Measure (TERM). This memorandum contains the results of an April/May 2013 TPB staff survey on the topic of signal timing, as well as associated information on background and on related traffic signals management activities by the region's transportation agencies. Key points are as follows:

- Survey results showed a rate of retimed/optimized signals in the region (within defined criteria) of 76%; 22% not retimed/optimized; and no report received for 2%. This is a similar but slightly reduced level of optimization compared to the last such survey in 2009.
- In 2002, credit was taken as a TERM in the regional air quality conformity determination process for an increased level of signal optimization. Such credits are now part of the "base" conditions for conformity determinations and cannot be counted anew in future emissions reduction measures/TERMs. Note that the region today still meets (in fact exceeds) the target set in the 2002 TERM for retiming signals.
- The world of traffic signal operations has evolved significantly since the 2002 TERM, including advancing technologies and increased real-time active management of signals, going above and beyond what is achievable in pre-set optimization. This memorandum describes a number of those activities.
- A total of 21 different agencies have ownership and/or maintenance responsibilities for the approximately 5,500 traffic signals on public roads in the National Capital Region.
- The costs of equipment installation and ongoing maintenance remain a constraint for signals agencies around the region.
- A presentation on one or more of these topics can be made at a future TPB meeting at the convenience of the Board.

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What Are Signal Timing and Signal Optimization?

Signal timing (definition adapted from Wikipedia) is the traffic engineering technique to allot right-of-way at an intersection, involving the determination of how much green time the traffic lights shall provide at an intersection approach, how long the pedestrian "walk" signal should be, and numerous other factors. Signal timing strives for the dual goals of safety and efficiency. Signal timing may be achieved in advance studies and the uploading of "pre-planned" timings, and/or in "real-time" adjustments of signals (if so equipped – see below for more information on adaptive and active management of signals).

The concept of signal optimization generally falls into the "pre-planned" category. Signal optimization is a traffic engineering concept whereby traffic signals (often groups of signals in corridors and/or isolated systems) are (re-)timed to reduce delay for vehicles on the roadway system while ensuring safety. In optimization studies, engineers use a combination of traffic volume counts, in-car and in-field travel time observations, control center observations, and computer analysis to determine signal timings given the complex interactions of traffic flows. The results for any one driver on any one trip may not appear to be "optimal", due to high traffic loads, cross-traffic, pedestrian movements, and other factors, but overall system delay should be minimized. An engineering "rule-of-thumb" recommends checking signal timing at least every three years because traffic patterns evolve.

Traffic signals allot time at intersections for safety, traffic flow, pedestrians, and other factors; an individual signal's timing needs to be balanced for these factors. Multiple nearby signals can be analyzed as a system to coordinate timings. Under certain conditions, a corridor with a predominating flow and direction can be timed for "progression", reducing delays for traffic in that flow. Signals generally have three or more timing plans, usually including morning peak period, midday, and evening peak period, and frequently additional plans such as weekend or overnight plans.

"Optimized", however, does not mean "without delay". The motorist may still experience delays even after signal or corridor optimization, if, for example:

- There are high traffic volumes / left and right turns / high cross-traffic volumes
- The motorist is traveling in the opposite direction of predominant flow
- The safety of and sufficient crossing time for pedestrians necessitate extra time
- Signals are optimized for multi-modal travel

It is overall system delay, not necessarily the delay experienced by a given individual motorist, which is minimized in optimization.

Changes since 2002 in the Air Quality Analysis Context of the Signal Optimization TERM

In 2002, the region committed to an increased level of signal optimization at a level of 2,946 signals over a three year period for air quality credits as a "TERM". At that time, this commitment helped

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the region achieve a finding of conformity with air quality standards. However, a number of changes have occurred in the years since that alter the air quality context of such a program. The former TERM level of optimization achieved is now assumed in the "base case" for regional air quality, and cannot be repeated. Also, the new Environmental Protection Agency-sanctioned "MOVES" model, in contrast to the old "Mobile" model, no longer readily accommodates analysis of TERMS of this type. Today's cleaner vehicle fleets also mean less impact for any optimization effort compared to 2002. Nevertheless, though the air quality conformity motivation for optimization may have been reduced, there are still congestion management and other reasons to continue optimization efforts.

Results of the Latest Signal Timing/Optimization Survey

According to regional records, a total of 21 different agencies have ownership and/or maintenance responsibility for traffic signals in the Washington region (this number excludes military bases/facilities which may have signals on their non-public roads). Thirteen of those agencies, covering an estimated 98% of the signals in the region, completed the recent TPB staff survey. The overall results of the survey show a slight decline in the percentage of traffic signals regionally which had been retimed within the 3-year "rule of thumb" window for the period ending December 31, 2012. An estimated 76% of the region's eligible traffic signals had been retimed or checked within the three-year window, in contrast to an estimated 80% as of the last report in 2009. This result, however, should be interpreted within the context of the comments below.

Summary Table of Regional Signal Timing/Optimization Results of 2009 and 2013 Surveys (Original TERM commitment = 2946 signals)

Survey Year	Total Signalized Intersections	Total Retimed		Retiming Method			Not Checked		No Report	
				Computer Optimized	Engineering Judgment	Active Management				
2013	5500	4200	76%	47%	7%	22%	1200	22%	100	2%
2009	5400	4300	80%	56%	24%	*	1000	18%	100	2%

* Combined with engineering judgement in the 2009 survey

Additional information/comments provided by respondents of the survey:

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- Regional results overall held to a similar albeit lower level to that of three years ago, in the context of widespread budgetary belt-tightening by involved transportation agencies; it is hoped that some upcoming anticipated investments will improve the regional picture.
- DDOT currently has a five-year signal re-timing project. This includes a phased approach, with the intent to touch all signals based on areas of concern. DDOT has also identified three corridors for possible deployment of an adaptive system.
- Signal optimization can help get an arterial closer to its design capacity but cannot increase capacity.
- Techniques are often combined; signals can be optimized using computer software followed by active field management for validation purposes.
- Active management is particularly useful to address non-recurring congestion caused by incidents and special events.
- Signal equipment must be properly maintained for signal timing to be effective.

Beyond Optimization: Other Traffic Signals Management Activities

Computer-based, pre-timed traffic signal optimization is just one of numerous activities undertaken by traffic signals agencies to ensure proper or improved operations of traffic signals. The systems described help signals (and support staff) do their jobs better, and have been the focus of a number of resource investments in the region in recent years. The following sections describe some of these activities (descriptions adapted from the Maryland State Highway administration and other sources).

Traffic Signals in Real Time

Since the adoption of the TERM in 2002, there have been technology changes (improved signals timing analysis programs, traffic detection equipment, video surveillance, traffic management centers) which make it easier for traffic engineering staff to monitor traffic flow and provide adjustments to signal timings from remote locations to address congestion caused by incidents, special events, and diverted traffic from other roads. Real-time traffic management, which is adjusting signal timing based on current demand, provides congestion relief above and beyond those obtained from the timing plans created by computer programs such as Synchro™. As can be seen from the results of the survey a number of jurisdictions have adopted such a practice either on a daily basis or during special events. Agencies such as the Virginia Department of Transportation and Montgomery County Department of Transportation actively manage their signals using the traffic operations center in real time.

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Adaptive Signal Control Technology (ASCT)

There are a number of situations when a computer-generated traffic signal timing plan may not produce the desired result as discussed above. To handle such a situation, implementation of ASCT which is performed by a computer program may offer an improvement over the existing operation. ASCT employs specialized detection equipment to adjust traffic signal timing based on real-time transportation demands – within an established set of parameters. The implementation of these systems requires the installation of specialized field equipment at the selected locations – representing additional costs to the implementing agency. The traffic signals subcommittee has discussed this subject and a number of jurisdictions in the region are considering the use of ASCT for selected corridors.

Management through Engineering Judgment/Troubleshooting

The third technique used by a number of jurisdictions is managing good efficient operation of signals through engineering judgment and troubleshooting. Whenever complaints are received traffic engineers visit the signalized intersection and using their experience and judgment adjust the signal timing to reduce delay and improve operations.

The techniques continue to provide improvements over a stand-alone optimized timing plan operation which otherwise may deteriorate over time.

Sustainment of Benefits

Benefits from retiming/optimization are, of course, limited if the corridor in question was already reasonably well-timed. Once a corridor is well-timed, benefits can only be maintained, not improved upon.

Multi-Modal Considerations Including Transit Signal Priority

Urban streets and roadways are multi-modal in nature (e.g., including buses, pedestrians, bicycles, trucks, others). Best practices in traffic engineering recognize this in the operation of traffic signals, including the levels of bus, bicycle, and pedestrian activities, and ensuring that they are accommodated in traffic signal timing.

Transit Signal Priority (TSP) Systems

Transit Signal Priority is the modification of traffic signal timing to benefit transit vehicles operating along a roadway. TSP gives additional time to the green phase for buses or streetcars, by extending the green light, providing an early or advanced green light, or adding an extra green

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phase just for transit. The \$58.8 million Transportation Investments Generating Economic Recovery (TIGER) grant awarded to the TPB in February 2010 for Priority Bus Transit in the National Capital Region includes a project to install TSP at up to 77 intersections along seven major bus corridors across the region and at another 82 signals in downtown DC. The TIGER funded TSP system will initially be installed and tested on VA-7 (Leesburg Pike) in 2014, by WMATA in close coordination with Virginia DOT and the partner jurisdictions. The system will subsequently be tested in the District and in Maryland, for their respective, different wayside traffic signal technologies, with completion planned for 2016.

Pedestrians

Traffic signal timing is an essential factor in accommodating pedestrians at intersections, and safety is paramount. Agencies must consider pedestrian crossing time and wait time within their overall timing/optimization processes. Pedestrian countdown signals have come into widespread use in the region, also aiding safety.

Equipment Upgrades

Detection Systems

Until recently, the most commonly used vehicle detectors were inductive loops, typically installed in saw cuts in the pavement, with detected vehicles passing over them. Inductive loops are now being supplanted by other technologies that provide engineering advantages. Wireless detectors that are smaller, nicknamed "hockey pucks", are easier to install than the old, large inductive loops, and provide maintenance advantages as well. Video detectors are another predominant form of vehicle detection for traffic signals. A video-based detector consists of a video image acquisition system (e.g., visual spectrum or infrared camera), digitizer, appropriate cabling, and a video image processing unit, with appropriate vision processing software. Signal detection cameras generally are separate from traffic management or law enforcement cameras because of the need for signals cameras to remain fixed on their assigned detection points, and cannot be panned or zoomed.

Signals Operations Centers

Some agencies have installed sophisticated communications networks that link traffic signals, traffic cameras, and detectors into a central traffic operations center. These centers have two-way communications with field equipment that allows traffic technicians to monitor traffic signal data and video, and make changes to signals right from the office. The ability to monitor traffic signals from a central location also may enable instant notification of equipment malfunction (loss of power, detector malfunction, etc.), allowing staff to respond quickly to malfunctions and mitigate problems in real time.

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LED Signal Heads

Light-Emitting Diodes (LEDs) are now the predominant form of illumination for signal heads, having largely superseded incandescent signal lamps. The higher efficiency of LEDs means that their electrical power consumption is vastly reduced, so running costs for power supply are correspondingly low. LED signal heads with their low energy consumption thus represent a valuable contribution to environmental protection: saving up to 90% of the energy consumed by signal lamps and lasting up to 15 years. Typical power consumption for a LED head is 30 watts compared to 160 watts for a regular signal head. It is also more feasible to provide battery-based power back-up systems for LED signals.

Power Back-Up Systems for Signals

Traffic signal power back-up systems provide emergency power to traffic signals when the input power source, typically public utility electric power, fails. Power back-up systems have become more practical and common in recent years as traffic signal lights have been converted from incandescent to efficient LED lights. Regional events such as the disruptive January 26, 2011 snow and ice storm and the June 29, 2012 derecho illustrate the need for such systems. There are two types of power back-up system widely used in the National Capital Region: battery-based and generator-based.

Battery-based power back-up systems provide instantaneous or near-instantaneous protection from input power interruptions by means of one or more attached batteries and associated electronic circuitry. As with any battery-powered systems, batteries will run down with use, or even at rest, and have to be maintained and replaced. The main advantage of battery-based systems is that they can start working immediately and seamlessly if main power fails, without the need for a technician to be deployed to the site. The main disadvantage is that the operational time enabled under battery power is limited, usually between two and eight hours depending on the size of the signal and its operational mode (full color versus flashing yellow/red). For battery back-ups, the signal must be composed of LED lights, and the traffic signal cabinet(s) at the intersection must be properly equipped to accommodate the battery arrays.

Generator-based power back-up systems require diesel generators to be deployed to traffic signals when power outages occur. Signal cabinets must be outfitted to handle the deployment of the generator, and, of course, generators must be obtained by the agency or jurisdiction, and be available for deployment. The main advantage of a generator system is that once equipment is deployed, the system can operate for essentially an unlimited amount of time if the generator is refueled periodically. The main disadvantage is that if back-up is needed, personnel must travel to the site of the intersection and deploy the equipment, which has inherent delay and may be difficult or impossible in given emergencies or situations.

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TPB staff has surveyed the region's traffic signals agencies regarding the numbers and types of traffic signal power back-up systems in the region, most recently as of December 31, 2012; a survey as of June 30, 2013 will be completed soon. As of the end of 2012, about 50% of the region's signals benefited from either a battery-based or generator-based back-up system, up from about 26% in 2011.

Ongoing Maintenance

Given the reliance of modern signal timing technology on functioning detection devices, ongoing maintenance of loops, cameras, and other signal equipment is essential. The implementation of real-time traffic management requires adequate detection of traffic patterns, and the performance of these systems will deteriorate if equipment begins to fail. This task can be challenging given that funding is required not only to install equipment for advanced signal systems, but to also ensure that it is properly maintained.

Emergency Preparedness

Major traffic signals agencies have developed and coordinated plans for signals operations in the event of a major emergency, in coordination with state and D.C. emergency management agencies. Also, the locations of power back-up systems for traffic signals have been coordinated with emergency transportation plans. The real-time management capabilities of signals systems in the region also aid preparedness.

Outlook

There is ongoing awareness and commitment to safe and effective signals operations among the transportation agencies of the region. There is continuing interagency coordination through the Traffic Signals Subcommittee and other forums. There are benefits of providing sufficient resources to ensure good signals operations, and it is hoped that these resources can continue to be devoted. As of now, the majority (76%) of the region's traffic signals are being re-timed/optimized or checked on a frequent basis.

A presentation on one or more of these topics can be made at a future TPB meeting at the convenience of the Board.

Signal Optimization and Improving Traffic Flow in the District

Posted on [October 8, 2013](#) by [DDOT Blogger](#)



The District of Columbia as a humanistic, people-friendly city is first and foremost an accessible city, where mobility is possible for all. Many cities today are plagued by traffic congestion, and in densely populated city areas the fastest ways of getting around are often on mass transit, by walking and bicycling.

Under Mayor Vincent C. Gray's [Sustainable D.C.](#) initiative, our goal is to continue to switch commuters from driving alone, to bicycling, walking, and carpooling by making mass transit more appealing. Our goal is to have 75% of our morning commutes to start and end using these transportation modes.

Creating this balance starts with improving our transportation network and one key factor is traffic optimization for all modes of transportation. Toward these aims, The District Department of Transportation (DDOT) is overhauling the District's traffic signal management program through using advanced computer software.

Traffic signal management can be defined as using new technologies and equipment to make existing traffic signal control systems operate more efficiently. Improved traffic signal has many benefits including improving air quality and reducing fuel consumption; reducing congestion and creating efficiencies for commercial and emergency vehicles, and buses. This can also reduce the number of serious accidents; reduce aggressive driving behavior, including red-light running and postponing and eliminate the need to construct additional road capacity.

The DDOT system is comprised of traffic lights, stop signs, and various other control devices designed to control competing flows of traffic. It is designed to efficiently manage vehicles, pedestrians, cyclists and public transit. The 1,600 traffic signals in D.C. collectively form DDOT's comprehensive signal program. Traffic signal re-timing and management is a cost-effective way to provide safe and efficient traffic flow throughout the city.

Signal Timing

Signal timing is a special technique that traffic engineers use to manage traffic flow and determine who has the right-of-way at

signalized intersections. DDOT traffic signal engineers manage traffic signal systems operations in connection with capital improvement projects, sight clearance inspections and responses to residents' inquiries.

The central objective of signal timing is to coordinate the competing demands of motor vehicles, public transit, bicycles and pedestrians in an efficient manner. Signal timing strategies are designed to minimize stops and delays, minimize fuel consumption and air pollution emissions and optimize traffic flow and progression along major arteries. Signal lights are designed to coordinate a process in which lights respond to the traffic demand based on the time of day. The current signal timing is determined by the preset movements of traffic.

DDOT's comprehensive plan to improve the flow of traffic is a coordinated 5-year project. It is well underway and several important changes have already been implemented at nearly 600 intersections. This part of the program (Phase I) is the first step in building a solid foundation to enhance and improve traffic flow. DDOT is replacing the old and outdated traffic controller software in the field during Phase I. More extensive changes will come in Phase II which is scheduled over next three years and will include all 1600 traffic signals in the District.

The scope and scale of this project is far more comprehensive than any previous DDOT effort. DDOT is on the forefront and cutting edge of managing traffic flow to respond to our population growth and improve safety and efficiencies.

DDOT's ultimate program goals are to make DC traffic signals safer and friendlier for pedestrians, vehicles, public transit, and cyclists, and to reduce traffic congestion, improve bus travel, and reduce harmful emissions.

DDOT's traffic engineers collect data on traffic patterns, volume, speed, lane-use, and timing of signals at intersections with the goal of utilizing the data to optimize traffic flow and better manage traffic movement in the District of Columbia. Using advanced computer technology has enhanced DDOT's abilities to manage traffic flow efficiently.

DDOT uses off-line software model that can emulate real-life traffic conditions. It evaluates and optimizes traffic signal timing plans based on traffic volume and geometric conditions. And it captures data based on capacity performance and level of service at signalized intersections.

Data is based on the time of day and organized around AM drive-time peak hours on weekdays from 7-9:30, mid-day peak from 11-1, and PM drive-time peak hours from 3 to 7. On weekends, the traffic flow is different and the data collected creates a separate pattern, from 11am to 4pm. The analysis takes the existing traffic conditions, then optimizes or creates an optimized plan to improve the flow of arterials by all users. The small changes in Phase I have largely gone unnoticed to the general captures data based on capacity performance and level of service at signalized intersections. Data is based on the time of day and organized around AM drive-time peak hours on weekdays from 7-9:30, mid-day peak from 11-1, and PM drive-time peak hours from 3 to 7. On weekends, the traffic flow is different and the data collected creates a separate pattern, from 11am to 4pm. The analysis takes the existing traffic conditions, then optimizes or creates an optimized plan to improve the flow of arterials by all users.

The small changes in Phase I have largely gone unnoticed to the general public but are fairly extensive. The updated traffic controller computer software includes several features. One of the most important features allows traffic engineers to modify signal timing to improve bus progression. DDOT, working in partnership with WMATA, is also planning improvements to assist in the operations and efficiencies of WMATA's bus fleet. The WMATA/DDOT effort will improve bus routes through the implementation of a Transit Signal Priority in the various heavy bus corridors.

Another feature of DDOT's program in the traffic controller computer software upgrade is Adaptive Traffic Signal Control Technology which will utilize real-time traffic information to adjust the timing of lights to accommodate changing traffic patterns and ease traffic

congestion. In cooperation with the Federal Highway Administration, DDOT will begin testing this new technology on New York Avenue, Pennsylvania Avenue SE and Rhode Island Avenue corridors in 2014. This feature will work to improve overall traffic flow.

The new traffic controller software will simplify the tedious process of designing new traffic signal timings and utilize the most modern computer technologies to create efficiencies. Increased traffic flow and a growing population mean DDOT must continually find new and innovative ways to manage traffic flow. The new software goes a long way towards assisting and driving this effort.

DDOT has built a complex traffic signal timing computer model that is being specifically adapted to DC's local driver population, roadway network, and traffic flows. The traffic signal timing computer model was vital in helping DDOT evaluate various signal timing options and make quick signal timing changes in the Wisconsin Avenue corridor in August this year.

A concrete example of the program's early success is during the afternoon rush hour. Traffic engineers report that drivers making the trip along the full length of Wisconsin Avenue, a major traffic artery, are saving time. Drivers commuting between Georgetown and Friendship Heights on Wisconsin Avenue are saving up to 5 minutes in their daily commute. More quick-relief, traffic signal re-timing experimental projects are planned for Georgia Avenue, another major traffic artery in the coming months. And more extensive changes are scheduled for these two corridors as part of the Phase 2 implementation in 2015.

Phase 2

Phase 2 will result in more noticeable changes to the coordinated traffic signal timings. Engineers will complete the redesign of coordinated signal timings for the first 200 signals to be implemented east of the Anacostia River and along M Street in the Southeast/Southwest corridor before the end of 2013.

The next phase of the project is re-timing over 600 signals in the downtown area—which is undergoing a massive influx in development (for example, CityCenterDC and the Marriot Marquis)—by late 2014 or early 2015. Re-timing downtown signals has some unique challenges with high volume traffic all competing for the same space and the same green lights.

Traffic signal re-timing will improve downtown traffic flow by timing the signals so that groups of vehicles (referred to as platoons) can travel through the series of signals with minimal stoppage. Importantly, traffic signal optimization also improves safety because traffic flow is smoother and vehicles stop less often. This reduces the probability for rear-end crashes, reduces vehicle emissions and lowers our carbon footprint. It also reduces travel costs by reducing the amount of time stopped at red lights, saving us money at the gas station.



A bicyclist crosses at one of several HAWK signals that DDOT recently installed in the District.

DDOT is at the forefront of modernizing traffic flow and utilizing the most advanced computer software to improve traffic flow and safety. This important effort will improve the quality of life for citizens and commuters in the District of Columbia and be an important component of Mayor Gray's [Sustainable D.C.](#) program.

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ITEM 11- Information

February 19, 2014

Review of Draft FY 2015 Commuter Connections Work Program (CCWP)

Staff

Recommendation: Receive briefing on the enclosed draft of the Commuter Connections Work Program (CCWP) for FY 2015 (July 1, 2014 through June 30, 2015).

Issues: None

Background: The Board will be asked to approve the FY 2015 CCWP at its March 19 meeting. The TPB Technical Committee reviewed this draft at its February 7 meeting.

**FY 2015 DRAFT WORK PROGRAM FOR THE
COMMUTER CONNECTIONS PROGRAM
FOR THE GREATER WASHINGTON
METROPOLITAN REGION**

February 19, 2014

**NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS**



The preparation of this program document was financially aided through grants from the District Department of Transportation; Maryland Department of Transportation; Virginia Department of Transportation; and the U.S. Department of Transportation.

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SUMMARY

Program Overview

The Fiscal Year 2015 Commuter Connections Work Program (CCWP) consists of a core program of regional transportation demand management operational activities funded jointly by state and local jurisdictions, plus jurisdictional programs that are conducted at the discretion of individual state funding agencies.

Funding

The regional state funding shares for the program elements are defined using a formula agreed to by the state funding agencies. Funding agencies for the programs listed in this document include the District Department of Transportation, Maryland Department of Transportation, and the Virginia Department of Transportation. The Maryland Transit Administration and the Virginia Department of Rail and Public Transportation provide direct funding to their local jurisdictions for transportation demand management activities that support the regional Commuter Connections program. The costs of the jurisdictional activities are allocated directly to the jurisdiction or jurisdictions that choose to conduct them. This ensures that the regional activities upon which all other activities depend will be conducted regionally, and that the costs are allocated to the participating funding agencies according to the agreed upon funding formula. At the same time, considerable flexibility is available to the state funding agencies and other agencies to define and fund discretionary activities that respond to their individual policy and funding priorities.

The FY 2015 Commuter Connections program elements are classified as follows:

REGIONAL PROGRAMS	JURISDICTIONAL PROGRAMS
Commuter Operations Center	Employer Outreach*
Guaranteed Ride Home	GRH Baltimore
Marketing	
Monitoring and Evaluation	

**Includes both a Regional and Jurisdictional Component*

The CCWP was re-structured and streamlined in FY 2006 to clarify and simplify funding responsibilities. The FY 2015 CCWP continues this effort aimed at streamlining the administration and oversight processes for the program. Commuter Connections has expanded incrementally since its inception in 1974 as the Commuter Club, with different program elements having different jurisdictional participation and funding shares. As the program became more complex, it became increasingly difficult to track how much each state funding agency was participating in and paying for each program element. Therefore, a funding formula was devised.

Planning Process Requirements

The TPB is required by federal regulations to approve a congestion management process which includes travel demand management as part of the metropolitan transportation plan. Commuter Connections constitutes the major demand management component of the congestion

management process to be approved by the TPB. Commuter Connections also provides transportation emission reduction measure benefits for inclusion in the air quality conformity determination, which must be approved by the TPB as part of the annual update of the Constrained Long Range Plan and Transportation Improvement Program. In addition, Commuter Connections programs may be needed to meet future Climate Change and Green House Gas emission targets that may be set for the transportation sector in the region.

Description of Commuter Connections Committees

The increasing complexity of the program prompted the creation of a working group to provide administrative and programmatic oversight of the core program cost elements. An agreement was signed in FY 2011 between COG and the state funding agencies for the support of the Commuter Connections TDM program in the Washington metropolitan region. The agreement will be reviewed and updated as needed during FY 2015. COG and the state funding agencies have an established working group; the State TDM (STDM) Work Group, which meets monthly (except for the month of August) and consists of representatives of the state transportation funding agencies in the District of Columbia, Maryland and Virginia. The State TDM Work Group helps to define the program content and budget for each fiscal year and helps to develop a detailed annual Work Program in collaboration with COG/TPB staff and the Commuter Connections Subcommittee. The draft work program is reviewed by program stakeholders and the Commuter Connections Subcommittee. The final Work Program is reviewed by the TPB Technical Committee and approved by the TPB. Program developments and/or significant changes to the CCWP made by the State TDM Work Group will be reviewed with the TPB's Technical Committee and in some cases the TPB's Steering Committee in the event the items or information will be presented to the TPB.

The State TDM Work Group also review's all RFP's and RFQ's as part of the work program and will identify selection committee members for individual contract solicitations. The State TDM Work Group will review and approve all CCWP work products with input from the Commuter Connections Subcommittee. Upon request, COG/TPB staff can provide additional details for projects being implemented under each program area.

As shown in Figure 2 on Page 9, the Commuter Connections Subcommittee will continue to provide overall technical review of the regional program elements in this Work Program and meet every other month. The Subcommittee will also review, provide comments, and endorse reports and other products for release. The Bike To Work Day Steering Committee will meet every other month from September to May to organize the regional Bike To Work Day event. The Car Free Day Steering Committee will meet every other month from March until September to organize the regional Car Free Day event. The Commuter Connections Ridematching Committee will continue to meet quarterly on technical issues regarding the regional TDM software system. The TDM Evaluation Group will meet as needed to provide direction and review of the regional TDM evaluation project. The Employer Outreach Committee will meet quarterly to review and discuss Employer Outreach efforts. The Regional TDM Marketing Group will also meet quarterly to provide input and coordination of regional TDM advertising and marketing efforts. Oversight for jurisdictional program elements will be provided by the states and agencies that are funding them.

Specialized project work groups will continue to meet as needed to address particular implementation issues, such as the development of regional TDM marketing campaigns and the Employer Recognition Awards. A Strategic Plan was adopted in November 2007 and has been updated annually and most recently in January 2013 that serves as a framework regarding the roles and responsibilities of the Commuter Connections stakeholders. The Strategic Plan can be accessed at www.commuterconnections.org under the 'About Us' Publications link and includes a mission statement, definition of Commuter Connections, overall program and operating objectives, network responsibilities for each program area that include objectives and acceptable performance levels, a committee structure, sample meeting calendar, and internal and external report deliverables.

