



## **TRANSPORTATION PLANNING BOARD**

Wednesday, November 16, 2016  
12:00 - 2:00 P.M.  
Walter A. Scheiber Board Room

### **SPECIAL WORK SESSION**

- **10:30 - 11:45 A.M.** Meeting of the Long-Range Plan Task Force to discuss the Phase 1 Report (*Walter A. Scheiber Board Room*)

### **AGENDA**

- 12:00 P.M.**    **1. PUBLIC COMMENT ON TPB PROCEDURES AND ACTIVITIES**  
*Tim Lovain, TPB Chairman*
- 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 encouraged to bring written copies of their remarks (65 copies) for distribution at the meeting.
- 12:20 P.M.**    **2. APPROVAL OF THE MINUTES OF THE OCTOBER 19 MEETING**  
*Tim Lovain, TPB Chairman*
- 12:25 P.M.**    **3. REPORT OF THE TECHNICAL COMMITTEE**  
*Tim Roseboom, TPB Technical Committee Chairman*
- 12:30 P.M.**    **4. REPORT OF THE CITIZENS ADVISORY COMMITTEE**  
*Doug Stewart, TPB Citizens Advisory Committee Chairman*
- 12:40 P.M.**    **5. STEERING COMMITTEE ACTIONS AND REPORT OF THE DIRECTOR**  
*Kanti Srikanth, TPB Staff Director*
- This agenda item includes Steering Committee actions, letters sent/received, and announcements and updates.
- 12:45 P.M.**    **6. CHAIRMAN'S REMARKS**  
*Tim Lovain, TPB Chairman*

Reasonable accommodations are provided upon request, including alternative formats of meeting materials.  
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## **ACTION ITEMS**

- 12:50 P.M.**    **7. REVIEW OF ALL COMMENTS RECEIVED DURING THE 30-DAY PUBLIC COMMENT PERIOD AND ACCEPTANCE OF RECOMMENDED RESPONSES FOR THE AIR QUALITY CONFORMITY ANALYSIS, THE 2016 CONSTRAINED LONG RANGE PLAN (CLRP) AMENDMENT, AND THE FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)**

*Lyn Erickson, TPB Plan Development and Coordination Program Director  
Charles Allen, TPB Second Vice Chairman*

The board will be briefed on the comments received from the public and from the TPB's Access for All Committee, and asked to accept the recommended responses for the Air Quality Conformity Analysis, the 2016 CLRP Amendment and the FY 2017-2022 TIP. The draft documents and web-based information were released for public comment on October 13. The public comment period for these documents ended on November 12. Public comments were posted as received on the TPB web site. The final version of the comments and responses memorandum will be incorporated into the documents scheduled for consideration under agenda items 8, 9 and 10.

**Action: Accept recommended responses to comments received for the Air Quality Conformity Analysis, the 2016 CLRP Amendment and the FY 2017-2022 TIP.**

- 1:05 P.M.**    **8. APPROVAL OF AIR QUALITY CONFORMITY ANALYSIS OF THE 2016 CLRP AMENDMENT AND 2017-2022 TIP**

*Lyn Erickson, TPB Plan Development and Coordination Program Director*

At the October 19 meeting, the board was briefed on the Air Quality Conformity Analysis of the 2016 CLRP Amendment and FY 2017-2022 TIP.

**Action: Adopt Resolution R3-2017 finding that the 2016 CLRP and FY 2017-2022 TIP conforms with the requirements of the Clean Air Act Amendments of 1990.**

- 1:10 P.M.**    **9. APPROVAL OF THE 2016 CLRP AMENDMENT**

*Lyn Erickson, TPB Plan Development and Coordination Program Director*

On October 13, the draft 2016 CLRP Amendment was released for public comment.

**Action: Adopt Resolution R4-2017 approving the 2016 CLRP Amendment.**

- 1:20 P.M.**    **10. APPROVAL OF THE FY 2017-2022 TIP**

*Lyn Erickson, TPB Plan Development and Coordination Program Director*

On October 13, the draft FY 2017-2022 TIP was released for public comment.

**Action: Adopt Resolution R5-2017 approving the FY 2017-2022 TIP.**

**1:25 P.M. 11. CERTIFICATION OF THE METROPOLITAN TRANSPORTATION PLANNING PROCESS FOR THE NATIONAL CAPITAL REGION**

*Lyn Erickson, TPB Plan Development and Coordination Program Director*

The Joint Planning Regulations issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) require that “the state and MPO shall certify at least every four years that the metropolitan transportation planning process is addressing the major issues in the metropolitan planning area and is being carried out in accordance with all applicable requirements...” The board will be briefed on the Statement of Certification and asked to endorse it.

**Action: Adopt Resolution R6-2017 endorsing the appended Statement of Certification.**

**INFORMATION ITEMS**

**1:30 P.M. 12. WMATA – COG TECHNICAL PANEL “INTERIM REPORT” AND METRO SAFETY COMMISSION UPDATE**

*Chuck Bean, COG Executive Director*

In June, the COG board authorized the convening of a technical panel to prepare an assessment of Metrorail safety, reliability, and state of good repair needs and revenue. In addition, progress has been made on the development of the Metro Safety Commission. The board will be briefed on both issues.

**1:40 P.M. 13. LONG-RANGE PLAN TASK FORCE PHASE 1 REPORT**

*Kanti Srikanth, TPB Staff Director*

The board will receive an update on the activities to date and the Phase I Report, which documents the work of the task force.

**2:00 P.M. 14. ADJOURN**

The next meeting is scheduled for December 21, 2016.

**MEETING AUDIO**

Stream live audio of TPB meetings and listen to recorded audio from past meetings at:

[www.mwcog.org/TPBmtg](http://www.mwcog.org/TPBmtg)

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**TRANSPORTATION PLANNING BOARD**  
**MEETING MINUTES**  
October 19, 2016

**MEMBERS AND ALTERNATES PRESENT**

Charles Allen, DC Council  
Bob Brown, Loudoun County  
James Davenport, Prince William County  
Allison Davis, WMATA  
Marc Elrich, Montgomery County  
Dennis Enslinger, City of Gaithersburg  
Gary Erenrich, Montgomery County DOT  
Jay Fisette, Arlington County  
Tawanna Gaines, Maryland House of Delegates  
Rene'e Hamilton, VDOT  
Neil Harris, City of Gaithersburg  
Konrad Herling, City of Greenbelt  
Catherine Hudgins, Fairfax County Board of Supervisors  
John Jenkins, Prince William County  
R. Earl Lewis, Jr. MDOT  
Tim Lovain, City of Alexandria  
Dan Malouff, Arlington County  
Phil Mendelson, DC Council  
Ron Meyer, Loudoun County  
Bridget Donnell Newton, City of Rockville  
Mark Rawlings, DC DOT  
Kelly Russell, City of Frederick  
Peter Schwartz, Fauquier County  
Eric Shaw, DC Office of Planning  
Elissa Silverman, DC Council  
Linda Smyth, Fairfax County Board of Supervisors  
David Snyder, City of Falls Church  
Tammy Stidham, NPS  
Todd M. Turner, Prince George's County  
Jonathan Way, Manassas City  
Victor Weissberg, Prince George's County/DPW&T  
Sam Zimbabwe, DDOT

**MWCOG STAFF AND OTHERS PRESENT**

John Swanson  
Andrew Meese  
Ron Milone  
Eric Randall  
Mark Moran  
Jane Posey  
Wendy Klancher  
William Bacon  
Andrew Austin  
Michael Farrell

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Ben Hampton	
Bryan Hayes	
Jessica Mirr	
Abigail Zenner	
Sergio Ritacco	
Ken Joh	
Lori Zeller	
Charlene Howard	
Debbie Leigh	
Deborah Etheridge	
Steve Walz	COG
Chuck Bean	COG/EO
Stuart Freudberg	COG/DO
Paul Des Jardin	COG/DCPS
Bill Orleans	HACK
Bobby Klancher	Loudoun County
Kari Snyder	MDOT
Patricia Happ	NVTC
Norm Catiorton	PWC
Malcolm Watson	FC DOT
Lauren Abraham	Vectre
Debbie Spielberg	Montgomery County/Councilmember Marc Elrich
Sydney Hawthorne	DC Council/Chairman Mendelson
Mike Licht	DBE Advance LLC
Stewart Schwartz	Coalition for Smarter Growth
Chase Rudner	Coalition for Smarter Growth
Bob Chase	Northern Virginia Transportation Alliance
Apostle Robert Price III	United House of Prayer for All People
Apostle S. Green	Director of Special Projects for Bishop CM Bailey, UHOP
Frank S. Wiggins	Commissioner ANC 6E-03
David N. Jordan	VDOT
Norman Whitaker	VDOT
Sree Nampoothrin	VDOT

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## **1. PUBLIC COMMENT ON TPB PROCEDURES AND ACTIVITIES**

Apostle Green said that the United House of Prayer supports DDOT's alternative #4 to build a two-way protected bike lane on the east side of 9<sup>th</sup> Street NW. He said that this alternative emerged after 18 months of good faith dialogue between the community and DDOT, including at two public meetings. He said that if DDOT moves forward with the bike lanes on 6<sup>th</sup> Street NW as proposed in the CLRP amendment the result will be a reduction in north-south travel between Massachusetts and Florida Avenues. He added that proximity to the convention center, Verizon Center, and the entrance to I-395 add to the possibility of congestion on 6<sup>th</sup> Street.

Mr. Wiggins, an ANC Commissioner for 6E03, said that he is concerned that after multiple conversations with DDOT the community is back to square one. He said that if two-way protected bike lanes are built along 6<sup>th</sup> Street NW as proposed in the CLRP amendment that there will be negative impacts on the churches and residents in his single member district. He said the he hopes that the TPB and DDOT will chose an alternate route for the bike lanes.

Apostle Price of the United House of Prayer, said a study conducted by DDOT shows that two-way protected bike lanes on 9<sup>th</sup> Street was the best alternative. He said that Bishop C.M. Bailey and the United House of Prayer endorse the 9<sup>th</sup> Street alternative as the best option.

Mr. Chase from the Northern Virginia Transportation Alliance endorsed the inclusion of I-395 multimodal express lanes in the 2016 CLRP. His group also supports proposed improvements on I-66 inside and outside the Capital Beltway, and the VRE extension to Haymarket. He said that the I-66 project is the only one that meets all six of the TPB's Regional Transportation Priorities Plan goals. He added that even with improvements, implementation of the CLRP results in higher congestion and delays. He said that the CLRP includes projects that fail to reach regional significance, and highlighted the absence of eight-car trains for Metro, a new Maryland beltway, and new Potomac River crossings as projects that could further improve future performance in the region.

Mr. Orleans said that proposed service changes for Metrorail are absurd and inappropriate. He said that some jurisdictions do not want to pay more and instead suggest fare increases. He said that the region needs to use a larger percentage of federal funding for WMATA improvements. He said stations should not be closed and fares should not increase.

## **2. APPROVAL OF MINUTES OF THE SEPTEMBER 21 MEETING**

A decision was made to approve the minutes from the September 21, 2016 TPB meeting. The motion was seconded and approved.

## **3. REPORT OF THE TECHNICAL COMMITTEE**

Mr. Roseboom said that the Technical Committee met on October 7 and was briefed on the draft 2016 Financially Constrained Long-Range Transportation Plan (CLRP), the draft Air Quality Conformity Analysis, and the Performance Analysis of the 2016 CLRP. He said that this was followed by a robust discussion on equity analysis of transportation impacts of telework. He said the committee was also briefed on an update on the federal transportation rulemaking and performance-based planning, the fall 2016 Street Smart bicycle and pedestrian safety campaign, and the Title VI and Environmental Justice analysis of "Communities of Concern" for the CLRP. He said that there was also an update on the Multi-Sector Working Group and the Long-Range Transportation Plan Task Force.

## **4. REPORT OF THE CITIZEN ADVISORY COMMITTEE**

Mr. Stewart said that the Citizens Advisory Committee met on October 13 and was briefed on the StreetSmart safety campaign, the 2016 CLRP amendment, FY2017-22 TIP and the performance of the

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2016 CLRP. He said that most of the meeting was spent discussing public involvement in the 2016 Long-Range Plan update. He said that the committee approved a recommendation that the TPB commit to developing a plan for engaging and incorporating public input into the selection of a limited set of regional unfunded priority transportation projects as part of the 2018 Long Range Plan update. He asked that the TPB clarify parameters for public involvement and make it clear how that involvement is going to be incorporated into the decision-making process. He said that the CAC has a long history of supporting the idea of a process for identifying unfunded regional projects as part of the long-range plan. He reminded the board that part of the CAC mission is to “promote public involvement in the regional transportation planning process.” He said that the CAC offers volunteer support with outreach in member jurisdictions and with civic groups.

Mr. Lovain said the board strongly supports a robust public process and involvement in the development of Phase 2 for the Long-Range Transportation Plan.

## **5. REPORT OF STEERING COMMITTEE**

Mr. Srikanth said that the Steering Committee met on October 7 and that a full copy of his report was included in the mailout. He reviewed the three amendments to the 2017-2022 TIP, two from Virginia Department of Transportation and one from the District of Columbia Department of Transportation that the committee approved. Next reviewing the letters sent and received he noted the letter that the TPB sent to the General Manager of WMATA requesting funding for the TPB’s Street Smart education campaign. He said that there was also a copy of the letter sent to the region’s Congressional delegation, informing them about the TPB’s sentiments and comments that the board had provided to the Federal Highway Administration and Federal Transit Administration on the recently proposed changes to the planning area of an MPO and the planning processes used by MPOs. He said that there was another letter from the TPB to the National Transportation Center at the University of Maryland. The letter was in support of the Center’s application for grant funds for a proposed study of analytics and communications to develop a tool to better operate managed lanes by examining travel behavior; a toll that could also be useful for programs such the TPB’s Commuter Connections Program. Finally, he said that the packet included a flier announcing the TPB’s Regional Conference on Traffic Incident Management on November 2.

## **6. CHAIR’S REMARKS**

Mr. Lovain began his remarks with a reminder to the TPB that he had listed three priorities that he wanted to address during his term: traffic incident management, the Long-Range Plan Task Force’s efforts, and helping Metro with the challenges it faces.

Mr. Lovain announced the upcoming traffic incident management conference on November 2 to discuss how to better clear traffic incidents from the roads. He said that about half of all traffic congestion is caused by nonrecurring incidents. And if you can clear incidents faster, it’s not only better for traffic but it means that the first responders are getting to the injured faster and many other benefits. He said the objective of the conference is to explore what can we as a region do better and how can we work together better. He described the conference agenda. Mr. Lovain said that this is a session for elected officials and decision-makers, and encouraged Board members and other decision makers from the jurisdictions to attend the event.

Mr. Lovain also announced that the next meeting of the Long-Range Plan Task Force would be on November 16 prior to the TPB meeting. He said that the meeting would focus on completing Phase 1 of the effort which is the unfunded projects in this region. He said that the draft Phase 1 Report will be presented at that meeting. The TPB will be asked to accept the report as final at the December TPB meeting.

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Lastly, Mr. Lovain discussed Metro. He recalled how the TPB had partnered with COG and the Washington Board of Trade to hold two regional forums focused on Metrorail system earlier in the year. Mr. Lovain noted that following the events in June the COG board adopted a resolution convening a technical panel to work on developing performance metrics for Metro, to document the operating and capital funding needs of the system, to assess revenue options, and also to analyze the economic value that Metro presents to the region. He said that the Board will be briefed about the technical panel's work next month.

Mr. Lovain then invited board members to discuss Metro's recent proposal to cut back operational hours for Metrorail and possibly end late-night service. Earlier this year, Metro temporarily curtailed late-night rail service as part of the aggressive, year-long SafeTrack maintenance program.

WMATA's alternate Board member Ms. Davis said that Metro is taking public comment on four scenarios that would permanently reduce service hours and create at least eight hours more time for track work. Some of these scenarios take time off on Monday through Thursday and others take time from off weekends, Friday through Sunday. She said that bus service could be used to fill in the mobility needs if rail closes earlier. She asked the board to remember that mobility is not just rail. It can be provided responsibly, effectively, affordably in other ways.

Ms. Hudgins said that the discussion really is very important for us to get some clarity in how we might want to respond to this proposal. She encouraged the public to participate in Metro's public forum to help bring clarity to the public impacts. She said that the preferred proposal addresses 1) how can Metro meet its safety commitments, 2) how do we fund the system, and 3) how Metro can maintain the safety and level of service in the future. She said it is important that the WMATA board give the general manager time to fix the system. She described ways that Virginia jurisdictions have attempted to bridge the impact of SafeTrack. She said that the Metro board has always identified safety as a major issue for WMATA, and recognizes that SafeTrack has been very arduous for the customer, and recognizes that without a safe rail system we will not be a good system no matter what we invest. Ms. Hudgins said that safety is a major issue but that there is also a need for an increase in funding.

Mr. Allen thanked the Chairman for having helped to facilitate this conversation here at the TPB. He said that this was an appropriate conversation for the TPB to have, because, as the Transportation Planning Board, you know, these decisions can't be made in isolation. He said that this Board may not be able to come to consensus on the specific option but that it is important to have the conversation. Mr. Allen said that hears from folks across D.C. with concerns around what the impact of ending late-night service will be on their small businesses, what the impact is going to be on the guests that come into D.C. and that are patronizing those places, and what Mr. Allen believes is most important, the workers who don't really have another option. He said that Uber and Lyft and other options aren't necessarily going to be just a cheap and easy option for those who really depend on Metrorail. Mr. Allen said that he does see that Metro bus can help alleviate some of those pressures and noted that we have to make sure that as jurisdictions we are engaged in speaking as those decisions move forward. He also said that he would like for the TPB to have a discussion about long term funding for Metro.

Mr. Lovain encouraged all of the Washington area jurisdictions to submit comments to Metro about how changes to Metrorail service will impact the people that live and work in their jurisdictions.

Mr. Elrich said that area counties are concerned with how proposed change will impact residents and employees. He questioned whether a larger labor force might help WMATA conduct track-work more quickly. He added that while fixing Metro costs money, cutting back service also decreases revenue. He suggested that a sales tax collected in station areas could help raise revenue for Metro. He said he was concerned about decreasing public confidence in Metro.

Mr. Mendelson said that the Council of the District of Columbia adopted a resolution requesting an alternative plan to the proposed Metro cutbacks. He said that improving Metrorail is a regional issue



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and highlighted that the proposed changes will have an economic impact on individuals and the region itself. He said that maintenance and safety are very important, but that there is no need to shut down the entire system only to work on segments. Referring to other rail systems in the country, he suggested that Metro focus on closing segments as a variation of SafeTrack. He said that the National Capital Region is world class, and that this should be reflected in the level of service provided by Metro.

Mr. Snyder referenced a letter by NVTC and said that although late night hours contribute to the region's economy, the most significant economic impact comes from the daytime commute. He said that when making decisions about reduced hours it is important to be balanced and recognized that costs need to be shared.

Mr. Shaw raised the issue of equity and expressed concerns that some proposed cuts could adversely affect communities of color, low-income communities, communities east of the river, and those in Prince George's County.

## **INFORMATION ITEMS**

### **7. OVERVIEW OF THE DRAFT 2016 CLRP AMENDMENT AND FY 2017-2022 TIP**

Ms. Erickson, introduced a series of briefings on the elements of the draft 2016 CLRP Amendment and FY 2017-2022 TIP. The board is scheduled to approve both documents at its November meeting. She explained that developing and approving the CLRP and TIP is the core of the TPB's fundamental metropolitan planning responsibilities under federal law.

Mr. Austin presented the first presentation, an overview of the nine major additions or changes to existing projects that are slated to be included in this year's amendment. The new projects include new express lanes on I-395 and a VRE commuter rail extension in Northern Virginia, and new bus-only lanes on 16th Street in the District of Columbia. The briefing also included details about the draft six-year Transportation Improvement Program (TIP), including amounts and sources of funding for projects programmed for planning, engineering, right of way acquisition, and/or construction through 2022.

Ms. Hamilton referred to a letter of commitment from the Virginia Department of Transportation in response to a resolution passed at the March TPB meeting asking for a commitment to fund transit and TDM projects in the I 395 corridor. She explained that the letter commits a \$15-million annual payment as part of the revenue-sharing for transit and other non-driving options in the corridor. She also noted that the amount will be increased annually to keep up with inflation.

Mr. Fisette thanked VDOT for the commitment. He said that VDOT met the intent and the letter of the earlier TPB resolution. He spoke about the earlier proposal for this corridor and the impacts of that projects compared to the current project and noted that he is glad that the impacts had been minimized. He also said that VDOT is still determining if this extension will be a public private partnership or if the Commonwealth itself could do it and retain the toll revenues. Mr. Fisette also said that this analysis and establishing this multi-modal pot of funding for the I 395 piece would be an opportunity to help inform what this multimodal pot should be by just looking at the existing extension and what the profit has been to date.

Ms. Hamilton explained that they would be doing their due diligence and by January they will have more information about the arrangement and if it will be a P3.

Ms. Smyth expressed some concerns about truck traffic on I-66 outside the Beltway. She said there were capacity questions if trucks are taking up space and if that would affect the rates. She also asked where the trucks would go as they travel through the corridor.

Ms. Hamilton responded that the agency is still analyzing those issues and that the plan may change.

Mr. Lovain asked Mr. Zimbabwe if he would like to respond to the public comments heard earlier in the

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meeting about the District's plan for bike lanes on 6th Street NW.

Mr. Zimbabwe said that DDOT is still studying many different options for the Bike lane project and that a decision had not been done. He explained that the agency had to pick one of the options for the air quality assessment and performance analysis and as such DDOT had chosen an option that potentially was most impactful from a regional traffic perspective, He said that when DDOT finalizes and selects an alternative they will request an update to the CLRP.

Mr. Mendelson asked if the 6<sup>th</sup> Street alternative is in the plan because it has the biggest possible impact on air quality.

Mr. Zimbabwe said that was correct.

## **8. BRIEFING ON THE DRAFT AIR QUALITY CONFORMITY ANALYSIS OF THE 2016 CLRP AMENDMENT**

Ms. Posey presented the results of the air quality conformity analysis of this year's amendment. The analysis is required each time the TPB amends or updates the CLRP. The analysis looks at future transportation-related emissions under the plan to ensure conformity with approved regional emissions limits. Staff explained that the analysis shows that emissions of VOCs and NO<sub>x</sub>, the two pollutants for which the TPB is required to perform the analysis, are forecast to remain below approved regional limits. She also explained that fine particulate matter (PM<sub>2.5</sub>) is no longer required as part of the analysis because the region recently met federal standards for the pollutant.

Mr. Mendelson asked about the budget for NO<sub>x</sub> and VOC and the finding that we are substantially under budget. He wanted to know if that was based on the current NO<sub>x</sub> and ozone requirements in our SIP.

Ms. Posey explained that the budget being used in the conformity analysis corresponds to the 1997 ozone standard and that there have been more recent and tougher standards set in 2008. She said that MWAQC is working on a maintenance plan for the 2008 standards and the emissions budgets in that plan will likely be lower than the budgets we currently have. A new 2015 standard will be coming out. Ms. Posey also noted that an even newer standard was published in 2015 and it will be a few more years before we will know about emissions budgets for that.

## **9. BRIEFING ON THE PERFORMANCE ANALYSIS OF THE DRAFT 2016 CLRP AMENDMENT**

Mr. Swanson briefed the board on the results of a performance analysis of the 2016 CLRP Amendment. The analysis looks at how travel demand and travel conditions in the region are expected to change over the duration of the plan given anticipated population and job growth and planned transportation improvements. The analysis showed that more people will be ridesharing, taking transit, bicycling, or walking in 2040, but that driving will remain the dominant mode of travel and roadway congestion will worsen considerably. The performance analysis also looked at measures of job accessibility, transit accessibility and connectivity, geographic differences in mode choice, and motor vehicle emissions of both regulated pollutants and greenhouse gases. It also evaluated how well the CLRP supports or advances key regional priorities spelled out in the Regional Transportation Priorities Plan.

Mr. Schwartz noted that despite all the new projects in the future congestion at the peak hour would increase by 66%.

Mr. Lovain noted that the only way to address that was to stop economic growth.

Mr. Elrich noted that people will be most concerned about hours of delay and that his constituents would be concerned about increased congestion. He also asked about why a 45-minute time frame is used.

Mr. Srikanth answered that the 45-minute access time is something that is a generally accepted standard metric that it is reflective of the average travel time on transit including transfer and access

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time.

Mr. Lovain reminded him that if the projects in the CLRP were not constructed that congestion would be much worse.

**10. BRIEFING ON FEDERAL PLANNING REGULATIONS - TRANSIT ASSET MANAGEMENT**

Due to time constraints, a decision was made to move this item to the November meeting.

**11. UPDATE ON THE REGIONAL "STREET SMART" PEDESTRIAN AND BICYCLE SAFETY EDUCATION CAMPAIGN**

Mr. Farrell said that the fall Street Smart campaign would kick off with an event on Friday, November 4 at 10:30 a.m. at 1310 Southern Avenue in Southeast D.C. He said that thanks to the funding agencies, the campaign will be carried out in a way that is comparable to previous years.

**OTHER ITEMS**

**12. ADJOURN**

No additional business was brought before the board. The meeting was adjourned at 2:06 p.m.

**Materials for Item 3  
Technical Committee Highlights  
will be posted early next week**



## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Kanti Srikanth, TPB Staff Director  
**SUBJECT:** Steering Committee Actions and Report of the Director  
**DATE:** November 10, 2016

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The attached materials include:

- Letters Sent/Received
- Announcements and Updates





**MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Kanti Srikanth, TPB Staff Director  
**SUBJECT:** Letters Sent/Received  
**DATE:** November 10, 2016

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The attached letters were sent/received since the last TPB meeting.







National Capital Region  
Transportation Planning Board

October 24, 2016

The Honorable Gregory G. Nadeau  
Administrator  
Federal Highway Administration (FHWA)  
U.S. Department of Transportation (USDOT)  
1200 New Jersey Avenue SE  
Washington, DC 20590

Carolyn Flowers  
Acting Administrator  
Federal Transit Administration (FTA)  
U.S. Department of Transportation (USDOT)  
1200 New Jersey Avenue SE  
Washington, DC 20590

**Re: Follow-up Comments as Requested on Proposed Metropolitan Planning Organization  
Coordination and Planning Area Reform Rule [Docket No. FHWA-2016-0016]**

Dear Administrator Nadeau and Acting Administrator Flowers:

Thank you for reopening the comment period on the Notice of Proposed Rulemaking (NPRM) on "Metropolitan Planning Organization Coordination and Planning Area Reform." As the TPB conveyed in its earlier comments (dated 8/26/16) on this proposed change, the negative unintended consequences of the new requirements would significantly outweigh their real or perceived benefits. At that time, the TPB respectfully requested that USDOT withdraw the NRPM and work with individual MPOs and States to remedy specific instances in which a lack of coordination might be hindering the metropolitan transportation planning process. The TPB appreciates this opportunity to further quantify and assess the negative consequences of these proposed changes.

The follow-up comments that TPB staff is providing today provide additional information on the following three points as jointly requested by FHWA and FTA on September 23, 2016:

- Potential impacts of the proposed requirements on unified planning products where multiple metropolitan planning organizations (MPOs) serve the same urbanized area.
- Suggested criteria for applying exceptions to the proposed requirements.
- Quantification of the expected costs of implementing the proposed rule.

The comments provided in this letter reflect the TPB's unique perspective as an MPO made up of state and local transportation officials and elected representatives from three state-level jurisdictions, 22 city and county governments, and a handful of regional agencies. The TPB spends roughly one-third of its annual \$15 million MPO budget on coordinating the input, review, and approval of its members in developing the three federally required planning documents: the Financially Constrained Long-Range Plan (CLRP) which is the TPB's Metropolitan Transportation Plan, the Transportation Improvement Program (TIP), and the air quality conformity determination. It also coordinates with several nearby MPOs in accordance with formal coordination agreements and

arrangements established to ensure that the metropolitan transportation planning process meets federal requirements for being continuous, cooperative, and comprehensive.

For the purposes of the TPB's assessment of the impacts and costs of USDOT's proposed rulemaking, the following assumptions were made about how the rules would most likely be carried out in the National Capital Region:

- ***Assumption #1:** The nine existing MPOs that currently serve what would become a new Washington-Baltimore-Philadelphia "Super-MPA" would remain intact.*

The new federal rules could require the creation of a new metropolitan planning area (MPA) spanning at least six state-level jurisdictions from Virginia to New Jersey (see Attachment 1). Depending on one's interpretation of the new rules, the new "Super-MPA" could stretch north all the way to Massachusetts. The mobility needs, local transportation and land use planning policies and priorities, and availability and appropriateness of different travel modes would vary immensely across a region of this size. Given this variation, the TPB staff is confident that the Governors and MPOs would agree to keep the multiple MPOs that currently exist intact. Agreements already exist among state DOTs in this region to address overlapping urbanized areas, and TPB staff would expect that to continue.

- ***Assumption #2:** The nine MPOs would have to develop a process for a single, unified Financially Constrained Long-Range Transportation Plan (CLRPT), Transportation Improvement Program (TIP), and air quality conformity determination.*

The proposed rule requires a unified set of planning products from multiple MPOs in a super-MPA. This coordination and consultation would have to occur among these MPOs and its localities to develop a process for a single set of planning documents. The nine MPOs within the "super-MPA" would then need to jointly develop a single Financially Constrained Long-Range Plan (CLRPT) and Transportation Improvement Program (TIP) for the MPA, jointly establish a set of performance targets for the MPA through the Performance-Based Planning and Programming (PBPP) requirements, and jointly agree on a process for making a single air quality conformity determination on the joint CLRPT and TIP.

- ***Assumption #3:** The TPB, in the spirit of the new rule, would endeavor to maintain a similar level of coordination with the state and local members and agencies of the new "Super-MPA" as it does today.*

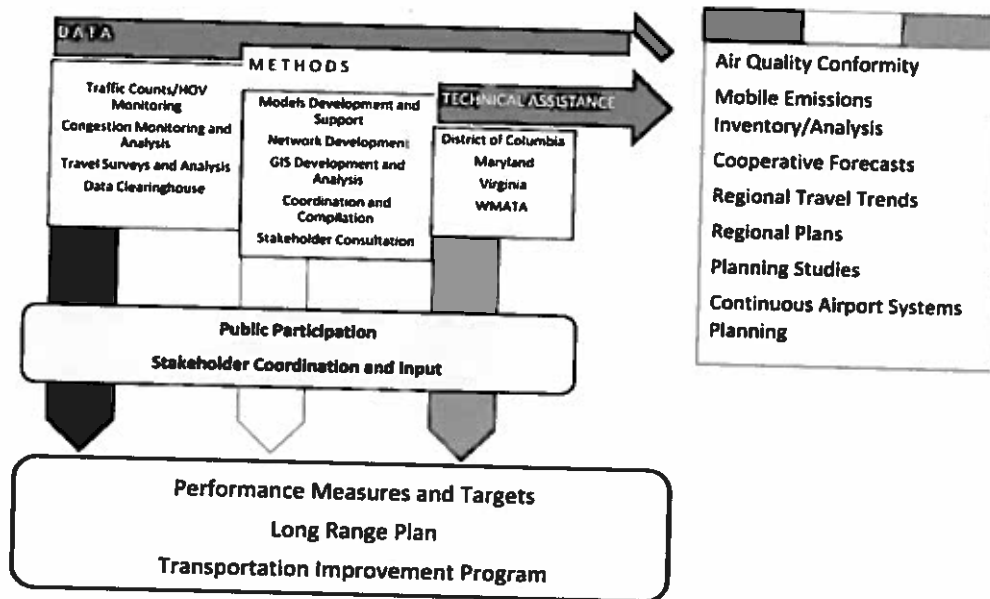
As a multi-state MPO since 1966, the TPB has an established coordination process with the District of Columbia, Maryland, and Virginia that is both extensive and comprehensive. In addition to the three state-level jurisdictions, this process also includes 22 local jurisdictions and numerous other state and regional agencies. The TPB's existing level of coordination required the development of a thorough understanding of the planning and programming authorities, and the TPB established processes within each member jurisdiction, the state agencies, and the MPO to carry out the MPO activities. Relationship building with dozens/hundreds of individual staff at the state and local level has occurred over time, which includes the establishment and maintenance of comfortable working relationships and the development of mutual respect and trust. These relationships require daily and weekly efforts to organize and attend regular meetings, and to devote extra time to the "back-and-forth" it takes to address any given concern or issue, for each member. Good coordination requires extensive staff time to prepare materials for meetings, and to conduct phone calls

and webinars. While this investment of relationship-building has been effective, including enabling the TPB to develop its key policy frameworks (the TPB Vision and the Regional Transportation Priorities Plan) and to regularly develop a regional CLRP and TIP, it requires a significant commitment of human and fiscal resources from all parties involved. Under the new proposed rule, the TPB would expect to maintain a similar level of coordination with the state and local members and agencies of the new "Super-MPA."

- **Assumption #4:** Every element of the Unified Planning Work Program (UPWP) would support the development of the three unified planning products for the "Super-MPA."

Every element of the TPB's existing Unified Planning Work Program supports the development of the CLRP, TIP, air quality conformity determination, and performance-based planning and programming activities for the National Capital Region. This includes data collection, methods development, public participation, stakeholder involvement, management of 15 standing committees, and development of six functional plans (see Figure 1). Under the new rules, every element of the UPWP would support the development of a unified Metropolitan Transportation Plan, TIP, and air quality determination for the "Super-MPA."

**Figure 1**  
**Overview of Planning Products and Supporting Processes in the TPB's Unified Planning Work Program (UPWP)**



- **Assumption #5:** Implementation of the new rules would require one-time start-up costs as well as ongoing annual costs.

The cost of the new activities and development of the new processes necessary to meet the requirements would be significant. Once the processes and agreements to proceed were in place, the costs would then decrease and become more consistent on an annual basis.

## POTENTIAL IMPACTS OF THE PROPOSED REQUIREMENTS

The potential impacts of the new requirements under this proposed rule focus primarily on the difficult task of convening and coordinating the input of large, diverse groups of people, including the public, to develop projects, programs, and priorities in a way that conforms with applicable laws and enables progress to achieving needed improvements. The metropolitan planning products required under federal law contain a seemingly infinite number of moving parts, all intricately timed and woven together by professional transportation staff who then have the job of educating the elected officials who formally act to approve the products. Consensus-building is a delicately balanced dance, and adding new performers to the act can add an exponential degree of complexity to an already complicated process. This added complexity has the immediate and direct consequence of slowing the delivery or compromising the quality of the planning products themselves. It is wholly unclear to the TPB what if any improvements such changes to the process would actually yield.

Below are the potential impacts of the proposed requirements as they relate to the development of specific planning products:

- The CLRP and TIP would have to be “unified” with at least eight other MPOs and up to 400 localities all with different product timeframes, planning horizons, travel patterns, political boundaries, policy guidance and different State and local budget cycles, with little value added to the process.
- At least seven Governors and the Mayor of DC would have to sign agreement(s) for unifying the planning products as well as coordinating data collection methods and planning assumptions. Agreements, especially complex agreements, can take years to develop and approve.
- Development of an agreement or agreements for unifying the inputs and data assumptions necessary to conduct a minimum of eight different conformity determinations would be extremely challenging and impractical.
- A “Super-MPA” would create areas with different attainment statuses for different pollutants, and different timeframes for conformity.
- Developing a common investment strategy for the current TPB area as required under performance-based planning and programming is challenging enough as it is; expanding this to eight other MPOs and possibly 400 localities would significantly delay implementation of this USDOT priority.

Below are additional potential impacts not directly related to the development of specific planning products:

- Implementation of the rule would overwhelm staff at State DOTs, FHWA, and FTA offices, MPOs, State air agencies, local jurisdictions, and elected officials, with little value added to the metropolitan planning process.
- Due to the length of time that coordination on a large scale would add to the process, slow MPO approvals could delay the implementation of key transportation investments and improvements critical to each region’s economy.

- The extra work created through this process would distract MPOs and State DOTs from focusing on achieving the goals set forth in the FAST Act, including performance-based planning and programming, and other USDOT priorities such as Ladders of Opportunity.
- This rule would create an unpredictable planning boundary that could change significantly every ten years, potentially undermining the 20-year long-range transportation planning process.

Table 1 below provides a description of each of the planning products or process that the proposed rule would require a “Super-MPA” to unify. A description of the complexity involved in each product/process and the challenges to creating unified products is also provided. Table 1 further demonstrates the difficulty in unifying products given that these products are dependent upon so many other elements in the TPB’s Unified Planning Work Program (UPWP).

**Table 1**  
**Description of Planning Products and Challenges to Unifying for a “Super-MPA”**

	Financially Constrained Long-Range Transportation Plan (CLRP)	Transportation Improvement Program (TIP)	Conformity Determination	Performance-Based Planning and Programming (PBPP)
<b>Description</b>	The TPB’s Plan includes over 500 projects for highway, transit and bike/pedestrian improvements totaling more than \$240 billion (including operations and maintenance funding).	The TPB’s TIP identifies a total of \$11 billion in funding commitments from 75 different sources for more than 300 projects. Twelve state and local Federal-aid recipients depend upon the TIP. The TPB does not receive federal funding to improve infrastructure (few exceptions).	An analysis of mobile source emissions for the Plan and TIP for each criteria pollutant the region is in nonattainment for based on the federal standards to ensure pollutants remain below approved regional limits.	Development of performance measurements and targets with three State DOTs and multiple transit agencies for areas such as safety, bridges, congestion, and transit assets. The PBPP will report and integrate into the TIP and CLRP.
<b>Timeframe</b>	The TPB’s Plan covers 2016 to 2040	6-year period; 2017 to 2022	2017, 2025, 2030, and 2040	2018, with 1-year, 2-year, and 4-years goals.
<b>Update or Amendment Cycle</b>	Updated every 4 years and usually amended annually	Updated every 2 years; amended or modified 30 to 80 times a year	Analysis is conducted annually (every time the CLRP is amended)	Annual and biennial updates for measurement and target-setting
<b>Coordination Occurring in National Capital Region</b>	The TPB engages with multiple levels of decision-makers in three state-level jurisdictions, with the regional transit agency (WMATA), and 22 local governments to identify CLRP and TIP		The TPB coordinates with a regional air quality committee that includes three state air agencies and three state DOTs on	Agreement on PBPP responsibilities and target-setting process with three States.

	<p>projects (the TPB does not typically receive direct funding for infrastructure improvements).</p> <p>Building consensus around TPB policy principles and transportation priorities for the CLRP and TIP took more than three years.</p> <p>Ongoing coordination must occur because the twelve funding agencies operate under different budget cycles which triggers ongoing amendments or updates.</p>	<p>federally mandated plans and the analysis.</p> <p>An established interagency consultation process is used to agree on the inputs, assumptions, analysis tools.</p>	
<p><b>Impacts and Challenges for Unifying Product within a Super-MPA</b></p>	<p>The CLRP and TIP would have to be “unified” with at least eight other MPOs and up to 400 localities all with different product timeframes, planning horizons, travel patterns, political boundaries, policy guidance and different State and local budget cycles, with little value added to the process.</p> <p>At least seven Governors and the D.C. Mayor would have to sign agreement(s) for unifying the planning products as well as coordinating data collection methods and planning assumptions, agreements which would take years to develop.</p>	<p>A “Super-MPA” would create areas with different attainment statuses for different pollutants, and different timeframes for conformity.</p> <p>Development of an agreement for unifying the inputs and data assumptions necessary to conduct a minimum of eight different conformity determinations would be extremely challenging and impractical.</p>	<p>Developing a common investment strategy for the current TPB area as required is challenging enough as it is; expanding this to eight other MPOs and possibly 400 localities would significantly delay implementation of this USDOT priority.</p>

*(Comments continue on following page)*

## **EXCEPTIONS THAT SHOULD BE INCLUDED IN A FINAL RULE**

The TPB maintains its earlier request that the proposed rule be withdrawn. However, should USDOT move towards implementation, the TPB recommends the following criteria to apply for exceptions to the rule. The criteria could apply to both the proposed requirement for a single MPO and a single MPA, as well as for the unified planning product requirements.

An MPO or MPA would be exempt from the proposed rule if any of the following criteria are met:

- The population of an Urbanized Area is greater than 300,000 based on current data or 20-year forecasts;
- The population contained in an Urbanized Area that overlaps into another MPA is less than 10 percent of the total population in an MPO's MPA; and/or
- Coordinated planning arrangements, which could be in the form of agreements or letters, exist and define roles and responsibilities for MPOs serving an Urbanized Area.

In regards to the process for exceptions, the TPB recommends that the relevant Governor(s) and MPO(s) would submit letters to FHWA district and FTA region offices describing how the MPO or MPA meets one or more the criteria for exceptions and that these FHWA and FTA offices acknowledge the exception.

## **EXPECTED COSTS OF IMPLEMENTING THE PROPOSED RULE**

The TPB's Unified Planning Work Program (UPWP) is developed and approved annually by FHWA and FTA. The FY 2017 UPWP budget is \$15.6 million and of that, approximately \$5 million (or 30 percent of the annual budget) is estimated to pay for coordination activities and to develop and maintain current multi-state unified planning products.

The TPB estimates that the start-up costs to meet the new requirements could range from \$3.5 to \$5 million per year, in addition to the normal annual MPO business costs. Depending on how long it takes to establish the new processes—and the TPB's experience is that it can take up to three years to accomplish large consensus-based efforts—the start-up cost could be \$10- to \$15 million. Once established, the TPB estimates that maintaining and carrying out the new processes could require a 10- to 15-percent increase in costs, or \$1.5 to \$2 million annually.

For TPB members, stakeholder participation is not reimbursed using Metropolitan Planning funds. Therefore, these costs do not reflect stakeholder time spent in coordination efforts. This is a hidden, additional burden that all TPB members would have to shoulder when participating in the metropolitan planning process of a larger and more complex MPA. This would effectively reduce their ability to be fully involved in the metropolitan planning process.

Mr. Nadeau and Ms. Flowers  
October 24, 2016

## SUMMARY

In summary, the TPB has been a leader in coordination for over 50 years across political boundaries in a large metropolitan area. However, the proposed rule would create a super-metropolitan planning area (MPA) with planning products that would have to be coordinated from southern Virginia to New Jersey or even Massachusetts. The impacts of implementing this rule would be far-reaching, its new requirements would add very little if any value to the metropolitan planning process, and the price-tag would be significant. The new rule could even unintentionally hinder the ability of the affected MPOs to effectively and efficiently conduct metropolitan planning and facilitate project delivery by unnecessarily burdening MPOs with rules for unified planning products that defy logic, overwhelm staff at State DOTs, State air agencies, local jurisdictions, and elected officials, and create an unpredictable planning boundary that could change every ten years—all of which could severely undermine the long-range planning process.

If you have any questions or would like to discuss this matter further, please contact me at [lerickson@mwkog.org](mailto:lerickson@mwkog.org) or (202) 962-3319. Please also feel free to reach out to TPB Staff Director Kanti Srikanth at [ksrikanth@mwkog.org](mailto:ksrikanth@mwkog.org) or (202) 962-3257.

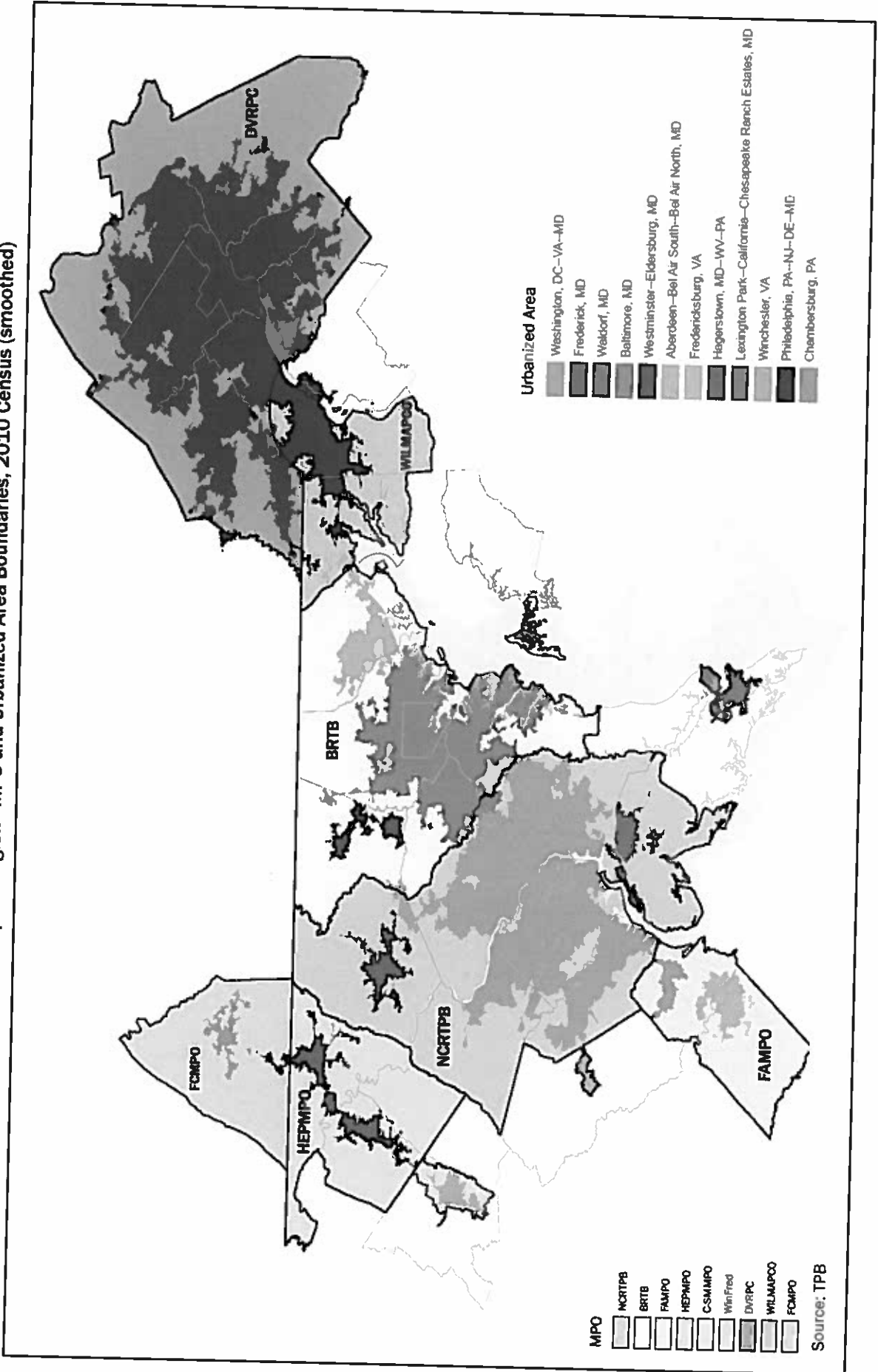
Sincerely,



Lyn Erickson, AICP  
TPB Plan Development and Coordination Director



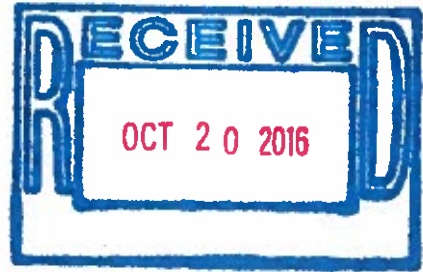
**ATTACHMENT 1. National Capital Region - MPO and Urbanized Area Boundaries, 2010 Census (smoothed)**







October 13, 2016



Mr. Timothy Lovain  
Chair  
National Capital Region Transportation Planning Board  
777 North Capitol Street NE, Suite 300  
Washington, DC 20002

Dear Chairperson Lovain:

Thank you for your September 30, 2016 letter requesting funding support for the Transportation Planning Board's (TPB) FY 2017 Street Smart Pedestrian and Bicycle Safety Campaign.

I am pleased to inform you that Metro will again provide \$150,000 funding for the 2017 campaign, and this letter reflects that commitment. At some point in every Metro trip, each of our customers is a pedestrian. With this in mind, Metro views the Street Smart campaign as integral to its pedestrian and bicyclist safety program. We look forward to participating fully in this effort with the TPB and our regional partners.

As you directed, we are notifying Mr. Kanti Srikanth, Director of Transportation Planning, of our commitment by sending him a copy of this letter.

Again, Metro is pleased to be a partner in your Street Smart program, and we wish you continued success.

Sincerely,

Paul Wiedefeld  
General Manager and  
Chief Executive Officer

cc: Kanti Srikanth, Director of Transportation

Washington  
Metropolitan Area  
Transit Authority

600 Fifth Street, NW  
Washington, DC 20001  
202/962-1234

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Maryland and Virginia  
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## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Kanti Srikanth, TPB Staff Director  
**SUBJECT:** Announcements and Updates  
**DATE:** November 10, 2016

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The attached documents provide updates on activities that are not included as separate items on the TPB agenda.





## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Kanti Srikanth, TPB Staff Director  
**SUBJECT:** Summary of the November 2, 2016 “Championing Traffic Incident Management in the National Capital Region” TPB Conference  
**DATE:** November 9, 2016

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## **OVERVIEW**

On November 2, 2016, the Transportation Planning Board hosted a special conference entitled “Championing Traffic Incident Management in the National Capital Region”. Looking at traffic incident management addressed one of three priorities for the Board that Chairman Lovain identified for the year. Approximately 50 persons participated or attended, either in person or via a webinar option. Attendees represented a variety of agencies and disciplines, including transportation operations and planning, public safety planning, and police; representatives included state DOTs, National Park Service, local jurisdictions, state and local police. A variety of informative conference materials are available at [www.mwcog.org/TIM2016](http://www.mwcog.org/TIM2016).

The conference followed up on a Regional Traffic Incident Management conference held back on April 27th, sponsored by the Metropolitan Area Transportation Operations Coordination (MATOC) Program. Whereas the MATOC conference was a gathering of practitioners, the TPB conference focused on how the TPB and other policy-level officials can enable those practitioners to do the best job they can.

## **CONFERENCE SESSIONS**

The first of three conference sessions looked at Traffic Incident Management in the Washington Metropolitan Area, featuring DDOT, MDOT-SHA, VDOT, and the MATOC Program. Speakers noted that the major transportation agencies of the National Capital Region have some of the nation’s best Traffic Incident Management programs, though enhancements continue to be pursued, especially in data, processes, training, and technology.

A second session provided interesting examples of Traffic Incident Management in other states/metropolitan areas, including Las Vegas/Southern Nevada (how a data-driven approach achieved a measurable reduction in secondary crashes); Philadelphia (where the regional agency is funded to be the Traffic Incident Management coordinating and training entity for the region), and Seattle (how lessons from one particularly bad incident were applied to achieve significant delay reductions for subsequent incidents).

The conference's third session convened a panel of the region's transportation agencies to examine opportunities for enhancements of traffic incident management in the National Capital Region. This discussion highlighted the challenges and opportunities our agencies face.

## **OUTCOMES AND NEXT STEPS**

Chairman Lovain concluded the conference by identifying the following areas of opportunity for the region to explore to enhance its traffic incident management practices. The Chairman noted that as the regional transportation planning Board the TPB can serve as an effective forum to work with its member jurisdictions to explore what the region can do to enhance its traffic incident management system:

- Ways to facilitate responders' quick access to the traffic incident locations (many times responders are stuck in traffic on the way to incidents)
- Regionally coordinated opportunities for Traffic Incident Management training
- Self-assessment of the "Traffic Incident Management" system from a regional perspective (federal tools available)
- Expanding the number of agencies using data tools such as the Regional Integrated Transportation Information System (RITIS)
- Supporting the Maryland General Assembly's consideration of expanding existing Potomac River Bridges Towing Compact to more bridges
- Expanding the number of local jurisdictions sharing traffic-related aspects of their emergency assistance request with state traffic incident management centers (helps shortens incident detection and response times).

In the coming months, follow-up on these recommendations will be pursued through TPB's subcommittees (such as the Systems Performance, Operations, and Technology Subcommittee); MATOC and its committees; and the Regional Emergency Transportation Committee (RESF-1) and other public safety committees.





## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Michael Farrell, Senior Transportation Planner  
**SUBJECT:** Update on the TPB's Street Smart Program  
**DATE:** November 9th, 2016

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## **BACKGROUND**

To help raise public awareness of pedestrian safety the National Capital Region Transportation Planning Board (TPB) runs a regional pedestrian and bicycle safety campaign known as Street Smart. Street Smart is an educational campaign, directed at motorists, pedestrians and bicyclists, with the goal of reducing pedestrian and bicyclist injuries and deaths. It consists of Fall and Spring waves of TV, transit, outdoor, internet advertising, with supporting law enforcement carried out by partner agencies. The Fall 2016 campaign wave launched on Friday, November 4th, and will run through November 27th.

## **FALL 2016 STREET SMART PRESS EVENT**

On Friday, November 4<sup>th</sup>, representatives from the District of Columbia, Maryland, and Virginia kicked off the Fall *Street Smart* safety awareness campaign at the United Medical Center in southeast Washington, D.C., near where two pedestrians were killed last year.

Transportation officials urged drivers, pedestrians, and bicyclists to exercise caution, watch out for each other, and follow traffic safety laws. "With daylight saving time ending this weekend, it will be dark during our evening rush hour, making visibility a critical safety issue. Like Mayor Muriel Bowser's Vision Zero initiative, the *Street Smart* campaign reminds everyone to watch out for each other on our region's streets," said Leif Dormsjo, Director of the District Department of Transportation.

Media was able to film law enforcement activities at the nearby intersection where the fatalities occurred. A street team was also on site with walking billboards displaying larger than life "Tired Faces" campaign messages.

In addition to Friday's press event there will be seven "Street Team" walking billboard outreach events across the region, and three "Enforcement Activation" media events, in which the press will be encouraged to observe the police carrying out pedestrian safety enforcement.

The campaign will continue to use the successful "Tired Faces" creative of recent years.

To learn more about Street Smart, visit [BeStreetSmart.net](http://BeStreetSmart.net) and follow on [twitter.com/COGStreetSmart](https://twitter.com/COGStreetSmart).





## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Kanti Srikanth, TPB Staff Director  
Andrew Meese, TPB Systems Performance Planning Director  
**SUBJECT:** Highlights from the 2016 Association of Metropolitan Planning Organizations (AMPO) Annual Meeting  
**DATE:** November 9, 2016

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The 2016 Association of Metropolitan Planning Organizations (AMPO) Annual Meeting took place October 25-28, 2016, in Fort Worth, Texas. A combination of plenary, breakout, committee, and training sessions were held. Over 200 people were in attendance, including representatives of over 80 of the nation's 400-plus MPOs, plus other federal, state, local, private sector, and academia participants. This memorandum provides highlights of the conference for the TPB's information, focusing on four general themes that ran through the conference: federal law and regulations; the practice of MPO planning; big data and planning tools; and the future of transportation.

### **FEDERAL LAW AND REGULATIONS**

Current and emerging federal law and regulations were a primary topic of discussion at the conference. The federal MAP-21 and FAST legislation generated a number of new requirements for MPOs, with federal rulemaking pursuant to these laws quite active in the last two years. Like the TPB, MPOs across the country are grappling with a myriad of new and upcoming requirements, especially regarding Performance-Based Planning and Programming (PBPP). TPB's activities regarding PBPP are relatively strong compared to other metropolitan areas, but much work remains to be done. State DOT/MPO coordination of PBPP target setting was a hot topic – TPB has already had extensive contacts with our region's state DOTs to get the ball rolling.

Another major topic of discussion was the Notice of Proposed Rulemaking on “MPO Coordination and Planning Area Reform”, which among other changes may engender mergers of existing adjacent MPOs into larger units. An emphasis of the AMPO discussions of widespread state and MPO opposition to the proposed rule has been documenting the potential costs associated with such mergers – a recent example in Connecticut cost an amount on par with a year's worth of the MPO's Unified Planning Work Program (UPWP) funding.

Finally, there was discussion on another federal initiative commonly referred to as “Megaregions”. Planning literature defines Megaregions as a group of geographic locations and/or areas that are combined because of similar characteristics and mutual interest. Megaregions have been described as offering flexible frameworks to harmonize transportation with quality of life, economic opportunity, and environmental sustainability. Since our roadway system crosses many jurisdictional boundaries, transportation is inherently Megaregional. It has been said that Megaregions allow us to think globally, coordinate regionally and act locally.

Discussions among federal and MPO representatives was centered around the recognition that things like air pollution, freight movements, and road safety don't stop at political boundaries but planning often does. Therefore, coordination at the Megaregional scale provides an approach to address new emerging challenges, and take advantages of the opportunities that arise around large metropolitan centers and their surrounding areas, connected by existing environmental, economic, cultural, and infrastructure relationships.

## **THE PRACTICE OF MPO PLANNING**

The conference provided multiple opportunities to share best and emerging practices of MPO Planning, on topics including public involvement, Environmental Justice and Title VI, freight, bicycle and pedestrian planning, MPO operations, health land use, creative placemaking, and corridor studies. Large MPOs like TPB have longstanding experience in these areas, efforts now expanding to the nation's smaller MPOs.

## **BIG DATA AND PLANNING TOOLS**

The national Strategic Highway Research Program #2 (SHRP2) has developed a number of planning tools that TPB staff can explore regarding project planning, economic impact analysis, and travel demand modeling. "Big Data" is still a hot catch-phrase, with the emergence of federal and private sector data sets that have the potential to make MPO planning more robust and responsive – if staffs have sufficient staff, training, and expertise in analyzing these new sources. A prime example has been TPB's use of vehicle probe data from the I-95 Corridor Coalition's Vehicle Probe Project (VPP) Suite. TPB staff has examined and continues to monitor emerging data sources, and is poised to take advantage of these sources.

## **THE FUTURE OF TRANSPORTATION**

There are uncertainties about the future of transportation. A prime factor is the emergence of connected and autonomous vehicles – what will they mean for tripmaking habits, for safety, for roadway capacity? What can cities and metropolitan areas do to install necessary "Smart City" infrastructure? The sharing economy (e.g. Uber) is another emerging trend lending uncertainty. Such uncertainties are typically examined via the use of scenario planning by MPOs to inform long term planning discussions.

The future was a key theme of the conference's keynote speaker, Jane Lappin, Director of Public Policy and Government Affairs at the Toyota Research Institute. She emphasized how swiftly changes are coming, and how companies are pouring resources into the race to be in the forefront of the new transportation system.

## **NEXT STEPS**

TPB staff will continue to be engaged in these coordination and collaborative work activities and involve the relevant TPB subcommittees, and communicate with AMPO and our peer MPOs on taking full advantage of new opportunities.



## **CITIZENS ADVISORY COMMITTEE 2017 Application**

Community leaders and interested citizens from across the Washington region are invited to apply for membership on the 2017 Citizens Advisory Committee (CAC) to the National Capital Region Transportation Planning Board (TPB).

### **WHAT IS THE CAC?**

The CAC is a group of 15 people who represent diverse viewpoints on regional transportation issues, including long-term planning concerns, and short-term policies and programs. The TPB itself is the body that coordinates transportation planning for the entire metropolitan Washington region. The TPB includes elected local officials, representatives from transportation agencies, and other key officials. Staff for the TPB is provided by the Metropolitan Washington Council of Governments (COG).

The mission of the TPB Citizens Advisory Committee is:

1. to ***promote public involvement*** in transportation planning for the region, and
2. to ***provide independent, region-oriented citizen advice*** to the TPB on transportation plans and issues.

The 15 members of the CAC are either elected or appointed. Every fall, six members are elected by the current CAC to serve in the coming year. The other nine members are appointed by the TPB each January. The membership is evenly divided between the District of Columbia, Suburban Maryland, and Northern Virginia. According to TPB procedures, the CAC membership should represent environmental, business, and civic interests in transportation, including appropriate representation from low-income, minority, and disabled groups and from the geographical area served by the TPB.

The CAC meets every month on the second Thursday evening, six days prior to the monthly TPB meeting (the TPB always meets on the third Wednesday of the month). The CAC meetings are from 6:00 P.M. to 8:00 P.M. at the Metropolitan Washington Council of Governments located at 777 North Capitol Street NE, Washington, DC 20002.

### **RECENT COMMITTEE ACTIVITIES**

The CAC acts in an advisory role to the TPB and offers comments to the board reflecting the committee's diverse viewpoints. Over the years, the CAC has focused on key regional transportation issues, such as the transportation funding shortfall, environmental concerns, and emergency preparedness issues. The committee has also identified key opportunities to enhance the TPB's ongoing public participation activities.

For more information on the CAC's activities, including committee reports and agendas, please visit [www.mwcog.org/tpbcac/](http://www.mwcog.org/tpbcac/).

## **APPLICANTS:**

- Should be able to attend monthly meetings at the Council of Governments. (The committee works best when all members are present, though there is a call-in option for occasions when a committee member cannot attend in person.)
- Should be willing to serve for a one-year term.
- Should complete the attached application form. Completed applications will be considered by the members of the CAC when they select six individuals to serve on next year's CAC and by the TPB chair and vice chairs when they nominate nine additional individuals to serve on the CAC.
- Must reside in one of the [TPB member jurisdictions](#).
- Should not be currently involved in any professional capacity with the TPB. This includes representing local government or a private firm on any COG/TPB committee or contract.

## **FOR MORE INFORMATION OR TO SUBMIT YOUR APPLICATION, PLEASE CONTACT:**

Bryan Hayes  
Metropolitan Washington Council of Governments  
777 North Capitol Street NE, Suite 300  
Washington, DC 20002  
Phone: (202) 962-3273  
Fax: (202) 962-3201  
[bhayes@mwkog.org](mailto:bhayes@mwkog.org)

## **DEADLINE FOR APPLICATIONS:**

December 9, 2016

**ITEM 8 – Information**  
November 16, 2016

Approval of Air Quality Conformity Analysis  
of the 2016 CLRP Amendment and FY2017-2022  
Transportation Improvement Program

**Staff**

**Recommendation:** Adopt Resolution R3-2017 finding that the 2016 CLRP conforms with the requirements of the Clean Air Act Amendments of 1990.

**Issues:** None

**Background:** At the October 19 meeting, the Board was briefed on the air quality conformity analysis of the 2016 CLRP Amendment and FY2017-2022 TIP.





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

**RESOLUTION FINDING THAT THE 2016 CONSTRAINED LONG RANGE PLAN AMENDMENT  
AND THE FY2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM CONFORM WITH THE  
REQUIREMENTS OF  
THE CLEAN AIR ACT AMENDMENTS OF 1990**

**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 U.S. Environmental Protection Agency (EPA), in conjunction with the U.S. Department of Transportation (DOT), under the Clean Air Act Amendments of 1990 (CAAA), issued on November 24, 1993 "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Funded or Approved Under Title 23 U.S.C. or the Federal Transit Act," and, over the years, subsequently amended these regulations and provided additional guidance, which taken together provide the specific criteria for the TPB to make a determination of conformity of its financially Constrained Long Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP) with the State Implementation Plans (SIPs) for air quality attainment within the Metropolitan Washington non-attainment area; and

**WHEREAS**, a scope of work was developed to address all procedures and requirements, including public and interagency consultation, and the scope was released for public comment on February 11, 2016, and approved by the TPB at its March 16, 2016 meeting; and

**WHEREAS**, highway and transit project inputs submitted for inclusion in the air quality conformity analysis of the 2016 CLRP Amendment and FY2017-2022 TIP were released for public comment on February 11, 2016, and approved by the TPB at its March 16, 2016 meeting; and

**WHEREAS**, on October 13, 2016, the draft results of the air quality conformity analysis of the 2016 CLRP Amendment and FY2017-2022 TIP were released for a 30-day public comment period with inter-agency consultation; and

**WHEREAS**, the analysis reported in *AIR QUALITY CONFORMITY ANALYSIS of the 2016 Constrained Long Range Plan Amendment and FY2017-2022 Transportation Improvement Program*, dated November 16, 2016, demonstrates adherence to all mobile source

emissions budgets for ground level ozone precursors Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>), and meets all regulatory, planning and interagency consultation requirements, and therefore provides the basis for a finding of conformity of the CLRP and the TIP with the requirements of the CAAA; and

**WHEREAS**, in the attached letter, the Metropolitan Washington Air Quality Committee (MWAQC) has provided favorable comments on the *AIR QUALITY CONFORMITY ANALYSIS of the 2016 Constrained Long Range Plan Amendment and FY2017-2022 Transportation Improvement Program* for the National Capital Region;

**NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD** determines that the 2016 Constrained Long Range Plan Amendment and the FY2017-2022 Transportation Improvement Program conform to all requirements of the Clean Air Act Amendments of 1990.

The Metropolitan Washington Air Quality Committee (MWAQC) is developing a comment letter, which will be added here after it is transmitted to the TPB.





## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Jane Posey, TPB Transportation Engineer  
**SUBJECT:** Air Quality Conformity Analysis Summary Report  
**DATE:** November 16, 2016

---

## **INTRODUCTION**

This memo documents summary results of the air quality conformity analysis of the 2016 Constrained Long Range Plan (CLRP) Amendment and FY2017-2022 Transportation Improvement Program (TIP) with respect to ozone season pollutants, specifically, Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx). TPB staff has found that the air quality conformity analysis of the 2016 CLRP Amendment and FY2017-2022 TIP demonstrates adherence to all mobile source emissions budgets for the pollutants analyzed, VOC and NOx. The results, showing that the CLRP and TIP meet all conformity requirements, have been reviewed by the Transportation Planning Board (TPB) Technical Committee and the Metropolitan Washington Air Quality Committee Technical Advisory Committee (MWAQC TAC). The findings were released for a 30-day public comment and interagency consultation on October 13, 2016 which ended on November 12, 2016.

## **BACKGROUND**

The TPB approved the Scope of Work and project submissions for the 2016 CLRP Amendment and FY2017-2022 TIP air quality conformity analysis on March 16.

Key technical planning assumptions and methods include:

- New Cooperative Land Activity Forecasts- Round 9.0
- New Project and Updates to Existing Project Submissions
- Updated HOV policy assumptions related to occupancy requirements
- EPA's MOVES 2014a Mobile Emissions Model
- 2014 Vehicle Registration Data
- Version 2.3.66 Travel Demand Model including a 3,722 Transportation Analysis Zones (TAZ) area system

### **Coordination with Calvert-Saint Mary's Metropolitan Planning Organization (C-SMMPO)**

Calvert County, Maryland is in the Washington D.C. region's ozone nonattainment area, and is also a member of the new southern Maryland MPO, C-SMMPO. Projects in Calvert County have always been included in the TPB's conformity analysis, but with the recent establishment of the new MPO, it was necessary to formalize coordination between the TPB and the C-SMMPO. On January 20, 2016 the TPB approved a resolution with the C-SMMPO and Calvert County where all parties agreed upon procedures for ensuring that transportation plans, programs, and projects in Calvert County are assessed for regional air quality conformity. The TPB/C-SMMPO agreement is included in Attachment A.

## CRITERIA POLLUTANTS

The Scope of Work identified conformity requirements associated with Ozone Season Pollutants (VOC and NO<sub>x</sub>) and Fine Particles (PM<sub>2.5</sub>) pollutants (direct fine particles and precursor NO<sub>x</sub>). The requirements included the development of mobile emissions inventories of the above four Ozone Season and Fine Particles Pollutants. However, on August 24, 2016, the Environmental Protection Agency (EPA) published a rule which effectively removes the requirement to include the Fine Particles Pollutants in the conformity analysis. A discussion of this rule and its application to the air quality conformity analyses conducted by TPB staff, as well as some background on the Ozone Season Pollutants, is provided below.

### Fine Particles Pollutants

The EPA has recently published a rule<sup>1</sup> related to air quality standards which will have a direct effect on how air quality conformity analyses are conducted in the Washington, D.C. region. The EPA revoked the 1997 Standard for Fine Particles Pollutants. The revocation, combined with the decreasing levels of fine particles that have enabled the region to be in compliance with more stringent 2012 standards, dictates that our region is no longer required to analyze Fine Particles Pollutants in the air quality conformity determinations of our transportation plans and TIPs. Since the region is no longer required to demonstrate transportation conformity for the Fine Particles Standard, staff did not include any charts or graphs associated with PM<sub>2.5</sub>-related pollutants in the air quality conformity report of the 2016 CLRP and FY2017-2022 TIP.

While reference to PM<sub>2.5</sub> levels will be removed from the conformity report, the region will continue to promote Transportation Emissions Reductions Measures and other federal, state, and local control programs that reduce fine particles emissions. The region will continue to monitor the levels of fine particles in the area, which are expected to continue to decline, especially with vehicle turnover introducing cleaner and more fuel-efficient vehicles into our fleet.

### Ozone Season Pollutants

On May 21, 2012 EPA designated the Metropolitan Washington, DC, (DC-MD-VA) region as 'marginal' nonattainment for the 2008 Ozone Standard. Under a 'marginal' designation, it is not necessary to develop updated mobile budgets; however, the region must still adhere to those currently approved by EPA under the old 1997 standard. The currently approved budgets for VOC and NO<sub>x</sub> were submitted to the EPA by the Metropolitan Washington Air Quality Committee (MWAQC) in 2007, as part of an 8-hour ozone SIP, responding to the 1997 Ozone Standard, under which the region was designated as 'moderate' nonattainment. On February 7, 2013 EPA found adequate the 2009 Attainment and 2010 Contingency budgets included in this SIP. The budgets are 66.5 tons/day of Volatile Organic Compounds (VOC) and 146.1 tons/day of Nitrogen Oxides (NO<sub>x</sub>) for the 2009 Attainment Plan and 144.3 tons/day of NO<sub>x</sub> for the 2010 Contingency Plan.