Key Elements and Highlights

The key elements and highlights of the FY 2015 Commuter Connections Work Program are summarized as follows:

- The Commuter Operations Center will provide ridematching services to commuters through a central toll free number "1-800-745-RIDE" and www.commuterconnections.org web site, and support to commuter assistance programs operated by local jurisdiction, transportation management associations, and employer-based commuter assistance programs.
- Guaranteed Ride Home (GRH) will provide users of alternative commute modes up to four free rides home per year in a taxi or rental car in the event of an unexpected personal or family emergency or unscheduled overtime.
- Marketing will provide frequent regional promotion of alternative commute options, including; car/vanpooling, teleworking, mass transit, bicycling, walking; and support programs such as Guaranteed Ride Home, the Commuter Connections network ridematching services and Bike to Work Day. The Marketing program aims to raise awareness of alternative commute options, and support the Commuter Connections network in persuading commuters to switch to alternative commute modes from the use of single-occupant vehicles, and persuading commuters currently using alternative commute modes to continue to use those modes. The 'Pool Rewards will continue with the provision of a cash incentive to new carpoolers and vanpoolers. Commuter Connections will coordinate the region's Car-Free Day event as part of World Car Free Day. The Car-Free Day event will encourage commuters and the general population to leave their cars home or to use alternative forms of transportation such as carpools, vanpools, public transit, bicycles, or walking. Commuter Connections will also be celebrating its 40th year of operations during 2014.
- Monitoring and Evaluation provides data collection and analysis activities as well as program tracking and monitoring reports for each program area. The 2013 State of the Commute general public report will be printed and distributed, the FY2012 – 2014 TERM Analysis Report will be finalized and distributed, and the FY 2015 Placement Rate Survey will be conducted and a report will be issued. Monitoring and evaluation activities are used

extensively to determine the program's effectiveness. Evaluation results have been used in the past to make program adjustments; for example, the 'Pool Rewards program was expanded to include vanpools, the Telework program was streamlined due to increased participation by the private sector; changes have been made to the Guaranteed Ride Home program guidelines based on participant survey feedback; and target marketing for GRH was re-introduced in the region after it was found that there was a dramatic drop in registrations when the marketing for this measure was streamlined into the mass marketing program.

- Employer Outreach will support outreach and marketing to the region's employers to implement new or expanded employer-based alternative commute modes and incentives such as transit and vanpool benefits, telework, preferential parking for carpools and vanpools, carpool and vanpool formation and incentives, flexible work schedules, and bicycling amenities. The outreach program also encourages employees' use of alternative commute modes such as ridesharing, transit, telework, bicycling, and walking. The outreach program also provides assistance to employers to hold bicycling seminars for employees, maintaining an up-to-date regional Bicycling Guide, providing information on workforce housing programs to promote "Live Near Your Work," and offering car-sharing and bike-sharing information to lower employers' fleet management costs. Maryland jurisdictions will provide resources to employers on the benefits of teleworking and assist them in starting or expanding telework programs.
- GRH Baltimore will provide users of alternative commute modes in the Baltimore metropolitan region and St. Mary's county up to four free rides home per year in a taxi or rental car in the event of an unexpected personal or family emergency or unscheduled overtime.

Figure 1 on page 7 of this document illustrates that the Commuter Connections service area is much larger than the Washington 8-hour ozone nonattainment area for workers eligible for the GRH program and larger still for workers who can access the Commuter Connections ridesharing services. The total Commuter Connections service area has approximately 10 million residents.

Program Background

Commuter Connections is a continuing commuter assistance program for the Washington region which encourages commuters to use alternatives to driving alone in a private automobile, including ridesharing, transit, telecommuting, bicycling, and walking. The program has evolved and expanded over the past three and a half decades following its inception in 1974 as the Commuter Club. In the mid-1980s, in an effort to better share regional ridesharing information the Commuter Club was expanded into the Ride Finders Network, which included Alexandria, Fairfax County, Montgomery County, Prince William County and the Northern Virginia Transportation Commission. By 1996, after steady growth in both size and strength, the Ride Finders Network became Commuter Connections, the commuter transportation network serving the Washington metropolitan region, encompassing twelve counties, four cities, and eight federal agencies. The Commuter Operations Center component of the current Commuter Connections Program

represents the evolution of the earlier Commuter Club and Ride Finders Network programs.

In the mid-1990s, several new elements were added to the Commuter Connections Program as Transportation Emissions Reduction Measures (TERMs) to help meet regional air quality conformity requirements. All of these measures were designed to produce specific reductions in Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NOx) by reducing vehicle trips and vehicle miles of travel associated with commuting. The measures were developed by the Travel Management Subcommittee of the TPB Technical Committee, and adopted into the regional Transportation Improvement Program (TIP) by the Transportation Planning Board (TPB). These measures were funded jointly by the District of Columbia, Maryland, and Virginia Departments of Transportation, with some variation in funding shares for the different measures.

<u>Measure</u>	<u>Date Implemented</u>
Commuter Operations Center	1974
Metropolitan Washington	
Telework Resource Center	1996
Integrated Ridesharing	1996
Employer Outreach	1997
Guaranteed Ride Home	1997
Employer Outreach for Bicycling	1998
Mass Marketing of Alternative Commute Options	2003
GRH Baltimore	2010

As the program elements shown above were implemented, their performance was evaluated over time. In FY 2006, the measures were revised to focus resources on the most effective program components. The total daily impacts of the Commuter Connections program were calculated in FY 2011 to be:

<u>Daily Impacts</u>	
VT Reductions:	126,000
VMT Reductions:	2,400,000
NOx Reductions (Tons):	0.9
VOC Reductions (Tons):	0.5
<u>Annual Impacts</u>	
PM 2.5 Reductions (Tons)	7
PM 2.5 Precursor NOx Reductions (Tons)	246
CO2 Reductions (Tons)	282,000

Extensive monitoring and evaluation have been carried out for the Commuter Connections Program over the past several years, and comprehensive data sets are available for reviewing the performance of individual program elements and identifying areas for both strengthening the performance of the program and streamlining the oversight and management procedures. The Program has been shown through the FY 2009 – 2011 TERM Analysis Report to be a highly cost-effective way to reduce vehicle trips (VT), vehicle miles of travel (VMT), and vehicle emissions associated with commuting. The following overall cost-effectiveness measures for the Commuter Connections Program are based on the results of the FY 2009 – 2011 TERM Analysis Report that

was released on January 17, 2011:

<u>Daily Impacts</u>	
Cost per VT reduced:	\$0.14
Cost per VMT reduced:	\$0.01
Cost per ton of NOx reduced:	\$20,000
Cost per ton of VOC reduced:	\$33,000

<u>Annual Impacts</u>	
Cost Per PM 2.5 Reduced	\$623,000
Cost per PM 2.5 Precursor NOx Reduced	\$ 18,000
Cost per CO2 Reduced	\$ 16

The Commuter Connections Program is generally regarded as among the most effective commuter assistance programs in the nation in terms of reductions effected in vehicle trips and vehicle miles of travel. Existing data collected on Commuter Connections program performance has been used to refine and enhance the program and to streamline procedures for program oversight and administration.

Figure 1: Geographic Areas Serviced by Commuter Connections

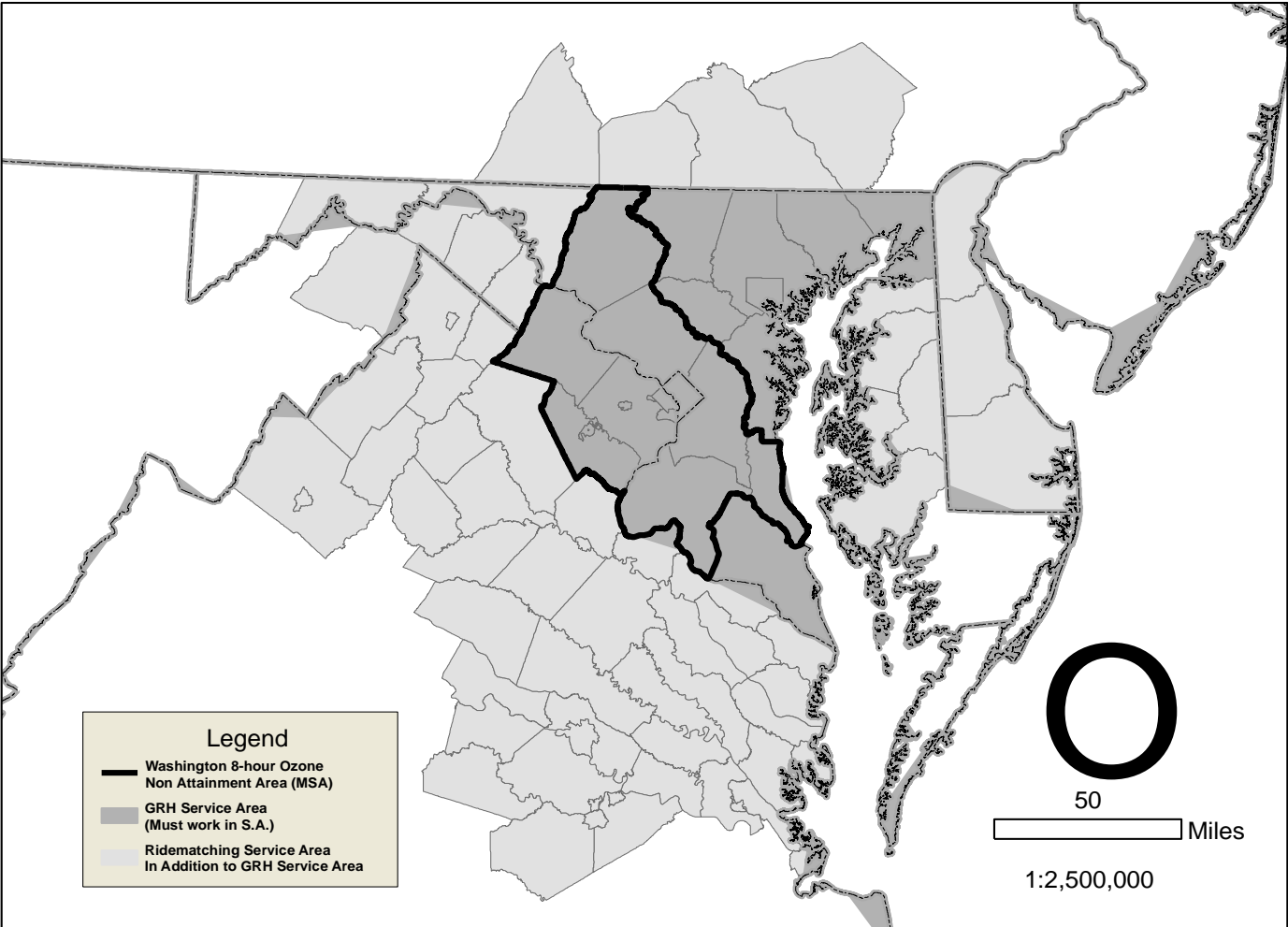
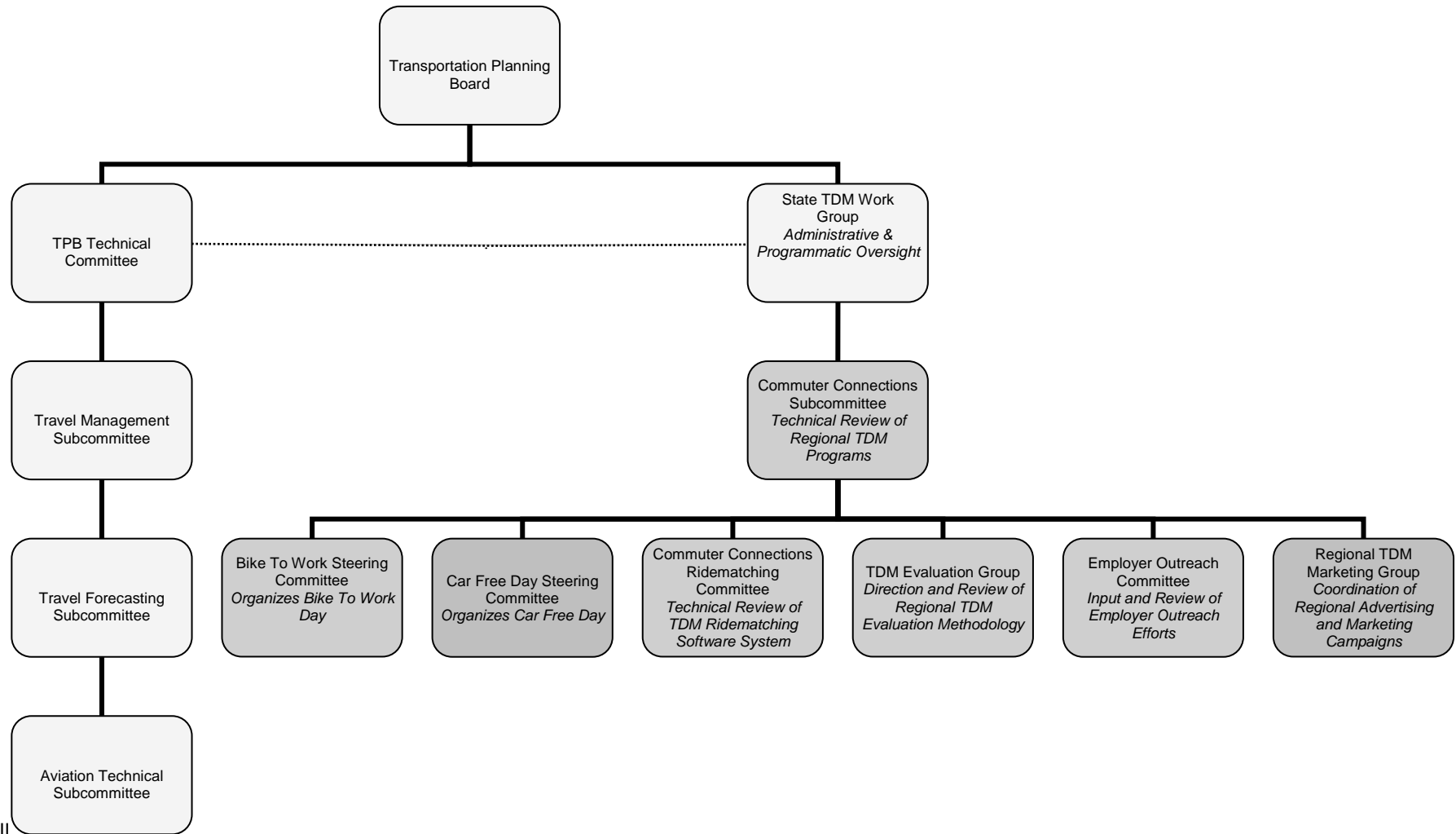


FIGURE 2: COMMUTER CONNECTIONS STRUCTURE



**Table 1
FY 2015 COMMUTER CONNECTIONS BUDGET AND WORK PROGRAM EXPENDITURES**

WORK ACTIVITY	DIRECT SALARIES STAFF	M& A 25%	LEAVE BENEFITS 19%	FRINGE BENEFITS 28%	INDIRECT COSTS 31 %	DATA & PC COSTS	CONTRACT SERVICES	DIRECT COSTS	TOTAL
Commuter Operations Center	\$137,609	\$34,402	\$32,682	\$57,314	\$81,222	\$90,740	\$60,000	\$22,472	\$516,441
Guaranteed Ride Home	\$101,613	\$25,403	\$24,133	\$42,322	\$59,976	\$5,465	\$140,000	\$304,315	\$703,227
Marketing	\$186,603	\$46,651	\$43,463	\$76,221	\$109,411	\$4,000	\$650,000	\$1,647,095	\$2,763,444
Monitoring and Evaluation	\$138,830	\$34,708	\$32,972	\$57,823	\$81,943	\$0	\$85,000	\$28,724	\$460,000
Employer Outreach	\$43,429	\$10,857	\$10,314	\$18,088	\$25,633	\$15,000	\$0	\$508,907	\$632,228
GRH Baltimore	\$18,443	\$4,611	\$4,380	\$7,681	\$10,886	\$0	\$41,000	\$62,999	\$150,000
TOTAL	\$626,527	\$156,632	\$147,944	\$259,449	\$369,071	\$115,205	\$976,000	\$2,574,512	\$5,225,340

**Table 2
 COMMUTER CONNECTIONS FISCAL YEAR 2015 BUDGET
 BY STATE FUNDING AGENCY AND PROGRAM ELEMENT**

FUNDS SOURCE	Commuter Operations Center	Guaranteed Ride Home	Marketing	Monitoring & Evaluation	Employer Outreach*	GRH Baltimore	TOTALS
District of Columbia	\$52,877	\$82,278	\$323,323	\$53,820	\$16,584	\$0	\$528,882
State of Maryland	\$202,922	\$315,749	\$1,240,786	\$206,540	\$552,304	\$150,000	\$2,668,301
Commonwealth of Virginia	\$196,142	\$305,200	\$1,199,335	\$199,640	\$63,340	\$0	\$1,963,657
Other**	\$64,500						\$64,500
TOTAL	\$516,441	\$703,227	\$2,763,444	\$460,000	\$632,228	\$150,000	\$5,225,340

* Virginia and the District of Columbia have allocated \$823,420 dollars to local jurisdictions and contractors to implement the TERM. DC has allocated \$255,627 and Virginia has allocated \$567,793.

**Software User Fees

Detailed Task Descriptions and Cost Estimates for the FY 2015 Commuter Connections Work Program

I. COMMUTER OPERATIONS CENTER

The Commuter Operations Center has been in existence since 1974 and provides local jurisdictions, Transportation Management Associations (TMAs), and federal government agencies a centralized database for commuting information. As part of the overall program, COG/TPB staff provides the following services:

- Ridematching coordination, training and technical assistance to local agencies;
- transportation information services to the general public;
- maintenance of the regional commuter database system hardware and software programming code; and
- data updates to software system.

The program is comprised the four project areas listed below. The total annual budget for the Commuter Operations Center regional program is \$516,441.

A. RIDEMATCHING COORDINATION AND TECHNICAL ASSISTANCE

Each month, COG receives several hundred applications for ridematching and transit information. More than 90% of these applications are received through the Commuter Connections Web site. COG/TPB staff reviews and processes all applications received through the Web site. Matchlists for carpool and vanpool information are sent daily by mail or email (depending on the applicant's preference). Each local Commuter Connections network member has access to the regional TDM on-line system and is notified through a customized queue when a commuter application has been entered through the Commuter Connections Web site from a commuter living in that network member's jurisdiction or in some cases; depending on the network member, it may be a commuter working in their service area. The queue serves as notification that the network member staff should take ownership of the record and follow up with the commuter to provide additional assistance, as needed. Applications received at COG through the mail and fax are forwarded to the network member serving the applicant's home jurisdiction or work jurisdiction for entry into the rideshare database.

The following local jurisdictions, transportation agencies, transportation management associations, and federal government agencies deliver ridematching and commuter assistance services through the Commuter Connections network to their residents and/or workers:

District of Columbia	Maryland	Virginia
COG/TPB	ARTMA	City of Alexandria
	Baltimore City	Arlington County

District of Columbia	Maryland	Virginia
	The BWI Partnership	Army National Guard Readiness Center
	Baltimore Metropolitan Council	Dulles Area Transportation Association
	Bethesda Transportation Solutions	Fairfax County
	Food and Drug Administration	George Washington Regional Commission
	Frederick County	LINK – Reston Transportation Management Association
	Harford County	Loudoun County
	Howard County	Northern Neck Planning District Commission
	Maryland Transit Administration	Northern Shenandoah Regional Valley Commission
	Montgomery County	Potomac and Rappahannock Regional Commission
	National Institutes of Health	Rappahannock – Rapidan Regional Commission
	North Bethesda Transportation Center	
	Prince George's County	
	Tri-County Council for Southern Maryland	

COG/TPB staff administers ridematching services on behalf of the District of Columbia and Arlington County. The local jurisdiction commuter assistance programs listed in Maryland and Virginia receive separate grants from the Maryland Transit Administration and the Virginia Department of Rail and Public Transportation to provide local services and to help support regional TDM program activities.

The Commuter Connections web-based TDM system includes ridematching databases from one commuter assistance program in southern Virginia and the entire state of Delaware and were incorporated into the TDM system's database to provide improved commuter ridematching through a single database for Virginia, Maryland and the District. These programs are: RideShare (serving the Charlottesville region) and Rideshare Delaware (serving the state of Delaware). The staffs from these programs and the commuters they serve have access to the TDM system for matching in carpools and vanpools and have customized access to other modules in the system such as SchoolPool and Guaranteed Ride Home. COG/TPB staff provides technical assistance to these three programs.

During FY 2015, COG/TPB staff will continue to provide technical support and training to Commuter Connections network member agencies for the regional Commuter Connections TDM software system. Staff will continue to review and distribute ridematching applications received from employers and the general public. Matchlist and renewal notice generation and distribution services will also be provided through COG. COG/TPB staff will produce network member technical assistance reports from the Commuter Connections TDM system, and provide staff support and coordination to the Commuter Connections State TDM Work Group, the Commuter Connections Subcommittee, the Commuter Connections Ridematching Committee, and to the Federal ETC Advisory Group. COG/TPB staff will also fulfill daily network member data requests. Federal Agency Employee Transportation Coordinator training will be coordinated and in some instances given by COG/TPB staff. Staff will also produce an annual Commuter Connections Work Program for FY 2016. The funding agreement between COG and the state funding agencies will also be reviewed and updated as needed during FY 2015.

COG/TPB staff will also work to expand the regional SchoolPool program and maintain the special events ridematching software module and monitor the trip tracking software module.

Cost Estimate: \$118,431

Products: Database documentation of specific technical actions implemented. *(COG/TPB staff)*

Documentation of Subcommittee and Ridematching Committee meetings. *(COG/TPB staff)*

Documentation of daily technical client member support given through COG's Help Desk. *(COG/TPB staff)*

Daily matchlist generation and distribution. *(COG/TPB staff)*

TDM Web Based System Training Manual updates, as needed. *(COG/TPB staff)*

Monthly commuter renewal notices as part of the purge process. *(COG/TPB staff)*

Review and update existing Emergency Management Continuity of Operations Plan for Commuter Connections program services. *(COG/TPB staff)*

Transportation Demand Management Resources Directory update twice yearly. *(COG/TPB staff)*

Federal ETC Web site updates. *(COG/TPB staff)*

FY 2015 Commuter Connections Work Program. *(COG/TPB staff)*

Services:

Software client Member Help Desk technical support. *(COG/TPB staff)*

Software and customer service training, as needed. *(COG/TPB staff)*

Federal agency ETC training and support to the Federal ETC Advisory Group. *(COG/TPB staff)*

Staff the Commuter Connections Subcommittee, Ridematching Committee, and STDM Work Group *(COG/TPB Staff)*

Work with state funding agencies to review and update Funding Agreement *(COG/TPB staff in conjunction with State Funding Agencies)*

Schedule:

July 1, 2014 - June 30, 2015

Oversight:

Ridematching Committee

- Communicate Technical Support Issues
- Share knowledge and experience on “Hot Topic” Issues
- Provide input and feedback on Software Technical Policies (i.e. purge process, Help Desk)
- Provide requests for software training

Commuter Connections Subcommittee

- Provide input and comments to FY 2016 CCWP
- Provide input and feedback on all programs and projects in CCWP

STDM Work Group

- Provide input and comments to FY 2016 CCWP
- Provide input, feedback and approval on all programs and projects in CCWP
- Review and provides updates, if needed, to Funding Agreement

B. TRANSPORTATION INFORMATION SERVICES

COG has provided transportation information services for 40 years in the Washington Metropolitan region. The Commuter Operations Center provides basic carpool/vanpool, transit, telecommuting, bicycling, and walking information. Specialized transportation information is also provided in support of Air Quality Action Days, Job Access Reverse Commute, SchoolPool, Special Events, Bulletin Board and other regional commuter service programs.

COG staffs the regional commute information telephone number 1-800-745-RIDE. Calls received at COG are transferred to the local Commuter Connections network member site (based on jurisdiction of residence or in some cases work location of the caller) where applicable. COG/TPB staff provides transportation information services to those commuters who cannot be assigned to a client member site, including residents of the District of Columbia. COG receives several hundred calls per week through the 800 number. COG staff also responds to daily requests and questions received by email.

During FY 2015, COG/TPB staff will continue to provide traveler information on alternatives to driving alone to the general public by telephone, Web site, electronically, and through printed information. Staff will continue processing applications from the general public and/or from Commuter Connections network members who request the service on a permanent or temporary basis based on information requests received. COG/TPB staff will answer the regional "800" telephone line, TDD line, and respond to e-mails on information requests from the Commuter Connections TDM system Web service.

Cost Estimate: \$85,329

Products: Provide commuter traveler information on alternatives to driving alone to the general public through the Web site, electronically, or through printed information.
(COG/TPB staff)

Services: Provide commuter traveler information on alternatives to driving alone to the general public by telephone.
(COG/TPB staff)

Process applications from the general public.
(COG/TPB staff)

Answer and respond to commuter calls from the regional "800" Commuter Connections line and COG TDD line . (COG/TPB staff)

Respond to commuter e-mails from the Commuter Connections TDM Web service. (COG/TPB staff)

Provide general public customer service. (COG/TPB staff)

Schedule: July 1, 2014 - June 30, 2015

Oversight: Ridematching Committee

- Provide input and feedback to information services policies and procedures.

C. TRANSPORTATION INFORMATION SOFTWARE, HARDWARE, AND DATABASE MAINTENANCE

The regional Transportation Demand Management (TDM) software system is provided as a regional database resource with secure online access to nearly 30 commuter assistance programs that include local rideshare agencies, Transportation Management Associations, and federal government agencies. The commuter assistance programs use the TDM software system to service their local commuters' transportation needs for alternative commuting information.

This project includes the daily routine monitoring and maintenance of the TDM software system as well as the hosting of the on-line system through COG's data center. Tasks include: daily backup of the TDM database, maintenance of the TDM Web system servers, off-site hosting for second site for contingency management, Windows support to TDM Oracle database and to virtual web server, oracle database administration and support, documentation of system and system changes, Storage Area Network (SAN) connectivity and maintenance, and the maintenance and replacement of hardware as needed.

This project will also include ongoing software code upgrades to the Web-based TDM system. Changes made to the software code will be reflected in a responsive web design format in order to be displayed on smart phone devices such as Android, Blackberry, and iPhone. Access to the system will also be provided through a mobile application.

Cost Estimate: \$259,584
Consultant Costs as Part of Estimate: \$ 60,000
(Maintenance Contracts/Software)

Services: Provide daily routine monitoring and maintenance of the TDM system and database for approximately 30 commuter assistance programs. (COG/TPB staff)

Maintain and update TDM system servers, software programming code, and web hosting. (COG/TPB staff in consultation with contractor).

Schedule: July 1, 2014- June 30, 2015

Oversight: Ridematching Committee

- Provide input and feedback to TDM system maintenance policies.
- Provide recommendations for TDM Web based system software code upgrades.

D. COMMUTER INFORMATION SYSTEM

The Commuter Information System project provides the TDM system with a GIS based information system that includes transit stop data, telework center locations, park and ride lot locations, and bicycling information as part of the ridematching functionality.

During FY 2015, COG/TPB staff will continue integration activities of new transit, telework center, park and ride lot, and bicycle route data into the TDM system server. Staff will also continue to obtain updated transit data, street centerline information and park-and-ride lot data from local jurisdictions and transit properties and reformat this data as necessary to the proper GIS format for use on the regional TDM system. Updates to the park-and-ride and telework center datasets for use on the TDM system will continue as will updates to the interactive GIS-based Web site application to include updated local and regional information for 11,000 plus transit, telework center, park-and-ride lots, and bicycle lanes/paths records. The bicycle routing module will also be updated to reflect any new and/or expanded bicycle paths and/or trails.

Cost Estimate: \$53,097

Services: Update local and regional information for transit, telework center locations, park and ride lots, and bicycle route information which will be used in the TDM Web system. (COG/TPB staff)

Schedule: July 1, 2014 - June 30, 2015

Oversight:

Ridematching Committee

- Provide input into data source updates for TDM web based system.

II. REGIONAL GUARANTEED RIDE HOME PROGRAM

The regional Guaranteed Ride Home (GRH) program eliminates a major barrier to using transit, carpooling, vanpooling, bicycling or walking to work. Studies have shown that a commuter's fear of being "stranded" at work if they or a family member become ill, or if they must work unexpected overtime, is one of the most compelling reasons commuters do not rideshare or use transit to travel to work. The regional GRH program eliminates this barrier by providing a free ride home in the event of an unexpected personal emergency or unscheduled overtime. The GRH program's free ride home is offered only to commuters that carpool, vanpool, use transit, bicycle, or walk to work at least two days per work week. As a result of the GRH program, some single occupant vehicle drivers will switch to a ridesharing or transit commuting alternative, and current ridesharing and transit users will increase the usage of these alternative commute modes. The GRH program is an insurance program for those commuters who do not drive alone to their worksite.

The Guaranteed Ride Home program is a regional program and consists of the project area previously outlined in Figure 1. The annual budget for the Guaranteed Ride Home program for the two project areas outlined below is \$703,227.

A. GENERAL OPERATIONS AND MAINTENANCE

COG/TPB staff processes all GRH applications received through the Commuter Connections web-based TDM software system, or by mail or fax. Using the web based TDM system, COG/TPB staff registers qualifying applicants, produces GRH registration ID cards, and sends ID card and participation guidelines to new registrants. Commuters can obtain information about the GRH program and complete an application on the Commuter Connections Web site, www.commuterconnections.org. Commuters may also call COG's Commuter Connections 800 telephone number, 1-800-745-RIDE, to ask questions about the GRH program and/or request information and an application. The 800 number is equipped with a menu so that callers can choose the menu item that best fits their needs. All GRH questions and requests for information and applications are taken by COG/TPB staff.

COG/TPB staff also mails GRH applications to GRH users who have used the GRH program without formally registering. GRH guidelines permit a commuter to use the GRH service one time as a "one-time exception" before they register. Also, COG/TPB staff mails transit vouchers to GRH users who used transit as part of their GRH trip. All vouchers and invoices from transportation service providers are processed by

COG/TPB staff.

In the event the commuter has not supplied an e-mail address, COG/TPB staff mails a re-registration notice to commuters who could not be contacted by telephone. The notice contains an application which the commuter can complete and send to COG to re-register. The commuter can also call Commuter Connections or visit the Commuter Connections Web site to re-register.

During FY 2015, staff will assist the Commuter Connections Subcommittee in reviewing the GRH participation guidelines for any recommended changes. These recommendations will be presented to the Commuter Connections Subcommittee for their final review and approval. In the past, recommendations have been made to modify and add participation guidelines to better convey the GRH trip authorization, GRH re-registration, and one-time exception rules and restrictions.

COG/TPB staff will continue to respond to the general public and to GRH applicants for registrations and re-registrations to the program. Registered commuters will be notified when their GRH registration is about to expire. Staff will continue to prepare and send new and re-registration GRH ID cards, registration letters, and participation guidelines on a weekly basis. Staff will also continue to monitor and maintain the GRH applicant database and server. COG/TPB staff will continue to update and maintain program participation guidelines, and provide annual customer service training to the daily operations contractor and COG/TPB staff assigned to the project.

Cost Estimate: \$210,098

Direct Costs (Telephone, Copies, etc) as Part of Estimate: \$26,115

Products: GRH new and re-registration ID cards and registration letters
(COG/TPB staff)

GRH Program participation guidelines. (COG/TPB staff)

Services: Process application requests from the general public for registration and re-registration to the program. (COG/TPB staff)

Notify commuters when registration is about to expire.
(COG/TPB staff)

Monitor and update GRH applicant database. (COG/TPB staff)

Schedule: July 1, 2014 - June 30, 2015

Oversight:

Commuter Connections Subcommittee

- Provide input and feedback on GRH program participation guidelines and policies.

B. PROCESS TRIP REQUESTS AND PROVIDE TRIPS

GRH transportation service is provided by several taxi companies, a rental car company, and a paratransit company, all under contract with COG. Commuters make their GRH trip request through a menu option provided on COG's Commuter Connections 800 telephone number. This menu option transfers calls for GRH trips directly to an operations contractor. This contractor reviews and assesses the trip request and approves or denies the request based on the GRH Participation Guidelines. The contractor then arranges the approved trips with the appropriate transportation providers. If a trip request is denied, the commuter is offered an arranged trip at their own expense.

During FY 2015, COG/TPB staff will continue management and monitoring of contract services for day-to-day operations services. Day to day operations include confirming ride request eligibility; dispatching rides through the ten ride service providers; tracking ride requests in the GRH database; and processing invoices for payment for ride service providers, the daily operations contractor and for the general public for transit vouchers.

Customer service training will be provided to all Guaranteed Ride Home call center agents.

Cost Estimate: \$493,129

Consultant/Contractor Costs as Part of Estimate:

<i>(Daily Operations)</i>	<i>\$140,000</i>
<i>(Cab and Car Rental Companies)</i>	<i>\$275,000</i>

Services:

Process GRH trip requests, approve/deny requests, and arrange rides. *(Daily Operations Contractor)*

Management and monitoring of contract services for day-to-day operations and ten cab and car rental ride service providers. This includes processing invoices for payment for contractors and for the general public for transit vouchers. *(COG/TPB staff)*

Customer service training for GRH call center agents. *(COG/TPB Staff)*

Provide GRH Rides (*Cab and Car Rental Companies*)

Schedule: July 1, 2014 - June 30, 2015

Oversight: Commuter Connections Subcommittee

- Provide input and feedback on GRH program operations.

III. **MARKETING**

The Marketing program delivers a “brand promise” for Commuter Connections as an umbrella solution for commuters seeking alternative commuting options within the region through regional marketing campaigns and special events and initiatives. The use of media and other forms of communication at high reach and frequency levels are used to communicate the benefits of alternative commute methods to Single Occupant Vehicle (SOV) commuters most likely to shift to non-SOV travel.

Marketing is a regional program and consists of five project areas listed below. The total annual project cost for the program tasks is \$2,763,444.

A. TDM MARKETING AND ADVERTISING

Regional TDM marketing campaigns aim to encourage both current SOV and non-SOV populations to either start or to continue using alternative transportation modes for commuting. Regional TDM marketing campaigns complement other on-going Commuter Connections program services that have been implemented in the region by increasing their overall efficiency and effectiveness.

Commuter Connections regional marketing campaigns may include, but are not limited in the use of direct mail to households and employers, radio, television, Web site advertisements and banner ads, phone book advertising, keyword search engine sponsorships, bus and rail advertising, and special event advertising. COG/TPB staff and its network members may also participate in promotions at employment sites and special events.

The overall objective of the project will be to continue to brand Commuter Connections and to meet the Mass Marketing TERM impact goals. A marketing/advertising/public relations contractor will be used to produce and execute the creative, copywriting, and earned media (public relations) plan.

The marketing/advertising/public relations contractor provides expertise to develop the regional marketing campaign. The program builds upon current regional TDM marketing efforts by local, state, and regional agencies to establish a coordinated and continuous year round marketing effort for regional TDM programs. Partnerships between COG and area transit agencies have been established and are maintained to enable the promotion of incentives such as the GRH program to transit riders. COG has also

partnered with local jurisdictions to promote various program services through value added media opportunities.

A Marketing Communications Plan and Schedule is issued within the first quarter of the fiscal year that will outline the overall marketing strategy to be used for marketing campaign. Input on this plan will be provided by the state funding agencies and the Regional TDM Marketing Group members. A Marketing Planning Workgroup will then be formed provide input to the detailed creative development of the regional marketing campaigns. Campaign summary documents will be produced that will outline campaign specifics such as direct mail distribution points (i.e. zip codes), radio stations used, etc.

COG/TPB staff will update and implement a public relations plan and continuously update the SharePoint site for posting marketing and advertising materials for review by the regional Marketing Planning Workgroup members. An outbound email box has also been established at docomments@mwcoq.org for communications on reports and other work program products that require feedback by Commuter Connections committee groups.

A regional commute alternatives newsletter, *Commuter Connections*, will be published quarterly and distributed to several thousand employers. The focus of the newsletter is on federal, state, regional and local information and/or ideas employers can use to either start, expand or maintain employer-based commute benefit programs. In addition, COG/TPB staff works with the General Services Administration to produce a quarterly Employee Transportation Coordinator (ETC) newsletter insertion into the Commuter Connections newsletter, for distribution to more than 100 Federal ETC's.

COG/TPB staff will continue to maintain and update all Commuter Connections collateral materials and Web based information. The regional Resource Guide and Strategic Marketing Plan will also be updated with input from member agencies. Part of the marketing and advertising plan will include the 40 year commemoration of the start of Commuter Connections (originally founded as the Commuter Club).

Cost Estimate: \$2,108,090

Consultant/Contractor Costs as Part of Estimate:

<i>(Advertising and Marketing Contractor)</i>	\$480,000
<i>(Media Buy)</i>	\$982,521
<i>(Postage/Printing)</i>	\$235,000

Products:

SharePoint postings for marketing and advertising materials for review by workgroup members and all other Commuter Connections committees. *(COG/TPB staff)*

Earned media plan. *(COG/TPB staff in conjunction with consultant)*

Quarterly employer newsletter and Federal agency Employee Transportation Coordinator newsletter. *(COG/TPB staff in conjunction with consultant)*

Mass Marketing material updates and re-prints. *(COG/TPB staff in conjunction with consultant)*

Commuter Connections Web Site updates. *(COG/TPB staff in consultation with consultant as needed)*

Creative materials for regional TDM marketing campaigns. *(COG/TPB staff in conjunction with consultant)*

Bus and rail advertising development and placement. *(COG/TPB staff in conjunction with consultant)*

Special event advertising development and placement. *(COG/TPB staff in conjunction with consultant)*

Marketing Communications Plan and schedule. *(COG/TPB staff in conjunction with consultant)*

2014 Strategic Marketing Plan and Resource Guide. *(COG/TPB staff in conjunction with consultant)*

1st Half of the Fiscal Year Regional TDM Marketing Campaign Summary Document. *(COG/TPB staff in conjunction with consultant)*

2nd Half of the Fiscal Year Regional TDM Marketing Campaign Summary Document. *(COG/TPB staff in conjunction with consultant)*

Services:

Placement of advertisements including, but not limited to: Web site advertisement through banner ads, placement of keyword search engine sponsorships, radio, print, and television, as needed. *(Consultant)*

Placement of advertisements in printed and electronic telephone directories. *(COG/TPB staff)*

Staff the Regional TDM Marketing Group. *(COG/TPB staff)*

Track the effectiveness of advertising campaigns through call volumes and internet hits. *(COG/TPB staff)*

Process media placement invoices. *(COG/TPB staff)*

Monitor and adjust the implementation of regional marketing campaigns. *(COG/TPB staff)*

Attend and participate in commuter promotional events and special events, as needed. *(COG/TPB staff)*

Management and oversight of marketing contract. *(COG/TPB staff)*

Commemorate Commuter Connections 40th year anniversary *(COG/TPB Staff in conjunction with, marketing contractor and Network Members)*

Schedule:

July 1, 2014 - June 30, 2015

Marketing Communications Plan and Schedule: September 2014

2014 Strategic Marketing Plan and Resource Guide: December 2014

1st Half of the Fiscal Year Regional TDM Marketing Campaign Summary Document: December 2014

2nd Half of the Fiscal Year Regional TDM Marketing Campaign Summary Document: June 2015

40th year Commuter Connections Anniversary: July – December 2014

Oversight:

Regional TDM Marketing Group

- Provide input and feedback on marketing plan, collateral materials, and recommendations made by the Marketing Planning Work Group.

- Provide information on current regional TDM marketing efforts by local, state, and regional agencies to establish and coordinate continuous year round marketing for regional TDM.

B. BIKE TO WORK DAY

A major marketing activity is the annual Bike to Work day event. Participation in this event has grown steadily each year and includes bicyclists from all jurisdictions in the region. This event is co-sponsored by the Washington Area Bicyclists Association (WABA) and is supported by COG/TPB staff, the state funding agencies and local jurisdictions, and individual sponsoring companies and organizations. Some of the costs of the event are off-set by business and interest-group sponsors who receive publicity for their financial support.

Commuter Connections participation in Bike to Work day includes support for the planning and promotion of the event, the maintenance and management of the event web sites, and assistance at the various “pit stops” on the day of the event, development of promotional materials and advertising, and earned media. An “Employer Challenge” is also held which identifies the top five employers with the most registered participants in the event. A drawing is then held with the five employers to select a winner. The winning employers’ registered participants receive a free lunch event sponsored by Commuter Connections.

COG/TPB staff will continue to support and implement a regional Bike To Work Day event and promote the event to employers. This will be accomplished through management and oversight of the event web site, media placements and marketing coordination activities with the marketing/advertising/public relations contractor.

Cost Estimate: \$146,421

Consultant/Contractor Costs as Part of Estimate:

<i>(Advertising and Marketing Contractor)</i>	\$ 70,000
<i>(Media Buy)</i>	\$ 40,000
<i>(Postage/Printing)</i>	\$ 8,523

Products: Earned media plan. *(COG/TPB staff in conjunction with consultant)*

Creative materials for Bike To Work Day Event which may include, but is not limited to logo update, poster, take-away brochure, transit signage, t-shirts, custom banners for each pit stop, radio ad, writing copy for live radio reads, print ad, internet ads, HTML e-mail

blasts, and public service announcements. *(COG/TPB staff in conjunction with consultant)*

Regional Proclamation. *(COG/TPB staff)*

Services:

Coordinate regional pit stops for Bike To Work Day event in May 2015. *(COG/TPB staff)*

Coordination and management of event web site *(COG/TPB staff in conjunction with WABA staff and consultant)*

Design and distribute event collateral materials to employers and the general public. *(COG/TPB staff in conjunction with consultant).*

Placement of advertisements; including, but not limited to: Web site advertisement through banner ads, placement of keyword search engine sponsorships, radio, and print, as needed. Activities include negotiation of value-added media. *(Consultant)*

Solicitation of corporate sponsors. *(COG/TPB staff in conjunction with consultant).*

Media outreach and coordination of interviews. *(COG/TPB staff in conjunction with consultant)*

Coordination of Employer Challenge. *(COG/TPB staff)*

Process media placement invoices. *(COG/TPB staff)*

Management and oversight of marketing contract. *(COG/TPB staff)*

Staff regional Bike To Work Day Steering Committee. *(COG/TPB staff)*

Schedule:

July 1, 2014 - June 30, 2015

Oversight:

Bike To Work Day

- Provide input and feedback on marketing collateral materials, radio advertisements and event logistics.

C. EMPLOYER RECOGNITION AWARDS

COG/TPB staff will coordinate the annual Commuter Connections Employer Recognition Awards for employers showing commitment towards voluntarily implementing commute alternative programs and telecommuting at their respective worksite(s). COG/TPB staff will also explore additional public relations opportunities for the award winning agencies to be profiled or highlighted. During FY 2009, a review of the program occurred and recommended changes that were adopted were implemented during FY 2010. An Employer Recognition Awards work group will continue to provide input to the collateral material developed for the award.

Coordination activities will include developing and distributing an awards nomination packet and soliciting nominations from employers through local jurisdictions, Chambers of Commerce and from the employers themselves. Staff will also work with the marketing contractor to review and classify the award submissions. A selection committee of objective transportation industry professionals will be recruited for the awards selection committee. The selection committee will be chaired by a member of the TPB.

The marketing contractor will work with COG/TPB staff to validate nomination entries and obtain and clarification needed from nominees. The marketing contractor will facilitate the selection committee process. Once the selection committee makes its recommendations, the award winners will be notified and a short video will be produced on each winning category. An awards booklet, giveaway, and short video briefs of each of the award winners will be produced for the awards ceremony. The awards ceremony will be held towards the end of the fiscal year. Staff will coordinate all logistics for the event including, but not limited to: securing speakers, writing remarks, securing event venue, and staffing the event. Additionally, COG's Office of Public Affairs along with the marketing contractor will identify media opportunities to highlight the winners.

Cost Estimate: \$99,256

Consultant/Contractor Costs as Part of Estimate:

<i>(Advertising and Marketing Contractor)</i>	\$60,000
<i>(Media Buy)</i>	\$ 5,500
<i>(Postage/Printing/Video)</i>	\$19,500

Products: Awards nomination packet. *(COG/TPB staff in conjunction with consultant).*

Awards invitations *(COG/TPB staff in conjunction with consultant).*

Awards Booklet. *(COG/TPB staff in conjunction with*

consultant).

Award Trophies. *(COG/TPB staff)*

Giveaway Item. *(COG/TPB staff in conjunction with consultant).*

Video Briefs. *(COG/TPB staff in conjunction with consultant).*

Event Photos. *(Consultant)*

Print Ad. *(Consultant in conjunction with COG/TPB staff)*

Services:

Coordinate award submissions with local jurisdictions. *(COG/TPB staff)*

Coordinate logistics for awards selection committee. *(COG/TPB staff in conjunction with consultant)*

Facilitate selection committee meeting *(Consultant)*

Identify and coordinate earned media opportunities. *(COG/TPB staff in conjunction with consultant)*

Placement of print ad. *(Consultant)*

Process media placement invoices. *(COG/TPB staff)*

Coordinate event logistics including recruitment of speakers, writing speaker remarks, securing event venue, and staffing the event. *(COG/TPB staff)*

Management and oversight of marketing contract. *(COG/TPB staff)*

Schedule:

July 1, 2014 - June 30, 2015

Oversight:

Commuter Connections Subcommittee

- Provide input and feedback on project and recommendations made by Employer Recognition Awards work group.

D. 'POOL REWARDS

During FY 2009 COG/TPB staff issued a report on the feasibility of conducting a carpool incentive demonstration project called 'Pool Rewards. The carpool incentive demonstration project was launched in FY 2010 and was evaluated. The purpose of the carpool incentive demonstration project was to recruit and retain commuters in a carpool through cash or other incentives. Similar programs are in operation in major metropolitan areas such as Los Angeles and Atlanta. Research has shown that commuters who are paid to carpool tend to stay in a carpooling arrangement longer than those carpoolers who are not paid. Commuters who currently take transit or a vanpool to work are eligible to receive \$245 per month under the IRS Qualified Transportation Fringe benefit provisions. Carpoolers are not eligible to participate. This type of a program has been used in a limited fashion in the Washington metropolitan region during large-scale construction projects such as the Wilson Bridge where the program was named "Bridge Bucks." The program proved to be extremely successful in convincing commuters to use an alternative form of transportation other than driving alone during the construction period.

During FY 2009, a demonstration program began operations in the following corridors: 1) I-495 from Bethesda to Tyson's Corner, 2) I-495 from MD-295 (BW Parkway) to I-270; and 3) I-395 from Washington DC into Northern Virginia. The program guidelines and implementation plans for each of these corridors were developed by a work group in FY 2009 and were deployed as part of the pilot project. The duration of the financial incentive for the three recommended corridors was for three months for participating commuters. During the course of the demonstration project in FY 2010, the corridor restrictions were lifted in March 2010 due to low participation rates.

An evaluation report was developed under the guidance of the State TDM Work Group and the TDM Evaluation Group. Based on the demonstration project results, the STDM Work Group determined the program's continuation beginning in FY 2011 along with changes to program guidelines and the 'Pool Rewards software module. After measuring the benefits produced from the carpool financial incentive program, comparisons were made from the expected outcomes to the actual outcomes in terms of auto occupancy and vehicle miles of travel, vehicle trips reduced and emission impacts. A follow-up survey conducted in FY 2011 of the original demonstration project participants showed a 93% carpool retention rate of all participants. A survey of new participants was conducted in FY 2011 and showed that 98% of the program participants planned to carpool after the incentive had ended. Continued evaluation will be conducted in order to adjust program guidelines and documentation of program participation from the user's end. Results from an additional survey of all past participants during FY 2014 will be used to make any necessary program adjustments in FY 2015.

The current carpool incentive allows each participating carpooler to earn up to \$130 over a 90 day time frame through a trip-tracking process. In FY 2012 the 'Pool Rewards program was expanded to include vanpools. Newly formed vanpools that originate in either the District of Columbia or in Maryland whose destination is in the Washington DC non-attainment region will be eligible to participate. Third-party vanpool providers on contract with COG/TPB provide the vanpool service and each of the 'Pool Rewards eligible

vanpools receive an on-going \$200 per month incentive. COG/TPB staff worked with WMATA to develop a monthly mileage reporting system for the Federal Transit Administration's (FTA's) National Transit Database. There will also be continued coordination with Virginia's new incentive vanpool program.

In FY 2015, advertising materials will be updated along with on-line advertising as a way to entice additional project participants.

Cost Estimate: \$328,307

Consultant/Incentive Costs as Part of Estimate:

<i>(Advertising and Marketing Contractor)</i>	\$ 15,000
<i>(Media Buy)</i>	\$ 45,000
<i>(Pool Rewards Incentive Payments)</i>	\$110,000 (carpools)
	\$120,000 (vanpools)

Products: Marketing materials. *(COG/TPB staff in conjunction with consultant)*

Services: Operation of 'Pool Rewards program which includes registering and verifying participants, monitoring trip logs, supervisor verification, and payments to program participants. *(COG/TPB staff)*

Media Placements. *(Consultant)*

Process media placement invoices. *(COG/TPB staff)*

Management and oversight of marketing contract. *(COG/TPB staff)*

Schedule: July 1, 2014 - June 30, 2015

Oversight: Commuter Connections Subcommittee

- Provide input and feedback on project recommendations for program continuation and/or expansion.

E. CAR-FREE DAY

During FY 2015, COG/TPB staff will coordinate with local jurisdictions to implement the regional Car Free Day campaign that will encourage residents to leave their cars behind or to take alternative forms of transportation such as public transit, carpools, vanpools, telework, bicycling or walking.

Car Free Day was first held in FY 2009. In FY 2012, evaluation results showed that there were over 11,700 individuals that pledged to go “car-free” for this event, a 70% increase over the previous year. In addition, there were approximately 5,500 vehicle trips reduced and 272,000 vehicle miles of travel reduced as a result of participation in this event. During FY 2013, the event was held on a Saturday and the participation rate was about half of that in FY 2012 (6,572 pledges). In FY 2014, the event date fell on a Sunday; however the region expanded the event to Car Free Days to include Friday and Saturday; however the participation rate fell sharply to 4,168.

This event will be held on September 22nd and is in tandem with the World Car Free Day event. In FY 2015, the event will fall on a weekday which will hopefully attract additional participation. A marketing campaign along with public outreach efforts will be developed to coincide with this worldwide celebrated event.

Cost Estimate:	\$81,370
<i>Consultant/Contractor Costs as Part of Estimate:</i>	
<i>(Advertising and Marketing Contractor)</i>	\$ 25,000
<i>(Media Buy)</i>	\$ 40,000
<i>(Postage/Printing)</i>	\$ 8,150

Products: Marketing collateral which can include, but is not limited to development and printing of posters, transit signage, bus shelter signage and other related advertising collateral that will need to be printed. *(COG/TPB staff in conjunction with consultant)*

Development and production of radio ad, internet ads, and text messages, and HTML e-mail blasts. *(COG/TPB staff in conjunction with consultant)*

Earned media plan development and implementation. *(COG/TPB staff in conjunction with consultant)*

Update of Web site and social media. *(COG/TPB staff in conjunction with consultant)*

Services: Implement regional Car Free Day event prior to and after Monday, September 22, 2014 and promote event to the general public, employers and to the media. *(COG/TPB staff in conjunction with consultant)*.

Media Placements, including the negotiation of value-added placements. *(Consultant)*

Process media placement invoices. *(COG/TPB staff)*

Staff regional Car Free Day Steering Committee.
(COG/TPB staff)

Management and oversight of marketing contract.
(COG/TPB staff)

Schedule: July 1, 2014 - June 30, 2015

Oversight: Car Free Day Steering Committee

- Provide input and feedback on marketing collateral materials, radio advertisements and event logistics.

IV. MONITORING AND EVALUATION

The Monitoring and Evaluation program will provide overall program and individual project results when appropriate for the various projects in the CCWP that will be used to track progress for the regionally adopted Transportation Emission Reduction Measures (TERMS). One project will solely focus on those activities directly related to data collection and analysis for the TERMS. Data collection and analysis for the TERMS occurs over a three year period. Results from this project will directly impact the FY 2012 – FY 2014 TERM Analysis report for Commuter Connections and the final results will be used to update the regional TERM Tracking Sheet. Cost effectiveness results are also calculated every three years. Impact and cost effectiveness results will also be used by the State TDM Work Group to make any necessary recommendations for changes to the TERMS being operated through Commuter Connections.

The second project area will include the ongoing tracking and monitoring activities for each of the CCWP program areas, including the Commuter Operations Center, Guaranteed Ride Home, Employer Outreach, Marketing, and GRH Baltimore. A direct customer satisfaction survey will be performed to gauge the level of satisfaction for Guaranteed Ride Home. Monthly data collection and quarterly progress reports and an annual progress report will also be produced by COG/TPB staff.

The Monitoring and Evaluation program is a regional program and consists of the two project areas outlined below. The total annual project cost for the program tasks is \$460,000.

A. TERM DATA COLLECTION AND ANALYSIS

Data collection analysis for the Commuter Connections TERMS occurs over a three year period. The current cycle began in FY 2012 (July 1, 2012) and will conclude in FY 2014 (June 30, 2014). During FY 2012, the previous data collection cycle's TERM Analysis Report was finalized and published and the Placement Rate Study for the new data collection period was completed. In FY 2013, the Framework Methodology Document was updated and published, and data collection activities occurred for the

2013 State of the Commute Report and 2013 GRH Applicant Survey. Draft Technical reports were produced for both data collection activities.

During FY 2014, the final year in the data collection cycle, COG/TPB staff conducted an evaluation of the regional Employer Outreach database as specified in the FY 2012 – 2014 TDM Evaluation Framework Methodology Document. An employer telework survey was also conducted with Maryland employers to gauge the effectiveness of assistance provided to employers to start and expand a telework program. A Bike To Work Day survey of the FY 2013 program participants was conducted and the 2013 State of the Commute Survey Technical Report was finalized and a general public report was prepared for printing. The 2013 Guaranteed Ride Home Applicant Survey Report was finalized and the draft FY 2014 TERM Analysis report was prepared.

During FY 2015, the 2013 State of the Commute general public report will be printed and distributed, the FY 2012 – 2014 TERM Analysis report will be finalized and results will be incorporated into the TPB's regional TERM tracking sheet, and the FY 2015 Placement Rate Study will be completed for the new data collection period.

Various presentations on the data collection instruments and reports will be prepared and given to the Commuter Connections TDM Evaluation Group, the Commuter Connections Subcommittee, the TPB Technical Committee, and the TPB, if warranted. The evaluation contractor will also be fulfilling data requests that are received or needed by COG/TPB staff during the course of the fiscal year.

COG/TPB staff will also provide day to day management and monitoring of evaluation contract services and will report results through monthly data collection activities and quarterly progress reports and an annual progress report.

During FY 2015, data collection activities from local sales territories will continue as will the review of employer database records and the classification of employer records into levels of participation. Quarterly level of effort verification statements will be produced by COG/TPB staff.

Cost Estimate: **\$221,875**

Consultant Costs as Part of Estimate:
(TDM Evaluation Project Consultant) \$55,000

Products: 2013 State of the Commute printing and distribution of general public report. (COG/TPB staff in conjunction with consultant).

Completion of FY 2012 – FY 2014 TERM Analysis Report (COG/TPB staff in conjunction with consultant).

FY 2015 Placement Rate Study data collection activities and report. (COG/TPB staff in conjunction with consultant).

Quarterly level of effort Employer Outreach TERM verification statements. (COG/TPB Staff)

Services: Fulfillment of data requests. (COG TPB Staff)

Data documentation from monthly activity reports from ten local sales territories. (COG TPB Staff)

Management and oversight of TDM Evaluation contract. (COG/TPB staff)

Schedule: July 1, 2014 - June 30, 2015

2013 State of the Commute Survey General Public Report: August 2014

2012 - 2014 TERM Analysis Report: January 2015

FY 2015 Placement Rate Study Report: May 2015

Oversight: TDM Evaluation Group

- Provide input and feedback on data collection activities, survey methodology, and draft reports.

B. PROGRAM MONITORING AND TRACKING ACTIVITIES

COG/TPB staff will collect monthly program statistics, produce quarterly progress reports, monthly Executive Summary reports, and produce a FY 2014 annual summary of program statistics of the number and type of commuter traveler requests filled by COG and other client member program sites. Staff will collect and analyze data from the monthly customer satisfaction survey for all GRH program users, and produce a customer satisfaction survey report based on the findings. Survey results will be used to change program guidelines and/or policies as needed.

COG/TPB staff will assist local Employer Outreach sales representatives to conduct employer site surveys. A contractor will be used to provide technical assistance for the electronic surveying process and analysis of results, and data entry assistance for those employers using a paper copy of the survey. Survey tabulation and reporting will be provided by COG/TPB staff. Results from the employer database tabulated surveys are used to estimate the participation rates and impacts for employer-based TDM programs reported from the local sales jurisdictions. COG/TPB staff will also maintain and update the archived Employer Commute Survey database.

COG/TPB staff will also monitor monthly progress for local Employer Outreach sales jurisdictions based on their approved Scopes of Work and contract project goals. Quarterly progress reports and level of effort tracking sheets listing results of each local sales jurisdiction will be prepared. An annual detailed snapshot of overall progress will be provided to appropriate state funding agencies for their respective jurisdictions.

COG/TPB staff will conduct the annual Employer Customer Satisfaction Survey and report.

COG/TPB staff will oversee a regional monitoring and evaluation program for Employer Outreach which includes data collection activities from local employer outreach sales territories. Local jurisdiction contract performance monitoring for Employer Outreach goals will also be a part of this activity.

Results from local employer telework sales calls and outreach services will be documented in terms of level of effort and progress and shown in quarterly progress reports. Quarterly documentation will also be provided on level of participation and effectiveness and results from sales and outreach activities for employer-based telework programs. Overall monitoring and evaluating employer-based telework programs throughout the region will continue.

Staff will also evaluate effectiveness of advertising campaigns through call volumes, internet hits, and the annual placement rate study. Marketing campaigns will be monitored through lead analysis and detailed campaign summary results. An event summary report will also be produced for the FY 2014 regional Bike To Work Day event.