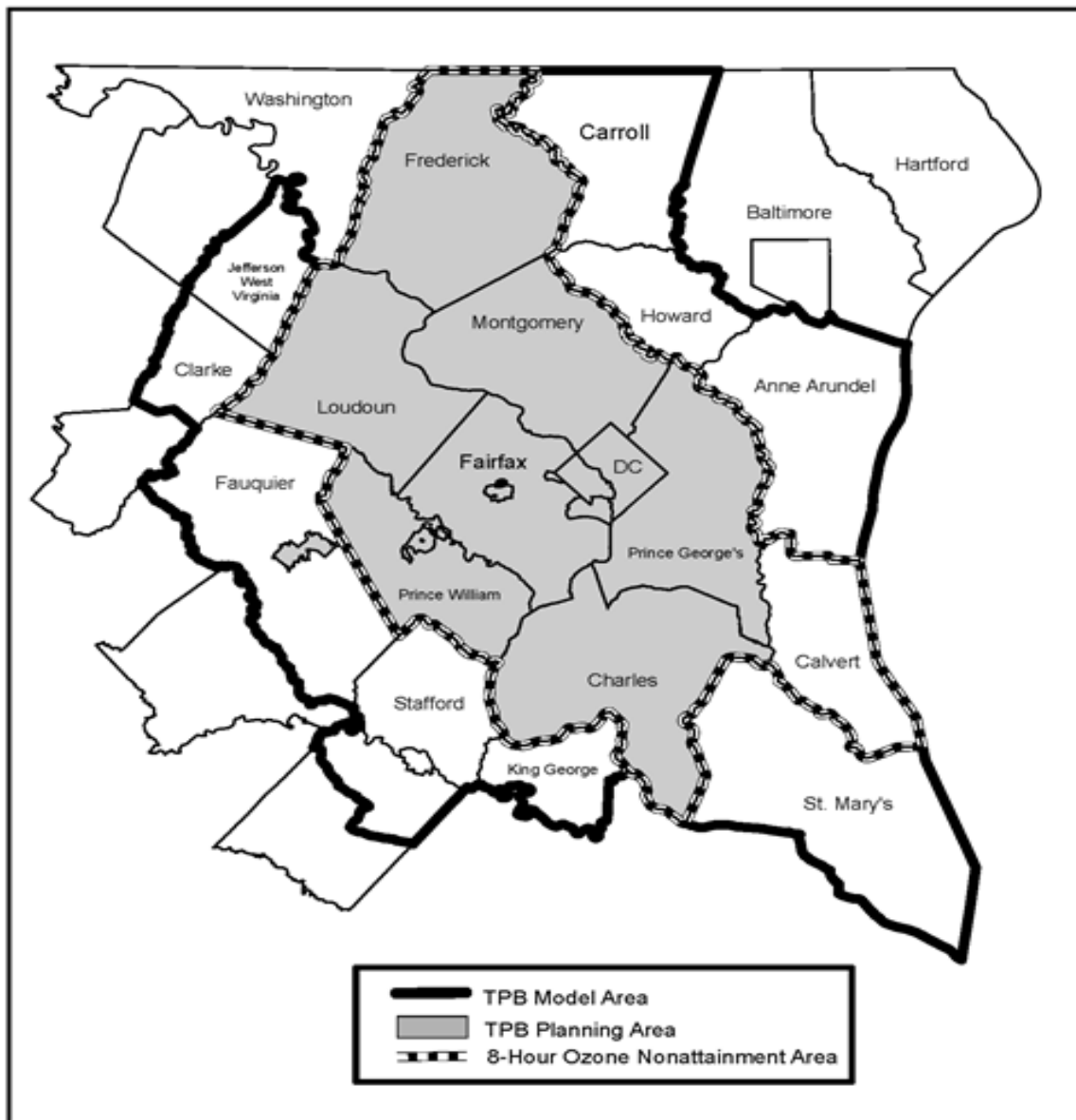
## WORK ACTIVITIES

Mobile emissions inventories were developed for ozone season VOC and NO<sub>x</sub> for five forecast years (2016, 2017, 2025, 2030 and 2040). These inventories address a primary conformity requirement to demonstrate that emissions associated with the plan and TIP do not exceed the EPA-approved mobile budgets. Exhibit 1 depicts the geographic areas for travel modeling and for emissions reporting.

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<sup>1</sup> Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements; Final Rule, Vol. 81, No. 44 Fed. Reg., August 24, 2016.

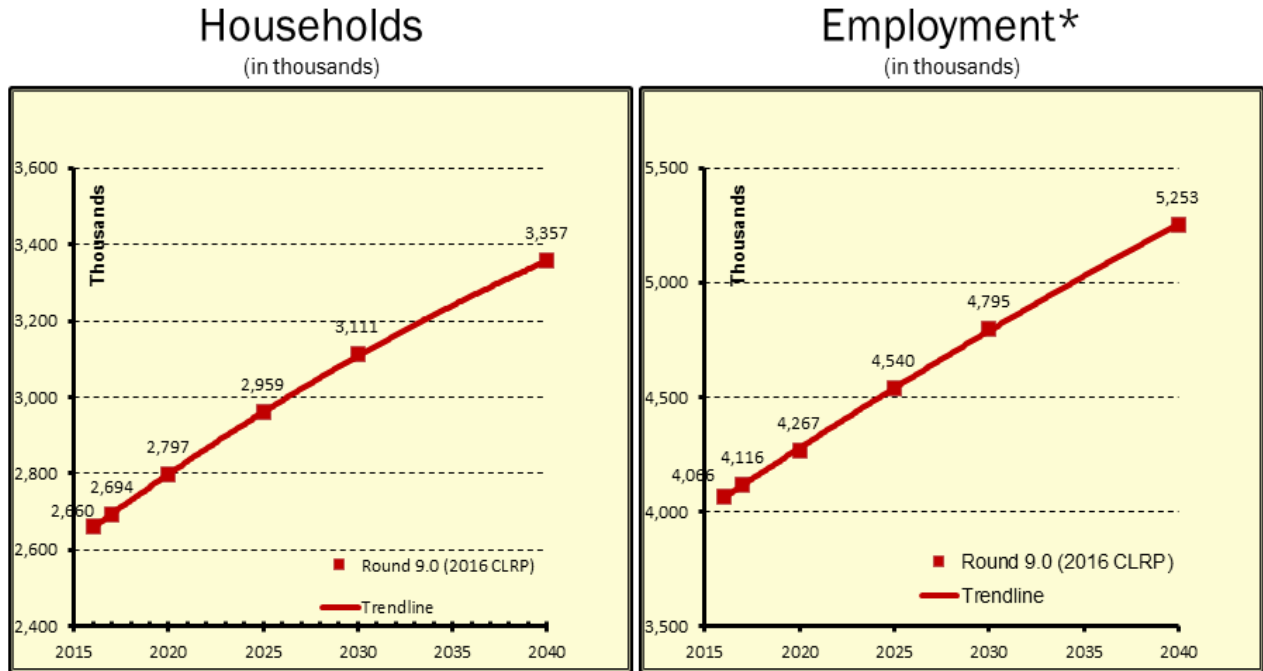
## EXHIBIT 1 Planning Areas



### Cooperative Forecasts

The COG Board approved the draft Round 9.0 Cooperative Forecasts for use in the air quality conformity analysis of the 2016 CLRP Amendment and FY2017-2022 TIP in March, 2016. The Round 9.0 data, summarized in Exhibit 2, reflect not only the forecast small area land use distributions throughout the Washington area, but also the latest planning assumptions for areas outside the Washington region. For example, the Baltimore land use input to Round 9.0 reflects the Baltimore Metropolitan Council's current 'Round 8A' adopted figures.

## EXHIBIT 2 Round 9.0 Cooperative Forecasts



NOTE: Values are for the modeled area.

\*Includes census adjustment

### CLRP Projects

Attachment B lists the major highway and transit project inputs for the conformity analysis. A complete list of highway and transit projects, as approved by the TPB on March 16, is shown in Appendix B of the full technical report.

### HOV Policy Assumptions

Attachment C is a letter from the Maryland Department of Transportation (MDOT) updating the policy assumption in the CLRP regarding high occupancy vehicle (HOV) facilities in Maryland. The previous policy indicated that all HOV/HOT facilities in the region will operate as HOV/HOT-3 in the year 2020 and beyond. MDOT recommended that I-270 and US 50, which currently operate as HOV-2 facilities, remain as HOV-2 in the CLRP for all analysis years. The Virginia Department of Transportation (VDOT) did not recommend any change to the policy for HOV/HOT facilities in the CLRP, so all HOV/HOT facilities in Virginia are assumed to operate as HOV/HOT-3 in the year 2020 and beyond, except I-66 inside the Beltway, which converts to HOT-3 when the I-66 outside the Beltway lanes open to traffic. There currently are no HOV/HOT facilities in the District in the CLRP.

### MOVES Model

In November 2015, EPA released MOVES2014a, which was an update to the MOVES2014 model. The MOVES2014a model includes minor updates to the default fuel tables and corrects an error in brake wear emissions. MOVES2014a does not significantly change the criteria pollutant emissions results of MOVES2014, and therefore, EPA does not consider it a new model for State Implementation Plan (SIP) and transportation conformity purposes.



### Vehicle Registration Data

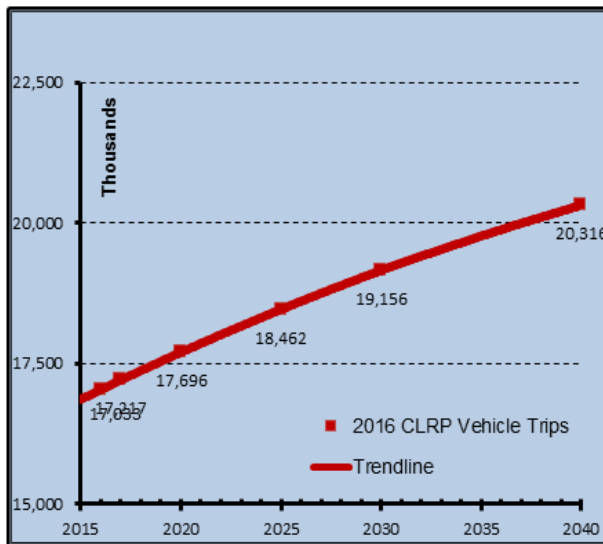
Every three years since 2005, the TPB has received updated regional vehicle fleet data for use in air quality conformity determinations and SIP updates. The current data are from 2014. States use Vehicle Identification Number (VIN) data from vehicle registrations to define the regional vehicle fleet. The latest data are used in the development of future year vehicle population profiles (i.e., vehicle age and vehicle type distribution) for all the analysis years in the air quality conformity analysis. The vehicle population of the 2014 VIN data was reviewed by the MWCOG/TPB technical oversight committees prior to becoming approved for transportation planning applications.

### Travel Modeling

Travel demand forecasts were developed for each of the analysis years using the Version 2.3.66 travel demand model. Exhibit 3 presents the resulting average weekday vehicle and transit trips through time for each conformity analysis year, for the full modeled area.

## EXHIBIT 3 Modeled Area Trips

Vehicle Trips  
(in thousands)



Transit Trips  
(in thousands)

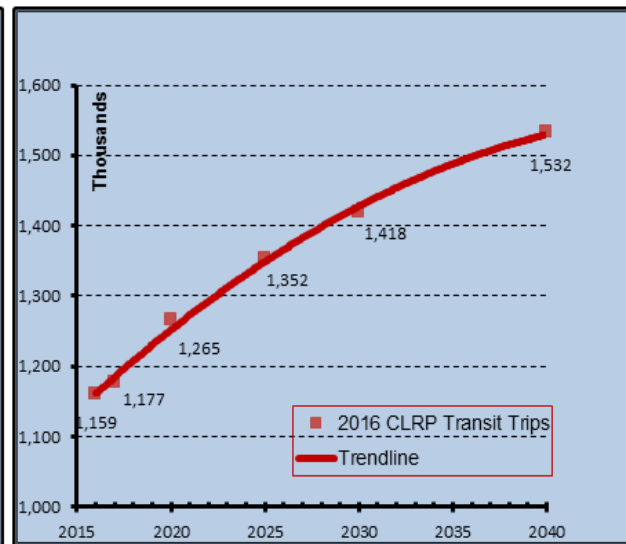
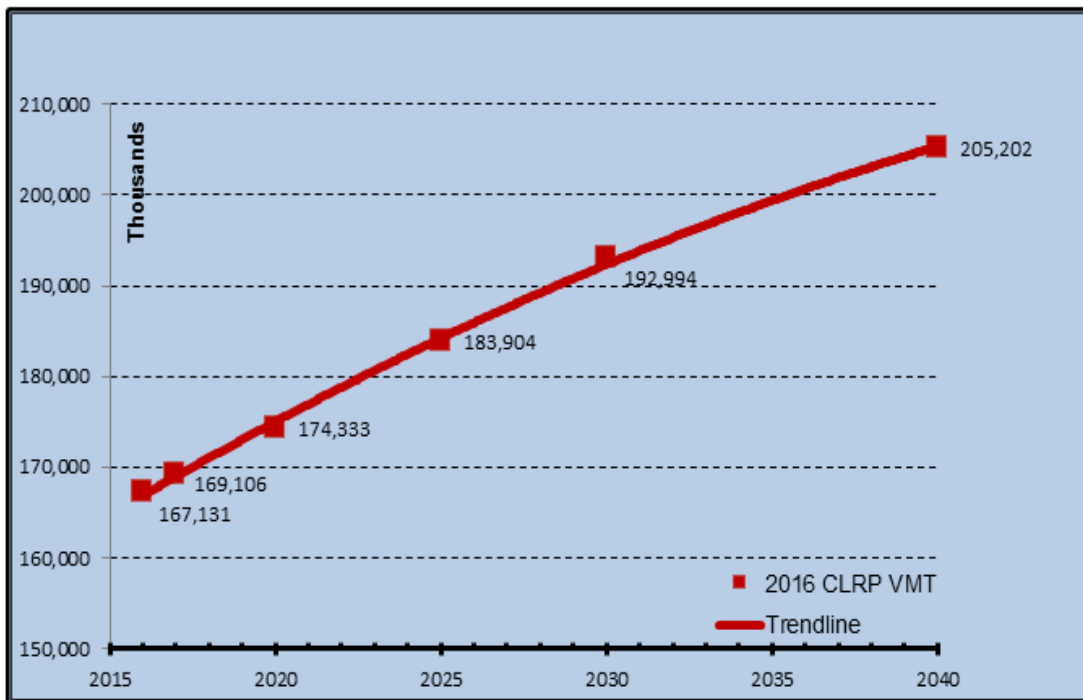


Exhibit 4 shows Vehicle Miles Traveled (VMT) results through time for each conformity analysis year, for the full modeled area.

**EXHIBIT 4**  
**Modeled Area Vehicle Miles Traveled**  
**(in thousands)**



#### **MOVES Inputs**

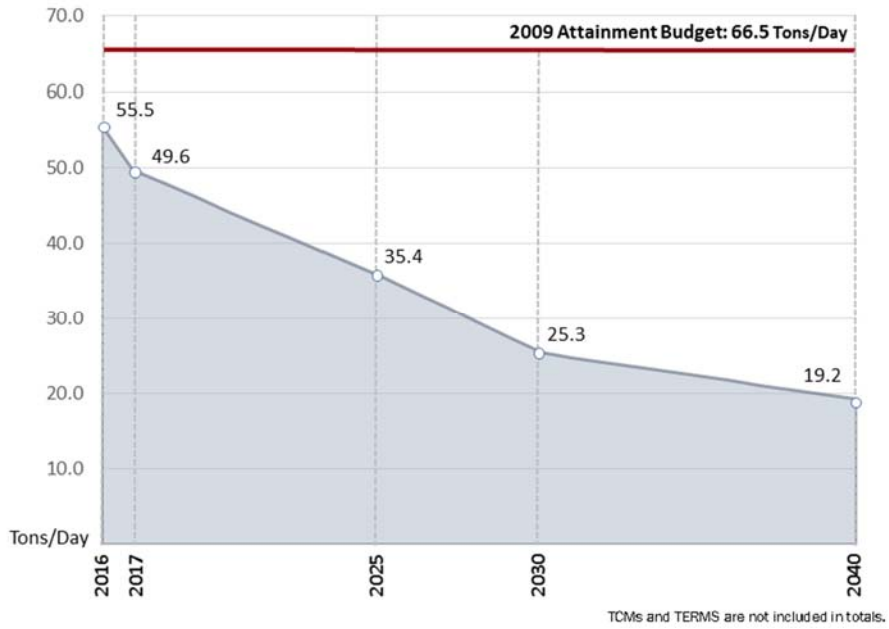
Inputs to the MOVES model include both transportation and environmental data. Transportation data include travel information from the travel demand model, such as VMT and speed distributions, as well as vehicle fleet data. Environmental data include fuel supply and formulation, meteorology data, and state Inspection and Maintenance (I/M) program information.

#### **Mobile Emissions Inventories**

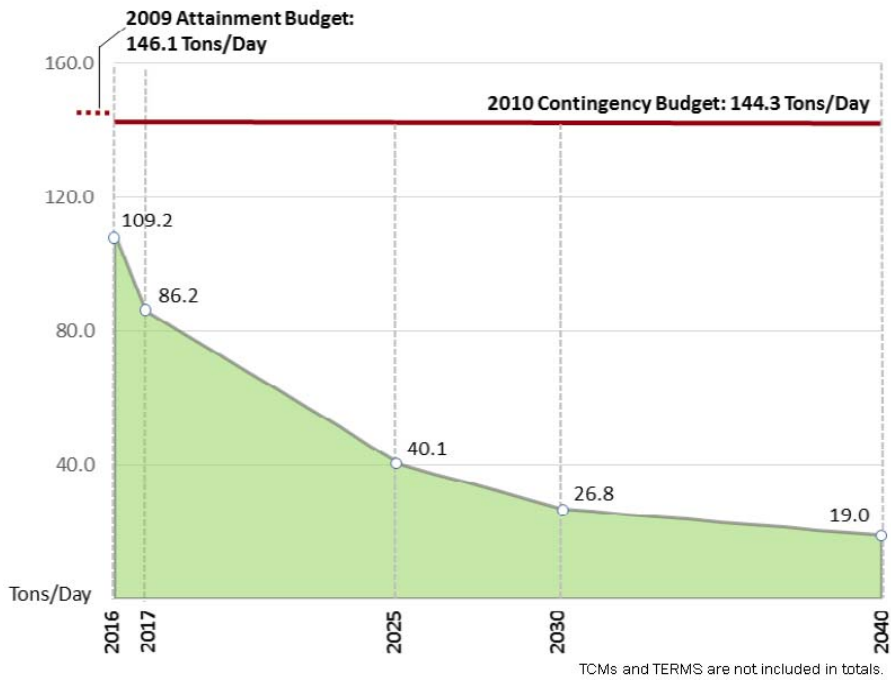
Ozone season emissions totals are illustrated in Exhibit 5. The emissions are shown in relation to the approved mobile budget for each pollutant. Ozone Season emissions reductions through time are attributed to cleaner vehicles and fuel standards, including those from Tier 2 and Tier 3 federal programs. The charts show that the mobile emissions are within the mobile budgets for ozone season VOC and NO<sub>x</sub> for all forecast years.

# EXHIBIT 5 Mobile Source Emissions

## OZONE SEASON VOC



## OZONE SEASON NOx



## TERMS

Transportation Emission Reduction Measures (TERMs) are special strategies or actions that the TPB and/or its member agencies can employ to further reduce forecasted emissions from mobile sources. All TERMS are intended to reduce motor vehicle emissions by reducing either the number of vehicle trips (VT), vehicle miles traveled (VMT), or both. These strategies may include ridesharing and telecommuting programs, improved transit and bicycling facilities, clean fuel vehicle programs or other possible actions. TERMS analyzed for the 2016 CLRP Amendment conformity analysis were grouped into four categories:

- TPB Commuter Connections Program
- Regional Incident Management Program
- Pedestrian Facilities Expansions & Enhancements
- Freeform Carpooling (Slug Lots)

Exhibit 6 lists the emission reduction potential of these TERMS, by pollutant, for each analysis year. The benefits of these projects are not included in the emissions totals in this report, but are available, if necessary, to ensure that regional emissions stay below the approved motor vehicle emissions budgets and also help offset future growth in mobile emissions.

### EXHIBIT 6 Transportation Emission Reduction Measures

ADDITIONAL EMISSIONS REDUCTIONS-ALL TERMS COMBINED				
Years/Pollutants	Ozone - VOC	Ozone - NOx	PM2.5 Direct	Precursor NOx
	(tons/day)	(tons/day)	(tons/year)	(tons/year)
2016	0.066	0.090	0.95	25.77
2017	0.074	0.083	1.04	23.91
2025	0.097	0.071	1.43	20.84
2030	0.087	0.054	1.63	16.60
2040	0.093	0.043	2.06	15.09

NOTE: Benefits from these TERMS are not included in the emissions totals in this conformity analysis.

## SUMMARY

The analytical results described in this air quality analysis provide a basis for a determination by the TPB of conformity of the 2016 CLRP Amendment and FY2017-2022 TIP.

# ATTACHMENT A



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

**RESOLUTION ON AGREEMENT BETWEEN THE NATIONAL CAPITAL REGION TRANSPORTATION  
PLANNING BOARD AND THE CALVERT-ST. MARY'S METROPOLITAN PLANNING  
ORGANIZATION AND CALVERT COUNTY, MARYLAND**

**WHEREAS**, the National Capital Region Transportation Planning Board (TPB) is the officially designated Metropolitan Planning Organization (MPO) for the Metropolitan Washington area; and

**WHEREAS**, the TPB's planning area is part of the Washington, DC-MD-VA 8-Hour Ozone Nonattainment area, as shown on the map in Attachment A, and as such, is subject to regional air quality conformity analysis of its Transportation Plans and Transportation Improvement Programs (TIPs); and

**WHEREAS**, the Washington, DC-MD-VA 8-Hour Ozone Nonattainment area also includes Calvert County, and transportation projects within Calvert County have been included in TPB's regional air quality conformity analysis as appropriate; and

**WHEREAS**, the Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO) is the newly officially designated MPO for Southern Maryland, whose planning area includes Calvert County, as shown on the map in Attachment B; and

**WHEREAS**, under federal surface transportation legislation (23 U.S.C. § 134 and 49 U.S.C. § 5303) related to MPO Consultation in Plan and TIP Coordination for Nonattainment areas, "If more than one metropolitan planning organization has authority within a metropolitan area or an area which is designated as a nonattainment area for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. § 7401 et seq.), each metropolitan planning organization shall consult with the other metropolitan planning organizations designated for such area and the State in the coordination of plans and TIPs" and

**WHEREAS**, the TPB and the C-SMMPO have agreed to consult with the Maryland Department of Transportation (MDOT) in the coordination of their respective plans and TIPS; and

**WHEREAS**, the TPB, the C-SMMPO, and Calvert County have agreed to a process where C-SMMPO will develop Plans and TIPs to include Calvert County projects, and the TPB will continue to include these Calvert County projects in its regional air quality conformity analysis;

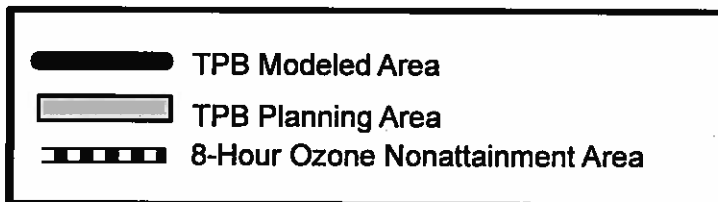
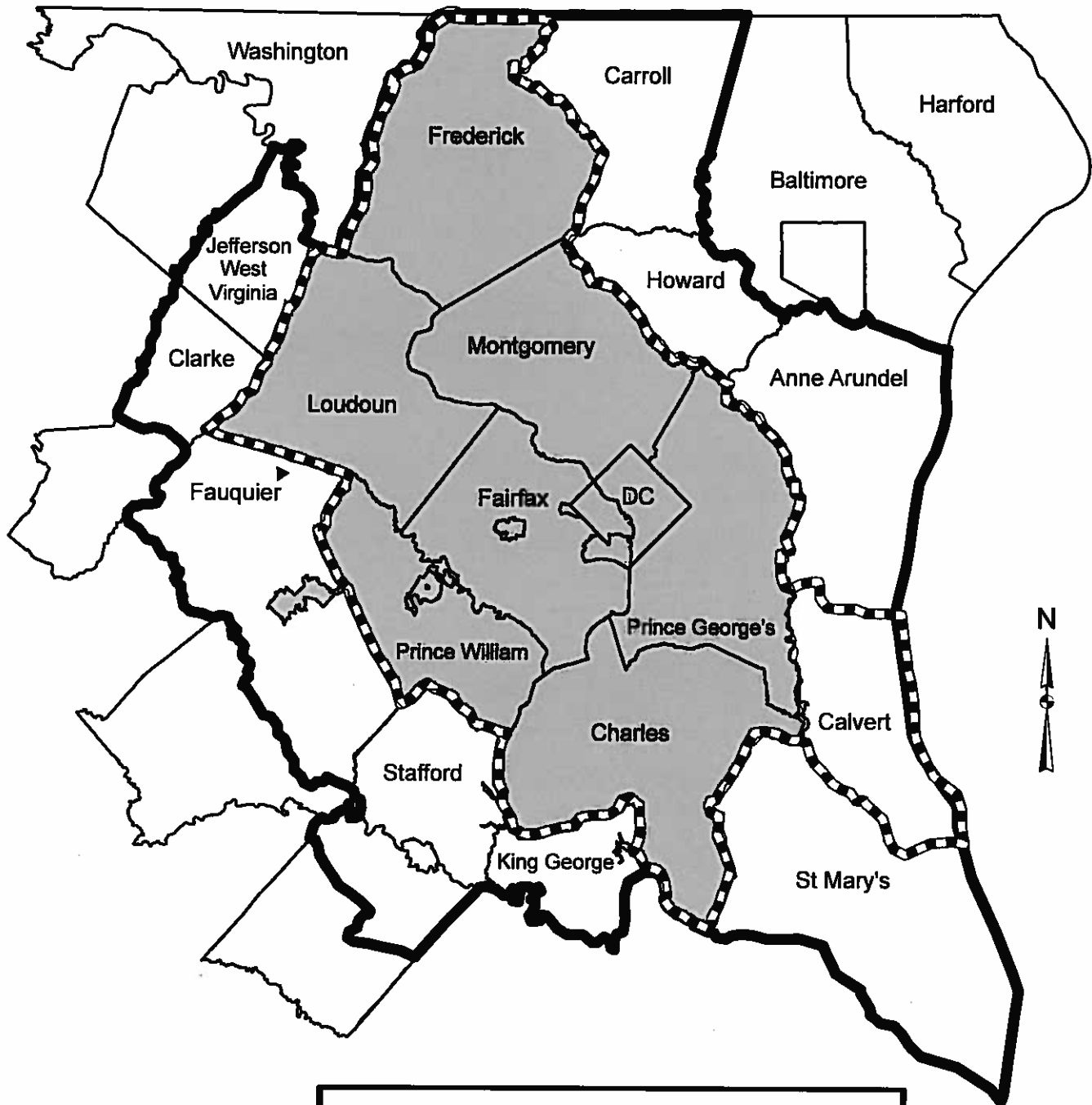
**NOW, THEREFORE, BE IT RESOLVED THAT THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD approves execution, by its Chairman, of the attached *Agreement between the National Capital Region Transportation Planning Board (TPB) and the Calvert-St. Mary's***

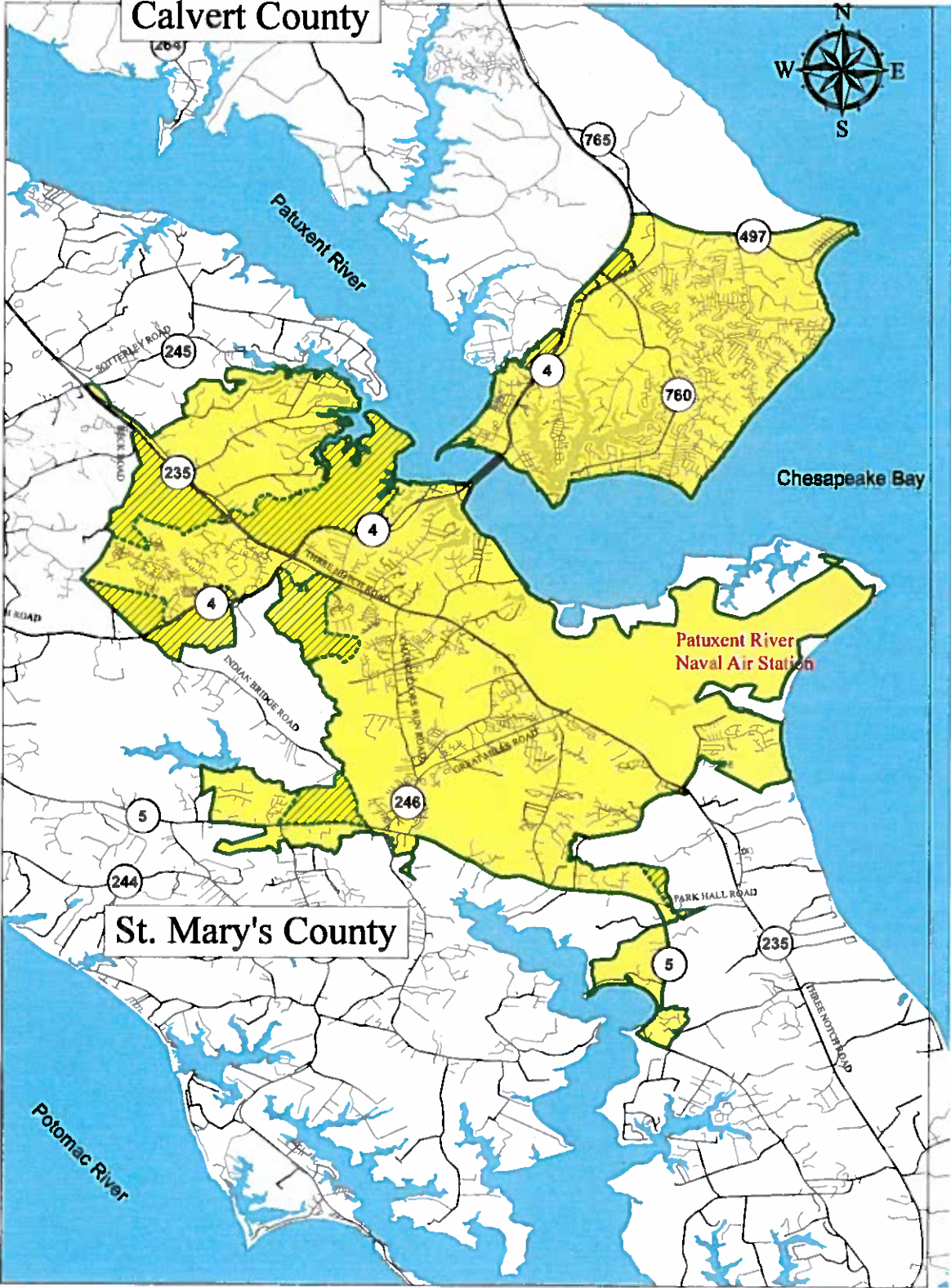
***Metropolitan Planning Organization (C-SMMPO) and Calvert County, Maryland on the conformity analysis and determination of transportation plans, programs, and projects in Calvert County, Maryland*** document to ensure that transportation plans, programs, and projects in Calvert County are assessed for regional air quality conformity as is required in the Clean Air Act Amendments of 1990 (with subsequent amendments).

**Adopted by the Transportation Planning Board at its regular meeting on January 20, 2016**







ATTACHMENT A  
TPB Transportation Planning Area and  
Washington, DC-MD-VA 8-Hour Ozone Nonattainment Area





**Legend**

-  Boundary Line
-  Urbanized Area Boundary Incorporated into Adjusted Urbanized Area
-  Adjusted Urbanized Area
-  Metropolitan Planning Area

**Calvert - St. Mary's  
Metropolitan Planning  
Organization  
Adjusted Urbanized Area  
and  
Metropolitan Planning Area**



**Agreement between the National Capital Region Transportation Planning Board (TPB) and the Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO) and Calvert County, Maryland on the conformity analysis and determination of transportation plans, programs, and projects in Calvert County, Maryland**

Recognizing that Calvert County, Maryland, is a member of the C-SMMPO and is included in the Washington DC-MD-VA 8-hour Ozone Nonattainment area, TPB and C-SMMPO and Calvert County agree upon the following procedures for ensuring that transportation plans, programs, and projects in Calvert County are assessed for regional air quality conformity as is required in the Clean Air Act Amendments of 1990 (with subsequent amendments):

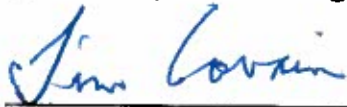
1. Transportation plans, programs, and projects in the C-SMMPO Metropolitan Planning Area (MPA) of Calvert County will be included in the Long Range Transportation Plan and Transportation Improvement Program developed by the C-SMMPO.
2. The C-SMMPO and Calvert County, in consultation with the Maryland Department of Transportation (MDOT), will submit the plan, program, and project inputs for Calvert and for the C-SMMPO MPA to the TPB for inclusion in each update of the TPB's regional air quality conformity analysis and determination for the Washington, DC-MD-VA 8-Hour Ozone Nonattainment area.
3. The timeframe for analysis and coordination will be outlined by the schedule in the TPB's *Call For Projects* document for each cycle.
4. The TPB's *Air Quality Conformity Scope of Work* will provide details regarding the steps taken to ensure compliance with the Federal Transportation Conformity Rule (40 CFR 51 and 93). For example, the TPB will coordinate with Calvert County and the State of Maryland to obtain all necessary analysis inputs and latest planning assumptions (e.g., land activity, vehicle registration data, etc.).
5. Project level conformity analyses will continue to be performed by the State, and assessed through the interagency consultation process, as is currently done for all state projects.
6. Calvert County will be involved in all aspects of the TPB's air quality conformity analysis and determination including its interagency consultation process:
  - Formal involvement for Calvert County on the TPB will be provided through MDOT, and through Calvert County's membership on the

Metropolitan Washington Air Quality Committee (MWAQC) and on the MWAQC Technical Advisory Committee.

- Informal involvement by Calvert County will be provided through participation by representatives of Calvert County in TPB committees and processes concerned with regional air quality conformity, including receipt of all materials and participation in all meetings, discussions, and reviews.
7. The TPB will provide copies of the conformity report to C-SMMPO and Calvert County at the completion of each conformity cycle. As relevant, portions of the TPB conformity report will be included in the C-SMMPO Plan and TIP documentation to demonstrate conformity.

This agreement will remain in effect for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) and all future NAAQS applicable to Calvert County.

Executed by the undersigned this \_\_\_\_\_ day of \_\_\_\_\_ 2016:



\_\_\_\_\_  
Tim Lovain, Chair  
National Capital Region Transportation  
Planning Board



\_\_\_\_\_  
Steven R. Weems, Chairperson  
Calvert - St. Mary's Metropolitan  
Planning Organization



\_\_\_\_\_  
Evan K. Slaughenhaupt Jr, President  
Board of County Commissioners  
Calvert County, Maryland

Approved for legal sufficiency

on January 27, 2016 by

  
\_\_\_\_\_  
County Attorney



Department of Community Planning and Building  
INTEROFFICE MEMORANDUM

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**TO:** Board of County Commissioners  
**VIA:** Terry Shannon, County Administrator TLS  
**VIA:** Thomas Barnett, Director of Community Planning and Building  
**FROM:** Patricia Haddon, Principal Planner [Signature]  
**DATE:** January 27, 2016  
**SUBJECT:** Agreement between the National Capital Region Transportation Planning Board and the Calvert-St. Mary's Metropolitan Planning Organization and Calvert County, Maryland on the conformity analysis and determination to transportation plans, programs, and projects in Calvert County, Maryland

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**Background:**

In their letter of July 24, 2015, to Dr. Kwame Arhin, Planning & Program Manager of the Federal Highway Administration, Maryland Division, the Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO) advised that they were coordinating the required air quality conformity analysis with the MPO for the National Capital Region, Transportation Planning Board (TPB), as Calvert County's portion of the C-SMMPO was within the non-attainment area for the 2008 8-Hour Ozone area within the National Capital Region.

Transportation plans, programs and projects in Calvert County must be included in the conformity analysis and determination carried out by the TPB for the Washington Metropolitan Statistical Area, as per a Proposal for Satisfying Federal Metropolitan Planning Requirements for Charles and Calvert Counties (Attachment A) and TPBs current resolution, adopted in 1993 (Attachment B.)

The TPB resolution (R23-93, Resolution Responding to Governor Schaefer's Letter Concerning the Metropolitan Planning Boundary in Maryland) which includes Calvert county in the TPB's air quality conformity analysis was the result of coordination between the State transportation air agencies and the Federal Highway Administration (FHA) and the Federal Transit Administration (FTA), in response to requirements in the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

**Discussion**

Since the establishment and inclusion of Calvert County in the C-SMMPO, the TPB staff has initiated discussions with the Maryland Department of Transportation to review and update the 1993 resolution. Updates have resulted in the attached agreement between TPB, the C-SMMPO, and Calvert County to address analysis issues related to inclusion of C-SMMPO and Calvert County transportation plans, projects and programs in TPB's regional air quality conformity analysis. The agreement has been reviewed by the TPB, MDOT, the C-SMMPO, FHA and FTA, and the County Attorney, John Norris. The agreement requires BOCC approval and signature.

**Conclusion/Recommendation:**

Staff requests the BOCC review and authorize signature of the attached agreement by the President of the County Commissioners, Evan Slaughenhoupt.

Attachments: 3

## ATTACHMENT A

### Proposal for Satisfying Federal Metropolitan Planning Requirements for Charles and Calvert Counties

The TPB proposes the conformity procedures defined in parts 1-4 below. These procedures affirm the practices that have been used for the past two years for the Metropolitan Washington Region non-attainment area as a means for assuring conformity in Charles and Calvert Counties.

1. The TPB agrees with Governor Schaefer that Charles and Calvert Counties not be a part of the planning area covered by the TPB.
2. Transportation plans, programs and projects in Charles and Calvert Counties will be excluded from the TPB's Long-Range Transportation Plan and six-year Transportation Improvement Program (TIP), and included in the statewide Long-Range Transportation Plan and state-wide Transportation Improvement Program (STIP) developed by the State of Maryland.
3. Transportation plans, programs and projects in Charles and Calvert Counties will be included in the conformity analysis and determination carried out by the TPB for the Washington Metropolitan Statistical Area (MSA). Conformity determinations concerning proposed added projects will be based on a system level analysis for the non-attainment area.
4. Charles and Calvert Counties will be involved in all aspects of the conformity analysis and determinations.
  - Formal involvement for Charles and Calvert Counties will be provided through the Maryland Department of Transportation on the TPB, and through Charles and Calvert Counties' membership on MWAQC and its Technical Staff Coordination Committee (TSCC).
  - Informal involvement by Charles and Calvert Counties will be provided through participation by their representatives in COG and TPB committees and processes concerned with conformity, including receipt of all materials and participation in all meetings, discussions, and reviews.

These procedures are subject to amendment should they be found in conflict with the final rule on conformity promulgated by the U.S. Environmental Protection Agency.

TPB R23-93  
December 16, 1993

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS  
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD  
777 North Capitol Street, N.E.  
Washington, D. C. 20002

RESOLUTION RESPONDING TO GOVERNOR SCHAEFER'S  
LETTER CONCERNING THE METROPOLITAN PLANNING  
BOUNDARY IN MARYLAND

WHEREAS, the National Capital Region Transportation Planning Board (TPB) is the officially designated Metropolitan Planning Organization (MPO) for the Metropolitan Washington area; and

WHEREAS, the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 requires MPO boundaries to "at least include the boundaries of the non-attainment area, except as otherwise provided by agreement between the metropolitan planning organization and the Governor;" and

WHEREAS, in a letter of April 16, 1992, the Governor of Maryland presented a proposal to the TPB under which "the Washington area MPO boundaries should not be expanded to encompass Charles and Calvert Counties;" and

WHEREAS, on September 16, 1992, the Transportation Planning Board (TPB) requested that the Metropolitan Washington Air Quality Committee (MWAQC) consider and provide comments to the TPB on the implications of Governor Schaefer's request for air quality planning and conformity findings in the Metropolitan Washington Area; and

WHEREAS, there has been extensive coordination with the State Transportation Agencies and the State Air Quality Agencies, who are members of MWAQC, and with Federal Highway Administration (FHWA) and Federal Transit Administration (FTA); and

WHEREAS, on December 9, 1992, the MWAQC adopted a set of recommendations to the TPB on responding to Governor Schaefer's request; and has transmitted those recommendations to the TPB; and

WHEREAS, the "Interim Guidance on the ISTEA Metropolitan Planning Requirements" issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) of April 6, 1992, contains the following guidance on Metropolitan boundaries:

"In non attainment areas, if the MPO and the Governor agree to exclude a portion of the nonattainment area, they must be able to demonstrate how conformity will be ensured in the excluded portion. Such proposals should be coordinated with FHWA, FTA, EPA, the state transportation agency, and the state air quality agency before a final decision is made".

NOW, THEREFORE, BE IT RESOLVED THAT: The National Capital Region Transportation Planning Board endorses the MWAQC recommendations as defined in Attachment A, agrees to respond favorably to the April 16, 1992 request of the Governor of Maryland, and also to transmit copies to the Federal Highway Administration, the Federal Transit Administration, and the Environmental Protection Agency.

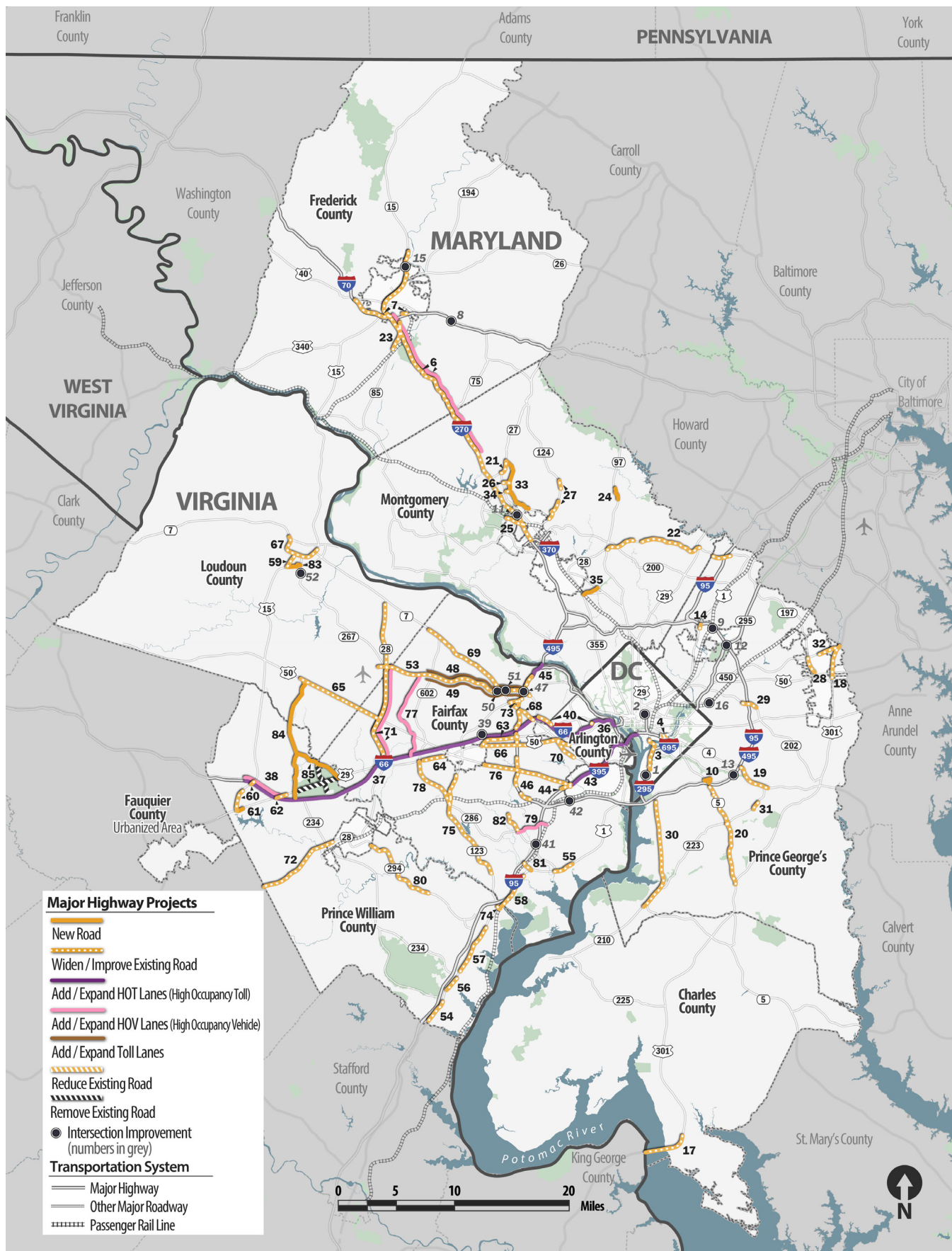
Adopted by the Transportation Planning Board at its regular meeting on December 16, 1992.



# ATTACHMENT B



# 2016 CLRP Major Highway Projects



## MAJOR HIGHWAY PROJECTS

### DISTRICT OF COLUMBIA

1. I-295 - reconstruct interchange at Malcolm X Blvd, 2014
2. I-395 - remove 3rd St SB exit ramp, reconfigure 3rd St SB entrance and 2nd St NB exit ramps, reconnect F St between 2nd and 3rd St, 2016
3. South Capitol St - convert to 6 lane urban blvd, incl. Franklin Douglas Bridge Reconstruction, 2015, 2016
4. Southeast Blvd - downgrade and construct urban blvd, 2015
5. Lane Reductions/Reconfigurations for Bicycle Lanes, 2015, 2016, 2017, 2021, 2022 (not mapped)

### MARYLAND

6. I-270/US-15 widen including HOV, 2030
7. I-70 - widen to 6 lanes, 2020
8. I-70 - interchange at Meadow Rd, 2020
9. I-95/I-495 - interchange at Greenbelt Metro Sta, 2020
10. I-95/I-495 - Branch Avenue Metro access improvements, construct 8 lanes, 2017
11. I-270 - interchange at Watkins Mill Rd Ext, 2018
12. Baltimore Washington Parkway (MD-295) at MD-193 (Greenbelt Rd) - intersection improvement, 2020, 2025
13. Suitland Pkwy - interchange at Rena/Forestville Rd, 2025
14. US-1 (Baltimore Ave) - reconstruct 4 lanes, 2030
15. US-15 (Catoctin Mtn Hwy) - reconstruct intersection at Monocacy Blvd, 2017
16. US-50 (John Hanson Hwy) - westbound ramp to Columbia Park Rd, 2025
17. US-301 - widen Governor Harry Nice Memorial Bridge, 2030
18. MD-3 (Robert Crain Hwy) - widen to 6 lanes, 2030
19. MD-4 (Pennsylvania Ave) - widen to 6 lanes with interchanges at Westphalia Rd and Suitland Pkwy, 2022, 2035
20. MD-5 (Branch Ave) - upgrade, widen to 6 lanes including interchanges, 2017, 2030
21. MD-27 (Ridge Rd) - widen to 6 lanes, 2020
22. MD-28 (Norbeck Rd) / MD-198 (Spencerville Rd) - widen to 4, 6 lanes, 2025
23. MD-85 (Buckeystown Pke) - widen to 4, 6 lanes, 2020, 2025
24. MD-97 (Brookeville Bypass) - construct 2 lane bypass, 2018
25. MD-117 (Clopper Rd) - widen to 4 lanes, 2025
26. MD-118 (Germantown Rd) - widen to 4 lanes, 2020
27. MD-124 (Woodfield Rd) - widen to 6 lanes, 2020
28. MD-197 (Collington Rd) - widen to 4/5 lanes, 2025
29. MD-202 (Landover Rd) - Largo Town Center Metro Access Improvement, recon-

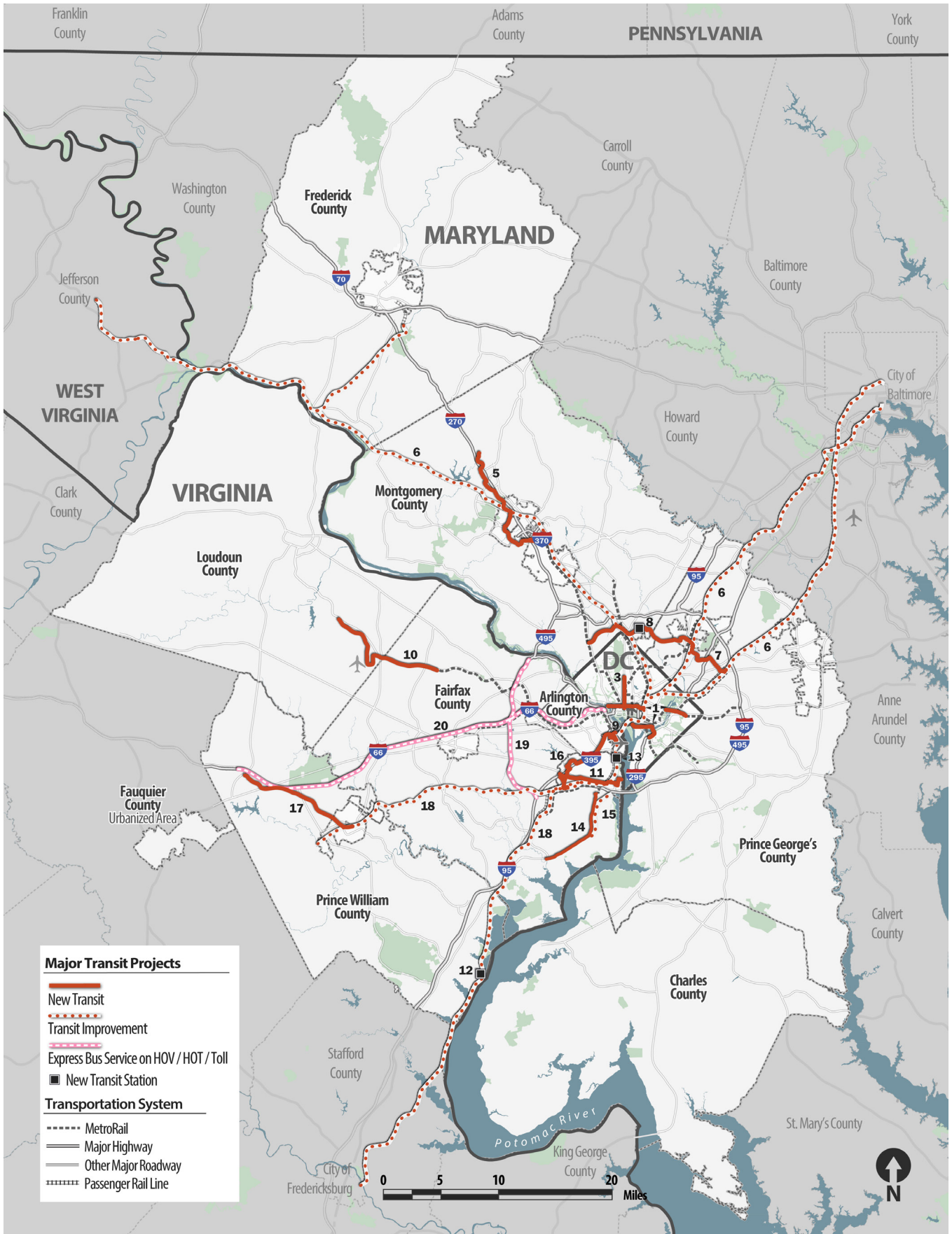
- struct 6 lanes, 2025
30. MD-210 (Indian Head Hwy) - upgrade to 6 lanes and interchange improvement, 2019, 2030
31. MD-223 (Woodyard Rd) - widen to 4 lanes, 2017, 2020
32. MD-450 (Annapolis Rd) - widen to 4 lanes, 2020
33. Mid County Hwy Extension (M-83) - construct 4, 6 lanes, 2025
34. Middlebrook Rd Extended - construct 4 lanes, 2025
35. Montrose Pkwy East - construct 4 lanes, 2022

### VIRGINIA

36. I-66 HOT (Inside Beltway), revise operations from HOV 2+ to HOT during peak hours and bus service, 2017, 2021, 2040
37. I-66 HOT (Outside Beltway) - widen to 6 lanes (3 general purpose, 2 HOT, and 1 auxiliary) and bus service, 2021, 2040
38. I-66 HOV, widen to 8 lanes, HOV in additional lanes during peak, includes interchange reconstruction at US-15, 2016
39. I-66 - construct HOV ramps to access Vienna Metro Sta, 2021
40. I-66 - construct 1 lane in each direction, 2020, 2040
41. I-95/Fairfax County Parkway - enhanced interchanges for BRAC, 2025
42. I-95/I-495 - reconstruct interchange at Van Dorn St, 2015
- 43. I-395 HOT - additional lane and revise operation from HOV 3+ during peak to HOT 3+, 2019**
44. I-395 - construct new south bound lane, 2018
45. I-495 - construct 4 HOT lanes, 2025, 2030
46. I-495 Auxiliary Lanes - construct 2 auxiliary lanes in both directions, 2030
47. I-495 - interchange at VA 267, 2030
48. Dulles Toll Rd (VA-267) - Collector-Distributor Road west-bound, 2037
49. Dulles Toll Rd (VA-267) - Collector-Distributor Road east-bound, 2036
50. Dulles Toll Rd (VA-267) - interchange at New Boone Blvd Extension, 2037
51. Dulles Toll Rd (VA-267) - interchange at Greensboro Drive/Tyco Rd, 2036
52. Dulles Greenway (VA 267) - interchange at Hawling Farm Blvd, 2016
53. Dulles Access Rd (VA 267) - widen to 6 lanes including interchange reconstruct at I-495, 2017
54. US-1 (Jefferson Davis Hwy) - widen to 6 lanes, 2030
55. US-1 (Richmond Hwy) - widen to 6 lanes, 2016, 2025
56. US-1 (Richmond Hwy) - widen to 6 lanes, 2024, 2030
57. US-1 (Richmond Hwy) - widen to 6 lanes, 2016, 2021
58. US-1 (Richmond Hwy) - widen to 6 lanes, 2019, 2021, 2035
59. US-15 (South King St) - widen to 4 lanes, 2017
60. US-15 (James Madison Hwy) - widen to 4 lanes, 2017, 2024, 2040
61. US-29 (Lee Hwy Parallel) McGraws Corner Dr - construct 4 lanes, 2020
62. US-29 (Lee Hwy) - widen to 5 lanes, 2030
63. US-29 (Lee Hwy) - widen to 6 lanes, 2025
64. US-29 (Lee Hwy) - widen to 3 lanes, 2017
65. US-50 (Lee Jackson Memorial Hwy) - widen to 6 lanes, 2025
66. US-50 (Arlington Blvd) - widen/reconstruct 6 lanes including interchanges, 2025
67. VA-7/US-15 Bypass (Harry Byrd Hwy) - widen to 6 lanes, 2040
68. VA-7 (Leesburg Pke) - widen to 6 lanes, 2021
69. VA-7 (Leesburg Pke) - widen to 6, 8 lanes, 2021, 2025, 2030
70. VA-7 (Leesburg Pke) - widen to 6 lanes, 2025
71. VA 28 (Sully Rd) HOV, widen to 8-10 lanes, HOV in additional lanes during peak, 2016, 2021, 2025, 2040
72. VA-28 (Nokesville Rd) - widen to 4 or 6 lanes, 2016, 2018, 2020, 2040
73. VA-123 (Chain Bridge Rd) - widen to 8 lanes, 2021
74. VA-123 (Gordon Blvd) - widen to 6 lanes, 2022
75. VA-123 (Ox Road) - widen to 6 lanes, 2025
76. VA-236 (Little River Tpke) - widen to 6 lanes, 2025
77. VA-286 (Fairfax County Pkwy) HOV - widen to 6 lanes, HOV in additional lanes during Peak, 2035
78. VA-286 (Fairfax County Pkwy / Jack Herrity Pkwy) - widen to 6 lanes, 2025
79. VA 289 (Franconia/Springfield Parkway), HOV lanes with interchange at Neuman St, 2025
80. VA-294 (Prince William Pkwy) - widen to 6 lanes, 2040
81. VA-638 (Pohick Rd) - widen to 4 lanes, 2025
82. VA-638 (Rolling Rd) - widen to 4 Lanes, 2020
83. Battlefield Pkwy - construct 4 lanes, 2020
84. Manassas Bypass (VA-234 Bypass) - construct 4 lanes, 2030
85. Manassas Battlefield Bypass - construct 4 lanes and close portions of US-29 (Lee Hwy) and VA-234 (Sudley Rd), 2030, 2035

**Projects listed in bold are new to the CLRP in the 2016 Amendment.**

# 2016 CLRP Major Transit Projects



## MAJOR TRANSIT PROJECTS

### DISTRICT OF COLUMBIA

1. DC Streetcar, 2016, 2017, 2020, 2022
- 2. DC Dedicated Bicycle Lane Network, 2016, 2017 (not mapped)**
- 3. 16th Street Bus Priority Improvements, 2021**
4. Tiger Grant Bus Priority Improvements (not mapped: DC, MD, and VA)

### MARYLAND

5. Corridor Cities Transitway BRT - from Shady Grove to COMSAT, 2020
6. MARC - Increase trip capacity and frequency along all commuter rail lines, 2029
7. Purple Line - Bethesda to New Carrollton, 2020
8. Silver Spring Transit Center, 2017

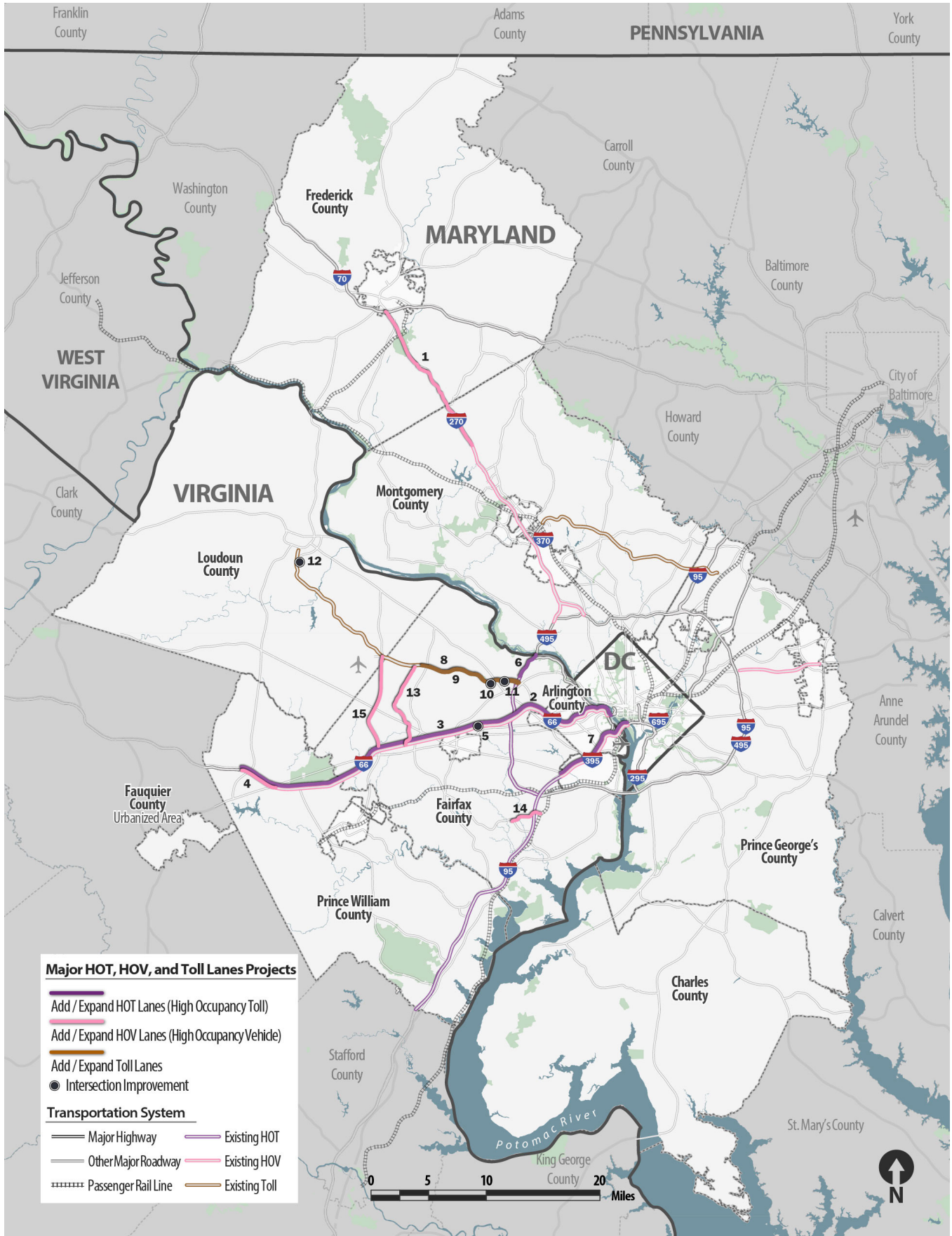
### VIRGINIA

- 9. Crystal City Transitway: Northern Extension BRT, 2016, 2023**
10. Metro Silver Line (Dulles Corridor Metrorail Project) - Phase 2, 2020
11. Duke St Transitway - King St Metro to Fairfax County line, 2024
12. Potomac Shores VRE Station, 2017
13. Potomac Yard Metro Station, 2021
14. US-1 BRT from Huntington Metro Station to Woodbridge , 2030
15. US-1 bus right turn lanes, 2035
16. West End Transitway - Van Dorn St Metro to Pentagon Metro, 2019
- 17. VRE - Gainseville-Haymarket Extension, 2022**
18. VRE - Reduce headways along the Manassas and Fredericksburg Lines, 2020
19. I-495 HOT Lane Express Bus Service
20. I-66 HOT Lane Enhanced Bus Service

Projects listed in bold are new to the CLRP in the 2016 Amendment

# 2016 CLRP

## Major HOT, HOV, and Toll Projects



## MAJOR HOT, HOV, AND TOLL LANE PROJECTS

### MARYLAND

1. I-270/US-15 widen including HOV, 2030

### VIRGINIA

2. I-66 HOT (Inside Beltway), revise operations from HOV 2+ to HOT during peak hours and bus service, 2017, 2021, 2040
3. I-66 HOT (Outside Beltway) - widen to 6 lanes (3 general purpose, 2 HOT, and 1 auxiliary) and bus service, 2021, 2040
4. I-66 HOV, widen to 8 lanes, HOV in additional lanes during peak, includes interchange reconstruction at US-15, 2016
5. I-66 - construct HOV ramps to access Vienna Metro Sta, 2021
6. I-495 - construct 4 HOT lanes, 2025, 2030
- 7. I-395 HOT - additional lane and revise operation from HOV 3+ during peak to HOT 3+, 2019**
8. Dulles Toll Rd (VA-267) - Collector-Distributor Road west-bound, 2037
9. Dulles Toll Rd (VA-267) - Collector-Distributor Road east-bound, 2036
10. Dulles Toll Rd (VA-267) - interchange at New Boone Blvd Extension, 2037
11. Dulles Toll Rd (VA-267) - interchange at Greensboro Drive/Tyco Rd, 2036
12. Dulles Greenway (VA 267) - interchange at Hawling Farm Blvd, 2016
13. VA-286 (Fairfax County Pkwy) HOV - widen to 6 lanes, HOV in additional lanes during Peak, 2035
14. VA 289 (Franconia/Springfield Parkway), HOV lanes with interchange at Neuman St, 2025
15. VA 28 (Sully Rd) HOV, widen to 8-10 lanes, HOV in additional lanes during peak, 2016, 2021, 2025, 2040

Projects listed in bold are new to the CLRP in the 2016 Amendment



# ATTACHMENT C





**Maryland Department of Transportation**  
The Secretary's Office

**Larry Hogan**  
Governor

**Boyd K. Rutherford**  
Lt. Governor

**Pete K. Rahn**  
Secretary

February 1, 2016

Mr. Kanti Srikanth  
Director  
Department of Transportation Planning  
Metropolitan Washington Council of Governments  
777 North Capitol Street, N.E., Suite 300  
Washington DC 20002

Dear Mr. Srikanth:

In response to your request for comments to inform the Air Quality Conformity Analysis Scope of Work for the 2016 Constrained Long Range Plan (CLRP) and FY 2017-2022 Transportation Improvement Program (TIP), I would like to address the current policy assumption which indicates all high-occupancy vehicle (HOV) facilities will operate as HOV-3 facilities in 2020. In 2009, the Maryland Department of Transportation (MDOT) recommended that the model should assume that the two MDOT HOV facilities, I-270 and US 50, which currently operate as HOV-2 facilities, would operate as HOV-3 facilities in 2020. MDOT does not plan to convert these facilities from HOV-2 operations to HOV-3 operations by 2020. We recommend that the HOV-3 assumption for Maryland facilities be changed to maintain these facilities as HOV-2 operations in the upcoming Air Quality Conformity Analysis.

We appreciate your cooperation in this matter. If you have any questions or concerns, please contact Ms. Lyn Erickson, Manager, Office of Planning and Capital Programming, MDOT, at 410-865-1279, toll free at 888-713-1414, or via email at [lerickson@mdot.state.md.us](mailto:lerickson@mdot.state.md.us). Of course, please feel free to contact me directly.

Sincerely,

Heather R. Murphy, Director  
Office of Planning and Capital Programming

cc: Mr. Eric Beckett, Chief, Regional and Intermodal Planning Division, SHA  
Ms. Lyn Erickson, Manager, Office of Planning and Capital Programming, Maryland  
Department of Transportation  
Ms. Kari Snyder, Regional Planner, Office of Planning and Capital Programming, Maryland  
Department of Transportation

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

**ITEM 9 – Action**  
November 16, 2016

Approval of the 2016 Constrained Long Range Plan (CLRP)  
Amendment

**Staff**

**Recommendation:** Adopt Resolution R4-2017 approving the 2016 CLRP Amendment.

**Issues:** None

**Background:** On October 13, the draft 2016 CLRP Amendment was released for public comment.



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

**RESOLUTION APPROVING THE  
2016 AMENDMENT TO THE CONSTRAINED LONG-RANGE  
TRANSPORTATION PLAN FOR THE NATIONAL CAPITAL REGION**

**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 the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area;

**WHEREAS**, the Federal Planning Regulations of the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) implementing the FAST Act, which became effective June 27, 2016, specify the development and content of the long range transportation plan and require that it be reviewed and updated at least every four years; and

**WHEREAS**, on October 21, 2015, the TPB approved the 2015 Amendment to the Constrained Long-Range Transportation Plan (CLRP) which was developed as specified in the Federal Planning Regulations; and

**WHEREAS**, on October 15, 2014, the TPB approved the FY 2015-2020 TIP which was developed as specified in the Federal Planning Regulations; and

**WHEREAS**, on December 16, 2015, the TPB issued a solicitation document for projects and strategies to be included in the 2016 CLRP Amendment and the FY 2017-2022 TIP that will meet federal planning requirements, address the federal planning factors, and goals in the TPB Vision and the Regional Transportation Priorities Plan; and

**WHEREAS**, the transportation implementing agencies in the region provided project submissions for the 2016 CLRP Amendment and the FY 2017-2022 TIP, and the TPB Technical Committee and the TPB reviewed the project submissions at meetings in February and March 2016; and

**WHEREAS**, on March 16, 2016 the TPB approved the major projects submitted for inclusion in the Air Quality Conformity Analysis of the 2016 CLRP Amendment and the FY 2017-2022 TIP; and

**WHEREAS**, on October 13, 2016 the draft 2016 CLRP Amendment and FY 2017-2022 TIP and the Air Quality Conformity Analysis were released for a 30-day public comment period and inter-agency review at the TPB Citizens Advisory Committee (CAC) meeting; and

**WHEREAS**, the significant changes for the 2016 CLRP Amendment are described in the attached memorandum of October 13, 2016 and on the CLRP website, and detailed information on all of the projects in the 2016 CLRP Amendment is provided on the CLRP website and in Appendix B of the Air Quality Conformity Analysis report as adopted November 16, 2016; and

**WHEREAS**, an updated financial plan for the 2014 CLRP entitled *Analysis of Financial Resources for the 2014 Financially Constrained Long-Range Transportation Plan*, September 2014, demonstrates that the forecast revenues reasonably expected to be available are equal to the estimated costs of expanding and adequately maintaining and operating the highway and transit system in the region through 2040; and

**WHEREAS**, in each year's update of the CLRP between 2000 and 2004, the TPB has explicitly accounted for the funding uncertainties affecting the Metrorail system capacity and levels of service beyond 2005 by constraining transit ridership to or through the core area to 2005 levels; and

**WHEREAS**, as a result of the "Metro Matters" commitments for Metro's near-term funding, the transit ridership constraint to or through the core area was applied in the 2005 through 2008 CLRP conformity analysis using 2010 ridership levels rather than 2005 levels; and

**WHEREAS**, the Passenger Rail Investment and Improvement Act of 2008 authorized \$150 million per year for 10 years in funding for WMATA's capital and preventive maintenance projects, and the legislatures of Maryland, Virginia, and District of Columbia have committed to the required dedicated local matching revenues, and this revenue was determined to be reasonably expected to be available through 2040 in the financial plan for the 2014 CLRP, and as a result of this funding, the conformity analyses for the 2009 CLRP through the 2016 CLRP Amendment used 2020 ridership levels, rather than 2010 levels, to constrain transit ridership to or through the core area; and

**WHEREAS**, the Metrorail ridership constraint to or through the core area was applied in the 2016 CLRP Amendment air quality conformity analysis as has occurred in past plans because capital funding for 100% eight-car trains and other core improvements was not identified for expansion of the Metrorail's core capacity; and

**WHEREAS**, during the development of the 2016 CLRP Amendment and the FY 2017-2022 TIP, the TPB Participation Plan was followed, and numerous opportunities were provided for public comment: (1) At the February 11, 2016 TPB Citizens Advisory Committee (CAC) meeting, the project submissions for inclusion in the Air Quality Conformity Analysis and the Air Quality Conformity work scope were released, and an opportunity for public comment on these submissions was provided at the beginning of the February TPB meeting; (2) At the March 16, 2016 meeting, the TPB accepted a set of responses to the public comments on the project submissions for inclusion in the CLRP and TIP documents; (3) On September 15, 2016 following the CAC meeting, a Public Forum was held on the development of the FY 2017-2022 TIP; (4) On October 27, 2016 the 2016 CLRP Amendment was presented to the TPB's Access for All Advisory Committee for their consideration and comment; (5) On October 13, 2016 in conjunction with the CAC meeting, the draft 2016 CLRP Amendment, the draft FY 2017-2022 TIP, and the draft Air Quality Conformity Analysis were released for a 30-day public

comment period which closed on November 12, 2016; (6) An opportunity for public comment on these documents was provided on the TPB website and at the beginning of the October and November TPB meetings; and (7) the documentation of the 2016 CLRP Amendment will include summaries of all comments and responses; and

**WHEREAS**, on October 19, 2016, the TPB received a briefing on the performance analysis of the draft 2016 CLRP Amendment showing how the CLRP supports the priorities identified in the Regional Transportation Priorities Plan which was approved by the TPB in January 2014; and

**WHEREAS**, on November 16, 2016, the TPB determined that the 2016 CLRP Amendment conforms with the requirements of the Clean Air Act Amendments of 1990; and

**WHEREAS**, the TPB Technical Committee has recommended favorable action on the 2016 CLRP Amendment by the Board; and

**NOW, THEREFORE, BE IT RESOLVED THAT** the National Capital Region Transportation Planning Board approves the 2016 Amendment to the Constrained Long-Range Transportation Plan for the National Capital Region, as described in the attached memorandum and the CLRP website, and Appendix B of the Air Quality Conformity Analysis report.







## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Andrew Austin, TPB Transportation Planner  
**SUBJECT:** Briefing on the Draft 2016 Amendment to the Financially Constrained Long-Range Transportation Plan (CLRP)  
**DATE:** October 13, 2016

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On Thursday, October 13, 2016 the TPB released the draft 2016 Constrained Long-Range Plan (CLRP) Amendment, the draft FY 2017-2022 Transportation Improvement Program (TIP) and the draft Air Quality Conformity Analysis results for a 30-day public comment period. This memo provides information on the project inputs and actions that have taken place to date regarding the CLRP. In December 2015, the TPB released the Call for Projects for the 2016 Amendment to the CLRP and the FY 2017-2022 TIP. After a 30-day public comment period, the project submissions from each agency were approved by the TPB for inclusion in the Air Quality Conformity Analysis on March 16, 2016. The attached materials present the same summary of the major new projects and changes to existing major projects that was included in this year's submissions. The projects described here are unchanged from those that were approved by the TPB on March 16, 2016.

### **REGIONAL POLICY FRAMEWORK FOR DEVELOPMENT OF THE 2016 CLRP AMENDMENT**

The Call for Projects document specifically listed the region's "greatest needs" reflecting the TPB's Vision and regional transportation priorities. The Call for Projects encouraged agencies to consider regional goals, priorities and needs as they developed and selected projects to submit for inclusion in the 2016 Amendment. The CLRP project description form asked agencies to explain how their new projects support the goals laid out in the Regional Transportation Priorities Plan (RTPP).

The agencies' responses to those questions were compiled in Table 1 on page 15 of the attachment, along with the agencies' responses to how projects support the federal Planning Factors on Table 2. Additionally, based on feedback from TPB members and representatives on the Technical Committee, staff developed individual project profile sheets that provide readers with "at a glance" information, as well as a narrative describing how the proposed major project supports the RTPP and other regional goals. A Project Profile has been created for each of the nine major projects proposed in this year's CLRP amendment.

### **SUMMARY OF PROJECT SUBMISSIONS**

In all, there were nine new and changed "major" projects in the 2016 submissions. For the purposes of this documentation, "major" projects are defined as those which directly affect interstates, major arterials, and expressways or freeways with at-grade intersections, as well as dedicated transit facilities. The submissions also include many changes to existing CLRP projects. These nine projects are listed in the attached Table 1 and they are also the subject of two-page project profiles, which are attached. Further details about these projects are contained in the CLRP Project Description Forms which are also attached to this memo. Four other new projects, which are not considered

major, are included in Table 1, but they are not highlighted with individual project profiles. The remaining project changes proposed for the 2016 CLRP Amendment are detailed in the Air Quality Conformity Inputs table, distributed separately from this memo.

In the **District of Columbia**, DDOT is proposing to implement bus priority lanes on 16<sup>th</sup> Street NW between H Street and Arkansas Avenue, and to expand its bicycle lane network with eight additional segments. DDOT has also submitted new information about lane configurations and removals for the DC Streetcar: Union Station to Georgetown project which has been in the CLRP since 2014.

No new major projects are proposed this year in **Maryland**. MDOT has responded to the call for projects by providing minor project updates. MDOT typically submits projects for inclusion in the CLRP once project-level NEPA analysis is substantially complete. No MDOT projects met that criteria this year.

In **Virginia**, VDOT and the Virginia Department of Rail and Public Transportation are proposing to extend VRE commuter rail from the City of Manassas to the Gainesville/Haymarket area. VDOT is also proposing to extend the Crystal City Transitway north to the Pentagon City Metro Station, and to extend Express Lanes on I-395 from Turkeycock Run to the vicinity of Eads Street in Arlington County.

Additionally, changes have been submitted by VDOT for two major projects on I-66 that were amended into the CLRP in 2015, and for one project on VA Route 28 that has been in the CLRP since 2004. The I-66 Multimodal Improvements *Inside* the Capital Beltway project is being revised to alter the vehicle-occupancy requirements and hours of operation for the proposed HOT lanes, as well as the scope of future widening. The I-66 Corridor Improvements *Outside* the Capital Beltway project is also being revised to reflect the preferred alternative that was selected in 2015, after the approval of the 2015 CLRP amendment, specifying the locations of access points between the general purpose and high occupancy lanes. The CLRP includes a project to widen VA Route 28 between I-66 and VA Route 7 from 6 to 8 lanes. For this amendment, the project is being revised to convert one general purpose lane in each direction into HOV lanes between I-66 and the Dulles Toll Road. Additionally, one auxiliary lane will be added in each direction between I-66 and Westfields Blvd.

No new major additional capacity projects are proposed by the **Washington Metropolitan Area Transit Authority** at this time.

## NEXT STEPS

The draft 2016 CLRP Amendment was released for a 30-day public comment period on Thursday, October 13, 2016, along with the draft Air Quality Conformity Analysis results, and the draft FY 2017-2022 TIP. Comments may be submitted:

- Online at [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment)
- Via email at [TPBcomment@mwcog.org](mailto:TPBcomment@mwcog.org)
- By calling (202) 962-3262, TDD: (202) 962-3213
- Or in writing to The Transportation Planning Board  
777 North Capitol Street, NE, Suite 300  
Washington, DC 20002-4239

The public comment period ends on Saturday, November 12, 2016. The TPB will be briefed on the comments received and the responses from implementing agencies and then asked to approve the Air Quality Conformity Analysis, the 2016 CLRP Amendment, and the FY 2017-2022 TIP at the

meeting on November 16, 2016. All comments submitted will be made available for review online at [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## **MATERIALS FOR PUBLIC COMMENT**

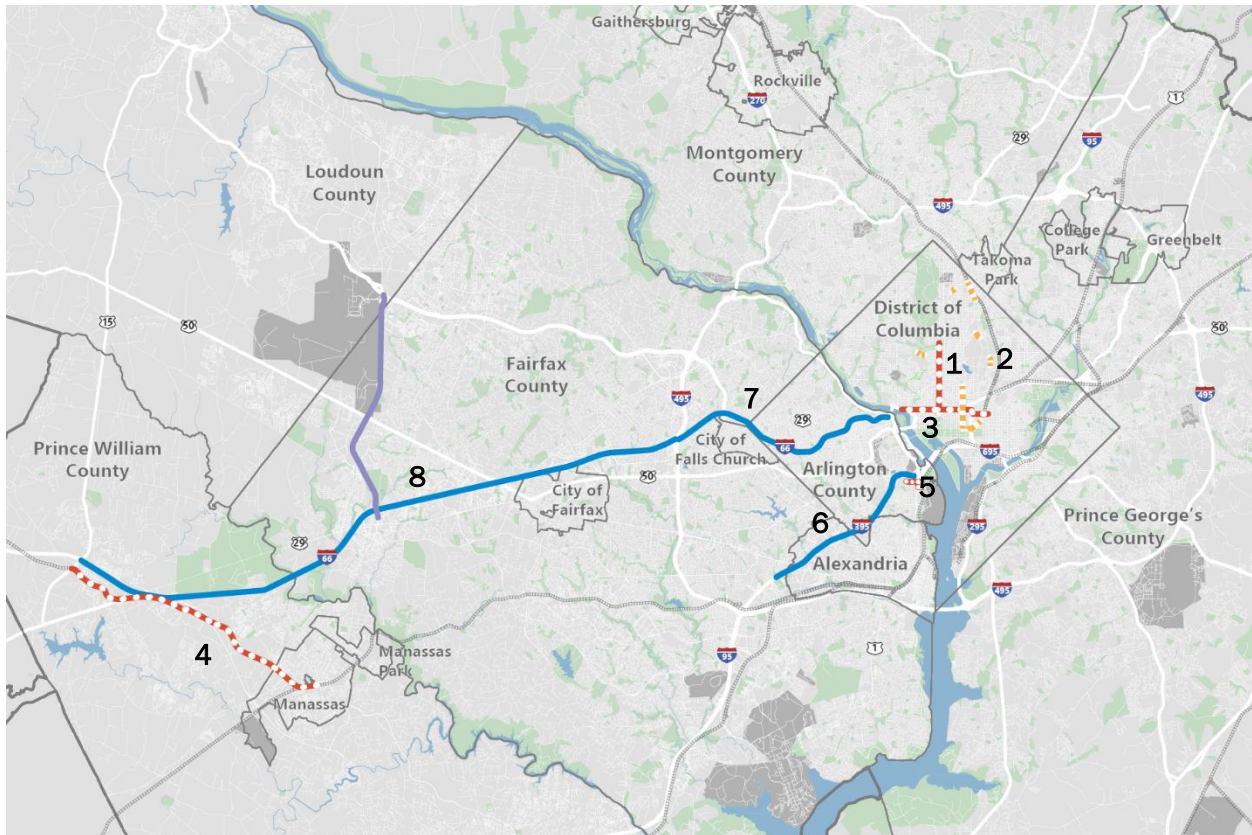
Attached to this memo are the following materials that were released for public comment on October 13:

- CLRP Maps
  - New Major Projects and Significant Changes for the 2016 Amendment (page 5)
  - All Major Highway Projects (page 7)
  - All Major Transit Projects (page 9)
  - All Major HOT, HOV, and Toll Projects (page 11)
- Summary of RTPP Goals and CLRP project description form questions (page 13)
- Table 1: 2016 CLRP Amendment Project Submissions and the RTPP Goals (page 15)
- Table 2: 2016 CLRP Amendment Project Submissions and federal Planning Factors (page 16)
- Project Profiles for the following projects:
  - 16<sup>th</sup> Street Bus Priority from H Street NW to Arkansas Avenue NW (page 17)
  - DC Dedicated Bicycle Lane Network on Multiple Street Segments Throughout City (page 19)
  - DC Streetcar: Union Station to Georgetown, Primarily Along the K Street NW Corridor (page 21)
  - VRE Haymarket Extension from Manassas VRE Station to Gainesville/Haymarket (page 23)
  - Crystal City Transitway: Northern Extension from Crystal City Metro Station to Pentagon City Metro Station (page 25)
  - I-395 Express Lanes Inside the Capital Beltway (Turkeycock Run to the Vicinity of Eads Street) (page 27)
  - I-66 Multimodal Improvements Inside the Capital Beltway (page 29)
  - I-66 Corridor Improvements Outside the Capital Beltway (page 31)
  - VA Route 28 HOV and Widening (page 33)
- Complete CLRP Project Description Forms for each project listed above (page 35)

An interactive map of the proposed major new and changed projects can be found online at [www.mwcog.org/clrp2016](http://www.mwcog.org/clrp2016).



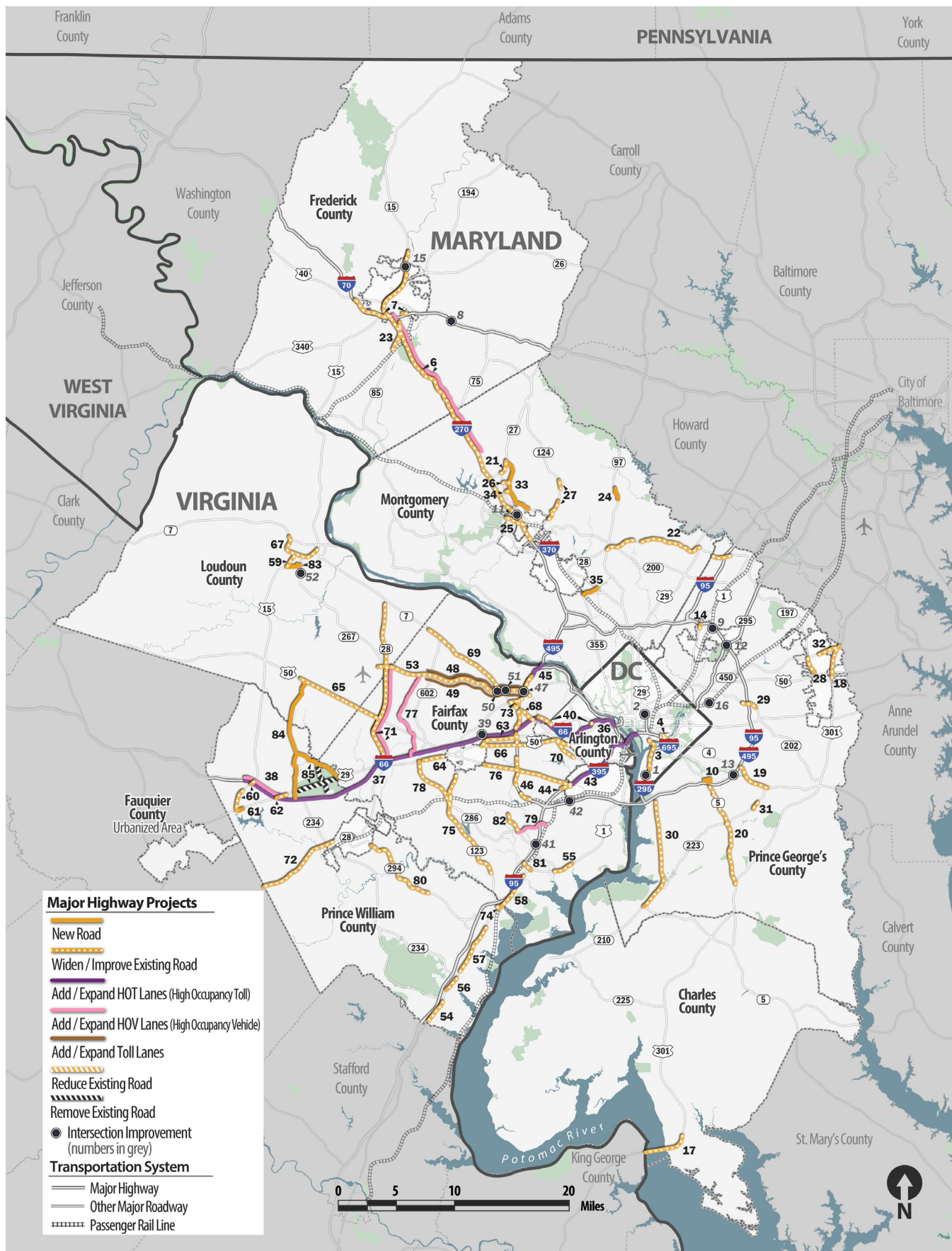
## New Major Projects and Significant Changes for the 2016 CLRP Amendment



1. 16<sup>th</sup> Street Bus Priority from H Street NW to Arkansas Avenue NW
2. DC Dedicated Bicycle Lane Network on Multiple Street Segments Throughout City
3. DC Streetcar: Union Station to Georgetown, Primarily Along the K Street NW Corridor
4. VRE Haymarket Extension from Manassas VRE Station to Gainesville/Haymarket
5. Crystal City Transitway: Northern Extension from Crystal City Metro Station to Pentagon City Metro Station
6. I-395 Express Lanes Inside the Capital Beltway (Turkeycock Run to the Vicinity of Eads Street)
7. I-66 Multimodal Improvements Inside the Capital Beltway
8. I-66 Corridor Improvements Outside the Capital Beltway
9. VA Route 28 HOV and Widening



# 2016 CLRP Major Highway Projects





## MAJOR HIGHWAY PROJECTS

### DISTRICT OF COLUMBIA

1. I-295 - reconstruct interchange at Malcolm X Blvd, 2014
2. I-395 - remove 3rd St SB exit ramp, reconfigure 3rd St SB entrance and 2nd St NB exit ramps, reconnect F St between 2nd and 3rd St, 2016
3. South Capitol St - convert to 6 lane urban blvd, incl. Franklin Douglas Bridge Reconstruction, 2015, 2016
4. Southeast Blvd - downgrade and construct urban blvd, 2015
5. Lane Reductions/Reconfigurations for Bicycle Lanes, 2015, 2016, 2017, 2021, 2022 (not mapped)

### MARYLAND

6. I-270/US-15 widen including HOV, 2030
7. I-70 - widen to 6 lanes, 2020
8. I-70 - interchange at Meadow Rd, 2020
9. I-95/I-495 - interchange at Greenbelt Metro Sta, 2020
10. I-95/I-495 - Branch Avenue Metro access improvements, construct 8 lanes, 2017
11. I-270 - interchange at Watkins Mill Rd Ext, 2018
12. Baltimore Washington Parkway (MD-295) at MD-193 (Greenbelt Rd) - intersection improvement, 2020, 2025
13. Suitland Pkwy - interchange at Rena/Forestville Rd, 2025
14. US-1 (Baltimore Ave) - reconstruct 4 lanes, 2030
15. US-15 (Catoctin Mtn Hwy) - reconstruct intersection at Monocacy Blvd, 2017
16. US-50 (John Hanson Hwy) - westbound ramp to Columbia Park Rd, 2025
17. US-301 - widen Governor Harry Nice Memorial Bridge, 2030
18. MD-3 (Robert Crain Hwy) - widen to 6 lanes, 2030
19. MD-4 (Pennsylvania Ave) - widen to 6 lanes with interchanges at Westphalia Rd and Suitland Pkwy, 2022, 2035
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- struct 6 lanes, 2025
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33. Mid County Hwy Extension (M-83) - construct 4, 6 lanes, 2025
34. Middlebrook Rd Extended - construct 4 lanes, 2025
35. Montrose Pkwy East - construct 4 lanes, 2022

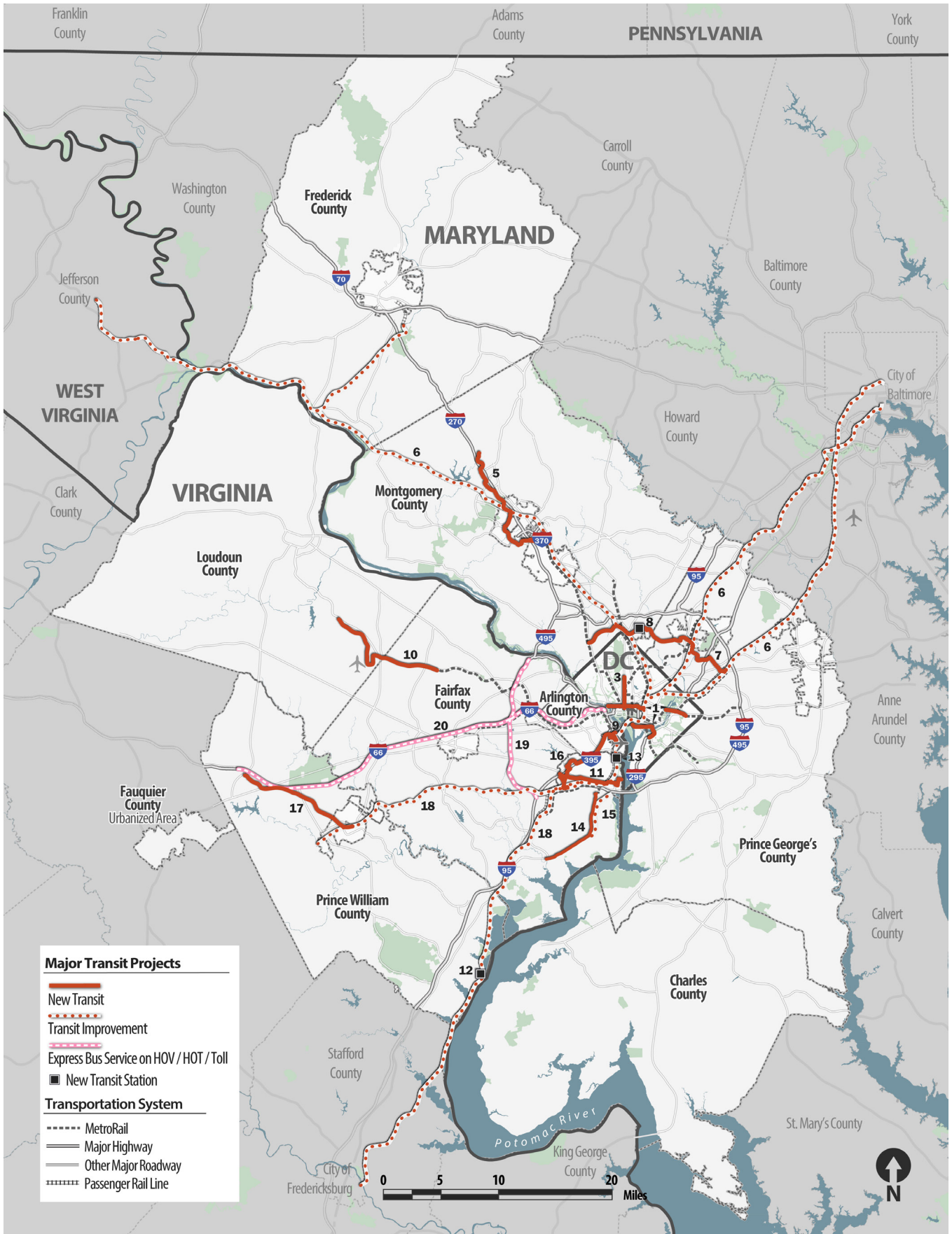
### VIRGINIA

36. I-66 HOT (Inside Beltway), revise operations from HOV 2+ to HOT during peak hours and bus service, 2017, 2021, 2040
37. I-66 HOT (Outside Beltway) - widen to 6 lanes (3 general purpose, 2 HOT, and 1 auxiliary) and bus service, 2021, 2040
38. I-66 HOV, widen to 8 lanes, HOV in additional lanes during peak, includes interchange reconstruction at US-15, 2016
39. I-66 - construct HOV ramps to access Vienna Metro Sta, 2021
40. I-66 - construct 1 lane in each direction, 2020, 2040
41. I-95/Fairfax County Parkway - enhanced interchanges for BRAC, 2025
42. I-95/I-495 - reconstruct interchange at Van Dorn St, 2015
- 43. I-395 HOT - additional lane and revise operation from HOV 3+ during peak to HOT 3+, 2019**
44. I-395 - construct new south bound lane, 2018
45. I-495 - construct 4 HOT lanes, 2025, 2030
46. I-495 Auxiliary Lanes - construct 2 auxiliary lanes in both directions, 2030
47. I-495 - interchange at VA 267, 2030
48. Dulles Toll Rd (VA-267) - Collector-Distributor Road west-bound, 2037
49. Dulles Toll Rd (VA-267) - Collector-Distributor Road east-bound, 2036
50. Dulles Toll Rd (VA-267) - interchange at New Boone Blvd Extension, 2037
51. Dulles Toll Rd (VA-267) - interchange at Greensboro Drive/Tyco Rd, 2036
52. Dulles Greenway (VA 267) - interchange at Hawling Farm Blvd, 2016
53. Dulles Access Rd (VA 267) - widen to 6 lanes including interchange reconstruct at I-495, 2017
54. US-1 (Jefferson Davis Hwy) - widen to 6 lanes, 2030
55. US-1 (Richmond Hwy) - widen to 6 lanes, 2016, 2025
56. US-1 (Richmond Hwy) - widen to 6 lanes, 2024, 2030
57. US-1 (Richmond Hwy) - widen to 6 lanes, 2016, 2021
58. US-1 (Richmond Hwy) - widen to 6 lanes, 2019, 2021, 2035

59. US-15 (South King St) - widen to 4 lanes, 2017
60. US-15 (James Madison Hwy) - widen to 4 lanes, 2017, 2024, 2040
61. US-29 (Lee Hwy Parallel) McGraws Corner Dr - construct 4 lanes, 2020
62. US-29 (Lee Hwy) - widen to 5 lanes, 2030
63. US-29 (Lee Hwy) - widen to 6 lanes, 2025
64. US-29 (Lee Hwy) - widen to 3 lanes, 2017
65. US-50 (Lee Jackson Memorial Hwy) - widen to 6 lanes, 2025
66. US-50 (Arlington Blvd) - widen/reconstruct 6 lanes including interchanges, 2025
67. VA-7/US-15 Bypass (Harry Byrd Hwy) - widen to 6 lanes, 2040
68. VA-7 (Leesburg Pke) - widen to 6 lanes, 2021
69. VA-7 (Leesburg Pke) - widen to 6, 8 lanes, 2021, 2025, 2030
70. VA-7 (Leesburg Pke) - widen to 6 lanes, 2025
71. VA 28 (Sully Rd) HOV, widen to 8-10 lanes, HOV in additional lanes during peak, 2016, 2021, 2025, 2040
72. VA-28 (Nokesville Rd) - widen to 4 or 6 lanes, 2016, 2018, 2020, 2040
73. VA-123 (Chain Bridge Rd) - widen to 8 lanes, 2021
74. VA-123 (Gordon Blvd) - widen to 6 lanes, 2022
75. VA-123 (Ox Road) - widen to 6 lanes, 2025
76. VA-236 (Little River Tpke) - widen to 6 lanes, 2025
77. VA-286 (Fairfax County Pkwy) HOV - widen to 6 lanes, HOV in additional lanes during Peak, 2035
78. VA-286 (Fairfax County Pkwy / Jack Herrity Pkwy) - widen to 6 lanes, 2025
79. VA 289 (Franconia/Springfield Parkway), HOV lanes with interchange at Neuman St, 2025
80. VA-294 (Prince William Pkwy) - widen to 6 lanes, 2040
81. VA-638 (Pohick Rd) - widen to 4 lanes, 2025
82. VA-638 (Rolling Rd) - widen to 4 Lanes, 2020
83. Battlefield Pkwy - construct 4 lanes, 2020
84. Manassas Bypass (VA-234 Bypass) - construct 4 lanes, 2030
85. Manassas Battlefield Bypass - construct 4 lanes and close portions of US-29 (Lee Hwy) and VA-234 (Sudley Rd), 2030, 2035

**Projects listed in bold are new to the CLRP in the 2016 Amendment.**

# 2016 CLR Major Transit Projects



## MAJOR TRANSIT PROJECTS

### DISTRICT OF COLUMBIA

1. DC Streetcar, 2016, 2017, 2020, 2022
- 2. DC Dedicated Bicycle Lane Network, 2016, 2017 (not mapped)**
- 3. 16th Street Bus Priority Improvements, 2021**
4. Tiger Grant Bus Priority Improvements (not mapped: DC, MD, and VA)

### MARYLAND

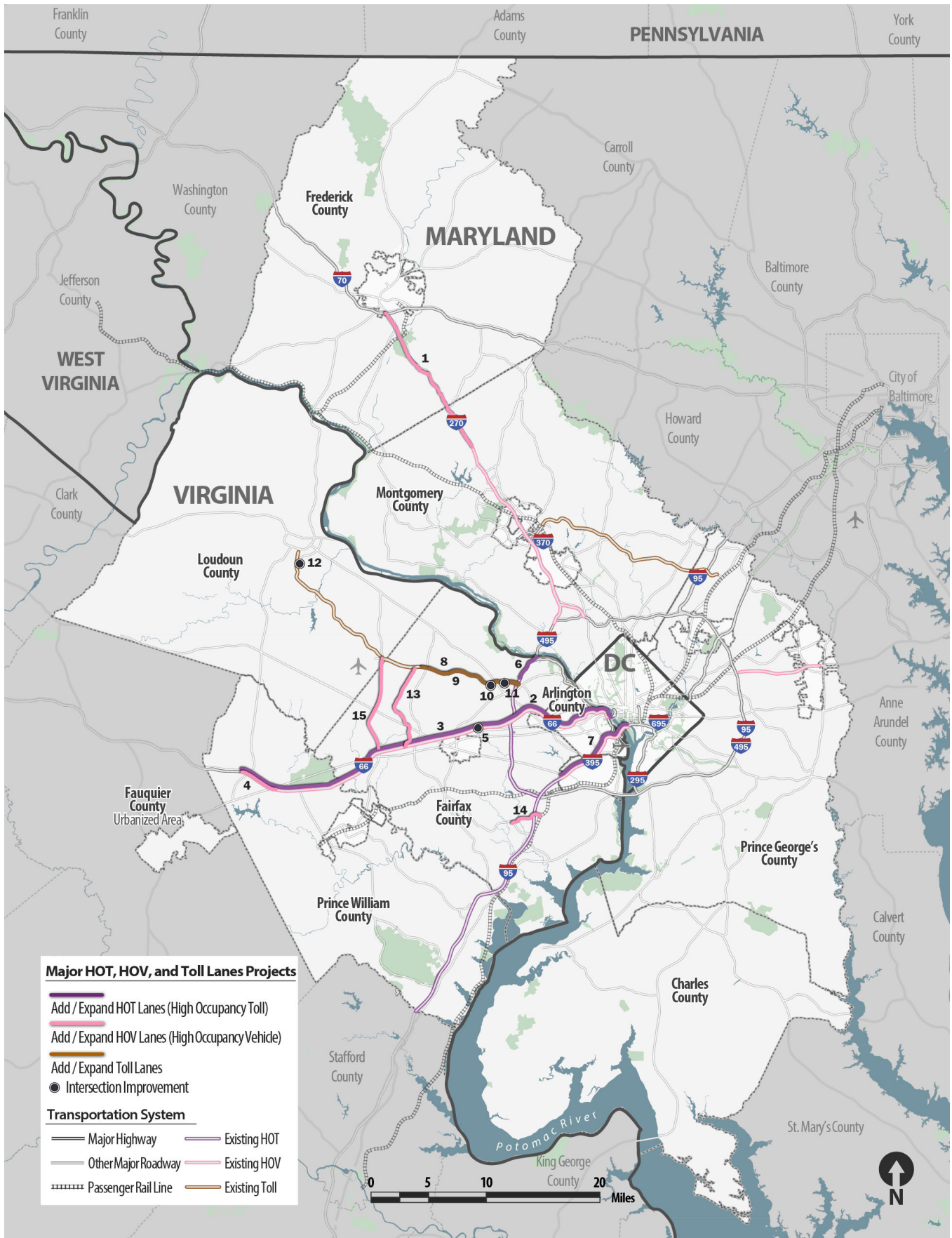
5. Corridor Cities Transitway BRT - from Shady Grove to COMSAT, 2020
6. MARC - Increase trip capacity and frequency along all commuter rail lines, 2029
7. Purple Line - Bethesda to New Carrollton, 2020
8. Silver Spring Transit Center, 2017

### VIRGINIA

- 9. Crystal City Transitway: Northern Extension BRT, 2016, 2023**
10. Metro Silver Line (Dulles Corridor Metrorail Project) - Phase 2, 2020
11. Duke St Transitway - King St Metro to Fairfax County line, 2024
12. Potomac Shores VRE Station, 2017
13. Potomac Yard Metro Station, 2021
14. US-1 BRT from Huntington Metro Station to Woodbridge , 2030
15. US-1 bus right turn lanes, 2035
16. West End Transitway - Van Dorn St Metro to Pentagon Metro, 2019
- 17. VRE - Gainseville-Haymarket Extension, 2022**
18. VRE - Reduce headways along the Manassas and Fredericksburg Lines, 2020
19. I-495 HOT Lane Express Bus Service
20. I-66 HOT Lane Enhanced Bus Service

Projects listed in bold are new to the CLRP in the 2016 Amendment

# 2016 CLRP Major HOT, HOV, and Toll Projects



## MAJOR HOT, HOV, AND TOLL LANE PROJECTS

### MARYLAND

1. I-270/US-15 widen including HOV, 2030

### VIRGINIA

2. I-66 HOT (Inside Beltway), revise operations from HOV 2+ to HOT during peak hours and bus service, 2017, 2021, 2040
3. I-66 HOT (Outside Beltway) - widen to 6 lanes (3 general purpose, 2 HOT, and 1 auxiliary) and bus service, 2021, 2040
4. I-66 HOV, widen to 8 lanes, HOV in additional lanes during peak, includes interchange reconstruction at US-15, 2016
5. I-66 - construct HOV ramps to access Vienna Metro Sta, 2021
6. I-495 - construct 4 HOT lanes, 2025, 2030
- 7. I-395 HOT - additional lane and revise operation from HOV 3+ during peak to HOT 3+, 2019**
8. Dulles Toll Rd (VA-267) - Collector-Distributor Road west-bound, 2037
9. Dulles Toll Rd (VA-267) - Collector-Distributor Road east-bound, 2036
10. Dulles Toll Rd (VA-267) - interchange at New Boone Blvd Extension, 2037
11. Dulles Toll Rd (VA-267) - interchange at Greensboro Drive/Tyco Rd, 2036
12. Dulles Greenway (VA 267) - interchange at Hawling Farm Blvd, 2016
13. VA-286 (Fairfax County Pkwy) HOV - widen to 6 lanes, HOV in additional lanes during Peak, 2035
14. VA 289 (Franconia/Springfield Parkway), HOV lanes with interchange at Neuman St, 2025
15. VA 28 (Sully Rd) HOV, widen to 8-10 lanes, HOV in additional lanes during peak, 2016, 2021, 2025, 2040

Projects listed in bold are new to the CLRP in the 2016 Amendment

# Assessing CLRP Project Submissions against the Regional Transportation Priorities Plan and MAP-21

The CLRP Project Description form includes a set of questions under the Regional Policy Framework section. These questions are intended to examine how projects support the goals set forth in the Regional Transportation Priorities Plan (RTPP). The six RTPP goals are described here and are matched up with the corresponding questions from the CLRP Project Description form. The responses provided by the submitting agencies for all new projects proposed for amendment to the CLRP this year have been summarized in the attached table, along with their responses as to how the projects support the federal planning factors prescribed under MAP-21.



## Goal 1

### Provide a Comprehensive Range of Transportation Options

Question  
**22**

- Please identify all travel mode options that this project provides, enhances, supports, or promotes.
- Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)



## Goal 2

### Promote a Strong Regional Economy, Including a Healthy Regional Core and Dynamic Activity Centers

Question  
**23**

- Does this project begin or end in an Activity Center?
- Does this project connect two or more Activity Centers?
- Does this project promote non-auto travel within one or more Activity Centers?

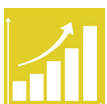


## Goal 3

### Ensure Adequate System Maintenance, Preservation, and Safety

Question  
**24**

- Does this project contribute to enhanced system maintenance, preservation, or safety?



## Goal 4

### Maximize Operational Effectiveness and Safety of the Transportation System

Question  
**25**

- Does this project reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?
- Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?



## Goal 5

### Enhance Environmental Quality, and Protect Natural and Cultural Resources

Question  
**26**

- Is this project expected to contribute to reductions in emissions of criteria pollutants?
- Is this project expected to contribute to reductions in emissions of greenhouse gases?



## Goal 6

### Support Inter-Regional and International Travel and Commerce

Question  
**27**

- Please identify all freight carrier modes that this project enhances, supports, or promotes.
- Please identify all passenger carrier modes that this project enhances, supports, or promotes.



# TABLE 1

## THE 2016 CLRP AMENDMENT PROJECT SUBMISSIONS AND THE REGIONAL TRANSPORTATION PRIORITIES PLAN GOALS

This matrix provides a visual summary of the responses provided by the relevant implementing agencies as to how their proposed projects support the goals identified in the RTPP.

Project	Estimated Cost	Projected Completion	Goal 1											Goal 2			Goal 3		Goal 4		Goal 5		Goal 6															
			SOV	HOV/Carpool	MetroRail	Commuter Rail	Streetcar/Lt. Rail	BRT	Express Bus	Metrobus	Local Bus	Bicycling	Walking	Other	Disadvantaged Groups	Begin/End in AC	Connect ACs	Non-Auto w/in AC	Maintenance	Reduce Time w/o Capacity	Enhance Safety	Criteria Pollutants	Greenhouse Gases	Long Haul Truck	Local Delivery	Freight Rail	Freight Air	Air Passenger	Amtrak	Intercity Bus								
<b>MAJOR* ADDITIONS AND CHANGES</b>																																						
● 16th Street Bus Priority	\$6 million	2021	✓										✓			✓																						
● DC Dedicated Bike Lanes	\$1.35 million	2016																																				
△ DC Streetcar	\$438 million	2022				✓	✓																															
● VRE: Haymarket Extension	\$433 million	2022		✓		✓																																
● Crystal City Transitway	\$24 million	2023																																				
● I-395 Express Lanes	\$220 million	2019	✓	✓																																		
△ I-66 Inside the Beltway	\$375 million	2017, 2040	✓	✓	✓																																	
△ I-66 Outside the Beltway	\$2-3 billion	2021, 2040	✓	✓	✓	✓																																
△ VA 28 Widening and HOV	\$10 million	2025, 2040	✓	✓																																		
<b>OTHER PROJECTS</b>																																						
● VA Route 643 Extended	\$50 million	2020	✓	✓	✓																																	
● VA Route 645 Extended	\$44 million	2020	✓	✓	✓	✓																																
● Riverside Parkway	\$15 million	2018	✓																																			
● VA 7 at Battlefield Parkway	\$58 million	2022	✓																																			

● New project    △ Change to project already in the CLRP



**TABLE 2**  
**THE 2016 CLRP AMENDMENT PROJECT SUBMISSIONS**  
**AND THE FEDERAL PLANNING FACTORS**

This matrix provides a visual summary of the responses provided by the relevant implementing agencies as to how their proposed projects support the federal planning factors.

	Estimated Cost	Projected Completion	Economic Vitality Safety	Homeland Security	Accessibility/Mobility People	Accessibility/Mobility Freight	Environment	Integration/Connectivity	Management & Operation	Preservation
<b>MAJOR PROJECTS*</b>										
● 16th Street Bus Priority	\$6 million	2021	☑	☑		☑	☑	☑		
● DC Dedicated Bike Lanes	\$1.35 million	2016	☑	☑		☑	☑			
△ DC Streetcar	\$438 million	2022	☑			☑	☑	☑		
● VRE: Haymarket Extension	\$433 million	2022	☑	☑	☑	☑	☑	☑		
● Crystal City Transitway	\$24 million	2023	☑	☑		☑	☑	☑	☑	
● I-395 Express Lanes	\$220 million	2019	☑	☑	☑	☑			☑	☑
△ I-66 Inside the Beltway	\$375 million	2017, 2040	☑	☑	☑	☑		☑	☑	☑
△ I-66 Outside the Beltway	\$2-3 billion	2021, 2040	☑	☑	☑	☑	☑	☑	☑	☑
△ VA 28 Widening and HOV	\$100 million	2025, 2040				☑	☑		☑	☑
<b>OTHER PROJECTS</b>										
● VA Route 643 Extended	\$50 million	2020	☑	☑	☑	☑	☑	☑	☑	☑
● VA Route 645 Extended	\$44 million	2020	☑		☑	☑	☑	☑	☑	☑
● Riverside Parkway	\$15 million	2018	☑	☑	☑	☑	☑	☑	☑	☑
● VA 7 at Battlefield Parkway	\$58 million	2022	☑	☑	☑	☑	☑	☑	☑	☑

**Federal Planning Factors**

- Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the **safety** of the transportation system for all motorized and non-motorized users.
- Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
- Increase accessibility and mobility of **people**.
- Increase accessibility and mobility of **freight**.
- 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.
- Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
- Promote efficient system **management and operation**.
- Emphasize the **preservation** of the existing transportation system.

\* Major projects are defined as changes to interstates, major arterials, and expressways or freeways with at-grade intersections, as well as dedicated transit facilities.

● New project     △ Change to project already in the CLRP

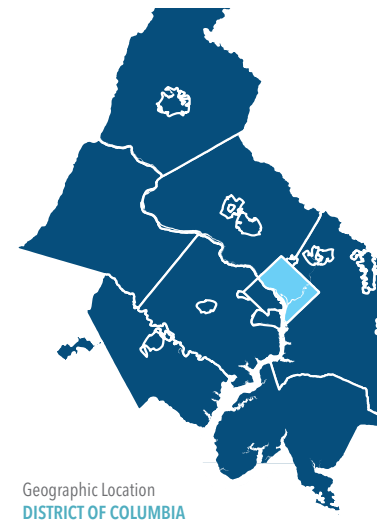
# 16TH STREET BUS PRIORITY

From H Street NW to Arkansas Avenue NW

**PROPOSED  
MAJOR ADDITION**  
2016 CLRP AMENDMENT

## Basic Project Information

Project Length..... **2.7 miles**  
 Anticipated Completion..... **2021**  
 Estimated Cost of Construction..... **\$6 million**  
 Submitting Agency..... **District of Columbia DOT**  
 Anticipated Funding Sources.....  
 **Federal**    State    Local    Private    Bonds    Other  
 CLRP ID..... **3522**



## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

This project will convert general purpose lanes on 16th Street NW into peak-period, peak-direction bus-only lanes from Arkansas Avenue to H Street, and implement a new reversible center lane from W Street to O Street and K Street to H Street. The project will also improve bus stops in the corridor, including installation of additional shelters, creation of additional waiting areas, and installation of off-board fare payment kiosks, as well as pedestrian improvements, including crosswalks and ADA ramps.

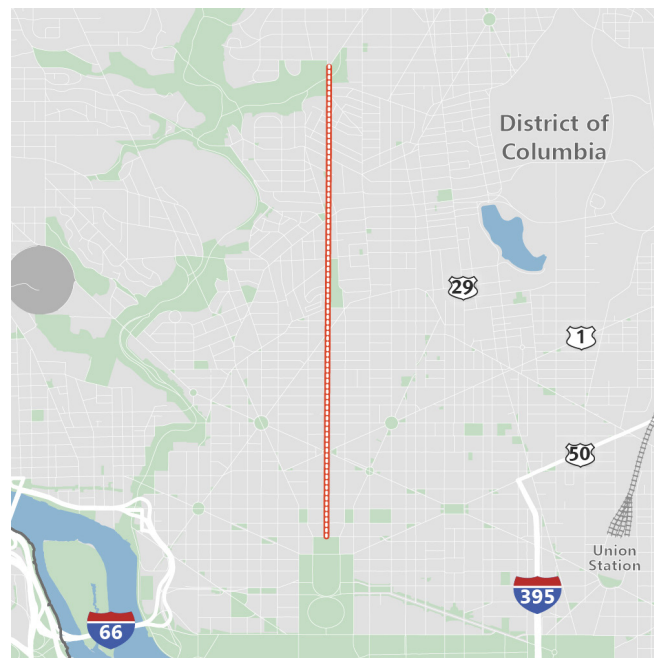
## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

- Move DC**
- 16th Street Transit Priority Study**

See official CLRP Project Description Form for more information about this project, or visit the project website at:

<http://ddot.dc.gov/page/16th-street-nw-transit-priority-planning-study>



## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

## How this project supports or advances goals in the Regional Transportation Priorities Plan

By providing reliable express bus service for nearly three miles in the congested 16th Street Corridor, this project will expand travel options (Goal 1) and improve connections between Activity Centers and circulation within them

(Goal 2). The project also enhances system efficiencies (Goal 4) by reducing transit travel times without expanding capacity, supports emissions reductions by reducing congestion (Goal 5), and improves safety (Goal 4).

### GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)     Carpool/HOV
- Metrorail     Commuter Rail     Streetcar/Light Rail
- BRT     Express/Commuter Bus     Metrobus     Local Bus
- Bicycling     Walking     Other
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

### GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS

- Begins or ends in an Activity Center
- Connects two or more Activity Centers
- Promotes non-auto travel within one or more Activity Centers

### GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY

- Contributes to enhanced system maintenance, preservation, or safety

### GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

### GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT

Expected to contribute to reductions in emissions of:

- Criteria Pollutants (NOx, VOCs, PM2.5)     Greenhouse Gases

### GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck     Local Delivery     Rail     Air

Enhances, supports, or promotes the following passenger carrier modes:

- Air     Amtrak Intercity Passenger Rail     Intercity Bus

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLR P:

- Support Economic Vitality
- Increase Safety for All Users
  - Support Homeland and Personal Security
- Increase Accessibility and Mobility of People and/or Freight
- Protect and Enhance the Environment
- Enhance Integration and Connectivity
- Promote Efficient System Management and Operation
  - Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLR P Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLR P.

*The information on this form was last updated on February 8, 2016.*



National Capital Region  
**Transportation Planning Board**

## Comment on this project or the 2016 CLR P Amendment

### • February 11–March 12, 2016

Comment on projects before they are included in the federally required Air Quality Conformity Analysis.



[www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment)



[TPBcomment@mwcog.org](mailto:TPBcomment@mwcog.org)



(202) 962-3262



777 North Capitol Street NE, Suite 300  
Washington DC 20002



At the beginning of the monthly TPB meeting

### • October 13–November 12, 2016

Comment on projects and any other aspect of the draft 2016 CLR P Amendment before final TPB adoption.

# DC DEDICATED BICYCLE LANE NETWORK

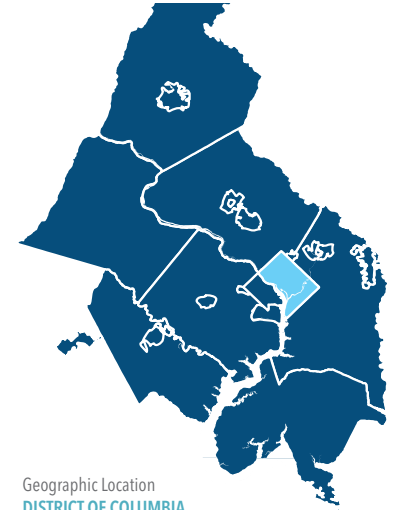
Multiple Street Segments Throughout City

**PROPOSED MAJOR ADDITION**  
2016 CLRP AMENDMENT

## Basic Project Information

Project Length..... **3.9 miles**  
 Anticipated Completion..... **2016, 2017**  
 Estimated Cost of Construction..... **\$1.35 million**  
 Submitting Agency..... **District of Columbia DOT**  
 Anticipated Funding Sources.....  
 Federal  State  **Local**  Private  Bonds  Other  
 CLRP ID..... **1171**

**HIGHWAY**  
**TRANSIT**  
**BICYCLE OR PEDESTRIAN**



## NOW AVAILABLE FOR COMMENT

February 11–March 12, 2016

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

This project will expand the District of Columbia’s dedicated bicycle lane network by removing one or more travel lanes for motor vehicles on the following road segments:

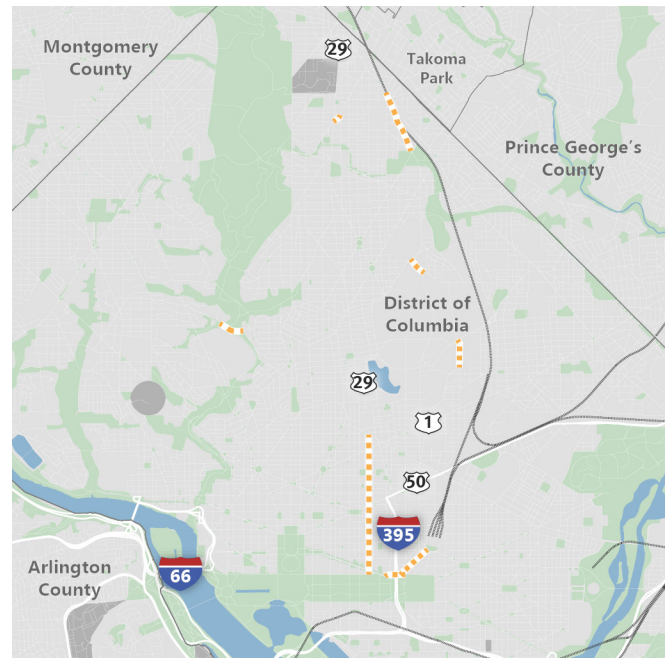
- **4th St NE**, from Lincoln Rd to Harewood Rd
- **Blair Rd NW**, from Peabody St to Aspen St
- **Constitution Ave NW**, from 1st St to Pennsylvania Ave
- **Eastern Downtown Study**, alternatives on 5th, 6th or 9th St. NW
- **Harewood Rd NW**, from Rock Creek Church Rd to North Capitol St
- **Klingle Rd NW**, from Adams Mill Rd to Porter St
- **Louisiana Ave NW**, from Columbus Circle to Constitution Ave NW
- **Piney Branch Rd NW**, from Georgia Ave to Underwood St

## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

- MoveDC**
- Eastern Downtown Protected Bike Lane Study**

See official CLRP Project Description Form for more information about this project.



## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

## How this project supports or advances goals in the Regional Transportation Priorities Plan

The viability of bicycling as a travel mode—representing an expansion of transportation options (**Goal 1**)—will be advanced with the implementation of nearly four miles of new bike lanes in the District. The project is particularly supportive of the Priorities Plan’s

call for improved non-motorized circulation within Activity Centers (**Goal 2**) to make bicycle travel more efficient and safer (**Goals 3 and 4**). The project further supports emissions reductions (**Goal 5**).

### **GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS**

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)     Carpool/HOV
- Metrorail     Commuter Rail     Streetcar/Light Rail
- BRT     Express/Commuter Bus     Metrobus     Local Bus
- Bicycling**     Walking     Other
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)**

### **GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS**

- Begins or ends in an Activity Center**
- Connects two or more Activity Centers**
- Promotes non-auto travel within one or more Activity Centers**

### **GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY**

- Contributes to enhanced system maintenance, preservation, or safety**

### **GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY**

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists**

### **GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT**

Expected to contribute to reductions in emissions of:

- Criteria Pollutants (NOx, VOCs, PM2.5)**     **Greenhouse Gases**

### **GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE**

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck     Local Delivery     Rail     Air

Enhances, supports, or promotes the following passenger carrier modes:

- Air     Amtrak Intercity Passenger Rail     Intercity Bus

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRP:

- Support Economic Vitality**
- Increase Safety for All Users**
  - Support Homeland and Personal Security
- Increase Accessibility and Mobility of People and/or Freight**
- Protect and Enhance the Environment**
- Enhance Integration and Connectivity**
  - Promote Efficient System Management and Operation
  - Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable**—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRP.

*The information on this form was last updated on February 4, 2016.*



National Capital Region  
**Transportation Planning Board**

## Comment on this project or the 2016 CLRP Amendment

### • **February 11–March 12, 2016**

Comment on projects before they are included in the federally required Air Quality Conformity Analysis.



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At the beginning of the monthly TPB meeting

### • **October 13–November 12, 2016**

Comment on projects and any other aspect of the draft 2016 CLRP Amendment before final TPB adoption.

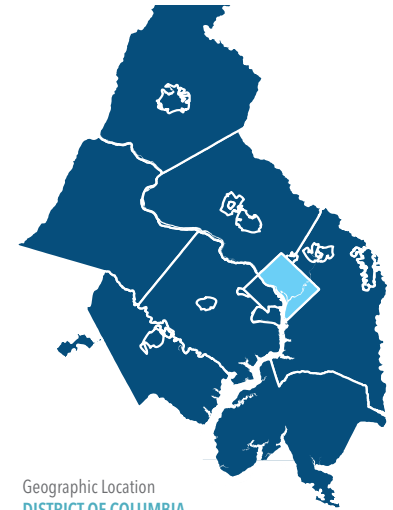
# DC STREETCAR: UNION STATION TO GEORGETOWN

Primarily Along the K Street NW Corridor

**PROPOSED MAJOR CHANGE**  
2016 CLRPP AMENDMENT

## Basic Project Information

Project Length..... **3.5 miles**  
 Anticipated Completion..... **2022**  
 Estimated Cost of Construction ..... **\$348 million**  
 Submitting Agency..... **District of Columbia DOT**  
 Anticipated Funding Sources.....  
 **Federal**    State    **Local**    Private    Bonds    Other  
 CLRPP ID ..... **3081**



## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

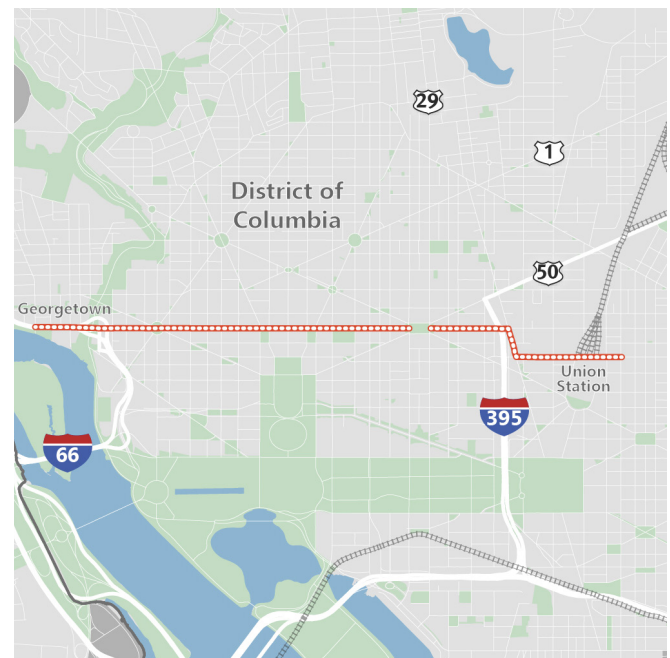
This project will extend the H Street NE streetcar line from Union Station to Georgetown, mainly along the K Street NW corridor. The project was added to the CLRPP in 2014. In this proposed major change, the District Department of Transportation (DDOT) has indicated that travel lanes in each direction on H Street and segments of K Street would be removed and new lanes on New Jersey Avenue and other segments of K Street would be added in order to allow the streetcar to run on an exclusive transitway.

## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

- 2014 Constrained Long-Range Transportation Plan (CLRPP)**
- moveDC**
- Final Alternative Analysis Study Report**

See official CLRPP Project Description Form for more information about this project, or visit the project website at: [www.unionstationtogeorgetown.com](http://www.unionstationtogeorgetown.com)



## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

## How this project supports or advances goals in the Regional Transportation Priorities Plan

This 3.5-mile streetcar line will provide a new express travel option (**Goal 1**) and support connections between key Activity Centers (**Goal 2**), including NoMa, Downtown DC, and Georgetown. The project will increase access to Union Station, supporting commuter rail and intercity rail and bus (**Goal 6**). And by

reducing driving and congestion, the project aims to support emissions reductions (**Goal 5**). The Priorities Plan supported street-level transit systems, like streetcars, in jurisdictions that have determined them to be cost-effective and important for mobility, accessibility, and community development.

### **GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS**

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)     Carpool/HOV
- Metrorail                       **Commuter Rail**                       **Streetcar/Light Rail**
- BRT                               Express/Commuter Bus                       Metrobus                       Local Bus
- Bicycling                       Walking                       Other
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

### **GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS**

- Begins or ends in an Activity Center**
- Connects two or more Activity Centers**
- Promotes non-auto travel within one or more Activity Centers**

### **GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY**

- Contributes to enhanced system maintenance, preservation, or safety

### **GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY**

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

### **GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT**

Expected to contribute to reductions in emissions of:

- Criteria Pollutants (NOx, VOCs, PM2.5)**     **Greenhouse Gases**

### **GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE**

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck     Local Delivery     Rail     Air

Enhances, supports, or promotes the following passenger carrier modes:

- Air     **Amtrak Intercity Passenger Rail**     **Intercity Bus**

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRP:

- Support Economic Vitality**
  - Increase Safety for All Users
  - Support Homeland and Personal Security
- Increase Accessibility and Mobility of People and/or Freight**
- Protect and Enhance the Environment**
- Enhance Integration and Connectivity**
- Promote Efficient System Management and Operation**
  - Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable**—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRP.

*The information on this form was last updated on February 4, 2016.*



National Capital Region  
**Transportation Planning Board**

## Comment on this project or the 2016 CLRP Amendment

### • **February 11–March 12, 2016**

Comment on projects before they are included in the federally required Air Quality Conformity Analysis.



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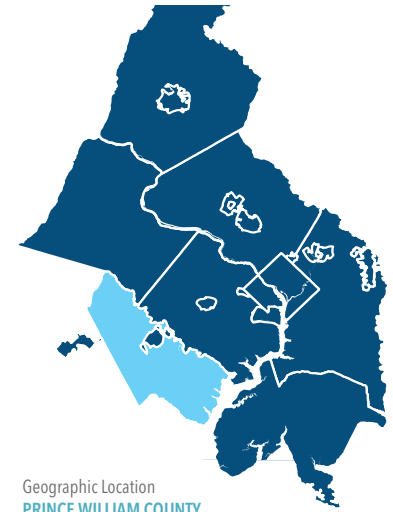
# VRE HAYMARKET EXTENSION

From Manassas VRE Station to Gainesville/Haymarket

**PROPOSED  
MAJOR ADDITION**  
2016 CLRP AMENDMENT

## Basic Project Information

Project Length..... **11 miles**  
 Anticipated Completion..... **2022**  
 Estimated Cost of Construction ..... **\$433 million**  
 Submitting Agency..... **Virginia DOT**  
 Anticipated Funding Sources.....  
 **Federal**  **State**  **Local**  **Private**  Bonds  **Other**  
 CLRP ID ..... **2420**



## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

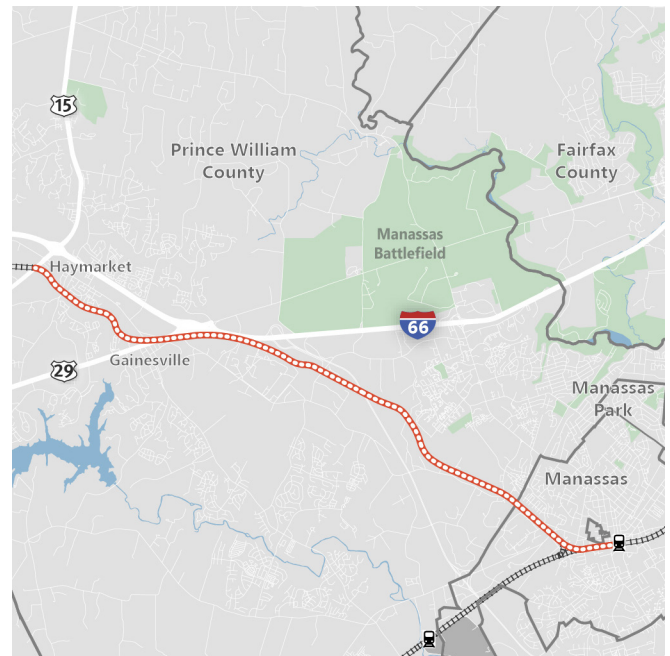
This project will extend the Virginia Railway Express (VRE) Manassas Line by approximately 11 miles to Gainesville and Haymarket. The project includes up to three new stations with platforms, bicycle and pedestrian access, and park-and-ride lots. The project also includes the purchase of additional railcars, expansion of equipment storage and yard facilities, widening of existing right-of-way, and real-time information on parking availability and train arrival. An alternatives analysis and environmental impact study are currently underway.

## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

- Prince William County Comprehensive Plan Transportation Element**
- Town of Haymarket Comprehensive Plan**
- City of Manassas Comprehensive Plan**
- NVTA TransAction 2040 Project List**

See official CLRP Project Description Form for more information about this project, or visit the project website at: [www.vre.org/ghx](http://www.vre.org/ghx)



## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.



## How this project supports or advances goals in the Regional Transportation Priorities Plan

The 11-mile Manassas Line extension will offer VRE services to more residents, eliminate crowding and serve future markets – key components that will expand transportation options (Goal 1). The project will also connect Activity Centers (Goal 2), which are focal points

for economic opportunity and growth. And by reducing congestion and driving, the extension will support emissions reductions (Goal 5) and boost efficient freight movement on both roads and rail (Goal 6).

### **GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS**

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)     **Carpool/HOV**
- Metrorail     **Commuter Rail**     Streetcar/Light Rail
- BRT     Express/Commuter Bus     Metrobus     Local Bus
- Bicycling**     **Walking**     **Other**
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)**

### **GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS**

- Begins or ends in an Activity Center**
- Connects two or more Activity Centers**
- Promotes non-auto travel within one or more Activity Centers

### **GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY**

- Contributes to enhanced system maintenance, preservation, or safety

### **GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY**

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists**

### **GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT**

Expected to contribute to reductions in emissions of:

- Criteria Pollutants (NOx, VOCs, PM2.5)**     **Greenhouse Gases**

### **GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE**

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck**     Local Delivery     **Rail**     Air

Enhances, supports, or promotes the following passenger carrier modes:

- Air     Amtrak Intercity Passenger Rail     Intercity Bus

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRP:

- Support Economic Vitality**
- Increase Safety for All Users**
- Support Homeland and Personal Security**
- Increase Accessibility and Mobility of People and/or Freight**
- Protect and Enhance the Environment**
- Enhance Integration and Connectivity**
- Promote Efficient System Management and Operation
- Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable**—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRP.

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National Capital Region  
**Transportation Planning Board**

## Comment on this project or the 2016 CLRP Amendment

### • **February 11–March 12, 2016**

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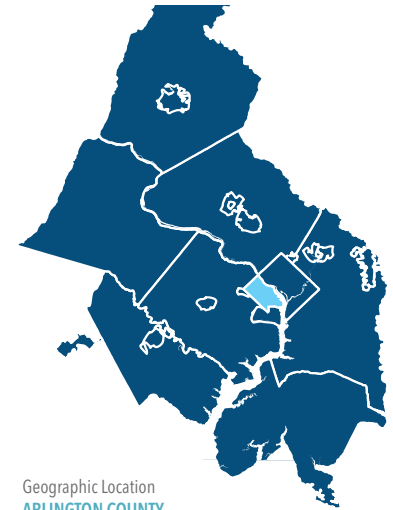
# CRYSTAL CITY TRANSITWAY: NORTHERN EXTENSION

From Crystal City Metro Station to Pentagon City Metro Station

**PROPOSED  
MAJOR ADDITION**  
2016 CLRP AMENDMENT

## Basic Project Information

Project Length..... **1 mile**  
 Anticipated Completion..... **2023**  
 Estimated Cost of Construction ..... **\$24 million**  
 Submitting Agency.....**Virginia DOT**  
 Anticipated Funding Sources.....  
 **Federal**  **State**  **Local**  **Private**  Bonds  **Other**  
 CLRP ID ..... **3521**



## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

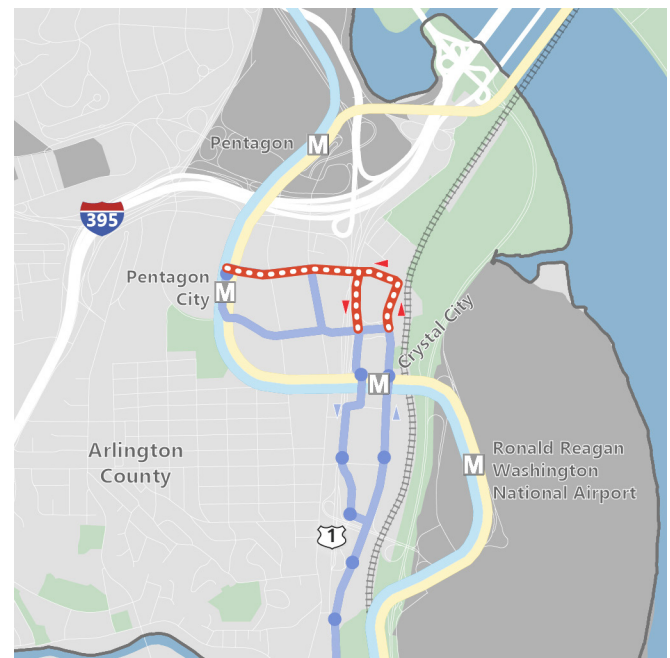
This project will extend the existing Metroway bus rapid transit (BRT) line from the Crystal City Metro Station north to the Pentagon City Metro Station. The extension will follow Clark Street and Crystal Drive as far as 12th Street South, at which point it will turn left and continue to South Hayes Street. The project includes construction of three new BRT stations along the route, as well as construction of a new one-block segment of 12th Street South.

## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

**Pending**

See official CLRP Project Description Form for more information about this project, or visit the project website at: [www.metrowayva.com](http://www.metrowayva.com)



## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

## How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan specifically called for cost-effective transit alternatives like bus rapid transit (BRT) that approach the speed, frequency, and reliability of heavy rail, but at a fraction of the cost. This BRT extension will expand transportation choice (Goal 1) by providing a new express transit option and improving the accessibility of non-motorized

modes and other transit. By adding dedicated transit lanes and a new street segment, the project will connect Activity Centers and promote circulation within them (Goal 2). It will also maximize use of existing infrastructure without adding new capacity (Goal 4), while reducing emissions (Goal 5) and supporting local delivery freight (Goal 6).

### GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)     Carpool/HOV
- Metrorail     Commuter Rail     Streetcar/Light Rail
- BRT     Express/Commuter Bus     Metrobus     Local Bus
- Bicycling     Walking     Other
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

### GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS

- Begins or ends in an Activity Center
- Connects two or more Activity Centers
- Promotes non-auto travel within one or more Activity Centers

### GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY

- Contributes to enhanced system maintenance, preservation, or safety

### GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

### GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT

Expected to contribute to reductions in emissions of:

- Criteria Pollutants (NOx, VOCs, PM2.5)     Greenhouse Gases

### GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck     Local Delivery     Rail     Air

Enhances, supports, or promotes the following passenger carrier modes:

- Air     Amtrak Intercity Passenger Rail     Intercity Bus

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRP:

- Support Economic Vitality**
- Increase Safety for All Users**
  - Support Homeland and Personal Security
- Increase Accessibility and Mobility of People and/or Freight**
- Protect and Enhance the Environment**
- Enhance Integration and Connectivity**
- Promote Efficient System Management and Operation**
  - Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable**—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available**—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRP.

*The information on this form was last updated on February 4, 2016.*



National Capital Region  
**Transportation Planning Board**

## Comment on this project or the 2016 CLRP Amendment

### • February 11–March 12, 2016

Comment on projects before they are included in the federally required Air Quality Conformity Analysis.