Monthly program statistics will be collected and quarterly progress reports will be provided for all program areas in the FY 2015 CCWP and an annual progress report for FY 2014 will be produced.

Cost Estimate:	\$238,125
Consultant Costs as Part of Estimate:	
<i>(Employer Survey Project Consultant)</i>	<i>\$ 30,000</i>

Products:	<p>Collect monthly program data and produce quarterly progress reports and monthly Executive Summary reports for the Commuter Operations Center, Guaranteed Ride Home, Employer Outreach, Marketing, Evaluation, and GRH Baltimore programs. <i>(COG/TPB staff)</i></p> <p>Produce FY 2014 annual progress report. <i>(COG/TPB staff)</i></p> <p>Collect and analyze data from monthly GRH customer satisfaction survey for FY 2014 program users, and</p>
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produce a report showing results. *(COG/TPB staff)*

Quarterly Employer Outreach verification report.
(COG/TPB staff)

Marketing lead analysis and campaign summary
report. *(COG/TPB staff)*

FY 2014 Bike to Work Day Event Report *(COG/TPB
staff)*

Employer Outreach Customer Satisfaction Survey
(COG/TPB staff and Contractor)

Survey reports to Employer Outreach representatives
from Employer Commute Survey results. *(COG/TPB
staff)*

Services:

Updating and Maintaining Employer Commute Survey
archived database. *(COG/TPB staff)*

Management and oversight of Employer Survey
contract. *(COG/TPB staff)*

Staff the TDM Evaluation Group *(COG/TPB staff)*

Schedule:

July 1, 2014 - June 30, 2015

FY 2013 4th Quarterly Progress Report: July 2014

FY 2014 Marketing Campaign Lead Analysis and
Results: September 2014

FY 2014 Annual Progress Report: September 2014

FY 2015 1st Quarter Progress Report: October 2014

FY 2015 2nd Quarter Progress Report: January 2015

FY 2015 3rd Quarter Progress Report: April 2015

FY 2015 Marketing Campaign Lead Analysis and
Results: March 2015

Oversight:

Commuter Connections Subcommittee

- Provide input and feedback on data collection activities for GRH customer

satisfaction survey, monthly, quarterly, and annual progress reports.

Regional TDM Marketing Group

- Provide input and feedback on campaign lead analysis reports.

Employer Outreach Committee

- Provide input and feedback on quarterly employer outreach verification reports and Employer commute survey process, reports and survey result archives.

V. EMPLOYER OUTREACH

The Employer Outreach program provides and supports outreach efforts in ten jurisdictions located in the region’s MSA. This program contains regional and jurisdictional components. COG/TPB’s Commuter Connections staff provides overall administration and arranges for sales training and support for the jurisdictional components of the program and technical training on the regional sales contact management database. The local jurisdictions provide outreach to employers and work with employers to develop and implement new, or expand existing employer-based alternative commute programs.

The following local jurisdictions provide employer outreach services:

District of Columbia
Frederick County
Montgomery County
Tri-County Council for Southern Maryland
Prince George’s County
City of Alexandria
Arlington County
Fairfax County
Loudoun County
Prince William County

Most employers who promote commute alternatives do so for practical reasons associated with the operation of their businesses. But the community as a whole benefits from commute alternatives programs, which improve air quality, reduce traffic congestion, and support economic development. For this reason, many local governments in the region continue to offer programs that encourage commute options at the employment site. These programs range from marketing efforts and incentive programs conducted through ridesharing programs to “adequate public facilities ordinances” that have trip reduction requirements for affected employers. Additionally, the Virginia Department of Transportation administers funds directly

to the local jurisdictions in Northern Virginia to implement the Employer Outreach TERM and has also allocated funding to the Telework!VA program for employers to either start or expand a telework program. The District Department of Transportation is using the pass-thru dollars for the TERM to hire a contractor directly. Results from these activities are reported and analyzed under the regional Monitoring and Evaluation program.

The Commuter Connections program's ongoing goal has been to weave existing local employer and government programs into a coherent, voluntary regional network, and to promote ways in which worksite commute alternatives programs may grow, without imposing burdensome mandates upon employers.

Regional Components of the Employer Outreach Program include:

- 1) Maintaining and updating a web-based regional employer/employee sales contact database to facilitate local efforts and avoid duplication.
- 2) Coordination with WMATA's SmartBenefits program sales staff, and/or their assigned consultant(s).
- 3) Review of individual local sales contact databases on a continuing basis to ensure quality control.
- 4) Providing bicycling information to area employers to help and support bicycling to work by their employees.
- 5) Coordinating technical training for the regional sales database on an as needed basis.
- 6) Supporting the Employer Outreach Committee of the Commuter Connections Subcommittee which provides guidance to the program.
- 7) COG/TPB staff support for updating and printing customized sales materials and employer case studies both in hard copy and for inclusion on the Commuter Connections Web site.
- 8) Providing coordinated marketing materials for the program including; but not limited to, customized sales portfolio's, employer case studies, Live Near Your Work, Alternative Work Schedule, Climate Change Carbon Footprint, LEED, and Emergency Commute Preparedness information.
- 9) Providing customized information on voluntary commuting actions that can be taken by employers and the general public to reduce mobile source emissions, particularly on Air Quality Action days, through the Clean Air Partners program.
- 10) Offering sales training for the sales and service representatives in each of the participating jurisdictions.

The regional components of the program are listed in the two project tasks below. The total

annual cost for the regional components of the Employer Outreach program is \$82,679.

Jurisdictional Components of the Employer Outreach Program include:

- 1) Contacting individual employers in each locality, (carried out by the local sales and service representatives) through the regional contact sales database which Commuter Connections maintains and updates.
- 2) Accomplishing local program goals in Maryland jurisdictions via staff, contractors, TMA's, or other entities. A scope of work is submitted to COG to expedite an annual program contract for each locality, and funding is allocated to localities based upon guidance to COG from the state funding agencies.
- 3) COG/TPB support for overseeing pass-thru funding to local sales jurisdictions for the implementation of voluntary transportation demand management strategies at private sector employment sites.
- 4) Providing sales support for the sales and service representatives in DC and Maryland.

The jurisdictional components of the program are outlined in the two project tasks below. The total annual costs for the jurisdictional components of the Employer Outreach program are \$549,549.

Regional Component Project Tasks

A. **REGIONAL EMPLOYER DATABASE MANAGEMENT AND TRAINING**

During FY 2014, COG/TPB staff will continue to maintain and update the hardware and software for the computerized regional employer outreach database and monitor the regional web-based database upgrade installed during FY 2013. In addition, COG/TPB staff will coordinate training and provide technical assistance to local sales jurisdictions upon request.

Cost Estimate: \$67,679

Services: Management and monitoring of Employer Outreach regional database and provision of sales representative database training as needed. *(COG/TPB staff)*

Maintenance and update of regional contact management database. *(COG/TPB staff)*

Schedule: July 1, 2014 - June 30, 2015

Oversight: Employer Outreach Committee

- Provide input and feedback on technical issues regarding the regional Employer Outreach database.

B. EMPLOYER OUTREACH FOR BICYCLING

The Employer Outreach for Bicycling program provides information to area employers to help support and encourage bicycling to work by their employees. This information is included in the Employer Outreach materials provided to employers under the Employer Outreach Program.

Specific activities under the Employer Outreach for Bicycling Program include the update of a guide on biking to work (“Biking to Work in the Washington Area: A Guide for Employers and Employees), and incorporation of WABA bike mentors into the ridematching database. (WABA’s Web site now provides users with 24-hour matching to WABA bike mentors, automating a service that previously consumed considerable staff time, and which was available only during office hours).

COG/TPB staff also provides support and facilitation for other bike-to-work outreach activities including lunch time seminars, association meetings and strategic mailings.

Cost Estimate: \$15,000

Printing as Part of Estimate \$7,355

Products: Regional Bicycling to Work Guide updates.
(COG/TPB staff)

Services: Employer assistance and seminars. (COG/TPB staff)

Schedule: July 1, 2014 - June 30, 2015

Oversight: Employer Outreach Committee

- Provide input and feedback on bicycling issues or outreach activities at employment sites.

Jurisdictional Component Project Tasks

A. MARYLAND LOCAL AGENCY FUNDING AND SUPPORT

Local jurisdictions work with employers to develop and implement new, or expand existing employer-based commuter benefit programs such as transit and vanpool benefits, preferential parking for carpools and vanpools, carpool and vanpool formation, and telework and flexible work schedules. Results from these efforts are recorded in the regional employer database.

Maryland jurisdictions will also provide general telework information to the general public, local agencies, and employers. Employer Outreach representatives will also work with employers in Maryland to establish new or expand existing telework programs.

Cost Estimate: Pass-thru to Local Jurisdictions: \$446,898
Telework component of pass-thru: \$81,063

Total Project Budget: \$446,898

Services: New or expanded employer-based TDM programs in Maryland. (*local jurisdictions*).

New or expanded employer telework programs in Maryland. (*local jurisdictions*).

Schedule: July 1, 2014 - June 30, 2015

B. DC, MARYLAND, AND VIRGINIA PROGRAM ADMINISTRATION

This project task includes the management and monitoring of pass-thru funding by COG/TPB staff to local sales jurisdictions in DC and Maryland for contract compliance. It also includes support to DC and Maryland jurisdictions, consultants, or TMA staff in implementing voluntary transportation demand management strategies at private and/or non-profit sector employment sites. This task involves the review and approval of an annual Scope of Work by COG/TPB staff for each of the Maryland sales jurisdictions and day to day contract management. This task also includes COG/TPB staff support for updating and printing employer specific regional employer-based marketing materials as well as providing training opportunities.

Cost Estimate: \$102,651

Products:

Electronic and printed updates of customized sales portfolio materials, employer specific regional marketing materials (General Commuter Connections brochure, Alternative Work Schedules brochure, Emergency Commute Preparedness brochure, Live Near Your Work brochure, LEED brochure, Climate Change brochure), and case studies. (COG/TPB staff)

Services:

Sales training offered for sales and service representatives in the region. (COG/TPB staff/sales training professionals).

Oversight to local sales jurisdictions in DC and Maryland to implement voluntary transportation demand management strategies at private sector employment sites. (COG/TPB staff)

Bi-annual sales support conference calls to DC and Maryland jurisdictions. Employer site visits by COG/TPB staff as requested or needed by DC and Maryland jurisdictions. (COG/TPB staff)

Staff the regional Employer Outreach Committee. (COG/TPB staff)

Schedule:

July 1, 2014 - June 30, 2015

Oversight:

Employer Outreach Committee

- Provide input and feedback on administrative items such as training, employer-based collateral materials, and case studies.

VI. GUARANTEED RIDE HOME BALTIMORE

A regional Guaranteed Ride Home (GRH) program was implemented in the Baltimore metropolitan region and in St. Mary's County beginning in FY 2011. The GRH Baltimore program will help to eliminate a major barrier to using transit, carpooling, vanpooling, bicycling or walking to work. Studies have shown that a commuter's fear of being "stranded" at work if they or a family member become ill, or if they must work unexpected overtime, is one of the most compelling reasons commuters do not rideshare or use transit to travel to work. The GRH Baltimore program eliminates this barrier by providing a free ride home in the event of an unexpected personal emergency or unscheduled overtime.

The GRH Baltimore is similar to the Washington metropolitan region's GRH program in offering a free ride home to commuters that carpool, vanpool, use transit, bicycle, or walk to work at least two days per work week. As a result of the GRH program, some single occupant vehicle drivers will switch to a ridesharing or transit commuting alternatives, and current ridesharing and transit users will increase the usage of these alternative commute modes. The program will be able to demonstrate both transportation and emission impacts that could be used as part of the Baltimore region's air quality conformity process. The GRH program is an insurance program for those commuters who do not drive alone to their worksite.

The budget for the Guaranteed Ride Home program includes two project areas outlined below, and with a budget of \$150,000.

A. GENERAL OPERATIONS AND MAINTENANCE

Commuter Connections staff at the Metropolitan Washington Council of Governments (COG) will process all GRH applications received by mail, fax, and the Commuter Connections Web site. Using the GRH software system, COG registers qualifying applicants, produces GRH registration ID cards, and sends ID card and participation guidelines to new registrants. Commuters can obtain information about the GRH program and complete an application on the Commuter Connections Web site, www.commuterconnections.org. Commuters may also call COG's Commuter Connections 800 telephone number, 1-800-745-RIDE, to ask questions about the GRH program and/or request information and an application. The 800 number is equipped with a menu so that callers can choose the menu item that best fits their needs. All GRH questions and requests for information and applications are taken by COG/TPB staff.

COG staff also mails GRH applications to GRH users who have used the GRH program without formally registering. GRH guidelines permit a commuter to use the GRH service one time as a "one-time exception" before they register. Also, COG staff mails transit vouchers to GRH users who used transit as part of their GRH trip. All vouchers and invoices from transportation service providers are processed by COG staff.

In the event the commuter has not supplied their e-mail address, COG/TPB staff mails a re-registration notice to commuters who could not be contacted by telephone. The notice contains an application which the commuter can complete and send to COG to re-register. The commuter can also call Commuter Connections or visit the Commuter Connections Web site to re-register.

COG/TPB staff will assist the Commuter Connections Subcommittee in reviewing the GRH participation guidelines for any recommended changes. These recommendations will be presented to the Commuter Connections Subcommittee for their final review and approval. In the past, recommendations have been made to modify and add participation guidelines to better convey the GRH trip authorization, GRH re-registration, and one-time exception rules and restrictions.

COG/TPB staff will respond to the general public and to GRH applicants for registrations and re-registrations to the program. Registered commuters will be notified when their GRH registration is about to expire. Staff will continue to prepare and send new and re-registration GRH ID cards, registration letters, and participation guidelines on a weekly basis. Staff will also continue to monitor and maintain the GRH applicant database and server. COG/TPB staff will continue to update and maintain program participation guidelines, and provide annual customer service training to the daily operations contractor and COG/TPB staff assigned to the project.

During FY 2015, data collection activities will continue for a GRH Baltimore Customer satisfaction survey. The purpose of the survey will be to gauge the level of satisfaction from those who have used the program. A report will be developed and finalized from the FY 2014 data collected.

Cost Estimate: **\$37,496**

Direct Costs (Telephone, Copies, etc) as part Of Estimate: \$ 3,732

Products: GRH new and re-registration ID cards and registration letters *(COG/TPB staff)*

GRH Participation Guidelines *(COG/TPB Staff)*

Final 2014 GRH Customer Satisfaction Survey Report. *(COG/TPB staff)*.

Services: Process application requests from the general public for registration and re-registration to the program. *(COG/TPB Staff)*

Notify commuters when registration is about to expire. *(COG/TPB staff)*

Monitor and update GRH applicant database. *(COG/TPB staff)*

Schedule: July 1, 2014 – June 30, 2015

2014 GRH Customer Satisfaction Survey Report: November 2014

Oversight: Commuter Connections Subcommittee

- Provide input and feedback on GRH program participation guidelines and policies.

B. PROCESS TRIP REQUESTS AND PROVIDE TRIPS

GRH transportation service will be provided by several taxi companies, a rental car company, and a paratransit company, all under contract with COG. Commuters make their GRH trip request through a menu option provided on COG's Commuter Connections 800 telephone number. This menu option transfers calls for GRH trips directly to an operations contractor. This contractor reviews and assesses the trip request and approves or denies the request based on the GRH Participation Guidelines. The contractor then arranges the approved trips with the appropriate transportation contractor.

The operations contractor contacts, by telephone, GRH registrants without e-mail addresses whose registration is near expiration and re-registers the qualifying commuters. While the system of calling commuters has been successful, many messages left on commuters' voice mail are not returned. In such cases, re-registration is facilitated by COG staff as described in the previous section.

COG/TPB staff will continue management and monitoring of contract services for day-to-day operations services. Day to day operations include confirming ride request eligibility, dispatching rides through the ride service providers, tracking ride requests in the GRH database, processing invoices for payment for ride service providers, the daily operations contractor and for the general public for transit vouchers.

Customer service training will be provided to all Guaranteed Ride Home call center agents.

Cost Estimate: **\$112,504**

Consultant/ Contractor Costs as Part of Estimate:

(Daily Operations): \$41,000
(Cab and Car Rental Companies) \$59,267

Services: Process GRH trip requests, approve/deny requests, and arrange rides. *(Daily Operations Contractor)*

Management and monitoring of contract services for day-to-day operations, and ride service providers. This includes processing invoices for payment for contractors and for the general public for transit vouchers. *(COG/TPB staff)*

Provide GRH Rides *(Cab and Car rental Companies)*

Schedule: July 1, 2014 – June 30, 2015

Oversight: Commuter Connections Subcommittee

- Provide input and feedback on GRH program participation guidelines and policies.

ITEM 12- Information

February 19, 2014

Review of the Draft FY 2015 Unified Planning Work Program (UPWP)

Staff

Recommendation: Receive briefing on the enclosed draft of the Unified Planning Work Program (UPWP) for FY 2015 (July 1, 2014 through June 30, 2015).

Issues: None

Background: The Board will be asked to approve the FY 2015 UPWP at its March 19 meeting. The TPB Technical Committee reviewed this draft at its February 7 meeting.

**NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD**

FY 2015

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING
FOR THE
WASHINGTON METROPOLITAN REGION**

DRAFT

February 19, 2014

The preparation of this program was financially aided through grants from the District of Columbia Department of Transportation; Maryland Department of Transportation; Virginia Department of Transportation; U.S. Department of Transportation, Federal Highway Administration; and the U.S. Department of Transportation, Federal Transit Administration, under the Federal Transit Act.

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I. INTRODUCTION

Purpose

The **FY 2015 Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region** incorporates in one document all federally assisted state, regional, and local transportation planning activities proposed to be undertaken in the region from July 1, 2014 through June 30, 2015. The UPWP provides a mechanism for the coordination of transportation planning activities in the region, and is required as a basis and condition for all federal funding assistance for transportation planning by the joint planning regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

This work program describes all transportation planning activities utilizing federal funding, including Title I Section 112 metropolitan planning funds, Title III Section 5303 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. It identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

Planning Requirements

The planning activities outlined in this work program respond to a variety of regulatory requirements. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) of 2005 defines the structure of the metropolitan planning process. On February 14, 2007, the FHWA and FTA issued final regulations regarding metropolitan planning in response to SAFETEA-LU. The Moving Ahead for Progress in the 21st Century (MAP-21) Act, which became law on July 6, 2012, made some important modifications to the metropolitan planning process, primarily requiring metropolitan planning organizations (MPOs) to establish and use a performance-based approach to transportation decision making and development of transportation plans. This work program has been developed to comply with the MAP-21 requirements regarding metropolitan planning. After the FHWA and FTA proposed regulations on MPO planning are issued, the proposed activities will be reviewed to identify revisions that may be necessary to comply with the final regulations.

On November 17, 2010, the TPB approved the 2010 Financially Constrained Long Range Transportation Plan (CLRP) for the National Capital Region. On May 5, 2011, FHWA and FTA transmitted their final Certification Report on the TPB planning process which found that “the metropolitan planning process of the Washington, DC-VA-MD TMA, conducted by the MWCOCG Transportation Planning Board and the Fredericksburg Metropolitan Area Metropolitan Planning Organization, conditionally meets the requirements of the Metropolitan Planning Rule at 23 CFR Part 450 Subpart C and 49 CFR Part 613. The FHWA and the FTA are, therefore, jointly certifying the transportation planning process, subject to implementation of the Recommendations and Corrective Actions within the next 18 months.” The report included 11 TPB recommendations and 3 FAMPO recommendations. The report also had 4 corrective actions that FAMPO must address. All of the recommendations and corrective actions have been addressed and a report on their implementation was submitted to FTA and FHWA on July 18, 2012.

On November 16, 2011, the TPB approved the 2011 CLRP. In a February 17, 2012 letter, FHWA and FTA found that the 2011 CLRP conforms to the region's State Implementation Plans. On July 18, 2012, the TPB approved the 2012 CLRP and FY 2013-2018 TIP. In a September 28, 2012 letter, FHWA and FTA found that the 2012 CLRP and FY 2013-2018 TIP conform to the region's State Implementation Plans. On July 17, 2013, the TPB approved the 2013 CLRP and FY 2013-2018 TIP. In a January 22, 2014 letter, FHWA and FTA found that the 2013 CLRP and FY 2013-2018 TIP conform to the region's State Implementation Plans.

The Clean Air Act Amendments (CAAA) of 1990 requires that the transportation actions and projects in the CLRP and Transportation Improvement Program (TIP) support the attainment of federal health standards for ozone. The CLRP and TIP have to meet specific requirements as specified by the Environmental Protection Agency (EPA) regulations issued on November 24, 1993, with amendments on August 15, 1997 and supplemental guidance on May 14, 1999, regarding criteria and procedures for determining air quality conformity of transportation plans, programs and projects funded or approved by the FHWA and FTA. These conformity requirements are also addressed in this document.

Regional Planning Goals

In 1998, the TPB adopted a set of policy goals that have since served to guide its planning work program. These goals are:

- The Washington metropolitan region's transportation system will provide reasonable access at reasonable cost to everyone in the region.
- 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 throughout the entire region, including a healthy regional core and dynamic regional activity centers with a mix of jobs, housing, services and recreation in a walkable environment.
- The Washington metropolitan region's transportation system will give priority to management, performance, maintenance, and safety of all modes and facilities.
- The Washington metropolitan region will use the best available technology to maximize system effectiveness.
- 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.
- The Washington metropolitan region will achieve better inter- jurisdictional coordination of transportation and land use planning.
- The Washington metropolitan region will achieve enhanced funding mechanisms for regional and local transportation system priorities that cannot be implemented with current and forecasted federal, state, and local funding.
- The Washington metropolitan region will support options for international and inter-regional travel and commerce.

Known as the TPB Vision, these goals are broad in scope, and also encompass a variety of strategies and objectives. Together, these goals, strategies, and objectives provide a

framework for setting out core principles for regional transportation planning. MAP-21 requires the planning process to consider projects and strategies that address eight planning factors. These eight planning factors are encompassed by the TPB Vision's policy goals and are considered when developing the CLRP. Each planning factor is included in one or more of the TPB Vision goals, objectives and strategies, except for security, which is implicitly addressed in the TPB Vision.

Addressing Changing Planning Priorities

MAP-21 Requirements

MAP-21 calls for metropolitan planning organizations, public transportation providers and states **to establish and use a performance-based approach to transportation decision making to support seven national goals**. The USDOT must establish performance measures related to seven goal areas for the federal-aid highway system by April 1, 2014. The goal areas include: safety, infrastructure, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. The goal areas for public transportation address transit safety and transit asset management.

The states then have a year (April 1, 2015) to establish performance targets in support of those measures; and the MPO subsequently has 180 days (October 1, 2015) to establish performance targets coordinated with those of the states and public transportation providers. After these targets are set, the metropolitan transportation plan and the transportation improvement program (TIP) are required to include a description of the performance measures and targets used in assessing the performance of the transportation system. The metropolitan transportation plan will also have to include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP is also required to include a description of the anticipated effect of the TIP toward achieving the performance targets set in the plan.

MAP-21 establishes two new programs administered by the state DOTs to fund a variety of projects. The TPB will have an important supporting role in the planning and selection of the projects funded under the new Transportation Alternatives Program and the new Section 5310 Enhanced Mobility Program.

In addition to the changing federal context, other factors that influence activities in this work plan are regional in scope. For example, on January 15, 2014, after a three-year process, the TPB approved the Regional Transportation Priorities Plan (RTPP) for the National Capital Region. The Priorities Plan developed a comprehensive set of regional transportation goals and challenges, and then identified three regional priorities that local, state, and regional agencies should consider when developing projects. By FY 2015, it is anticipated that the Priorities Plan will influence policy actions, funding strategies and potential projects considered for potential incorporation into the CLRP.

Regional and federal factors that are non-regulatory may evolve from one year to the next, but are nonetheless influential in the planning activities that are conducted and described in this work program. As these factors continue to evolve, the UPWP is adjusted annually to

focus on new and emerging priorities. This UPWP builds upon the previous UPWP, and is the result of close cooperation among the transportation agencies in the region. This UPWP was prepared with the involvement of these agencies, acting through the TPB, the TPB Technical Committee and its subcommittees. This UPWP details the planning activities that must be accomplished to address the annual planning requirements such as preparing the TIP and a Congestion Management System. It also describes the tasks required to meet the approval dates for the region's CLRP and the TIPs, and outlines the activities for the subsequent years.

Responsibilities for Transportation Planning

The National Capital Region Transportation Planning Board (TPB) is the organization responsible for conducting the continuing, cooperative, comprehensive (3-C) transportation planning process for the Metropolitan Washington Region in accordance with requirements of MAP-21. The TPB is the official Metropolitan Planning Organization (MPO) for transportation planning for the Washington metropolitan region, designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia.

The TPB is composed of representatives from the 20 cities and counties, including the District of Columbia, that are members of the Metropolitan Washington Council of Governments (COG), the two state and the District transportation agencies, the Washington Metropolitan Area Transit Authority (WMATA), the Metropolitan Washington Airports Authority (MWAA), four federal agencies, the General Assemblies of Maryland and Virginia, and private transportation service providers. When matters of particular importance are before the TPB, a special voting procedure may be invoked that weights the votes of local jurisdiction members according to population.

Figure 1 lists the organizations represented on the TPB and its Technical Committees. Figure 2 shows the geographical location of each of the participating local jurisdictions. The TPB also serves as the transportation policy committee of COG. This relationship serves to ensure that transportation planning is integrated with comprehensive metropolitan planning and development, and is responsive to the needs of the local governments in the area.

Policy coordination of regional highway, transit, bicycle, pedestrian and intermodal planning is the responsibility of the TPB. This coordinated planning is supported by the three departments of transportation (DOTs), FTA, FHWA, and the member governments of COG. The TPB coordinates, reviews, and approves work programs for all proposed federally assisted technical studies as part of the UPWP. The relationship among land use, environmental and transportation planning for the area is established through the continuing coordinated land-use, environmental and transportation planning work programs of COG and TPB. Policy coordination of land use and transportation planning is the responsibility of COG, through its Metropolitan Development Policy Committee (MDPC) and the Transportation Planning Board. COG's regional land use cooperative forecasts are consistent with the adopted regional Long Range Transportation Plan.

The chairman of the TPB and the state transportation directors are members of the Metropolitan Washington Air Quality Committee (MWAQC), which was formed under the authority of the governors of Maryland and Virginia, and the mayor of the District of Columbia

to recommend the region's air quality plans. These recommendations will be forwarded to the governors and mayor for inclusion in the State Implementation Plans (SIPs) they submit to EPA.

In the Washington Metropolitan region, the roles and responsibilities involving the TPB, the three state DOTs, the local government transportation agencies, WMATA, and the local government public transportation operators for cooperatively carrying out state transportation planning and programming have been established over several years. As required under the final planning regulations, the TPB, the state DOTs and the public transportation operators have documented their transportation planning roles and responsibilities in the Washington Metropolitan Region in a Memorandum of Understanding (MOU) that was executed by all parties on January 16, 2008. The MOU is included in the Appendix and the responsibilities for the primary planning and programming activities are indicated in Figure 3.

Also in the Appendix is an agreement involving the TPB and Charles and Calvert counties in Maryland regarding consistency and conformity of their plans, programs and projects is included in the UPWP.

Included in the Appendix is the 2004 agreement between the TPB and the Fredericksburg Area MPO (FAMPO) in Virginia in which FAMPO committed to be responsible for meeting the TMA responsibilities for the transportation planning and programming requirements within the Metropolitan Washington Urbanized Area portion of Stafford County and producing the required planning documents on the TPB's current planning cycle.

Each year, the TPB Call for Projects document is transmitted to FAMPO requesting new and updated information on the projects located in the portion of Stafford County in the Washington DC TMA to be included in the update of the CLRP. FAMPO is also requested updated information on the Congestion Management System (CMS) for this portion of Stafford County. FAMPO transmits this information to TPB on the schedule included in the TPB Call for Projects document.

FY 2015 Regional Planning Priorities

During FY 2014, a significant effort will be made to examine potential regional performance measures in coordination with the three state DOTs, WMATA and the local government public transportation operators to address the new MAP-21 planning regulations and performance management requirements for MPOs. With the completion in January 2014 of the three-year process to develop the RTPP, the focus will turn to assessing what policy actions, funding strategies and potential projects are proposed for inclusion in the CLRP. Efforts will continue to improve the coordination between land use and transportation planning. The TPB public participation process and technical planning procedures will also continue to be strengthened. In addition to these activities directly involving the TPB, a number of corridor studies and other planning studies and programs are underway throughout the region (see Figure 4).