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# I-395 EXPRESS LANES

Inside the Capital Beltway (Turkeycock Run to vicinity of Eads Street)

**PROPOSED  
MAJOR ADDITION**  
2016 CLRP AMENDMENT

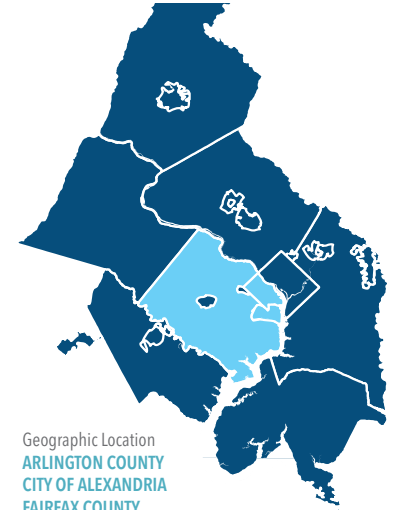
## Basic Project Information

Project Length..... **8 miles**  
 Anticipated Completion..... **2019**  
 Estimated Cost of Construction ..... **\$220 million**  
 Submitting Agency..... **Virginia DOT**  
 Anticipated Funding Sources.....  
 Federal  State  Local  **Private**  Bonds  Other  
 CLRP ID ..... **3525**

**HIGHWAY**

**TRANSIT**

**BICYCLE OR PEDESTRIAN**



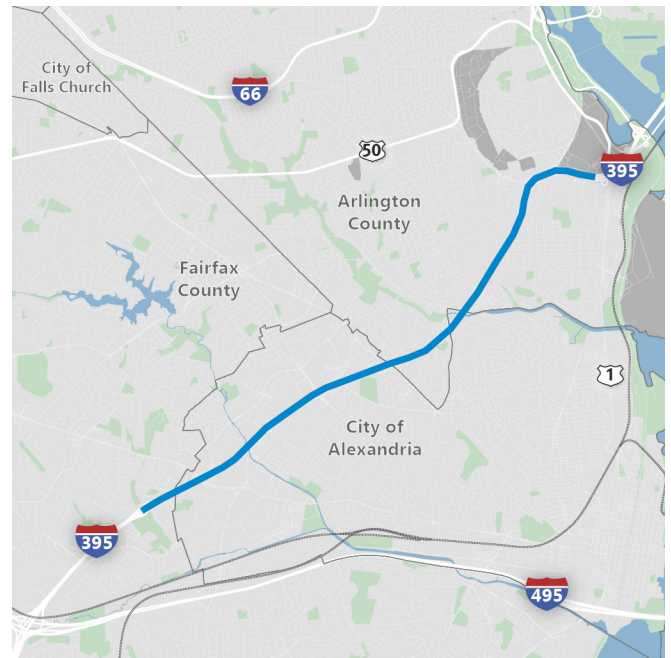
## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

This project will convert and reconfigure the two existing reversible high-occupancy vehicle (HOV) lanes on I-395 inside the Capital Beltway to a three-lane, reversible high-occupancy/toll (HOT) facility (“Express Lanes”). The project will provide a seamless connection from the I-95 Express Lanes to the vicinity of Eads Street in Arlington. This conversion was originally added to the CLRP in 2007 but was removed in 2011. The 2014 opening of the I-95 Express Lanes has led to renewed interest in this project. Travel demand management and enhanced transit services are currently being developed and are expected in the next update of the CLRP. Toll revenue will be used in part to fund transit services.



## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

**Pending**

See official CLRP Project Description Form for more information about this project.

## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

## How this project supports or advances goals in the Regional Transportation Priorities Plan

The Priorities Plan called upon the region to use tolling and pricing mechanisms to manage road congestion and raise revenue, and this project adds another key component to the region's express lane network. The I-395 Express Lanes will expand transportation

choices (**Goal 1**) by providing free-flowing travel lanes to solo drivers who pay tolls, carpools, and express bus services. The 8-mile project connects several Activity Centers, which are the region's primary engines for economic growth and opportunity (**Goal 2**).

### **GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS**

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)**     **Carpool/HOV**
- Metrorail                       Commuter Rail                       Streetcar/Light Rail
- BRT**                                       **Express/Commuter Bus**                       **Metrobus**                       **Local Bus**
- Bicycling                       Walking                       Other
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)**

### **GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS**

- Begins or ends in an Activity Center**
- Connects two or more Activity Centers**
- Promotes non-auto travel within one or more Activity Centers**

### **GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY**

- Contributes to enhanced system maintenance, preservation, or safety**

### **GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY**

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

### **GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT**

- Expected to contribute to reductions in emissions of:
- Criteria Pollutants (NO<sub>x</sub>, VOCs, PM<sub>2.5</sub>)     Greenhouse Gases

### **GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE**

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck**     **Local Delivery**     Rail     Air

Enhances, supports, or promotes the following passenger carrier modes:

- Air     Amtrak Intercity Passenger Rail     **Intercity Bus**

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRP:

- Support Economic Vitality**
- Increase Safety for All Users**
- Support Homeland and Personal Security**
- Increase Accessibility and Mobility of People and/or Freight**
- Protect and Enhance the Environment
- Enhance Integration and Connectivity**
- Promote Efficient System Management and Operation**
- Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable**—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available**—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRP.

*The information on this form was last updated on February 4, 2016.*

## Comment on this project or the 2016 CLRP Amendment

### • **February 11–March 12, 2016**

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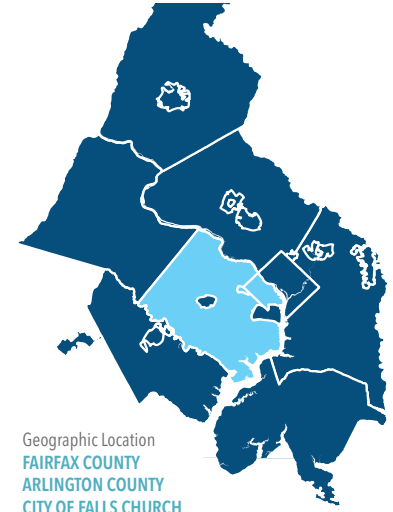
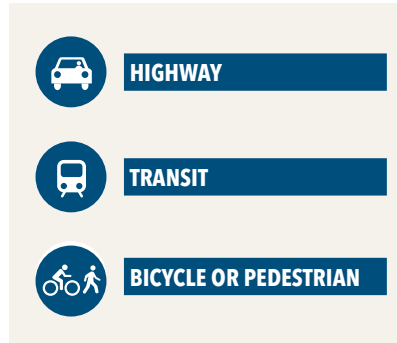
# I-66 MULTIMODAL IMPROVEMENTS

Inside the Capital Beltway

**PROPOSED MAJOR CHANGE**  
2016 CLRP AMENDMENT

## Basic Project Information

Project Length..... **10 miles**  
 Anticipated Completion.....**2017, 2020, 2040**  
 Estimated Cost of Construction.....**\$375 million**  
 Submitting Agency.....**Virginia DOT**  
 Anticipated Funding Sources.....  
 **Federal**  **State**  Local  Private  **Bonds**  **Other**  
 CLRP ID..... **3484**



## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

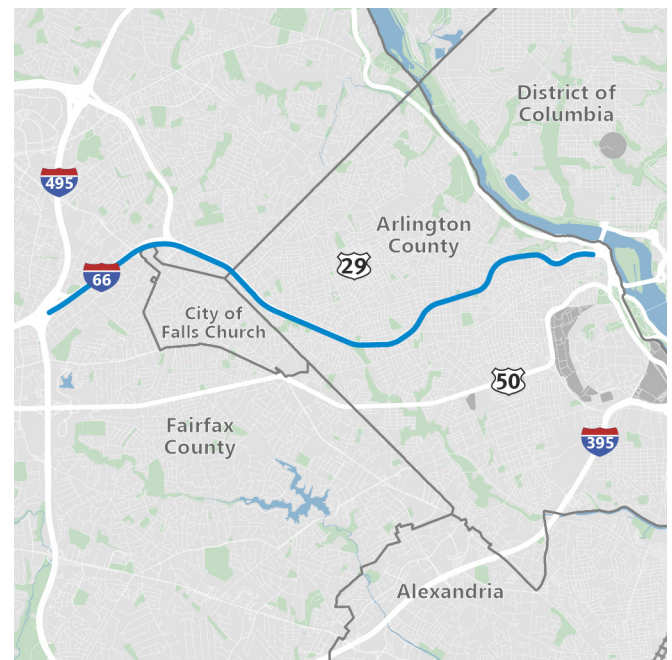
See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

This project will convert I-66 inside the Capital Beltway to high-occupancy/toll (HOT) lanes (“Express Lanes”) and widen certain segments (see schedule below). The project also includes enhanced bus service and numerous bicycle, pedestrian, and other multimodal improvements in the corridor.

- **In 2017:** Begin HOT-2+ during peak periods in peak direction
- **By 2020:** Widen EB I-66 from Dulles Toll Rd to Fairfax Dr (near Ballston)
- **In 2021:** Begin HOT-3+ during peak periods in peak direction
- **In 2040:** Expand HOT-3+ during peak periods to both directions
- **By 2040:** Widen WB I-66 from Sycamore St to Washington Blvd

This project was added to the CLRP in 2015. This proposed change alters the scope and timing of the tolling and lane widenings through 2040.



## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

- I-66 Multimodal Study Inside the Beltway**
- 2015 Constrained Long-Range Transportation Plan (CLRP) Amendment**

See official CLRP Project Description Form for more information about this project, or visit the project website at: [www.Transform66.org](http://www.Transform66.org)

## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

## How this project supports or advances goals in the Regional Transportation Priorities Plan

This project is designed to expand transportation choices by introducing a new travel option—Express Lanes—to the I-66 corridor while supporting other transportation modes (Goal 1), including carpooling, express buses, bicycling, and walking. The 10-mile project forms a key link in a network of recent and forthcoming priced-lane projects in the

region, which is consistent with the Priorities Plan’s call for the consideration of express toll facilities. It also supports the Priorities Plan strategy of making targeted roadway improvements that provide congestion relief for drivers in key locations. In addition to the first goal, the project supports aspects of all the other goals in the Priorities Plan.

### **GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS**

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)**     **Carpool/HOV**
- Metrail**                       **Commuter Rail**                       **Streetcar/Light Rail**
- BRT**                               **Express/Commuter Bus**                       **Metrobus**                       **Local Bus**
- Bicycling**                       **Walking**                               **Other**
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)**

### **GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS**

- Begins or ends in an Activity Center**
- Connects two or more Activity Centers**
- Promotes non-auto travel within one or more Activity Centers**

### **GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY**

- Contributes to enhanced system maintenance, preservation, or safety**

### **GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY**

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)**
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists**

### **GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT**

- Expected to contribute to reductions in emissions of:
- Criteria Pollutants (NOx, VOCs, PM2.5)**     **Greenhouse Gases**

### **GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE**

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck**     **Local Delivery**     **Rail**     **Air**

Enhances, supports, or promotes the following passenger carrier modes:

- Air**     **Amtrak Intercity Passenger Rail**     **Intercity Bus**

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRP:

- Support Economic Vitality**
- Increase Safety for All Users**
- Support Homeland and Personal Security**
- Increase Accessibility and Mobility of People and/or Freight**
- Protect and Enhance the Environment**
- Enhance Integration and Connectivity**
- Promote Efficient System Management and Operation**
- Emphasize System Preservation**

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)**
- Traffic operational improvements**
- Public transportation improvements**
- Intelligent Transportation Systems (ITS) technologies**
- Other congestion management strategies**
- Not applicable**—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available**—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRP.

*The information on this form was last updated on February 4, 2016.*



National Capital Region  
**Transportation Planning Board**

## Comment on this project or the 2016 CLRP Amendment

### • **February 11–March 12, 2016**

Comment on projects before they are included in the federally required Air Quality Conformity Analysis.



[www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment)



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Comment on projects and any other aspect of the draft 2016 CLRP Amendment before final TPB adoption.


# I-66 CORRIDOR IMPROVEMENTS

Outside the Capital Beltway

**PROPOSED MAJOR CHANGE**  
2016 CLRPP AMENDMENT

## Basic Project Information

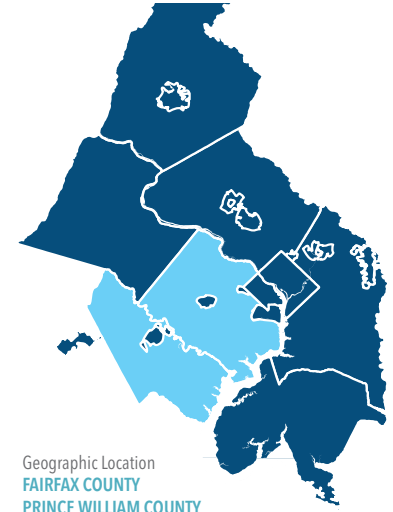
Project Length..... **26 miles**  
 Anticipated Completion..... **2021, 2040**  
 Estimated Cost of Construction ..... **\$2-3 billion**  
 Submitting Agency..... **Virginia DOT**  
 Anticipated Funding Sources.....  
 **Federal**  **State**  **Local**  **Private**  **Bonds**  **Other**  
 CLRPP ID ..... **3448**



**HIGHWAY**

**TRANSIT**

**BICYCLE OR PEDESTRIAN**



## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

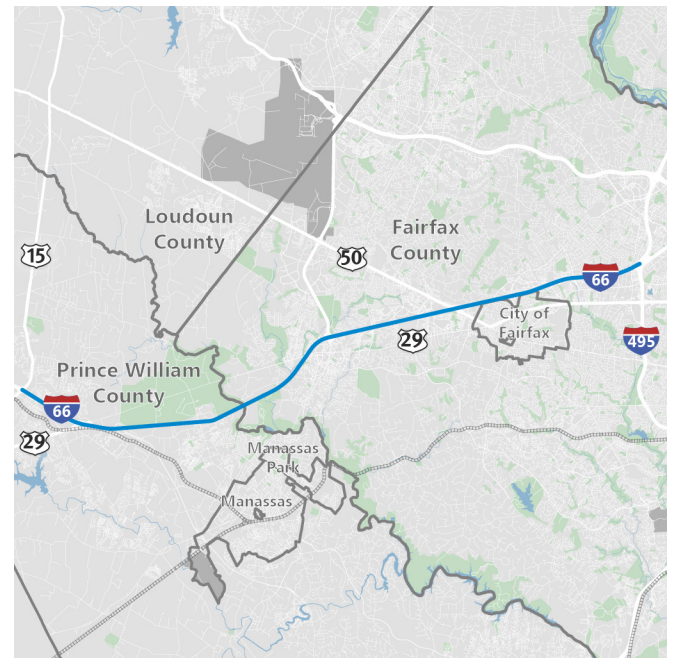
This project will add two new high-occupancy/toll (HOT) lanes (“Express Lanes”) in either direction to I-66 outside the Capital Beltway. One lane will be added new while the other will come from converting the existing high-occupancy vehicle (HOV) lane. Vehicles with three or more occupants (HOV-3+) will get to use the lanes for free while those not meeting the occupancy requirement will pay a toll. The project also includes new park-and-ride lots and enhanced express bus service in the corridor. The project was added to the CLRPP in 2015. This proposed major change includes various ramp movement modifications, but no major policy or facility changes.

## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

- 2015 Constrained Long-Range Transportation Plan (CLRPP) Amendment**

See official CLRPP Project Description Form for more information about this project, or visit the project website at: [www.Transform66.org](http://www.Transform66.org)



## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.



## How this project supports or advances goals in the Regional Transportation Priorities Plan

The extension of Express Lanes on I-66 outside the Capital Beltway supports a variety of transportation options by providing congestion-free travel for solo drivers who pay tolls, as well as for carpoolers and express bus services (Goal 1). The 26-mile project is consistent with the Priorities Plan's call for the use of pricing mechanisms to manage road

congestion and raise revenue, especially when building new lanes or roads—that is, when expanding capacity. The project forms a key link in an emerging network of recent and forthcoming priced-lane projects. It supports aspects of all the Priorities Plan goals, ranging from connecting Activity Centers to enhancing safety to reducing emissions.

### GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)     Carpool/HOV
- Metrorail                       Commuter Rail                       Streetcar/Light Rail
- BRT                                   Express/Commuter Bus               Metrobus                       Local Bus
- Bicycling                       Walking                                   Other
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

### GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS

- Begins or ends in an Activity Center
- Connects two or more Activity Centers
- Promotes non-auto travel within one or more Activity Centers

### GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY

- Contributes to enhanced system maintenance, preservation, or safety

### GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

### GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT

Expected to contribute to reductions in emissions of:

- Criteria Pollutants (NOx, VOCs, PM2.5)     Greenhouse Gases

### GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck     Local Delivery     Rail     Air

Enhances, supports, or promotes the following passenger carrier modes:

- Air     Amtrak Intercity Passenger Rail     Intercity Bus

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRP:

- Support Economic Vitality
- Increase Safety for All Users
- Support Homeland and Personal Security
- Increase Accessibility and Mobility of People and/or Freight
- Protect and Enhance the Environment
- Enhance Integration and Connectivity
- Promote Efficient System Management and Operation
- Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRP.

*The information on this form was last updated on February 4, 2016.*



National Capital Region  
**Transportation Planning Board**

## Comment on this project or the 2016 CLRP Amendment

### • February 11–March 12, 2016

Comment on projects before they are included in the federally required Air Quality Conformity Analysis.



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# VA 28 HOV AND WIDENING

From I-66 to the Dulles Toll Road

**PROPOSED  
MAJOR CHANGE**  
2016 CLRPP AMENDMENT

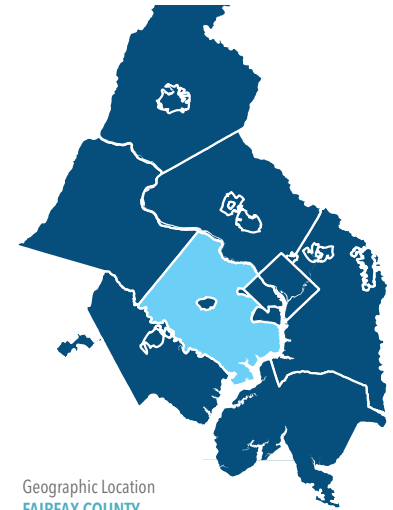
## Basic Project Information

Project Length.....**8 miles**  
 Anticipated Completion.....**2021, 2025, 2040**  
 Estimated Cost of Construction.....**\$100 million**  
 Submitting Agencies.....**Fairfax County, Virginia DOT**  
 Anticipated Funding Sources.....  
 Federal  **State**  **Local**  Private  Bonds  **Other**  
 CLRPP ID..... **1734**

**HIGHWAY**

**TRANSIT**

**BICYCLE OR PEDESTRIAN**



## NOW AVAILABLE FOR COMMENT

**February 11–March 12, 2016**

See reverse for details, or visit [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment).

## Project Description

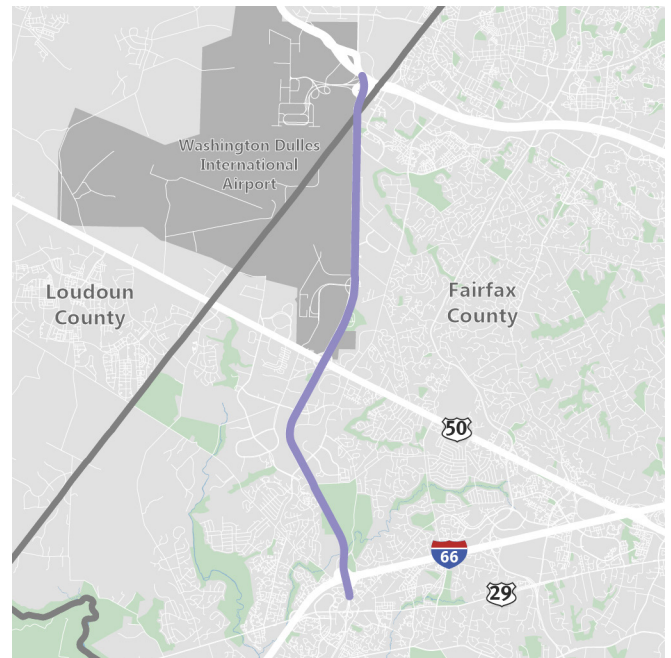
This project will create high-occupancy vehicle (HOV) lanes on VA Route 28 (Sully Rd) between I-66 and the Dulles Toll Road by 2040 by converting one general purpose lane in either direction to HOV. The project will also add a new auxiliary lane in either direction on a 2-mile stretch between I-66 and Westfields Blvd by 2021. This project is part of a larger project to widen VA 28 from 6 to 8 lanes between I-66 and VA Route 7 which has been in the CLRPP since 2004. The addition of auxiliary lanes between I-66 and Westfields Blvd will bring the total number of lanes on that segment to 10.

## Existing Support for this Project

This project has undergone review at the local, state, and/or sub-regional levels and is included in the following approved plans:

**Fairfax County Transportation Plan**

See official CLRPP Project Description Form for more information about this project, or visit the project website at: [www.28freeway.com](http://www.28freeway.com)



## Goals in the Regional Transportation Priorities Plan that this project supports or advances



### GOAL 1

Provide a Range of Transportation Options



### GOAL 2

Promote Dynamic Activity Centers



### GOAL 3

Ensure System Maintenance, Preservation, and Safety



### GOAL 4

Maximize Operational Effectiveness and Safety



### GOAL 5

Protect and Enhance the Natural Environment



### GOAL 6

Support Interregional and International Travel and Commerce

See reverse side for more information about how this project advances regional goals and addresses certain federal planning requirements.

## How this project supports or advances goals in the Regional Transportation Priorities Plan

This 8-mile road widening will connect four Activity Centers (Goal 2) along a heavily congested circumferential corridor. TPB and COG policies have long emphasized the importance of improving transportation connections between Activity Centers, which are anticipated to attract 75 percent of the region's new jobs over the next 25 years.

The VA 28 project will also expand transportation options in the corridor (Goal 1) by providing carpool lanes in each direction by 2040. In addition, the project will improve access to Dulles Airport, supporting interregional and international travel and commerce. (Goal 6).

### GOAL 1: PROVIDE A RANGE OF TRANSPORTATION OPTIONS

Provides, enhances, supports, or promotes the following travel mode options:

- Single Driver (SOV)**     **Carpool/HOV**
- Metrorail                       Commuter Rail                       Streetcar/Light Rail
- BRT                                 Express/Commuter Bus             Metrobus                       Local Bus
- Bicycling                         Walking                               Other
- Improves accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low incomes, and/or limited English proficiency)

### GOAL 2: PROMOTE DYNAMIC ACTIVITY CENTERS

- Begins or ends in an Activity Center**
- Connects two or more Activity Centers**
- Promotes non-auto travel within one or more Activity Centers

### GOAL 3: ENSURE SYSTEM MAINTENANCE, PRESERVATION, AND SAFETY

- Contributes to enhanced system maintenance, preservation, or safety

### GOAL 4: MAXIMIZE OPERATIONAL EFFECTIVENESS AND SAFETY

- Reduces travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)
- Enhances safety for motorists, transit users, pedestrians, and/or bicyclists

### GOAL 5: PROTECT AND ENHANCE THE NATURAL ENVIRONMENT

- Expected to contribute to reductions in emissions of:
- Criteria Pollutants (NOx, VOCs, PM2.5)     Greenhouse Gases

### GOAL 6: SUPPORT INTERREGIONAL AND INTERNATIONAL TRAVEL AND COMMERCE

Enhances, supports, or promotes the following freight carrier modes:

- Long-haul Truck**     **Local Delivery**     Rail     **Air**

Enhances, supports, or promotes the following passenger carrier modes:

- Air**     Amtrak Intercity Passenger Rail     Intercity Bus

## Addressing Federal Planning Factors

This project addresses the following federal planning factors designed to guide development of the CLRPP:

- Support Economic Vitality
- Increase Safety for All Users
- Support Homeland and Personal Security
- Increase Accessibility and Mobility of People and/or Freight**
- Protect and Enhance the Environment
- Enhance Integration and Connectivity**
- Promote Efficient System Management and Operation**
- Emphasize System Preservation

## Consideration of Alternatives to Adding SOV Capacity

The agency or agencies submitting this project considered the following congestion-mitigation measures before proposing to significantly increase capacity for single-occupant vehicles (SOVs):

- Transportation demand management measures (including growth management and congestion pricing)
- Traffic operational improvements
- Public transportation improvements
- Intelligent Transportation Systems (ITS) technologies
- Other congestion management strategies
- Not applicable—This project does not increase SOV capacity or is exempt from consideration of alternatives.
- Not yet available**—Agencies have until May 6, 2016 to complete the required Congestion Management Documentation.

See the CLRPP Congestion Management Documentation Form for more information.

Information about how projects advance regional goals and address federal planning requirements is self-reported by the agencies submitting projects for inclusion in the CLRPP.

*The information on this form was last updated on February 11, 2016.*




National Capital Region  
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## Comment on this project or the 2016 CLRPP Amendment

### • February 11–March 12, 2016


Comment on projects before they are included in the federally required Air Quality Conformity Analysis.

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# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM



## **BASIC PROJECT INFORMATION**

1. Submitting Agency: District Department of Transportation
2. Secondary Agency: Policy, Planning and Sustainability Administration (PPSA)
3. Agency Project ID: PM0G6A
4. Project Type:  Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  Transit  CMAQ  
 ITS  Enhancement  Other  Federal Lands Highways Program  
 Human Service Transportation Coordination  TERMS
5. Category:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other
6. Project Name: *16<sup>th</sup> Street NW Transit Priority Implementation*

Prefix	Route	Name	Modifier
		16 <sup>th</sup> Street NW	
		H Street NW	
		Arkansas Avenue NW	

7. Facility:
8. From (at):
9. To:
10. Description: This project is the implementation of the recommended alternative from the 16<sup>th</sup> Street NW Transit Priority Planning Study. The corridor will be reconstructed as shown in the recommended alternative (attached). The reconstruction will add peak-hour peak-direction bus lanes and a fifth lane from W Street to O Street and K Street to H Street. The curb-to-curb street width is anticipated to remain unchanged. The existing center reversible lane will be extended the full length of the corridor. Improvements will be made at the bus stops, including installation of additional shelters, creation of additional waiting areas, and the installation of off-board fare payment kiosks. Pedestrian improvements will also be made, including installation of ADA ramps and the addition of several crosswalks, to improve safe access to the bus stops.
11. Projected Completion Year: 2021
12. Project Manager: Megan Kanagy
13. Project Manager E-Mail: [megan.kanagy@dc.gov](mailto:megan.kanagy@dc.gov)
14. Project Information URL: <http://ddot.dc.gov/page/16th-street-nw-transit-priority-planning-study>
15. Total Miles: *2.7 miles*
16. Schematic (file upload): *see attached*
17. State/Local Project Standing (file upload): A year-long planning study will be completed in early 2016.
18. Jurisdictions: *District of Columbia ANCs 1A, 1B, 1C, 1D, 2A, 2B, 2C, 2F, 4A, 4C*
19. Baseline Cost (in Thousands): \$6,000 cost estimate as of 01/20/2016
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

**Regional Policy Framework:** Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

# CLRP PROJECT DESCRIPTION FORM

## 22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

- |  |   |   |                                    |
|--|---|---|------------------------------------|
| <input type="checkbox"/> Single Driver | <input type="checkbox"/> Carpool/HOV          |   |                                    |
| <input type="checkbox"/> Metrorail     | <input type="checkbox"/> Commuter Rail        | <input type="checkbox"/> Streetcar/Light Rail |                                    |
| <input type="checkbox"/> BRT           | <input type="checkbox"/> Express/Commuter bus | <input checked="" type="checkbox"/> Metrobus  | <input type="checkbox"/> Local Bus |
| <input type="checkbox"/> Bicycling     | <input checked="" type="checkbox"/> Walking   | <input type="checkbox"/> Other                |                                    |

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

## 23. Promote Regional Activity Centers

Does this project begin or end in an Activity Center?

Does this project connect two or more Activity Centers?

Does this project promote non-auto travel within one or more Activity Centers?

## 24. Ensure System Maintenance, Preservation, and Safety

Does this project contribute to enhanced system maintenance, preservation, or safety?

## 25. Maximize Operational Effectiveness and Safety

Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

## 26. Protect and Enhance the Natural Environment

Is this project expected to contribute to reductions in emissions of criteria pollutants?

Is this project expected to contribute to reductions in emissions of greenhouse gases?

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

- Long-Haul Truck    Local Delivery    Rail    Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

- Air    Amtrak intercity passenger rail    Intercity bus

## 28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

## MAP-21 PLANNING FACTORS

29. Please identify any and all planning factors that are addressed by this project:

a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue?    Yes;  No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d.  Increase **accessibility and mobility** of people.

e.  Increase accessibility and mobility of **freight**.

f.  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.

g.  Enhance the **integration and connectivity** of the transportation system, across and between

# CLRP PROJECT DESCRIPTION FORM

modes, for people and freight.

- h.  Promote efficient system **management and operation**.
- i.  Emphasize the **preservation** of the existing transportation system.

## **ENVIRONMENTAL MITIGATION**

30. Have any potential mitigation activities been identified for this project?  Yes;  No
- a. If yes, what types of mitigation activities have been identified?
- Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;
  - Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## **CONGESTION MANAGEMENT INFORMATION**

31. Congested Conditions
- a. Do traffic congestion conditions necessitate the proposed project or program?  Yes;  No
  - b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring
  - c. If the congestion is on another facility, please identify it:
32. Capacity
- a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No
  - b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):
    - None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required
    - The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)
    - The number of lane-miles added to the highway system by the project totals less than one lane-mile
    - The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange
    - The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
    - The project consists of preliminary studies or engineering only, and is not funded for construction
    - The construction costs for the project are less than \$10 million.
  - c. If the project is not exempt and requires a Congestion Management Documentation Form, [click here to open a blank Congestion Management Documentation Form](#).



# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM



CLRP ID 1171

## **BASIC PROJECT INFORMATION**

1. Submitting Agency: **DDOT**
2. Secondary Agency:
3. Agency Project ID:
4. Project Type:  Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  Transit
5. Category:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other
6. Project Name: **Dedicated Bike Lanes, Citywide**
7. Facility: **See facilities and limits in description below**
10. Description: **Include an additional eight segments of the District of Columbia's Bike Lane Network as described below:**
  - **4<sup>th</sup> St. NE from Lincoln Rd. NE to Harewood Rd. NE**

This project will connect existing bike lanes south of Lincoln Rd and to the north on Harewood Rd. It will reduce roadway capacity from 4 lanes to 2 lanes plus a center turn lane. 0.27 mile, \$20,000
  - **Eastern Downtown Protected Bike Lane Study**

Design alternatives being considered in this study include 5th St NW, 6th street and 9th St NW. For the purposes of air quality conformity analysis, the project includes the maximum potential change in traffic conditions, which would reduce roadway capacity on 6th St. NW between Constitution Ave. and Massachusetts Ave NW through converting the existing roadway configuration from six general purpose travel lanes in the peak periods to four lanes and protected bicycle lanes. In the off-peak scenario, it would change from four general purpose travel lanes to two lanes and protected bicycle lanes. Between Massachusetts Ave. and Florida Ave. the project would reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes to two general purpose travel lanes, a center turn lane, and protected bicycle lanes. 1.6 miles, \$150,000
  - **Blair Rd. NW from Peabody St. NW to Aspen St. NW**

Reduce roadway capacity through converting the existing roadway configuration from three general purpose travel lanes (two northbound and one southbound) to two general purpose lanes (one in each direction) and a shared use trail. 0.73 mile, \$1 million
  - **Constitution Ave. NW from 1<sup>st</sup> St NW to Pennsylvania Ave. NW**

Reduce roadway capacity through converting the existing roadway configuration from six general purpose travel lanes and a center turn lane to four general purpose lanes, a center turn lane, and protected bicycle lanes. 0.23 mile, \$35,000
  - **Harewood Rd. NW from Rock Creek Church Rd. NW to North Capitol St.**

Harewood Road is currently one-way with two lanes. This project will reduce roadway capacity through the elimination of one lane to provide room for the addition of separated bicycle lanes. It will provide a bicycle connection between the communities along Rock Creek Church Road and the schools east of North Capitol Street. 0.2 mile, \$20,000
  - **Klingle Rd. NW from Adams Mill Rd. NW to Porter St. NW**

Klingle Road has four lanes separated by a crash-barrier-style median – two eastbound lanes, and two westbound lanes This project will reduce roadway capacity through the elimination of one lane in each direction to provide room for the addition of separated bicycle lanes on either side of the roadway. It will provide a bicycle connection between Mount Pleasant and the new Klingle Rd bicycle and pedestrian path under construction in Rock Creek Park. 0.31 mile, \$20,000
  - **Louisiana Ave. NW from Columbus Cir. NE/Massachusetts Ave. NE to Constitution Ave. NW**

Reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes and a center turn lane to three general purpose lanes, a center turn lane, and protected bicycle lanes. This lane would connect existing protected lanes on 1<sup>st</sup> Street NE and Pennsylvania Avenue NW. 0.42 mile, \$100,000
  - **Piney Branch Rd. NW from Georgia Ave. NW to Underwood St. NE**

This project will reduce roadway capacity through converting the existing roadway configuration from four general purpose travel lanes and a center turn lane to two general purpose lanes, a center turn lane, and bicycle lanes. 0.11 mile, \$5,000



# CLRP PROJECT DESCRIPTION FORM

11. Projected Completion Year: **2016**
12. Project Manager: **Mike Goodno**
13. Project Manager E-Mail: **mike.goodno@dc.gov**
14. Project Information URL:
15. Total Miles: **3.88**
16. Schematic (file upload):
17. State/Local Project Standing (file upload):
18. Jurisdictions: District of Columbia
19. Baseline Cost (in Thousands): **\$1,350** cost estimate as of MM/DD/YYYY
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

**Regional Policy Framework:** Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

## 22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

- |   |   |   |                                    |
|---|---|---|------------------------------------|
| <input type="checkbox"/> Single Driver        | <input type="checkbox"/> Carpool/HOV          |   |                                    |
| <input type="checkbox"/> Metrorail            | <input type="checkbox"/> Commuter Rail        | <input type="checkbox"/> Streetcar/Light Rail |                                    |
| <input type="checkbox"/> BRT                  | <input type="checkbox"/> Express/Commuter bus | <input type="checkbox"/> Metrobus             | <input type="checkbox"/> Local Bus |
| <input checked="" type="checkbox"/> Bicycling | <input type="checkbox"/> Walking              | <input type="checkbox"/> Other                |                                    |

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

## 23. Promote Regional Activity Centers

- Does this project begin or end in an Activity Center?
- Does this project connect two or more Activity Centers?
- Does this project promote non-auto travel within one or more Activity Centers?

## 24. Ensure System Maintenance, Preservation, and Safety

Does this project contribute to enhanced system maintenance, preservation, or safety?

## 25. Maximize Operational Effectiveness and Safety

- Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?
- Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

## 26. Protect and Enhance the Natural Environment

- Is this project expected to contribute to reductions in emissions of criteria pollutants?
- Is this project expected to contribute to reductions in emissions of greenhouse gases?

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

- Long-Haul Truck  Local Delivery  Rail  Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

- Air  Amtrak intercity passenger rail  Intercity bus

## 28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or

# CLRP PROJECT DESCRIPTION FORM

advances these and other regional goals or needs.

## **MAP-21 PLANNING FACTORS**

29. Please identify any and all planning factors that are addressed by this project:
- Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - Increase the **safety** of the transportation system for all motorized and non-motorized users.
    - Is this project being proposed specifically to address a safety issue?  Yes;  No
    - If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
  - Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
  - Increase **accessibility and mobility** of people.
  - Increase accessibility and mobility of **freight**.
  - 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.
  - Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
  - Promote efficient system **management and operation**.
  - Emphasize the **preservation** of the existing transportation system.

## **ENVIRONMENTAL MITIGATION**

30. Have any potential mitigation activities been identified for this project?  Yes;  No
- If yes, what types of mitigation activities have been identified?  
 Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;  
 Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## **CONGESTION MANAGEMENT INFORMATION**

31. Congested Conditions
- Do traffic congestion conditions necessitate the proposed project or program?  Yes;  No
  - If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring
  - If the congestion is on another facility, please identify it:
32. Capacity
- Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No
  - If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):  
 None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required  
 The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)  
 The number of lane-miles added to the highway system by the project totals less than one lane-mile  
 The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange  
 The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles  
 The project consists of preliminary studies or engineering only, and is not funded for construction  
 The construction costs for the project are less than \$10 million.
  - If the project is not exempt and requires a Congestion Management Documentation Form.



# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM



## **BASIC PROJECT INFORMATION**

1. Submitting Agency: DDOT
2. Secondary Agency:
3. Agency Project ID:
4. Project Type:  Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  Transit  CMAQ  
 ITS  Enhancement  Other  Federal Lands Highways Program  
 Human Service Transportation Coordination  TERMS
5. Category:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other
6. Project Name: Union Station to Georgetown Streetcar
7. Facility:
8. From (at): H Street NE/NW at 3rd Street NE
9. To: K Street NW at Wisconsin Ave NW
10. Description: Implement streetcar from Union Station to Georgetown in the K Street corridor.

The project is projected to encompass the following changes to the roadway network:

- H Street NE/NW from 3rd St NE to NJ Ave – reduce lanes from 6 to 4, add 1 lane in each direction exclusive for transit
- NJ Ave NW from H to K streets – remove the one-way segment and provide 1 vehicle lane in each direction (this may be included already), add 1 lane in each direction exclusive for transit
- K St NW from NJ Ave to 7<sup>th</sup> St - add 1 lane in each direction exclusive for transit
- K St NW from 9th St to 12th St – reduce vehicle lanes from 4 to 2, add 1 lane in each direction exclusive for transit
- K St NW from 12th to 21st - add 1 lane in each direction exclusive for transit (this may be in the network already)
- K St NW from 21st to 25th – reduce vehicle lanes from 4 to 2, add 1 lane in each direction exclusive for transit
- K St NW from 25th to 29th - add 1 lane in each direction exclusive for transit
- K St NW from 29th to Wisconsin – reduce vehicle lanes from 4 to 2, add 1 lane in each direction exclusive for transit

11. Projected Completion Year: 2022
12. Project Manager: Jamie Henson
13. Project Manager E-Mail: [Jamie.henson@dc.gov](mailto:Jamie.henson@dc.gov)
14. Project Information URL:
15. Total Miles: 3.5
16. Schematic (file upload):
17. State/Local Project Standing (file upload):
18. Jurisdictions: DC
19. Baseline Cost (in Thousands):\$348M cost estimate as of 09/30/2013
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

# CLRP PROJECT DESCRIPTION FORM

**Regional Policy Framework:** Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

## 22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

- |  |   |  |                                    |
|--|---|--|------------------------------------|
| <input type="checkbox"/> Single Driver | <input type="checkbox"/> Carpool/HOV              |  |                                    |
| <input type="checkbox"/> Metrorail     | <input checked="" type="checkbox"/> Commuter Rail | <input checked="" type="checkbox"/> Streetcar/Light Rail |                                    |
| <input type="checkbox"/> BRT           | <input type="checkbox"/> Express/Commuter bus     | <input type="checkbox"/> Metrobus                        | <input type="checkbox"/> Local Bus |
| <input type="checkbox"/> Bicycling     | <input type="checkbox"/> Walking                  | <input type="checkbox"/> Other                           |                                    |

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

## 23. Promote Regional Activity Centers

- Does this project begin or end in an Activity Center?
- Does this project connect two or more Activity Centers?
- Does this project promote non-auto travel within one or more Activity Centers?

## 24. Ensure System Maintenance, Preservation, and Safety

Does this project contribute to enhanced system maintenance, preservation, or safety?

## 25. Maximize Operational Effectiveness and Safety

- Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?
- Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

## 26. Protect and Enhance the Natural Environment

- Is this project expected to contribute to reductions in emissions of criteria pollutants?
- Is this project expected to contribute to reductions in emissions of greenhouse gases?

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

- Long-Haul Truck    Local Delivery    Rail    Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

- Air    Amtrak intercity passenger rail    Intercity bus

## 28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

## MAP-21 PLANNING FACTORS

29. Please identify any and all planning factors that are addressed by this project:

- a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.
  - i. Is this project being proposed specifically to address a safety issue?    Yes;    No
  - ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
- c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
- d.  Increase **accessibility and mobility** of people.

# CLRP PROJECT DESCRIPTION FORM

- e.  Increase accessibility and mobility of **freight**.
- f.  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.
- g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
- h.  Promote efficient system **management and operation**.
- i.  Emphasize the **preservation** of the existing transportation system.

## **ENVIRONMENTAL MITIGATION**

30. Have any potential mitigation activities been identified for this project?  Yes;  No
- a. If yes, what types of mitigation activities have been identified?
    - Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;
    - Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## **CONGESTION MANAGEMENT INFORMATION**

31. Congested Conditions
- a. Do traffic congestion conditions necessitate the proposed project or program?  Yes;  No
  - b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring
  - c. If the congestion is on another facility, please identify it:
32. Capacity
- a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No
  - b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):
    - None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required
    - The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)
    - The number of lane-miles added to the highway system by the project totals less than one lane-mile
    - The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange
    - The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
    - The project consists of preliminary studies or engineering only, and is not funded for construction
    - The construction costs for the project are less than \$10 million.
  - c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

## **RECORD MANAGEMENT**

33. Completed Year:
34.  Project is being withdrawn from the CLRP.
35. Withdrawn Date: MM/DD/YYYY
36. Record Creator:
37. Created On:
38. Last Updated by:
39. Last Updated On:
40. Comments:



# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM



## **BASIC PROJECT INFORMATION**

1. Submitting Agency: **VDOT**
2. Secondary Agency: **VRE**
3. Agency Project ID: **VRE0004**
4. Project Type:  Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  Transit
5. Category:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other
6. Project Name: **VRE - Gainesville - Haymarket Extension**
7. Facility: **VRE Rail Lines**
8. From: **City of Manassas VRE Station**
9. To: **Gainesville/Haymarket**
10. Description: The project extends VRE's Manassas Line by about 11 miles from the City of Manassas to Gainesville and the Town of Haymarket in western Prince William County along the Norfolk Southern (NS) owned B-Line. The project includes up to 3 new VRE stations with platforms, bike and pedestrian access, and park-and-ride lots. Real-time information on parking availability and train arrivals will be provided at the station facilities. Also included in the project are expansion of equipment storage yard facilities, rolling stock for additional trains, and right-of-way acquisitions for stations and to expand the B-Line railroad corridor from 65 feet to approximately 100 feet in width.

The VRE Gainesville-Haymarket Extension (GHX) is one of 10 multimodal improvements in the I-66 corridor – including Express Lanes, additional general purpose lanes, high-frequency bus service, and Metrorail extension – recommended by the Commonwealth Transportation Board (CTB) in July 2013 to provide new travel choices and enhance transportation safety and travel reliability in this designated Corridor of Statewide Significance. The GHX and expanded VRE Manassas Line service are among the system investments identified in VRE's long-range system plan, System Plan 2040, which was adopted by the VRE Operations Board in January 2014. The plan provides a framework for VRE capital investments and actions that VRE should pursue through 2040 to best meet regional travel needs. System Plan 2040 identified GHX as a VRE priority to expand mobility and travel choices between western Prince William County and the Alexandria-Arlington-Washington, DC core and to provide congestion relief in the I-66 corridor. System Plan 2040 is included in the 2014 CLRP approved by the Transportation Planning Board on October 15, 2014.

Prior to 2014, the idea of extending VRE service to the Gainesville-Haymarket area dates to 2004 and earlier. Population growth and the availability of affordable new housing in western Prince William beyond the central Washington, DC-Arlington-Alexandria core area were acknowledged in the 2004 VRE Strategic Plan, VRE's first long-range plan, as two of the factors supporting the extension of VRE service westward along the I-66 corridor. In 2005, the Virginia General Assembly directed the development of a Gainesville-Haymarket Extension Implementation Plan to identify the necessary actions and estimated costs to facilitate the VRE service extension. Additional studies completed by VRE in 2009, including an Alternatives

Analysis and Feasibility, confirmed the merits of the extension, identified an initial set of potential station locations, and developed an updated set of capital and operating cost estimates.



# CLRP PROJECT DESCRIPTION FORM

Additionally, the VRE GHX and related Manassas Line service expansion has been included as a recommended rail transit improvement in the Northern Virginia Transportation Authority (NVTA) TransAction2040 plan, 2013 Virginia Statewide Rail Plan, and the Prince William County, City of Manassas and Town of Haymarket Comprehensive Plans. VRE trains operating over the NS B-Line would share tracks with freight trains. Because the VRE GHX includes construction of additional tracks on the B-Line, implementation of the extension expands freight rail capacity alleviates a freight bottleneck on the B-Line and adjacent Manassas junction as identified in the 2014 Virginia Multimodal Freight Plan.

## Current Project Development Activities

In July 2015, VRE initiated a planning and design study for the GHX. The study includes:

- Alternatives analysis of station locations and railroad infrastructure.
- Identification of a preferred railroad improvements, as well as the number of stations and station locations.
- Development of updated ridership projections and GHX service plans.
- Development of detailed cost estimates and a funding plan.
- National Environmental Policy Act (NEPA).
- Preliminary engineering for stations and railroad infrastructure.

It is expected an Environmental Assessment (EA) will be the applicable NEPA class of action. The NEPA process will be initiated in mid-2016. Associated technical studies including traffic and ridership analysis and forecasts, noise and vibration analysis, air quality analysis, evaluation of historic and cultural resources, and examination of indirect and cumulative effects will be completed in conjunction with NEPA. Preliminary engineering for stations (e.g., platforms, parking, related road improvements) and railroad infrastructure (e.g., track, signals, equipment storage facilities) have been initiated and will be closely coordinated with the NEPA process. A comprehensive community and stakeholder engagement strategy has been implemented for the study, recognizing the critical importance of designing a VRE extension that serves the needs of corridor residents, current and future VRE riders, and stakeholders throughout the region. The full study is estimated to be completed in late 2017.

## Financial Plan

The project is included in the current VRE long-range plan, System Plan 2040, adopted by the Operations Board in 2014, and the VRE FY 2017-2022 Capital Improvement Program adopted in December 2015. The GHX was included in the CLRP as a study in 2008. While the proposed stations and track improvements are not included in the CLRP, reduced headways on the Manassas Line are included.

The total project cost estimated in September 2015 and escalated to the year of expenditure (YOE) is \$433,055,714. The costs by phase are listed below.

<i>Project Element (YOE)</i>	<i>Estimated Costs (Year of Expenditure \$)</i>
Project Development Planning (completed 2009)	\$ 1,070,000
Project Development Planning, NEPA & PE (FY 2016 \$)	\$ 4,735,714
Final Design (FY 2016 \$)	\$ 24,500,000
Right-of-Way Acquisition (FY 2020 \$)	\$ 55,400,000
Construction (FY 2020 \$)	\$ 347,350,000
<b>TOTAL</b>	<b>\$ 433,055,714</b>

# CLRP PROJECT DESCRIPTION FORM

Costs are based on the best information currently available; the preparation of updated cost estimates and a detailed financial plan is underway as part of the current project development activities.

## Project Development Planning, NEPA, and Preliminary Engineering

Initial studies of the extension have been completed, including the 2005 VRE Gainesville-Haymarket Implementation Plan, requested by the Virginia General Assembly and funded by the Department of Rail and Public Transportation (DRPT), and a 2009 Alternatives Analysis and Feasibility Study, funded with a combination of Virginia Rail Enhancement Funds (REF) grant (\$700,000), other State funds (\$32,500) and VRE system funds (\$337,500).

Additional Project Development, NEPA, and Preliminary Engineering studies are underway using \$2,785,714 in REF funds, \$1,500,000 from Northern Virginia Transportation Authority (NVTA), and \$450,000 from VRE system funds. This phase of study will be completed in 2017 (FY2018).

## Final Design, Right-of-Way and Construction

Final design for the extension is expected to begin in FY 2018 at an estimated cost of \$24,500,000. Right-of-way acquisition for stations and railroad right-of-way is estimated to be \$55,400,000. Construction of stations, railroad infrastructure, equipment storage facilities and rolling stock are estimated to be \$347,350,000. Final funding sources for final design, right-of-way acquisition and construction have not yet been identified. A project financial plan has been developed that includes federal, state and regional/local sources as outlined below; expected sources include a number of funding programs historically used for VRE capital investments as well as new capital funding sources.

The Virginia Rail Enhancement Fund (REF) is an expected source of funding. The REF program is intended for freight and/or passenger rail (including VRE) transportation rolling stock, right-of-way, railroad infrastructure and related facilities and improvements that have been determined to support the common good of a region of the Commonwealth or the Commonwealth as a whole. REF funds of up to \$60,000,000 is anticipated. The REF program is the primary funding source for GHX project development, NEPA and preliminary engineering (PE) phases, accounting for approximately \$3,500,000 of \$5,800,000 in currently committed project funding. Prior VRE REF program commitments include: VRE Brooke and Leeland Road station expansions (\$30.9M); Hamilton to Crossroads 3rd Track (\$20.2M); and Alexandria to Washington, D.C. cab signal installation (\$1.3M). Freight investments in the VRE service area funded through the REF program, which also support current VRE service or proposed GHX service, include: CSX Fredericksburg to DC 3rd track (\$3.7M); CSX Virginia Avenue Tunnel (\$134.3M); Norfolk Southern (NS) Manassas to Alexandria Passenger Corridor Initiative (\$8.2M); NS B-Line Gainesville passing siding (\$6M); and B-Line traffic control/signal system Manassas to Front Royal (\$18.5M).

Approximately \$115,000,000 and \$120,000,000 will be sought from the Commonwealth of Virginia through its House Bill (HB) 2/HB 1887 project prioritization and funding allocation program. The GHX project was submitted for HB 2/ HB 1887 evaluation and funding consideration in September 2015. Although the project was ranked 143 among 287 projects evaluated, and received the 3rd highest project benefit score among all projects evaluated, the project was not recommended for funding in this round. The final funding plan will be adopted by the Commonwealth

## CLRP PROJECT DESCRIPTION FORM

Transportation Board (CTB) in June 2016. VRE intends to re-submit the GHX project for HB 2 evaluation using updated project costs and ridership that are currently under development in the next HB 2 call for projects in September 2016. The application process required a resolution of support from the regional entity considering the project for funding. The NVTA, as well as Prince William County and the City of Manassas adopted resolutions to support submitting the project for HB 2 evaluation. The Town of Haymarket passed a resolution earlier in 2015 supporting the study. The project also has the support of the CTB as evidenced by the July 13, 2013 resolution that included the VRE Extension among 10 improvement concepts recommended to expand multimodal travel opportunities and reduce congestion in the I-66 corridor of statewide significance.

VRE also anticipates approximately \$35,000,000-40,000,000 from local funding sources including the NVTA, jurisdiction funds, and VRE system funds. NVTA is planning to fund a FY 2018-23 program of projects. VRE anticipates funding for the GHX project through this source. NVTA's current long range transportation plan, TransAction 2040, includes the GHX project. Inclusion in TransAction is a criteria for obtaining NVTA funding. Prior VRE improvements funded by NVTA include: platform expansions at VRE Lorton, Franconia-Springfield, Rippon, Alexandria and Crystal City stations (\$32.6M); Slaters Lane railroad switch/signal (\$7M); and parking expansion at VRE Manassas Park station (\$0.5M).

In addition to public funding sources, private proffers linked to development approvals in Prince William County have included VRE capital investments. Adopted proffers include construction of the future Potomac Shores Station, currently under design, and commitments for a 700 space parking structure at the VRE Rippon Station, NS B-Line right-of-way expansion in Gainesville, and a pedestrian trail connection to a future VRE Haymarket Station from the Villages of Piedmont development. As additional proposals for new development in the GHX corridor are submitted for approval by Prince William County, other proffers towards GHX implementation are expected. These proffered station facilities, right-of-way or rail infrastructure can be used as local match for federal and state funding. The project is consistent with Prince William County's Comprehensive Plan and Economic Development Strategy. The County is undertaking an update of their Comprehensive Plan Economic Development Chapter which provides an opportunity to better align the GHX project with local goals and policy objectives.

Other funding sources that have historically been used for VRE capital investments include: capital funding assistance from Virginia DRPT, and Federal CMAQ and RSTP funds allocated by NVTA. Currently, \$1,000,000 in CMAQ funding has been allocated for FY2021.

In addition to the state and regional/local funding sources listed above, VRE anticipates funding from the federal Major Capital Investment Grant (CIG) program, commonly referred to as the "New Starts" program. New Starts requires a project sponsor to submit a request to enter project development as a first step. Once approved to enter project development, the project sponsor must complete NEPA as well as develop the estimated project costs, ridership and other data to enable the project to be rated for entry into engineering and a federal funding commitment. New Starts funding can account for up to 50% of project capital costs or up to \$215,000,000-\$220,000,000 for the GHX project. The FAST Act authorizes \$11.3 billion for the program through 2020. Since 2010, FTA has obligated or committed nearly \$5.2 billion of total CIG program funding for commuter rail projects across the US, which is about 24% of total CIG funding available. In northern Virginia, the WMATA Silver Line Phase 1 included New Starts capital commitments.

# CLRP PROJECT DESCRIPTION FORM

## Coordination with Other Project in the Corridor

This project is being coordinated with other active projects in the corridor including I-66 Corridor Improvement Project Outside the Beltway, US Route 15 improvement with railroad overpass, Dominion Power Haymarket High-Voltage Transmission Line, and Norfolk Southern Crescent Corridor initiative.

11. Projected Completion Year: **2022**
12. Project Manager: **Christine Hoeffner**
13. Project Manager E-Mail: **choeffner@vre.org**
14. Project Information URL: **www.vre.org/ghx**
15. Total Miles: **11 miles**
16. Schematic (file upload):
17. State/Local Project Standing (file upload):
18. Jurisdictions: **Prince William County**
19. Baseline Cost (in Thousands): **\$433,000** cost estimate as of **9/28/2015**
20. Amended Cost (in Thousands): cost estimate as of
21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

**Regional Policy Framework:** Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

## 22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

- |   |   |   |                                    |
|---|---|---|------------------------------------|
| <input type="checkbox"/> Single Driver        | <input checked="" type="checkbox"/> Carpool/HOV   |   |                                    |
| <input type="checkbox"/> Metrorail            | <input checked="" type="checkbox"/> Commuter Rail | <input type="checkbox"/> Streetcar/Light Rail |                                    |
| <input type="checkbox"/> BRT                  | <input type="checkbox"/> Express/Commuter bus     | <input type="checkbox"/> Metrobus             | <input type="checkbox"/> Local Bus |
| <input checked="" type="checkbox"/> Bicycling | <input checked="" type="checkbox"/> Walking       | <input checked="" type="checkbox"/> Other     |                                    |

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

## 23. Promote Regional Activity Centers

- Does this project begin or end in an Activity Center?
- Does this project connect two or more Activity Centers?
- Does this project promote non-auto travel within one or more Activity Centers?

## 24. Ensure System Maintenance, Preservation, and Safety

- Does this project contribute to enhanced system maintenance, preservation, or safety?

## 25. Maximize Operational Effectiveness and Safety

- Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?
- Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

## 26. Protect and Enhance the Natural Environment

- Is this project expected to contribute to reductions in emissions of criteria pollutants?
- Is this project expected to contribute to reductions in emissions of greenhouse gases?

# CLRP PROJECT DESCRIPTION FORM

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

Long-Haul Truck     Local Delivery     Rail     Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

Air     Amtrak intercity passenger rail     Intercity bus

## 28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

The proposed extension of the Manassas Line will improve access for all demographics, including the historically transportation-disadvantaged populations, from Haymarket and north Prince William County to jobs and services in Washington, D.C., Arlington, and Alexandria. Additional trains will help relieve existing congestion on VRE trains. Reduced frequencies on the Manassas Line will make commuting on VRE feasible for even more residents all along the Line. In summary, the project will help more residents take advantage of VRE services, eliminate existing passenger crowding, and serve future growth in these travel markets (Goal 1).

The project adds a new travel option & improves multimodal connectivity and accessibility from Gainesville, Innovation, City of Manassas and Manassas Regional Airport, which are identified activity centers to VRE destinations including Crystal City, Old Town and Carlyle.

Future land use maps for Prince William County, City of Manassas, and Town of Haymarket show high density employment, commercial, and residential uses within the buffer areas of proposed station locations. The extension will support walkable transit-oriented development in these activity centers as well as the economic development goals of the jurisdictions (Goal 2). Commuter rail is one of the safest and most reliable modes of travel in this region (Goals 3&4).

New stations and additional trains along the Manassas Line will reduce congestion for passenger & freight traffic on adjacent highways, especially I-66 and Route 50. This will improve reliability on these highways due to lower traffic volumes. New/expanded park-and-ride lots along the extension would relieve lots in Fairfax County and Arlington. This project reduces emissions of criteria pollutants and greenhouse gases by reducing the vehicle miles traveled in single-occupant vehicles, as well as reducing congestion on adjacent highways (Goal 5).

The project also improves freight rail throughput by reducing identified bottlenecks on the Norfolk Southern B-Line near Manassas and increases capacity in Norfolk Southern's Crescent Corridor. Increased freight rail throughput will in turn reduce the number of trucks on the congested roadways in this region (Goal 6).

## **MAP-21 PLANNING FACTORS**

29. Please identify any and all planning factors that are addressed by this project:

- a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.
  - i. Is this project being proposed specifically to address a safety issue?     Yes;     No
  - ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
- c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
- d.  Increase **accessibility and mobility** of people.

# CLRP PROJECT DESCRIPTION FORM

- e.  Increase accessibility and mobility of **freight**.
- f.  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.
- g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
- h.  Promote efficient system **management and operation**.
- i.  Emphasize the **preservation** of the existing transportation system.

## **ENVIRONMENTAL MITIGATION**

30. Have any potential mitigation activities been identified for this project?  Yes;  No
- a. If yes, what types of mitigation activities have been identified?
- Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;
  - Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## **CONGESTION MANAGEMENT INFORMATION**

31. Congested Conditions
- a. Do traffic congestion conditions necessitate the proposed project or program?  Yes;  No
  - b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring
  - c. If the congestion is on another facility, please identify it: I-66
32. Capacity
- a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No
  - b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):
    - None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required
    - The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)
    - The number of lane-miles added to the highway system by the project totals less than one lane-mile
    - The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange
    - The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
    - The project consists of preliminary studies or engineering only, and is not funded for construction
    - The construction costs for the project are less than \$10 million.
  - c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.



# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM



## **BASIC PROJECT INFORMATION**

**CLRP ID 3521**

1. Submitting Agency: **VDOT**
2. Secondary Agency:
3. Agency Project ID:
4. Project Type:  Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  Transit
5. Category:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other
6. Project Name: **Crystal City Potomac Yard Transitway Northern Extension**
7. Facility: **Crystal City Transitway**
8. From: **Crystal City Metro Station**
9. To: **Pentagon City Metro Station**
10. Description: **Extend the Metroway bus rapid transit (BRT) from Crystal City Metro to Pentagon City Metro. The transitway operates in Crystal City on a paired one-way couplet along South Clark Street and Crystal Drive, ending at 15th Street South. This project will extend the transitway north along Clark Street and Crystal Drive as far as 12th Street South, at which point the transitway will turn left on 12th Street and continue as far as South Hayes Street. The project includes three new bi-directional BRT stations, at 12th/Clark, on 12th between Eads Street and Fern Street, and at 12th/Hayes/Pentagon City Metro. The project also includes construction of new 1-block segment of 12th Street South, between Fern Street and Eads Street. where there is currently no street.**
11. Projected Completion Year: **2023**
12. Project Manager: **Dan Malouff**
13. Project Manager E-Mail: **dmalouff@arlingtonva.us**
14. Project Information URL:
15. Total Miles: **1 mile**
16. Schematic (file upload):
17. State/Local Project Standing (file upload):
18. Jurisdictions: **Arlington County**
19. Baseline Cost (in Thousands): **\$24,000** cost estimate as of **1/29/2016**
20. Amended Cost (in Thousands): cost estimate as of
21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

**Regional Policy Framework:** Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

## **22. Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

- |   |   |   |   |
|---|---|---|---|
| <input type="checkbox"/> Single Driver        | <input type="checkbox"/> Carpool/HOV          | <input type="checkbox"/> Streetcar/Light Rail |   |
| <input type="checkbox"/> Metrorail            | <input type="checkbox"/> Commuter Rail        | <input checked="" type="checkbox"/> Metrobus  | <input checked="" type="checkbox"/> Local Bus |
| <input checked="" type="checkbox"/> BRT       | <input type="checkbox"/> Express/Commuter bus | <input type="checkbox"/> Other                |   |
| <input checked="" type="checkbox"/> Bicycling | <input checked="" type="checkbox"/> Walking   |   |   |



# CLRP PROJECT DESCRIPTION FORM

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

## 23. Promote Regional Activity Centers

Does this project begin or end in an Activity Center?

Does this project connect two or more Activity Centers?

Does this project promote non-auto travel within one or more Activity Centers?

## 24. Ensure System Maintenance, Preservation, and Safety

Does this project contribute to enhanced system maintenance, preservation, or safety?

## 25. Maximize Operational Effectiveness and Safety

Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?

Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

## 26. Protect and Enhance the Natural Environment

Is this project expected to contribute to reductions in emissions of criteria pollutants?

Is this project expected to contribute to reductions in emissions of greenhouse gases?

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

Long-Haul Truck  Local Delivery  Rail  Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

Air  Amtrak intercity passenger rail  Intercity bus

## 28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

**This project adds new dedicated transit lanes as well as a new street segment, connecting and promoting circulation within regional activity centers.**

## MAP-21 PLANNING FACTORS

29. Please identify any and all planning factors that are addressed by this project:

a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue?  Yes;  No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d.  Increase **accessibility and mobility** of people.

e.  Increase accessibility and mobility of **freight**.

f.  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.

g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h.  Promote efficient system **management and operation**.

i.  Emphasize the **preservation** of the existing transportation system.

# CLRP PROJECT DESCRIPTION FORM

## ENVIRONMENTAL MITIGATION

30. Have any potential mitigation activities been identified for this project?  Yes;  No
- a. If yes, what types of mitigation activities have been identified?
- Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;
  - Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## CONGESTION MANAGEMENT INFORMATION

31. Congested Conditions
- a. Do traffic congestion conditions necessitate the proposed project or program?  Yes;  No
- b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring
- c. If the congestion is on another facility, please identify it: **Metrorail Blue and Yellow Lines, Route 1**
32. Capacity
- a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No
- b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):
- None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required
  - The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)
  - The number of lane-miles added to the highway system by the project totals less than one lane-mile
  - The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange
  - The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
  - The project consists of preliminary studies or engineering only, and is not funded for construction
  - The construction costs for the project are less than \$10 million.
- c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.



# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM



## **BASIC PROJECT INFORMATION**

1. Submitting Agency: **Virginia Department of Transportation**
2. Secondary Agency: **Virginia Department of Rail and Public Transportation**
3. Agency Project ID:
4. Project Type:  Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  
 Transit  CMAQ  
 ITS  Enhancement  Other  Federal Lands Highways Program  
 Human Service Transportation Coordination  TERMS
5. Category:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other
6. Project Name: **395 Express Lanes Project in Northern Virginia**
7. Facility: **I-395 HOV lanes**
8. From (at): Turkeycock Run near Duke Street
9. To: vicinity of Eads Street, Arlington County

### **10. Description:**

The conversion of the I-395 reversible HOV lanes to reversible High Occupancy Toll (HOT) lanes was originally included as part of the I-95/I-395 HOV/Bus/HOT Lanes Project in the 2007 CLRP. This segment was removed from the project and the CLRP in 2011, and VDOT and Transurban (the Concessionaire for the project) moved forward with the I-95 Express Lanes project from Garrisonville to north of the Beltway, ending them at a flyover to the general purpose lanes at Turkeycock Run near Duke Street. The I-95 Express lanes opened to traffic in late 2014, and there is now renewed interest in converting the remaining HOV section of I-395 to Express Lanes, providing a seamless express connection from the I-95 Express Lanes to the vicinity of Eads Street.

The 395 Express Lanes project would expand the two existing reversible HOV lanes on I-395 to three (3) managed High Occupancy Toll lanes for approximately 8 miles, from the terminus of the I-95 Express Lanes (Turkeycock Run near Duke Street) to the vicinity of Eads Street near the Pentagon. The Express lanes will continue to be operated as a reversible facility; northbound in the weekday morning hours and southbound in the weekday evening hours. The 395 project connects to the I-95 Express Lanes at Turkeycock Run and traverses Fairfax County, the City of Alexandria and Arlington County.

The scope of the project includes the following:

- Convert the two existing reversible High Occupancy Vehicle (HOV) lanes to High Occupancy Toll (HOT) lanes; construct an additional HOT lane (total= 3 HOT lanes);
- Install a Tolling and Traffic Management System to enable active traffic management and dynamic tolling;
- Install directional, regulatory, and dynamic messaging signs;

# CLRP PROJECT DESCRIPTION FORM

- Construct soundwalls consistent with minimum Federal and State requirements; and
- Construct an improved connection between the 395 Project and Eads Street.
- Conduct multimodal study

All existing HOV ramps along I-395 will be converted to HOT ramps, with the exception of the new south facing bus/HOV only ramp at Seminary Road which will remain HOV/transit only at all times.

## **Long-Term Transit Investment**

The Department of Rail and Public Transportation (DRPT) will conduct a multimodal study for the entire I-395 and existing I-95 Express Lanes corridor by December 2016. DRPT will solicit stakeholder input throughout the study, including scope development. The study will identify transit service and TDM program enhancements that would increase mobility and benefit toll payers in the I-95/I-395 corridor and could be funded with toll revenues. A list of projects will be identified, prioritized, and funded through the toll revenues.

The 395 Express concessionaire will fund an annual transit payment (amount to be determined), which will be provided to the Department. The transit services associated with the I-395 Project will be designed through the multimodal study, and developed in consultation with the local transit providers and local jurisdictions. .

## **Tolling Policy**

The I-395 Express Lanes will be operated similar to the I-95 Express Lanes, using dynamic tolling to manage congestion on the lanes. Express lanes use dynamic pricing to maintain free-flowing conditions for all users during all hours. The toll rates will vary throughout the day, depending on demand and congestion levels. Toll prices will be adjusted in response to the level of traffic to ensure free flowing operations.

Dynamic message signs will provide drivers with current toll rates so they can choose whether or not to use the lanes. Toll collection on the Express Lanes will be totally electronic. There will be no toll booths. The dynamic message signs will be supplemented by other notification/communications methods to ensure all users, including transit operators, have as much advance notice of traffic conditions as is possible.

MAP-21 mandated strict performance standards which are intended to ensure free-flowing conditions on the Express lanes. The proposed Express lanes project will include performance monitoring as an integral part of the project and ensure that the MAP-21 mandated performance standards are complied with at a minimum. More specifically, the project will meet all applicable requirements of MAP-21 regarding "HOV Facility Management, Operation, Monitoring, and Enforcement" as described in Section 166 of Title 23 U.S.C., inclusive of the amendments (deletions, insertions and additions) prescribed by MAP-21 Section 1514 "HOV FACILITIES", similar to the I-95 Express Lanes. This includes a minimum average operating speed of 45 mph for 90% of the time over a specific period of time during the peak period.

# CLRP PROJECT DESCRIPTION FORM

## Schedule

Construction of the project is projected to begin in 2017 and completed in 2019. The NEPA process will start in January 2016, and be completed by December 2016.

## Federal Environmental Review ("NEPA") Process

VDOT and FHWA will be conducting an Environmental Assessment (EA) for the project starting in early 2016. The technical studies associated with this document include traffic analysis and forecasting, air analysis, noise analysis, and examination of indirect and cumulative effects. There will be a robust public outreach component for the project, with the first public information meetings being held in the spring of 2016. The Draft EA is anticipated for late summer 2016, with a formal Public Hearing planned in fall 2016.

## Outreach

In addition to VDOT's outreach for the environmental document, VDOT will partner with Transurban to inform and engage key stakeholder groups and surrounding communities throughout the project planning, design, construction and implementation. A key stakeholder technical advisory group comprised of representatives of local jurisdictions and agencies will meet regularly to provide input on the project.

## Financial Plan

An agreement between 95 Express Lanes LLC and VDOT outlines the framework to advance the 395 Express Lanes project under the I-95 Comprehensive Agreement as a Concessionaire Project Enhancement. 95 Express will be responsible to for the overall Project Cost, including funding an annual transit payment amount. VDOT will be responsible to complete the environmental document and oversight.

11. Projected Completion Year: 2019
12. Project Manager: Susan Shaw (VDOT)
13. Project Manager E-Mail: Susan.Shaw@vdot.virginia.gov
14. Project Information URL:
15. Total Miles: 8 miles
16. Schematic (file upload):
17. State/Local Project Standing (file upload):
18. Jurisdictions: Fairfax County, Arlington County, City of Alexandria
19. Baseline Cost (in Thousands): \$220 million                      cost estimate as of 01/26/16
20. Amended Cost (in Thousands):                                      cost estimate as of MM/DD/YYYY

# CLRP PROJECT DESCRIPTION FORM

21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

**Regional Policy Framework:** Questions 22-27 address the goals identified in the Regional Transportation Priorities Plan. Question 28 should be used to provide additional context of how this project supports these goals or other regional needs identified in the Call for Projects.

## 22. Provide a Comprehensive Range of Transportation Options

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

- |   |  |   |
|---|--|---|
| <input checked="" type="checkbox"/> Single Driver | <input checked="" type="checkbox"/> Carpool/HOV          | <input type="checkbox"/> Streetcar/Light Rail |
| <input type="checkbox"/> Metrorail                | <input type="checkbox"/> Commuter Rail                   | <input checked="" type="checkbox"/> Metrobus  |
| <input checked="" type="checkbox"/> BRT           | <input checked="" type="checkbox"/> Express/Commuter bus | <input checked="" type="checkbox"/> Local Bus |
| <input type="checkbox"/> Bicycling                | <input type="checkbox"/> Walking                         | <input type="checkbox"/> Other                |

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)

## 23. Promote Regional Activity Centers

- Does this project begin or end in an Activity Center?
- Does this project connect two or more Activity Centers?
- Does this project promote non-auto travel within one or more Activity Centers?

## 24. Ensure System Maintenance, Preservation, and Safety

Does this project contribute to enhanced system maintenance, preservation, or safety?