Figure 1

ORGANIZATIONS REPRESENTED ON THE TPB AND/OR ITS TECHNICAL COMMITTEES

VIRGINIA

Arlington County	Northern Virginia Regional Commission
Fairfax County	Northern Virginia Transportation Commission
Loudoun County	Virginia Department of Transportation
Prince William County	Virginia Department of Rail and Public Transportation
City of Alexandria	Virginia Department of Aviation
City of Fairfax	Virginia General Assembly
City of Falls Church	Potomac and Rappahannock Transportation Commission
City of Manassas	
City of Manassas Park	
Northern Virginia Transportation Authority	

MARYLAND

Frederick County	City of Greenbelt
Montgomery County	City of Rockville
Prince George's County	City of Takoma Park
Charles County	The Maryland-National Capital Park and Planning Commission
City of Bowie	Maryland Department of Transportation
City of College Park	Maryland General Assembly
City of Frederick	
City of Gaithersburg	

DISTRICT OF COLUMBIA

D.C. Council
D.C. Department of Transportation
D.C. Office of Planning

REGIONAL, FEDERAL AND PRIVATE SECTOR

Washington Metropolitan Area Transit Authority
Private Transportation Service Providers
Metropolitan Washington Airports Authority
Federal Highway Administration
Federal Transit Administration
National Capital Planning Commission
National Park Service

**Figure 2:
Membership of the
National Capital Region
Transportation Planning Board**



Figure 3

TRANSPORTATION PLANNING AND PROGRAMMING RESPONSIBILITIES

RESPONSIBILITY	AGENCIES
UPWP Development	TPB, DOTs, WMATA, Local Gov'ts
Planning Certification	TPB, DOTs
Performance-based Planning	TPB, DOTs, WMATA
Performance targets	TPB, DOTs, WMATA,
Performance monitoring	TPB, DOTs, WMATA,
CLRP Development	
Transportation/Land-Use Planning	TPB, MDPC, Local Gov'ts
Plan Inputs/Update	DOTs, WMATA, Local Gov'ts, NVTA, PRTC, FAMPO
Project Selection	TPB, DOTs, WMATA, and Local Gov'ts
Air Quality Conformity	TPB, FAMPO
Financial Plan	TPB, DOTs, WMATA
Congestion Management Process	TPB, DOTs, Local Gov'ts, FAMPO
Safety Element	TPB, DOTs, Local Gov'ts,
Participation Plan	TPB
Freight Plan	TPB, DOTs, Local Gov'ts.
TIP Development	
TIP Inputs	DOTs, WMATA, Local Gov'ts, NVTA, PRTC,
Project Selection	TPB, DOTs, WMATA
Air Quality Conformity	TPB, FAMPO
Financial Plan	TPB, DOTs, WMATA, Local Govt., NVTA, PRTC
Human Service Transportation	
Coordination Planning	TPB, WMATA, human services agencies
Private Enterprise Participation	TPB, WMATA, Local Gov'ts, NVTC/PRTC
Public Involvement Plan	TPB
Projects Fed Funding	TPB, DOTs, WMATA
Air Quality 2010 Attainment Plan	MWAQC, TPB, DOTs
CO ₂ Mobile Emissions Reduction	WMATA, state AQ agencies
Climate Change Adaptation	TPB, DOTs, WMATA, Local Gov'ts
Corridor Studies	DOTs, WMATA, TPB
Travel Demand Forecasting	TPB
Travel Monitoring	TPB, DOTs, WMATA, Local Gov'ts

Figure 4**TRANSPORTATION PLANNING STUDIES WITHIN THE WASHINGTON METROPOLITAN AREA 2014**

Name	Primary Agencies	Schedule	Products
Regional			
Update of Constrained Long-Range Plan	TPB, state DOTs, WMATA, local govts.	2014	CLRP
Station Area Plans (multiple stations)	WMATA	on-going	Plans
Station Access Studies (multiple stations)	WMATA	on-going	Plans
Priority Corridor Dev. Plans (multiple corridors)	WMATA	on-going	Plans
Bus Service Eval. Studies	WMATA	on-going	Studies
Bicycle and Pedestrian Phase III	WMATA	2014	Report
2040 Regional Transit System Plan	WMATA	2014	Report
2040 Regional Transit System Implementation Plan	WMATA	2014	Report
Policy Alternatives to the 2040 RTSP Build Network	WMATA	2014	Report
LRT/ Streetcar Interoperability	WMATA	on-going	Report
Metrobus Passenger Survey	WMATA/MWCOG	2014	Dataset, Report
Late-Night Bus Service	WMATA	2014	Report
Silver Spring Capacity Study	WMATA	2014	Report
Farragut West – Farragut North Passageway Study	WMATA	2014	Report
Metrobus Network Effectiveness Study	WMATA	2014	Report

Figure 4 PLANNING STUDIES 2014 (Continued)			
Name	Primary Agencies	Schedule	Products
Metrorail Line Load Application	WMATA	2014	Application
Virginia			
I-66 Corridor Study (Tier 1) (Outside the Beltway)	VDOT	2013	Report
Tri-County Parkway	VDOT	2013	FEIS
VRE Extension to Gainesville	VRE	2013	PE/ EIS
Columbia Pike Multi-modal Transportation Study	Arlington Co.	2013	Prelim. Des.
Vanpool Incentive Design	NVTC / FAMPO	2013	Report
Maryland			
Capital Beltway Study	MDOT, VDOT, Montgomery & Prince George's Counties	On-hold	DEIS
I-270 Multi-Modal Corridor Study - Highway	MDOT/SHA, Montgomery & Frederick Counties	On-hold	FEIS
Corridor Cities Transitway Study	MDOT/MTA	2015	EA/FONSI
Purple Line (Bethesda to Silver Spring/ Silver Spring to New Carrollton)	MDOT/MTA	2014	FEIS
Southern Maryland Transit Study	MDOT/MTA	2015	Report
MD 5 Transportation Study(I-495 to US 301)	MDOT/SHA	2014	DEIS
US 301 Waldorf Study (US 301from T.B. to south of Waldorf)	MDOT/SHA	2014	Feasibility Study
MD 223 Corridor Study (Steed Road to MD 4)	MDOT/SHA	2014	Report

Figure 4 PLANNING STUDIES 2014 (Continued)

<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule</u>	<u>Products</u>
MD 97 Safety Accessibility Study (16th Street to Forest Glen Road)	MDOT/SHA/MTA	2015	Not Determined
MD 97 (BRT) (Glenmont Metro to Montgomery General Hospital – Olney)	MDOT/SHA/MTA	2014	Not Determined
MD 586 Viers Mill BRT	MDOT/SHA/MTA	2015	DEIS
US 301 Planning for Operations Study (US 50 to Potomac River)	MDOT/SHA	2015	Report
I-270 Planning for Operations Study (I-495 To MD 109)	MDOT/SHA	2015	Report
Region-wide Bus on Shoulder Feasibility	MDOT/MTA/SHA WMATA/VDOT/ Counties	2014	Report
MD 28 Corridor Study MD 97 to I-95	MDOT/SHA	2017	Not Determined
Montgomery County BRT Study	MDOT/MTA/SHA	tbd	Not Determined

Figure 4 PLANNING STUDIES 2014 (Continued)

Name	Primary Agencies	Schedule	Products
District of Columbia	(To be updated)		
14th Street Bridge Feasibility Study	FHWA, DDOT, VDOT	on-going	EIS
South Capitol Street (EIS)/AWI	DDOT	on-going	EIS
First Place and Galloway NE Redesign (Fort Totten Metrorail Station)	DDOT/WMATA	on-going	Report/Design
Citywide Travel Demand	DDOT	on-going	Travel Model
Great Streets Program	DDOT	on-going	Design
16 th Street Corridor Study	DDOT	2013	Study
Managed Lane Study	DDOT	2013/14	Study/NEPA
DC Streetcar- Anacostia Ext EA and Section 106	DDOT/FTA/FHWA	2013	EA & Sec 106
Union Station to Georgetown Waterfront Alternatives Analysis	DDOT/FTA	2013	Study
Union Station to Georgetown NEPA	DDOT / FTA	2014	EA
DC Streetcar- Benning Rd Ext Feasibility Study	DDOT/WMATA	2013	Study
DC Streetcar- Benning Rd Ext Environmental	DDOT/FTA/FHWA	2013	EA
DC Streetcar- M Street Ext	DDOT	2013	Study
DC Streetcar – M Street Ext Environmental	DDOT/FTA /FHWA	2014	EA
Virginia Avenue Tunnel	CSX/FHWA/DDOT	2013	EIS
Long Bridge Study	DDOT/ FRA	2013	Study
Long Bridge Environmental	DDOT / FRA	2014	EA

Figure 4 PLANNING STUDIES 2014 (Continued)			
Name	Primary Agencies	Schedule	Products
C Street N.E. Implementation Study	DDOT	2014	Study
moveDC	DDOT	2014	Study
Metropolitan Branch Trail Fort Totten to Eastern Avenue Concept Study	DDOT	2014	Study
Southeast/Southwest Special Events Study	DDOT	2013	Study
State Freight Plan	DDOT	2014	Plan

Total Proposed Funding by Federal Source for FY 2015

Proposed federal funding for the transportation planning activities in this UPWP relies upon five sources: FTA Section 5303, FHWA Section 112, FAA Continuous Airport System Planning (CASP), FHWA State Planning and Research (SPR) and special federal funding. The proposed funding amounts (including state and local matching funds) for the TPB work program are shown in Table 1 on page 17.

The new FY 2015 funding level in Table 1 under the "FTA Section 5303" column is assumed to be the same as the FY 2014 level, and new funding under the "FHWA Section 112" column is assumed to be the same as the FY 2014. The total FY 2015 budget for the Basic Program with unobligated funding from FY 2013 is assumed to be the same as the FY 2014 total. The FY 2015 funding levels and budget will be amended in the fall after the new federal funding amounts are determined.

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

	FTA SECT 5303 80% FED & 20% STA/ LOC	FHWA SECT 112 80% FED & 20% STA/ LOC	FAA CASP 90% FED & 10% LOC	TOTALS
ALLOTMENTS PROVIDED BY DDOT				
NEW FY 2015	521,703	2,148,445		2,670,148
UNOBLIGATED FY 2013	28,123	116,540		144,663
CARRYOVER FY 2014				0
SUBTOTAL	549,826	2,264,985		2,814,811
ALLOTMENTS PROVIDED BY MDOT				
NEW FY 2015	1,253,735	3,531,767		4,785,502
UNOBLIGATED FY 2013	152,328	374,130		526,458
CARRYOVER FY 2014				0
SUBTOTAL	1,406,063	3,905,897		5,311,960
ALLOTMENTS PROVIDED BY VDRPT & VDOT				
NEW FY 2015	1,010,540	3,168,679		4,179,219
UNOBLIGATED FY 2013	72,000	332,689		404,689
CARRYOVER FY 2014				0
SUBTOTAL	1,082,540	3,501,368		4,583,908
TPB BASIC PROGRAM				
TOTAL NEW FY 2015	2,785,978	8,848,891		11,634,869
TOTAL UNOBLIGATED FY 2013	252,451	823,359		1,075,810
SUBTOTAL	3,038,429	9,672,250		12,710,679
TOTAL CARRYOVER FY 2014	0	0		0
TOTAL BASIC PROGRAM	3,038,429	9,672,250		12,710,679
GRAND TOTAL	3,038,429	9,672,250	\$232,000	12,942,679

"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 FY2014 UPWP

II. PROPOSED FY 2015 TPB WORK PROGRAM AND BUDGET

Program Structure

The TPB is responsible for the federally required planning process, serves as a forum for regional coordination, and provides technical resources for decision-making. This work program presents the work activities that support the TPB responsibilities. This work program comprises seven major activities and follows the structure in the FY 2014 program. These work activities include: (1) Plan Support; (2) Coordination and Programs; (3) Forecasting Applications; (4) Development of Networks/Models; (5) Travel Monitoring; (6) Technical Assistance; and (7) Continuous Airport System Planning. The tasks to be completed under each of the work activities are described in the following sections. The staff of the COG Department of Transportation Planning will carry out these activities, with the assistance of staff in other COG departments and supplementary consultant support.

The work program has been structured to clearly identify the specific work products to be developed, the linkages between them, and the TPB entity responsible for oversight of the products. Figures 5 and 6 on pages 21-22 illustrates the relationship between and among the TPB work activities.

The first major activity, **Plan Support** includes the preparation and coordination of the policy and planning products necessary for conducting an effective transportation planning process for the region. The UPWP, the transportation improvement program (TIP) and the financially-constrained long-range plan (CLRP) are required by federal law and regulations. The development of the CLRP and TIP will comply with the requirements in MAP-21.

The second major activity, **Coordination and Programs**, includes related activities such as the regional congestion management process (CMP), safety planning, management, operations and technology, emergency preparedness, freight planning, regional bus planning, and bicycle and pedestrian planning. These activities will address the development of new performance measures and targets required in MAP-21. Public participation applies to all of the policy products. Human services transportation coordination planning incorporates the MPO role in the new MAP-21 FTA Section 5310 Enhanced Mobility program for elderly persons and persons with disabilities. The Transportation /Land Use Connection (TLC) Program supports the improvement of coordination between land use and transportation planning and incorporates the MPO role in the new MAP-21 Transportation Alternatives Program.

The third major activity, **Forecasting Applications**, includes forecasting applications such as air quality conformity and regional studies to provide the substantive inputs for the policy products.

The fourth major activity, **Development of Networks and Models** interacts with **Travel Monitoring**, the fifth major activity. Together, these activities provide empirical travel information from congestion monitoring and survey and analysis activities. Both products and methods activities provide input for the technical products.

The sixth major activity, **Technical Assistance**, activity responds to requests from state and local governments and transit operating agencies for applying TPB methods and data

to support corridor, project, and sub-area transportation and land use studies related to regional transportation planning priorities.

Finally, the seventh major activity, **Continuous Airport System Planning (CASP)** utilizes the methods and data work activities for airport and airport-serving facilities in the region.

Work Activity Budgets

The proposed budget levels by funding source, which include FTA and FHWA funds together with state and local match, are shown in Table 2 on page 23. The TPB committee structure is shown in Figure 6 on page 25. The TPB committee or sub-committee responsible for the specific work activities listed in Table 2 are shown under the descriptions for each task starting on page 27. A detailed breakdown of staffing, consultant costs and other budgetary requirements is provided in Table 3 on page 24.

Funding for the TPB Basic Work Program is similar to the FY 2014 level. The FY 2015 UPWP continues and modifies several work activities in the FY 2014 UPWP to address MAP-21 requirements. The structure and content of this work program are summarized as follows:

- **Under Section 1 - Plan Support**, all of the activities have been conducted on an annual basis in previous years. The development of the CLRP and TIP will comply with the requirements in MAP-21.
- **Under Section 2 - Coordination Planning**, all of the activities have been conducted on an annual basis in previous years and will address the development of new performance measures and targets required in MAP-21.
- **Under Section 3 - Forecasting Applications**, the development of the Regional Transportation Priorities Plan began in FY 2012 and the other activities have been conducted on an annual basis in previous years.
- **Under Section 4 - Development of Networks/Models**, all of the activities have been conducted on an annual basis in previous years.
- **Under Section 5 - Travel Monitoring**, all of the activities have been conducted on an annual basis in previous years.
- **Section 6 - Technical Assistance and Section 7 - Continuous Airport System Planning (CASP)** are conducted each year.
- **Section 8 - Service/Special Projects**, service work or special technical studies as specified in contracts between the transportation agencies and COG may be included in the UPWP. Services or special projects are authorized and funded separately by the transportation agencies.

Figure 5: Overview of Planning Products and Supporting Activities

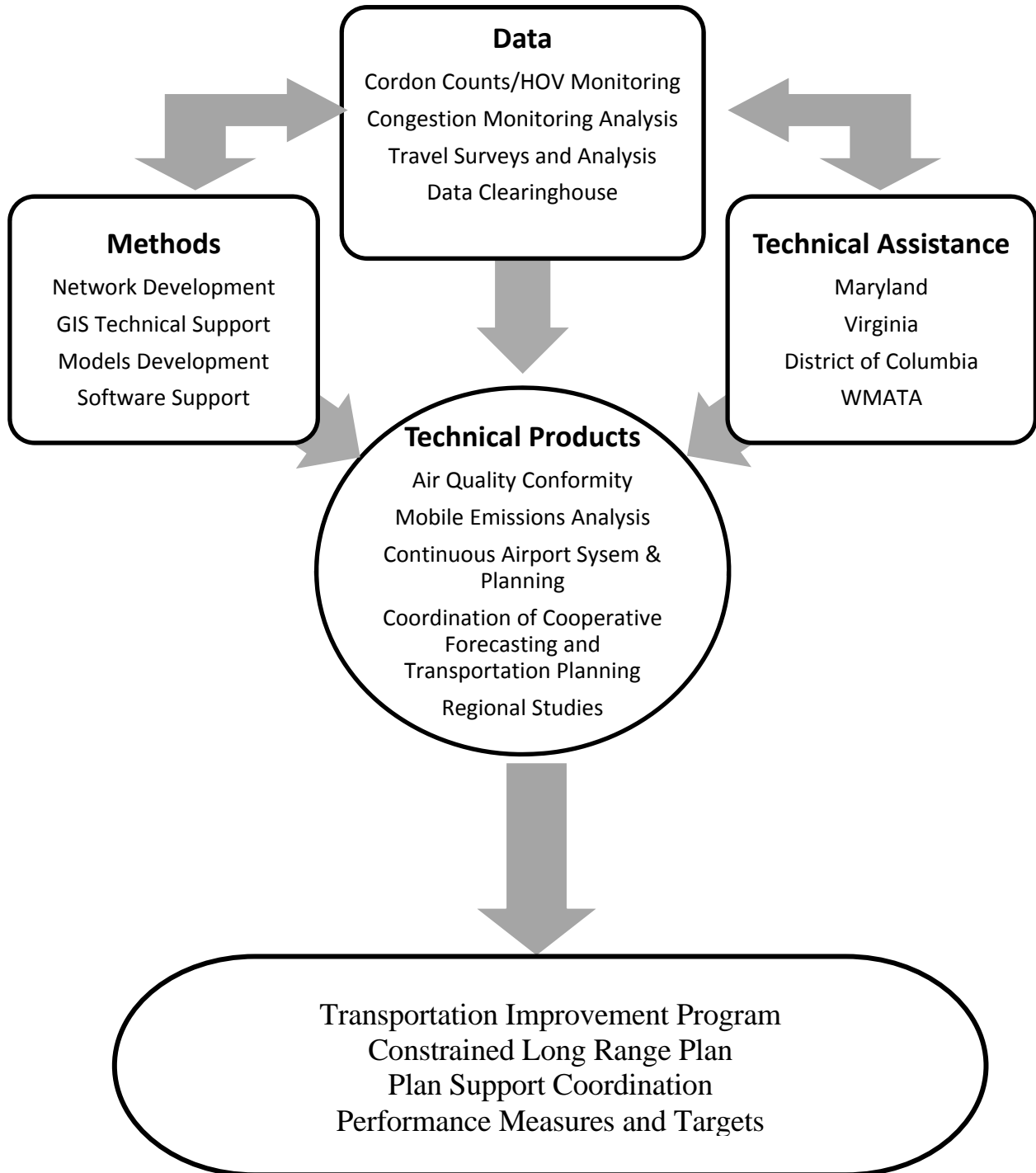


Figure 6: Visual Representation of UPWP Work Activity Relationships

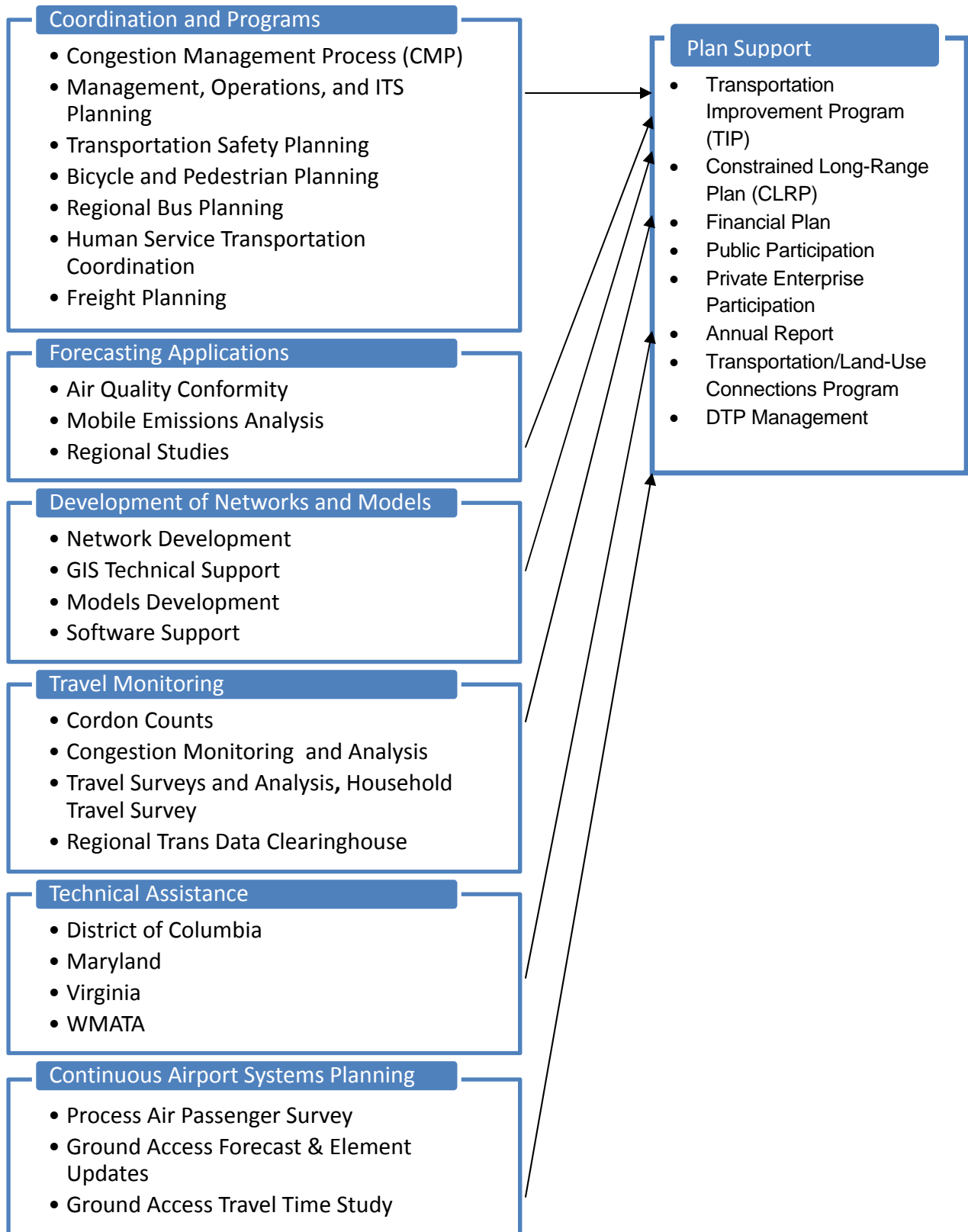


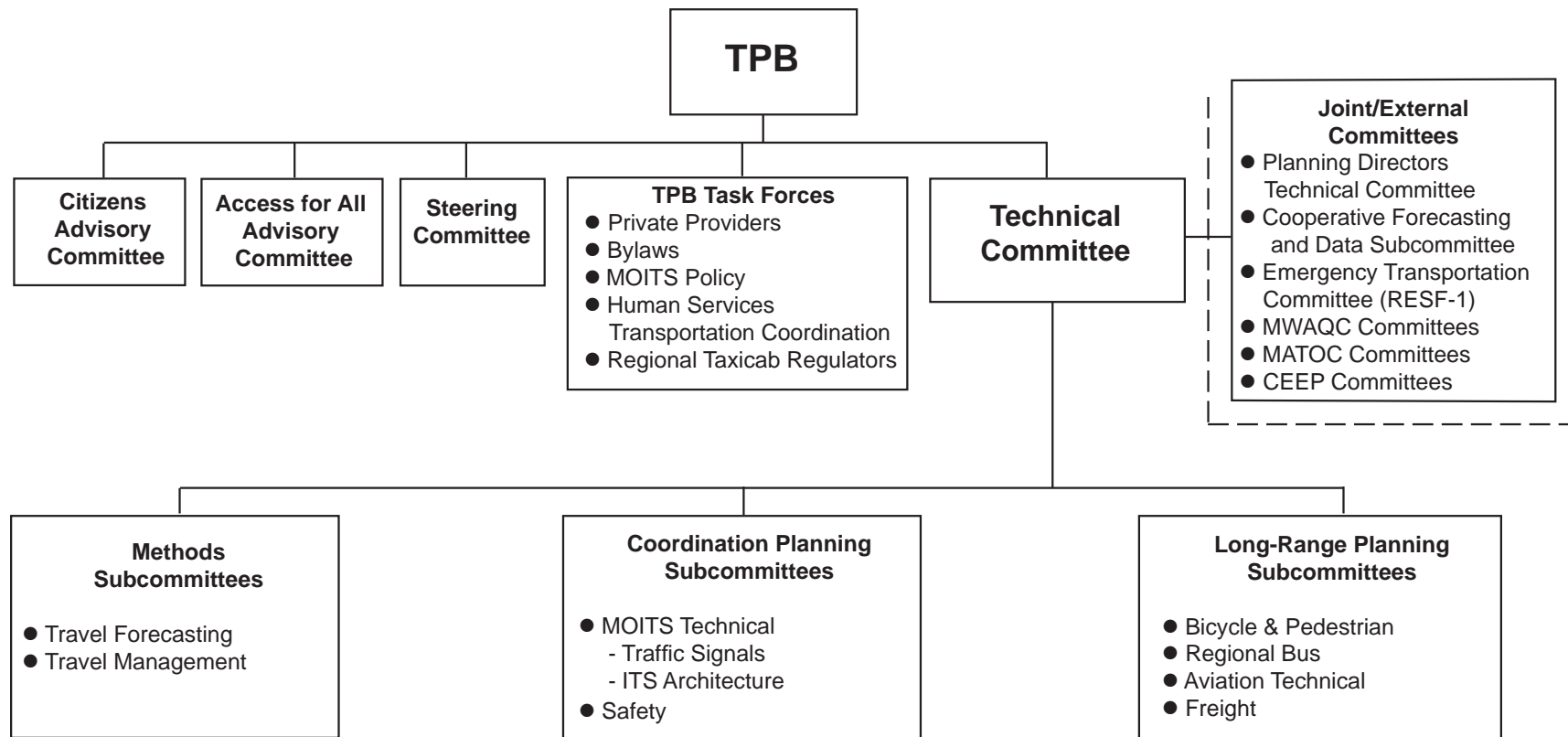
TABLE 2
TPB FY 2015 WORK PROGRAM BY FUNDING SOURCES

WORK ACTIVITY	TOTAL COST	FTA/STATE/ LOCAL	FHWA/STATE/ LOCAL	OTHER FUND
1. PLAN SUPPORT				
A. Unified Planning Work Program (UPWP)	72,800	17,403	55,397	
B. Transp Improvement Program (TIP)	247,800	59,235	188,565	
C. Constrained Long-Range Plan	636,100	152,057	484,043	
D. Financial Plan	64,900	15,514	49,386	
E. Public Participation	434,700	103,913	330,787	
F. Private Enterprise Participation	18,800	18,800		
G. Annual Report	82,500	19,721	62,779	
H. Transportation/Land Use Connection Progr	430,300	102,861	327,439	
I. DTP Management	482,800	115,411	367,389	
Subtotal	2,470,700	604,915	1,865,785	
2. COORDINATION and PROGRAMS				
A. Congestion Management Process (CMP)	211,000	50,439	160,561	
B. Management, Operations, and ITS Planning	350,500	83,785	266,715	
C. Emergency Preparedness Planning	77,600	18,550	59,050	
D. Transportation Safety Planning	128,800	30,789	98,011	
E. Bicycle and Pedestrian Planning	125,000	29,881	95,119	
F. Regional Bus Planning	160,000	38,247	121,753	
G. Human Service Transportation Coordination	141,200	33,753	107,447	
H. Freight Planning	154,500	36,933	117,567	
I. MATOC Program Planning Support	123,600	29,546	94,054	
Subtotal	1,472,200	351,923	1,120,277	
3. FORECASTING APPLICATIONS				
A. Air Quality Conformity	584,600	139,746	444,854	
B. Mobile Emissions Analysis	707,200	169,053	538,147	
C. Regional Studies	531,800	127,124	404,676	
D. Coord Coop Forecasting & Transp Planning	831,000	198,647	632,353	
Subtotal	2,654,600	634,570	2,020,030	
4. DEVELOPMENT OF NETWORKS/MODELS				
A. Network Development	792,800	189,515	603,285	
B. GIS Technical Support	565,300	135,132	430,168	
C. Models Development	1,103,400	263,763	839,637	
D. Software Support	184,300	44,056	140,244	
Subtotal	2,645,800	632,466	2,013,334	
5. TRAVEL MONITORING				
A. Cordon Counts	258,400	61,769	196,631	
B. Congestion Monitoring and Analysis	360,500	86,176	274,324	
C. Travel Surveys and Analysis				
Household Travel Survey	727,500	173,906	553,594	
D. Regional Trans Data Clearinghouse	327,400	78,263	249,137	
Subtotal	1,673,800	400,114	1,273,686	
Core Program Total (I to V)	10,917,100	2,623,988	8,293,112	
6. TECHNICAL ASSISTANCE				
A. District of Columbia	360,470	43,963	316,507	
B. Maryland	646,043	78,791	567,252	
C. Virginia	564,195	68,809	495,386	
D. WMATA	222,878	222,878		
Subtotal	1,793,586	414,441	1,379,145	
Total, Basic Program	12,710,686	3,038,429	9,672,257	
7. CONTINUOUS AIRPORT SYSTEM PLANNING				
A. Update Ground Access Forecasts - Phase 1	40,000			40,000
B. Ground Access Element Update - Phase 2	82,000			82,000
C. Process 2013 Air Passenger Survey - Phase 2	110,000			110,000
Subtotal	232,000			232,000
GRAND TOTAL	12,942,686	3,038,429	9,672,257	232,000