## 25. Maximize Operational Effectiveness and Safety

- Project is primarily designed to reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?
- Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

## 26. Protect and Enhance the Natural Environment

- Is this project expected to contribute to reductions in emissions of criteria pollutants?
- Is this project expected to contribute to reductions in emissions of greenhouse gases?

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

- Long-Haul Truck  Local Delivery  Rail  Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

- Air  Amtrak intercity passenger rail  Intercity bus

# CLRP PROJECT DESCRIPTION FORM

## 28. Additional Policy Framework Response

Please provide additional written information that describes how this project further supports or advances these and other regional goals or needs.

The I-395 Express Lanes project addresses several RTPP goals, as noted above. The project will be particularly effective in helping the Region achieve RTPP Goal # 1: ***Provide a Comprehensive Range of Transportation Options***. This project will combine capacity improvements with managed lanes, congestion pricing, intelligent transportation systems, new transit services, and ride-sharing opportunities to expand the range and magnitude of transportation alternatives available to travelers. Moreover, the project will provide a vital link to the Express Lanes network in Northern Virginia, improving regional accessibility by providing express access to the vicinity of Eads Street in Arlington County. The project addresses three of the four major problems cited in Goal Statement #1: roadway congestion, transit crowding, and inadequate bus service.

## **MAP-21 PLANNING FACTORS**

29. Please identify any and all planning factors that are addressed by this project:
- a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
  - b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.
    - i. Is this project being proposed specifically to address a safety issue?  Yes;  No
    - ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:
  - c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.
  - d.  Increase **accessibility and mobility** of people.
  - e.  Increase accessibility and mobility of **freight**.
  - f.  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.
  - g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
  - h.  Promote efficient system **management and operation**.
  - i.  Emphasize the **preservation** of the existing transportation system.

## **ENVIRONMENTAL MITIGATION**

30. Have any potential mitigation activities been identified for this project?  Yes;  No
- a. If yes, what types of mitigation activities have been identified?
    - Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;
    - Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands



# CLRP PROJECT DESCRIPTION FORM

## **CONGESTION MANAGEMENT INFORMATION**

### 31. Congested Conditions

- a. Do traffic congestion conditions necessitate the proposed project or program?  Yes;  No
- b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring
- c. If the congestion is on another facility, please identify it: General Purpose lanes of I-395

### 32. Capacity

- a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No
- b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):
  - None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required
  - The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)
  - The number of lane-miles added to the highway system by the project totals less than one lane-mile
  - The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange
  - The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
  - The project consists of preliminary studies or engineering only, and is not funded for construction
  - The construction costs for the project are less than \$10 million.
- c. If the project is not exempt and requires a Congestion Management Documentation Form, [click here to open a blank Congestion Management Documentation Form.](#)

## **RECORD MANAGEMENT**

- 33. Completed Year:
- 34.  Project is being withdrawn from the CLRP.
- 35. Withdrawn Date: MM/DD/YYYY
- 36. Record Creator:
- 37. Created On:
- 38. Last Updated by:
- 39. Last Updated On:
- 40. Comments:

# Congestion Management Documentation Form for Projects in the 2040 CLRP



Project Name: 395 Express Lanes Project in Northern Virginia

- 1.** Indicate whether the proposed project's location is subject to or benefits significantly from any of the following in-place congestion management strategies:
- a)  Metropolitan Washington Commuter Connections program (ridesharing, telecommuting, guaranteed ride home, employer programs)
  - b)  A Transportation Management Association is in the vicinity
  - c)  Channelized or grade-separated intersection(s) or roundabouts
  - d)  Reversible, turning, acceleration/deceleration, or bypass lanes
  - e)  High occupancy vehicle facilities or systems
  - f)  Transit stop (rail or bus) within a 1/2 mile radius of the project location
  - g)  Park-and-ride lot within a one-mile radius of the project location
  - h)  Real-time surveillance/traffic device controlled by a traffic operations center
  - i)  Motorist assistance/hazard clearance patrols
  - j)  Interconnected/coordinated traffic signal system
  - k)  Other in-place congestion management strategy or strategies (briefly describe below:)

**2.** List and briefly describe how the following categories of (additional) strategies were considered as full or partial alternatives to single-occupant vehicle capacity expansion in the study or proposal for the project.

**a.** Transportation demand management measures, including growth management and congestion pricing

The project includes the addition of one HOV/HOT lane in each direction combined with the existing HOV lanes to provide three barrier-separated reversible managed HOT express lanes, which will be tolled (congestion priced) for single and two occupant vehicles. HOV-3+ and transit vehicles will travel on the express lanes for free.

**b.** Traffic operational improvements

Congestion pricing will insure that the express lanes will operate at 45 mph or better throughout the day.

**c.** Public transportation improvements

The Department of Rail and Public Transportation (DRPT) will conduct a multimodal study for the entire I-395 and existing I-95 Express Lanes corridor by December 2016. DRPT will solicit stakeholder input throughout the study, including scope development. The study will identify transit service and TDM program enhancements that would increase mobility and benefit toll payers in the corridor and could be funded with toll revenues. A list of projects will be identified, prioritized, and funded through the toll revenues.

The 395 Express concessionaire will fund an annual transit payment (amount to be determined), which will be provided to the Department. The transit services associated with the I-395 project will be designed through the multimodal study, and developed in consultation with the local transit providers and local jurisdictions.

**d. Intelligent Transportation Systems technologies**

The project will be operated similar to the I-95 Express Lanes using dynamic tolling to manage congestion in the lanes. There will be no toll booths; toll collection will be totally electronic.

**e. Other congestion management strategies**

**f. Combinations of the above strategies**

**3. Could congestion management alternatives fully eliminate or partially offset the need for the proposed increase in single-occupant vehicle capacity? Explain why or why not.**

The corridor currently is served by two reversible HOV lanes, Metrorail's Blue/Yellow Line service, the I-95 Express Lanes to the south, and numerous TDM strategies. The current multimodal services in the corridor do not alleviate the congested conditions experienced on a daily basis on the general purpose lanes. Increasing the HOV capacity and converting the HOV lanes to HOT will facilitate transit service, HOV trips, and others willing to pay a fee for a faster trip. This will not only help alleviate the congestion caused by the current merge from the I-95 HOT lanes to the general purpose lanes at Turkeycock, but could also reduce congestion in the existing general purpose lanes in the northbound (am) and southbound (pm) directions.

**4. Describe all congestion management strategies that are going to be incorporated into the proposed highway project.**

See 2a, 2b, 2c and 2d above.

**5. Describe the proposed funding and implementation schedule for the congestion management strategies to be incorporated into the proposed highway project. Also describe how the effectiveness of strategies implemented will be monitored and assessed after implementation.**

The 395 Express Lanes concessionaire will fund an annual transit payment (to be determined) which will be provided to VDOT. DRPT will complete the Transit/TDM Corridor Study in calendar year 2016 and then the implementation schedule will be determined. Strategies will be monitored by the implementing agencies, and modified as needed.

**FINANCIALLY CONSTRAINED LONG-RANGE  
TRANSPORTATION PLAN FOR 2040  
PROJECT DESCRIPTION FORM  
BASIC PROJECT INFORMATION**

1. Submitting Agency: **Virginia Department of Transportation**
2. Secondary Agency: **Virginia Department of Rail and Public Transportation**
3. Agency Project ID: **UPC 107371**
4. Project Type:  
 Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  
 Transit  CMAQ  ITS  Enhancement  Other  
 Federal Lands Highways Program  Human Service Transportation Coordination  
 TERMS
5. Category:  
 System Expansion;  System Maintenance;  Operational Program;  
 Study;  Other
6. Project Name: **I-66 Multimodal Improvement Project, Inside the Beltway**  
Prefix Route Name Modifier
7. Facility: **I-66**
8. From: **I-495, Fairfax County**
9. To: **Route 29 near Rosslyn, Arlington County**
10. Description:

The I-66 Multimodal Improvement Project (the "Project") was originally submitted for the 2015 CLRP Air Quality Analysis, and this current submission provides the most recent updates to the project components, schedule, and costs.

The Project is based on the recommendations from the June 2012 Final Report of the I-66 Multimodal Study inside the Beltway. The study team for the Multimodal Study included local, state, regional and federal stakeholders who participated in an interactive process which resulted in endorsements from these partners. The study, which built upon the 2009 Department of Rail and Public Transportation (DRPT) I-66 Transit/Transportation Demand Management (TDM) study, evaluated and recommended various multimodal improvements in the corridor that were further refined in the August 2013 Supplemental Report. The recommended improvements from the study included transit, bike/ped, TDM, integrated corridor management (ICM), tolling, and widening components, making this a truly multimodal solution for the corridor.

VDOT is completing a categorical exclusion (CE) NEPA process to advance the tolling component identified in the I-66 Multimodal Study. VDOT is also completing a comprehensive traffic

analysis as well as a traffic and revenue study to determine the expected project revenues by year. VDOT has been working with corridor stakeholders, including local jurisdictional partners, to review the results of the traffic analysis and refine the list of multimodal and operational improvements.

VDOT will own and operate the facility inside the Beltway. Toll revenues will be used first to operate and maintain the facility, to repay the cost of construction, and then to implement multimodal solutions in the corridor. The Northern Virginia Transportation Commission (NVTC) will take the lead, in coordination with the local jurisdictions, in recommending to the Commonwealth Transportation Board (CTB) which multimodal projects should be funded using the toll revenues. This arrangement has been formalized through a Memorandum of Agreement (MOA) between CTB, VDOT and NVTC, which details the specific responsibilities of each agency.

The multimodal improvement program administered by NVTC will implement multimodal projects beginning in 2017 in conjunction with the tolling component. The multimodal improvement program will be funded through net toll revenues allocated by CTB for the term of the MOA, which is 40 years. Multimodal projects will be selected through a process established by NVTC.

**The tolling component of the Project and Initial Multimodal Program will be implemented first.** The tolling includes conversion of the existing I-66 facility inside the Capital Beltway to a Managed Lanes facility with the following characteristics:

- Dynamic tolling during 4-hour peak periods
- Opens to tolling in the peak direction only
- When the tolling begins, HOV-2+ will be allowed to ride free. The free HOV occupancy requirement will be raised to HOV-3+ when the I-66 outside the Beltway project opens or converts to HOV-3+.
- Facility free to all traffic during off-peak periods;
- Consistent with current policy, heavy trucks will be prohibited.

Concurrent with the tolling component, the first group of multimodal improvements will be implemented. The improvements will be based on recommendations from VDOT's June 2012 *Final Report of the I-66 Multimodal Study Inside the Beltway*, and the further refinements found in the *August 2013 Supplemental Report*, recommendations from DRPT's 2009 Transportation Demand Management/Transit Report, projects in the region's constrained long range plan (updated periodically) and including but not limited to multimodal transportation improvements to the corridor roadways and associated transportation and transit facilities, as established by NVTC through a defined selection process. The net toll revenues will fund the multimodal improvements that can be obligated by the time tolling begins in the corridor and that meet project eligibility as established in the MOA:

- Must benefit the toll-paying users of the Facility;
- Must have the capacity to attain one or more of the Improvement Goals, defined as (1) move more people; (2) enhance transportation connectivity; (3) improve transit service; (4) reduce roadway congestion; and (5) increase travel options

- Must be one of the following multimodal transportation improvements serving the Corridor subject to the limitation set forth in the MOA:
  - 1) New or enhanced local and commuter bus service, including capital and operating expenses (e.g., fuel, tires, maintenance, labor and insurance) and transit priority improvements; Vanpool, and formal and informal carpooling programs and assistance;
  - 2) Capital improvements for Washington Metropolitan Area Transit Authority rail and bus service, including capital and operating expenses, and improved access to Metrorail stations and Metrobus stops;
  - 3) Park and ride lot(s) and access or improved access thereto;
  - 4) Roadway improvements to address impacts from the dynamic tolling of the Facility on roadways in the Corridor (including but not limited to Routes 7, 29, 50, and 309, and Washington Boulevard, Wilson Boulevard, and Westmoreland Street);
  - 5) Roadway operational improvements in the Corridor;
  - 6) Transportation Systems Management and Operations as defined in 23 U.S.C. § 101(a)(30) on December 1, 2015;
  - 7) Projects identified in VDOT's June 2012 Final Report of the I-66 Multimodal Study Inside the Beltway and the August 2013 Supplemental Report, as well as recommendations from DRPT's 2009 Transportation Demand Management/Transit Report, and projects in the region's constrained long range plan, as such plan may be updated from time to time,

The multimodal improvement program will include the following types of projects:

The **transit** components include all the current improvements in the CLRP plus new priority bus routes on I-66, Route 29, and Route 50; Metrorail station improvements at Ballston and East Falls Church, and service enhancements for numerous routes in the study area inside the Beltway. Consideration will also be given to Metrorail core capacity improvements (8-car trains) that will address capacity concerns in the I-66 corridor.

For the **bicycle/pedestrian** components, the Multimodal Study identified approximately 60 capital and operating projects inside the Beltway. The Supplemental Report examined projects deemed to be the most regionally significant of the 60, based on (1) projects that can impact bicycling and walking for relatively large numbers of people and (2) projects that enhance the connectivity and functionality of the regional network. Sample projects include:

- Custis trail/W&OD trail improvements
- Fairfax Drive connector
- Arlington Boulevard trail- Glebe Rd. to City of Fairfax
- West Falls Church connector trail
- VA 7 – Tysons to Falls Church

The **TDM** elements of the Project were built on those recommended in the DRPT Transit and TDM Study of 2009, and in the 2012 Multimodal Study were grouped into high, medium and low impact, based on the ability of each measure to impact travel demand. High impact strategies included rideshare program operational support, enhanced telework, van priority access, direct transit subsidies, and enhanced employer outreach. Medium impact strategies included vanpool driver incentives, I-66 corridor carpool startup incentives, and regionwide financial incentives. Lower impact strategies included enhanced corridor marketing, enhanced vanpool insurance pool, capital assistance for vanpools, and flexible vanpool network strategies.

The Project **ICM** recommendation also includes the addition of dynamic merge/junction control, speed harmonization, advanced parking management systems for park-and-ride lots, multimodal traveler information including travel time information by mode, and implementing signal priority for transit vehicles in the corridor.

Lastly, the project also includes the **widening** of I-66 in the eastbound direction from the Dulles Toll Road (DTR) to Fairfax Drive near Ballston by 2020. It also includes the westbound **widening** between the Sycamore Street off-ramp to the Washington Blvd. on-ramp by 2040.

### **Tolling Policy**

As on the other managed lane facilities in the region, tolls will be congestion-based. To use this section of I-66 inside the Beltway during the 4-hour peak periods in the peak direction, motorists will have the choice of forming a carpool (2+ at project opening (2017), 3+ when I-66 outside the beltway opens or converts to HOV-3+), taking transit, or paying a toll. When tolling starts in 2017, carpools of two or more persons, buses, motorcycles, and emergency response vehicles will ride free. Other vehicles not meeting the occupancy requirement can choose to pay a toll, using electronic toll collection equipment, at a rate that will vary based on the level of congestion, to ensure free-flow conditions as specified by Federal and State regulations. When the I-66 outside the Beltway project converts to HOV-3+ or opens to tolling, the carpool occupancy requirement for free access to the inside the Beltway managed lanes will be increased to HOV-3+.

The region's current Constrained Long Range Plan calls for all HOV lanes in Northern Virginia to be HOV-3+ by 2020. Allowing HOV-3+ vehicles to ride free is consistent with this policy change, and will also match the occupancy requirement on I-495 and the I-95 Express Lanes. The Project provides a seamless network of Express lanes by connecting to adjacent Express facilities.

MAP-21 mandates strict performance standards which are intended to ensure free-flowing conditions on the Express lanes. The proposed Express lanes project will include performance monitoring as an integral part of the project and ensure that the MAP-21 mandated performance standards are complied with as a minimum. More specifically, the project will meet all applicable requirements of MAP-21 regarding "HOV Facility Management, Operation, Monitoring, and Enforcement" as described in Section 166 of Title 23 U.S.C., inclusive of the amendments (deletions, insertions and additions) prescribed by MAP-21 Section 1514 "HOV FACILITIES". This includes a minimum average operating speed of 45 mph for 90% of the time over a specific period of time during the peak period.

## Schedule

Project development and procurement began in 2015, and will be followed by construction of the tolling gantries starting in 2016. Tolling is expected to start in summer 2017, along with the initial multimodal improvements. The multimodal improvement program will continue for the term of the 40 year MOA executed in January 2016 (expected to sunset in 2056). Eastbound widening is expected by 2020 and westbound widening is expected by 2040.

## Federal Environmental Review (“NEPA”) Process

VDOT is conducting a CE for the tolling component in order to participate in the Value Pricing Pilot Program, which is a federal program. Completion of the CE is expected in March 2016. Environmental documentation for future widening will be prepared at a later date.

## Coordination with Other Projects

The Project has been closely coordinated with other initiatives such as the I-66 Active Traffic Management (ATM) project (recently implemented) and the I-66 Express Lanes project outside the Beltway. The Project will also be coordinated with future improvements that may be underway in the corridor.

## Financial Plan

The total baseline cost for the Project is estimated to be approximately \$375M (in year of expenditure dollars). This estimate includes the cost of tolling, multimodal improvements, and roadway widening, all of which will be self-financed through toll revenues.

## Stakeholder Outreach

VDOT and DRPT have been working closely with Arlington County, Fairfax County, the City of Falls Church, transit providers, and other stakeholders to implement a comprehensive outreach program. The outreach program has provided the opportunity for direct engagement with various groups along the corridor, including the local political leadership, transit service providers, various other interest groups, and business and community groups and leaders. There will also be additional opportunities for the public to learn more about the Project, as well as provide comments, both through the CLRP process and the NEPA process.

11. Projected Completion Year: **2017 (tolling, implement multimodal program), 2020 and 2040 (widening)**
12. Project Manager: Ms. Amanda Baxter
13. Project Manager E-Mail: [Amanda.Baxter@VDOT.Virginia.gov](mailto:Amanda.Baxter@VDOT.Virginia.gov)
14. Project Information URL: **[Transform66.org](http://Transform66.org)**
15. Total Miles: **10 miles (approximate)**



16. Schematic:



17. Documentation: **<to be determined>**

18. Jurisdictions: **Fairfax County, Arlington County, City of Falls Church**

19. Baseline Cost (in Thousands): **\$375,000**

20. Amended Cost (in Thousands): cost estimate as of 1/14/2016

21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

**Regional Policy Framework**

**22. Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

Single Driver  Carpool/HOV  Metrorail  Commuter Rail  Streetcar/Light Rail  
 BRT  Express/Commuter bus  Metrobus  Local Bus  Bicycling  Walking  Other

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)  Yes  No

**23. Promote Dynamic Activity Centers**

Does this project begin or end in an Activity Center?  Yes  No

Does this project connect two or more Activity Centers?  Yes  No

Does this project promote non-auto travel within one or more Activity Centers?  Yes  No

**24. Ensure System Maintenance, Preservation, and Safety**

Does this project contribute to enhanced system maintenance, preservation, or safety?

Yes  No

**25. Maximize Operational Effectiveness and Safety**

Does this project reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?  Yes  No

Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?  Yes  No

## 26. Protect and Enhance the Natural Environment

Is this project expected to contribute to reductions in emissions of criteria pollutants and/or greenhouse gases?  Yes  No

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

Long-Haul Truck  Local Delivery  Rail  Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

Air  Amtrak intercity passenger rail  Intercity bus

## 28. Additional Policy Framework

In the box below, please provide any additional information that describes how this project further supports or advances these and other regional goals.

VDOT and DRPT's Transforming I-66 Inside the Beltway project addresses several RTPP goals, as noted above. The project will be particularly effective in helping the Region achieve RTPP Goal # 1: **Provide a Comprehensive Range of Transportation Options**. This project combines capacity improvements with managed lanes, congestion pricing, intelligent transportation systems, new transit services, ride-sharing, and bicycle and pedestrian facilities improvements to expand the range of transportation alternatives available to travelers. The project addresses the four major problems cited in Goal Statement #1: roadway congestion, transit crowding, inadequate bus service, and unsafe walking and biking.

The Transform66: inside the Beltway project, as approved by the Commonwealth Transportation Board, is the culmination of a process that began with the development of the I-66 Multimodal Study for I-66 Inside the Beltway. This study recommended a multimodal package of improvements for I-66 which will provide improved and expanded travel opportunities for all modes in the corridor.

## MAP-21 PLANNING FACTORS

29. Please identify any and all planning factors that are addressed by this project:

a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue?  Yes;  No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d.  Increase **accessibility and mobility** of people.

e.  Increase accessibility and mobility of **freight**.

f.  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.

- g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.
- h.  Promote efficient system **management and operation**.
- i.  Emphasize the **preservation** of the existing transportation system.

## ENVIRONMENTAL MITIGATION

30. Have any potential mitigation activities been identified for this project?  Yes;  No

a. If yes, what types of mitigation activities have been identified?

- Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;
- Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

*Environmental mitigation may be required through analysis associated with future environmental studies associated with the widening.*

## CONGESTION MANAGEMENT INFORMATION

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program?

- Yes;  No

b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No

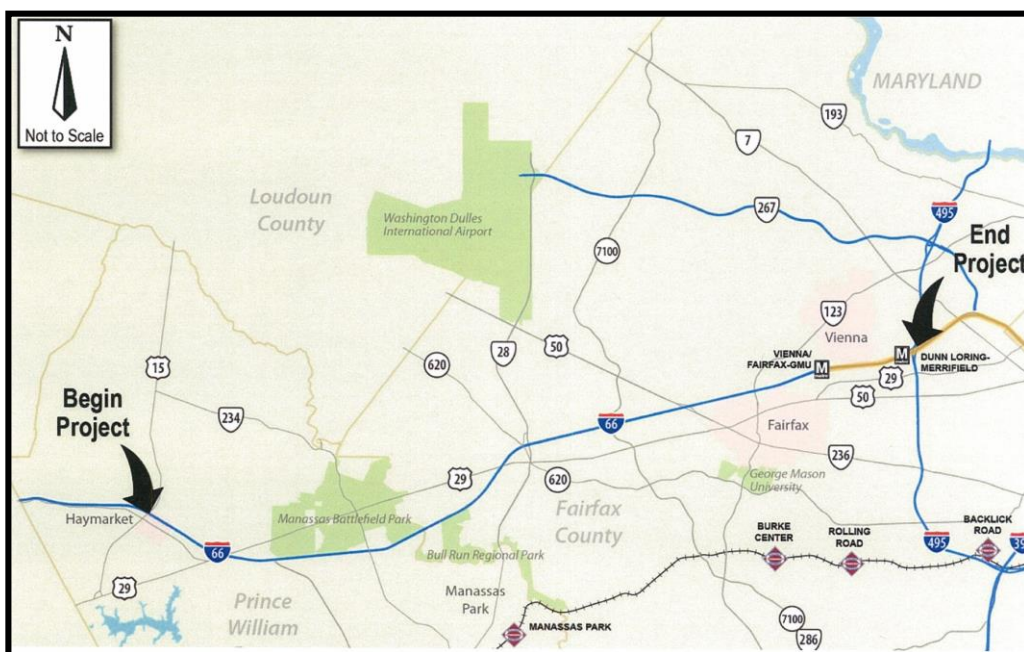
b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

- None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required
- The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)
- The number of lane-miles added to the highway system by the project totals less than one lane-mile
- The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange
- The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
- The project consists of preliminary studies or engineering only, and is not funded for construction
- The construction costs for the project are less than \$10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.

# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM BASIC PROJECT INFORMATION

1. Submitting Agency: **Virginia Department of Transportation**
2. Secondary Agency: **Virginia Department of Rail & Public Transportation**
3. Agency Project ID: **0066-96A-297, P101    UPC#105500**
4. Project Type:
  - Interstate     Primary     Secondary     Urban     Bridge     Bike/Ped
  - Transit     CMAQ     ITS     Enhancement     Other
  - Federal Lands Highways Program     Human Service Transportation Coordination
  - TERMS
5. Category:
  - System Expansion;     System Maintenance;     Operational Program;
  - Study;     Other
6. Project Name: **I-66 Corridor Improvements Project Outside the Beltway**  
Prefix Route Name Modifier
7. Facility: **I-66**
8. From: **US 15, Prince William County**
9. To: **I-495, Fairfax County**



## 10. Description:

The Commonwealth's I-66 Corridor Improvements Project ("Project") outside the Beltway was first submitted for the 2015 CLRP Air Quality Analysis, and the FY16 submission provides minor modifications to the project based on the Commonwealth Transportation Board's selection of a preferred alternative on October 27, 2015. The project includes:

- Three general purpose lanes in each direction (with auxiliary lanes between interchanges where needed: between US 29 Gainesville and VA 234 Bypass / Prince William Parkway; and between US 29 Centreville and I-495 / Capital Beltway);
- Two barrier-separated managed express lanes in each direction (the existing high-occupancy vehicle (HOV) lane will be converted to an express lane and one new express lane will be added);
- New high-frequency bus service with more predictable travel times;
- Direct access ramps to and from the Express lanes:
  - Haymarket - west of US 15 - to / from east and west
  - Gainesville - at University Boulevard - to / from east\*
  - VA 234 Bypass / Prince William Parkway - to / from west
  - Cushing Road Park and Ride Lot / VA 234 Bypass - to / from east
  - Manassas - Balls Ford Road Park and Ride Lot - to / from east\*
  - Centreville - VA 28 - to / from east and west (access between west and south excluded)\*
  - Centreville - I-66 mainline transition ramps to allow all movements between I-66 General Purpose lanes and I-66 Express lanes\*
  - Centreville - Stringfellow Road - to / from east\*
  - Fair Oaks - Monument Drive - to / from east and west\*
  - Fairfax - US 50 - to / from east (I-66) and northwest (US 50)\*
  - Fairfax - VA 123 - to / from east\*
  - Vienna - Vaden Drive - to / from west\*
  - Dunn Loring - from Eastbound I-66 General Purpose lanes to Eastbound I-66 Express lanes\*

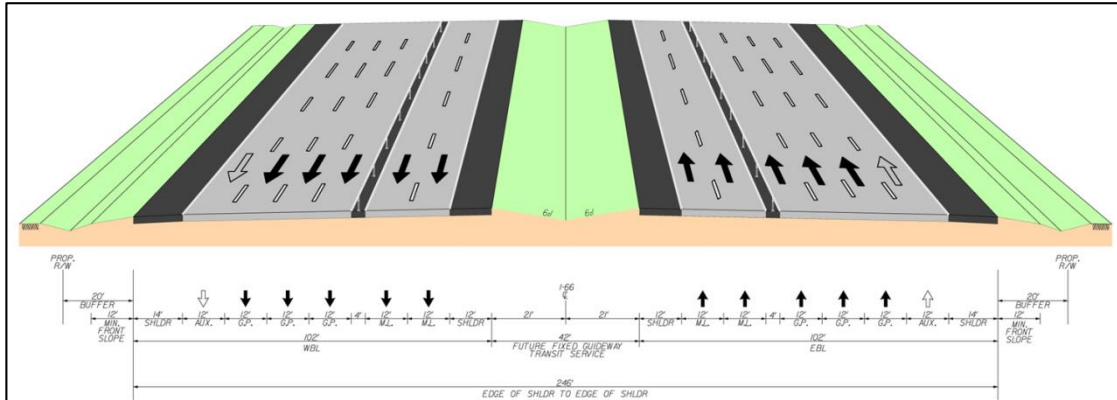
*\* Ramps implemented in Phase 1 by 2021; all other access is part of ultimate Preferred Alternative constructed by 2040*

- New or expanded commuter park and ride lots in the corridor.
- A phased approach to construction that includes express lanes from Gainesville to I-495 in the first phase (opening in 2021), with the remaining portion of the corridor express lanes between Gainesville and Haymarket constructed by 2040. In addition, a typical section that provides space in the median for future transit will be phased as well, between US 15 Haymarket and US 29 Centreville, as described below.

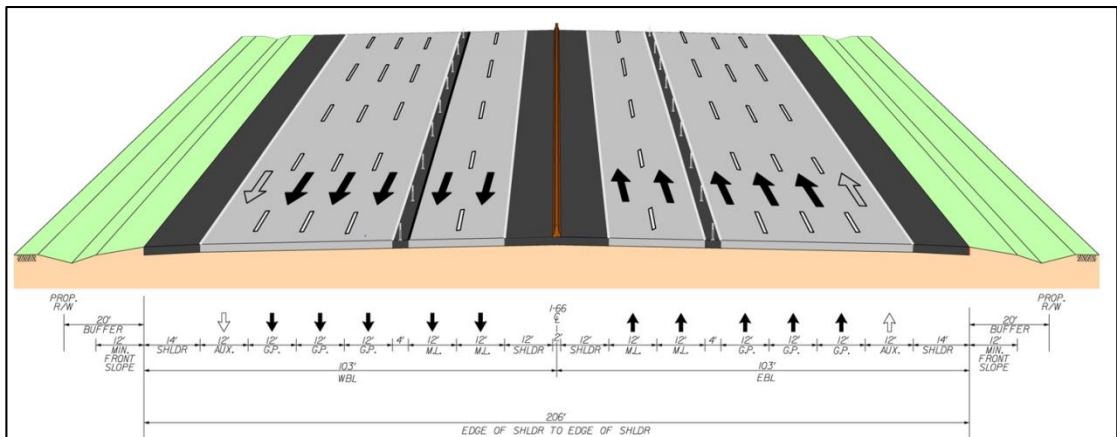
Below are two typical sections that will be implemented along the corridor. The first typical section illustrates the alternative selected by the Commonwealth Transportation Board for the Preferred Alternative. The second typical section illustrates the alternative that will be initially utilized as part of a phased construction approach, from east of US 29 Gainesville to US 29 Centreville only, under Phase 1.

Once the entire project is constructed, the cross section will be reconfigured where needed to allow for future transit.

*Preferred Alternative – Flexible Barrier with Buffer & Median reserved for Future Center Transit*



*Phase 1 (Opening Year Configuration) – Flexible Barrier with Buffer and No Median Between US 29 Gainesville and US 29 Centreville*



As on the I-495 and I-95 Express Lanes, access to the I-66 Express Lanes will be available to automobiles, motorcycles, light-trucks, emergency vehicles, buses and transit vehicles only. Vehicles with three or more occupants and motorcycles would travel on the Express Lanes for free, as per the code of the Commonwealth of Virginia and Federal law. The facility will be operated and enforced for HOV3+ occupancy and toll payment in a manner that complies with the statutory requirements of the Commonwealth. Other vehicles not meeting the occupancy requirement of 3+ will pay a toll, using electronic toll collection equipment, at a rate that will vary based on congestion, to ensure free-flow conditions as specified by Federal regulations.

The region's current Constrained Long Range Plan calls for all HOV lanes in Northern Virginia to be HOV-3+ by 2020. Allowing HOV-3's to ride free is consistent with this policy change, and will also match the High Occupancy Toll lane occupancy requirement on 495 and 95. The Project expands the NoVA network of Express lanes by connecting to the I-495 Express Lanes Project, which also connects to the newly constructed I-95 Express Lanes.

The project includes a robust transit component, consisting of new and expanded commuter bus services providing one-seat rides between park and ride lots and major regional destinations on I-66 to complement Metrorail in the corridor. New and expanded park and ride lots are included throughout the corridor, with easy or direct access to the managed lanes. Finally, to promote and incentivize alternative modes in the corridor, new and enhanced corridor transportation demand management strategies will be included as part of the project.

Bicycle and Pedestrian accommodations in the corridor are included as part of the Preferred Alternative, and will be consistent with VDOT's Policy for Integrating Bicycle and Pedestrian Accommodations ([www.virginiadot.org/bikepedpolicy/](http://www.virginiadot.org/bikepedpolicy/)).

Project construction, operations and maintenance will be procured using Virginia's Public-Private Transportation Act (PPTA) legislation leading to the selection of a private consortium ("Concessionaire"). A comprehensive agreement will ultimately outline all of the terms and conditions of the Public-Private Partnership.

### **Tolling Policy**

Express lanes use dynamic pricing to maintain free-flowing conditions for all users, even during rush hour. The toll rates will vary throughout the day corresponding to demand and congestion levels. Toll prices will be adjusted in response to the level of traffic to ensure free flowing operations.

Dynamic message signs will provide drivers with current toll rates so they can choose whether or not to use the lanes. Toll collection on the Express Lanes will be totally electronic. There will be no toll booths. The dynamic message signs will be supplemented by other notification/communications methods to ensure all users, including transit operators, have as much advance notice of traffic conditions as is possible.

MAP-21 mandates strict performance standards which are intended to ensure free-flowing conditions on the Express lanes. The proposed Express lanes project will include performance monitoring as an integral part of the project and ensure that the MAP-21 mandated performance standards are complied with as a minimum. More specifically, the project will meet all applicable requirements of MAP-21 regarding "HOV Facility Management, Operation,

Monitoring, and Enforcement” as described in Section 166 of Title 23 U.S.C., inclusive of the amendments (deletions, insertions and additions) prescribed by MAP-21 Section 1514 "HOV FACILITIES". This includes a minimum average operating speed of 45 mph for 90% of the time over a specific period of time during the peak period.

### **Schedule**

Construction for the Project is projected to begin in 2017, with an estimated construction completion time of 4-5 years for Phase 1. The facility is expected to enter operations in 2021. The remaining construction of the Preferred Alternative will be implemented by 2040. The current schedule calls for completion of the environmental review in compliance with Federal (NEPA) and state regulations by January – February 2016. FHWA has further conditioned environmental approval to the Project being included in a conforming Transportation Improvement Program ("TIP") and Constrained Long Range Plan ("CLRP") for construction.

### **Federal Environmental Review ("NEPA") Process**

The Tier 2 Environmental Assessment scope builds upon and includes a combination of concepts identified in the Tier 1 Environmental Impact Statement. It evaluates site-specific conditions and potential effects the proposed improvements would have on air quality, noise, neighborhoods, parks, recreation areas, historic properties, wetlands and streams. The environmental review is currently being conducted in full accordance and compliance with Federal and state law. FHWA is the 'Lead Agency' for the NEPA document and will provide document review / approval and issuance of FONSI at the conclusion of the process.

### **Transportation Management Plan**

As a matter of policy, practice and a reflection the agency's commitment to safety, VDOT adopts Transportation Management Plans for its construction projects. Such Plans are also required by FHWA for large projects such as this initiative. The congestion mitigation plans used for projects such as the Springfield Interchange, the I-495 Express Lanes, and the I-95 Express Lanes have been very successful in managing traffic during construction. VDOT and the Concessionaire will similarly implement a robust Transportation Management Plan for this Project.

### **Coordination with Other Projects in the Corridor**

This project is being coordinated with other active projects in the corridor such as:

- Vaden Drive ramp improvements (now incorporated into I-66 project)



- Active Traffic Management (ATM) project (now operational)
- Route 28 / I-66 interchange improvements (now incorporated into I-66 project)
- US 15 / I-66 interchange improvements
- HOV lane and widening project from Gainesville to US 15

### **Financial Plan**

The total cost for the proposed Project is estimated to be approximately \$2 – 3 billion in year of expenditure dollars. Funding sources for the Project will include a combination of private and public equity and third party debt, including private bank loans and/or Private Activity Bonds, with the potential for TIFIA funding as a form of subordinated debt. As the Project progresses, VDOT will explore all avenues of funding to ensure the lowest cost of capital for the Project.

The Concessionaire will be fully authorized to toll the facility, which will serve to pay debt service, operating and maintenance costs and return on equity. Toll revenue will be the main source of revenue. The Commonwealth will enter into a Comprehensive Agreement with the selected Concessionaire, which will authorize the Concessionaire to raise the necessary funds to construct the Project.

### **Stakeholder Outreach**

A Stakeholder Technical Advisory Group (STAG) has been established and meets regularly. The STAG provides the opportunity for direct engagement with various groups along the corridor, including local jurisdictions, environmental resource agencies, transit service providers, and various other agencies. Stakeholder and public outreach is a high priority for the I-66 project team. A Transit/TDM Technical Advisory Group (TTAG) is also actively engaged in project development. There have been numerous opportunities for the public to learn more about the Project, as well as provide comments, through public meetings, the project website, and community dialogs in addition to other items. The project outreach has included 2 sets of Public Information Meetings and two sets of Public Hearings.

- 11. Projected Completion Year: **2021 for Phase 1 / 2040 for Preferred Alternative**
- 12. Project Manager: **Ms. Susan Shaw, P.E.**
- 13. Project Manager E-Mail: **[susan.shaw@VDOT.Virginia.gov](mailto:susan.shaw@VDOT.Virginia.gov)**
- 14. Project Information URL: **<http://www.transform66.org>**
- 15. Total Miles: **23 miles for Phase 1 / 26 miles for Preferred Alternative**
- 16. Schematic: **See figures in items 9 and 10 above, as well as attached roll maps.**

17. Documentation: **The graphics included in the response to items 9 and 10 above have been uploaded to allow a more readable version. All project documentation may be accessed electronically at: <http://outside.transform66.org/>**

18. Jurisdictions: **Fairfax County, Prince William County**

19. Baseline Cost (in Thousands): **\$2,000,000 - \$3,000,000 (approximately 2 to 3 \$billion) combined public & private cost estimate as of 11/10/2014**

20. Amended Cost (in Thousands): **\$2,100,000 (Phase 1) / approximately \$3,100,000 (Preferred Alternatives) - combined public & private cost estimate as of 9/28/2015**

21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

### **Regional Policy Framework**

#### **22. Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

Single Driver  Carpool/HOV  Metrorail  Commuter Rail  Streetcar/Light Rail  
 BRT  Express/Commuter bus  Metrobus  Local Bus  Bicycling  Walking  Other

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)  Yes  No

#### **23. Promote Dynamic Activity Centers**

Does this project begin or end in an Activity Center?  Yes  No

Does this project connect two or more Activity Centers?  Yes  No

Does this project promote non-auto travel within one or more Activity Centers?  Yes  No

#### **24. Ensure System Maintenance, Preservation, and Safety**

Does this project contribute to enhanced system maintenance, preservation, or safety?

Yes  No

#### **25. Maximize Operational Effectiveness and Safety**

Does this project reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?  Yes  No

Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?

Yes  No

#### **26. Protect and Enhance the Natural Environment**

Is this project expected to contribute to reductions in emissions of criteria pollutants and/or greenhouse gases?  Yes  No

#### **27. Support Interregional and International Travel and Commerce**

Please identify all freight carrier modes that this project enhances, supports, or promotes.

Long-Haul Truck  Local Delivery  Rail  Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

Air  Amtrak intercity passenger rail  Intercity bus

## 28. Additional Policy Framework

In the box below, please provide any additional information that describes how this project further supports or advances these and other regional goals.

VDOT and DRPT's Transforming I-66 Outside the Beltway project addresses several RTPP goals, as noted above. The project will be particularly effective in helping the Region achieve RTPP Goal # 1: **Provide a Comprehensive Range of Transportation Options**. This innovative project will combine capacity improvements with managed lanes, congestion pricing, intelligent transportation systems, new transit services, ride-sharing, new and expanded park and ride lots and bicycle and pedestrian facilities improvements to expand the range of transportation alternatives available to travelers. Moreover, the project is being designed to reserve opportunities for future westward extension of Metrorail or other high quality transit services. The project addresses the four major problems cited in Goal Statement #1: roadway congestion, transit crowding, inadequate bus service, and unsafe walking and biking.

The Preferred Alternative, as approved by the Commonwealth Transportation Board, is the culmination of a process that began with the development of the *Draft Tier1 Environmental Impact Statement* for I-66 Outside the Beltway. This document concluded that there was not a "single mode" solution to the problems associated with I-66. Adding enough freeway lanes to insure reliable travel was not feasible, while it was determined that the mix of modes, strategies and technologies embodied in what became the Preferred Alternative would provide improved and expanded travel opportunities.

## MAP-21 PLANNING FACTORS

29. Please identify any and all planning factors that are addressed by this project:

a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.

- i. Is this project being proposed specifically to address a safety issue? Yes;  No
- ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d.  Increase **accessibility and mobility** of people.

e.  Increase accessibility and mobility of **freight**.

f.  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.

g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h.  Promote efficient system **management and operation**.

i.  Emphasize the **preservation** of the existing transportation system.

## ENVIRONMENTAL MITIGATION

30. Have any potential mitigation activities been identified for this project?  Yes;  No

a. If yes, what types of mitigation activities have been identified?

Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;

Vibrations;

Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## CONGESTION MANAGEMENT INFORMATION

31. Congested Conditions

a. Do traffic congestion conditions necessitate the proposed project or program?

Yes;  No

b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring

c. If the congestion is on another facility, please identify it:

32. Capacity

a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No

b. If the answer to Question 32.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):

None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required

The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)

The number of lane-miles added to the highway system by the project totals less than one lane-mile

The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange

- The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
- The project consists of preliminary studies or engineering only, and is not funded for construction
- The construction costs for the project are less than \$10 million.

c. If the project is not exempt and requires a Congestion Management Documentation Form, [click here to open a blank Congestion Management Documentation Form](#).

**RECORD MANAGEMENT**

33. Completed Year:

34.  Project is being withdrawn from the CLRP.

35. Withdrawn Date: MM/DD/YYYY

36. Record Creator:

37. Created On:

38. Last Updated by:

39. Last Updated On:

40. Comments:

# FINANCIALLY CONSTRAINED LONG-RANGE TRANSPORTATION PLAN FOR 2040 PROJECT DESCRIPTION FORM



## **BASIC PROJECT INFORMATION**

1. Submitting Agency: Fairfax County DOT
2. Secondary Agency: Virginia DOT
3. Agency Project ID:
4. Project Type:  Interstate  Primary  Secondary  Urban  Bridge  Bike/Ped  Transit  CMAQ  
 ITS  Enhancement  Other  Federal Lands Highways Program  
 Human Service Transportation Coordination  TERMS
5. Category:  System Expansion;  System Maintenance;  Operational Program;  Study;  Other
6. Project Name: Route 28 Expansion with HOV Lanes

	Prefix	Route	Name	Modifier
7. Facility:		28	Sully Road	
8. From ( <input type="checkbox"/> at):			I-66	
9. To:			Loudoun County (at Dulles Toll Road)	

10. Description: Widen Route 28 from 6 to 8 lanes plus auxiliary lanes between I-66 and Westfields Blvd., with a later incorporation of HOV lanes into 8 lane roadway.
11. Projected Completion Year: 2025/2040
12. Project Manager:
13. Project Manager E-Mail:
14. Project Information URL:
15. Total Miles: 8
16. Schematic:
17. Documentation:
18. Jurisdictions: Fairfax County, VA
19. Baseline Cost (in Thousands): \$100,000 cost estimate as of 05/19/2010
20. Amended Cost (in Thousands): cost estimate as of MM/DD/YYYY
21. Funding Sources:  Federal;  State;  Local;  Private;  Bonds;  Other

## **Regional Policy Framework**

### **22. Provide a Comprehensive Range of Transportation Options**

Please identify all travel mode options that this project provides, enhances, supports, or promotes.

- |   |   |   |                                    |
|---|---|---|------------------------------------|
| <input checked="" type="checkbox"/> Single Driver | <input checked="" type="checkbox"/> Carpool/HOV |   |                                    |
| <input type="checkbox"/> Metrorail                | <input type="checkbox"/> Commuter Rail          | <input type="checkbox"/> Streetcar/Light Rail |                                    |
| <input type="checkbox"/> BRT                      | <input type="checkbox"/> Express/Commuter bus   | <input type="checkbox"/> Metrobus             | <input type="checkbox"/> Local Bus |
| <input type="checkbox"/> Bicycling                | <input type="checkbox"/> Walking                | <input type="checkbox"/> Other                |                                    |

Does this project improve accessibility for historically transportation-disadvantaged individuals (i.e., persons with disabilities, low-incomes, and/or limited English proficiency?)  Yes  No

# CLRP PROJECT DESCRIPTION FORM

## 23. Promote Regional Activity Centers

Does this project begin or end in an Activity Center?  Yes  No

Does this project connect two or more Activity Centers?  Yes  No

Does this project promote non-auto travel within one or more Activity Centers?  Yes  No

## 24. Ensure System Maintenance, Preservation, and Safety

Does this project contribute to enhanced system maintenance, preservation, or safety?  Yes  No

## 25. Maximize Operational Effectiveness and Safety

Does this project reduce travel time on highways and/or transit without building new capacity (e.g., ITS, bus priority treatments, etc.)?  Yes  No

Does this project enhance safety for motorists, transit users, pedestrians, and/or bicyclists?  Yes  No

## 26. Protect and Enhance the Natural Environment

Is this project expected to contribute to reductions in emissions of criteria pollutants?  Yes  No

Is this project expected to contribute to reductions in emissions of greenhouse gases?  Yes  No

## 27. Support Interregional and International Travel and Commerce

Please identify all freight carrier modes that this project enhances, supports, or promotes.

Long-Haul Truck  Local Delivery  Rail  Air

Please identify all passenger carrier modes that this project enhances, supports, or promotes.

Air  Amtrak intercity passenger rail  Intercity bus

## 28. Additional Policy Framework

In the box below, please provide any additional information that describes how this project further supports or advances these and other regional goals.

## MAP-21 PLANNING FACTORS

29. Please identify any and all planning factors that are addressed by this project:

a.  Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

b.  Increase the **safety** of the transportation system for all motorized and non-motorized users.

i. Is this project being proposed specifically to address a safety issue?  Yes;  No

ii. If yes, briefly describe (in quantifiable terms, where possible) the nature of the safety problem:

c.  Increase the ability of the transportation system to support **homeland security** and to safeguard the personal security of all motorized and non-motorized users.

d.  Increase **accessibility and mobility** of people.

e.  Increase accessibility and mobility of **freight**.

f.  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.

g.  Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

h.  Promote efficient system **management and operation**.

i.  Emphasize the **preservation** of the existing transportation system.

# CLRP PROJECT DESCRIPTION FORM

## **ENVIRONMENTAL MITIGATION**

30. Have any potential mitigation activities been identified for this project?  Yes;  No
- a. If yes, what types of mitigation activities have been identified?
- Air Quality;  Floodplains;  Socioeconomics;  Geology, Soils and Groundwater;  Vibrations;
  - Energy;  Noise;  Surface Water;  Hazardous and Contaminated Materials;  Wetlands

## **CONGESTION MANAGEMENT INFORMATION**

31. Congested Conditions
- a. Do traffic congestion conditions necessitate the proposed project or program?  Yes;  No
- b. If so, is the congestion recurring or non-recurring?  Recurring;  Non-recurring
- c. If the congestion is on another facility, please identify it:
32. Capacity
- a. Is this a capacity-increasing project on a limited access highway or other principal arterial?  Yes;  No
- b. If the answer to Question 26.a was "yes", are any of the following exemption criteria true about the project? (Choose one, or indicate that none of the exemption criteria apply):
- None of the exemption criteria apply to this project – a Congestion Management Documentation Form is required
  - The project will not use federal funds in any phase of development or construction (100% state, local, and/or private funding)
  - The number of lane-miles added to the highway system by the project totals less than one lane-mile
  - The project is an intersection reconstruction or other traffic engineering improvement, including replacement of an at-grade intersection with an interchange
  - The project, such as a transit, bicycle or pedestrian facility, will not allow private single-occupant motor vehicles
  - The project consists of preliminary studies or engineering only, and is not funded for construction
  - The construction costs for the project are less than \$10 million.
- c. If the project is not exempt and requires a Congestion Management Documentation Form, click here to open a blank Congestion Management Documentation Form.



**ITEM 10 – Action**  
November 16, 2016

Approval of the FY 2017-2022  
Transportation Improvement Program (TIP)

**Staff**

**Recommendation:** Adopt Resolution R5-2017 approving the  
FY 2017-2022 TIP

**Issues:** None

**Background:** On October 13, the draft FY 2017-2022  
TIP was released for public comment.



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

**RESOLUTION APPROVING THE  
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) FOR FY 2017-2022**

**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 the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

**WHEREAS**, the Federal Planning Regulations of the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) implementing the FAST Act, which became effective June 27, 2016, specify the development and content of the long range transportation plan and require that it be reviewed and updated at least every four years; and

**WHEREAS**, the TIP is required by FHWA and 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 October 15, 2014, the TPB approved the FY 2015-2020 TIP which was developed as specified in the Federal Planning Regulations; and

**WHEREAS**, on December 16, 2015, the TPB issued a solicitation document for projects and strategies to be included in the 2016 CLRP Amendment and the FY 2017-2022 TIP that will meet federal planning requirements, address the federal planning factors, and goals in the TPB Vision and the Regional Transportation Priorities Plan; and

**WHEREAS**, the transportation implementing agencies in the region provided project submissions for the 2016 CLRP Amendment and the FY 2017-2022 TIP, and the TPB Technical Committee and the TPB reviewed the project submissions at meetings in February and March 2016; and

**WHEREAS**, on March 16, 2016 the TPB approved the major projects submitted for inclusion in the Air Quality Conformity Analysis for the 2016 CLRP Amendment and the FY 2017-2022 TIP; and

**WHEREAS**, on October 13, 2016 the draft 2016 CLRP Amendment and FY 2017-2022 TIP and the Air Quality Conformity Analysis were released for a 30-day public comment period and inter-agency review at the TPB Citizens Advisory Committee (CAC) meeting; and

**WHEREAS**, the FY 2017-2022 TIP projects are consistent with the 2016 CLRP Amendment as approved by the TPB on November 16, 2016; and are selected in accordance with the Federal Planning Regulations; and

**WHEREAS**, the FY 2017-2022 TIP has been developed to meet the financial requirements in the Federal Planning Regulations; and

**WHEREAS**, on November 16, 2016, the TPB determined that the 2016 CLRP Amendment and FY 2017-2022 TIP conform with the requirements of the Clean Air Act Amendments of 1990; and

**WHEREAS**, the U.S. Department of Transportation issued regulations in 1991 on providing transit services to persons with disabilities to conform to the Americans With Disabilities Act (ADA) of 1990, and by January 1997, both the Washington Metropolitan Area Transit Authority and Frederick County ADA Paratransit services were operating as planned in conformance with the regulations; and

**WHEREAS**, during the development of the 2016 CLRP Amendment and the FY 2017-2022 TIP, the TPB Participation Plan was followed, and numerous opportunities were provided for public comment: (1) At the February 11, 2016 TPB Citizens Advisory Committee (CAC) meeting, the project submissions for inclusion in the Air Quality Conformity Analysis and the Air Quality Conformity work scope were released, and an opportunity for public comment on these submissions was provided at the beginning of the February TPB meeting; (2) At the March 16, 2016 meeting, the TPB accepted a set of responses to the public comments on the project submissions for inclusion in the CLRP and TIP documents; (3) On September 15, 2016 following the CAC meeting, a Public Forum was held on the development of the FY 2017-2022 TIP; (4) On October 27, 2016 the 2016 CLRP Amendment was presented to the TPB's Access for All Advisory Committee for their consideration and comment; (5) On October 13, 2016 in conjunction with the CAC meeting, the draft 2016 CLRP Amendment, the draft FY 2017-2022 TIP, and the draft Air Quality Conformity Analysis were released for a 30-day public comment period which closed on November 12, 2016; (6) An opportunity for public comment on these documents was provided on the TPB website and at the beginning of the October and November TPB meetings; and (7) the documentation of the 2016 CLRP Amendment will include summaries of all comments and responses; and

**WHEREAS**, the TPB Technical Committee has recommended favorable action on the FY 2017-2022 TIP by the Board,

**NOW, THEREFORE, BE IT RESOLVED THAT** the National Capital Region Transportation Planning Board approves the Transportation Improvement Program for FY 2017-2022.



## **MEMORANDUM**

**TO:** Transportation Planning Board  
**FROM:** Andrew Austin, TPB Transportation Planner  
**SUBJECT:** Briefing on the Draft FY 2017-2022 Transportation Improvement Program (TIP)  
**DATE:** October 13, 2016

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On Thursday, October 13, 2016 the TPB released the draft 2016 Constrained Long-Range Plan (CLRP) Amendment, the draft FY 2017-2022 Transportation Improvement Program (TIP) and the draft Air Quality Conformity Analysis results for a 30-day public comment period. This memo provides information on the development of the draft FY 2017-2022 TIP. In December 2015, the TPB released the Call for Projects for the 2016 Amendment to the CLRP and the FY 2017-2022 TIP. The baseline used for the development of the new TIP was the FY 2015-2020 TIP, as amended, and carried over to cover fiscal years 2017-2022. Agencies were asked to provide their inputs for the Draft TIP in May 2016.

### **BACKGROUND ON THE TIP**

Before a transportation funding agency can apply for federal funds to use toward any projects, the project must be identified in a TIP and in a CLRP (if applicable). Typically, it is the last step a project must go through before any work can begin. When USDOT approves a project for funding, the submitting agency must know several things at the moment of the transaction, including exactly what type of funding is available and identified for use, how much the project phase costs, and other details. Often referred to as an “obligation” document, the TIP must meet strict federal requirements and serves as one official way that these funding details are provided.

Federal law requires that the TIP cover a minimum of four-years and be updated at least every four years. The TIP is a short term implementation document that is essentially the means for implementing the projects and programs identified in the long term in the CLRP. It includes capital projects, operational programs and some maintenance for all modes of surface transportation: roads and bridges, transit, bicycle and pedestrian, and freight. The TPB’s TIP covers a six-year period to be consistent with the budgeting and programming processes of its member agencies. Funding in the first two years of the TIP must be “available and committed,” according to federal law, while funding for the third and fourth years must be “reasonably expected to be available,” much like funding in the CLRP.

The prioritization and implementation of projects is a continuously evolving process for each agency. The TIP document included in this item can only provide a “snapshot” of the TIP at this point in time. The TIP is amended or modified on a monthly and sometimes even weekly basis, through staff approvals, TPB Steering Committee actions, or large-scale amendments brought to the TPB for adoption.

The funding included in the TIP does not provide a comprehensive picture of all transportation-related spending in the region. There are many operations and maintenance programs that do not use federal funding and that are not required to be included in the TIP. Similarly, many small-scale projects that are

not regionally significant or federally funded are not required to be included either. While the funding of different phases (planning, engineering, right-of-way acquisition, construction) is described in the TIP, it is not intended to provide a schedule for construction the way that a Capital Improvement Program (CIP) might. There is also no guarantee that projects programmed in the TIP will be built. Priorities can change and funding can be withdrawn from one project to be applied to other projects.

## **INPUTS TO THE FY 2017-2022 TIP**

The previously approved FY 2015-2020 TIP, as amended through October 7, 2016, formed the baseline of inputs for each agency to start with when updating the FY 2017-2022 TIP. The three Departments of Transportation in the District, Maryland, and Virginia, and the Washington Metropolitan Area Transit Authority are on different schedules for their budgeting and programming processes. For this reason, some agencies have provided inputs that cover the full six years of the TIP, while inputs from other agencies may only cover the first four years.

Projects in the **District of Columbia** come from the DDOT State Transportation Improvement Program (STIP). DDOT is currently developing its new FY 2017-2023 STIP, and will provide a significant amendment to update the TPB FY 2017-2022 TIP in early 2017. Currently, funding in the District portion of the FY 2017-2022 TIP reflects the FY 2015-2020 TIP, as amended. Projects in **Maryland** come from the Maryland Consolidated Transportation Program (CTP). MDOT has provided inputs to the TIP based on its draft FY 2017-2022 (CTP). Projects in **Virginia** come from the VDOT STIP. VDOT is currently developing the FY 2018-2021 STIP, which is expected to provide the inputs for a significant amendment to the TIP in early 2017. Funding in the Virginia portion of the FY 2017-2022 TIP reflects the FY 2015-2020 TIP, as amended. Projects from **Washington Metropolitan Area Transit Authority** (WMATA) come from their latest Capital Budget. Currently, WMATA funding of the FY 2017-2022 TIP reflects the FY 2015-2020 TIP, as amended. An amendment to reflect funding changes related to the Metro SafeTrack program is expected by the end of 2016. An amendment to reflect WMATA's FY 2018 Capital Budget and FY 2018-2023 CIP is expected in the spring of 2017.

## **SUMMARY OF FUNDING IN THE FY 2017-2022 TIP**

There are over 300 projects and programs included in the FY 2017-2022 TIP with a total of \$11 billion programmed over the document's six year span. There are 114 road and bridge projects that total \$2.45 billion and 55 transit projects that total \$6.63 billion (the Purple Line in Maryland accounting for \$2.4 billion of that funding). There are 34 projects identified as bicycle and pedestrian projects with \$250 million in funding. It should be noted that there are many road projects that include bicycle and/or pedestrian accommodations that are not included in this count or total.

Almost half of the funding in the TIP – \$4.8 billion, or 45% – comes from state or local sources. The remaining \$6.2 billion (55%) comes from formula funding programs from the Federal Highway Administration and the Federal Transit Administration.

## **MATERIALS FOR PUBLIC COMMENT**

Attached to this memo is the draft FY 2017-2022 TIP which was released for a 30-day public comment period on Thursday, October 13, 2016. Comments may be submitted:

- Online at [www.mwcog.org/TPBcomment](http://www.mwcog.org/TPBcomment)
- Via email at [TPBcomment@mwkog.org](mailto:TPBcomment@mwkog.org)
- By calling (202) 962-3262, TDD: (202) 962-3213
- Or in writing to The Transportation Planning Board  
777 North Capitol Street, NE, Suite 300  
Washington, DC 20002-4239

The public comment period ends on Saturday, November 12, 2016. The TPB will be asked to approve the FY 2017-2022 TIP at the meeting on November 16, 2016.





# FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM

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Draft for Public Comment

October 13, 2016



National Capital Region  
Transportation Planning Board



## Interstate

### 11th Street Bridges and Interchange Reconstruction

TIP ID: 5554 Agency ID: HTF02A Title: Garvee Bond Debt Service

### Rehabilitation of I-395 HOV Bridge over Potomac River

TIP ID: 6187 Agency ID: MRR27A Title: Rehabilitation of I-395 HOV Bridge over Potomac River

### Rehabilitation of I-66 Ramp to Whitehurst Freeway over Potomac Pkwy and Rock Creek (Bridge No.1303)

TIP ID: 6416 Agency ID: Title: Rehabilitation of I-66 Ramp to Whitehurst Freeway over Potomac Pkwy and

## Primary

### Anacostia Waterfront Initiative

TIP ID: 5957 Agency ID: AW0, EW002C Title: Pennsylvania Ave/Potomac Circle

TIP ID: 5723 Agency ID: AW027A Title: St. Elizabeths Campuses Access Improvements

TIP ID: 5802 Agency ID: CD044A Title: Program Manager AWI

TIP ID: 3290 Agency ID: SR049A Title: Reconstruction of Kenilworth Avenue, NE

### South Capitol Street

TIP ID: 6038 Agency ID: Title: Garvee Debt Service

TIP ID: 3423 Agency ID: AW011, AW024 Title: South Capitol Street Corridor

## Secondary

### Columbia Road NW, Reconstruction 16th to 18th Streets and Resurface 18th Street to Conn Ave

TIP ID: 6189 Agency ID: MRR24A Title: Columbia Road, NW, Reconstruction 16th to 18th Streets and Resurface 18

### Florida Avenue Transportation Study

TIP ID: 6195 Agency ID: ZU033A Title: Florida Avenue Transportation Study

### Maryland Avenue Pedestrian Safety Project

TIP ID: 6014 Agency ID: SR088A Title: Maryland Avenue NE Road Diet

### Mid City East

TIP ID: 6184 Agency ID: OSS14A Title: Mid City East

### Reconstruction of 18th Street, NW from Virginia Ave to Connecticut Ave/M Street

TIP ID: 6412 Agency ID: Title: Reconstruction of 18th Street, NW from Virginia Ave to Connecticut Ave/M

### Reconstruction of 21st Street, NW from Constitution Ave to G Street and from I Street to New Hampshi

TIP ID: 6413 Agency ID: Title: Reconstruction of 21st Street, NW from Constitution Ave to G Street and Fr

### Reconstruction of Columbia Rd NW from Michigan Ave./Park Place to 15th Street

TIP ID: 6415 Agency ID: Title: Reconstruction of Columbia Rd NW from Michigan Ave NW/Park Place to 1

### Reconstruction of Harvard Street NW from 16th Street NW to Georgia Ave NW

TIP ID: 6425 Agency ID: Title: Reconstruction of Harvard Street NW from 16th St NW to Georgia Ave NW

### Reconstruction of Kenyon Street NW from Park Place to 13th Street

TIP ID: 6414 Agency ID: Title: Reconstruction of Kenyon Street NW from Park Place NW to 13th Street N

### Reconstruction of Ward II

TIP ID: 6493 Agency ID: Title: Reconstruction of Ward II

### Safety Improvements of 22nd and I NW

TIP ID: 6492 Agency ID: Title: Safety Improvements of 22nd and I NW

## Bike/Ped

### District-wide Bicycle and Pedestrian Management Program

TIP ID: 3232 Agency ID: CM064A, ZUT0 Title: Bicycle and Pedestrian Management Program

**East Capitol Street Pedestrian Safety Project**

TIP ID: 6315 Agency ID: SR086A Title: East Capitol Street Corridor Mobility & Safety Plan

**Metropolitan Branch Trail**

TIP ID: 3228 Agency ID: AF073A, ZU024 Title: Metropolitan Branch Trail

**National Recreational Trails**

TIP ID: 2796 Agency ID: AF066A Title: National Recreational Trails

TIP ID: 6230 Agency ID: ZU010A Title: New York Avenue Trail

**Rock Creek Park Trail**

TIP ID: 3230 Agency ID: AF005A Title: Rock Creek Park Trail

**Safe Routes to School**

TIP ID: 2888 Agency ID: CM086A Title: Safe Routes to School

**South Capitol Street Trail**

TIP ID: 6114 Agency ID: ZUT10C Title: South Capitol Street Trail

**Bridge**

**Anacostia Freeway Bridges over Nicholson Street SE**

TIP ID: 6082 Agency ID: MRR15A Title: Anacostia Freeway Bridges over Nicholson Street SE (Bridges #1001, 1002)

**H Street Bridge over Amtrak**

TIP ID: 6039 Agency ID: CD054A Title: H Street Bridge over Railroad

**Rehabilitation of 14th Street, SW Bridge over Streetcar Terminal**

TIP ID: 6426 Agency ID: Title: Rehabilitation of 14th Street, SW Bridge over Streetcar Terminal

**Rehabilitation of K Street NW Bridge, over Whitehurst Freeway Ramp (Bridge No. 1304)**

TIP ID: 6417 Agency ID: Title: Rehabilitation of K Street NW Bridge, over Whitehurst Freeway Ramp (Brid

**Roadway and Bridge Improvement on Southern Avenue and Winkle Doodle Branch Bridge**

TIP ID: 5353 Agency ID: ED028A Title: Roadway and Bridge Improvement on Southern Avenue and Bridge #64 (ov

**Enhancement**

**Transportation Alternatives Program**

TIP ID: 3210 Agency ID: AF049A Title: Transportation Alternatives Program

**ITS**

**Traffic Operations Improvements Citywide**

TIP ID: 3216 Agency ID: OSS07A, CI060 Title: Traffic Operations Improvements Citywide

TIP ID: 6283 Agency ID: PM0A4A Title: Managed Lanes

**Traffic Signal LED Replacement**

TIP ID: 6115 Agency ID: CI040A Title: Traffic Signal LED Replacement

**Other**

**Asset Condition Assessment**

TIP ID: 5323 Agency ID: MNT06A, SR09 Title: Condition Assessment

**Cleveland Park Study**

TIP ID: 6193 Agency ID: PM0D7A Title: Cleveland Park Study

**Planning and Management Systems**

TIP ID: 3213 Agency ID: CAL16C, PM30 Title: Planning and Management Systems

TIP ID: 5322 Agency ID: CM085A Title: Preventive Maintenance and Repair of Stormwater Pumping Stations

TIP ID: 3355 Agency ID: PM086A Title: Professional Capacity-Building Strategy

**Rehabilitation of Anacostia Freeway Bridges over South Capitol Street (Bridge No. 1016 & 1017)**

TIP ID: **6097** Agency ID: **MRR14A** Title: **Rehabilitation of Anacostia Freeway Bridges over South Capitol Street (Bri**

**Roadside Improvements Citywide**

TIP ID: **5792** Agency ID: **ED0C2A** Title: **C Street NE Implementation**

**Roadway Reconstruction Citywide**

TIP ID: **2965** Agency ID: **SR060A MRR1** Title: **Roadway Reconstruction Citywide**

**Safety Improvements**

TIP ID: **3212** Agency ID: **CB0, CIO** Title: **Safety Improvements Citywide**

TIP ID: **6240** Agency ID: **MRR01A** Title: **Safety and Geometric Improvements of I-295**

**Streetscape**

TIP ID: **2922** Agency ID: **ED064A** Title: **Great Streets - Minnesota Ave, NE**

**Traffic Congestion Mitigation**

TIP ID: **2945** Agency ID: **CM074A** Title: **District TDM (goDCgo)**

**Traffic Signal Maintenance**

TIP ID: **5347** Agency ID: **CI046A, CI047** Title: **Traffic Signal Maintenance NHPP-STP**

**Urban Forestry Program**

TIP ID: **5313** Agency ID: **CG311, CG312,** Title: **Urban Forestry Program**

**TERMS**

**Transportation Emissions Reduction Measures**

TIP ID: **3219** Agency ID: **ZU022A** Title: **Commuter Connections Program**

**Maintenance**

**Bloomingdale/LeDroit Park Medium Term Flood Mitigation Project**

TIP ID: **6190** Agency ID: **FLD01** Title: **Bloomingdale/LeDroit Park Medium Term Flood Mitigation Project**

**Bridge Replacement/Rehabilitation Program**

TIP ID: **6427** Agency ID: Title: **Kenilworth Terrace Bridge over Watts Branch**

TIP ID: **5298** Agency ID: **AF067A** Title: **Emergency Transportation Project**

TIP ID: **3202** Agency ID: **CD032C, MNT0** Title: **Bridge Design Consultant Services**

TIP ID: **5342** Agency ID: **CD046A** Title: **Approach Bridges to 14th Street Bridge**

TIP ID: **5337** Agency ID: **CD051A** Title: **Replacement of Pedestrian Bridges over Kenilworth Ave**

TIP ID: **5334** Agency ID: **CD052A** Title: **Safety Improvements of Benning Road Bridges over Kenilworth Ave**

TIP ID: **3243** Agency ID: **CD062A** Title: **Citywide Consultant Bridge Inspection**

TIP ID: **5316** Agency ID: **CD062A** Title: **Impact Attenuators and Guiderrails**

TIP ID: **5804** Agency ID: **MRR04A** Title: **East Capitol St. Bridge over Anacostia River, Br. # 233**

TIP ID: **5433** Agency ID: **PM094A, CD05** Title: **Bridge management Project/AASHTOWARE**

**Maintenance of Stormwater management / Best Management Ponds**

TIP ID: **3242** Agency ID: **CA303C, MNT0** Title: **Maintenance, Rehab and Reconstruction of Stormwater-Hydraulic Structur**

**Normanstone/Fulton Street Culvert & LID**

TIP ID: **6194** Agency ID: **Temp1315** Title: **Normanstone/Fulton Street Culvert & LID**

**Resurfacing Streets and Freeways Citywide**

TIP ID: **5339** Agency ID: **SR037A** Title: **FY2012 Pavement Restoration - NHPP Streets**

TIP ID: **3215** Agency ID: **SR092A** Title: **Federal Aid Pavement Restoration**

**Streetlight Asset Mgmt & Streetlight Construction - Federal**

TIP ID: 5439 Agency ID: AD017A Title: Citywide streetlight construction

TIP ID: 5385 Agency ID: AD020A Title: Streetlight Asset Mgmt - Federal

**Streetlight Asset Mgmt & Streetlight Construction - Local**

TIP ID: 5350 Agency ID: AD304 Title: Streetlight Asset Mgmt & Streetlight Construction - Local

**Systems Maintenance**

TIP ID: 2699 Agency ID: CD018A, CD01 Title: Asset Preservation of Tunnels in the District of Columbia

TIP ID: 2927 Agency ID: CD036A, CD04 Title: Citywide FA Preventive Maintenance

**Transit**

**5303/5304 FTA Program**

TIP ID: 6102 Agency ID: Title: 5303/5304 FTA Program

**DC Circulator New Buses for Replacement and Expansion**

TIP ID: 6105 Agency ID: Title: DC Circulator New Buses for Replacement and Expansion

**DC Circulator Expansion - Phase I**

TIP ID: 6103 Agency ID: Title: DC Circulator Expansion - Phase I

**Streetcar**

TIP ID: 5754 Agency ID: CM080A Title: Benning Road Extension

TIP ID: 5755 Agency ID: STC12A Title: Union Station to Georgetown Premium Transit; K Street Transit

**Freight**

**District Freight Plan**

TIP ID: 5922 Agency ID: AF081A Title: District Freight Plan

**Off-Hours Freight Delivery Pilot Project**

TIP ID: 6408 Agency ID: Title: Off-Hours Freight Delivery Pilot Project

**Planning and Systems Enhancement for Weight Stations**

TIP ID: 2633 Agency ID: CI029A, CI053 Title: Size and Weight Enforcement Program

**Virginia Avenue Tunnel Project**

TIP ID: 5959 Agency ID: MRR16A Title: Virginia Avenue Tunnel Project

## Interstate

### I-270 at Watkins Mill Road Interchange

TIP ID: 3044 Agency ID: MO3511 Title: I-270 at Watkins Mill Road Interchange Construction

### I-270/I-495 West Side Corridor

TIP ID: 6444 Agency ID: MO0691 Title: I-270 Innovative Congestion Management

TIP ID: 6432 Agency ID: MO8382 Title: I-495, Capital Beltway, American Legion Bridge Planning Study

### I-270/US 15 Corridor

TIP ID: 6431 Agency ID: FR1881 Title: US 15/US 40 Frederick Freeway Highway Reconstruction

### I-70/US 40 at MD 144FA, Meadow Road, and Old National Pike Interchange

TIP ID: 6411 Agency ID: FR5801 Title: I-70/US 40 at MD 144FA, Meadow Road, and Old National Pike Interchange C

### I-95/I-495 at Greenbelt Metro Station Interchange

TIP ID: 2894 Agency ID: PG3331 Title: I-95/I-495 at Greenbelt Metro Station Interchange Construction

### MD 5 at I-95/I-495 Interchange

TIP ID: 3554 Agency ID: PG4941 Title: MD 5 at I-95/I-495 Phase 2 Highway Reconstruction

## Primary

### MD 210 Corridor

TIP ID: 4879 Agency ID: PG7001 Title: MD 210 at Kerby Hill Road/Livingston Road

### MD 4 at Suitland Parkway Interchange

TIP ID: 3547 Agency ID: PG6181 Title: MD 4 at Suitland Parkway Interchange Construction

### MD 5 Corridor

TIP ID: 4882 Agency ID: PG1751 Title: MD 5 at MD 373 and Brandywine Road Interchange Construction

TIP ID: 3469 Agency ID: PG3916 Title: MD 5 Corridor Study

TIP ID: 6395 Agency ID: PG5971 Title: MD 5 at Linda Lane Intersection Improvements

### US 1 Corridor

TIP ID: 3108 Agency ID: PG6241 Title: US 1 Highway Reconstruction

### US 15 at Monocacy Boulevard Interchange

TIP ID: 4892 Agency ID: FR5711 Title: US 15 at Monocacy Boulevard Interchange Construction

### US 29 Corridor

TIP ID: 6389 Agency ID: MO4253 Title: US 29 at Stewart Lane, Tech Road, Greencastle Road, and Blackburn Road In

### US 301 Corridor (Waldorf Area)

TIP ID: 4881 Agency ID: CH2031 Title: US 301 Waldorf Area Project

### US 50 Corridor

TIP ID: 6398 Agency ID: PG0641 Title: US 50 Feasibility Study

## Secondary

### Joint Base Andrews BRAC Improvements

TIP ID: 5759 Agency ID: PG7801 Title: Joint Base Andrews BRAC Improvements

TIP ID: 6392 Agency ID: PG7802 Title: MD 337 at MD 218 and I-95/I-495 NB Off-Ramp BRAC Intersection Improve

### MD 124 Corridor

TIP ID: 3057 Agency ID: MO6322 Title: MD 124 Phases 2-3 Highway Reconstruction

### MD 180/MD 351 Corridor

TIP ID: 6489 Agency ID: FR6781 Title: MD 180, Jefferson Pike - Urban Reconstruction

**MD 28/MD 198 Corridor**

TIP ID: 3476 Agency ID: MO8861 Title: MD 28/MD 198 Corridor Study

**MD 355 at Randolph Road/Montrose Parkway Interchange**

TIP ID: 3542 Agency ID: MO3441 Title: MD 355 Phase 2 Highway Reconstruction

**MD 85 Corridor**

TIP ID: 6483 Agency ID: FRNEW3 Title: MD 85 Buckeystown Pike

**MD 97 at Brookeville**

TIP ID: 3106 Agency ID: MO7461 Title: MD 97 at Brookeville Highway Construction

**MD 97 at Randolph Road Interchange**

TIP ID: 3104 Agency ID: MO8541 Title: MD 97 at Randolph Road Interchange Construction

**MD 97 Montgomery Hills Study**

TIP ID: 5420 Agency ID: MO2241 Title: MD 97 Montgomery Hills Study

**Naval Support Activity Bethesda BRAC Improvements**

TIP ID: 6384 Agency ID: MO5931 Title: Naval Support Activity Bethesda BRAC Improvements

TIP ID: 5998 Agency ID: MO5932 Title: MD 355 at Cedar Lane and Jones Bridge Road Phases 1-2 BRAC Intersection

TIP ID: 6072 Agency ID: MO5933 Title: MD 187 at West Cedar Lane/Oakmont Avenue BRAC Intersection Improve

TIP ID: 6122 Agency ID: MO5934 Title: MD 355 BRAC Highway Improvements

TIP ID: 6077 Agency ID: MO5936 Title: MD 320 at Sligo Creek Parkway BRAC Improvements Mitigation

TIP ID: 6071 Agency ID: MO5938 Title: MD 185 at Jones Bridge Road and Kensington Parkway Phase 3 BRAC Inters

**Other**

**Bladensburg War of 1812 Archaeological/Historical Study**

TIP ID: 6399 Agency ID: PG7621 Title: Bladensburg War of 1812 Archaeological/Historical Study

**System Preservation Projects**

TIP ID: 6532 Agency ID: Title: MD 355 Frederick Road Bridge Relplacement over Little Bennett Creek

TIP ID: 3081 Agency ID: AWBR Title: Bridge Replacement and Rehabilitation

TIP ID: 5838 Agency ID: AWCE Title: Congressional Earmarks

TIP ID: 3085 Agency ID: AWCM Title: Congestion Management

TIP ID: 3038 Agency ID: AWEN Title: Environmental Projects

TIP ID: 3082 Agency ID: AWRR Title: Resurfacing and Rehabilitation

TIP ID: 3084 Agency ID: AWSS Title: Safety and Spot Improvements

TIP ID: 2710 Agency ID: AWTE Title: Transportation Alternatives

TIP ID: 3083 Agency ID: AWUR Title: Urban Reconstruction

TIP ID: 6517 Agency ID: CH2061 Title: MD 234 Gilbert Swamp Run Bridge Replacement

TIP ID: 6481 Agency ID: FR1301 Title: US 15 Catoctin Mountain Highway Bridge Replacement

TIP ID: 6518 Agency ID: FR1321 Title: MD 355 Urbana Pike Bridge Replacement

TIP ID: 6488 Agency ID: FR3501 Title: US 40 AL Urban Reconstruction

TIP ID: 6439 Agency ID: FR5361 Title: MD 140 Flat Run Bridge Replacement

TIP ID: 6486 Agency ID: FR5591 Title: MD 355 Urbana Pike Bridge Replacement

TIP ID: 6482 Agency ID: FR6471 Title: MD 75 Green Valley Road Bridge Replacement

TIP ID: 6507 Agency ID: MO1741 Title: Complete Streets Near Metro Station S. Stonestreet Ave

TIP ID: 6508 Agency ID: MO1751 Title: Complete Streets Near Metro Station Twinbrook Station



**SUBURBAN MARYLAND**  
**FY 2017-2022 TIP PROJECT TYPE INDEX**

TIP ID: <b>6430</b>	Agency ID: <b>MO1881</b>	Title: <b>I-495 Inner Loop Resurfacing</b>
TIP ID: <b>6538</b>	Agency ID: <b>MO2401</b>	Title: <b>MD 195, Carroll Avenue at Sligo Creek and Sligo Creek Parkway Bridge Repla</b>
TIP ID: <b>6033</b>	Agency ID: <b>MO5821</b>	Title: <b>MD 193 I-495 Bridge Rehabilitation</b>
TIP ID: <b>6487</b>	Agency ID: <b>PG0461</b>	Title: <b>MD 381 Brandywine Road Bridge Replacement</b>
TIP ID: <b>6529</b>	Agency ID: <b>PG1061</b>	Title: <b>MD 212 A Urban Reconstruction</b>
TIP ID: <b>6521</b>	Agency ID: <b>PG1272</b>	Title: <b>I-95/I-495 at MD 214 Bridges Replacement</b>
TIP ID: <b>6522</b>	Agency ID: <b>PG1272</b>	Title: <b>I-95/I-495 at MD 214 Bridges Replacement</b>
TIP ID: <b>6180</b>	Agency ID: <b>PG1291</b>	Title: <b>I-595/US 50 Resurfacing (Eastbound)</b>
TIP ID: <b>6182</b>	Agency ID: <b>PG5431</b>	Title: <b>US 1 Drainage Improvements</b>
TIP ID: <b>6150</b>	Agency ID: <b>PG5461</b>	Title: <b>MD 500 Community Safety and Enhancement Improvements</b>
TIP ID: <b>6032</b>	Agency ID: <b>PG6641</b>	Title: <b>MD 4 MD 223 Bridges Replacement</b>
TIP ID: <b>6437</b>	Agency ID: <b>PG6981</b>	Title: <b>I-95/I-495 Suitland Road Bridges Replacement</b>
TIP ID: <b>6438</b>	Agency ID: <b>PG6982</b>	Title: <b>I-95/I-495 Suitland Parkway Bridges Replacement</b>
TIP ID: <b>6183</b>	Agency ID: <b>PG7581</b>	Title: <b>MD 4 Community Safety and Enhancement Improvements</b>
TIP ID: <b>6433</b>	Agency ID: <b>PG8231</b>	Title: <b>I-95 Resurfacing</b>
TIP ID: <b>6514</b>	Agency ID: <b>PG9792</b>	Title: <b>I-595/US 50 Resurfacing (Westbound)</b>
TIP ID: <b>6181</b>	Agency ID: <b>PG9795</b>	Title: <b>MD 5 Resurfacing</b>

**TERMS**

**Transportation Emissions Reduction Measures**

TIP ID: <b>3566</b>	Agency ID: <b>AWCC</b>	Title: <b>Commuter Connections Program</b>
TIP ID: <b>5773</b>	Agency ID: <b>AWGR</b>	Title: <b>Commuter Connections Program - Guaranteed Ride Home Baltimore/Saint M</b>

**Transit**

**MD 586 Bus Rapid Transit Study**

TIP ID: <b>6000</b>	Agency ID: <b>MO2441</b>	Title: <b>MD 586 Bus Rapid Transit Study</b>
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**Maintenance**

**Marc Improvements**

TIP ID: <b>6400</b>	Agency ID:	Title: <b>MARC Improvements</b>
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**Transit**

**Large Urban Operating**

TIP ID: <b>6147</b>	Agency ID:	Title: <b>Large Urban Systems - Preventive Maintenance</b>
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**Large Urban Systems- Capital**

TIP ID: <b>2713</b>	Agency ID: <b>0892/0893</b>	Title: <b>Large Urban Systems - Capital</b>
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**MARC Rolling Stock Overhauls and replacements**

TIP ID: <b>6401</b>	Agency ID:	Title: <b>MARC Rolling Stock Overhauls and Replacements</b>
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**Purple Line**

TIP ID: <b>2795</b>	Agency ID:	Title: <b>Purple Line</b>
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**Ridesharing**

TIP ID: <b>3760</b>	Agency ID:	Title: <b>Ridesharing - Statewide Program</b>
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**Rural Transit - Capital Assistance**

TIP ID: <b>2602</b>	Agency ID: <b>Part of 0218</b>	Title: <b>Rural Transit - Capital Assistance</b>
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**Rural Transit - Operating Assistance**

TIP ID: 2853 Agency ID: Part of 0218 Title: Rural Transit - Operating Assistance

**Seniors and Individuals with Disabilities**

TIP ID: 6440 Agency ID: Title: Seniors and Individuals with Disabilities

**Small Urban Systems - Capital**

TIP ID: 3012 Agency ID: Part of 0217 Title: Small Urban Systems - Capital

**Small Urban Systems - Operating Assistance**

TIP ID: 2594 Agency ID: Part of 0217 Title: Small Urban Transit Systems - Operating Assistance

**Secondary**

**Various Roads - County Capital Improvement Program**

TIP ID: 5494 Agency ID: Title: Study, Design, ROW, & Construction

**Bike/Ped**

**Bikeways & Trails Program - County Capital Improvement Program**

TIP ID: 5495 Agency ID: F3 Title: Planning, Design & Construction

**Bridge**

**Various Bridges - County Capital Improvement Program**

TIP ID: 3173 Agency ID: F3 Title: Study, Design, ROW, Construction, Inspection & Training

**Secondary**

**Burtonsville Access Road**

TIP ID: 3498 Agency ID: P500500 Title: Burtonsville Access Road

**Clarksburg Transportation Connections**

TIP ID: 6020 Agency ID: P501315 Title: Clarksburg Transportation Connections

**Goshen Road South**

TIP ID: 3049 Agency ID: P501107 Title: Goshen Road South

**Montrose Parkway East**

TIP ID: 3703 Agency ID: P500717 Title: Montrose Parkway East

**Snouffer School Road North**

TIP ID: 3062 Agency ID: P501119 Title: Snouffer School Road North

**Snouffer School Road: Sweet Autumn Dr. to Centerway Road**

TIP ID: 6064 Agency ID: P501109 Title: Snouffer School Road: Sweet Autumn Dr. to Centerway Rd

**Bike/Ped**

**Bethesda CBD Streetscape**

TIP ID: 5943 Agency ID: P500102 Title: Bethesda CBD Streetscape

**Bicycle Pedestrian Priority Area Improvements**

TIP ID: 6365 Agency ID: P501532 Title: Bicycle and Pedestrian Priority Area Improvements

**Bikeway Program - Minor Projects**

TIP ID: 3066 Agency ID: P507596 Title: Annual Bikeway Program

**Capital Crescent Trail**

TIP ID: 6015 Agency ID: P501316 Title: Capital Crescent Trail

**Falls Road East Side Hiker/Biker Path**

TIP ID: 3429 Agency ID: P500905 Title: Falls Road East Side Hiker/Biker Path

**Frederick Road Bike Path: Stringtown to Milestone Manor**

TIP ID: 6063 Agency ID: P501118 Title: Frederick Road Bike Path: Stringtown to Milestone Manor

**MacArthur Boulevard Bikeway Improvements- Segment 2**

TIP ID: 5729 Agency ID: P500718 Title: MacArthur Boulevard Bikeway Improvements

**MD 355 Multimodal Crossing**

TIP ID: 5724 Agency ID: P501209 Title: MD 355 Multimodal Crossing Project

**Metropolitan Branch Trail**

TIP ID: 5942 Agency ID: P501110 Title: Metropolitan Branch Trail

**Needwood Road Bikepath**

TIP ID: 6016 Agency ID: P501304 Title: Needwood Road Bikepath

**Pedestrian Safety Program**

TIP ID: 3642 Agency ID: P500333 Title: Pedestrian Safety Program

**Seven Locks Bikeway & Safety Improvements**

TIP ID: 6017 Agency ID: P501303 Title: Seven Locks Bikeway & Safety Improvements

**Sidewalk & Infrastructure Revitalization**

TIP ID: 5975 Agency ID: P508182 Title: Sidewalk & Curb Replacement

**Sidewalk Program - Minor Projects**

TIP ID: 3067 Agency ID: P506747 Title: Sidewalk Program - Minor Projects

**Transportation Improvements for Schools**

TIP ID: 6364 Agency ID: P509036 Title: Transportation Improvements for Schools

**Bridge**

**Beach Drive Bridge M-PK-24001**

TIP ID: 5912 Agency ID: P509132 Title: Beach Drive Bridge M-PK-24001

**Bridge Renovation**

TIP ID: 5972 Agency ID: P509753 Title: Bridge Renovation

**Brink Road Bridge M-0064001**

TIP ID: 5913 Agency ID: P509132 Title: Brink Road Bridge M-0064001

**Garrett Park Road Bridge M-PK-04001**

TIP ID: 5916 Agency ID: P509132 Title: Garrett Park Road Bridge M-PK-04001

**Piney Meetinghouse Road Bridge M-0021001**

TIP ID: 5919 Agency ID: P501522 Title: Piney Meetinghouse Road Bridge M-0021001

**Enhancement**

**Silver Spring Green Trail**

TIP ID: 3125 Agency ID: P509975 Title: Silver Spring Green Trail

**ITS**

**Advanced Transportation Management System**

TIP ID: 3065 Agency ID: P509399 Title: Advanced Transportation Management System

**Traffic Signal System Modernization**

TIP ID: 3648 Agency ID: P500704 Title: Traffic Signal System Modernization

**Other**

**East Gude Drive Roadway Improvements**

TIP ID: 6018 Agency ID: P501309 Title: East Gude Drive Roadway Improvements

**Intersection & Spot Improvements**

TIP ID: 5980 Agency ID: P507017 Title: Intersection & Spot Improvements

**Neighborhood Traffic Calming**

TIP ID: 5981 Agency ID: P509523 Title: Neighborhood Traffic Calming

**Seminary Road Intersection Improvement**

TIP ID: 6019 Agency ID: P501307 Title: Seminary Road Intersection Improvement

**Streetlight Enhancements - CBD /Town Center**

TIP ID: 5982 Agency ID: P500512 Title: Streetlight Enhancements - CBD / Town Center

**Traffic Signals**

TIP ID: 6065 Agency ID: P507154 Title: Traffic Signals

**White Flint District East - Transportation**

TIP ID: 5985 Agency ID: P501204 Title: White Flint District East - Transportation

**White Flint District West: Transportation & Workaround**

TIP ID: 5986 Agency ID: P501116 & P50 Title: White Flint District West: Transportation & West Workaround

**White Flint Traffic Analysis and Mitigation**

TIP ID: 5987 Agency ID: P501202 Title: White Flint Traffic Analysis and Mitigation

**Maintenance**

**Bridge Preservation Program**

TIP ID: 5971 Agency ID: P500313 Title: Bridge Preservation Program

**Resurfacing: Primary/Arterial**

TIP ID: 5974 Agency ID: P508527 Title: Resurfacing: Primary / Arterial

**Transit Park and Ride Lot Renovations**

TIP ID: 5976 Agency ID: P500534 Title: Transit Park and Ride Lot Renovations

**Transit**

**ADA Compliance Transportation Access**

TIP ID: 3068 Agency ID: P509325 Title: ADA Compliance Transportation Access

**Bethesda Metro South Entrance**

TIP ID: 5560 Agency ID: P500929 Title: Bethesda Metro South Entrance

**Bus Stop Improvement Program**

TIP ID: 3063 Agency ID: P507658 Title: Bus Stop Improvement Program

**RideOn Bus Fleet**

TIP ID: 3072 Agency ID: P500821 Title: Ride On Bus Fleet

**Primary**

**Contee Road Reconstruction**

TIP ID: 5424 Agency ID: Title: Contee Road Reconstruction

TIP ID: 5425 Agency ID: Title: Construct Contee Road from I-95 to Old Gunpowder Road

**Secondary**

**Addison Road**

TIP ID: 6367 Agency ID: Title: Addison Road I

**Auth Road**

TIP ID: 5608 Agency ID: Title: Auth Road II

**Cherry Hill Road**

TIP ID: 6369 Agency ID: Title: Cherry Hill Road III

**Contee Road**

TIP ID: 3114 Agency ID: Title: Contee Road

**Governor Bridge Road**

TIP ID: **6509** Agency ID: Title: **Governor's Bridge Road Bridge Reconstruction**

**Livingston Road and Bridge**

TIP ID: **5806** Agency ID: Title: **Bridge Replacement - Livingston Road**

**Old Gunpowder Road**

TIP ID: **5258** Agency ID: Title: **Old Gunpowder Road II**

**Suitland Road**

TIP ID: **3157** Agency ID: Title: **Suitland Road**

**Surratts Road**

TIP ID: **3159** Agency ID: Title: **Surratts Road**

**Traffic Congestion Improvemets**

TIP ID: **6373** Agency ID: Title: **Traffic Congestion Improvements**

**Wheeler Road**

TIP ID: **3166** Agency ID: Title: **Wheeler Road**

**Bike/Ped**

**Pedestrian Safety Improvements**

TIP ID: **6370** Agency ID: Title: **Pedestrian Safety Improvements**

**School access project**

TIP ID: **6026** Agency ID: Title: **School Access Project**

**Bridge**

**Bridge Rehabilitation, Federal Aid**

TIP ID: **5401** Agency ID: Title: **Bridge Replacement, Federal Aid**

**Enhancement**

**County Revitalization & Restoration 2**

TIP ID: **6023** Agency ID: Title: **Coounty Revitalization & Restoration 2**

**Green Street Improvements**

TIP ID: **6003** Agency ID: Title: **Green/Complete Street Improvements**

**Planning and site Acquisition 2**

TIP ID: **6371** Agency ID: Title: **Planning and site acquisition 2**

**Transportation Enhancements 2**

TIP ID: **6374** Agency ID: Title: **Transportation Enhancements 2**

**Other**

**Developer Contribution Projects**

TIP ID: **6024** Agency ID: Title: **Developer Contribution Projects**

**Maintenance**

**ADA Right of Way Modifications**

TIP ID: **6012** Agency ID: Title: **Modification of ADA Rights of Way County-Wide**

**Curb and Road Rehabilitation I & II**

TIP ID: **5609** Agency ID: Title: **Curb and Road rehabilitation II**

**Transit**

**Bus Mass Transit/Metro Access 2**

TIP ID: **6375** Agency ID: Title: **Bus Mass Transit/ Metro Access 2**

**Safety**

**Street Lights and Traffic Signals 2**

TIP ID: 6372 Agency ID:

Title: **Street Lights and Traffic Signals 2**

## Interstate

### Boundary Chanel Drive Modifications

TIP ID: 5965 Agency ID: 104323 Title: Boundary Chanel Drive Modifications

### I-495 HOT Lanes- South of GW Pkwy to South of Old Dominion Drive

TIP ID: 6361 Agency ID: 106025 Title: I-495 Northern Section Shoulder Use Debt Service

### I-66 Corridor Improvements Project

TIP ID: 6540 Agency ID: 108826 Title: Transform 66 Outside of Beltway

### I-66 Multimodal Improvement Project, inside the Beltway

TIP ID: 6513 Agency ID: 108336 Title: I-66 Inside the Beltway Tolling Infrastructure

TIP ID: 6512 Agency ID: 108337 Title: I-66 Inside the Beltway Tolling Systems Integration

### I-66 Study / Access Improvements(Outside the Beltway)

TIP ID: 6347 Agency ID: 54911, 105239 , Title: I 66 Preliminary Engineering for EIS

### I-95 HOT/HOV Lanes Construction

TIP ID: 6265 Agency ID: 103222 [T1161 Title: I-95 HOV/HOT Lanes Debt Service

## Primary

### Route 1 Improvements

TIP ID: 6446 Agency ID: 104303 Title: Route 1 Widening from Featherstone Road to Mary's Way

### Route 7 (Leesburg Pike) Widening (VA 267 to Reston Ave.)

TIP ID: 6519 Agency ID: 99478 Title: RTE 7 CORRIDOR IMPROVEMENTS HB 2 FY17

### Rte. 28 Widening

TIP ID: 6298 Agency ID: 96721 Title: Route 28 Widening

### US 1, Widen, Reconstruct Interchange, Study

TIP ID: 6296 Agency ID: 104303 Title: WIDEN ROUTE 1 TO SIX LANES - PE & RW ONLY

### VA 28 Centreville Road

TIP ID: 6450 Agency ID: 108720 Title: VA Route 28 Widening (Prince William County Line to Route 29)

### VA 28 PPTA, Upgrade, Construct

TIP ID: 6457 Agency ID: 106652 Title: Route 28 Widening (SB from the Dulles Toll Road to Route 50)

### VA 7

TIP ID: 6301 Agency ID: 99478 Title: Route 7 - Widen to Six Lanes

### VA 7, Widen, Upgrade

TIP ID: 6539 Agency ID: 106917 Title: RTE 7 CORRIDOR IMPROVEMENTS

## Secondary

### Jones Branch Dr. Connector

TIP ID: 6080 Agency ID: 103907 Title: Jones Branch Drive Connector

### Neabsco Mills Road

TIP ID: 6541 Agency ID: 107947 Title: NEABSCO MILLS ROAD - Widen to 4 lanes

### Reconstruct and widen Rte. 659 - Belmont Ridge Road

TIP ID: 6447 Agency ID: -16861 Title: Belmont Ridge Road (Route 659), South of the Dulles Greenway

### Rogues Road Reconstruction

TIP ID: 6429 Agency ID: 104300 Title: Rogues Road Reconstruction

### Rolling Road Widening

TIP ID: 6248 Agency ID: 102905 Title: Rolling Road Widening

**Rte 659 - Belmont Ridge Road Reconstruction to four lanes**

TIP ID: 6335 Agency ID: 76244 Title: VA 659 Reconstruct to 4 Lanes

**Telegraph Road**

TIP ID: 6336 Agency ID: 104802 Title: TELEGRAPH RD - RTE 611- WIDEN TO 4 LANES (PE Only)

**VA 638 Rolling Road Widening**

TIP ID: 6247 Agency ID: 5559 Title: Rolling Road

**Urban**

**Evergreen Mill Road Widening**

TIP ID: 6256 Agency ID: 104380 Title: Evergreen Mill Road Widening

**Spring Street**

TIP ID: 6537 Agency ID: 105521 Title: Widen East Spring Street

**Sycolin Road**

TIP ID: 6203 Agency ID: 102895 Title: Sycolin Road

**Wellington Rd. Overpass Phase III**

TIP ID: 6332 Agency ID: 104374 Title: Wellington rd. Overpass Phase II

**Bridge**

**Construction: Bridge Rehabilitation/Replacement/Reconstruction**

TIP ID: 5503 Agency ID: TIPGRP001 Title: Construction: Bridge Rehabilitation/Replacement/Reconstruction

**TIP Grouping for Preventive Maintenance for Bridges**

TIP ID: 5525 Agency ID: TIPGRP006 Title: TIP Grouping for Preventive Maintenance for Bridges

**Enhancement**

**Colchester Road**

TIP ID: 6316 Agency ID: 76256 Title: Colchester Road - RTE 612

**TIP Grouping project for Construction: Transportation Enhancement Byway Non-Traditional**

TIP ID: 5523 Agency ID: TIPGRP004 Title: TIP Grouping project for Construction: Transportation Enhancement Byway

**ITS**

**TIP Grouping project for Maintenance: Traffic and Safety Operations**

TIP ID: 5526 Agency ID: TIPGRP007 Title: TIP Grouping project for Maintenance: Traffic and Safety Operations

**Other**

**TIP Grouping project for Construction: Safety/ITS/Operational Improvements**

TIP ID: 5506 Agency ID: TIPGRP003 Title: TIP Grouping project for Construction: Safety/ITS/Operational Improvements

**Virginia Statewide Vehicle Fuel Conversion Program**

TIP ID: 6041 Agency ID: T11802 Title: Virginia Statewide Vehicle Fuel Conversion Program

**Maintenance**

**TIP Grouping project for Preventive Maintenance and System Preservation**

TIP ID: 5524 Agency ID: TIPGRP005 Title: TIP Grouping project for Preventive Maintenance and System Preservation

**Transit**

**CSX RF & P Rail Corridor Third Track**

TIP ID: 6402 Agency ID: VRE0018 Title: Phase II - Work related potomac shores station

**Dulles Corridor Metrorail Extension Phase II**

TIP ID: 6362 Agency ID: 102891 and F Title: Route 28 Metrorail Station (Innovation Station)

**Dulles Corridor Metrorail Project**

TIP ID: 4272 Agency ID: DUL0002 Title: Dulles Corridor Metrorail Project - Phase 2



**Franconia-Springfield Parkway Park-and-Ride Lots**

TIP ID: **6281** Agency ID: **106274** Title: **Springfield CBD Commuter Parking Garage**

**PRTC - Bus Acquisition / Replacement Program**

TIP ID: **4506** Agency ID: **PRTC0005** Title: **PRTC - Bus Acquisition / Replacement Program**

**PRTC - Captial Cost of Contracting**

TIP ID: **5601** Agency ID: **PRTC0004** Title: **PRTC - Preventive Maintenance**

**PRTC Security Enhancements**

TIP ID: **5707** Agency ID: **PRTC0006** Title: **PRTC Security Enhancements**

**TIP Grouping for Transit Vehicles**

TIP ID: **6331** Agency ID: Title: **Transit : Vehicles**

**TIP Grouping project for Transit Access**

TIP ID: **6333** Agency ID: Title: **Transit : Access**

**TIP Grouping project for Transit Amenities**

TIP ID: **6328** Agency ID: Title: **Aminities**

**Transit: Ridesharing**

TIP ID: **6330** Agency ID: Title: **Transit Ridesharing**

**VRE - Administration / Studies / Training**

TIP ID: **4802** Agency ID: **VRE0002** Title: **Fare Collection System/Comm. Improvements**

TIP ID: **4277** Agency ID: **VRE0003** Title: **Security Enhancements Systemwide**

TIP ID: **4489** Agency ID: **VRE0008** Title: **Grant and Project Management**

**VRE - Rolling Stock Acquisition**

TIP ID: **4818** Agency ID: **VRE0001** Title: **Rolling Stock Modifications and Overhauls**

TIP ID: **4534** Agency ID: **VRE0009** Title: **Rolling Stock Acquisition**

**VRE - Stations and Facilities**

TIP ID: **6404** Agency ID: Title: **VRE Stations and Facilities**

TIP ID: **6320** Agency ID: **T10671** Title: **VRE Rippon Platforms**

TIP ID: **4310** Agency ID: **VRE0011** Title: **VRE Stations and Facilities**

**VRE - Tracks and Storage Yards**

TIP ID: **4070** Agency ID: **VRE0007** Title: **VRE Storage Yards Improvements**

**VRE Track Lease Improvements**

TIP ID: **5489** Agency ID: **VRE0012** Title: **VRE Track Lease Improvements**

<b>Transit</b>		
<b>Maintenance Equipment</b>		
TIP ID: <b>5861</b>	Agency ID:	Title: <b>Maintenance Equipment</b>
<b>Maintenance Facilities</b>		
TIP ID: <b>5867</b>	Agency ID:	Title: <b>Facilities Maintenance Support – Systemwide Support Equipment, Environm</b>
TIP ID: <b>5866</b>	Agency ID:	Title: <b>Rail Yards - Systemwide Maintenance, Expansion, Rehabilitation and Replac</b>
TIP ID: <b>5857</b>	Agency ID:	Title: <b>Bus Garages - Systemwide Maintenance, Expansion, Rehabilitation, and Rep</b>
<b>Other Facilities</b>		
TIP ID: <b>5862</b>	Agency ID:	Title: <b>Other Support Facilities</b>
<b>Passenger Facilities</b>		
TIP ID: <b>5860</b>	Agency ID:	Title: <b>Passenger Facilities</b>
<b>Project Management and Support</b>		
TIP ID: <b>5863</b>	Agency ID:	Title: <b>Credit Facility</b>
<b>Rail System Infrastructure Rehabilitation</b>		
TIP ID: <b>5856</b>	Agency ID:	Title: <b>Rail Line Segment Rehabilitation</b>
<b>Systems and Technology</b>		
TIP ID: <b>5858</b>	Agency ID:	Title: <b>Systems and Technology</b>
<b>Track &amp; Structures</b>		
TIP ID: <b>5859</b>	Agency ID:	Title: <b>Track and Structures</b>
<b>Vehicles/ Vehicle Parts</b>		
TIP ID: <b>5855</b>	Agency ID:	Title: <b>MetroAccess and Service Vehicles</b>
TIP ID: <b>5854</b>	Agency ID:	Title: <b>Buses - Replacement, Rehabilitation, Expansion, &amp; Enhancements</b>
TIP ID: <b>5853</b>	Agency ID:	Title: <b>Rail Cars - Replacement, Rehabilitation, Expansion, &amp; Enhancements</b>

# DISTRICT OF COLUMBIA

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## FY 2017-2022 TIP Tables

Draft for Public Comment  
October 13, 2016



National Capital Region  
**Transportation Planning Board**



**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 2633 Agency ID: CI029A, CI053 Title: Size and Weight Enforcement Program</b>									<b>Total Cost:</b>	<b>\$11,280</b>

Facility: Citywide	STP	80/20/0	450 a	5,000 c	450 c	450 c	250 c			
From:			440 c							
To:			150 e							

**Total Funds: 6,150**

Description: This project provides trained personnel to enforce size and weight regulations, as well as increase the number of portable scales at Weigh in Motion sites on and off the Federal-aid System. This project will facilitate reducing weight violations and preventing premature deterioration of pavements and structures in the District, and in turn provide a safe driving environment.

- a. Weigh in Motion Maintenance
- b. Truck Size and Weight Program

<b>TIP ID: 2699 Agency ID: CD018A, CD01 Title: Asset Preservation of Tunnels in the District of Columbia</b>									<b>Total Cost:</b>	<b>\$41,275</b>
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Facility: Citywide Asset Management of Tunnel	NHPP	80/20/0	650 a	1,000 a	175 a	175 a	175 a			
From:			600 c	7,600 c	7,600 c	14,600 c				
To:										

**Total Funds: 31,325**

Description: This initiative provides technical support and supportive services for this performance based contract that enables sustained preventive maintenance, rehabilitation and preservation of all tunnel assets in DDOT inventory system. This principal objectives relative to public safety are the maintenance of automated or natural ventilation system for the explosion of harmful carbon monoxide gas from all tunnels and the provision of an adequate lighting system within each tunnel.

<b>TIP ID: 2796 Agency ID: AF066A Title: National Recreational Trails</b>									<b>Total Cost:</b>	<b>\$2,100</b>
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Facility: Citywide	NRT	80/20/0	1,125 a	300 a	300 a	300 a	300 a			
From:										
To:										

**Total Funds: 1,200**

Description: Programs associated with the Recreational Trails Program – a program established to develop and maintain recreational trails and trail-related facilities. Mostly small projects; often grants to local groups.

Through the D.C. Recreational Trails Program Advisory Committee, the Department of Transportation will provide or grant funding to non-profits to provide the following services for District trails: maintain and restore existing trails; develop and rehabilitate trailside and trailhead facilities and trail linkages; purchase and lease trail construction and maintenance equipment; construct new trails; acquire easements or property for trails; assess trail conditions for accessibility and maintenance; develop and disseminate publications and operate educational programs to promote safety and environmental protection related to trails (including supporting non-law enforcement trail safety and trail use monitoring patrol programs, and providing trail-related training).

<b>TIP ID: 2888 Agency ID: CM086A Title: Safe Routes to School</b>									<b>Total Cost:</b>	<b>\$10,406</b>
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Facility: Safe Routes to School	SRTS	100/0/0	4,651 c	1,151 c	1,151 c	1,151 c	1,151 c			
From:										
To:										

**Total Funds: 4,604**

Description: To enable and encourage children, including those with disabilities, to walk and bicycle to school, to make walking and bicycling to school safe and more appealing, and to facilitate the planning, development and implementation of projects that will improve safety, and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

Increase walking and bicycling to school and associated safety through planning, engineering, education, and enforcement.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 2922</b> Agency ID: <b>ED064A</b> Title: <b>Great Streets - Minnesota Ave, NE</b>										<b>Total Cost: \$15,000</b>

Facility: Minnesota Ave	STP	80/20/0	700 a	14,000 c						14,000
From: A Street, NE										
To: Sheriff Road, NE	<b>Total Funds: 14,000</b>									

Description: Reconstruction of Minnesota Avenue from A St., SE to Sheriff Rd., NE including LIDs, streetscape. Schedule is impacted by Benning Streetcar study. Project will be phased to mitigate impacts. Phase 1 will construct from A St. to just south of Benning Road; Phase 2 will follow when streetcar study produces direction as to track route.

<b>TIP ID: 2927</b> Agency ID: <b>CD036A, CD04</b> Title: <b>Citywide FA Preventive Maintenance</b>										<b>Total Cost: \$44,100</b>
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Facility:	NHPP	80/20/0	9,600 c	4,800 c	10,720 c				5,360 c	20,880
From:										
To:	STP	80/20/0	2,400 c	1,200 c	2,680 c				1,340 c	5,220
<b>Total Funds: 26,100</b>										

Description: This project provides a two-year base contract with two option years for the performance of preventive maintenance activities and initiating emergency repairs on highway structures on an as needed basis. The work includes concrete deck repair, replacement of expansion joints, repair or replacement of beams, girders and other structural steel, maintenance painting, application of low slump concrete overlays on bridge decks, concrete repair, underpinning and shoring of deficient bridge elements, jacking beams and restoring bearings, repair or replacement of bridge railings, guiderails and fencing, cleaning bridge scuppers and drain pipes, graffiti removal and other miscellaneous repair work on various highway structures.

<b>TIP ID: 2945</b> Agency ID: <b>CM074A</b> Title: <b>District TDM (goDCgo)</b>										<b>Total Cost: \$7,000</b>
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Facility: citywide	CMAQ	80/20/0	2,000 a	1,000 a	1,000 a	1,000 a			1,000 a	4,000
From:										
To:	<b>Total Funds: 4,000</b>									

Description: Identify neighborhoods affected by traffic congestion impacts; determine the causes of traffic congestion; and identify alternative construction projects, traffic management strategies, and other transportation improvement strategies to reduce traffic congestion. Also, environmental studies will assess how the proposed construction projects or traffic management studies will impact air and water quality in the District of Columbia. Outreach to residents, employees and visitors about alternative transportation options to special events and attractions. Provide a multi-modal transportation information resource website ([www.goDCgo.com](http://www.goDCgo.com)). Create a commuter store that sells fare media and provides trip planning assistance. The project includes an annual District program and annual allocations.

a. District TDM/goDCgo: Encourage sustainable travel by District residents, workers and visitors primarily through goDCgo brand. Includes employer outreach, bikeshare and circulator marketing, special events.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 2965 Agency ID: SR060A MRR1 Title: Roadway Reconstruction Citywide</b>									<b>Total Cost:</b>	<b>\$53,900</b>
Facility: CITYWIDE	HSIP	90/10/0								
From:										
To:	NHPP	80/20/0			6,000 c					6,000
	STP	80/20/0	1,760 a 8,000 c	19,000 c			18,000 c			37,000
									<b>Total Funds:</b>	<b>43,000</b>

Description: This project reconstructs streets and highways on the Federal-aid highway system and other streets with poor pavement condition, drainage, or other reconstruction needs. Total roadway reconstruction is required when the highway pavement has reached the end of its useful life and can no longer be resurfaced. Streets must be reconstructed once the base deteriorates or the crown becomes too high, creating an undesirable slope from the center line to each curb. The scope of work includes the removal of deteriorated base and pavement, repairing the sub-base, replacing or reconstructing pavement and base within the roadway area and resetting or reconstructing curbs and sidewalks. Additional work includes the installation of wheelchair ramps, bicycle facilities, safety features and landscaping improvements. Projects Include:

- a. Oregon Ave. NW, Military Rd. to Western Ave.
- b. Rehabilitation of Broad Branch NW
- c. Canal Road NW, Chain Bridge to M St.
- d. New Jersey Ave., Mass Ave. to N St.
- e. Florida Ave NW, 9th to Sherman

<b>TIP ID: 3202 Agency ID: CD032C, MNT0 Title: Bridge Design Consultant Services</b>									<b>Total Cost:</b>	<b>\$4,075</b>
Facility: CITYWIDE	NHPP	80/20/0	300 a	1,550 a	300 a	625 a	650 a			3,125
From:										
To:	STP	80/20/0	200 a	200 a	200 a					400
									<b>Total Funds:</b>	<b>3,525</b>

Description: Provide engineering services for bridges and structures design, geotechnical or other investigations, surveying, including constructability review.

FY2013 Citywide Open End Bridge Design Consultant Services under this contract, the consultant will investigate structural deficiencies encountered during bridge inspections and from observation of DDOT staff. They will propose and design solutions for temporary shoring, structural repair and retrofit, perform structural analyses and rating of bridges, prepare plans, details, special provisions, cost estimates and work orders for construction by the DDOT preventive maintenance contractor.

<b>TIP ID: 3210 Agency ID: AF049A Title: Transportation Alternatives Program</b>									<b>Total Cost:</b>	<b>\$8,050</b>
Facility: Citywide	STP	80/20/0	2,300 a							
From:										
To:	TAP	80/20/0		1,150 a	1,150 a	1,150 a	1,150 a			4,600
									<b>Total Funds:</b>	<b>4,600</b>

Description: The Transportation Enhancements program is federally funded through the Transportation Equity Act for the 21st Century (TEA-21). The program funds projects that aim to strengthen the cultural, aesthetic, and environmental aspects of the nation's intermodal transportation system. Categories include pedestrian and bicycle facilities, scenic and historic preservation, archeological research, and environmental mitigation of runoff pollution.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: 3212 Agency ID: CB0, CIO Title: <b>Safety Improvements Citywide</b>			Total Cost:							
Facility: Citywide	HSIP	90/10/0	3,254 a	3,000 a	3,000 a	3,000 a	3,000 a	3,000 a		14,260
From:			1,563 c	565 c	565 c	565 c	565 c	565 c		
To:	NHPP	80/20/0								
	SPR	80/20/0	220 a							
	STP	80/20/0	1,266 a	560 a	560 a	560 a	560 a	560 a		3,740
			1,542 c	375 c	375 c	375 c	375 c	375 c		
<b>Total Funds:</b>										<b>18,000</b>

Description: Safety improvements provide a safe traveling environment for vehicular traffic, pedestrians and bicycle circulation within the District on Federal-aid and local roads. Work includes elimination or relocation of roadside visual obstructions; elimination or relocation of roadside obstacles; skid resistance resurfacing; modifications to traffic channeling; median replacement; traffic signals, signs, and lighting upgrades; installation of pavement markings to eliminate or reduce accidents; and installation of safety fences at overhead structures. Safety improvements are systematically identified through analyses of accident records, inspections, surveys, and citizen requests. The District maintains an inventory of locations with the highest number of reported accidents. Funding identified to be obligated District-wide as projects are identified.

- a. City-Wide Traffic Safety
- b. CW Road Safety Audit Program
- c. Pavement Skid Testing
- d. Traffic Accident Reporting and Analysis System (TARAS)
- f. Traffic Safety Data Center at Howard University
- g. Traffic Safety Design Program - HSIP
- h. Traffic Safety Engineering Support Services
- i. Traffic Sign Inventory Upgrade
- j. Traffic Data Collection and Analysis Service
- k. Work Zone Project Management System (CWTMP)
- l. 16th Street NW Circle (Blair Circle) Improvements
- m. Alabama Avenue SE Safety Study
- n. CCTV Cameras
- o. Transportation Asset Management Plan



DRAFT  
10/7/2016

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3213 Agency ID: CAL16C, PM30 Title: Planning and Management Systems</b>									<b>Total Cost: \$49,377</b>
Facility: Citywide	CMAQ	80/20/0	595 a	149 a	153 a	198 a	157 a		657
From:	HSIP	80/20/0		381 a	392 a	404 a	416 a		1,593
To:	Sect. 5339	80/20/0							
	SHRP2	100/0/0							
	SPR	80/20/0	5,800 a	6,500 a	7,000 a	6,500 a	7,000 a		27,000
	STP	80/20/0	3,653 a	3,080 a	2,280 a	2,380 a	2,130 a		9,870
	TID	100/0/0							
<b>Total Funds:</b>									<b>39,120</b>

- Description:
- a. ADA Ramps
  - b. Asset Inventory and ADA Compliance
  - c. Civil Rights/EEO Compliance Monitoring Program
  - d. Climate Change and Air Quality
  - e. Constructability and Work Zone Safety Review
  - f. DBE Support Services
  - g. District STIP Development
  - h. Environmental Management System
  - i. Metropolitan Planning
  - j. State Planning and Research Program
  - k. Boundary Stones
  - l. Research Development and Technology
  - m. Audit and Compliance
  - n. Non-Destructive Concrete Tester and Surveyor
  - o. Utility Location 3D Data Repository
  - p. Research and Innovation Implementation and Evaluation
  - q. Summer Transportation Institute
  - r. Bus Stop ADA Improvements

<b>TIP ID: 3215 Agency ID: SR092A Title: Federal Aid Pavement Restoration</b>									<b>Total Cost: \$65,100</b>
Facility: Citywide	STP	80/20/0	9,300 c	9,300 c	9,300 c	9,300 c	9,300 c		37,200
From:									
To:									
<b>Total Funds:</b>									<b>37,200</b>

Description: Citywide pavement and resurfacing/restoration, upgrading of sidewalk, curb and gutter, and wheelchair ramps.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3216 Agency ID: OSS07A, CI060 Title: Traffic Operations Improvements Citywide</b>										
<b>Total Cost:</b>										
Facility:	DEMO	80/20/0	96 a							
From:										
To:	NHPP	80/20/0	428 c	477 c	477 c	477 c	477 c	477 c		1,908
	NHS	80/20/0	310 a							
	STP	80/20/0	2,700 a	1,000 a	1,000 a	1,000 a	1,000 a	1,000 a		37,950
			17,365 c	7,900 c	8,000 c	8,000 c	8,000 c	8,000 c		
			1,500 e	600 e	550 e	500 e	400 e			

**Total Funds: 39,858**

Description: This project modifies and improves vehicular and pedestrian traffic control systems, such as traffic signals, channelization, signs, pavement markings, and other traffic control measures on and off the Federal-aid highway system. Includes installation of a variety of traffic engineering devices and construction of nominal geometric alterations. The project will preserve and promote the efficient use of existing city streets through changes in the organization of vehicular and pedestrian traffic flows. Projects include:

- a. ITS On Call Technical Support Services
- b. MATOC Annual Fee
- c. Traffic Management Center Operations
- d. Citywide Thermoplastic Pavement Markings
- e. Advanced Traffic Management System
- f. Infrastructure Information Technology Support Services
- g. Moveable Barrier System
- h. Implementation of Advanced Traffic Signal Controllers for DC Signal System
- i. Maintenance of Existing Transportation Systems

<b>TIP ID: 3219 Agency ID: ZU022A Title: Commuter Connections Program</b>	<b>Total Cost: \$4,900</b>
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Facility:	CMAQ	80/20/0	1,400 a	700 a	700 a	700 a	700 a			2,800
From:										
To:										

**Total Funds: 2,800**

Description: The purpose of the Commuter Connections Program is to reduce mobile source emission through the reduction in the number of VMT, and support of other Transportation Control Measures. This project provides funding for Commuter Operations Center, Guaranteed Ride, Home, Marketing, Monitoring and Evaluation, Employer Outreach, and DC Kiosk.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3228 Agency ID: AF073A, ZU024 Title: Metropolitan Branch Trail</b>									<b>Total Cost: \$7,432</b>
Facility: Union Station District Line	CMAQ	80/20/0	400 a	3,300 c					3,300
From:									
To:	DEMO	80/20/0	732 a	300 a					300
									<b>Total Funds: 3,600</b>

Description: The Metropolitan Branch Trail project will provide a 6.25-mile bicycle/pedestrian trail from Union Station north to the District Line along the railroad right-of-way. This trail will connect at the District line with a route continuing into Silver Spring MD. This project is intended to serve both recreational users and commuters to meet Transportation Control Measures (TCMs) and air quality objectives.

- a. L & M St.
- b. Ft. Totten

<b>TIP ID: 3230 Agency ID: AF005A Title: Rock Creek Park Trail</b>									<b>Total Cost: \$8,550</b>
Facility: M Street to Beach Drive	CMAQ	80/20/0		5,050 c					5,050
From: Piney Branch Pkwy									
To: 16th Street	DEMO	80/20/0	500 a						
									<b>Total Funds: 5,050</b>

Description: Rehabilitate the paved trail in Rock Creek Park including selected widening, resurfacing, new connections, and a new bridge south of the Zoo tunnel. Retaining wall repair on Piney Branch.

<b>TIP ID: 3232 Agency ID: CM064A, ZUT0 Title: Bicycle and Pedestrian Management Program</b>									<b>Total Cost:</b>
Facility: Citywide	CMAQ	80/20/0	2,935 c	1,165 c	605 c	165 c	165 c		2,100
From:									
To:									
									<b>Total Funds: 2,100</b>

Description: The goal of this project is to increase the safety and convenience of bicycle and pedestrian travel. It includes the widening of existing routes, curve realignment, grade reduction, and signage and lighting upgrades. Included in the Bicycle and Pedestrian Management Program is:

- a. Bicycle Parking Racks
- b. Bicycle Lanes and Signs (mark dedicated bicycle lanes, including signage)
- c. BIKE\_Capital Bikeshare (CaBi)

<b>TIP ID: 3242 Agency ID: CA303C, MNT0 Title: Maintenance, Rehab and Reconstruction of Stormwater-Hydraulic Structures and Flood</b>									<b>Total Cost: \$3,215</b>
Facility:	STP	80/20/0	250 a	350 a					1,100
From:			750 c	750 c					
To:									
									<b>Total Funds: 1,100</b>

Description: The purpose of this project is to replace/rehab existing hydraulic structures as culverts, inlets, etc.. On a bi-annual bases and based on stormwater drainage problem occurrences the structures will be inspected. On an annual bases, structures will be rehabilitated or replaced depending on their condition. The project also assesses and manages flooding conditions on transportation infrastructures.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3243 Agency ID: CD062A Title: Citywide Consultant Bridge Inspection</b>									<b>Total Cost: \$13,150</b>

Facility:	NHPP	80/20/0	2,650 a	1,850 a	1,850 a	3,750 a				7,450
From:										
To:										<b>Total Funds: 7,450</b>

Description: Consultant inspection of the District's bridges. Work under this contract consist of performing detailed condition inspections and evaluations of all highway and pedestrian bridges, and tunnels and underpasses, under the ownership of the District of Columbia in accordance with the prescribed inspections schedule, the DDOT Bridge Inspection Manual of Procedures and the National Bridge Inspection Standards (NBS). Safety inspection of railroad owned bridges crossing District streets shall also be performed. Selected inspections of culverts and overhead sign structures shall be performed as needed. FY2014 obligation includes Phase II of the overhead sign structure effort.

<b>TIP ID: 3290 Agency ID: SR049A Title: Reconstruction of Kenilworth Avenue, NE</b>									<b>Total Cost: \$13,050</b>
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Facility: Kenilworth Ave, NE	NHPP	80/20/0	13,050 c						13,050	
From: East Capitol St Ramp										
To: Rail Over Pass north of Benning Rd	NHS	80/20/0	750 a							<b>Total Funds: 13,050</b>

Description: Design of Kenilworth Ave/I295 from East Capitol Street, NE to Penn Rail Road Bridge over pass is a total reconstruction project. The length of the project is about 2,600 both directions. The design project will include upgrade of the existing curb and gutter, replace existing fences, remove the existing temporary Jersey Barriers and replace with permanent Jersey Barriers and address the current hydraulic problem.

<b>TIP ID: 3355 Agency ID: PM086A Title: Professional Capacity-Building Strategy</b>									<b>Total Cost: \$7,000</b>
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Facility: Citywide	STP	80/20/0	2,000 a	1,000 a	1,000 a	1,000 a	1,000 a			4,000
From:										
To:										<b>Total Funds: 4,000</b>

Description: This project provides training and educational experiences to build the technical capability and functional knowledge of DDOT employees to be a high-performing DDOT organization that will enhance community involvement and improve management's capacity.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3423 Agency ID: AW011, AW024 Title: South Capitol Street Corridor</b>									<b>Total Cost: \$554,172</b>
Facility: DEMO	80/20/0	36,018 c							
From: N St, MLK Ave, Suitland Pkwy, Memorial Bri									
To: GARVEE	80/20/0		48,690 c	84,270 c	76,330 c				209,290
	NHPP	80/20/0		22,320 c	22,320 c	22,320 c			66,960
	State	0/100/0	34,420 c	4,294 c	24,303 c				63,017
<b>Total Funds:</b>									<b>339,267</b>

Description: Redevelopment of the South Capitol Street corridor is a part of the Anacostia Waterfront Initiative. Concept plans for the replacement of the Frederick Douglas Memorial Bridge are under development as part of the EIS currently being prepared for the corridor.

- a. New Frederick Douglass Memorial Bridge: Full replacement and realignment of the Frederick Douglass Memorial Bridge.
- b. Reconfigure the interchange at Suitland Parkway and I-295: The improvements include the removal of existing cloverleaf ramps at the interchange, replacing them with a diamond interchange. The diamond interchange will include two at-grade signalized intersections, one at the I-295 northbound ramps and the other at I-295 southbound ramps.
- c. Reconfigure the interchange at Martin Luther King Jr. Ave. and Suitland Parkway. The existing MLK Jr. Bridge over Suitland Parkway will be replaced and a center ramp signalized interchange will be created to allow full movements to and from Suitland Parkway to MLK Jr. Ave.
- d. Boulevard streetscape treatments along South Capitol Street from between N Street and the SE/SW Freeway. In this segment, South Capitol Street will be rebuilt as a six-lane boulevard divided by a landscaped median.
- e. New Jersey Avenue Streetscape improvements: The streetscape concept will restore a consistent design to the avenue between the SE-SW Freeway and M Street SE.

<b>TIP ID: 5298 Agency ID: AF067A Title: Emergency Transportation Project</b>									<b>Total Cost: \$175</b>
Facility: C ITYWIDE	STP	80/20/0	25 c	25 c	25 c	25 c	25 c		100
From:									
To:									
<b>Total Funds:</b>									<b>100</b>

Description: The purpose of this project is to provide a vehicle that allows the Department to respond to emergencies or other unforeseen events that are not budgeted or planned. It is always to plan for emergency work such as major pavement failures, such as sinkholes, falling steel and concrete from bridges and other urgent needs. The project will enable the Department to quickly respond to any emergency without delay,

<b>TIP ID: 5313 Agency ID: CG311, CG312, Title: Urban Forestry Program</b>									<b>Total Cost: \$10,800</b>
Facility: Citywide	NHPP	80/20/0		1,512 c		1,512 c			3,024
From:									
To: NHS	80/20/0		1,500 c						
	STP	80/20/0	4,200 c	2,088 c		2,088 c			4,176
<b>Total Funds:</b>									<b>7,200</b>

Description: Plant new trees, remove dead and diseased trees, treat diseased trees, replace trees, and landscape along local and Federal roads.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5316 Agency ID: CD062A Title: Impact Attenuators and Guiderails</b>										<b>Total Cost:</b>

Facility: Citywide	HSIP	90/10/0	1,600 c		1,675 c	1,700 c	1,700 c			5,075
From:										
To:	<b>Total Funds: 5,075</b>									

Description: This project repairs, replaces and upgrades safety appurtenances on and off the Federal-aid Highway System that have been damaged by errant vehicles, and replaces units that do not meet the requirements of NCHRP (National Cooperative Highway Research Program) Report 350. Work also includes construction of guiderails and attenuators at new locations and removal of units in locations where they are no longer needed.

<b>TIP ID: 5322 Agency ID: CM085A Title: Preventive Maintenance and Repair of Stormwater Pumping Stations</b>										<b>Total Cost: \$3,336</b>
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Facility:	CMAQ	80/20/0		600 a	650 a	700 a	750 a			2,700
From:										
To:	State	0/100/0	303 a	1,000 a	1,000 a					2,000
										<b>Total Funds: 4,700</b>

Description: Maintain DDOT's environmental management system and update, as necessary, the DDOT Environmental Policy and Process manual. This project will also enable the review and processing of environmental documentation.

<b>TIP ID: 5323 Agency ID: MNT06A, SR09 Title: Condition Assessment</b>										<b>Total Cost:</b>
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Facility: citywide	State	0/100/0	700 a							
From: citywide										
To:	STP	80/20/0	1,650 a	1,000 a	650 a	1,000 a	650 a			3,300
										<b>Total Funds: 3,300</b>

Description: This project will be used to retain a vendor to perform data collection and analysis of DDOT's pavement conditions.

<b>TIP ID: 5334 Agency ID: CD052A Title: Safety Improvements of Benning Road Bridges over Kenilworth Ave</b>										<b>Total Cost: \$23,000</b>
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Facility: Benning Road over Kenilworth	NHPP	80/20/0		20,000 c						20,000
From:										
To:	<b>Total Funds: 20,000</b>									

Description: Structural design of three bridge alternatives. The project scope includes infrastructure improvements within vicinity of the bridges, including construction of handicap ramps according to ADA guidelines.

<b>TIP ID: 5337 Agency ID: CD051A Title: Replacement of Pedestrian Bridges over Kenilworth Ave</b>										<b>Total Cost: \$16,500</b>
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Facility: Kenilworth	STP	80/20/0	1,000 a		9,000 c					9,000
From:										
To:	<b>Total Funds: 9,000</b>									

Description: This project will fund the replacement of the deck, approach slabs, bearing joints; and repair the substructure and repaint steel.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5339 Agency ID: SR037A Title: FY2012 Pavement Restoration - NHPP Streets</b>									<b>Total Cost: \$29,350</b>
Facility: NHPP	80/20/0	6,000 c	150 a	5,200 c					11,350
From:			6,000 c						
To:									
									<b>Total Funds: 11,350</b>

Description: Resurfacing of selected roadway segments on the National Highway System (NHPP), repair-replacement of curbs, gutters and sidewalks, driveways, base pavements, perimeter fencing, furnishing sewer-water manhole frames, catch basin tope and removal of roadway and roadside debris.

<b>TIP ID: 5342 Agency ID: CD046A Title: Approach Bridges to 14th Street Bridge</b>									<b>Total Cost:</b>
Facility: 14th Street Bridge northbound over the Poto	NHPP	80/20/0	750 a	23,500 c					23,500
From:									
To:									
									<b>Total Funds: 23,500</b>

Description: The approach bridges to be rehabilitated are over Maine Ave. (bridge 171-1), over the Outlet Channel (bridge 171-2) and over Haines Point Park (bridge 171-3).

<b>TIP ID: 5347 Agency ID: CI046A, CI047 Title: Traffic Signal Maintenance NHPP-STP</b>									<b>Total Cost: \$59,000</b>
Facility: Citywide	HSIP	90/10/0	1,240 c	500 c	1,000 c	1,000 c	1,000 c		3,500
From: Citywide	NHPP	80/20/0	1,164 c	2,420 c	2,450 c	2,480 c	2,510 c		9,860
To: Citywide	NHS	80/20/0	3,121 c						
	STP	80/20/0	3,950 a	1,250 a	1,750 a	1,750 a	1,750 a		28,100
			13,619 c	5,650 c	5,650 c	5,150 c	5,150 c		
									<b>Total Funds: 41,460</b>

Description: Provide effective and efficient maintenance services for the traffic signal systems throughout the District of Columbia.

Support the Traffic Signal Group of DDOT TOA in providing traffic engineering studies and signal system analysis and management for the city's roadway system. This projects mission is to perform signal warrants. Projects include:

- a. Citywide Traffic Signal Construction Contract
- b. Citywide Traffic Signal Construction Contract (National Highway System Routes)
- c. Traffic Signal Consultant Design
- d. Traffic Signal Optimization
- e. Traffic Signal Uninterruptible Power Supply
- f. Traffic Signal Maintenance - NHPP
- g. Traffic Signal Maintenance - STP
- h. Asset Inventory, Preliminary Design and RFP Development for Improved Signal System and Communication Network
- I. Traffic Signal Systems Analysis
- J. Implementation of Freeway Traffic Management System

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5350 Agency ID: AD304 Title: Streetlight Asset Mgmt &amp; Streetlight Construction - Local</b>									<b>Total Cost: \$10,500</b>
Facility: Citywide	State	0/100/0	4,236 a	300 a	300 a	300 a	300 a		34,800
From:			43,989 c	8,400 c	8,400 c	8,400 c	8,400 c		
To:									
									<b>Total Funds: 34,800</b>

Description: This project will provide maintenance of streetlights, alley lights, alley tree trimming for blockage of alley lighting, knockdowns, and asset inventory for lighting on non-federally-funded streets.

<b>TIP ID: 5353 Agency ID: ED028A Title: Roadway and Bridge Improvement on Southern Avenue and Bridge #64 (over Winkle Do</b>									<b>Total Cost: \$19,100</b>
Facility: Southern Avenue	STP	80/20/0	1,100 a	15,100 c					15,100
From: South Capitol Street									
To: 23rd Street									
									<b>Total Funds: 15,100</b>

Description: The purpose of this project is to identify solutions that improve the livability of the Southern Avenue corridor from South Capitol Street SE to 23rd Street SE.

<b>TIP ID: 5385 Agency ID: AD020A Title: Streetlight Asset Mgmt - Federal</b>									<b>Total Cost:</b>
Facility: Citywide	NHPP	80/20/0	606 c	3,384 c	3,384 c	3,384 c	3,384 c		13,536
From:	NHS	80/20/0	3,000 c						
To:	STP	80/20/0	964 c	5,383 c	5,383 c	5,383 c	5,383 c		21,532
									<b>Total Funds: 35,068</b>

Description: This project will provide maintenance for the District's aging lighting system to provide safe operations. Work includes upgrade of lights in tunnels and underpasses, bridges, highways, overhead guide sign lighting, obsolete incandescent and mercury vapor lights as well as navigation lights on bridges and waterways. Projects include:

- a) Street Light Replacement
- b) Streetlight Design Services
- c) Streetlight System Upgrade
- d) Streetlight Conversion
- e) Electrical Upgrade
- f) CW painting of street light and traffic signal poles
- g) CW Street and Bridge Light Maintenance
- h) Multiple Circuit Conversion
- i) Streetlight Asset Management
- j) Highway Lighting
- k) Emergency Response to Knockdowns

<b>TIP ID: 5433 Agency ID: PM094A, CD05 Title: Bridge management Project/AASHTOWARE</b>									<b>Total Cost: \$2,125</b>
Facility: Citywide	NHPP	80/20/0	275 a	300 a	325 a	325 a	325 a		1,275
From: Citywide									
To:	STP	80/20/0	300 e	300 e	300 e	310 e	310 e		1,220
									<b>Total Funds: 2,495</b>

Description: This project provide funds to support the Bridge Management Program and to pay the annual Points license fee.



**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
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<b>TIP ID: 5439</b>	Agency ID: <b>AD017A</b>	<b>Title: Citywide streetlight construction</b>						<b>Total Cost:</b>			
Facility: citywide	STP	80/20/0	450 a	100 a	100 a	100 a	100 a			4,000	
From: citywide				900 c	900 c	900 c	900 c				
To:											
<b>Total Funds:</b>										<b>4,000</b>	

Description: This project will provide installation/construction of the District's aging streetlight systems to provide safe operations. Work includes upgrading of lighting in tunnels, freeway air rights, overhead signs structures, and obsolete navigational lights on bridges.

<b>TIP ID: 5554</b>	Agency ID: <b>HTF02A</b>	<b>Title: Garvee Bond Debt Service</b>						<b>Total Cost: \$82,390</b>			
Facility:	NHPP	80/20/0	11,763 c	11,774 c	11,772 c	11,771 c	11,771 c			47,088	
From:											
To:											
<b>Total Funds:</b>										<b>47,088</b>	

Description: This project consist of rehabilitation of existing deck, steel beams.

<b>TIP ID: 5723</b>	Agency ID: <b>AW027A</b>	<b>Title: St. Elizabeths Campuses Access Improvements</b>						<b>Total Cost: \$108,980</b>			
Facility:	GSA Earmark	80/20/0		31,420 c	24,800 c					56,220	
From:											
To:											
<b>Total Funds:</b>										<b>56,220</b>	

Description: Multimodal transportation improvements to accommodate the DHS consolidation at ST. Elizabeths East and West Campuses, and other nearby development. West Campus project will improve access and transportation flow in and around the area. Improvements include I-295 interchange reconfigurations, roadway, safety, ITS and operational improvements to nearby streets. Project details include:

- a. I-295 interchange reconfigurations – I-295/Malcolm X Ave., I-295/South Capitol St.; Malcolm X Ave. east and west of I-295- (PE)
- b. Roadway infrastructure in and around the two campuses – 13th St., Sycamore St., Dogwood St., Pecan St. Cypress St., and West Campus Access Rd. - (PE)
- c. MLK Ave, Malcolm X Ave., Firth Sterling, Alabama Ave. - (PE)

<b>TIP ID: 5754</b>	Agency ID: <b>CM080A</b>	<b>Title: Benning Road Extension</b>						<b>Total Cost: \$82,750</b>			
Facility: Streetcar Line	CMAQ	80/20/0	3,200 a								
From:											
To:	State	0/100/0	2,000 a	23,614 c	27,363 c	21,644 e				92,217	
							19,596 e				
<b>Total Funds:</b>										<b>92,217</b>	

Description: The Benning Road Streetcar Extension is a 1.95-mile surface fixed guide way transit line that includes electrically powered streetcar vehicles operating along tracks located within the existing street and travel lanes. The NEPA study will address potential impacts of the project, as well as, preliminary engineering (conceptual) for the line.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5755 Agency ID: STC12A Title: Union Station to Georgetown Premium Transit; K Street Transit</b>									<b>Total Cost: \$76,290</b>
Facility: Premium Transit	CMAQ	80/20/0	1,500 d						
From:									
To:	NHPP	80/20/0	7,500 a	31,500 c	34,875 c				73,875
	State	0/100/0	4,250 a		24,280 c	45,014 c			69,294
									<b>Total Funds: 143,169</b>

Description: DDOT received an alternatives analysis grant from the Federal Transit Administration to study premium transit options from the Union Station to Georgetown. Premium transit is high quality transit that offered improved liability and speed. The purpose of the AA study is to provide premium transit between Union Station and Georgetown. The Nepa document will select a preferred alternative to move to design and construction for premium transit. Also included in this project is an extension study to continue the transit Northwest. This project also includes K Street Transit Streetscape construction funding.

<b>TIP ID: 5792 Agency ID: ED0C2A Title: C Street NE Implementation</b>									<b>Total Cost:</b>
Facility: C Street/N. Carolina Avenue	STP	80/20/0		4,000 c					4,000
From: Oklahoma Avenue									
To: 14th Street NE									
									<b>Total Funds: 4,000</b>

Description: The C Street NE Traffic Calming project will slow traffic on the corridor by reducing at least one vehicular lane of traffic.

<b>TIP ID: 5802 Agency ID: CD044A Title: Program Manager AWI</b>									<b>Total Cost: \$52,500</b>
Facility: Citywide	NHPP	80/20/0	7,500 a	7,000 a	6,500 a	6,000 a	5,500 a		25,000
From:									
To:									
									<b>Total Funds: 25,000</b>

Description: Consultant services to supplement the NEPA process and implement design and construction of the AWI corridors. Work includes surveys; geotechnical and environmental investigation and testing preliminary ; roadway and bridge design and CE services during construction. Funding will be used for construction oversight and consultant services.

<b>TIP ID: 5804 Agency ID: MRR04A Title: East Capitol St. Bridge over Anacostia River, Br. # 233</b>									<b>Total Cost: \$16,000</b>
Facility: Anacostia Freeway Bridge over Anacostia Ri	NHPP	80/20/0				16,000 a			16,000
From:									
To:									
									<b>Total Funds: 16,000</b>

Description: Rehabilitation of subject bridge to eliminate all deficiencies and ensure the safety of the traveling public. This bridge is structurally deficient and must be rehabilitated in accordance with the requirements of MAP21. Deficiencies include deteriorating overlay, efflorescence and map cracking in soffit, expanded bearings, deteriorated superstructure steel under fender dams, peeling paint, rotation of substructure units.

<b>TIP ID: 5922 Agency ID: AF081A Title: District Freight Plan</b>									<b>Total Cost: \$300</b>
Facility: Citywide	STP	80/20/0	450 a	150 a	150 a				300
From:									
To:									
									<b>Total Funds: 300</b>

Description: Development of a District freight plan to enhance the safety and efficiency of goods movement

DRAFT  
10/7/2016

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5957 Agency ID: AW0, EW002C Title: Pennsylvania Ave/Potomac Circle</b>									<b>Total Cost: \$5,750</b>

Facility: Pennsylvania Ave and Potomac Circle      HSIP      80/20/0      5,750 c      5,750

From: \_\_\_\_\_  
To: \_\_\_\_\_ **Total Funds: 5,750**

Description: Convert the former I-695 freeway into Southeast Boulevard and to reconfigure Barney Circle to provide at grade access and neighborhood connectivity to the waterfront. Improve pedestrian and bicycle access to the Sousa Bridge and along proposed Southeast Boulevard to the 11th Street Bridges.

    Pedestrian and Bicycle Safety improvements including reconfiguration of the Pennsylvania Ave/Potomac Avenue intersection, new signals and crosswalks and improvement access to the Potomac Metro station.

<b>TIP ID: 5959 Agency ID: MRR16A Title: Virginia Avenue Tunnel Project</b>									<b>Total Cost: \$201,300</b>
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Facility: Virginia Ave. SE      PRIV      0/0/0      200,500 c      1,200 c      1,200 c      2,400

From: \_\_\_\_\_  
To: \_\_\_\_\_ **Total Funds: 2,400**

Description: The existing railway tunnel is owned and operated by CSX Transportation, Inc. (CSXT) and has long been identified as one of the most significant freight bottlenecks on the East Coast. CSXT proposes to improve freight transportation reliability and capacity through the District by replacing the existing 106 year old 4,000 foot-long tunnel. The proposal includes the restoration of a second track within the tunnel and increasing the tunnel height to a minimum 20 foot clearance to accommodate intermodal trains transporting double-stacked standard cargo containers.

<b>TIP ID: 6014 Agency ID: SR088A Title: Maryland Avenue NE Road Diet</b>									<b>Total Cost: \$3,600</b>
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Facility: Maryland Ave. NE      STP      80/20/0      3,300 c      3,300

From: 2nd Street NE  
To: 15th Street NE **Total Funds: 3,300**

Description: To improve pedestrian safety on Maryland Avenue from 2nd Street to 15th Street NE.