TABLE 3
TPB FY 2015 BUDGET AND WORK PROGRAM BY EXPENDITURE CATEGORY

WORK ACTIVITY	DIRECT SALARIES DTP STAFF	DIRECT SALARIES OTHER COG STAFF	M & A 25%	LEAVE BENEFITS 19%	FRINGE BENEFITS 28%	INDIRECT COSTS 31%	DATA & PC COSTS	CONSULTANT	DIRECT COSTS	TOTAL
1. PLANS SUPPORT										
A. Unified Planning Work Program	29,067	0	7,267	6,903	12,106	17,156	100	0	200	72,800
B. Transportation Improvement Program	79,223	0	19,806	18,815	32,996	46,760	200	50,000	0	247,800
C. Constrained Long-Range Plan	227,018	15,000	60,504	57,479	100,800	142,848	1,250	25,000	6,200	636,100
D. Financial Plan	22,011	0	5,503	5,228	9,167	12,992	0	10,000	0	64,900
E. Public Participation	123,845	0	30,961	29,413	51,582	82,398	0	50,000	66,500	434,700
F. Private Enterprise Participation	7,337	0	1,834	1,743	3,056	4,331	0	0	500	18,800
G. Annual Report	18,222	0	4,555	4,328	7,589	12,305	0	12,000	23,500	82,500
H. Transportation/Landuse Connection Program	67,475	0	16,869	16,025	28,104	39,827	0	260,000	2,000	430,300
I. DTP Management	104,761	0	26,190	24,881	43,633	61,834	0	10,000	211,500	482,800
Subtotal	678,959	15,000	173,490	164,815	289,034	420,451	1,550	417,000	310,400	2,470,699
2.COORDINATION and PROGRAMS										
A. Congestion Management Process	83,392	0	20,848	19,806	34,733	49,221	0	0	3,000	211,000
B. Management, Operations, & ITS Planning	119,676	0	29,919	28,423	49,845	70,637	0	50,000	2,000	350,500
C. Emergency Preparedness Planning	6,899	4,517	2,854	2,711	4,755	18,363	0	0	37,500	77,600
D. Transportation Safety Planning	50,837	0	12,709	12,074	21,174	30,006	0	0	2,000	128,800
E. Bicycle and Pedestrian Planning	49,314	0	12,328	11,712	20,539	29,107	0	0	2,000	125,000
F. Regional Bus Planning	63,145	0	15,786	14,997	26,300	37,271	0	0	2,500	160,000
G. Human Service Transportation Coordination	55,809	0	13,952	13,255	23,244	32,940	0	0	2,000	141,200
H. Freight Planning	61,141	0	15,285	14,521	25,465	36,088	0	0	2,000	154,500
I. MATOC Program Planning & Support	49,153	0	12,288	11,674	20,472	29,012	0	0	1,000	123,600
Subtotal	539,366	4,517	135,971	129,172	226,527	332,646	0	50,000	54,000	1,472,200
3. FORECASTING APPLICATIONS										
A. Air Quality Conformity	211,753	19,620	57,843	54,951	96,367	136,566	0	0	7,500	584,600
B. Mobile Emissions Analysis	226,431	52,091	69,630	66,149	116,004	164,395	0	0	12,500	707,200
C. Regional Studies	136,334	51,900	47,058	44,706	78,399	111,103	0	60,000	2,300	531,800
D. Coordination Cooperative Forecasting and Transportation Planning	142,414	167,500	77,479	73,605	129,079	182,924	55,500	0	2,500	831,000
Subtotal	716,931	291,111	252,011	239,410	419,850	594,987	55,500	60,000	24,800	2,654,600
4. DEVELOPMENT OF NETWORKS/MODELS										
A. Network Development	306,426	0	76,607	72,776	127,626	180,865	0	25,000	3,500	792,800
B. GIS Technical Support	194,568	0	48,642	46,210	81,038	114,842	0	0	80,000	565,300
C. Models Development	356,301	0	89,075	84,621	148,399	210,303	0	200,000	14,700	1,103,400
D. Software Support	73,088	0	18,272	17,358	30,441	43,140	0	0	2,000	184,300
Subtotal	930,384	0	232,596	220,966	387,505	549,150	0	225,000	100,200	2,645,800
5. TRAVEL MONITORING										
A. Cordon Counts	65,792	0	16,448	15,626	27,402	38,833	0	0	94,300	258,400
B. Congestion Monitoring and Analysis	95,320	0	23,830	22,639	39,701	56,262	0	100,000	22,749	360,500
C. Travel Surveys and Analysis Household Travel Survey	119,235	0	29,809	28,318	49,661	70,377	16,500	400,000	13,600	727,500
D. Regional Transportation Data Clearinghouse	121,239	0	30,310	28,794	50,496	71,560	25,000	0	0	327,400
Subtotal	401,586	0	100,396	95,377	167,260	237,032	41,500	500,000	130,649	1,673,800
Core Program Total (1 to 5)	3,267,225	310,628	894,463	849,740	1,490,176	2,134,266	98,550	1,252,000	620,049	10,917,099
6. TECHNICAL ASSISTANCE										
A. District of Columbia	104,429	0	26,107	24,802	43,495	61,638	0	95,000	5,000	360,470
B. Maryland	173,016	0	43,254	41,091	72,061	102,121	0	190,000	24,500	646,043
C. Virginia	226,199	0	56,550	53,722	94,212	133,512	0	0	0	564,195
D. WMATA	53,274	0	13,318	12,653	22,189	31,444	0	90,000	0	222,878
Subtotal	556,918	0	139,229	132,268	231,956	328,715	0	375,000	29,500	1,793,586
TOTAL BASIC PROGRAM	3,824,143	310,628	1,033,693	982,008	1,722,132	2,462,981	98,550	1,627,000	649,549	12,710,685
7. CONTINUOUS AIRPORT SYSTEM PLANNING CASP TOTAL	93,014	0	23,254	22,091	38,740	54,901	0	0	0	232,000
8. SERVICE/SPECIAL PROJECTS	0	0	0	0	0	0	0	0	0	0
GRAND TOTAL	3,917,157	310,628	1,056,946	1,004,099	1,760,873	2,517,882	98,550	1,627,000	649,549	12,942,685

Figure 7
TPB Committee Structure



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III. MAJOR WORK ACTIVITIES

1. PLAN SUPPORT

A. THE UNIFIED PLANNING WORK PROGRAM (UPWP)

The Unified Planning Work Program (UPWP) for the Metropolitan Washington Region describes all transportation planning activities utilizing federal funding, including Title I Section 134 metropolitan planning funds, Title III Section 8 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. The UPWP identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Clean Air Act Amendments of 1990 (CAAA) created a number of planning requirements. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU), which became law on August 11, 2005, reaffirmed the structure of the metropolitan planning process, and increased federal financial support for it. On February 14, 2007, FHWA and FTA issued the final regulations regarding metropolitan planning in response to SAFETEA-LU. The Moving Ahead for Progress in the 21st Century (MAP-21) Act, which became law on July 6, 2012, made some important modifications to the metropolitan planning process, primarily requiring metropolitan planning organizations (MPOs) to establish and use a performance-based approach to transportation decision making and development of transportation plans. This work program has been developed to comply with the new MAP-21 requirements regarding metropolitan planning. After the FHWA and FTA proposed regulations on MPO planning are issued, the proposed activities will be reviewed to identify revisions that may be necessary to comply with the final regulations.

In 1994, the TPB developed and adopted the first financially-constrained Long Range Transportation Plan for the National Capital Region (CLRP). In July 1997, the first three-year update of the CLRP was approved by the TPB, the second update was approved in October 2000, and the third update was approved in December 2003. The fourth update was approved by the TPB in October 2006. On November 17, 2010, the TPB approved the fifth update. In fall 2014, the TPB will be asked to approve the sixth update

The Environmental Protection Agency (EPA) issued regulations on November 24, 1993, followed with a succession of guidance documents, and on July 1, 2004 published the 8-hour ozone standard conformity guidance, which taken together provide criteria and procedures for determining air quality conformity of transportation plans, programs and projects funded or approved by the FHWA and FTA. These conformity requirements are addressed in this document. Under these regulations, the State Implementation Plans (SIP) for improving air quality for the region must be adopted by the states and submitted to EPA by specified dates.

The FY 2015 UPWP defined by this document details the planning activities to be accomplished between July 2014 and June 2015 to address the annual planning requirements such as preparing the Transportation Improvement Program, addressing

federal environmental justice requirements, and assessing Air Quality Conformity. It describes the tasks required to meet approval dates for the region's SIPs, and outlines the activities for the subsequent years.

In addition, this document describes the integration of program activities and responsibilities of the TPB Technical Committee and its subcommittees for various aspects of the work program. It provides an overview of the regional planning priorities and describes the major transportation planning and air quality planning studies being conducted throughout the region over the next two years.

During FY 2015, certain amendments may be necessary to reflect changes in planning priorities and inclusion of new planning projects. Under this task, Department of Transportation Planning (DTP) staff will identify and detail such amendments for consideration by the TPB as appropriate during the year.

In the second half of FY 2015, staff will prepare the FY 2016 UPWP. The document will incorporate suggestions from the federal funding agencies, state transportation agencies, transit operating agencies, local governments participating in TPB, and the public through the TPB's public involvement process. The new UPWP will be presented in outline to the TPB Technical Committee and the TPB in January 2015, as a draft to the Technical Committee in February and as a final document for adoption by the Technical Committee and the TPB in March 2015. The approved UPWP will be distributed to the TPB and the Technical Committee, and made available to the public on the TPB web site.

This task will also include the preparation of monthly progress reports for each of the state agencies administering the planning funding, and the preparation of all necessary federal grant submission materials.

Oversight:	Technical Committee
Cost Estimate:	\$72,800
Products:	UPWP for FY 2016, amendments to FY 2015 UPWP, monthly progress reports and state invoice information, federal grant materials
Schedule:	Draft: February 2015 Final: March 2015

B. THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

The Transportation Improvement Program (TIP) for the Metropolitan Washington Area is a six year program of highway, transit, bicycle and pedestrian, congestion mitigation/air quality, safety and transportation enhancement projects. The TIP will be updated every two years and amended as necessary between updates. Up-to-date information on project amendments and modifications in the TIP is available in the on-line TIP database. A printed TIP document will be produced every two years. The TIP must be approved by the TPB and the governors of Maryland and Virginia and the mayor of the District of Columbia, and is required as a condition for all federal funding

assistance for transportation improvements within the Washington Metropolitan Statistical Area.

TIP documentation describes major projects from the previous TIP that have been implemented and identifies significant delays in the implementation of major projects. The Program Development Process and Project Development Process sections of the TIP explain the TPB's actions during the project selection process, including:

- Reviewing project inputs for consistency with the Air Quality Conformity Analysis;
- Producing a financial summary of all funding sources proposed by an agency;
- Development of priority project lists by the Bicycle and Pedestrian, Freight, and Regional Bus Subcommittees, for inclusion on the TIP, and;
- TIGER and Section 5310 Enhanced Mobility project development.

Citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, freight shippers, users of public transit, and all other interested parties will be given an opportunity to review and comment on the FY 2015-2020 TIP and any subsequent amendments to the TIP as described under the TPB's public participation plan which was adopted in December 2007. To facilitate public review, project information from the TIP and CLRP will be made accessible through an online, searchable database. Visual representation of the projects will be enhanced with a GIS system for displaying projects. A summary guide that highlights the funding and projects in the TIP will be prepared and will guide users to the online database.

The database application for submitting TIP project data, CLRP projects, and air quality conformity data will continue to be improved to facilitate reviewing the TIP and CLRP information. Interactive means of sharing the information in the TIP and CLRP such as querying capabilities and specialized maps or graphs will be available.

The TIP Schedule and Project Selection

The 2014 CLRP and the FY 2015-2020 TIP are scheduled to be approved on October 15, 2014. The TIP will be prepared with the assistance of and in cooperation with the

transportation implementing agencies in the region, including the state departments of transportation, the District of Columbia Department of Transportation, the National Park Service, the Washington Metropolitan Area Transit Authority (WMATA) and other public transit operators, and local government agencies. Projects included in the TIP will be reviewed for consistency with the policies and facilities delineated in the adopted CLRP for the region. Only projects or phases of projects that have full funding anticipated to be available within the time period contemplated for completion are included in the TIP. A financial plan will be prepared to demonstrate how the TIP can be implemented, and indicate the sources of public, private and innovative funding. This financial plan will be expanded with additional analysis and visual aids such as graphs and charts, online documentation and an accompanying summary brochure for the CLRP and TIP.

During the year administrative modifications and amendments will likely need to be made to the FY 2015-2020 TIP to revise funding information or reflect changes in

priorities or the introduction of new project elements. Such modifications and amendments will follow the procedures adopted by the TPB on January 16, 2008.

In October 2014, the TPB will issue a call for projects document requesting project submissions for the 2015 CLRP. Amendments to the FY 2015-2020 TIP that accompany updates to the 2013 CLRP will be prepared for review by the TPB Technical Committee, the TPB, and the public between January and June 2015.

Performance management and the TIP

MAP-21 calls for MPOs, states, and public transportation providers to establish and use a performance-based approach to transportation decision making to support seven national goals. The USDOT must establish performance measures related to nine areas by April 1, 2015. The states then have a year (April 1, 2016) to establish performance targets in support of those measures; and the MPO subsequently has 180 days (October 1, 2016) to establish performance targets coordinated with those of the states and public transportation providers. After these targets are set, the CLRP and TIP are required to include a description of the performance measures and targets used in assessing the performance of the transportation system. The CLRP will also have to include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP is also required to include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP.

Once the USDOT has established performance measures for the nine areas, TPB staff will coordinate with DDOT, MDOT and VDOT staff on their setting of the state performance targets in support of the measures. States may set different targets for urbanized and rural areas. TPB staff will coordinate with the DOT efforts to ensure consistent state measures that are relevant for the TPB planning area. TPB staff will also coordinate with the DOT staffs to develop the specific performance targets in relation to the applicable performance measures for the TPB planning area. Similarly, TPB staff will coordinate with WMATA and other public transportation providers on their setting of performance targets for USDOT established performance measures.

The 2015 CLRP and new TIP will include a description of the performance measures and targets under development or to be used in assessing the performance of the transportation system. Once the targets are developed in coordination with the State DOTs and public transportation providers, the CLRP will also include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP also will include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP.

Annual Listing of TIP Projects that Have Federal Funding Obligated

TPB must publish or otherwise make available an annual listing of projects, consistent with the categories in the TIP, for which federal funds have been obligated in the preceding year. With the assistance of and in cooperation with the transportation implementing agencies in the region, TPB will prepare a listing of projects for which federal funds have been obligated in FY 2013.

Oversight:	Technical Committee
Cost Estimate:	\$247,800
Products	FY 2015-2020 TIP Amendments and administrative modifications to the FY 2015-2020 TIP
Schedule:	October 2014 June 2015

C. CONSTRAINED LONG-RANGE TRANSPORTATION PLAN (CLRP)

The financially Constrained Long-Range Plan (CLRP) includes all “regionally significant” highway, transit and High-Occupancy Vehicle (HOV), bicycle and pedestrian projects, and studies that the TPB realistically anticipates can be funded and 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.

Under SAFETEA-LU, the last four-year update of the CLRP was approved by the TPB on November 17, 2010 and included an expanded financial analysis of transportation revenues expected to be available through 2040. As required by MAP-21, the next four year update of the CLRP will be in 2014. The 2014 CLRP will address the new MAP-21 long-range transportation plan requirement to incorporate a performance-based approach to transportation decision-making to support seven national goals. The CLRP is updated annually with amendments that include new projects or adjust the phasing or other aspects of some of the projects or actions in the plan, or change specific projects as new information on them becomes available.

New Performance-Based Approach

MAP-21 calls for MPOs and state DOTs to establish and use a performance-based approach to transportation decision making to support seven national goals. The USDOT must establish performance measures related to seven areas by April 1, 2014. The states then have a year (April 1, 2015) to establish performance targets in support of those measures; and the MPO subsequently has 180 days (October 1, 2015) to establish performance targets coordinated with those of the states and public transportation providers. After these targets are set, the CLRP and TIP are required to include a description of the performance measures and targets used in assessing the performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP is also required to include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP.

Once the USDOT has established performance measures for the seven areas, TPB staff will coordinate with DDOT, MDOT and VDOT staff on their setting of the state performance targets in support of the measures. States may set different targets for urbanized and rural areas. TPB staff will coordinate with the DOT efforts to ensure consistent state measures that are relevant for the TPB planning area. TPB staff will

also coordinate with the DOT staffs to develop the specific performance targets in relation to the applicable performance measures for the TPB planning area. Similarly, TPB staff will coordinate with WMATA and other public transportation providers on their setting of performance targets for USDOT established performance measures.

The Transportation Vision, which was adopted by the TPB in October 1998, contains a vision statement, long-range goals, objectives, and strategies to guide transportation planning, decision-making and implementation in the region. It addresses the planning factors in MAP-21. The Vision is the TPB Policy Element of the CLRP. The CLRP website (www.mwcog.org/clrp) describes how the plan performs related to MAP-21 planning factors as reflected by the goals of the TPB Vision. The goals from COG's Region Forward efforts are reflected in the TPB Vision, which includes a broader set of policy goals for transportation than Region Forward.

The TPB's Regional Transportation Priorities Plan (RTPP), adopted by the TPB in January 2014, identifies near-term, on-going and long term strategies that address the most pressing challenges that the region faces in meeting the TPB's regional Vision goals. The challenges and high-pay off strategies with wide regional support identified in RTPP can inform the identification of new projects and programs for inclusion in future updates to the CLRP.

The CLRP will be documented in several ways and public materials will be provided during plan development and after plan approval. The CLRP website will be utilized to document the plan update by describing the development process related planning activities, major projects, performance of the plan and how the public can get involved. The website also makes CLRP-related process and technical documentation readily accessible. The TPB will continue to make the plan information more accessible and visual. Projects in the plan will be accessible through an online database that the public can easily search. Projects will be mapped using GIS where possible and displayed along with project descriptions and in an interactive map. These maps will also be used in printed media, such as the CLRP and TIP summary brochure. The TPB will also continue to improve the quality of public materials about the plan during its development and after approval so that the materials are more useful to a wide variety of audiences, using less technical jargon and more "public friendly" language.

The 2014 CLRP

In November 2013, the TPB issued a "Call for Projects" document requesting projects, programs or strategies for inclusion in the 2014 CLRP. Project updates were due in December 2013. Materials describing the draft 2014 CLRP were developed in the spring of 2014, including major project descriptions and maps.

In September 2014, the 2014 CLRP will be released for a final public comment period along with the accompanying air quality conformity analysis. The TPB is scheduled to adopt the 2014 CLRP in October 2014.

Subsequent documentation of the CLRP will include an analysis of how the plan performs in regard to transit and auto trips made, vehicle miles of travel, lane miles of congestion and accessibility to jobs. The performance analysis is done after every CLRP update and is documented on the CLRP website. The analysis will be used to

describe how the CLRP performs based on regional goals and MAP-21 planning factors and will also examine connectivity between the Regional Activity Centers. There will be two opportunities for public comment during the development of the 2014 CLRP.

The 2015 CLRP

In October 2014, the TPB will issue its “Call for Projects” document for the 2015 CLRP. The “Call for Projects” document will request new projects programs and strategies, and updated information to be included in the 2015 CLRP. Materials describing the draft 2015 CLRP will be developed in the spring of 2015, including maps, major project descriptions, and analysis from the previous year’s CLRP. The development of the 2015 CLRP will include two opportunities for the public to comment on the Plan. The 2015 CLRP will be prepared and reviewed between January and June 2015 with approval scheduled for July 2015.

A description of the performance measures and targets under development or to be used in assessing the performance of the transportation system will be drafted. Once the targets are developed in coordination with the State DOT’s, the CLRP will include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP also will include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP. After the TPB approves the 2014 CLRP, anticipated for October 2014, a performance analysis of the CLRP to 2040 will be conducted utilizing the established performance measures. The 2014 CLRP will be also be evaluated for disproportionately high and adverse effects on low-income and minority population groups.

Environmental Consultation

During the development of the CLRP the TPB will continue to consult with the federal, state and local agencies responsible for natural resources, wildlife, land management environmental protection, conservation and historic preservation as necessary in the District of Columbia, Maryland and Virginia on potential environmental mitigation activities. To aid in the integration of projects for the CLRP with natural and historic resources, maps of transportation and historic resources will be updated with the latest available GIS data from District of Columbia and the States and forwarded to federal, state and local agencies for comments.

Climate Change Adaption

The environmental consultation activities described above also provide an opportunity to engage environmental and transportation agencies on the topic of climate change adaptation. Local, state and national practices will be monitored for potential applicability to the region.

Oversight:	Technical Committee
Cost Estimate:	\$636,100
Products:	Documentation of the 2014 CLRP, Call for Projects for the 2015 CLRP, draft 2014 CLRP and documentation

Schedule: July 2015

D. FINANCIAL PLAN

The Financially Constrained Long-Range Transportation Plan (CLRP)

The CLRP must be updated every four years as required by MAP-21. The CLRP is updated annually with amendments that include new projects or adjust the phasing or other aspects of some of the projects or actions in the plan, or change specific projects as new information on them becomes available. The 2014 CLRP will be the four-year update of the plan.

As required under MAP-21 and federal planning regulations, both the TIP and the CLRP must have a financial plan that demonstrates how they can be implemented and show the sources of funding expected to be made available to carry them out. The financial analysis for the 2014 CLRP includes federal and state revenue projections, cost estimates for new system expansion projects, and cost estimates for system maintenance and rehabilitation. All revenue and cost estimates are in year of expenditure from 2015 through 2040.

In early 2014, in consultation with state and local DOTs and public transportation operators, an initial financial analysis was conducted to determine estimated revenues reasonably expected to be available for projected expenditures for use in preparing project submissions for the draft 2014 CLRP. By mid-2014, the financial analysis for the 2014 CLRP which covers 2015 to 2040 will be finalized in consultation with the state and local DOTs and public transportation operators. In spring 2015, the financial analysis for the 2014 CLRP will be reviewed and updated for use in preparing submissions for the 2015 CLRP.

The Transportation Improvement Program

A financial plan for the FY 2015-2020 TIP as amended will be prepared. Since federal funding is apportioned to states, financial summaries for all TIP projects from agencies in the District of Columbia, Maryland and Virginia as well as WMATA and other transit agencies will be prepared. All projects submitted by these agencies will be grouped by the proposed federal funding categories under Surface Transportation (Title I) and Transit (Title III).

The funds programmed in the TIP for each state by federal program category will be compared with the information provided by the states and transit operators on the estimated available Federal and State funds for the program period. The funds programmed in the TIP for each state by federal program category in the first and second years will be compared with the trends of the annual funding programmed in previous TIPs and with the funding reported in the annual listings of TIP projects that have federal funding obligated. Comparisons that indicate significant changes from past trends will be reviewed with the implementing agency to clarify the change. Implementing agencies will ensure that only projects for which construction and operating funds can reasonably be expected to be available will be included in the TIP. In the case of new funding sources,

strategies for ensuring their availability will be identified by the implementing agency and included in the TIP. The product will be a financial summary that focuses on the first two years of the six-year period of the TIP, and it will be incorporated as a main section of the TIP for review by the public and approval by the Technical Committee and the TPB. The TIP will also summarize funding that the implementing agencies have programmed specifically for bicycle and pedestrian projects and identify projects that include bicycle and/or pedestrian accommodations.

Oversight:	Technical Committee
Cost Estimate:	\$64,900
Products:	Update of the financial analysis for 2015 CLRP and FY 2015-2020 TIP
Schedule:	June 2015

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.

Oversight:	Transportation Planning Board
Cost Estimate:	\$434,700
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

F. PRIVATE ENTERPRISE PARTICIPATION

In June 1987, the TPB adopted its Private Enterprise Participation Policy and Procedures designed to afford maximum opportunity to private providers to participate in the development and provision of mass transportation services in the region. In April 1994, the Federal Transit Administration (FTA) rescinded its private participation guidance and changed the federal requirements regarding private enterprise participation. During FY 1995, the TPB reviewed its policy and revised it in light of the new requirements. Under this task, DTP staff will conduct the activities as specified in the policy adopted on July 19, 1995 by the TPB.

The following activities are anticipated:

- The procedures for involving private transportation providers in urban mass transportation and the activities accomplished will be documented as a section of the Transportation Improvement Program (TIP).

- To facilitate early consultation, TPB will conduct an annual forum for key transit staff from the local jurisdictions and WMATA to meet with interested private providers to discuss in general terms their plans for major bus service changes and expansions.
- Private transit providers will be afforded the opportunity to present their views on the CLRP, the TIP, and the Unified Planning Work Program while these documents are in a draft stage.
- Support will be provided to the Private Providers Task Force. This group will be the vehicle through which the above tasks are accomplished, and will advise the TPB of the private provider perspective on transit service through its chairman, who is a non-voting member of the TPB. Minutes will be prepared for Task Force meetings, as well as other documentation as required.
- Through their representation on the TPB, private transit and taxicab providers will be encouraged to contribute to the shaping of policies and strategies for the CLRP that promote effective, competitive provision of transit services, particularly in growing suburban areas and activity centers.
- In July 2007, the TPB established the Taxicab Regulators Task Force to: 1) encourage close cooperation and sharing of information between municipal and county taxicab regulators in the National Capital region and to work to resolve common problems and 2) explore the possibility of developing standards to improve the quality of service for taxicab customers in their respective jurisdictions. TPB staff will support the task force meetings which are scheduled every quarter.

Oversight:	Transportation Planning Board
Cost Estimate:	\$18,800
Product:	Documentation on Private Provider Involvement
Schedule:	Annual Transit Forum - May 2015 Draft in TIP – June 2014

G. TPB ANNUAL REPORT AND TPB NEWS

TPB staff annually produces The Region magazine, which provides a non-technical review and analysis of transportation issues in the Washington region. Elected officials and citizens are the primary target audience of this magazine, which has an annual circulation of approximately 1,100 and is distributed throughout the year as the TPB's flagship publication.

The TPB News is produced monthly to provide a timely update on the activities of the TPB, including decisions made at the TPB's monthly meeting. The TPB News has a circulation of approximately 1,100 paper copies, and an electronic distribution of approximately 500.

In January 2012, the TPB launched the new TPB Weekly Report, which is a web-based newsletter featuring a short article every week on a single topic of interest in regional transportation. This publication is distributed electronically, including notifications through social media sites, such as Twitter and Facebook.

- The new issue of *The Region* will describe the main activities completed in 2014.
- Produce the monthly newsletter *TPB News*.
- Write and distribute the *TPB Weekly Report*,

Oversight: Transportation Planning Board

Cost Estimate: \$82,500

Products: *Region* magazine, *TPB News* and *TPB Weekly Report*

Schedule: June 2015

H. TRANSPORTATION/LAND USE CONNECTION (TLC) PROGRAM

The TLC Program provides support to local governments in the Metropolitan Washington region as they work to improve transportation/ land use coordination at the community level. Through the program, the TPB provides its jurisdictions with consultant-provided, short-term technical assistance to catalyze or enhance planning efforts. Begun as a pilot in November 2006, the program also provides a clearinghouse to document national best practices, as well as local and state experiences with land use and transportation coordination. By the end of FY2013, 62 TLC technical assistance projects will have been completed. These projects cover a range of subjects, including promoting “complete streets” improvements to ensure pedestrian and bicycle access to transit, identifying transportation and public realm improvements to facilitate transit-oriented development, and offering recommended changes in local government policies on issues such as urban road standards or parking policies.