<b>TIP ID: 6038 Agency ID: Title: Garvee Debt Service</b>									<b>Total Cost:</b>
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Facility: \_\_\_\_\_      NHPP      80/20/0      12,320 c      18,030 c      18,030 c      18,030 c      66,410

From: \_\_\_\_\_  
To: \_\_\_\_\_ **Total Funds: 66,410**

Description: DDOT will use future FHWA annual allocations to pay service on the bonds.

<b>TIP ID: 6039 Agency ID: CD054A Title: H Street Bridge over Railroad</b>									<b>Total Cost: \$22,750</b>
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Facility: H Street NE      NHPP      80/20/0      500 a      4,250 c      6,500 c      12,000 c      22,750

From: North Capitol Street  
To: 3rd Street NE

**Total Funds: 22,750**

Description: Conduct environmental assessments. Prepare concept designs, design plans and specifications and construct documents for bridge replacement/rehabilitation. Includes work on the H Street NE Bridge from North Capitol St. to 3rd St. NE.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6082 Agency ID: MRR15A Title: Anacostia Freeway Bridges over Nicholson Street SE (Bridges #1001, 1002)</b>									<b>Total Cost: \$8,000</b>

Facility: Anacostia Freeway Bridges at Nicholson  
From: NHPP 80/20/0 1,000 a 9,500 c 9,500  
To: **Total Funds: 9,500**

Description: Rehabilitation of subject bridges to eliminate all deficiencies and to make the facility safe for the traveling public. Two bridges are structurally deficient and must be rehabilitated under the requirements of MAP21.

<b>TIP ID: 6097 Agency ID: MRR14A Title: Rehabilitation of Anacostia Freeway Bridges over South Capitol Street (Bridge No. 1016)</b>									<b>Total Cost: \$21,000</b>
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Facility: Anacostia Freeway over South Capitol Stree  
From: NHPP 80/20/0 1,000 a 20,000 c 20,000  
To: **Total Funds: 20,000**

Description: Rehabilitation or replacement of subject bridges to eliminate all structural deficiencies and to make the facilities safe for the traveling public. The bridges are structurally deficient and must be rehabilitated under the requirements of MAP21.

<b>TIP ID: 6102 Agency ID: Title: 5303/5304 FTA Program</b>									<b>Total Cost: \$2,874</b>
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Facility: Citywide  
From: Sect. 5303 80/20/0 760 a 415 a 415 a 415 a 415 a 1,660  
To: Sect. 5304 80/20/0 198 a 110 a 110 a 110 a 110 a 440  
**Total Funds: 2,100**

Description: DDOT receives an annual FTA grant appropriation to support metropolitan planning activities (5303) and Statewide/DC based Planning Activities (5304).

<b>TIP ID: 6103 Agency ID: Title: DC Circulator Expansion - Phase I</b>									<b>Total Cost: \$3,750</b>
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Facility: State 0/100/0 1,576 e 750 e 750 e 750 e 750 e 3,000  
From: **Total Funds: 3,000**  
To:

Description: Implement the Phase I DC Circulator routes as identified in the DC Circulator 10-Year Transit Development Plan

<b>TIP ID: 6105 Agency ID: Title: DC Circulator New Buses for Replacement and Expansion</b>									<b>Total Cost: \$8,925</b>
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Facility: State 0/100/0 21,539 e 17,600 e 7,100 e 24,700  
From: **Total Funds: 24,700**  
To:

Description: Additional Circulator buses must be purchased in order to expand service to additional routes.

<b>TIP ID: 6114 Agency ID: ZUT10C Title: South Capitol Street Trail</b>									<b>Total Cost:</b>
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Facility: CMAQ 80/20/0 700 a 9,700 c 9,700  
From: **Total Funds: 9,700**  
To:

Description: Design and construct a paved bicycle and pedestrian trail along South Capitol Street based on the 2010 concept plan.

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6115 Agency ID: CI040A Title: Traffic Signal LED Replacement</b>			<b>Total Cost:</b>						<b>\$8,400</b>
Facility: NHPP	80/20/0	600 c	540 c	540 c	540 c	540 c			2,160
From: STP	80/20/0	600 c	540 c	540 c	540 c	540 c			2,160
To:									
<b>Total Funds:</b>									<b>4,320</b>

Description: Replace traffic and pedestrian signal LED modules at all signalized intersections on the surface transportation systems.

<b>TIP ID: 6184 Agency ID: OSS14A Title: Mid City East</b>			<b>Total Cost:</b>						<b>\$3,000</b>
Facility: Eckington, Bloomingdale, LeDroit, Hannover	STP	80/20/0	2,500 c						2,500
From: Eckington									
To: Shaw									
<b>Total Funds:</b>									<b>2,500</b>

Description: The Mid City East Livability Study seeks to improve physical connectivity among the neighborhoods of Mid City East and their connections to the opportunities and assets of the larger city. Local transportation networks are envisioned as safe and comfortable for travelers of all ages and abilities, contributing to the health of the community and environment and celebrating local identity. The study covers the neighborhoods of Eckington, Bloomingdale, LeDroit, Hannover-Bates, and parts of Shaw.

<b>TIP ID: 6187 Agency ID: MRR27A Title: Rehabilitation of I-395 HOV Bridge over Potomac River</b>			<b>Total Cost:</b>						<b>\$39,250</b>
Facility: I-395 HOV	NHPP	80/20/0	750 a			38,500 c			38,500
From: Over Potomac River									
To: Over Potomac River									
<b>Total Funds:</b>									<b>38,500</b>

Description: Repair extensive pier cracking, superstructure and substructure rehabilitation.

<b>TIP ID: 6189 Agency ID: MRR24A Title: Columbia Road, NW, Reconstruction 16th to 18th Streets and Resurface 18th Street to C</b>			<b>Total Cost:</b>						<b>\$1,000</b>
Facility: Columbia Road, NW	STP	80/20/0			1,000 a				1,000
From: 16th Street, NW									
To: Connecticut Ave, NW									
<b>Total Funds:</b>									<b>1,000</b>

Description: Pavement reconstruction from 16th to 18th Street to remove old streetcar tracks and Resurface from 18th Street to Connecticut Ave. Improve curb and gutter, sidewalk, streetlight, traffic signals, upgrade ADA ramps, drainage catch basins, add LID's, median planter and replace trees.

<b>TIP ID: 6190 Agency ID: FLD01 Title: Bloomingdale/LeDroit Park Medium Term Flood Mitigation Project</b>			<b>Total Cost:</b>						<b>\$10,000</b>
Facility: Bloomingdale/LeDroit Park	State	0/100/0	500 a	500 a	500 a				4,000
From:			1,500 c	1,500 c	1,500 c				
To:									
<b>Total Funds:</b>									<b>4,000</b>

Description: The exact street locations are not known at this time but the work is confined to the Bloomingdale and LeDroit Park communities, per the Mayor's Task force on Bloomingdale/LeDroit Flood Mitigation Report.

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**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6193 Agency ID: PM0D7A Title: Cleveland Park Study</b>									<b>Total Cost:</b>
Facility: Connecticut Ave. NW	NHPP	80/20/0	2,415	c					2,415
From: Porter Street NW									
To: Macomb Street NW									
Description: Implementation of Cleveland Park study recommendations including Connecticut Avenue access lane and neighborhood parking supply, streetscape improvements and intersection reconfiguration at Porter/Quebec/Connecticut Ave NW.									<b>Total Funds: 2,415</b>
<b>TIP ID: 6194 Agency ID: Temp1315 Title: Normanstone/Fulton Street Culvert &amp; LID</b>									<b>Total Cost: \$2,200,000</b>
Facility: Normanstone Drive	FLAP	100/0/0	1,500	c					1,500
From: Fulton Street									
To: 34th Street	State	0/100/0	2,200	c	600	c			600
Description: This project repair seven culverts under Normanstone Drive, install linear bioretention cells along Fulton Street and Normanstone Drive, and mill and resurface both streets									<b>Total Funds: 2,100</b>
<b>TIP ID: 6195 Agency ID: ZU033A Title: Florida Avenue Transportation Study</b>									<b>Total Cost: \$12,000</b>
Facility: Florida Avenue, NE	STP	80/20/0	1,000	a					1,000
From: 1St Street, NE									
To: H Street, NE									
Description: Implementation of Florida Avenue Transportation Study recommendations, which may include reconstruction of Florida Ave from Benning Rd to New York Ave, safety improvements and streetscape upgrades.									<b>Total Funds: 1,000</b>
<b>TIP ID: 6230 Agency ID: ZU010A Title: New York Avenue Trail</b>									<b>Total Cost: \$3,600</b>
Facility: Paved trail/sidewalk	CMAQ	80/20/0	400	a	3,300	c			3,300
From:									
To:									
Description: Design and build a new trail along New York Avenue NE.									<b>Total Funds: 3,300</b>

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6240 Agency ID: MRR01A Title: Safety and Geometric Improvements of I-295</b>									<b>Total Cost:</b>	<b>\$11,500</b>

Facility: I-295/DC-295      NHPP      80/20/0      1,500 a      2,500 c      6,500 c      9,000

From: \_\_\_\_\_  
To: \_\_\_\_\_ **Total Funds: 9,000**

Description: Safety and geometry improvement of I295/DC 295. Work includes upgrade substandard ramps, extend merge area & acceleration lane, review slip ramps, complete missing interchange movements, reduce congestion, provide access for vehicular traffic, pedestrian and cyclists that include, road configuration, sidewalk improvement, pavement markings, median, island, traffic signal, signs, street lighting, and guardrails at interchanges along I-295/DC 295 between Eastern Avenue and Chesapeake St.

- a. DC 295/ Eastern Ave NE
- b. DC 295/ Nannie Helen Burroughs Avenue from Sheriff Road NE/ Minnesota Avenue NE to Kenilworth Avenue NE/ Kenilworth Terrace NE
- c. DC 295/ Benning Rd, SE
- d. DC 295/ East Capitol St, SE
- e. DC 295/ Pennsylvania Ave, SE
- f. South Capitol Street to I-295 southbound toward Overlook Avenue, SW
- g. DC 295/ Chesapeake St, SW
- h. Kenilworth Avenue NE
- i. DC 295 Mainline Improvements

<b>TIP ID: 6283 Agency ID: PM0A4A Title: Managed Lanes</b>									<b>Total Cost:</b>	<b>\$21,309</b>
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Facility: Rochambeau Bridge, I-395, SW/SE Freeway      NHPP      80/20/0      5,000 a      5,309 a      5,309

From: \_\_\_\_\_  
To: \_\_\_\_\_ **Total Funds: 5,309**

Description: The project is to perform a high level feasibility review to identify any potential flaws or major obstacles to completing the project as a public-private partnership (P3) and lay out the critical path to moving the project forward. Phase I: to include NEPA, design, and construction for Rochambeau Bridge. Phase II: to include NEPA, design, and construction for the SE/SW Freeway. Phase III: to include NEPA, design, and construction of I-295.

<b>TIP ID: 6315 Agency ID: SR086A Title: East Capitol Street Corridor Mobility &amp; Safety Plan</b>									<b>Total Cost:</b>	<b>\$3,800</b>
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Facility: Street      STP      80/20/0      3,300 c      3,300

From: \_\_\_\_\_  
To: \_\_\_\_\_ **Total Funds: 3,300**

Description: Design and Construct pedestrian safety and traffic operations improvements

<b>TIP ID: 6408 Agency ID: Title: Off-Hours Freight Delivery Pilot Project</b>									<b>Total Cost:</b>	<b>\$300</b>
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Facility:      HRDP      50/50/0      140 a      140

From: \_\_\_\_\_  
To: \_\_\_\_\_ **Total Funds: 140**

Description: The DDOT Off-Hours Freight Delivery Pilot Project will focus on improving the management of curbside loading zones in the city by incentivizing businesses to shift to off-hour deliveries. The District has a constrained infrastructure with multiple modes competing for use of the same space and DDOT believes that a focus on encouraging off-hour deliveries would contribute significantly to reducing congestion.

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10/7/2016

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 6412 Agency ID:</b>			<b>Title: Reconstruction of 18th Street, NW from Virginia Ave to Connecticut Ave/M Street</b>					<b>Total Cost:</b>		<b>\$1,000</b>
Facility: 18th Street NW	STP	80/20/0	1,000 a						1,000	
From: Virginia Ave NW										
To: M Street NW										
Description: Pavement reconstruction including improvement of curb and gutter, sidewalk, streetlight, traffic signals upgrade ADA ramps, drainage catch basins, LID's, and replace trees.									<b>Total Funds: 1,000</b>	
<b>TIP ID: 6413 Agency ID:</b>			<b>Title: Reconstruction of 21st Street, NW from Constitution Ave to G Street and From I Street to</b>					<b>Total Cost:</b>		<b>\$1,000</b>
Facility: 21st Street NW	STP	80/20/0		1,000 a					1,000	
From: Constitution Ave NW / I Street NW										
To: G Street NW / New Hampshire Ave NW										
Description: Pavement reconstruction including improvement of curb and gutter, sidewalk, streetlight, traffic signals upgrade ADA ramps, drainage catch basins, LID's, and replace trees on 21st Street NW, from Constitution Ave to G Street and from I Street NW to New Hampshire Ave NW									<b>Total Funds: 1,000</b>	
<b>TIP ID: 6414 Agency ID:</b>			<b>Title: Reconstruction of Kenyon Street NW from Park Place NW to 13th Street NW</b>					<b>Total Cost:</b>		<b>\$6,500</b>
Facility: Kenyon Street NW	STP	80/20/0		1,000 a	5,500 c				6,500	
From: Park Place NW										
To: 13th Street NW										
Description: Pavement reconstruction including improvement of curb and gutter, sidewalk, streetlight, traffic signals upgrade ADA ramps, drainage catch basins, LID's, and replace trees on Kenyon Street NW from Park Place NW to 13th Street NW									<b>Total Funds: 6,500</b>	
<b>TIP ID: 6415 Agency ID:</b>			<b>Title: Reconstruction of Columbia Rd NW from Michigan Ave NW/Park Place to 15th Street</b>					<b>Total Cost:</b>		<b>\$1,000</b>
Facility: Columbia Rd NW	STP	80/20/0			1,000 d				1,000	
From: Michigan Ave NW/ Park Place NW										
To: 15th Street NW										
Description: Pavement reconstruction including improvement of curb and gutter, sidewalk, streetlight, traffic signals upgrade ADA ramps, drainage catch basins, LID's, and replace trees on Columbia Rd NW from Michigan Ave/Park Place to 15th Street NW									<b>Total Funds: 1,000</b>	
<b>TIP ID: 6416 Agency ID:</b>			<b>Title: Rehabilitation of I-66 Ramp to Whitehurst Freeway over Potomac Pkwy and Rock Creek (</b>					<b>Total Cost:</b>		<b>\$6,000</b>
Facility: I-66 Ramp to Whitehurst Freeway over Pot	NHPP	80/20/0		1,000 a	5,000 c				6,000	
From: I-66 Ramp										
To: Whitehurst Freeway over Potomac Pkwy an										
Description: Rehabilitation of the concrete substructures and superstructure and other related miscellaneous repairs of I-66 Ramp to Whitehurst Freeway over Potomac Pkwy and Rock Creek (Bridge No. 1303).									<b>Total Funds: 6,000</b>	
<b>TIP ID: 6417 Agency ID:</b>			<b>Title: Rehabilitation of K Street NW Bridge, over Whitehurst Freeway Ramp (Bridge No. 1304)</b>					<b>Total Cost:</b>		<b>\$7,000</b>
Facility: K Street Bridge over Whitehurst Freeway Ra	NHPP	80/20/0	1,000 a		6,000 c				7,000	
From:										
To:										
Description: Rehabilitation of the concrete substructures and superstructure and other related miscellaneous repairs on K Street NW Bridge, over Whitehurst Freeway Ramp (Bridge No. 1304).									<b>Total Funds: 7,000</b>	



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10/7/2016

**DISTRICT OF COLUMBIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 6425 Agency ID: Title: Reconstruction of Harvard Street NW from 16th St NW to Georgia Ave NW</b>			<b>Total Cost: \$1,000</b>							
Facility: Harvard Street NW	STP	80/20/0	1,000	a					1,000	
From: 16th Street, NW										
To: Georgia Avenue NW										
Description: Pavement reconstruction from Harvard Street from 16th Street to Georgia Ave, Improve Curb and gutter, sidewalk, streetlight, traffic signals, upgrade ADA ramps, drainage catch basins, add LID's median planter and replace trees.									<b>Total Funds: 1,000</b>	
<b>TIP ID: 6426 Agency ID: Title: Rehabilitation of 14th Street, SW Bridge over Streetcar Terminal</b>			<b>Total Cost: \$6,000</b>							
Facility: 14 Street SW Bridge over Streetcar Terminal	NHPP	80/20/0	5,500	c					5,500	
From:										
To:										
Description: Rehabilitation of the concrete substructures and superstructure and other related miscellaneous repairs.									<b>Total Funds: 5,500</b>	
<b>TIP ID: 6427 Agency ID: Title: Kenilworth Terrace Bridge over Watts Branch</b>			<b>Total Cost: \$3,125</b>							
Facility: Kenilworth Terrace Bridge over Watts Branch	STP	80/20/0				250	a		250	
From:										
To:										
Description: Project scope include applying waterproof seal to the entire timber structure, repair the reinforced concrete roadway curb, rehabilitation of deck structure of both approach abutments.									<b>Total Funds: 250</b>	
<b>TIP ID: 6492 Agency ID: Title: Safety Improvements of 22nd and I NW</b>			<b>Total Cost: \$400</b>							
Facility: Pennsylvania Ave, NW	HSIP	80/20/0	350	c					350	
From: 22nd Street NW										
To: I Street NW										
Description: Safety improvements of 22nd and I Street, NW. Improve curb and gutter, sidewalk, streetlights, mtraffic signals, upgrade ADA rampsdrainage catch basins, a LIDs.									<b>Total Funds: 350</b>	
<b>TIP ID: 6493 Agency ID: Title: Reconstruction of Ward II</b>			<b>Total Cost: \$10,000</b>							
Facility: 21st Street NW, Florida Ave NW, and Mass	STP	80/20/0				9,000	c		9,000	
From:										
To:										
Description: Reconstruction of Ward II including four locations: 21st Street NW, from O St to Mass Ave, Florida Ave, from Decatur St. to Mass Ave. NW, Mass Ave NW from 20th St to 23rd St., and Mass Ave NW from Decatur St to Belmont St. Pavement reconstruction including improvement of curb and gutter, sidewalk, streetlights, traffic signals, upgrade ADA ramps, drainage catch basins, LID's and replace trees.									<b>Total Funds: 9,000</b>	



# SUBURBAN MARYLAND

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## FY 2017-2022 TIP Tables

Draft for Public Comment  
October 13, 2016

### **Federal Funding Programs and Non-Federal Match Requirements**

Transportation agencies frequently use federal funds provided by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to cover the cost of implementing projects and programs included in the TIP. The federal funding programs administered by these two agencies usually require that a matching contribution of some level be provided from a non-federal source. Non-federal or “matching” funds are typically provided by the state and/or local governments.

In most sections of this TIP document, this funding arrangement is shown in a column to the right of the source name as a three-way split between Federal, State, and Local sources. For example, a funding amount of \$1 million shown with an 80/20/0 split would indicate that \$800,000 would be coming from the identified federal source, and \$200,000 in matching funds would be provided by the state government.

The data provided by the Maryland Department of Transportation State Highway Administration for this section of the FY 2017-2022 TIP shows the federal funding and non-federal matching funds as separate line items under each project.

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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
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**MDOT/State Highway Administration**

TIP ID: 2710	Agency ID: AWTE	Title: Transportation Alternatives	Complete:	Total Cost:				
Facility:	State	68 a	67 a	69 a	69 a	127 a	400 a	13,322
From:		90 b	89 b	92 b	91 b	170 b	533 b	
To:		968 c	960 c	991 c	983 c	1,827 c	5,728 c	
	STP/E	270 a	268 a	276 a	274 a	510 a	1,598 a	53,280
		360 b	357 b	369 b	366 b	680 b	2,131 b	
		3,870 c	3,839 c	3,963 c	3,932 c	7,307 c	22,910 c	
<b>Total Funds:</b>								<b>66,602</b>

Description: Transportation Alternatives projects include areawide: Tree planting, native plant establishment, and integrated roadside vegetation management; in Frederick County: Ballenger Creek Trail Phase 1, Ballenger Creek Trail Phase 4, Carroll Creek Park Trail Phase 2, and Saving Maryland's Civil War Battlefields; in Montgomery County: Anglers Breach, Ethan Allen Gateway streetscape, Flower Avenue streetscape, I-270 stormwater management facilities functional upgrades, MTA's share of Capital Crescent Trail construction costs associated with the Purple Line, Olde Towne Gaithersburg rolling stock restoration, and Shady Grove Metro Access Road bikepath; and in Prince George's County: Bladensburg Archaeology, Bowie Heritage Trail Phase 1, College Park Trolley Trail Phase 4, North Gate Park at Paint Branch, and Scorpion 2010 Archaeology.

TIP ID: 2894	Agency ID: PG3331	Title: I-95/I-495 at Greenbelt Metro Station Interchange Construction	Complete: 2020	Total Cost: \$167,107				
Facility: I 95 at Greenbelt Metro Station	NHPP	4,803 a	1,764 a	22,448 c	31,808 c	34,045 c	28,697 c	118,762
From:	State	1,277 a	498 a	2,000 b	3,232 b	3,225 b	8,095 c	42,240
To:		24 b	283 b	6,332 c	8,972 c	9,603 c		
		1 c						
<b>Total Funds:</b>								<b>161,002</b>

Description: Construction of a full I-95/I-495 interchange at Greenbelt Metro Station.

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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3038 Agency ID: AWEN Title: Environmental Projects</b>		<b>Complete:</b>				<b>Total Cost:</b>		
Facility: HSIP		77 a	62 a	62 a	62 a	64 a	46 a	976
From:		2 b	2 b	2 b	2 b	99 c	1 b	
To:		124 c	99 c	99 c	99 c		74 c	
<hr/>								
NHPP		1,190 a	725 a	274 a	274 a	643 a	629 a	9,828
		31 b	19 b	7 b	7 b	17 b	17 b	
		1,911 c	1,164 c	439 c	439 c	1,032 c	1,010 c	
<hr/>								
NRT		155 a						408
		4 b						
		249 c						
<hr/>								
State		644 a	451 a	212 a	212 a	483 a	473 a	6,532
		17 b	12 b	6 b	6 b	12 b	12 b	
		1,032 c	745 c	341 c	341 c	772 c	761 c	
<hr/>								
STP		1,190 a	1,053 a	547 a	547 a	1,259 a	1,245 a	15,370
		31 b	28 b	14 b	14 b	33 b	33 b	
		1,911 c	1,691 c	878 c	878 c	2,020 c	1,998 c	
<b>Total Funds:</b>								<b>33,114</b>

Description: Environmental projects include environmental preservation, wetland replacement, reforestation, landscaping, environmental compliance, noise abatement and sound barriers, drainage improvements, total maximum daily load (TMDL) compliance, and bicycle facility retrofit improvements.

<b>TIP ID: 3044 Agency ID: MO3511 Title: I-270 at Watkins Mill Road Interchange Construction</b>		<b>Complete: 2020</b>				<b>Total Cost: \$129,742</b>		
Facility: I 270 at Watkins Mill Road	Local	4,900 a						
From:	NHPP	4,641 a	68 b	1,096 b	1,096 b	973 b		3,233
To:		7,056 b						
<hr/>								
State		1,278 a	30,422 c	42,317 c	35,892 c			108,631
		3 c						
<b>Total Funds:</b>								<b>111,864</b>

Description: Construction of a new I-270 interchange at Watkins Mill Road.

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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>3057</b> Agency ID: <b>MO6322</b> Title: <b>MD 124 Phases 2-3 Highway Reconstruction</b>		Complete: <b>2020</b> Total Cost: <b>\$113,500</b>						
Facility: MD 124	HPP	18	b					
From: Midcounty Highway								
To: Warfield Road	Local			2,500	b	2,500	b	5,000
	State	3,011	a	851	a	869	a	1,841
		6	b					
<b>Total Funds:</b>								<b>6,841</b>

Description: Reconstruction of MD 124 from Midcounty Highway to south of Airpark Road and north of Fieldcrest Road to Warfield Road.

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>3081</b> Agency ID: <b>AWBR</b> Title: <b>Bridge Replacement and Rehabilitation</b>		Complete: Total Cost:						
Facility:	NHPP	3,182	a	3,324	a	3,169	a	108,072
From:		530	b	554	b	528	b	
To:		13,964	c	14,590	c	13,907	c	
	State	846	a	884	a	842	a	28,245
		141	b	148	b	140	b	
		3,711	c	3,882	c	3,697	c	
	STP	201	a	214	a	201	a	6,915
		33	b	36	b	33	b	
		882	c	939	c	882	c	
<b>Total Funds:</b>								<b>143,232</b>

Description: Bridge replacement and rehabilitation projects include structural replacements, bridge deck rehabilitation, superstructure replacements, bridge parapet reconstruction, and painting.

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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3082 Agency ID: AWRR Title: Resurfacing and Rehabilitation</b>		<b>Complete:</b>				<b>Total Cost:</b>		
Facility:	HSIP	26 a	23 a	26 a	26 a	23 a	23 a	2,067
From:		4 b	3 b	4 b	4 b	3 b	3 b	
To:		335 c	298 c	335 c	335 c	298 c	298 c	
<hr/>								
	NHPP	965 a	864 a	968 a	953 a	854 a	852 a	65,268
		138 b	123 b	138 b	136 b	122 b	122 b	
		13 c	11,360 c	12,718 c	12,519 c	11,228 c	11,195 c	
<hr/>								
	State	558 a	500 a	560 a	551 a	494 a	493 a	38,525
		80 b	71 b	80 b	79 b	71 b		
		7,332 c	6,566 c	7,357 c	7,241 c	6,492 c		
<hr/>								
	STP	1,255 a	1,124 a	1,260 a	1,240 a	1,111 a	1,109 a	101,413
		179 b	161 b	180 b	177 b	159 b	158 b	
		16,494 c	14,772 c	16,560 c	16,295 c	14,606 c	14,573 c	
								<b>Total Funds: 207,273</b>

Description: Resurfacing and rehabilitation projects include pavement milling, pavement overlay, and concrete patching.

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3083 Agency ID: AWUR Title: Urban Reconstruction</b>		<b>Complete:</b>				<b>Total Cost:</b>		
Facility:	NHPP	216 a	143 a	168 a	147 a	22 a	22 a	5,978
From:		36 b	24 b	28 b	24 b	4 b	4 b	
To:		1,548 c	1,022 c	1,207 c	1,053 c	155 c	155 c	
<hr/>								
	State	154 a	100 a	121 a	743 a	15 a	15 a	4,250
		26 b	17 b	20 b	104 b	3 b	3 b	
		1,107 c	719 c	867 c	18 c	109 c	109 c	
<hr/>								
	STP	402 a	259 a	315 a	2,188 a	39 a	39 a	11,017
		67 b	43 b	53 b	45 c	6 b	6 b	
		2,879 c	1,858 c	2,260 c		279 c	279 c	
								<b>Total Funds: 21,245</b>

Description: Urban reconstruction projects include drainage improvements, curb and gutter replacement, pavement milling and resurfacing, streetscaping, sidewalks improvements, signage, marking, and lighting.



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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3084 Agency ID: AWSS Title: Safety and Spot Improvements</b>		<b>Complete:</b>				<b>Total Cost:</b>		
Facility:	CMAQ	122 a	81 a	68 a	54 a	81 a	68 a	1,577
From:		8 b	5 b	5 b	4 b	5 b	5 b	
To:		275 c	184 c	153 c	122 c	184 c	153 c	
<hr/>								
	HSIP	2,411 a	909 a	1,036 a	965 a	1,180 a	1,061 a	25,427
		161 b	61 b	294 b	64 b	78 b	70 b	
		5,464 c	2,060 c	2,349 c	2,188 c	2,673 c	2,403 c	
<hr/>								
	NHPP	1,220 a	821 a	713 a	680 a	983 a	983 a	18,001
		81 b	55 b	48 b	45 b	66 b	66 b	
		2,766 c	1,860 c	1,616 c	1,542 c	2,228 c	2,228 c	
<hr/>								
	State	1,280 a	915 a	831 a	798 a	1,314 a	1,014 a	20,506
		85 b	61 b	56 b	53 b	87 b	67 b	
		2,901 c	2,075 c	1,885 c	1,809 c	2,977 c	2,298 c	
<hr/>								
	STP	4,908 a	2,774 a	2,660 a	2,111 a	3,911 a	2,606 a	63,666
		326 b	185 b	178 b	167 b	261 b	173 b	
		11,124 c	5,793 c	6,029 c	5,690 c	8,863 c	5,907 c	
<b>Total Funds:</b>								<b>129,177</b>

Description: Safety and spot improvements include roundabouts, geometric improvements, intersection capacity improvements, slope repairs, pedestrian crossings, sidewalks, rail crossings, safety improvements, intersection realignment, drainage improvements, pavement marking, joint sealing, truck weigh facilities, rest areas, crash prevention measures, guardrail end treatments, ADA retrofits, traffic management.

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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>3085</b> Agency ID: <b>AWCM</b> Title: <b>Congestion Management</b>		Complete:			Total Cost:			
Facility: CMAQ		433 a	433 a	516 a	400 a	383 a	366 a	6,841
From:		12 b	12 b	14 b	11 b	10 b	10 b	
To:		725 c	725 c	865 c	670 c	642 c	614 c	
NHPP		160 a	173 a	200 a	147 a	147 a	133 a	2,594
		4 b	5 b	5 b	4 b	4 b	4 b	
		268 c	290 c	335 c	246 c	246 c	223 c	
State		130 a	140 a	163 a	120 a	113 a	107 a	2,089
		3 b	4 b	4 b	3 b	3 b	3 b	
		218 c	234 c	274 c	201 c	190 c	179 c	
STP		360 a	386 a	453 a	333 a	306 a	293 a	5,759
		10 b	10 b	12 b	9 b	8 b	8 b	
		603 c	647 c	759 c	558 c	513 c	491 c	
<b>Total Funds:</b>								<b>17,283</b>

Description: Congestion management projects include traffic management, new and reconstructed signals, signage, lighting, signal systemization, design and construction of park-and-ride facilities, CHART, design and construction of ITS projects, and design and construction of intersection capacity improvements.

TIP ID: <b>3104</b> Agency ID: <b>MO8541</b> Title: <b>MD 97 at Randolph Road Interchange Construction</b>		Complete: <b>2017</b>			Total Cost: <b>\$78,017</b>			
Facility: MD 97 at Randolph Road	Local	13,573 b						
From:		1,573 c						
To:								
NHPP		4,275 b	2,697 b					19,565
		16,806 c	16,868 c					
State		1,647 a	806 b	700 b				5,584
		4,336 b	4,078 c					
		5,189 c						
STP		5,470 a						
<b>Total Funds:</b>								<b>25,149</b>

Description: Construction of a new MD 97 interchange at Randolph Road.

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

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3106 Agency ID: MO7461 Title: MD 97 at Brookeville Highway Construction</b>		<b>Complete: 2020 Total Cost: \$42,771</b>						
Facility: MD 97	Local	3,525 a	250 a	1,711 b	6,374 c	1,626 b		11,461
From: Gold Mine Road		14 b	1,500 b					
To: North of Brookeville								
	NHPP	1,594 a						
	State	470 a	8,907 c	15,396 c	1,374 b			25,677
		30 c						
<b>Total Funds:</b>								<b>37,138</b>

Description: Construction of new two-lane MD 97 from south of Brookeville, near Gold Mine Road, to north of Brookeville.

<b>TIP ID: 3108 Agency ID: PG6241 Title: US 1 Highway Reconstruction</b>		<b>Complete: 2022 Total Cost: \$49,804</b>							
Facility: US 1	State	379 a	2,000 b	4,829 b	1,421 b	8,709 c	9,826 c	10,107 c	40,481
From: College Avenue		1,063 b			3,589 c				
To: I 95									
	STP	4,887 a	1,200 a	994 a	800 a				2,994
<b>Total Funds:</b>								<b>43,475</b>	

Description: Reconstruction of US 1 between College Avenue and MD 193

<b>TIP ID: 3469 Agency ID: PG3916 Title: MD 5 Corridor Study</b>		<b>Complete: 2025 Total Cost: \$715,700</b>						
Facility: MD 5	NHPP	1,312 a						
From: US 301		6,372 b						
To: I 95								
	State	4,373 a	130 a					130
		1,797 b						
<b>Total Funds:</b>								<b>130</b>

Description: A study to upgrade MD 5 to a multi-lane freeway from US 301 at T.B. to north of I-95/I-495.

<b>TIP ID: 3476 Agency ID: MO8861 Title: MD 28/MD 198 Corridor Study</b>		<b>Complete: 2025 Total Cost: \$356,600</b>						
Facility: MD 28/198	State	1,990 a	1,125 a	710 a				1,835
From: MD 97		2 b						
To: I 95								
	STP	3,207 a						
<b>Total Funds:</b>								<b>1,835</b>

Description: A study examining capacity improvements in the MD 28/MD 198 corridor between MD 97 and I-95.

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

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>3542</b> Agency ID: <b>MO3441</b> Title: <b>MD 355 Phase 2 Highway Reconstruction</b>		Complete: <b>2020</b> Total Cost: <b>\$87,600</b>						
Facility: Montrose Parkway	Local	3,491 a		5,509 a				5,509
From: Randolph Road								
To: East of Parklawn Drive	State	1,860 a						
<b>Total Funds:</b>								<b>5,509</b>

Description: Construction of Montrose Parkway, including a CSX Railroad grade-separated crossing and interchange at Parklawn Drive.

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>3547</b> Agency ID: <b>PG6181</b> Title: <b>MD 4 at Suitland Parkway Interchange Construction</b>		Complete: <b>2022</b> Total Cost: <b>\$140,314</b>						
Facility: MD 4 at Suitland Parkway	HPP	5,684 a		10,000 c				10,000
From:								
To:	NHPP	1,019 a	257 a	1,135 b	2,500 b	29,049 c		55,124
		4,550 b	2,083 b	2,411 c	17,355 c			
		1 c	334 c					
	PL	990 b		5,000 c				5,000
	State	3,480 a	272 a	3,582 b	3,621 b	2,766 b		31,338
		2,773 b	3,376 b	2,063 c	3,305 c	10,559 c		
		1,378 c	1,794 c					
	STP	400 a	649 a					649
		990 b						
<b>Total Funds:</b>								<b>102,111</b>

Description: Construction of a new MD 4 interchange at Suitland Parkway.

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>3554</b> Agency ID: <b>PG4941</b> Title: <b>MD 5 at I-95/I-495 Phase 2 Highway Reconstruction</b>		Complete: <b>2020</b> Total Cost: <b>\$48,154</b>						
Facility: MD 5	NHPP	3,561 a	626 b	811 b	517 b	250 b		9,065
From: I 95		1,562 b	6,861 c					
To: Branch Avenue Metro Station		22,869 c						
	State	1,795 a	291 b	291 b	121 b			2,443
		48 b	1,740 c					
		6,832 c						
<b>Total Funds:</b>								<b>11,508</b>

Description: Construction of MD 5 Phase 2 improvements, improving access to Branch Avenue Metro Station, including access road improvements; MD 5 pedestrian bridge; and Auth Road, Auth Place, and Auth Way improvements.

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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
TIP ID: <b>3566</b> Agency ID: <b>AWCC</b> Title: <b>Commuter Connections Program</b>		Complete:					Total Cost:		
Facility: State		2,788 e	3,046 e	2,962 e	3,065 e	3,333 e		15,194	
From:									
To:		<b>Total Funds: 15,194</b>							

Description: The Commuter Connections Program works to reduce the number of vehicle miles traveled, vehicle trips, and emissions. This program provides funding to TPB's Commuter Connections program for the following projects: Commuter Operations Center, Guaranteed Ride Home, marketing, monitoring and evaluation, employer outreach, and the telecommute project.

TIP ID: <b>4879</b> Agency ID: <b>PG7001</b> Title: <b>MD 210 at Kerby Hill Road/Livingston Road</b>		Complete: <b>2020</b>					Total Cost: <b>\$115,389</b>		
Facility: MD 210 at Kerby Hill Road/Livingston Road	HPP	4,808 a							
From:									
To:	NHPP	182 b	1,094 b	1,094 b	1,094 b	1,003 b		63,464	
		13,224 c	15,798 c	17,807 c	23,593 c	1,981 c			
	State	1,203 a	1,174 b	526 b	274 b	251 b		23,121	
		5,386 b	5,603 c	6,296 c	8,287 c	710 c			
		4,005 c							
		<b>Total Funds: 86,585</b>							

Description: Construction of a new MD 210 interchange at Kerby Hill Road/Livingston Road.

TIP ID: <b>4881</b> Agency ID: <b>CH2031</b> Title: <b>US 301 Waldorf Area Project</b>		Complete: <b>2040</b>					Total Cost: <b>\$175,600</b>		
Facility: US 301	NHPP	8,269 a	1,000 a	1,000 a				2,000	
From: MD 227									
To: MD 5 at T.B.	State	2,646 a			1,721 a			1,721	
		<b>Total Funds: 3,721</b>							

Description: A study examining alternatives, including grade-separated interchanges at MD 5 and MD 228, to upgrade US 301 through Waldorf from MD 227 to north of MD 5 at T.B.

TIP ID: <b>4882</b> Agency ID: <b>PG1751</b> Title: <b>MD 5 at MD 373 and Brandywine Road Interchange Construction</b>		Complete: <b>2017</b>					Total Cost: <b>\$55,532</b>		
Facility: MD 5 at MD 373 and Brandywine Road	HPP	5,267 a	2,820 c	3,928 c	4,121 c	2,989 c		13,858	
From:									
To:	NHPP	3 c	2,820 c	3,929 c	4,122 c	2,990 c		13,861	
	State	2,752 a	999 b	736 b	4,483 c	3,252 c		16,810	
		1,025 b	3,067 c	4,273 c					
		37 c							
	TCSP	1,633 b	192 b	95 b				287	
		<b>Total Funds: 44,816</b>							

Description: Construction of a new MD 5 interchange at MD 373 and Brandywine Road. This project also includes construction of a park-and-ride lot.

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

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 4892 Agency ID: FR5711</b>		<b>Title: US 15 at Monocacy Boulevard Interchange Construction</b>					<b>Complete: 2017 Total Cost: \$60,792</b>		
Facility: US 15 at Monocacy Boulevard	Local	2,800 a							
From:									
To:	NHPP	1,153 a	1,920 b	773 b	108 b			2,801	
		11,364 b							
	PL	209 a							
	State	855 a	1,040 b	561 b	27 b			26,919	
		3,519 b	13,410 c	11,881 c					
		11,172 c							
<b>Total Funds:</b>								<b>29,720</b>	

Description: Construction of a grade-separated US 15 interchange at Monocacy Boulevard, including a park-and-ride lot.

<b>TIP ID: 5420 Agency ID: MO2241</b>		<b>Title: MD 97 Montgomery Hills Study</b>					<b>Complete: 2030 Total Cost: \$63,000</b>		
Facility: MD 97	Local	2,613 a	387 a					387	
From: MD 390									
To: MD 192									
<b>Total Funds:</b>								<b>387</b>	

Description: A study evaluate MD 97 safety and accessibility improvements between MD 390 and MD 192

<b>TIP ID: 5759 Agency ID: PG7801</b>		<b>Title: Joint Base Andrews BRAC Improvements</b>					<b>Complete: 2016 Total Cost: \$7,400</b>		
Facility:	PL	2,970 a	3,494 a					3,494	
From:									
To:	State	26 a							
	STP	907 a							
<b>Total Funds:</b>								<b>3,494</b>	

Description: Overall design of improvements providing improved access to Joint Base Andrews. Parent project of PG7802 (TIP 6392) and PG7803 (TIP 6393).

<b>TIP ID: 5773 Agency ID: AWGR</b>		<b>Title: Commuter Connections Program - Guaranteed Ride Home Baltimo</b>					<b>Complete: Total Cost:</b>		
Facility:	State	150 e	150 e	150 e	150 e	170 e	150 e	920	
From:									
To:									
<b>Total Funds:</b>								<b>920</b>	

Description: This project expands the Commuter Connections Program's Guaranteed Ride Home program to the Baltimore Metropolitan Area and to Saint Mary's County.

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Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
TIP ID: <b>5838</b> Agency ID: <b>AWCE</b> Title: <b>Congressional Earmarks</b>		Complete:					Total Cost:		
Facility: Earmark		4,136	c					4,136	
From:									
To: HPP		1,600	c					1,600	
Local		400	c					400	
<b>Total Funds:</b>								<b>6,136</b>	

Description: Congressional earmarks are non-SHA projects that receive federal funding through Congressional action, either a High Priority (HPP) earmark from reauthorization bill MAP-21 or an earmark in the annual appropriations omnibus bill. Since these earmarks are granted via a transportation spending bill, MDOT/SHA administer these funds. Individual projects are shown in the SHA portion of the CTP under the respective jurisdictions. The match amounts, which vary percentage-wise project by project, are provided by project sponsors.

TIP ID: <b>5998</b> Agency ID: <b>MO5932</b> Title: <b>MD 355 at Cedar Lane and Jones Bridge Road Phases 1-2 BRAC Int</b>		Complete: <b>2016</b>					Total Cost: <b>\$15,900</b>		
Facility: MD 355 at Cedar Lane and Jones Bridge Road	NHPP	6,764	c						
From:									
To: OEA		837	b	126	b	1,000	b	84	
		3,549	c	1,256	c			2,466	
State		116	b	405	c			405	
		2,055	c						
<b>Total Funds:</b>								<b>2,871</b>	

Description: Construction of MD 355 Phase 1 and 2 intersection improvements at Cedar Lane and Jones Bridge Road to improve access to Naval Support Activity Bethesda.

TIP ID: <b>6000</b> Agency ID: <b>MO2441</b> Title: <b>MD 586 Bus Rapid Transit Study</b>		Complete: <b>2040</b>					Total Cost: <b>\$87,600</b>		
Facility: MD 586	Local	3,611	a	2,389	a			2,389	
From: MD 97									
To: MD 355								<b>Total Funds: 2,389</b>	

Description: A study to evaluate roadway improvements necessary to implement Montgomery County's bus rapid transit system on MD 586 between Wheaton Metro Station and Rockville Metro Station.

TIP ID: <b>6032</b> Agency ID: <b>PG6641</b> Title: <b>MD 4 MD 223 Bridges Replacement</b>		Complete: <b>2015</b>					Total Cost: <b>\$22,400</b>		
Facility: MD 4 at MD 223	NHPP	896	a	3,623	c			3,623	
From:		16,574	c						
To: State		224	a	31	c			31	
		1,234	c						
<b>Total Funds:</b>								<b>3,654</b>	

Description: Replacement of MD 4 MD 223 bridges 1618101 and 1618102. The existing bridges are structurally deficient and functionally obsolete.

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CAPITAL COSTS (in \$1,000)**

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>PIP ID: 6033 Agency ID: MO5821 Title: MD 193 I-495 Bridge Rehabilitation</b>		<b>Complete: 2017 Total Cost: \$11,462</b>						
Facility: MD 193 at I-495	BR	569 a						
From:								
To:	NHPP	9,525 c	302 c					302
	State	194 a	77 c					77
		795 c						
<b>Total Funds:</b>								<b>379</b>

Description: Rehabilitation of MD 193 I-495 Bridge 15136 substructure and replacement of MD 193 I-495 Bridge 13136 superstructure. The existing structure is structurally deficient and functionally obsolete

<b>PIP ID: 6071 Agency ID: MO5938 Title: MD 185 at Jones Bridge Road and Kensington Parkway Phase 3 BR</b>		<b>Complete: 2020 Total Cost: \$18,400</b>						
Facility: MD 185 at Jones Bridge Road and Kensington	OEA	3,550 b	2,423 b	1,367 b	938 c	2,734 c	1,768 c	9,230
From:								
To:								
<b>Total Funds:</b>								<b>9,230</b>

Description: Construction of MD 185 Phase 3 intersection improvements at Jones Bridge Road and Kensington Parkway to improve access to Naval Support Activity Bethesda.

<b>PIP ID: 6072 Agency ID: MO5933 Title: MD 187 at West Cedar Lane/Oakmont Avenue BRAC Intersection Im</b>		<b>Complete: 2016 Total Cost: \$4,421</b>						
Facility: MD 187 at West Cedar Lane/Oakmont Avenue	OEA	631 b	7 b	6 b				13
From:		3,461 c						
To:	State	160 b	80 b	66 b				146
		10 c						
<b>Total Funds:</b>								<b>159</b>

Description: Construction of MD 187 intersection improvements at West Cedar Lane/Oakmont Avenue to improve access to Naval Support Activity Bethesda.

<b>PIP ID: 6077 Agency ID: MO5936 Title: MD 320 at Sligo Creek Parkway BRAC Improvements Mitigation</b>		<b>Complete: 2017 Total Cost: \$2,103</b>						
Facility: MD 320 at Sligo Creek Parkway	OEA	81 c	1,419 c					1,419
From:								
To:	State	46 a	19 c					19
		9 c						
	STP	529 c						
<b>Total Funds:</b>								<b>1,438</b>

Description: Construction of bicycle/pedestrian improvements, including a new Anacostia Tributary Trail System Sligo Creek bicycle/pedestrian bridge. This project serves as mitigation for BRAC improvements right-of-way effects to Maryland-National Capital Park and Planning Commission properties.



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FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6122 Agency ID: MO5934 Title: MD 355 BRAC Highway Improvements</b>		<b>Complete: 2020 Total Cost: \$4,299</b>						
Facility: MD 355	OEA	444 c	1,409 c	1,571 c	875 c			4,299
From: Woodmont Avenue/Glenbrook Parkway								
To: South Wood Road/South Drive								
<b>Total Funds:</b>								<b>4,299</b>

Description: Construction of MD 355 intersection improvements between Woodmont Avenue/Glenbrook Parkway and South Wood Road/South Drive to improve access to Naval Support Activity Bethesda. This project is being designed and construction in conjunctino with Montgomery County/s MD 355 Crossing design/build project, which includes a MD 355 pedestrian underpass providing access to Medical Center Metro Station.

<b>TIP ID: 6150 Agency ID: PG5461 Title: MD 500 Community Safety and Enhancement Improvements</b>		<b>Complete: 2016 Total Cost: \$10,489</b>						
Facility: MD 500	State	96 a	4,198 c					4,198
From: MD 208		252 b						
To: MD 410		4,010 c						
	STP	1,933 a						
<b>Total Funds:</b>								<b>4,198</b>

Description: Construction of MD 500 landscaped median with sidewalk and crosswalk improvements from MD 208 to MD 410.

<b>TIP ID: 6180 Agency ID: PG1291 Title: I-595/US 50 Resurfacing (Eastbound)</b>		<b>Complete: 2017 Total Cost: \$10,421</b>						
Facility: I 595	NHPP	143 a	840 c					840
From: Lottsford Vista Road		7,838 c						
To: Anne Arundel County Line								
	State	35 a	147 c					147
		1,418 c						
<b>Total Funds:</b>								<b>987</b>

Description: Resurfacing of eastbound I-595/US 50 from Lottsford Vista Road to the Anne Arundel County line.

<b>TIP ID: 6181 Agency ID: PG9795 Title: MD 5 Resurfacing</b>		<b>Complete: 2016 Total Cost: \$8,169</b>						
Facility: MD 5	NHPP	6,574 c	1 c					1
From: I 95								
To: MD 223	State	36 a	2 c					2
		1,365 c						
	STP	191 a						
<b>Total Funds:</b>								<b>3</b>

Description: Resurfacing of MD 5 from south of I-95/I-495 to MD 223.

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CAPITAL COSTS (in \$1,000)**

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 6182 Agency ID: PG5431 Title: US 1 Drainage Improvements</b>		<b>Complete: 2017 Total Cost: \$12,200</b>							
Facility: US 1	NHPP	905 a							
From: MD 212		1,176 b							
To: South of Ammendale Road									
State		368 a	2,432 c					2,432	
		408 b							
		5,116 c							
STP		441 b							
<b>Total Funds:</b>								<b>2,432</b>	

Description: Drainage improvements along US1 from MD 212 to south of Ammendale Road. This project includes the replacement of a culvert under US 1 at Ammendale Road.

<b>TIP ID: 6183 Agency ID: PG7581 Title: MD 4 Community Safety and Enhancement Improvements</b>		<b>Complete: 2017 Total Cost: \$26,464</b>							
Facility: MD 4	NHPP	1,748 a							
From: Forestville Road									
To: MD 458	State	83 a	15,828 c					15,828	
		309 b							
		8,496 c							
<b>Total Funds:</b>								<b>15,828</b>	

Description: Construction of raised curb along the outside edge of MD 4, sidewalk along southbound MD 4, a 10-foot shared-use path along northbound MD 4, on-road bicycle accommodations, and other traffic calming measures between Forestville Road and MD 458.

<b>TIP ID: 6384 Agency ID: MO5931 Title: Naval Support Activity Bethesda BRAC Improvements</b>		<b>Complete: 2020 Total Cost: \$23,000</b>							
Facility:	OEA	1,941 c	1,732 c	1,023 c				2,755	
From:									
To:	PL	2,753 a							
	State	8,715 a			1,204 c			1,204	
	STP	800 a			4,816 a			4,816	
<b>Total Funds:</b>								<b>8,775</b>	

Description: Overall design and construction of improvements providing improved access to Naval Support Activity Bethesda. Parent project of MO5932 (TIP 5998), MO5933 (TIP 6072), MO5934 (TIP 6122), MO5935 (TIP 5988), MO5936 (TIP 6077), MO5937 (TIP 5992), and MO5938 (TIP 6071).

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CAPITAL COSTS (in \$1,000)**

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6389 Agency ID: MO4253 Title: US 29 at Stewart Lane, Tech Road, Greencastle Road, and Blackbur Complete: 2040 Total Cost: \$390,900</b>								
Facility: US 29 at Stewart Lane, Tech Road, Greencastl	NHPP	2,262 a						
From:								
To:	PL			420 a				420
	State	4,460 a						
		545 b						
<b>Total Funds:</b>								<b>420</b>

Description: Construction of new US 29 interchanges at Stewart Lane, Tech Road, Greencastle Road, and Blackburn Road.



<b>TIP ID: 6392 Agency ID: PG7802 Title: MD 337 at MD 218 and I-95/I-495 NB Off-Ramp BRAC Intersection Im Complete: 2016 Total Cost: \$5,850</b>								
Facility: MD 337	NHPP	80 b	27 b					27
From: MD 218								
To: I 95 NB Off-Ramp	State	35 b	26 b	6 b				356
		687 c	324 c					
	STP	16 b	64 b	21 b				1,749
		2,900 c	1,664 c					
<b>Total Funds:</b>								<b>2,132</b>

Description: Construction of MD 337 intersection improvements at MD 218 to improve access to Joint Base Andrews.



<b>TIP ID: 6395 Agency ID: PG5971 Title: MD 5 at Linda Lane Intersection Improvements Complete: 2025 Total Cost: \$16,300</b>								
Facility: MD 5 at Linda Lane	NHPP	608 a	1,000 a	750 a	742 a			2,492
From:								
To:								
<b>Total Funds:</b>								<b>2,492</b>

Description: Construction of MD 5 intersection improvements at Linda Lane.




<b>TIP ID: 6398 Agency ID: PG0641 Title: US 50 Feasibility Study Complete: 2016 Total Cost: \$500</b>								
Facility: I 595 /US 50	State	448 d	52 d					52
From: Maryland/District of Columbia line								
To: MD 704								
<b>Total Funds:</b>								<b>52</b>

Description: A study to examine I-595/US 50 capacity and operational improvements between the Maryland/District of Columbia line and MD 704.

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CAPITAL COSTS (in \$1,000)**

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6399 Agency ID: PG7621 Title: Bladensburg War of 1812 Archaeological/Historical Study</b>		<b>Complete: 2017 Total Cost:</b>					<b>\$66</b>	
Facility: US at Bladensburg	NPS	70 a	62 a					62
From:								
To:								<b>Total Funds: 62</b>
Description: An archaeological study of sites related to the Battle of Bladensburg during the War of 1812.								

<b>TIP ID: 6411 Agency ID: FR5801 Title: I-70/US 40 at MD 144FA, Meadow Road, and Old National Pike Interc</b>		<b>Complete: 2022 Total Cost:</b>					<b>\$32,800</b>	
Facility: I 70 at MD 144FA	Local	300 b	300 b	8,250 c	8,250 c			23,600
From:			6,500 c					
To:	PRIV	3,000 a	2,000 a	900 a				2,900
	State	252 a						
								<b>Total Funds: 26,500</b>

Description: Construction of two missing I-70/US 40 ramp movements at MD 144FA, Meadow Road, and Old National Pike, including entry ramp to westbound I-70/US 40 and exit ramp from eastbound I-70/US 40. 

<b>TIP ID: 6430 Agency ID: MO1881 Title: I-495 Inner Loop Resurfacing</b>		<b>Complete: 2018 Total Cost:</b>					<b>\$10,097</b>	
Facility: I 495	State	344 a	7,606 c	2,142 c				9,748
From: I 270Y		5 c						
To: Seminary Road								<b>Total Funds: 9,748</b>

Description: Resurfacing of I-495 inner loop between I-270 and Seminary Road.

<b>TIP ID: 6431 Agency ID: FR1881 Title: US 15/US 40 Frederick Freeway Highway Reconstruction</b>		<b>Complete: 2030 Total Cost:</b>						
Facility: US 15/US 40	State	526 a	1,000 a	1,674 a	1,250 a	550 a		4,474
From: I 70								
To: MD 26								<b>Total Funds: 4,474</b>

Description: Reconstruction of US 15 and US 40 between I-70 and MD 26.

<b>TIP ID: 6432 Agency ID: MO8382 Title: I-495, Capital Beltway, American Legion Bridge Planning Study</b>		<b>Complete: 2030 Total Cost:</b>						
Facility: I 495	State	1,430 a	1,250 a	1,250 a	1,250 a	820 a		4,570
From: Northern terminus of I-495 HOT lane facilities								
To: I 270								<b>Total Funds: 4,570</b>

Description: I-495 reconstruction between the Potomac River and I-270 and I-270 Spur reconstruction between I-495 and I-270.

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

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6433 Agency ID: PG8231 Title: I-95 Resurfacing</b>		<b>Complete: 2017 Total Cost: \$13,004</b>						
Facility: I 95	NHPP	3,893 c	7,720 c					7,720
From: I 495								
To: North of Old Gunpowder Road	State	403 a	683 c					683
		305 c						
<b>Total Funds:</b>								<b>8,403</b>

Description: Resurfacing of I-95 from I-495 to north of Old Gunpowder Road.

<b>TIP ID: 6437 Agency ID: PG6981 Title: I-95/I-495 Suitland Road Bridges Replacement</b>		<b>Complete: 2020 Total Cost: \$35,621</b>						
Facility: I 95 /I 495 at Suitland Road	NHPP	1,330 a						
From:								
To:	State	390 a	10,635 c	12,899 c	10,240 c	102 c		33,876
		25 c						
<b>Total Funds:</b>								<b>33,876</b>

Description: Replacement of I-95/I-495 Suitland Road Bridges 1616205 and 1616206. The existing bridges are structurally deficient and functionally obsolete.



<b>TIP ID: 6438 Agency ID: PG6982 Title: I-95/I-495 Suitland Parkway Bridges Replacement</b>		<b>Complete: 2019 Total Cost: \$31,176</b>						
Facility: I 95 /I 495 at Suitland Parkway	State	90 a	1,086 a	15,300 c	14,700 c			31,086
From:								
To:								
<b>Total Funds:</b>								<b>31,086</b>

Description: Replacement of I-95/I-495 Suitland Parkway Bridges 1616005 and 1616006. The existing bridges are structurally deficient and functionally obsolete.



<b>TIP ID: 6439 Agency ID: FR5361 Title: MD 140 Flat Run Bridge Replacement</b>		<b>Complete: 2018 Total Cost: \$5,784</b>						
Facility: MD 140 at Flat Run	State	279 a	80 b	79 b	42 c			845
From:		112 b	298 c	346 c				
To:		5 c						
	STP	937 a	1,569 c	1,817 c	220 c			3,606
<b>Total Funds:</b>								<b>4,451</b>

Description: Replacement of MD 140 Flat Run Bridge 10062. The existing bridge is structurally deficient.



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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6444 Agency ID: MO0691 Title: I-270 Innovative Congestion Management</b>		<b>Complete: 2021 Total Cost: \$100,000</b>						
Facility: I270	State	1,500 a	1,500 a	18,462 c	26,513 c	26,546 c	19,530 c	98,500
From: I495			5,949 c					
To: I70								
								<b>Total Funds: 98,500</b>

Description: Pilot implementation of active traffic management (ATM) and innovative congestion mitigation (ICM) tools to reduce congestion on I-270, including the east and west spurs (31.5 miles).

<b>TIP ID: 6481 Agency ID: FR1301 Title: US 15 Catoctin Mountain Highway Bridge Replacement</b>		<b>Complete: 2017 Total Cost: \$6,411</b>						
Facility: US 15 at MD 26	BR	454 a						
From:								
To:	State	174 a	4,135 c	1,023 c				5,158
		625 c						
								<b>Total Funds: 5,158</b>

Description: Replacement of US Cactoctin Mountain Highway bridge 1019701 over MD 26. The existing bridge is structurally deficient.

<b>TIP ID: 6482 Agency ID: FR6471 Title: MD 75 Green Valley Road Bridge Replacement</b>		<b>Complete: 2017 Total Cost: \$2,848</b>						
Facility: MD 75 at Haines Branch	BR	391 a						
From:								
To:	State	118 a	114 c					114
		93 b						
		2,132 c						
								<b>Total Funds: 114</b>

Description: Replacement of MD 75 Green Valley Road Bridge 10172 over Haines Branch.



<b>TIP ID: 6483 Agency ID: FRNEW3 Title: MD 85 Buckeystown Pike</b>		<b>Complete: 2021 Total Cost: \$106,951</b>						
Facility: MD 85 Buckeystown Pike	HPP	1,826 a	351 a					351
From: Crestwood Boulevard /Shockley Drive								
To: Spectrum Drive	Local	1,478 a						
	State	2,318 a	99 a	2,900 b	1,684 b	1,332 b	31,573 c	97,409
		3,569 b	3,334 b	11,877 c	21,127 c	23,483 c		
								<b>Total Funds: 97,760</b>

Description: Widen to a multilane divided highway from Crestwood Boulevard /Shockley Drive to Spectrum Drive, including MD 85 interchange reconstruction at I-270 and I-270 dual bridges replacement.

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

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6486 Agency ID: FR5591 Title: MD 355 Urbana Pike Bridge Replacement</b>		<b>Complete: 2021 Total Cost:</b>						<b>\$9,187</b>
Facility: MD 355 over CSXT Railroad	BR	1,223 a	536 a					536
From:								
To:	State	401 a	192 a	152 b	152 b	152 b	114 b	7,322
		13 b	152 b	2,413 c	2,413 c	843 c		
			739 c					
<b>Total Funds:</b>								<b>7,858</b>

Description: Replacement of MD 355 Urbana Pike Bridge 10084 over CSXT railroad. The existing bridge is structurally deficient.



<b>TIP ID: 6487 Agency ID: PG0461 Title: MD 381 Brandywine Road Bridge Replacement</b>		<b>Complete: 2018 Total Cost:</b>						<b>\$3,176</b>
Facility: MD 381 at Timothy Branch	State	598 a	495 a	83 a				2,578
From:								
To:			500 c	1,500 c				
<b>Total Funds:</b>								<b>2,578</b>

Description: Replacement of MD 381 Brandywine Road Bridge 1630500 over Timothy Branch.



<b>TIP ID: 6488 Agency ID: FR3501 Title: US 40 AL Urban Reconstruction</b>		<b>Complete: 2019 Total Cost:</b>						<b>\$17,799</b>
Facility: US 40 Main Street AL	NHPP		2,162 c	4,533 c	2,211 c			8,906
From: Ivy Hill Road								
To: Middletown Parkway	State	1,134 a	64 b	64 b	112 b			5,466
		89 b	807 c	2,939 c	1,480 c			
		3 c						
	STP	2,201 a						
<b>Total Funds:</b>								<b>14,372</b>

Description: Reconstruction of US 40 AL from Ivy Hill Drive to Middletown Parkway.



<b>TIP ID: 6489 Agency ID: FR6781 Title: MD 180, Jefferson Pike - Urban Reconstruction</b>		<b>Complete: 2019 Total Cost:</b>						<b>\$28,295</b>
Facility: MD 180 Jefferson Pike	State	350 a	1,120 a	825 a	3,456 c	9,671 c	12,873 c	27,945
From: N. of I-70								
To: Structure No. 10140								
<b>Total Funds:</b>								<b>27,945</b>

Description: Urban reconstruction for MD 180, Jefferson Pike from 600 feet north of I-70 to Structure No. 10140



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

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6507 Agency ID: MO1741 Title: Complete Streets Near Metro Station S. Stonestreet Ave</b>		<b>Complete:</b>				<b>Total Cost:</b>		
Facility: Local	39 c	39 c						39
From: To: TCSP	156 c	184 c						184
<b>Total Funds:</b>								<b>223</b>

Description: Implement a road diet on S. Stonestreet Avenue near the Rockville metro station to provide space for a sidewalk and bike lanes.

<b>TIP ID: 6508 Agency ID: MO1751 Title: Complete Streets Near Metro Station Twinbrook Station</b>		<b>Complete:</b>				<b>Total Cost:</b>		
Facility: Local		122 c						122
From: To: TCSP		488 c						488
<b>Total Funds:</b>								<b>610</b>

Description: Improve pedestrian crossing locations on public roadways near the Twinbrook metro station

<b>TIP ID: 6514 Agency ID: PG9792 Title: I-595/US 50 Resurfacing (Westbound)</b>		<b>Complete: 2019</b>				<b>Total Cost: \$11,554</b>		
Facility: I 595	State	17 a	7,515 c	2,737 c				10,252
From: Lottsford Vista Road		841 c						
To: Anne Arundel County Line	STP	298 a	65 a	65 a	16 a			146
<b>Total Funds:</b>								<b>10,398</b>

Description: Resurfacing of westbound I-595/US 50 from Lottsford Vista Road to the Anne Arundel County line.

<b>TIP ID: 6517 Agency ID: CH2061 Title: MD 234 Gilbert Swamp Run Bridge Replacement</b>		<b>Complete: 2018</b>				<b>Total Cost: \$5,044</b>		
Facility: MD 234 at Gilbert Swamp Run	BR	475 a	347 a					347
From: To: State		139 a	87 a	3,100 c				4,087
			900 c					
<b>Total Funds:</b>								<b>4,434</b>

Description: Replacement of MD 234 Bridge#08047 over Gilbert Swamp Run. The existing bridge is structurally deficient.





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

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>PIP ID: 6518 Agency ID: FR1321 Title: MD 355 Urbana Pike Bridge Replacement</b>		<b>Complete: 2018 Total Cost: \$8,789</b>						
Facility: MD 355 at Bennett Creek	BR	606 a						
From:								
To:	State/Local	183 a	2,080 c	5,920 c				8,000
<b>Total Funds:</b>								<b>8,000</b>

Description: Replacement of MD 355 Urbana Pike bridge 1008600 over Bennett Creek. The existing bridge is structurally deficient.

<b>PIP ID: 6521 Agency ID: PG1272 Title: I-95/I-495 at MD 214 Bridges Replacement</b>		<b>Complete: 2020 Total Cost: \$36,863</b>						
Facility: I 95 I-95/I-495 at MD 214	NHPP		274 c	274 c	9,334 c			9,882
From:								
To:	State	168 a	694 a	314 a	2,334 c	2,333 c		5,817
			71 c	71 c				
<b>Total Funds:</b>								<b>15,699</b>

Description: Replacement of I-95/I-495 bridges 1615305 and 1615306 over MD 214. The existing bridges are structurally deficient and functionally obsolete.

<b>PIP ID: 6522 Agency ID: PG1272 Title: I-95/I-495 at MD 214 Bridges Replacement</b>		<b>Complete: 2020 Total Cost: \$36,863</b>						
Facility: I 95 I-95/I-495 at MD 214	NHPP		274 c	274 c	9,334 c	9,333 c	9,330 c	28,545
From:								
To:	State	168 a	694 a	314 a	2,334 c	2,333 c	2,333 c	8,150
			71 c	71 c				
<b>Total Funds:</b>								<b>36,695</b>

Description: Replacement of I-95/I-495 bridges 1615305 and 1615306 over MD 214. The existing bridges are structurally deficient and functionally obsolete.

<b>PIP ID: 6529 Agency ID: PG1061 Title: MD 212 A Urban Reconstruction</b>		<b>Complete: 2020 Total Cost: \$13,000</b>						
Facility: MD	State	48 a	127 a	189 b	90 b	39 b	35 b	4,205
From: Pine Street		1,174 b	601 b	546 c	1,332 c	709 c	226 c	
To: US 1			311 c					
	STP	2,677 a	877 a	1,939 c	4,723 c	2,514 c	802 c	11,958
			1,103 c					
<b>Total Funds:</b>								<b>16,163</b>

Description: Reconstruction of MD 212A from Pine Street to US 1

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

FY 2017 - 202

Source	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
TIP ID: <b>6532</b> Agency ID:		Title: <b>MD 355 Frederick Road Bridge Replacement over Little Bennett Cr</b>					Complete: <b>2018</b>	Total Cost:	<b>\$5,215</b>
Facility: MD 355 at Little Bennett Creek	BR	313 a							
From:									
To:	State	227 a	450 a	225 a				4,675	
			1,420 c	2,580 c					
<b>Total Funds:</b>								<b>4,675</b>	

Description: Replacement of MD 355 Bridge 15053 over Little Bennett Creek.

TIP ID: <b>6538</b> Agency ID: <b>MO2401</b>		Title: <b>MD 195, Carroll Avenue at Sligo Creek and Sligo Creek Parkway Bri</b>					Complete: <b>2019</b>	Total Cost:	<b>\$12,254</b>
Facility: MD 195 at Sligo Creek and Sligo Creek Parkw	BR	893 a	8 a					8	
From:									
To:	State	243 a	2 a	42 b	42 b	18 b		1,933	
		118 b	42 b	768 c	15 c				
		476 c	1,004 c						
	STP	1,882 c	3,831 c	2,870 c				6,701	
<b>Total Funds:</b>								<b>8,642</b>	

Description: Replace Bridge 15033 over Sligo Creek and Sligo Creek Parkway.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
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**MDOT/Maryland Transit Administration**

<b>TIP ID: 2594</b>	Agency ID: <b>Part of 0217</b>	Title: <b>Small Urban Transit Systems - Operating Assistance</b>	Complete:	Total Cost:
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Facility:	Sect. 5307	50/25/25	8,652 e	8,652 e	8,652 e	8,652 e	8,652 e	8,652 e	8,652 e	51,912
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From:										
To:										
										<b>Total Funds: 51,912</b>

Description: Operating assistance to small urban transit systems in Charles and Frederick Counties

<b>TIP ID: 2602</b>	Agency ID: <b>Part of 0218</b>	Title: <b>Rural Transit - Capital Assistance</b>	Complete:	Total Cost:
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Facility:	Sect. 5311	80/10/10	267 e	70 e	70 e	70 e	70 e	70 e	70 e	420
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From:										
To:										
										<b>Total Funds: 420</b>

Description: Capital assistance for rural transit service in Frederick County

<b>TIP ID: 2713</b>	Agency ID: <b>0892/0893</b>	Title: <b>Large Urban Systems - Capital</b>	Complete:	Total Cost:
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Facility:	Sect. 5307	80/20/0	2,820 e	2,500 e	2,500 e	2,500 e	2,500 e	2,500 e	2,500 e	15,320
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From:										
To:										
										<b>Total Funds: 15,320</b>

Description: Capital assistance for large urban transit service in Prince George's and Montgomery Counties.

<b>TIP ID: 2795</b>	Agency ID:	Title: <b>Purple Line</b>	Complete: <b>2022</b>	Total Cost: <b>\$2,410,000</b>
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Facility: Purple Line	P3	0/0/0	17,330 c	17,330 c	17,330 c	17,330 c	17,330 c	17,330 c	17,330 c	103,980
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From: Bethesda										
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To: New Carrollton	Sect. 5307	80/20/0	13,750 c	12,500 c	12,500 c	6,250 c	6,250 c	6,250 c	6,250 c	57,500
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	Sect. 5309-NS	80/20/0	3,000 a	395,000 c	145,000 c	145,000 c	145,000 c	145,000 c	145,000 c	1,120,000
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	State	0/100/0	8,750 c	73,287 c	26,903 c	26,903 c	26,903 c	26,903 c	26,903 c	207,802
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	TIFIA	100/0/0		890,000 c						890,000
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**Total Funds: 2,379,282**

Description: Construction of a 16 mile transitway that would operate between Bethesda and Silver Spring in Montgomery County and extend into Prince Georges County to connect with the Metrorail system at College Park and New Carrollton. The Bethesda to Silver Spring portion would include a parallel hiker/biker trail. The project would provide direct connections to both branches of the Metrorail Red Line, Green Line and Orange Line. The Purple Line would also link to all three MARC lines, AMTRAK and regional/local bus services. The project would include 21 stations. Ridership for 2040 is estimated at approximately 74,000 daily boardings. A TIFIA loan of \$890 million was obligated in 2016 and utilized by the P3 concessionaire from 2016-2022.