The following activities are proposed for FY 2015:

- Fund at least six technical assistance planning projects at a level between \$20,000 and \$60,000 each. Fund at least one project for between \$80,000 and \$100,000 to perform project design to achieve 30% completion.
- Fund at least one technical assistance project at up to \$80,000 to complete preliminary engineering and conceptual design work, enabling one previous TLC technical assistance planning project or other member jurisdiction planning project to move towards construction-readiness.

- Conduct the selection process for small capital improvement projects using funding suballocated to the Washington metropolitan region through the state DOTs from the new MAP-21 Transportation Alternatives Program (TAP). Coordinate program implementation with the state DOTs.
- Maintain and update the TLC Regional Clearinghouse and website
- Develop tools and activities to facilitate regional learning about TLC issues among TPB member jurisdictions through the Regional Peer Exchange Network. Organize at least one regional meeting to facilitate an exchange of information about lessons learned from past TLC projects.
- Identify recommended implementation action steps in each planning project report, such as further study needs, more stakeholder collaboration, suggested land use or local policy changes, and transportation investment opportunities and priorities.
- Provide staff support for TLC Technical Assistance Projects to be conducted as part of the MDOT Technical Assistance Program and for other projects where additional funding is provided by state or local agencies.

Oversight: TPB Technical Committee

Cost Estimate: \$430,300

Products: Updated web-based clearinghouse, technical assistance provided by consultant teams to six localities, and implementation toolkit.

Schedule: Technical assistance: September 2014-June 2015

I. DTP MANAGEMENT

This activity includes all department-wide management activities not attributable to specific project tasks in the DTP work program. Examples include the following:

- Supervision of the preparation, negotiation, and approval of the annual work program and budget, involving the State Transportation Agencies, the Technical Committee, the Steering Committee, and the TPB.
- Day-to-day monitoring of all work program activities and expenditures by task.
- Day-to-day management and allocation of all staff and financial resources to insure that tasks are completed on schedule and within budget.
- Preparation for and participation in regular meetings of the TPB, the Steering Committee, the Technical Committee, and the State Technical Working Group.

- Attendance at meetings of other agencies whose programs and activities relate to and impact the TPB work program, such as local government departments.
- Response to periodic requests from TPB members, federal agencies, Congressional offices, media, and others for information or data of a general transportation nature.
- Review of transportation proposals of regional importance submitted to TPB through the intergovernmental review process. Where significant regional impacts are likely, staff will obtain Technical Committee and Board review and approval of comments prepared.

In addition to salaries, nominal amounts are utilized for travel related to non-project specific meetings attended by the senior staff, data processing for financial monitoring and analysis, and conferences such as FTA and FHWA seminars on federal regulations and financial management. These activities represent three to four percent of the total amount allocated for DTP Management.

Oversight:	Transportation Planning Board
Cost Estimate:	\$482,800
Products:	Materials for the meetings of the TPB, the Steering Committee, the Technical Committee, and the State Technical Working Group; responses to information requests from elected officials, federal agencies and media; and participation in external meetings related to TPB work program.
Schedule:	Ongoing throughout the year

2. COORDINATION AND PROGRAMS

A. CONGESTION MANAGEMENT PROCESS (CMP)

The regional Congestion Management Process (CMP) is a federally required component of the metropolitan transportation planning process. The CMP is to address the systematic management of traffic congestion and provision of information on transportation system performance. No single occupant vehicle (SOV) capacity expanding project can receive federal funds unless it is part of the regional CMP. The federal MAP-21 legislation continues the requirement for a CMP, with emphasis on congestion data as part of a performance measurement- based metropolitan planning process.

- Undertake activities to address the federal requirement for a regional Congestion Management Process component of the metropolitan transportation planning process. Include information from regional Travel Monitoring programs (see Section 5 of the UPWP) addressing congestion and reliability, as well as information on non-recurring congestion as examined in the Management, Operations, and Intelligent Transportation Systems (MOITS) program (see also Task 2.B.).
- Identify and assess strategies that address congestion, in coordination with MOITS, the Metropolitan Area Transportation Operations Coordination Program (see also Task 2.I), the Air Quality Conformity program (see also Task 3.A.), and the regional Commuter Connections Program (see www.commuterconnections.org).
- Analyze transportation systems condition data archives from private sector sources, especially the speed data archive from the I-95 Corridor Coalition/INRIX, Inc. Vehicle Probe Project, and the FHWA's National Performance Management Research Data Set (NPMRDS), as compiled in the Congestion Monitoring and Analysis Task (see also Task 5.B.).
- Address MAP-21 requirements related to the CMP, including:
 - Analyze data from the above sources to support the “congestion reduction”, “System Reliability” and other relevant National Goals for Performance Management.
 - Report regional congestion performance measures based on the available data, especially for congestion reduction and system reliability.
 - Coordinate with member states on congestion reduction and system reliability targets.
- Compile information and undertake analysis for development on four major aspects of the regional CMP:
 - CMP Components of the Constrained Long-Range Plan (CLRP), portions of the CLRP that specifically address CMP and its subtopics, in the form of interlinked web pages of the on-line CLRP, to be updated in conjunction with major updates of the CLRP;
 - CMP Documentation Form Information addresses federally-required CMP considerations associated with individual major projects, to be included with

overall project information submitted by implementing agencies to the annual Call for Projects for the CLRP and Transportation Improvement Program (TIP) (see also Task 1.C), and incorporated into the regional CMP; and

- A CMP Technical Report, published on an as-needed basis, compiling and summarizing the results of monitoring and technical analysis undertaken in support of the regional CMP. Technical analysis will prepare for the next major update of the CMP Technical Report to be produced in FY2016 (last published in 2014).
- National Capital Region Congestion Report, released quarterly on the TPB website, reviewing recent information on congestion and reliability on the region's transportation system and featured CMP strategies, with a "dashboard" of key performance indicators.

Oversight: Management, Operations, and Intelligent Transportation Systems (MOITS) Technical Subcommittee

Cost Estimate: \$211,000

Products: Updated CMP portions of the CLRP; CMP Documentation Form; National Capital Region Congestion Report; Technical analysis for the future FY2016 CMP Technical Report; documentation as necessary supporting MAP-21 requirements of the CMP; summaries, outreach materials, and white paper(s) on technical issues as needed

Schedule: Monthly

B. MANAGEMENT, OPERATIONS, AND INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLANNING

Regional transportation systems management and operations are vital considerations for metropolitan transportation planning, and have been emphasized in MAP-21. Under this work task, TPB will address these as well as coordination and collaborative enhancement of transportation technology and operations in the region, with a key focus on non-recurring congestion due to incidents or other day-to-day factors. The MOITS program includes planning activities to support the following major topics:

- MAP-21: Address MAP-21 requirements related to MOITS, including:
 - Compile and analyze data to support the “system reliability” National Goal for Performance Management
 - Coordinate with member states on system reliability targets

- ITS Data: The collection/compilation, processing, warehousing, and sharing of transportation systems usage and condition data from Intelligent Transportation Systems (ITS) sources
- Regional Transportation Management: Particularly in conjunction with the Metropolitan Area Transportation Operations Coordination (MATOC) Program (see also Task 2.I.); support the MOITS Technical Subcommittee in its long-range planning advisory role for the MATOC Program
- Multi-modal Coordination: Examination of traffic and transit management interactions in daily operations
- Coordination of day-to-day transportation operations planning with emergency preparedness in conjunction with the COG Regional Emergency Support Function 1 – Emergency Transportation Committee (see also Task 2.C.)
- Traveler Information: Real-time traveler information made available to the public, including addressing federal Section 1201 requirements on making real-time incident data available
- Congestion Management Process: Technology and operations strategies to address non-recurring congestion aspects of the regional Congestion Management Process (see also Task 2.A.)
- Maintenance and Construction Coordination: Regional sharing of available maintenance and construction information for coordination purposes, in conjunction with MATOC's regional construction coordination system
- Intelligent Transportation Systems (ITS) Architecture: Maintain the regional ITS architecture in accordance with federal law and regulations
- Traffic Signals: Assist member agencies in the exchange and coordination of interjurisdictional traffic signal operations information and activities; examine traffic signal systems and operations from the regional perspective, including in conjunction with emergency planning needs
- Climate Change Adaptation: Monitor local and national practices regarding transportation operational procedures to adapt to climate change effects. Coordinate with COG Regional Climate Adaption Plan activities to identify transportation operations-related climate change adaptation activities for the region's transportation agencies to consider
- MOITS Strategies: Analysis of strategies designed to reduce congestion, reduce emissions, and/or better utilize the existing transportation system.
- Member Agency Activities: Work as needed with the MOITS activities of the state and D.C. departments of transportation, the Washington Metropolitan Area Transit Authority, and other member agencies
- Coordinate with supra-regional management and operations activities of the Federal Highway Administration, the I-95 Corridor Coalition, and other relevant stakeholders

- Provide staff support to the MOITS Policy Task Force, MOITS Technical Subcommittee, MOITS Regional ITS Architecture Subcommittee, and MOITS Traffic Signals Subcommittee.

Oversight:	Management, Operations, and Intelligent Transportation Systems (MOITS) Technical Subcommittee
Cost Estimate:	\$350,500
Products:	Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; revised regional ITS architecture; MOITS input to the CLRP as necessary; review and advice to MOITS planning activities around the region; documentation as necessary supporting MAP-21 requirements of MOITS planning
Schedule:	Monthly

C. TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING

Under this work task, TPB will provide support and coordination for the transportation sector's role in overall regional emergency preparedness planning, in conjunction with the Metropolitan Washington Council of Governments (COG) Board of Directors, the National Capital Region Emergency Preparedness Council, and other COG public safety committees and efforts. This task is the transportation planning component of a much larger regional emergency preparedness planning program primarily funded outside the UPWP by U.S. Department of Homeland Security and COG local funding. Here specialized needs for transportation sector involvement in Homeland Security-directed preparedness activities will be addressed. Efforts are advised by a Regional Emergency Support Function #1 - Transportation Committee in the COG public safety committee structure, with additional liaison and coordination with the TPB's Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee.

MAP-21 requires the metropolitan planning to address the security of the transportation system for motorized and nonmotorized users.

Major topics to be addressed under this task include the following:

- Liaison and coordination between emergency management and TPB, MOITS, and other transportation planning and operations activities.
- Planning for the role of transportation as a support agency to emergency management in catastrophic or declared emergencies, including:

- Emergency coordination and response planning through the emergency management and Homeland Security Urban Area Security Initiative (UASI) processes
- Emergency communications, technical interoperability, and capabilities
- Public outreach for emergency preparedness
- Coordination with regional critical infrastructure protection and related security planning
- Emergency preparedness training and exercises
- Conformance with U.S. Department of Homeland Security (DHS) directives and requirements
- Applications for and management of UASI and other federal Homeland Security funding.

Oversight: Management, Operations, and Intelligent Transportation Systems (MOITS) Technical Subcommittee

Cost Estimate: \$77,600

Products: Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; regular briefings and reports to TPB and MOITS as necessary; materials responding to DHS and UASI requirements; documentation as necessary supporting MAP-21 requirements of transportation emergency preparedness planning

Schedule: Monthly

D. TRANSPORTATION SAFETY PLANNING

The Washington metropolitan area is a diverse and rapidly growing region, a major tourist destination, and a gateway for immigrants from all over the world. Growth has meant more people driving more miles and more people walking, especially in inner suburban areas where pedestrians were not common in years past. MAP-21 requires metropolitan planning to increase the safety of the transportation system for motorized and non-motorized users. These and other factors, along with heightened awareness of the safety problem, have demonstrated the need for the regional transportation safety planning program.

Under this work task, TPB will provide opportunities for consideration, coordination, and collaboration planning for safety aspects of the region's transportation systems. Safety planning will be in coordination with the State Strategic Highway Safety Plan efforts of the District of Columbia, Maryland, and Virginia, as well as other state, regional, and local efforts. Coordination will be maintained with the regional Street Smart pedestrian

and bicycle safety outreach campaign. Major topics to be addressed in the Transportation Safety Planning task include the following:

- Support of the Transportation Safety Subcommittee
- Safety data compilation and analysis
- Address MAP-21 requirements related to the CMP, including:
 - Compile fatality and injury data to support the “safety” National Goal for Performance Management.
 - Provide information on performance measures for safety.
 - Coordinate with member states on addressing safety targets.
- Coordination on metropolitan transportation planning aspects of state, regional, and local safety efforts, and with transportation safety stakeholders
- Coordination with other TPB committees on the integration of safety considerations
- Maintenance of the safety element of region's long-range transportation plan.

Oversight: Transportation Safety Subcommittee

Cost Estimate: \$128,800

Products: Safety element of the CLRP; summaries, outreach materials, and white paper(s) on technical issues as needed; documentation as necessary supporting MAP-21 requirements of transportation safety planning

Schedule: Quarterly

E. BICYCLE AND PEDESTRIAN PLANNING

Under this work task, TPB will provide opportunities for consideration, coordination, and collaborative enhancement of planning for pedestrian and bicycle safety, facilities, and activities in the region, advised by its Bicycle and Pedestrian Subcommittee. An updated Regional Bicycle and Pedestrian Plan was completed in FY2014, and provides guidance for continued regional planning activities. Major topics to be addressed include the following:

- Advise the TPB, TPB Technical Committee, and other TPB committees on bicycle and pedestrian considerations in overall regional transportation planning.
- Maintain the Regional Bicycle and Pedestrian Plan and supporting Bicycle and Pedestrian Plan database on the TPB Web site for member agency and public access.
- Provide the TPB an annual report on progress on implementing projects from the Regional Bicycle and Pedestrian Plan. Provide the public with information on the status of bicycle and pedestrian facilities planning and construction in the Washington region.

- Monitor regional Complete Streets and Green Streets activities.
- Compile bicycle and pedestrian project recommendations for the Transportation Improvement Program (TIP).
- Coordinate with the annual "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP).
- Advise on the implementation and potential expansion of the regional bikesharing system and associated marketing materials.
- Examine regional bicycle and pedestrian safety issues, their relationship with overall transportation safety, and ensure their consideration in the overall metropolitan transportation planning process, in coordination with task 2.D above.
- Examine bicycle and pedestrian systems usage data needs for bicycle and pedestrian planning, and ensure their consideration in the overall metropolitan transportation planning process.
- Coordinate and host one or more regional bicycle and pedestrian planning or design training, outreach, or professional development opportunities for member agency staffs or other stakeholders.
- Provide staff support to the Bicycle and Pedestrian Subcommittee, supporting the regional forum for coordination and information exchange among member agency bicycle and pedestrian planning staffs and other stakeholders.

Oversight:	Regional Bicycle and Pedestrian Subcommittee
Cost Estimate:	\$125,000
Products:	Compilation of bicycle and pedestrian facilities for the TIP; maintenance of the regional bicycle and pedestrian plan on the TPB Web Site; one or more regional outreach workshops; Subcommittee minutes, agendas, and supporting materials; white papers or other research and advisory materials as necessary.
Schedule:	Bimonthly

F. REGIONAL BUS PLANNING

This work activity will provide support to the Regional Bus Subcommittee for the coordination of bus planning throughout the Washington region, and for incorporating regional bus plans into the CLRP and TIP. The Regional Bus Subcommittee is a forum for local and commuter bus, rail transit, and commuter rail operators and other agencies involved in bus operation and connecting transit services. The Subcommittee focuses on bus planning as well as regional transit issues, such as data sharing and technical projects.

The major topics to be addressed in FY 2015 include the following:

- Evaluate federal rulemaking for the performance provisions of MAP-21, specifically transit safety and transit state of good repair, including changes in the metropolitan planning process in regard to performance-based project programming and planning.
- Provide a forum for discussion of the development of the performance measures and selection of performance targets required under MAP-21, in order to coordinate with relevant providers of public transportation to ensure consistency to the maximum extent practicable.
- Development and publication of useful operations, customer, and financial data on regional bus services for TPB and public utilization, including a priority list of regional projects to improve bus transit services.
- Coordination and evaluation of CLRP and TIP proposals and amendments with regard to bus transit service plan implementation and capital projects for bus facilities and runningway improvements.
- Provide technical advice and input regarding regional transportation and land use coordination, including the development of transit assumptions for TPB planning studies.
- Facilitation of technology transfer and information sharing as it relates to regional, state and local bus transit services, including for Bus Rapid Transit (BRT) projects, customer information, and other common issues.
- Coordination with other regional committees regarding bus transit participation in planning and training activities, including but not limited to the Regional Emergency Support Function (RESF) #1 at COG, and the MATOC Transit Task Force.
- Coordination with the TPB Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee regarding integrated planning for bus services and street operations.
- Coordination with the TPB Access for All (AFA) Committee to enhance regional mobility for all populations.

Oversight: Regional Bus Subcommittee

Cost Estimate: \$160,000

Products: Data compilation, reports on technical issues, and outreach materials

Schedule: Monthly

G. HUMAN SERVICE TRANSPORTATION COORDINATION

Under the final USDOT planning requirements for SAFETEA-LU, a Coordinated Plan was required to guide funding decisions for three Federal Transit Administration (FTA) programs: 1) Formula Program for Elderly Persons and

Persons with Disabilities (Section 5310); 2) Job Access and Reverse Commute for Low Income Individuals (JARC, Section 5316); and 3) New Freedom Program for Persons with Disabilities (Section 5317). In 2009, the TPB adopted an Update to the Coordinated Human Service Transportation Plan for the National Capital Region ("Coordinated Plan"). The TPB became the designated recipient of the SAFETEA-LU's JARC and New Freedom programs in 2006 for the Washington DC-VA-MD Urbanized Area.

MAP-21 eliminated the JARC program and consolidated the New Freedom and the Section 5310 Elderly and Individuals with Disabilities Program into a new program "Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities". A Joint Designated Recipient arrangement between the TPB, the D.C. Department of Transportation (DDOT), the Maryland Transit Administration (MTA), and the Virginia Department of Rail and Public Transportation (DRPT) was finalized in FY2013. Under the Joint Designated Recipient arrangement, the TPB is responsible for the federally required Coordinated Plan, project solicitation and selection. DDOT, DRPT and MTA receive the funds directly from the FTA and administer the projects in their jurisdiction.

The TPB established the Human Service Transportation Coordination Task Force ("Task Force") to develop and help implement the Coordinated Plan which guided project selection for JARC and New Freedom, and under MAP-21, and will guide project selection for the new Section 5310 Enhanced Mobility program. The Task Force is comprised of human service and transportation agency representatives from each TPB jurisdiction as well as consumers and private providers. The Task Force establishes priorities for the annual solicitations and assists with outreach.

Proposed work activities include:

- Support the activities of the TPB Human Service Transportation Coordination Task Force which will oversee the following work activities:
 - Review and update the Coordinated Plan as needed based on FTA guidance on MAP-21 for human service transportation coordination and the new Section 5310 Enhanced Mobility Program;
- The TPB will carry out the following activities as defined under the joint designated recipient arrangement between the TPB, DDOT, DRPT and MTA:
 - Develop priority projects in preparation for the solicitation for the Enhanced Mobility Program in the Washington DC-VA-MD Urbanized Area;
 - Conduct a project solicitation for the Enhanced Mobility Program; and
 - Convene a selection committee that will make grant funding recommendations for the Enhanced Mobility funding to the TPB in

coordination with DDOT, DRTP and MTA.

- Coordinate the activities of the coordination task force with the TPB Access For All Advisory Committee and the Private Providers Task Force.

Oversight: Transportation Planning Board

Cost Estimate: \$141,200

Products: Updated Coordinated Plan, Project Priorities for 2014 Solicitation, and Project Recommendations for Enhanced Mobility Funding

Schedule: June 2015

H. FREIGHT PLANNING

Under this work task, TPB will provide opportunities for consideration, coordination, and collaborative enhancement of planning for freight movement, safety, facilities, and activities in the region. An updated Regional Freight Plan was completed in FY2010, and provides guidance for continued regional planning activities. Major topics to be addressed include the following:

- Support the Regional Freight Subcommittee.
- Complete a new Regional Freight Plan.
- Maintain the Regional Freight Plan and supporting information on the TPB Web site for member agency and public access.
- Ensure consideration of freight planning issues in overall metropolitan transportation planning, including:
 - Work proactively with the private sector for consideration of private sector freight issues. Identify topics of interest to private sector, often competing trucking and freight stakeholders.
 - Continue following up on recommendations from the Regional Freight Forum held in FY2011.
 - Advise the TPB and other committees in general on regional freight planning considerations for overall metropolitan transportation planning.
 - Coordinate with federal, state, and local freight planning activities.
- Address MAP-21 requirements related to freight planning, including:
 - Analyze available freight movement data for the region including FHWA Freight Analysis Framework total tonnage and total value data for truck, rail, air cargo, and maritime movements in our region; this data may inform freight performance measures.
 - Monitor federal rulemaking on freight performance measures.

- Coordinate with member states on the establishment of freight targets.
- Complete a set of "Freight Around the Region" outreach materials focusing on individual jurisdictions' freight activities and their links to regional activities.
- Coordinate with TPB travel monitoring and forecasting activities on freight considerations.
- Examine truck safety issues.
- Develop ongoing freight component input to the Constrained Long Range Plan (CLRP).
- Keep abreast of regional, state, and national freight planning issues.
- Undertake data compilation and analysis on freight movement and freight facilities in the region.
- Undertake freight stakeholder outreach with representatives of the freight community, including carriers, shippers, and other stakeholders, to gain their input on regional freight movement, safety and other issues and to gauge their interest in state and MPO planning and programming processes.

Oversight:	TPB Freight Subcommittee
Cost Estimate:	\$154,500
Products:	New Regional Freight Plan; data compilation and outreach materials as needed; white paper(s) on technical issues as needed; structured interviews and summarized results; documentation as necessary supporting MAP-21 requirements of freight planning
Schedule:	Bimonthly

I. METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING

Under this work task, TPB will provide planning support for the Metropolitan Area Transportation Operations Coordination (MATOC) Program, in conjunction with the MATOC Steering Committee, subcommittees, and partner agencies. This task is the metropolitan transportation planning component of a larger set of MATOC Program activities, including operational and implementation activities, funded outside the UPWP. The Metropolitan Area Transportation Operations Coordination (MATOC) Program's mission is to provide situational awareness of transportation operations in the National Capital Region (NCR) through the communication of consistent and reliable information, especially during incidents. MATOC's information sharing is undertaken in large part through the Regional Integrated Transportation Information System (RITIS). RITIS is an automated system that compiles, formats, and shares real-time traffic and transit data among the region's transportation agencies. RITIS was developed on behalf of the region by the Center for Advanced Transportation Technology Laboratory at the

University of Maryland. Data provided through RITIS is in daily use by the region's major transportation operations centers.

As a complement to the externally-funded operations activities of MATOC, this UPWP task is to provide ongoing TPB staff planning assistance to the MATOC Program, as a part of the TPB's metropolitan transportation planning activities. Planning activities under this task include:

- Committee Support: Provide administrative support of MATOC Steering Committee and subcommittee meetings, including preparation of agendas and summaries and tracking of action items.
- TPB Reports: Provide regular briefings to the TPB on MATOC Program progress.
- TPB Staff Participation: Provide input and advice to the MATOC Information Systems Subcommittee and Operations Subcommittee.
- Coordinate as necessary with the Management, Operations, and Intelligent Transportation Systems (MOITS) Technical Subcommittee
- Outreach: Coordinate the work of MATOC with other organizations, for example, with public safety or emergency management groups and media representatives; prepare articles, presentations and brochures to convey MATOC concepts, plans, and accomplishments. Also coordinate with the COG Regional Emergency Support Function # 1 - Emergency Transportation Committee.
- Implementation Planning: Prepare implementation plans describing the work required to reach defined stages of MATOC operating capability, including expert input from MATOC subcommittees.
- Financial and Legal Analysis: Support discussion of the identification of funding sources, estimation of funding needs, as well as preparation of legal agreement materials that provide for the long term sustainability of MATOC.
- Performance Measurement: Support MATOC committee discussions of assessing progress against MATOC's defined goals and objectives.
- Risk Management: Identify and monitor major risks to progress and identify actions to be taken in order to avoid incurring risks or mitigating their consequences.
- Supporting Materials: Develop supporting or informational materials for the above activities as necessary.

Oversight: MATOC Steering Committee; MOITS Technical Subcommittee

Cost Estimate: \$123,600

Products: Agendas, minutes, summaries, and outreach materials as needed; white paper(s) on technical issues as needed; regular briefings and reports to the TPB, MATOC committees, and the MOITS Policy Task

Force and Technical Subcommittee

Schedule: Monthly

3. FORECASTING APPLICATIONS

A. AIR QUALITY CONFORMITY

The objective of this work activity is to ensure that TPB plans, programs and projects meet air quality requirements. The 1990 Clean Air Act Amendments require that detailed systems level detailed technical analyses are conducted to assess air quality conformity of transportation plans and programs. Procedures and definitions for the analyses were originally issued as EPA regulations in the November 24, 1993 *Federal Register*, and subsequently amended and issued, most recently in a March 2010 EPA publication. In addition, federal guidance has also been published at various times by the EPA, FHWA and FTA.

The 2014 Constrained Long Range Plan (CLRP) and FY2015-20 Transportation Improvement Program (TIP) will address ozone, wintertime carbon monoxide, and fine particles (particulate matter, PM_{2.5}) requirements, including differing geographical boundaries, inventory time periods, and evaluation criteria by pollutant. The schedule for adoption of the updated plan and TIP calls for most of the work to be completed in FY2014. As the Public Comment Period extends beyond the end of FY2014 and into the start of FY2015, it is anticipated that the final stages of the plan development consisting of incorporation of the public comments, development of the final report, adoption by the TPB and subsequent transmittals will take place in September 2014. Upon adoption of the 2014 CLRP, a new Air Quality Conformity cycle will begin for the 2015 CLRP and FY2015-20 TIP, which will run throughout FY2015.

The interagency and public consultation procedures of TPB are based on the November 24, 1993 EPA regulations, which were adopted by TPB in September 1994 and subsequently amended to reflect additional requirements in August 15, 1997 regulations, which were adopted by TPB in May 1998. These procedures address the preparation of the annual UPWP and TIP and any updates to the regional plan or programs. The procedures involve timely announcement of upcoming TPB activities relating to air quality conformity and distribution of relevant material for consultation purposes.

The FY2015 work program will include the following tasks:

- Completion of conformity analysis of the 2014 CLRP by preparing the final report, which documents procedures, results, and comments and testimony received; in addition, all data files for use in subsequent regional and corridor/subarea planning studies are organized and documented.
- Preparation and execution of a work program for analysis of the 2015 CLRP & FY2015-20 TIP using the most up-to-date project inputs, planning assumptions, travel demand model, software and emissions factor model (MOVES); preparation of a draft report on the conformity assessment.
- TPB interagency and public consultation procedures; this includes

funding for review and coordination work on the part of COG/DEP staff to reflect involvement by the Metropolitan Washington Air Quality Committee (MWAQC) in the public and interagency consultation process.

- Coordination of project solicitation, documentation, and emissions reduction analysis associated with CMAQ projects. Perform incidental air quality conformity reviews (non-systems level), as required throughout the year.
- Keeping abreast of federal requirements – as they are updated throughout the year – on air quality conformity regulations and as guidance is issued; revision of work program elements as necessary.

Oversight:	Technical Committee in consultation with MWAQC committee
Cost Estimate:	\$584,600
Products:	Final report on 2014 CLRP & FY2015-20 TIP Air Quality Conformity Assessment; Work Program for 2015 CLRP & FY2015-20 TIP Conformity Assessment
Schedule:	June 2015

B. MOBILE EMISSIONS ANALYSIS

The objective of this work activity is to conduct a broad range of analyses aiming to quantify emissions levels of various pollutants and ensure that TPB plans, programs and projects meet air quality requirements. A component of this work activity is the analysis, assessment and evaluation of the performance of Transportation Emissions Reduction Measures (TERMs) associated with PM2.5 and 8-hour ozone SIPs.

The FY2015 work program will include the following tasks:

- Development of input data for MOVES model runs for the 2015 CLRP & FY2015-20 TIP Air Quality Conformity Assessment, review and evaluation of MODEL outputs. Mobile emissions may also be developed for GHG pollutants using the MOVES model (as deemed necessary) in support of strategic planning scenarios as part of the TPB’s Scenario Task Force activities and the COG Board’s Climate, Energy, and Environment Policy Committee (CEEPC).
- Execution of sensitivity tests (as necessary) assessing the likely impacts of input data changes in MOVES model runs
- Measurement of the on road mobile emissions reductions attributable to current and future Transportation Emissions Reductions Measures (TERMs)

- Technical support to the Commuter Connections Program in support of developing implementation plans and evaluating current and future TERMS
- Funding for the COG Department of Environmental Programs (DEP) in support of its contributions towards provision of data from the state air agencies, and updates on federally-mandated issues related to mobile emissions as part of the annual air quality conformity determinations
- Response to requests for technical assistance by governmental entities and/or their consultants working on technical analyses or municipal transportation planning.
- Development of presentation material, rendering technical support and attendance of MWAQC and CEEPC meetings, policy discussions and public hearings.
- Monitoring of performance measures development associated with Air Quality as mandated by MAP-21
- Monitoring of the development of the newest version of MOVES (MOVES2914) by keeping up-to-date on technical issues, release date, grace period, and technical support activities provided by EPA; staff training on MOVES2 2014 may also be necessary

Oversight:	Technical Committee and Travel Management Subcommittee, in consultation with MWAQC committees
Cost Estimate:	\$707,200
Products:	Reports on TERM evaluation and on greenhouse gas emissions reduction strategies; Updated mobile source emissions inventories / reports as required addressing ozone and PM _{2.5} standards and climate change requirements
Schedule:	June 2015

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.

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
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

D. COORDINATION OF COOPERATIVE FORECASTING AND TRANSPORTATION PLANNING PROCESSES

Under this work activity staff will support the Planning Directors Technical Advisory Committee (PDTAC) and the TPB Technical Committee in the coordination of local, state and federal planning activities and the integration of land use and transportation planning in the region.

The following work activities are proposed for FY 2015:

- Support the Planning Directors Technical Advisory Committee (PDTAC) in the coordination of local, state and federal planning activities and the integration of land use and transportation planning in the region.
- Analyze changes in regional economic, demographic and housing trends drawing on the results from the Census American Communities Survey (ACS) and from other available federal, state, local data sources.
- Work with members of the Cooperative Forecasting Subcommittee to enhance and improve the quality of small area (TAZ-level) employment data. This effort will involve the tabulation and analysis of state ES-202 employment data files for DC, MD and VA and collaboration with the National Capital Planning Commission (NCPG) and the General Services Administration (GSA) to obtain site specific employment totals for federal employment sites in the region.

- Work with members of the Cooperative Forecasting Subcommittee to refine the national and regional economic growth assumptions by major industry groups that are inputs into the top-down Cooperative Forecasting regional econometric model. Obtain consensus on regional econometric benchmark projections for Round 8.4 and Round 9.0 Cooperative Forecasts.
- Work with the members of the Cooperative Forecasting Subcommittee, the region's Planning Directors, the Baltimore Metropolitan Council, the Tri-County Council for Southern Maryland, the George Washington Regional Planning Commission and the Planning Directors of Fauquier County- VA, Clarke County-VA and Jefferson County-WV to develop updates to the Round 8.3 Cooperative Forecasts by jurisdiction and reconcile these updated local jurisdiction forecasts with new regional econometric benchmark projections.
- Update the technical documentation of regional econometric benchmark projections and methodologies employed by local jurisdictions in preparing their jurisdictional and TAZ-level Cooperative Forecasts.
- Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to develop updated Round 8.4 Transportation Analysis Zone (TAZ)-level growth forecasts.
- Update and maintain Cooperative Forecasting land activity databases that are used as input into TPB travel demand-forecasting model. Prepare updated Round 8.4 TAZ-level population, household, and employment forecasts for both COG member and non-member jurisdictions in the TPB Modeled Area.
- Analyze and map Round 8.4 growth forecasts for identified COG Activity Centers.
- Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to assess the effects of significant transportation system changes on the Cooperative Forecasting land activity forecasts. Document key land use and transportation assumptions used in making updates to the Cooperative Forecasting land activity forecasts
- Respond to public comments on updated Round 8.4 forecasts and the Cooperative Forecasting process.
- Develop and publish useful economic, demographic and housing-related information products including the Regional Economic Monitoring Reports (REMS) reports, the annual "Commercial Development Indicators" and economic and demographic data tables to be included in the Region Forward work program.

Oversight: Technical Committee

Estimated Cost: \$\$831,000

Products: Coordination of Land Use and Transportation Planning in the Region, Review and Update of Regional Econometric Model, Update of Regional Planning Databases, Mapping of Updated Regional Activity Centers, Development and Distribution of technical reports and information products.

Schedule: June 2015

4. DEVELOPMENT OF NETWORKS AND MODELS

A. NETWORK DEVELOPMENT

This activity will involve the development of transportation network files which are primary inputs to the regional travel demand model and are used to reflect system improvements as specified in the evolving TIP and CLRP. During FY 2015, TPB staff will continue to develop network files that are compliant with the adopted Version 2.3.52 travel demand model (or its successor) to support regional and project planning needs. Staff will continue to serve network-related needs associated with project planning and long-term models development activities.

The following work activities are proposed:

- Update the TPB's base-year (2014) transit network to reflect the most current operations of the local transit providers in the Metropolitan Washington Region. Staff will utilize digital (GTFS) data that is available on the web and published schedules for services that are not included in the digital files.
- Prepare base- and forecast-year highway and transit networks in accordance with the 2014 CLRP and FY2015-2020 TIP elements that are received from state and local agencies. The networks will be prepared in compliance with the Version 2.3.52 travel demand model requirements. Provide guidance in the development of network inputs to other technical staff members in the department.
- Support the development of networks for special regional planning studies and for developmental work in the Models Development program.
- Continue to support technical refinements in the models development, including a multi-year migration in the transit network building software, from TRNBUILD to Public Transport (PT).
- Support the ongoing analysis of newly collected INRIX speed data and traffic ground count data for the evaluation of the regional travel model performance.
- Respond to technical data requests associated with network-related information, including transit line files, station files, and shape files associated with features of the regional highway or transit network.
- Further refine or upgrade the TPB's existing ArcGIS-based system which is used to facilitate network coding and network file management.

Oversight:

Travel Forecasting Subcommittee

Cost Estimate: \$792,800

Products: A series of highway and transit networks reflecting the latest TIP and Plan, and compliant with the Version 2.3 travel model. Technical documentation will be furnished.

Schedule: June 2015

B. GIS TECHNICAL SUPPORT

Under this work activity staff will provide Geographic Information System (GIS) data and technical support to users of the COG/TPB GIS for many important TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.

The following work activities are proposed for FY 2015:

- Provide data and technical support to staff using the COG/TPB GIS for development and distribution of data and information developed by the TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.
- Provide ongoing maintenance and support of GIS-based transportation network management and editing tools.
- Enhance the COG/TPB GIS Spatial Data Library with updated transportation and non-transportation features as these data become available.
- Add additional transportation attribute data, land use features and imagery data to the COG/TPB GIS Spatial Data Library.
- Update GIS Spatial Data Library documentation, GIS User Guides and technical documentation of various GIS software applications as required.
- Maintain and update an intranet-based GIS Project Information Center that lists and describes DTP GIS databases and applications currently being developed, as well as those that are currently available.
- Train staff on use of GIS databases for transportation planning.
- Continue to coordinate the regional GIS activities with state DOTs, WMATA, and the local governments through COG's GIS Committee and subcommittees.
- Maintain and update COG/TPB's GIS-related hardware and software.

- Respond to request for COG/TPB GIS metadata, databases, and applications.

Oversight: Technical Committee

Estimated Cost: \$565,300

Products: Updated GIS software, Databases, User Documentation and Training materials; Support of GIS transportation network management.

Schedule: June 2015

C. MODELS DEVELOPMENT

The Models Development activity functions to maintain and advance the TPB's travel forecasting methods and practices, which are critical to ongoing transportation planning work. Models development activities are formulated around the areas of data collection, short- and long-term models development, research, and maintenance. During FY 2015, staff will continue to support the application and refinement of the currently adopted Version 2.3.52 travel model to serve regional and project planning needs. Staff will also maintain a consultant-assisted effort to evaluate existing forecasting practices and to provide advice on longer-term improvements. All staff-proposed improvements to the regional travel model will be implemented in consultation with the TPB Travel Forecasting Subcommittee (TFS).

The following work activities are proposed:

- Support the application of the Version 2.3.52 travel model for air quality planning work and other planning studies conducted by TPB staff. This will include the update of travel modeling inputs as necessary (external trips and other exogenous trip tables), investigating technical problems that might arise during the course of application, and documenting refinements to the model. Staff will also provide support for local project planning work on an "as needed" basis. Some of this support will be administered through the TPB's technical service accounts.
- Continue the consultant-assisted effort to improve the TPB travel model and to conduct focused research on selected technical aspects of travel modeling in order to keep abreast of best practices.
- Staff will work with local transportation agencies in formulating ways in which the regional travel model might be used to provide performance-based measures as per the new surface transportation authorization legislation (MAP-21).
- Continue the investigation of refinements to the Version 2.3.52 model, drawing from recommendations compiled from past consultant-generated reviews of the regional travel model. These refinements will focus most immediately on activities that were initiated during FY 2014, including an enhanced traffic

assignment process, an improved mode choice model application program, and the use of the Public Transport (PT) transit network program. Staff will also continue to leverage available technology to minimize model computation times as much as possible.

- Continue with sensitivity testing with the Version 2.3.52 travel model, in consultation with the TFS. The testing may point to a need to modify the adopted travel model.
- Continue the analysis of geographically focused household travel survey data that TPB staff has collected during FY 2012, FY 2013 and FY 2014. This will include a comparison of surveyed data against modeled data as a way of assessing model performance and reasonability.
- Keep abreast of new developments in travel demand forecasting, both short-term developments (such as for trip-based, four-step models) and long-term developments (such as ABMs and airport choice and ground access mode choice models). TPB staff will also continue involvement with the Transportation Research Board (TRB), the Travel Modeling Improvement Program (TMIP) and Institute of Transportation Engineers (ITE).
- Staff will keep abreast of hardware and software needs and opportunities, including the potential use of “cloud computing” and the use of versioning software as an efficient way of tracking model code as it evolves with model refinements over time.
- Provide staff support for the TPB Travel Forecasting Subcommittee which is the forum charged with overseeing technical practices and improvements to the TPB travel forecasting process. This will include organizing meetings, preparing regular presentations, and coordinating with internal and external meeting participants on presentation items.
- Respond to model-related data requests from local partner agencies and their consultants.

Oversight:	Travel Forecasting Subcommittee
Cost Estimate:	\$1,103,400
Products:	Updated travel models; documentation of models development activities; and recommendations for continued updating of the travel demand modeling process, where applicable.
Schedule:	June 2015

D. SOFTWARE SUPPORT

This work element supports the infrastructure needs of the TPB microcomputer-based travel demand forecasting model and the emissions models used in air quality applications. It consists of software, hardware and knowledge-based maintenance of all the systems needed for successful model runs. Activities performed under this work activity include: (1) development and testing of revisions and upgrades of the software currently in use (2) tests of new software needed for the successful execution of model runs, file management and upkeep, data storage, retrieval and transfer systems etc. (3) training of TPB staff in use of models and adopted systems. Throughout FY2013 staff will closely monitor the performance of all software and hardware systems and it will research and evaluate potential system upgrades through testing and demonstration.

The FY2015 work program will include the following tasks:

- Continued support on executing CUBE / TP+ runs and migration to CUBE / Voyager in running TPB travel demand forecasting applications.
- Continued support on MOVES emissions model runs and supporting software applications.
- Training of DTP staff in various applications of CUBE/ TP+, CUBE / Voyager, MOVES2014 and post-model applications such as integration with TRANSIM (as deemed necessary).
- Monitoring of the performance of DTP desktop and laptop microcomputer hardware and software and make upgrades as appropriate.
- Coordination with the COG Office of Technology Programs and Services (OTPS) staff in this task and in applications under the Microsoft Windows operating system.
- Maintenance of the data storage systems for the back-up, archiving and retrieval of primary regional and project planning data files.
- Support development and execution of applications of micro simulation software as appropriate.

Oversight: TPB Technical Committee

Cost Estimate: \$184,300

Products: Operational travel demand forecasting process plus operational MOVES2010 Models; File transfer, storage and retrieval processes; DTP staff training in CUBE/ TP+, CUBE / Voyager, and MOVES2010 systems; and Microcomputer hardware to support CUBE/ TP+, CUBE / Voyager, MOVES2010, and other operations.

Schedule: June 2015

5. TRAVEL MONITORING

A. CORDON COUNTS

Volume, occupancy, and travel time monitoring of the regional HOV system is performed on a 3 to 4-year cycle. In FY 2015 staff will conduct the second phase of data collection on the regional HOV system during the fall and then process, tabulate and analyze the volume, occupancy, and travel time data and prepare a technical report summarizing the key findings and changes from previous HOV monitoring. Staff will also prepare a technical report appendix containing the detailed data for each regional HOV monitoring location.

Oversight:	Travel Forecasting Subcommittee
Estimated Cost:	\$258,400
Products:	2014 Regional HOV Monitoring Report and appendices
Schedule:	June 2015

B. CONGESTION MONITORING AND ANALYSIS

Congestion Monitoring supplies data for the Congestion Management Process (CMP - Item 2.A.) and Models Development (Item 4.C.). The program monitors congestion on both the freeway and the arterial highway systems, to understand both recurring and non-recurring congestion. Data collection methods include a combination of aerial surveys, field data collection, and/or data procured from private sources. Examples of emerging technologies include probe-based data and Bluetooth-based data. Activities will include:

- Analyze and publish the results of the triennial aerial survey of congestion on the region's freeway system, based upon the data collection that took place in spring 2014; coordinate this information with other congestion data sources.
- Compile, review, and format transportation systems condition information from sources including:
 - The speed data archive from the I-95 Corridor Coalition/INRIX, Inc. Vehicle Probe Project (VPP) and associated VPP Suite developed by the University of Maryland Center for Advanced Transportation Technology;
 - The Regional Integrated Transportation Information System (RITIS) of the Metropolitan Area Transportation Operations Coordination (MATOC) Program;
 - The FHWA's National Performance Management Research Data Set (NPMRDS)
 - Private sector sources as available.

- Examine potential new sources of archived operations data.
- Provide data to the products of the Congestion Management Process (see also Task 2.A.)

Oversight:	MOITS Technical Subcommittee
Estimated Cost:	\$360,500
Product:	Final report of the spring 2014 aerial survey of congestion on the region's freeways; transportation systems monitoring data sets and analysis reports from archives, provided for the products of the Congestion Management Process (2.A.) and other regional transportation planning activities; documentation as necessary supporting MAP-21 requirements of congestion monitoring and analysis
Schedule:	June 2015

C. TRAVEL SURVEYS AND ANALYSIS

In FY 2012-2014, the 2007/2008 Regional Household Travel Survey data was supplemented with collection of household travel survey data in 14 focused geographic subareas of the region. This additional household travel survey data collection was in response to the need expressed by local jurisdiction users of the household travel survey to have additional household samples in smaller geographic subareas to analyze specific aspects of daily travel behavior in these smaller geographic areas. In FY 2015, staff will continue to support users of TPB household travel survey data, update user documentation, provide technical assistance to the users of these survey data and begin planning for the next region-wide household travel survey.

The following work activities are proposed for FY 2015:

- Provide data, documentation, and technical support to users of 2007/2008 Regional Household Travel Survey and 2011-2014 Geographically-Focused Household Travel Surveys. Update user documentation as required.
- Complete the processing and analysis of data collected in the 2014 Geographically-Focused Household Travel Surveys to support analysis of regional growth and transportation issues of topical interest to the members of the TPB. Prepare information reports on various aspects of daily household and vehicle travel in the region.
- Update vehicle flows and commuter rail ridership across the external cordon for the TPB modeled area with data from third party vehicle trip data providers and commuter rail operators.

- Begin planning and seek funding for a large sample methodologically enhanced activity-based region-wide household travel survey to begin in FY 2016-FY2017. The pre-test and data collection for the methodologically enhanced activity-based region-wide household survey will not begin until funding for the full survey can be identified. It is currently estimated that between \$2.1 and \$2.6 million in funding will be needed to collect survey data from approximately 10,000 households in the TPB modeled area.

Oversight:	Travel Forecasting Subcommittee
Estimated Cost:	\$727,500
Product:	Household Travel Survey Data Collection and Processing, Household Travel Survey Analyses, Information Reports and Technical Memorandum, Maintenance of Travel Survey Data and Documentation, Planning for Region-Wide Household Survey
Schedule:	June 2015

D. REGIONAL TRANSPORTATION DATA CLEARINGHOUSE

Efficient access to a comprehensive data set containing current and historic data on the characteristics and performance of the region's transportation system is vitally important for transportation planning, air quality analysis, models development, congestion management and project evaluations. Under this work item state will continue to work with local, state, WMATA and other regional agencies to transfer data to and from the Regional Transportation Data Clearinghouse and to update the Data Clearinghouse with updated highway and transit performance data as these data become available.

The following work activities are proposed for FY 2015:

- Update Clearinghouse data files with FY13-14 highway and transit network data.
- Update Clearinghouse traffic volume data with AADT and AAWDT volume estimates, hourly directional traffic volume counts and vehicle classification counts received from state DOTs and participating local jurisdiction agencies.
- Update Clearinghouse transit ridership data with data received from WMATA, PRTC, VRE, MTA and local transit agencies including the Ride-On, The Bus, ART, DASH and the Fairfax Connector.
- Add newly collected and processed freeway and arterial road speed and level of service (LOS) data to the Regional Transportation Data Clearinghouse network.
- Add updated Cooperative Forecasting data to the Clearinghouse by TAZ.

- Update Regional Clearinghouse user manuals and documentation.
- Display Clearinghouse volume, speed and LOS data on a web-based application that utilizes satellite/aerial photography imagery with zooming user interface.
- Distribute Regional Transportation Clearinghouse Data to TPB participating agencies via a web-based ArcGIS application.

Oversight:	Technical Committee
Estimated Cost:	\$327,400
Product:	Updated Clearinghouse Database and Documentation; Web Interface to Access Clearinghouse Data
Schedule:	June 2015

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6. TECHNICAL ASSISTANCE

The TPB work program responds to requests for technical assistance from the state and local governments and transit operating agencies. This activity takes the form of individual technical projects in which the tools, techniques, and databases developed through the TPB program are utilized to support corridor, project, and sub-area transportation and land use studies related to regional transportation planning priorities. The funding level allocated to technical assistance is an agreed upon percentage of the total new FY 2015 funding in the basic work program. The funding level for each state is an agreed upon percentage of the total new FTA and FHWA planning funding passed through each state. The funding level for WMATA is an agreed upon percentage of the total new FTA funding. The specific activities and levels of effort are developed through consultation between the state and WMATA representatives and TPB staff.

Technical assistance projects anticipated in FY 2015 are described below. Total funds allocated to the District of Columbia, Maryland, Virginia, and WMATA for technical assistance are shown in Table 2. Work on each project is directed by staff from the respective state DOT or WMATA and is conducted by TPB staff or consultants as noted.

A. DISTRICT OF COLUMBIA

1. Program Development, Data Requests and Miscellaneous Services

This project accounts for staff time spent in developing scopes of work for requested projects and in administering the work program throughout the year. Work activities involve meeting with DDOT staff to discuss proposed projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and progress reporting throughout the projects.

Additionally, this project establishes an account to address requests which are too small or too short-lived to warrant separate scopes of work. Requests may include staff time to participate in technical review committees and task forces and execution of small technical studies.

Cost Estimate:	\$10,000
Product:	specific scopes of work
Schedule:	on-going activity

The program for FY 2015 remains to be specified.

TOTAL DISTRICT OF COLUMBIA COST ESTIMATE: \$360,470

B. MARYLAND

1. Program Development Management

This work task will account for DTP staff time associated with the administration of this Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time needed for the development of the annual planning work program.

Cost Estimate: \$15,000

Schedule: On-going activity

The program for FY 2015 remains to be specified.

TOTAL MARYLAND COST ESTIMATE: \$ 646,043

C. VIRGINIA

1. Program Development And Data/Documentation Processing

This work element accounts for DTP staff time associated with the administration of this Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time to process requests for data/documents from Northern Virginia as advised by VDOT throughout the year.

Cost Estimate: \$15,000

Product: Data, documentation, scopes of work, progress reports

Schedule: On-going activity

The program for FY 2015 remains to be specified.

TOTAL VIRGINIA COST ESTIMATE: \$564,195

D. WMATA

1. Program Development

This project is established to account for DTP staff time spent in developing scopes of work for requested projects and for administering the resultant work program throughout the year. Work activities will involve meeting with WMATA staff to discuss projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and reporting progress on projects throughout the year. In addition, this project will provide staff

with resources to attend required meetings at WMATA.

Cost Estimate: \$5,000

Schedule: on-going activity

2. Miscellaneous Services

This miscellaneous account is a mechanism established to address requests which are too small or too short-lived to warrant separate work scopes. Past work has included requests for hard copy, plots, tape, or diskettes of data from any of the planning work activities at COG.

Cost Estimate: \$5,000

Schedule: on-going activity

3. 2014 Metrobus Passenger On-Board Survey

Background

The 2014 Metrobus On-Board Passenger Survey will be conducted by WMATA and TPB, with TBP staff managing the survey implementation. The primary purpose of this survey is to update the information from the 2008 survey. Since the last survey occurred there have been regional changes as well as Federal reporting changes. The October 2012 FTA Title VI Circular requires that passenger origin-destination surveys be conducted no less than every five years. Other objectives of the survey include obtaining and updating origin and destination information for both planning studies as well as for regional subsidy allocation. Regional subsidy allocation requires that only regional routes are surveyed, however, to be compliant with Title VI, all routes will need to be surveyed. In order to catch up to and maintain the standards of the federal requirements, a complete baseline survey is needed in calendar year 2014. Following that, 1/3 of the routes will be surveyed every year on a rolling basis, so that therein after, every route will have been surveyed every 3 years.

The 2014 survey will serve as the baseline survey to collect on-board passenger data for the entire Metrobus system, including regional and local routes, and cover both weekdays and weekends. The baseline survey will be split into two surveying periods, Spring 2014 and Fall 2014. Hence, the 2014 UPWP funds will support the first half of the survey and the 2015 UPWP funds will support the second half of the survey. TPB staff will manage the 2014 baseline survey for WMATA with the participation of WMATA staff .

Scope of Work

TPB staff will solicit proposals from qualified survey contractors to perform all data collection and processing activities associated with the conduct of a regional bus passenger survey. These duties include, but are not limited to the recruitment and training of surveyors to distribute and collect survey questionnaires, the scheduling and supervision of these surveyors, the distribution and collection of survey questionnaires to and from bus passengers, the development and implementation of survey quality control on board

procedures, the entry and processing of the survey data into a electronic database, the performance of basic logic and consistency edit checks to ensure data quality and completeness and the documentation of survey results and procedures. TPB staff will also perform geocoding as part of the survey management.

Cost Estimate: FY 2015

Product: Final report summarizing the survey methodology, findings, geo-coded data, and documenting all elements of the data collection and survey processing activities as well as all data files associated with the survey.

Schedule: Complete by March 2015

Baseline Survey – Phase 1

Final Project implementation plan: January 2014

Phase 1 surveys: March - May 2014

Completion of Phase 1 follow-up surveys: June 2014

Final Phase 1 deliverables: August 2014

Year 1 Baseline Survey – Phase 2 (FY 2015 UPWP)

Phase 2 implementation plan: August 2014

Phase 2 surveys: September - November 2014

Completion of Phase 2 follow-up surveys: December 2014

All final deliverables: March 2015

TOTAL WMATA COST ESTIMATE: \$222,878

7. CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

The purpose of the CASP program is to provide a regional process that supports the planning, development and operation of airport and airport-serving facilities in a systematic framework for the Washington-Baltimore Region, which includes the region's three major commercial airports: Thurgood Marshall Baltimore Washington International Airport, Ronald Reagan Washington National Airport, and Washington Dulles International Airport. Oversight of the program is the responsibility of the TPB Aviation Technical Subcommittee. The elements of the multi-year CASP work program for FY 2015 are as follows:

Update Ground Access Forecasts – Phase 1

The update of forecasts of ground access trips to the region's three commercial airports is an important step in the airport systems planning process. This project will use the results of the most recent (2013) regional air passenger survey together with the latest available airport terminal area forecasts and land activity forecasts of future growth in the Washington-Baltimore region to update forecasts of ground access trips from local area Aviation Analysis Zones (AAZ) to each of the region's three commercial airports. Phase 1 of this project will result in updated ground access trip generation rates by AAZ and will be completed during FY 2015. Phase 2 will result in updated forecasts of ground access trips by time of day and mode of arrival and will be completed during FY 2016.

Specific tasks to be completed in Phase 1 are: the update of annual local originating passenger forecasts, conversion of base year and forecast annual local originating air passenger trips to average weekday passenger trips, review and analysis of average weekday ground access trips by mode, trip origin and resident status for each AAZ and transportation analysis zone; the review and refinement of the AAZ area system, and calculation of weekday ground access trip generation rates by trip origin and resident/non-resident status for each AAZ. The product of Phase 1 will be a technical memorandum documenting the updated trip generation rates and the methodology used to produce them.

Cost Estimate: \$ 40,000

Ground Access / Air Cargo Element Update – Phase 2

The purpose of this project is to update the Ground Access/Air Cargo Element of the Regional Airport System Plan to examine ground accessibility for both air passengers and cargo. Maintaining ground access to the region's airports by both passengers and cargo provides significant benefits to the region's economy. However, ground access and landside congestion problems are expected to increase in the future. These ground access problems could adversely impact airport use in the Washington-Baltimore region.

This update will provide an analysis of current and forecast ground access problems at DCA, IAD, and BWI. It will analyze how current and future traffic congestion affects access to the airports by passengers and cargo. It will also look at overall conditions and demand for air cargo facilities in the region. Further, this plan element will integrate airport system ground access and facility planning into the overall regional transportation planning process for the National Capital Region and include recommendations for improving ground access

to the region's airports. Phase 1 entailed preparation of the scope of work of the Ground Access/Air Cargo Element Update and completion of the supply analysis, which will entail identifying current and planned ground access facilities and services for passengers and cargo and identifying cargo facilities at these airports.

Phase 2 of this project will complete the update of the Ground Access/Air Cargo Element, the first phase of which resulted in the completion of a supply analysis. Phase 2 will continue the analysis of demand, needs analysis and identification of policy recommendations including the preparation of the final report.

Specific tasks to be completed in this phase include: undertaking a review of forecasted demand for airport ground access, identifying ground access needs of the region's air passengers and cargo, documenting issues and problems, highlighting key issues to be addressed in the CLRP, and coordination with relevant agencies to identify policy issues. In addition, for cargo, it will examine the estimated potential demand for air cargo facilities and compare this demand with current and planned facilities to determine air cargo facility needs in this region.

The products of Phase 2 will be a final report outlining key policy issues and recommendations pertaining to the ground access to the region's airports. This plan element will also integrate airport system ground access and facility planning into the overall regional transportation planning process for the National Capital Region and include recommendations for improving ground access and cargo for the region's airports.

Cost Estimate: \$ 82,000

Process 2013 Air Passenger Survey – Phase 2

The purpose of the APS is to collect information about travel patterns and user characteristics of air passengers using the three major commercial airports and to help determine airport terminal and groundside needs. Data from the air passenger surveys will provide the basis for analysis of major changes in airport use in the region and planning for future airport improvements. Phase 1 of this project resulted in a final survey database for general analysis. Phase 2 will involve geocoding and further data analysis including preparation of summary findings and a full technical report. Continued processing and geocoding of the data collected in the 2013 APS will be carried out in this CASP project.

Phase 2 of this project provides for the continued processing of data collected in the 2013 Regional Air Passenger Survey. In Phase 1, data collected as part of the survey was corrected and the 2013 Air Passenger Survey database was finalized in preparation for data analysis. The General Findings Report was issued as part of Phase 1. Specific tasks to be completed in Phase 2 are: geocoding, data expansion, data tabulation, and data analysis. During this process detailed statistical analysis of the survey is conducted, which ultimately results in summarization of the survey findings. Findings are summarized by the various characteristics of the air passengers, characteristics of their ground access trips (work vs. non-work, resident vs. non-resident, mode of access, airport preference, etc.) as well as the geographic characteristics of ground access trips. Analysis concludes with the

production of summary tables and charts, and GIS-based maps that will be incorporated the final survey report. The products for this phase will be the preparation of the Geographic Findings Report and final geocoded survey file.

Cost Estimate: \$110,000

TOTAL CASP COST ESTIMATE: \$232,000

8. SERVICE/SPECIAL PROJECTS

In addition to the TPB basic work program in the UPWP and the Continuous Airport System Planning (CASP) program, service work or special technical studies as specified in contracts between the transportation agencies and COG may be included in the UPWP. Services or special projects are authorized and funded separately by the transportation agencies.

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