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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 2853 Agency ID: Part of 0218 Title: Rural Transit - Operating Assistance</b>			<b>Complete:</b>			<b>Total Cost:</b>			
Facility:	Sect. 5311	50/25/25	1,374 e	1,374 e	1,374 e	1,374 e	1,374 e	1,374 e	8,244
From:									
To:									
Description: Operating assistance for rural service in Charles, Frederick, Montgomery, and Prince George's counties									<b>Total Funds: 8,244</b>

<b>TIP ID: 3012 Agency ID: Part of 0217 Title: Small Urban Systems - Capital</b>			<b>Complete:</b>			<b>Total Cost:</b>			
Facility:	Sect. 5307	80/10/10	1,049 e	3,272 e	3,272 e	3,272 e	3,272 e	3,272 e	19,632
From:									
To:	Sect. 5339	80/10/10							
Description: Capital Assistance for Small Urban Transit services in Charles and Frederick counties.									<b>Total Funds: 19,632</b>

<b>TIP ID: 3760 Agency ID: Title: Ridesharing - Statewide Program</b>			<b>Complete:</b>			<b>Total Cost:</b>			
Facility:	CMAQ	100/0/0	495 e	873 e	873 e	873 e	873 e	873 e	5,238
From:									
To:									
Description: To promote and encourage the establishment of carpools and vanpools. The ridesharing project covers the activities of the ridesharing unit of the Statewide Transportation Program with coordinators in Frederick, Prince George's, Montgomery Counties, and the Tri-County Council of Southern Maryland.									<b>Total Funds: 5,238</b>

<b>TIP ID: 6147 Agency ID: Title: Large Urban Systems - Preventive Maintenance</b>			<b>Complete:</b>			<b>Total Cost:</b>			
Facility:	Sect. 5307	80/20/0	11,110 e	5,555 e	5,555 e	5,555 e	5,555 e	5,555 e	38,885
From:									
To:									
Description: Large Urban Operating Preventative Maintenance for Montgomery County.									<b>Total Funds: 38,885</b>

<b>TIP ID: 6400 Agency ID: Title: MARC Improvements</b>			<b>Complete:</b>			<b>Total Cost:</b>			
Facility:	Sect. 5307	80/20/0		204 e	603 e	2,966 e	7,653 e	5,000 e	16,426
From:									
To:	Sect. 5337-SGR	80/20/0	24,093 e	680 e	12,295 e	12,900 e	750 e	8,100 e	58,818
Description: This is an ongoing improvement program of the MARC Camden, Brunswick, and Penn Lines to ensure safety and quality of service. This program is implemented through CSX and Amtrak construction agreements. CSX efforts include projects such as interlocking replacements and other track improvements. Amtrak efforts include projects such as passenger upgrades at Washington Union Station, interlocking work, and other track improvements.									<b>Total Funds: 75,244</b>

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

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 6401</b>	<b>Agency ID:</b>	<b>Title: MARC Rolling Stock Overhauls and Replacements</b>					<b>Complete:</b>		<b>Total Cost:</b>		
Facility:	Sect. 5307	80/20/0		0 e	0 e	0 e	4,024 e	188 e	0 e	4,212	
From:											
To:	Sect. 5337-SGR	80/20/0		28,682 e	23,373 e	2,484 e	3,505 e	0 e	3,900 e	61,944	
<b>Total Funds:</b>										<b>66,156</b>	

Description: This is an ongoing project for the overhaul and replacement of MARC rolling stock. Overhaul of MARC coaches and locomotives are performed in accordance with "10-year Minor" and "20-year Midlife" schedules, and/or the manufacturer's schedule. Upgrade MARC vehicles with federally-mandated Positive Train Control safety features. The project also includes funding for multi-level coaches that will be used to replace coaches that have reached the end of their useful life and provide additional capacity for the MARC system.

<b>TIP ID: 6440</b>	<b>Agency ID:</b>	<b>Title: Seniors and Individuals with Disabilities</b>					<b>Complete:</b>		<b>Total Cost:</b>		
Facility:	Sect. 5310	50/50/0		148 e	0 e	148 e	0 e	148 e	0 e	444	
From:											
To:	Sect. 5310.	80/20/0		501 e	0 e	501 e	0 e	501 e	0 e	1,503	
<b>Total Funds:</b>										<b>1,947</b>	

Description: Will enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and ADA complementary paratransit services.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
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**Frederick County**

<b>TIP ID: 3173</b>	<b>Agency ID: F3</b>	<b>Title: Study, Design, ROW, Construction, Inspection &amp; Training</b>					<b>Complete: 2020</b>	<b>Total Cost: \$9,090</b>
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Facility: Various Bridges	BR	35/0/65				450 c			450
From:									
To:	BR 1	37/0/63							
	BR 2	94/0/6	2,447 c						2,447
	Local	0/0/100		348 c			1,854 c		2,202
	NHCBP	80/0/20	2,478 c						

**Total Funds: 5,099**

Description: Rehabilitate, construct (replace) & inspect bridges or culverts at the following locations: Blacks Mill Rd; Lewistown Rd; Ball Road; Gas House Pike; Pete Wiles Rd.; Bretheren Church Rd; Hessong Bridge Rd; Reels Mill Rd; Dixon Rd; Hoovers Mill Rd; Hornets Nest Rd; deck replacements on Old Frederick Rd & Thurston Rds.; and covered bridge preservation projects Work may include bridge inspection training.

<b>TIP ID: 5494</b>	<b>Agency ID:</b>	<b>Title: Study, Design, ROW, &amp; Construction</b>					<b>Complete: 2020</b>	<b>Total Cost: \$26,688</b>
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Facility: Various Roads	Local	0/0/100	1,608 c	5,716 c	2,508 c	12,795 c			22,627
From: Various Roads									
To:									

**Total Funds: 22,627**

Description: Upgrade and improvements to Boyers Mill Road; Gas House Pike; Ijamsville Road; Old National Pike; Opossumtown Pike; Reels Mill Road; Reichs Ford Road; Yeagertown Rd; English Muffin Way & Shockley Drive/Spectrum Drive. Portions of Boyers Mill Road, and all of Ijamsville Road, & Old National Pike, will include bicycle accommodations.

<b>TIP ID: 5495</b>	<b>Agency ID: F3</b>	<b>Title: Planning, Design &amp; Construction</b>					<b>Complete: 2018</b>	<b>Total Cost: \$2,854</b>
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Facility: Varous Trails	Local	0/0/100	189 e						189
From:									
To:	State/Local	0/40/60		1,238 e					1,238

**Total Funds: 1,427**

Description: Various Trails including the Ballenger Creek Corridor

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
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**Montgomery County**

<b>TIP ID: 3049</b>	<b>Agency ID: P501107</b>	<b>Title: Goshen Road South</b>	<b>Complete:</b>	<b>Total Cost:</b>	<b>\$128,630</b>
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Facility: Goshen Road South	Local	0/0/100	3,695 a	127 a	126 a	2,579 a	2,290 a		57,900
From: South of Girard Street				5,016 b	619 b	6,429 b	28,158 c		
To: 1000 feet north of Warfield Road						8,520 e	4,036 e		

**Total Funds: 57,900**

Description: This project provides for the design of roadway improvements along Goshen Road from south of Girard Street to 1000 feet North of Warfield Road, a distance of approximately 3.5 miles. The improvements will widen Goshen Road from the existing 2-lane open section road to a 4-lane divided, closed section roadway using 12-foot inside lanes, 11-foot outside lanes, 18-foot median, and 5-foot on-road bike lanes. A 5-foot concrete sidewalk and an 8-foot bituminous hiker/biker path along the east and west side of the road, respectively, are also proposed along with storm drain improvements, street lighting and landscaping. The project also entails construction of approximately 6,000 linear feet of retaining wall. The project is needed to reduce existing and future congestion, improve vehicular and pedestrian safety. It will improve roadway network efficiency, provide for alternate modes of transportation, and will significantly improve pedestrian safety by constructing a sidewalk and a hiker/biker path. A pedestrian impact analysis has been completed for this project. Construction completion is scheduled for FY 22, and funded in the CIP in the "Beyond 6 Years" period.

<b>TIP ID: 3062</b>	<b>Agency ID: P501119</b>	<b>Title: Snouffer School Road North</b>	<b>Complete:</b>	<b>Total Cost:</b>	<b>\$13,482</b>
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Facility: Snouffer School Road	Local	0/0/100	900 a	300 a					3,300
From: MD Woodfield Road			105 b	3,000 c					
To: Centerway Road									

**Total Funds: 3,300**

Description: This project provides for the design, land acquisition and construction of 1,300 linear feet of roadway widening and resurfacing along Snouffer School Road between Centerway Road and Fessenden Lane and a new traffic signal at Alliston Hollow Way, as well as providing for grading for two northern lanes and resurfacing two southern lanes from Fessenden Lane to Alliston Hollow Way. The closed-section roadway typical section consists of two through lanes southbound and one through lane northbound separated by a raised median, an 8-foot shared use path on the northern side, and a 5-foot sidewalk on the southern side within a 100 foot right-of-way. The sidewalk and shared use path will extend 2,500 linear feet from Centerway Road to Alliston Hollow Way. The project will include a bridge for the northbound traffic lanes and replacement of the existing bridge for the southbound traffic lane over Cabin Branch, street lights, storm drainage, stormwater management, and landscaping and utility relocations. This project is needed to meet the existing and future traffic and pedestrian demands in the area. It will improve traffic flow by providing additional traffic lanes and encourage alternative means of mobility through proposed bicycle and pedestrian facilities. A pedestrian impact analysis has been completed for this project.

<b>TIP ID: 3063</b>	<b>Agency ID: P507658</b>	<b>Title: Bus Stop Improvement Program</b>	<b>Complete:</b>	<b>Total Cost:</b>	<b>\$6,387</b>
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Facility: Bus Stop Improvement Program	Local	0/0/100	352 a	151 a	155 a				1,324
From:			345 b	345 b	357 b				
To:			556 c	155 c	161 c				

**Total Funds: 1,324**

Description: This project provides for the installation and improvement of capital amenities at bus stops in Montgomery County to make them safer, more accessible, and attractive to users and to improve pedestrian safety for County transit passengers. These enhancements can include items such as sidewalk connections, improved pedestrian access, pedestrian refuge islands and other crossing safety measures, area lighting, and paved passenger standing areas. In prior years, this project included funding for the installation and replacement of bus shelters and benches along Ride-On and County Metrobus routes; benches and shelters are now in the operating budget.

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

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 3065 Agency ID: P509399 Title: Advanced Transportation Management System</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$59,233</b>	
Facility: Advanced Transportation Management Syst	Local	0/0/100	354 a	177 a	177 a	177 a	177 a	177 a		8,032	
From:			3,662 e	1,831 e	1,831 e	1,831 e	1,831 e	1,831 e			
To:											
<b>Total Funds:</b>										<b>8,032</b>	

Description: This project provides for Advanced Transportation Management Systems (ATMS) in the County. The ATMS deploys the infrastructure to conduct real-time management and operations of the County's transportation system. Twenty-two National Intelligent Transportation Architecture market packages have been identified for deployment of the ATMS. Each of these market packages is considered a subsystem of the ATMS program and may include several elements. These subsystems are identified in the ATMS Strategic Deployment Plan, dated February 2001, and revised July 2011. One aspect of this project will focus on improving pedestrian walkability by creating a safer walking environment, utilizing selected technologies and ensuring ADA compliance.

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 3066 Agency ID: P507596 Title: Annual Bikeway Program</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$4,897</b>	
Facility: Annual Bikeway Program	Local	0/0/100	140 a	169 a	11 a	11 a	11 a	11 a		2,120	
From:			10 b	11 b	169 b	169 b	169 b	169 b			
To:			350 c	350 c	350 c	350 c	350 c	350 c			
	State	0/100/0									
	State/Local	0/50/50	140 a								
			10 b								
			350 c								
<b>Total Funds:</b>										<b>2,120</b>	

Description: This program provides funds to plan, design and construct bikeways, trails, and directional route signs throughout Montgomery County. The purpose of the program is to develop the bikeway network specified by master plans, and those requested by the community to provide access to commuter rail, mass transit, major employment centers, recreational and educational facilities, and other major attractions. Bikeway types include shared-use paths, designated lanes, and signed shared routes along existing roads. There is a continuing and increasing need to develop a viable and effective bikeway and trail network throughout the County to increase bicyclist safety and mobility, provide an alternative to the use of automobiles, reduce traffic congestion, reduce air pollution, conserve energy, enhance quality of life, provide recreational opportunities, and encourage healthy life styles.

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 3067 Agency ID: P506747 Title: Sidewalk Program - Minor Projects</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$20,238</b>	
Facility: Sidewalk Program - Minor Projects	Local	0/0/100	942 a	520 a	520 a	520 a	520 a	520 a		9,656	
From:			12 b	6 b	6 b	6 b	6 b	6 b			
To:			3,698 c	1,874 c	1,874 c	1,874 c	1,874 c	1,874 c			
			28 e	14 e	14 e	14 e	14 e	14 e			
<b>Total Funds:</b>										<b>9,656</b>	

Description: This pedestrian access improvement program provides sidewalks on County-owned roads and some State-maintained roadways. Some funds from this project will go to support the Renew Montgomery program. The Montgomery County Department of Transportation maintains an official list of all outstanding sidewalk requests. Future projects are evaluated and selected from this list, which is continually updated with new requests. In addition, projects identified by the Citizens' Advisory Boards are placed on this list. One aspect of this project will focus on improving pedestrian walkability by creating a safer walking environment, utilizing selected engineering technologies and ensuring Americans with Disabilities Act (ADA) compliance. In addition to connecting existing sidewalks, these projects increase pedestrian safety and facilitate walking to: Metrorail stations, bus stops, shopping and medical centers, employment, recreational, and school sites. The average rate of requests for sidewalks has been 80 to 100 per year over the last two years. This program also complements and augments the bikeways that are included in road projects.



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

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3068 Agency ID: P509325 Title: ADA Compliance Transportation Access</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$12,068</b>
Facility: ADA Compliance Transportation Access	Local	0/0/100	1,242 c	283 a	283 a	283 a	283 a			6,100
From:			28 e	1,214 c	1,214 c	1,214 c	1,214 c			
To:				28 e	28 e	28 e	28 e			

**Total Funds: 6,100**

Description: This project provides both curb ramps for sidewalks and new transportation accessibility construction in compliance with the Americans with Disabilities Act (ADA). This improvement program provides for planning, design and reconstruction of existing infrastructure Countywide to enable obstruction-free access to public facilities, public transportation, Central Business Districts (CBDs), health facilities, shopping centers, and recreation. Curb ramp installation at intersections along residential roads will be constructed based on population density. Funds are provide for the removal of barriers to wheelchair users such as signs, poles, and fences, and for intersection improvements, such as the reconstruction of median breaks and new curb ramps, crosswalks and, sidewalk connectors to bus stops. Curb ramps are needed to enable mobility for physically-impaired citizens; for the on-call transit program, "Accessible Ride On" and for County-owned and leased facilities. A portion of this project will support the Renew Montgomery Program. One aspect of this project will focus on improving pedestrian walkability by creating a safer walking environment, utilizing selected engineering technologies, and ensuring ADA compliance.

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3072 Agency ID: P500821 Title: Ride On Bus Fleet</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$190,352</b>
Facility: Ride On Bus Fleet	Local	0/0/100	20,255 e	6,873 e	15,247 e	19,591 e	15,260 e			56,971
From: Countywide										
To: Sect. 5307		100/0/0	3,200 e	1,600 e	1,600 e	1,600 e	1,600 e			6,400
Sect. 5308		100/0/0	3,066 e							
State		0/100/0	800 e	400 e	400 e	400 e	400 e			1,600

**Total Funds: 64,971**

Description: This project provides for the purchase of replacement buses in the Ride On fleet in accordance with the Division of Transit Services' bus replacement plan. The FY 15-20 plan calls for the following:

- FY 15: 26 full-size buses & 1 small diesel
- FY 16: 25 full-size buses
- FY 17: 15 full-size buses
- FY 18: 28 full-size buses
- FY 19: 9 full-size buses & 31 small diesel buses
- FY 20: 32 full-size buses

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3125 Agency ID: P509975 Title: Silver Spring Green Trail</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$4,279</b>	
Facility: Silver Spring Green Trail	Local	0/0/100		1,259 c					1,259
From: Fenton Street									
To: Sligo Creek Hiker-Biker Trail	State/Local	0/40/60	1,221 c						1,221
<b>Total Funds:</b>									<b>2,480</b>

Description: This project provides for an urban trail along the selected Purple Line alignment along Wayne Avenue in Silver Spring. A Memorandum of Understanding will be established between the County and the Maryland Transit Administration (MTA) to incorporate the design and construction of the trail as a part of the design and construction of the Purple Line. The pedestrian and bicycle use along this trail supplements the County transportation program. The funding provided for the trail includes the design, property acquisition, and construction of the trail through the Silver Spring CBD, along the northern side of Wayne Avenue from Fenton Street to the Sligo Creek Hiker-Biker Trail. This trail is part of a transportation corridor and is not a recreation area of State or local significance. The trail will include an 8-10 foot wide bituminous shared use path, lighting, and landscaping. The trail will provide access to the Silver Spring Transit Station, via the Metropolitan Branch Trail, and the future Capital Crescent Trail. A pedestrian impact analysis has been completed for this project. Will be design and built at part of Purple Line project. Final cost and cash flows will be determined based on final design and MOU agreement between MTA and County.

<b>TIP ID: 3429 Agency ID: P500905 Title: Falls Road East Side Hiker/Biker Path</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$24,830</b>	
Facility: Falls Road Bikeway	Local	0/0/100		119 a	489 a	1,165 e			3,395
From: River Road					1,622 b				
To: Dunster Road									
<b>Total Funds:</b>									<b>3,395</b>

Description: This project provides funds to develop final design plans and to acquire right-of-way, and construct approximately 4 miles of an 8-foot bituminous hiker/biker path along the east side of Falls Road from River Road to Dunster Road. The path will provide pedestrian and cyclist access to communities along the project corridor and will provide connection to existing pedestrian facilities to the north (Rockville), and to the south (Potomac).

The path is a missing link between existing bicycle facilities within the City of Rockville and the existing path along Falls Road south of River Road. The path provides much needed access to public transportation along Falls Road. The path will provide pedestrian access to the following destinations: bus stops along Falls Road, Bullis School, Ritchie Park Elementary School, Potomac Community Center, Potomac Library, Potomac Village Shopping Center, Potomac Promenade Shopping Center, Heritage Farm Park, Falls Road Golf Club, Falls Road Park, and a number of religious facilities along Falls Road.

<b>TIP ID: 3498 Agency ID: P500500 Title: Burtonsville Access Road</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$6,890</b>	
Facility: Burtonsville Access Road	Local	0/0/100		335 a	145 a	70 a			2,412
From: MD Spencerville Road					1,077 b	785 b			
To: School Access Road in Burtonsville									
<b>Total Funds:</b>									<b>2,412</b>

Description: This project provides for a new roadway between Spencerville Road (MD 198) and the School Access Road in Burtonsville. This roadway will consist of two 12' lanes, closed section, for a length of approximately 1,400 linear feet. The project also includes an eight-foot parking lane, curb and gutter, five-foot sidewalks, landscaping and street lighting. The new road will serve as a local access road north of and parallel to MD 198 and the entrance to Burtonsville Shopping Center on the east side of US 29. This new road will provide an important alternative access for existing businesses on the north side of MD 198 and to the Burtonsville Elementary School. The project will create a more unified and pedestrian-friendly downtown Burtonsville and improve circulation in this area.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 3642 Agency ID: P500333 Title: Pedestrian Safety Program</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$19,512</b>	
Facility: Pedestrian Safety Program	Local	0/0/100	200 a	146 a	146 a	100 a	100 a		6,622
From: Countywide			2,715 c	1,250 c	1,380 c	1,250 c	1,250 c		
To:			500 e	250 e	250 e	250 e	250 e		

**Total Funds: 6,622**

Description: This project provides for the review and analysis of existing physical structures and traffic controls in order to make modifications aimed at improving safety and the walking environment for pedestrians. This project provides for the construction of physical structures and/or installation of traffic control devices which include, but are not limited to: new crosswalks; pedestrian refuge islands; sidewalks; bus pull-off areas; fencing to channel pedestrians to safer crossing locations; relocating, adding, or eliminating bus stops; accessible pedestrian signals (countdown) or warning beacons; improving signage, etc. The improvements will be made in compliance with the requirements of the Americans with Disabilities Act (ADA). This project supports the construction of improvements at and around schools identified in the Safe Routes to School program. The project also includes performing pedestrian safety audits at High Incidence Areas, and implementing identified physical improvements, education, and outreach.

<b>TIP ID: 3648 Agency ID: P500704 Title: Traffic Signal System Modernization</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$40,849</b>	
Facility: Traffic Signal System Modernization	Local	0/0/100		100 a	100 a	100 a	100 a		4,952
From:				1,138 e	1,138 e	1,138 e	1,138 e		
To:									

**Total Funds: 4,952**

Description: This project provides for the modernization of the county's aged traffic control system. Phase I consists of planning, requirements development, systems engineering, and testing. Phase II consists of acquisition of central system hardware and software, acquisition and implementation of control equipment and communications for intersections, as well as reconfiguration of the communications cable plant. Phase 1 is complete.

<b>TIP ID: 3703 Agency ID: P500717 Title: Montrose Parkway East</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$119,890</b>	
Facility: Montrose Parkway East	Local	0/0/100	320 a	880 b	134 b	2,436 a	4,000 a		42,441
From: Eastern Limit of MD 355/Montrose Interchan			5,324 b		866 e	15,695 c	12,256 c		
To: Veirs Mill Road/Parkland Road Intersection						6,174 e			

**Total Funds: 42,441**

Description: This project provides for a new four-lane divided parkway as recommended in the North Bethesda / Garrett Park and Aspen Hill Master Plans. The roadway will be a closed section with 11-foot wide lanes, a 10-foot wide bikepath on the north side and a 5-foot wide sidewalk on the south side. The project includes a 350-foot bridge over Rock Creek. The roadway limits are between the eastern limit of the MD 355/Montrose interchange on the west, and the intersection of Veirs Mill Road and Parklawn Drive on the east. The project includes a bridge over CSX, a grade-separated interchange at Parklawn Drive, and a tie-in to Veirs Mill Road. This project will relieve traffic congestion on roadways in the area through increased network capacity. The project also provides improved safety for motorists, pedestrians, and bicyclists, as well as a greenway.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5560 Agency ID: P500929 Title: Bethesda Metro South Entrance</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$57,610</b>	

Facility: Bethesda Metro South Entrance	Local	0/0/100	7,200 a	12,624 c	12,262 c	10,162 c	6,437 c		41,485
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From: Elm Street west of Wisconsin Avenue

To:

**Total Funds: 41,485**

Description: This project provides access from Elm Street west of Wisconsin Avenue to the southern end of the Bethesda Metrorail Station. The Metrorail Red Line runs below Wisconsin Avenue through Bethesda more than 120 feet below the surface, considerably deeper than the Purple Line right-of-way. The Bethesda Metrorail Station has one entrance, near East West Highway. The station was built with accommodations for a future southern entrance.

The Bethesda light rail transit (LRT) station would have platforms located just west of Wisconsin Avenue on the Georgetown Branch ROW. This platform allows a direct connection between LRT and Metrorail, making transfers as convenient as possible. Six station elevators would be located in the Elm Street ROW, which would require narrowing the street and extending the sidewalk.

The station would include a new south entrance to the Metrorail Station, including a new mezzanine above the Metrorail platform, similar to the existing mezzanine at the present station's north end. The mezzanine would use the existing knock-out panel in the arch of the station and the passageway that was partially excavated when the station was built, in anticipation of the future construction of a south entrance. Specific dollar amounts and flows will be based on final design estimate and MOU between MTA and County.

<b>TIP ID: 5724 Agency ID: P501209 Title: MD 355 Multimodal Crossing Project</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$72,980</b>	
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Facility: MD MD 355 Multimodal Crossing	DOD	100/0/0	5,819 a						
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From: MD Medical Center Metrorail Station/NIH

17,780 c

To: MD Walter Reed National Military Medical C

7,184 e

OEA	100/0/0	1,352 a	305 a						6,139
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264 c 2,603 c

1,410 e 205 e

State	0/100/0	4,806 c							4,806
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**Total Funds: 10,945**

Description: This project provides for right-of-way negotiations, utility relocations, and the design and construction of a multimodal grade separated connection between the Walter Reed National Military Medical Center (WRNMMC) and the Medical Center Metro Rail station. The project consists of two major elements: (1) a shallow pedestrian and bicycle underpass below Rockville Pike, MD 355, just south of the South Wood Road/South Drive intersection. Access to the underpass will be provided by elevators, escalators and stairs; and (2) a bank of three high speed elevators, on the eastern side of MD 355 that will provide a direct connection from the WRNMMC to the existing Metro station mezzanine, about 120 feet below the elevation of MD 355. Canopies will cover the stairs and escalators. The project also includes extension of the southbound MD 355 left turn lane in the existing median to provide additional queuing for vehicles turning to the WRNMMC hospital entrance at South Wood Road; expansion of the curb radius at the northwestern corner of MD 355 / South Drive to improve bus access to the Metrorail station; and stormwater management. The scope of the work is included in the National Environmental Policy Act (NEPA) document prepared earlier by the County Department of Transportation (DOT) and approved by the Federal Highway Administration. A pedestrian impact analysis has been completed for this project

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5729 Agency ID: P500718 Title: MacArthur Boulevard Bikeway Improvements</b>			<b>Complete:</b>		<b>Total Cost:</b>		<b>\$17,300</b>		
Facility: MacArthur Boulevard	Local	0/0/100	1,672 a		506 a	754 a			1,460
From: I Capital Beltway			4,723 c			200 b			
To: DC Line			260 e						

**Total Funds: 1,460**

Description: Phase I of project provides bikeway improvements along 13,800' of MacArthur Boulevard from I-495 to Oberlin Avenue. Phase II extends the bikeway from Oberlin Ave to the DC Line. Phase to be completed in FY 15. Design for Phase 2 will start in FY19 with construction to start in FY21 and FY 22. To encourage alternative modes of travel and enhance pedestrian safety, the pavement will be widened to provide 2-3 foot shoulders to accommodate the needs of on-road commuters and experienced bicyclists. The existing shared-use path will be upgraded to current standards to promote usage and enhance safety for all users. This project will also provide for spot improvements to MacArthur Boulevard to enhance safety for pedestrians, cyclists and motorists. This project will improve safety and accessibility for pedestrians and bicyclists of all experience levels and enhances connectivity with other bikeways in the vicinity. A pedestrian impact analysis had been completed for this project.

<b>TIP ID: 5912 Agency ID: P509132 Title: Beach Drive Bridge M-PK-24001</b>			<b>Complete:</b>		<b>Total Cost:</b>				
Facility: Beach Drive Bridge	BR	80/0/20	500 a	200 a					200
From: Over Silver Creek									
To:									

**Total Funds: 200**

Description: Replace bridge on Beach Drive over Silver Creek, and reconstruct Roadway Approaches

<b>TIP ID: 5913 Agency ID: P509132 Title: Brink Road Bridge M-0064001</b>			<b>Complete: 2019</b>		<b>Total Cost:</b>				
Facility: Brink Road Bridge M-0064001	BR	80/0/20	400 a	200 a					200
From: Over Great Seneca Creek									
To:									

**Total Funds: 200**

Description: This project provides for the rehabilitation of the Brink Road Bridge, over Great Seneca Creek, as well as the reconstruction of the roadway approaches.

<b>TIP ID: 5916 Agency ID: P509132 Title: Garrett Park Road Bridge M-PK-04001</b>			<b>Complete:</b>		<b>Total Cost:</b>				
Facility: Garrett Park Road Bridge M-PK-04001	BR	80/0/20	500 a	200 a					200
From: Over Rock Creek									
To:									

**Total Funds: 200**

Description: This project provides for the rehabilitation of Garrett Park Road Bridge M-PK-04001 over Rock Creek, and the reconstruction of roadway approaches

<b>TIP ID: 5919 Agency ID: P501522 Title: Piney Meetinghouse Road Bridge M-0021001</b>			<b>Complete:</b>		<b>Total Cost:</b>		<b>\$4,025</b>		
Facility: Piney Meetinghouse Road Bridge M-002100	BR	70/0/30		258 a					1,996
From: Over Watts Branch				1,595 c					
To:				143 e					

**Total Funds: 1,996**

Description: This project provides for the preliminary engineering for the rehabilitation or reconstruction of the bridge on Piney Meetinghouse Road over Watts Branch, and reconstruction roadway approaches.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5942 Agency ID: P501110 Title: Metropolitan Branch Trail</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$12,147</b>	
Facility: Metropolitan Branch Trail	Local	0/0/100	880 a	100 a	361 a				6,087
From: End of existing trail in Takoma Park			2,000 b	500 c	4,795 c				
To: Silver Spring Transit Center					331 e				

**Total Funds: 6,087**

Description: This project provides for completion of the preliminary engineering and final engineering necessary to obtain CSX and WMATA approvals for the 0.62-mile segment of this trail in Montgomery County between the end of the existing trail in Takoma Park, and the Silver Spring Transit Center. The trail will be designed to be 8 feet to 10 feet in width. This project also includes the land acquisition, site improvements, utility relocations and construction of the project from the Silver Spring Transit Center to the east side of Georgia Avenue, including a new or expanded pedestrian bridge over Georgia Avenue, as well as the segment along Fenton Street, from King Street to the north end of the existing trail. The design will also include a grade-separated crossing of Burlington Avenue, the narrowing of Selim Road, the trail segment on King Street, and the construction of new retaining walls and reconstruction of existing retaining walls. A pedestrian impact analysis has been completed for this project. This trail is to be part of a larger system of trails to enable non-motorized travel around the Washington Region. The trail is to be an off-road facility serving pedestrians, bicyclists, joggers and skaters and will be Americans with Disabilities Act (ADA) accessible.

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5943 Agency ID: P500102 Title: Bethesda CBD Streetscape</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$8,214</b>	
Facility: Bethesda CBD Streetscape	Local	0/0/100		400 a	497 a	490 a	262 a		7,301
From: Bethesda CBD					1,286 c	1,982 c	1,188 c		
To: Bethesda CBD							1,196 e		

**Total Funds: 7,301**

Description: This project provides for the design and construction of pedestrian improvements to complete unfinished streetscapes along approximately 5,425 feet of streets in the Bethesda CBD as identified in the Bethesda CBD Sector Plan. This includes:

Element 1  
1,125 feet along Woodmont Avenue between Old Georgetown Road and Cheltenham Drive.

Element 2  
3,550 feet along Wisconsin Avenue between Cheltenham Drive and the northern end of the CBD.

Element 3  
750 feet along East-West Highway between Waverly Street and Pearl Street.

This project is intended to fill in the gaps between private development projects that have been constructed or are approved in the CBD. Design elements include the replacement and widening, where possible, of sidewalks, new vehicular and pedestrian lighting, street trees, street furniture, roadway signs. The county will coordinate with the utility company for installation of aesthetic covering over existing utility poles within the project area. This project addresses streetscape improvements and does not assume the undergrounding of utilities.

**SUBURBAN MARYLAND  
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	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 5971</b> Agency ID: <b>P500313</b> Title: <b>Bridge Preservation Program</b>									Complete:	Total Cost:	<b>\$9,807</b>
Facility: Bridge Preservation Program	Local	0/0/100	284 a	152 a	152 a	152 a	152 a	152 a		2,056	
From: County-wide			4 b	2 b	2 b	2 b	2 b	2 b			
To: County-wide			720 c	360 c	360 c	360 c	360 c	360 c			

**Total Funds: 2,056**

Description: This project includes actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements, restore the function of existing bridges, keep bridges in good condition and extend their useful lives. Preservation actions may be preventive or condition driven.

<b>TIP ID: 5972</b> Agency ID: <b>P509753</b> Title: <b>Bridge Renovation</b>									Complete:	Total Cost:	<b>\$8,211</b>
Facility: County-wide	Local	0/0/100	180 a	90 a	90 a	90 a	90 a	90 a		360	
From:											
To:	State/Local	0/16/84	1,220 c	610 c	610 c	610 c	610 c	610 c		2,440	

**Total Funds: 2,800**

Description: This project provides for the renovation of County roadway and pedestrian bridges that have been identified as needing repair work beyond routine maintenance levels to assure continued safe functioning.

<b>TIP ID: 5974</b> Agency ID: <b>P508527</b> Title: <b>Resurfacing: Primary / Arterial</b>									Complete:	Total Cost:	<b>\$59,518</b>
Facility: County-wide	Local	0/0/100	2,400 a	915 a	915 a	915 a	915 a	915 a		24,400	
From:			13,600 c	5,185 c	5,185 c	5,185 c	5,185 c	5,185 c			
To: County-wide											

**Total Funds: 24,400**

Description: Montgomery County maintains approximately 966 lane miles of primary and arterial roadways. This project provides for the systematic milling, repair, and bituminous concrete resurfacing of selected primary and arterial roads and revitalization of others. This project provides for a systematic full-service, and coordinated revitalization of the primary and arterial road infrastructure to ensure viability of the primary transportation network, and enhance safety and ease of use for all users. One aspect of this project will focus on improving pedestrian mobility by creating a safer walking environment, utilizing selected engineering technologies, and ensuring compliance with the Americans with Disabilities Act (ADA).

<b>TIP ID: 5975</b> Agency ID: <b>P508182</b> Title: <b>Sidewalk &amp; Curb Replacement</b>									Complete:	Total Cost:	<b>\$56,059</b>
Facility: Countywide	Local	0/0/100	2,115 a	1,005 a	1,005 a	1,005 a	1,005 a	1,005 a		26,800	
From:			11,985 c	5,695 c	5,695 c	5,695 c	5,695 c	5,695 c			
To:											

**Total Funds: 26,800**

Description: This project provides for the removal and replacement of damaged or deteriorated sidewalks, curbs, and gutters in business districts and residential communities. MCDOT currently maintains about 1,034 miles of sidewalks and about 2,098 miles of curbs and gutters. This project includes: overlay of existing sidewalks with asphalt; base failure repair and new construction of curbs; and new sidewalks with handicapped ramps to fill in missing sections. A significant aspect of this project has been and will be to provide safe pedestrian access and ensure compliance with the Americans with Disabilities Act (ADA).

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Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 5976 Agency ID: P500534 Title: Transit Park and Ride Lot Renovations</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$3,039</b>

Facility: Transit Park and Ride Lot Renovations	Local	0/0/100	215 a	125 a	125 a				1,352
From:			765 c	718 c	384 c				
To:									
<b>Total Funds:</b>									<b>1,352</b>

Description: This project provides repairs and renovations to parking lots at transit Park and Ride lots, transit centers, and MARC Rail lots to allow them to continue functioning as transit facilities and comply with the Americans with Disabilities Act (ADA) requirements. In FY 08 and FY 09, an evaluation and assessment of all park and ride facilities, including ADA accessibility and pedestrian safety, was completed to provide scope and detailed cost estimates for the restoration and upgrades. The County operates 10 transit park and ride lots in major transportation corridors. Several County park and ride lots have had major failures, resulting from the age and use of the facilities. Some of the lots were constructed more than 20 years ago. Pavement and the entrances were not constructed to support heavy bus traffic. Additionally, the County is responsible for the maintenance of eight MARC Park and Ride lot facilities. The same ADA and lot failure issues exist with these lots.

<b>TIP ID: 5980 Agency ID: P507017 Title: Intersection &amp; Spot Improvements</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$10,117</b>
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Facility: Intersection & Spot Improvements	Local	0/0/100	500 a	322 a	322 a	336 a	1,344 e		5,224
From: County-wide			20 b	10 b	10 b	10 b			
To: County-wide			1,380 c	700 c	772 c	798 c			
			400 e	200 e	200 e	200 e			
<b>Total Funds:</b>									<b>5,224</b>

Description: This project provides for the planning and reconstruction of various existing intersections in Montgomery County, and for an annual congestion study to identify locations where there is a need for congestion mitigation. The project includes the identification and implementation of corridor modifications and traffic calming treatments to enhance pedestrian safety. At these identified locations either construction begins immediately or detailed design plans are prepared and developed into future projects. A pedestrian impact analysis will be performed during design or is in progress.

<b>TIP ID: 5981 Agency ID: P509523 Title: Neighborhood Traffic Calming</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$2,801</b>
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Facility: Neighborhood Traffic Calming	Local	0/0/100	148 a	74 a	74 a	74 a	74 a		1,240
From: Residential Neighborhoods County-wide			472 e	236 e	236 e	236 e	236 e		
To:									
<b>Total Funds:</b>									<b>1,240</b>

Description: This project provides for the planning, design, and construction of physical traffic control features in residential neighborhoods. Traffic calming features such as traffic circles and islands, curb extensions, speed humps, physical and painted lane narrowing devices, etc., are used to maintain and improve the safety and livability of residential neighborhoods by addressing issues of aggressive driving and excessive speeds and volumes.

<b>TIP ID: 5982 Agency ID: P500512 Title: Streetlight Enhancements - CBD / Town Center</b>			<b>Complete:</b>					<b>Total Cost:</b>		<b>\$3,930</b>
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Facility: Streetlight Enhancements - CBD / Town Cen	Local	0/0/100	100 a	50 a	50 a	50 a	50 a		1,000
From: CBDs and Town Centers			360 e	200 e	200 e	200 e	200 e		
To:									
<b>Total Funds:</b>									<b>1,000</b>

Description: This project provides for the evaluation and enhancement of street lighting within and around the Central Business Districts (CBDs) and town centers where current lighting does not meet minimum Illuminating Engineering Society of North America (IESNA) standards. This project will fill in street lighting; standardize streetlight types; and replace sodium vapor lighting. This project is needed to provide visibility and safety improvements in areas where there is a high concentration of pedestrians, bicyclists, and vehicles.



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	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>5985</b> Agency ID: <b>P501204</b> Title: <b>White Flint District East - Transportation</b>							Complete:	Total Cost:		<b>\$29,690</b>
Facility: White Flint District East	Local	0/0/100	2,050 a	460 a	400 a					7,800
From:			3,000 c	3,300 c	3,300 c					
To:			100 e	340 e						

**Total Funds: 7,800**

Description: This project provides for completion of preliminary engineering to 35% plans for three new roads and one bridge in the White Flint District East side area as follows:

**PROJECT 1**

Executive Blvd. Extended East (B-7): MD 355 (Rockville Pike) to New Private Street  
(Construct 1100' of 4-lane roadway)

**PROJECT 2**

Executive Blvd. Extended East (B-7): New Private Street to new Nebel Street Extended.  
(Construct 600' of 4-lane roadway)

**PROJECT 3**

Nebel Street (B-5): Nicholson Lane South to combined property  
(Construct 1,200' of 4-lane roadway)

**PROJECT 4**

Bridge across White Flint Metro Station on future MacGrath Boulevard between MD 355 and future Station Street.  
(Construct 80' long 3-lane bridge)

The vision for the White Flint District is for a more urban core with a walkable street grid, sidewalks, bikeways, trails, paths, public use space, parks and recreational facilities, mixed-use development, and enhanced streetscape to improve the areas for pedestrian circulation and transit oriented development around the Metro station.

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	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5986 Agency ID: P501116 &amp; P50 Title: White Flint District West: Transportation &amp; West Workaround</b>				<b>Complete:</b>				<b>Total Cost:</b>		<b>\$133,784</b>
Facility: White Flint District West: Transportation & From:	Local	0/0/100	3,400 a	2,057 a	2,313 a	2,944 a	2,570 a			59,515
To:			600 b	8,978 c	13,897 c	5,120 c	208 b			
				12,529 e	6,699 e	950 e	1,250 c			

**Total Funds: 59,515**

Description: This project provides for engineering, utility design, and land acquisition for one new road, one relocated road, improvements to three existing roads, and one new bikeway in the White Flint District area for Stage 1. The project also includes both design and future construction expenditures for the reconstruction of Rockville Pike and Hoya Street. Various improvements to the roads will include new traffic lanes, shared-use paths, undergrounding of overhead utility lines where required, other utility relocations and streetscaping. The new White Flint West Workaround project (CIP #501506) continues funding for several western workaround road projects. The following projects are funded through FY14 for final design:

1. Main Street/Market Street (B-10) – Old Georgetown Road (MD 187) to Woodglen Drive – new two-lane 1,200 foot roadway.
2. Main Street/Market Street (LB-1) – Old Georgetown Road (MD 187) to Woodglen Drive – new 1,200 foot bikeway.
3. Executive Boulevard Extended (B-15) – Marinelli Road to Old Georgetown Road (MD 187) – 900 feet of relocated four-lane roadway.
4. Intersection of Hoya Street (formerly 'Old' Old Georgetown Road) (M-4A), Old Georgetown Road, and Executive Boulevard, including the approaches to Old Georgetown Road. The following projects are proposed for both design and construction in the FY19-20 and Beyond 6-Years periods:
5. Rockville Pike (MD 355) (M-6) – Flanders Avenue to Hubbard Drive – 6,300 feet of reconstructed 6-8 lane roadway.
6. Hoya Street (M-4A) – Montrose Parkway to the intersection of Old Georgetown Road – 1,100 feet of reconstructed four-lane roadway.

This project also provides for analysis and studies necessary to implement the district. Design is underway on all road projects in the western workaround, with the exception of the Rockville Pike segment, and will conclude in FY15 (FY15 design is funded through White Flint West Workaround). Design of the Rockville Pike section will begin in FY19 and will conclude in FY21 in order to coordinate with the implementation of the Rapid Transit System (RTS) (CIP #501318). Some property acquisition may occur on this section in FY20. The current expenditure/funding schedule assumes that land needed for road construction will be dedicated by the developers.

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5987 Agency ID: P501202 Title: White Flint Traffic Analysis and Mitigation</b>				<b>Complete:</b>				<b>Total Cost:</b>		<b>\$1,787</b>
Facility: White Flint Traffic Analysis and Mitigation From:	Local	0/0/100	668 a	81 a	81 a	81 a	81 a			324
To:										

**Total Funds: 324**

Description: This project is programmed in direct response to requirements of the Approved White Flint Sector Plan. It is composed of three components with the overall goal of mitigating the traffic impacts on communities and major intersections outside of, and surrounding, the White Flint Sector Plan area that will occur as a result of the redevelopment densities approved under the Approved White Flint Sector Plan. These components include:

- A. Cut-through traffic monitoring and mitigation
- B. Capacity improvements to address congested intersections
- C. A study of strategies and implementation techniques to achieve the Sector Plan's modal split goals. The modal split study will identify specific infrastructure projects to create an improved transit, pedestrian, and biking infrastructure; and programs needed to accomplish the mode share goals; determine funding sources for these strategies; and determine the scope and cost of project components. Transit, pedestrian, bicycle access, safety studies, and TDM planning and implementation efforts are required to facilitate White Flint's transition from a highly automobile oriented environment to a more transit, pedestrian, and bicycle friendly environment. Once specific improvements are identified and concepts developed, detailed design and construction will be programmed in a stand alone PDF.

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Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6015 Agency ID: P501316 Title: Capital Crescent Trail</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$95,856</b>	
Facility: Capital Crescent Trail	Local	0/0/100	12,795 c	3,000 a	700 b	700 b			65,916
From: Elm Street Park in Bethesda				15,111 c	16,805 c	16,805 c			
To: Silver Spring									
<b>Total Funds:</b>									<b>65,916</b>

Description: This project provides for the funding of the Capital Crescent trail, including the main trail from Elm Street Park in Bethesda to Silver Spring, as a largely 12-foot wide hard-surface hiker-biker path, connector paths at several locations, a new bridge over Connecticut Avenue, a new underpass beneath Jones Mill Road, supplemental landscaping and amenities, and lighting at trail junctions, underpasses and other critical locations. This trail will connect to the existing Capital Crescent Trail from Bethesda to Georgetown, the Metropolitan Branch Trail from Silver Spring to Union Station, and the Rock Creek Bike Trail from northern Montgomery County to Georgetown. This trail will serve pedestrians, bicyclists, joggers, and skaters, and will be compliant with the Americans with Disabilities Act of 1990 (ADA), the Bethesda CBD Sector Plan, and the Purple Line Functional Master Plan. Schedule: 1) The interim trail along the Georgetown Branch right-of-way between Bethesda and Lyttonsville will be upgraded to a permanent rail between FY 16 and FY 18, concurrent with the Purple Line construction schedule in that segment; 2) the new extension of the trail on the northeast side of the Metropolitan Branch Trail, between Lyttonsville and the Silver Spring Transit Center will be built in FY 19 and FY 20; 3) the Metropolitan Branch segment will be opened concurrently with the planned opening of the Purple Line in 2020. Final funding flows and costs subject to final design cost and completion of MOU between MTA and County.

<b>TIP ID: 6016 Agency ID: P501304 Title: Needwood Road Bikepath</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$4,200</b>	
Facility: Needwood Road Bikepath	Local	0/0/100	62 a						632
From: Deer Lake Road			280 c						
To: Muncaster Mill Road			290 e						
	State/Local	0/25/75							
<b>Total Funds:</b>									<b>632</b>

Description: This project provides for the design and construction of a new 8-foot wide shared use path along the south side of Needwood Road, a distance of approximately 1.7 miles, between Deer Lake Road and Muncaster Mill Road (MD 115) in order to provide a safe and continuous pedestrian and bike connection to the Shady Grove Metro Station, Colonel Zadok Magruder High School, the Inter-County Connector (ICC) Shared Use Path, Rock Creek Trail, future North Branch Trail, and Rock Creek Regional Park (Lake Needwood). The project will also include the design and construction of the crossing of Muncaster Mill Road at Needwood Road intersection and a new 6-foot sidewalk along the east side of Muncaster Mill Road, a distance of approximately 450 feet, from Needwood Road to Colonel Zadok Magruder High School.

<b>TIP ID: 6017 Agency ID: P501303 Title: Seven Locks Bikeway &amp; Safety Improvements</b>			<b>Complete:</b>			<b>Total Cost:</b>		<b>\$27,944</b>	
Facility: Seven Locks Bikeway & Safety Improvemen	Local	0/0/100		1,723 a	1,334 a	20 a			6,993
From: Montrose Road					346 b	3,570 b			
To: Bradley Boulevard									
<b>Total Funds:</b>									<b>6,993</b>

Description: This project provides for pedestrian and bicycle improvements for dual bicycle facilities (on-road and off-road), and enhanced, continuous pedestrian facilities along Seven Locks Road from Montrose Road to Bradley Boulevard (3.3 miles), plus a bike path on Montrose Road between Seven Locks Road and the I-270 ramp, plus northbound and eastbound auxiliary through lanes with on-road bike lanes at the intersection of Seven Locks Road and Tuckerman Lane. This project is needed to address bicycle facility disconnects along Seven Locks Road. The roadway lacks adequate north-south, on road/off-road bicycle facilities necessary to provide continuity and connection between existing and future bike facilities. Continuous bicycle and pedestrian facilities are needed to allow safe access to residential, retail and commercial destinations, as well as existing religious and educational facilities. The project is broken down into three phases: Phase I provides dual bikeway and pedestrian facilities for the segment of Seven Locks Road from Montrose Road to Tuckerman Lane including the bike path on Montrose and the improvements to the Tuckerman Lane intersection. This project currently provides funding for Phase 1 improvements only. Phase 2 provides a dual bikeway and pedestrian facilities for the segment of Seven Locks Road from Tuckerman Lane to Democracy Boulevard. Phase III provides a dual bikeway and pedestrian facilities for the segment of Seven Locks Road from Democracy Boulevard to Bradley Boulevard.

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	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6018 Agency ID: P501309 Title: East Gude Drive Roadway Improvements</b>				<b>Complete:</b>				<b>Total Cost:</b>		<b>\$6,027</b>
Facility: East Gude Drive Roadway Improvements	Local	0/0/100		749 a	367 a	26 a	100 a			2,586
From: Crabbs Branch Way					50 b	179 b	1,115 c			
To: Southlawn Lane										
<b>Total Funds:</b>										<b>2,586</b>

Description: This project provides for the design, land acquisition, and construction of roadway improvements along East Gude Drive from Crabbs Branch Way to Southlawn Lane to increase roadway capacity, and to improve vehicular and pedestrian safety. The improvements will: (1) add a westbound lane (800 linear feet) from Calhoun Drive to Crabbs Branch Way; (2) extend the length of the eastbound taper east of Calhoun Drive (500 linear feet) to west of Incinerator Lane; (3) provide an east-to-northbound left turn lane (300 Feet) at Dover Road; (4) construct the missing section of sidewalk on the north side of East Gude Drive from west of Incinerator Lane to east of Calhoun Drive (550 linear feet); and (5) install 6 foot sidewalk connectors from each bus stop on the north side of East Gude Drive to the nearest intersection. A pedestrian impact analysis has been completed for this project. This project is needed to reduce existing and future congestion and improve pedestrian and vehicular safety. Planning and Design begin in FY 17; construction is to be completed by FY 21, and is funded in the "Beyond 6 Years" period", which begins on July 1, 2018.

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6019 Agency ID: P501307 Title: Seminary Road Intersection Improvement</b>				<b>Complete:</b>				<b>Total Cost:</b>		<b>\$7,258</b>
Facility: Seminary Road Intersection Improvement	Local	0/0/100		363 a	289 a	473 a	318 e			6,792
From: Brookeville Road Seminary Place Intersectio				170 b	377 b	2,691 c				
To: Linden Lane/Second Avenue Intersection					1,859 c	252 e				
<b>Total Funds:</b>										<b>6,792</b>

Description: This project provides for the design, land acquisition and construction of an approximate 40 foot segment of Seminary Road between the Brookeville Road/Seminary Place, and Linden Lane / Second Avenue intersections on a new alignment; reconstruction of 650 feet of Seminary Place from Seminary Road to 450 Feet east of Riley Place with a vertical alignment revision at Riley Place: increasing the Linden Lane curb lane widths along the 250 foot section between Brookeville Road and Second Avenue to provide two 15-foot shared use lanes to accommodate bicyclists; and reconstruction of the 350 foot segment Brookeville Road between Linen Lane and Seminary Road. Seminary Road will be a closed-section roadway with two 15-foot shared use lanes and a sidewalk along the northern side. Brookeville Road will be a closed-section roadway with one southbound 16-foot shared use lane, sidewalks, and a parking lane on the western side. The project includes street lights, landscaping and stormwater management. The project will simplify vehicle movements and improve traffic congestion by eliminating the Seminary Road "sweep" between Brookville Road and Second Avenue, and pedestrian and bicyclist safety will be improved. The proposed Seminary Place vertical alignment revision at Riley Place will increase intersection sight distance. A pedestrian impact analysis has been completed for this project.

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6020 Agency ID: P501315 Title: Clarksburg Transportation Connections</b>				<b>Complete:</b>				<b>Total Cost:</b>		<b>\$10,000</b>
Facility: Clarksburg Transportation Connections	Local	0/0/100		2,000 e	2,000 e	2,000 e	2,000 e			8,000
From: Snowden Farm Parkway/Little Seneca Park										
To: Ridge Road/										
<b>Total Funds:</b>										<b>8,000</b>

Description: This project provides for the County contribution to the developers design, partial land acquisition, and construction of the:

- 1) The 2400' long section of Snowden Farm Parkway from 300' north of Morning Star Drive to Ridge Road (MD 27)
- 2) The 3,400' section of Little Seneca Parkway from Snowden Farm Parkway to Frederick Road (MD 355)
- 3) The Intersection of Brink Road @ MD 355

Both parkways will include four-lane divided roadways, an 8' wide bikeway along the north/west sides, and a 5' sidewalk along the south/east sides within the 120' right-of-way. The Brink Road intersection will include improvements to the intersection as required by the Planning Board's opinion in the approval of the Clarksburg Village and Greenway Village Subdivisions. The project will also include street lighting, stormwater management, landscaping and reforestation. Appropriate auxiliary lanes and traffic signals will also be provided. A pedestrian impact analysis will be performed during design or is in progress. These roads will provide congestion relief to the Clarksburg area by providing direct tie-ins to MD 355 and MD 27, thus providing better access to I-270. These roads will provide congestion relief to the Clarksburg Area by providing direct tie-ins to MD 355 and MD 27 and thus better access to I-270.

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Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6063 Agency ID: P501118 Title: Frederick Road Bike Path: Stringtown to Milestone Manor</b>			<b>Complete:</b>				<b>Total Cost:</b>		<b>\$7,193</b>
Facility: Frederick Road Bike Path	Local	0/0/100	60 a	178 a					2,670
From: Stringtown Road			378 b	1,895 c					
To: Milestone Manor Lane				597 e					

**Total Funds: 2,670**

Description: This project provides for the design, land acquisition, and construction of a new 10-foot wide hiker-biker path along the west side of Frederick Road (MD 355) between Stringtown Road and the existing hiker-biker path near Milestone Manor Lane, a distance of approximately 2.5 miles. The entire project will replace about 0.9 miles of existing sidewalk segments in order to provide a continuous route serving two schools, two parks, and a church. The project includes streetlights and street trees.

<b>TIP ID: 6064 Agency ID: P501109 Title: Snouffer School Road: Sweet Autumn Dr. to Centerway Rd</b>			<b>Complete:</b>				<b>Total Cost:</b>		<b>\$23,710</b>
Facility: Snouffer School Road	Local	0/0/100	980 a	944 a	393 a	142 a			16,141
From: Sweet Autumn Drive			1,890 b	6,620 c	2,812 c	3,515 c			
To: Centerway Road						1,715 e			

**Total Funds: 16,141**

Description: This project provides for the design, land acquisition, and construction of 5,850 linear feet of roadway widening along Snouffer School Road between Sweet Autumn Drive and Centerway Road. The roadway typical section consists of two through lanes in each direction, a continuous center turn lane and 5.5 foot bike lanes in each direction with an 8-foot shared use path on the north side and a 5-foot sidewalk on the south side within a 90' right-of-way. The project will require approximately 1.44 acres of land acquisition and will include street lights, storm drainage, stormwater management, and landscaping. The Maryland State Highway Administration (MSHA) MD 124 Phase II project will widen the approximate 900 linear foot segment on Snouffer School Road between Sweet Autumn Drive and Woodfield Road.

<b>TIP ID: 6065 Agency ID: P507154 Title: Traffic Signals</b>			<b>Complete:</b>				<b>Total Cost:</b>		<b>\$40,889</b>
Facility: Various	Local	0/0/100	1,560 a	725 a	725 a	725 a	725 a		19,340
From: Various			8,890 e	4,110 e	4,110 e	4,110 e	4,110 e		
To: Various									

**Total Funds: 19,340**

Description: This project provides for the design, construction and maintenance of vehicular and pedestrian traffic signals and signal systems including: new and existing signals; reconstruction / replacement of aged and obsolete signals and components; auxiliary signs; accessible pedestrian signals (APS); updates of the County's centrally-controlled computerized traffic signal system; communications and interconnect into the signal system. Increases in congestion levels and the number of accidents necessitate a continued investment in the traffic signal system to: increase intersection safety; accommodate changes in traffic patterns and roadway geometry; reduce intersection delays, energy consumption and air pollution; and provide coordinated movement on arterial routes through effective traffic management and control, utilizing modern traffic signal technologies.

<b>TIP ID: 6364 Agency ID: P509036 Title: Transportation Improvements for Schools</b>			<b>Complete:</b>				<b>Total Cost:</b>		<b>\$1,775</b>
Facility: Various	Local	0/0/100		209 e	209 e	209 e	209 e		836
From: Various									
To: Various									

**Total Funds: 836**

Description: This project provides for transportation improvements such as intersection modifications, sidewalks, traffic signals, streetlights etc. for safe pedestrian and vehicular circulation identified in the Montgomery County Public Schools Capital Program. Schools include but are not limited too: Page Elementary, Sligo Middle School, Cloverly Elementary School and Glenhaven Elementary School. Specific Safe Routes to School studies and assessments are included separately in the MCDOT operating budget.



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

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
TIP ID: 6365 Agency ID: P501532		Title: <b>Bicycle and Pedestrian Priority Area Improvements</b>					Complete:		Total Cost:		<b>\$5,375</b>
Facility:	Local	0/0/100		150 a	150 a	150 a	1,000 e			4,000	
From:				850 c	850 c	850 c					
To:											
<b>Total Funds:</b>										<b>4,000</b>	

Description: The project provides for the design and construction of bicycle and pedestrian capital improvements in the 28 Bicycle-Pedestrian Priority Areas (BPPAs) identified in County master plans. Examples of such improvements include, but are not limited to: sidewalk, curb, and curb ramp reconstruction to meet ADA best practices, bulb-outs, cycle tracks, streetlighting, and relocation of utility poles. A study in FY15 will identify sub-projects in the following BPPAs: Glenmont, Grosvenor, Silver Spring Central Business District, Veirs Mill/Randolph Road, and Wheaton Central Business District. Design and construction of sub-projects will begin in FY16.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
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**Prince George's County**

<b>TIP ID: 3114</b>	Agency ID:	Title: <b>Contee Road</b>	Complete: <b>2017</b>	Total Cost: <b>\$25,467</b>
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Facility: Contee Road	Local	0/0/100	450 a	28 a					1,052
From: US 1			3,650 b	1,024 c					
To: MD 201 Extended/Virginia Manor Road/Cont									
<b>Total Funds:</b>									<b>1,052</b>

Description: This project will include the reconstruction of Contee Road from US 1 to the proposed Virginia Manor Road eas (MD 201/Kenilworth Avenue extended). The improvements will include the construction of a 4 lane divided roadway with median, bicycle lanes, sidewalks, street lights, traffic signal, curb and gutter and landscaping. This improvement is necessary to serve planned development in the area and to improve access to the Laurel Regional Hospital.

<b>TIP ID: 3157</b>	Agency ID:	Title: <b>Suitland Road</b>	Complete: <b>2018</b>	Total Cost: <b>\$8,295</b>
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Facility: Suitland Road	Local	0/0/100	50 a	20 a					8,608
From: MD Allentown Road			80 b	43 b					
To: Suitland Parkway			4,208 c	4,207 c					
<b>Total Funds:</b>									<b>8,608</b>

Description: Redevelopment and reconstruction to provide a four-lane facility to support local development and to improve safety and area traffic flow.

<b>TIP ID: 3159</b>	Agency ID:	Title: <b>Surratts Road</b>	Complete: <b>2017</b>	Total Cost: <b>\$6,018</b>
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Facility: Surratts Road	Local	0/0/100	700 b	2,000 c					2,700
From: Beverly Ave.									
To: Brandywine Road									
<b>Total Funds:</b>									<b>2,700</b>

Description: This project consists of upgrading Surratts Road to a collector-type roadway from the general vicinity of Beverly Abenue westward to Brandywine Road and improvements to Brandywine Road from Thrift Road to approximately 500 feet north of Surratts Road. A portion of Surratts Road will be relocated to improve the alignment of the intersection at Brandywine Road. Phase 2, which is not programmed at this time will provide improvements from Summit Creek Drive to Beverly Avenue. This project will be partially funded with developer contributions. This project will improve existing traffic service and provide sufficient capacity for projected area development. It will tie into developer improvements on Surratts Road, and will enable a continuous collector-type roadway to be in place from the vicinity of MD 5 to Brandywine Road

<b>TIP ID: 3166</b>	Agency ID:	Title: <b>Wheeler Road</b>	Complete: <b>2018</b>	Total Cost: <b>\$4,170</b>
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Facility: Wheeler Road	Local	0/0/100	3,102 c	40 a	19 a				868
From: Owens Road				238 b	571 b				
To: St. Barnabas Road									
<b>Total Funds:</b>									<b>868</b>

Description: This project consists of providing geometric improvements at the intersection of Wheeler Road at Owens Road and Saint Barnabas Road. The project limits extend from Saint Brnabas Road to west of Owens Road. This modification will eliminate congestion caused by traffic at Owens Road.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5258 Agency ID: Title: Old Gunpowder Road II</b>			<b>Complete: 2018 Total Cost: \$17,764</b>						
Facility: Old Gunpowder Road	Local	0/0/100	150 a	100 a					11,450
From: Powder Mill Road			1,400 b	5,000 c					
To: Greencastle Road			4,800 c						

**Total Funds: 11,450**

Description: This project is composed of two phases. Phase I consists of designing the ultimate, four lane divided urban collector section from Greencastle Road to Denim Road. A developer will construct two lanes of the four-lane divided section from 400 feet south of Greencastle Road to Briggs Chaney Road. Phase II consists of constructing the remaining unbuilt portion of the ultimate full collector section from Greencastle Road to Denim Road. Included is the construction of an additional bridge over I-95. "Developer" funding consists of potential contributions from area developments that have traffic impacts to the roadway. The improvements are needed to serve planned development in the area.

<b>TIP ID: 5401 Agency ID: Title: Bridge Replacement, Federal Aid</b>			<b>Complete: 2020 Total Cost: \$2,050</b>						
Facility: Bridge Replacement Federal Aid	BR	80/0/20		300 a	200 a				2,050
From: various locations				900 c	650 c				
To: various locations									

**Total Funds: 2,050**

Description: This project will rehabilitate deteriorated bridges exceeding 20 feet in length where the current deteriorated condition of the bridges does not warrant replacement. Federal Aid funding will be utilized for design and construction of the projects at an 80/20 federal/local ratio.

<b>TIP ID: 5424 Agency ID: Title: Contee Road Reconstruction</b>			<b>Complete: 2017 Total Cost: \$21,367</b>						
Facility: Contee Road	Local	0/0/100	28 a						1,052
From: US 1 Baltimore Avenue			1,024 c						
To: MD 201 Kenilworth Avenue / Virginia Manor									

**Total Funds: 1,052**

Description: This project will include the reconstructin of Conttee Road from US 1 to the proposed Virginia Manor Road east ( MD 201/ Kennilworth Avenue extended). The improvements will include the construction of a 4 lane divided roadway with median, bicycle lanes, sidewalks, street lights, traffic signals, curb and gutter and landscaping. The improvement is needed to serve planned development in the area and to improve access to the Laurel regional Hospital

<b>TIP ID: 5425 Agency ID: Title: Construct Contee Road from I-95 to Old Gunpowder Road</b>			<b>Complete: 2017 Total Cost: \$21,367</b>						
Facility: Contee Road	Local	0/0/100	28 a						1,052
From: US 1 Baltimore Avenue			1,024 c						
To: MD 201 Extended/Virginia Manor Road/Cont									

**Total Funds: 1,052**

Description: Construction a new segment of Contee Road from west of the proposed I-95 interchange (SHA Project) to Old Gunpowder Road and reconstruct/re;ocate Contee Road from US 1 to Kenilworth Avenue extended west/existing Virginia Manor Road.

<b>TIP ID: 5608 Agency ID: Title: Auth Road II</b>			<b>Complete: 2021 Total Cost: \$16,100</b>						
Facility: Auth Road	Local	0/0/100	300 a	100 a	200 a	200 a			500
From: Allentown Road									
To: Metro Access Road (Woods Way)									

**Total Funds: 500**

Description: Auth Road, Phase II consists of reconstructing Auth Road from henderson Way to Allentown Road. This project will resolve storm drainage problems and enhance pedestrian access and safety. Traffic signals, sidewalks, street lighting and landscaping will be installed.



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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5609 Agency ID:</b>			<b>Title: Curb and Road rehabilitation II</b>			<b>Complete: 2020</b>		<b>Total Cost: \$73,000</b>	
Facility: various locations	Local	0/0/100	2,000 a	2,000 a	2,000 a	1,000 a			42,000
From:			10,000 c	8,000 c	8,000 c	9,000 c			
To:									
<b>Total Funds:</b>									<b>42,000</b>

Description: This Project provides funding for rehabilitation County streets, curbs and sidewalks, various safety improvements, installing new sidewalks, construction of sidewalk ramps in accordance with the Americans with Disabilities Act, landscaping, traffic calming improvements, revitalization improvements and the installation of guardrails. The project also includes funding to urbanize and revitalize older subdivisions. An ongoing resurfacing and safety program provides increased vehicular and pedestrian safety remedies to address hazardous conditions and upgrade the appearance of neighborhoods.

<b>TIP ID: 5806 Agency ID:</b>			<b>Title: Bridge Replacement - Livingston Road</b>			<b>Complete: 2017</b>		<b>Total Cost: \$6,758</b>	
Facility: Bridge Replacement - Livingston Road	BR	80/0/20	1,200 c						1,200
From:									
To: Over Piscataway Creek									
<b>Total Funds:</b>									<b>1,200</b>

Description: This project will replace the existing Livingston Road Bridge over Piscataway Creek, reconstruct the approach roadways and install sidewalks, street lights, and landscaping. Funding for the bridge replacement is anticipated to be 80% Federal Aid for design and construction. Right of way, wetland, mitigation, and necessary roadway rehabilitation beyond the bridge and approach limits are anticipated to be County funded. the bridge is currently load restricted to 58,000 pounds and was originally constructed in 1932.

<b>TIP ID: 6003 Agency ID:</b>			<b>Title: Green/Complete Street Improvements</b>			<b>Complete: 2020</b>		<b>Total Cost: \$28,355</b>	
Facility: Various locations County-wide	Local	0/0/100	350 a	84 a					9,305
From:			250 b	2,321 c					
To:			6,300 c						
<b>Total Funds:</b>									<b>9,305</b>

Description: This project provides funding for a variety of street improvements along major roadways and at key intersections to improve their appearance, safety and functionality while addressing environmental issues. These improvements include but are not limited to roadway and intersection modifications, tree planting, bio retention facilities or stormwater management related water quality and quantity measures necessary to improve the environment, bicycle lane installation and the construction of sidewalks and paths.

<b>TIP ID: 6012 Agency ID:</b>			<b>Title: Modification of ADA Rights of Way County-Wide</b>			<b>Complete: 2018</b>		<b>Total Cost:</b>	
Facility: ADA Rights of Way Modifications County-Wi	Local	0/0/100	1,000 c	500 c	500 c				1,000
From:									
To: Various Locations									
<b>Total Funds:</b>									<b>1,000</b>

Description: This Prroject will modify existing curb, gutters and sidewalks througout the County to bring the existing infrastructure into compliance with current Americans with Disabilities Act (ADA) design standards.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6023 Agency ID:</b>			<b>Title: Coounty Revitalization &amp; Restoration 2</b>			<b>Complete: 2020</b>		<b>Total Cost: \$5,300</b>	
Facility: Various locations County-wide	Local	0/0/100	200 a	100 a	100 a	100 a			3,100
From:			800 c	600 c	600 c	600 c			
To: Various locations County-wide									
<b>Total Funds:</b>									<b>3,100</b>

Description: This project provides for infrastructure improvements and reconstruction in areas targeted for revitalization. Funding is provided for street improvements along major and minor roadways and at key interstections to improve their function, safety and appearance while also improving access and addressing environmental issues. Improvements will include the installation of traffic signals, intersections modifications, drainage structures, street lighting, landscaping, water quality and quantity measures, bicycle lanes, sidewalks, and other amenities necessary to improve or expand roadway infrastructure while enhancing the appearance of the community. This project will accommodate critical improvements associated with the County's revitalization and economic development efforts. In particular, the area inside the beltway between MD 214 and Southern Avenue is a priority.


<b>TIP ID: 6024 Agency ID:</b>			<b>Title: Developer Contribution Projects</b>			<b>Complete: 2015</b>		<b>Total Cost: \$7,168</b>	
Facility: Various locations County-wide	PRIV	0/0/0	50 a						3,000
From:			2,950 c						
To:									
<b>Total Funds:</b>									<b>3,000</b>

Description: This project provides funding for a variety of street improvements necessitated by new development. These improvements include, but are not limited to, traffic signals, intersection modifications, roadway widening, new construction, resurfacing, landscaping and contributions to a variety of State highway projects.

<b>TIP ID: 6026 Agency ID:</b>			<b>Title: School Access Project</b>			<b>Complete:</b>		<b>Total Cost: \$1,900</b>	
Facility: Various locations County-wide	Local	0/0/100	100 c	100 c	100 c	100 c			400
From:									
To:	SRTS	70/0/30							
<b>Total Funds:</b>									<b>400</b>

Description: This project provides funding for vehicular and pedestrian access improvements, in conjunction with the construction of new schools or renovations and additions to existing school buildings. This project provides sidewalks, crosswalks and other enhancements for students walking within 1 to 1.5 miles of their respective schools in accordance with the current Prince George's County Board of Education policy. In addition, Federal funding through the State of Maryland is for the Safe Routes to School (SRTS) program), to engage and encourage children to safely walk or bike to school including children with disabilities within two miles of school (K-8)

<b>TIP ID: 6367 Agency ID:</b>			<b>Title: Addison Road I</b>			<b>Complete: 2021</b>		<b>Total Cost: \$20,510</b>	
Facility: Addison road	Local	0/0/100	389 a	300 a	64 a	1,000 c	5,000 c		7,364
From: Walker Mill Road				500 b	500 b				
To: MD 214 (Central Avenue)									
<b>Total Funds:</b>									<b>7,364</b>

Description: The project consists of reconstructing Addison Road from Walker Mill Road to MD 214. Initially four travel lanes with a median will be constructed Improvements will include roadway widening, the construction of crosswalks, sidewalks, landscaping, street lighting and a roadway median to improve the safety, function, capacity and appearance of the roadway. The cost shown does not reflect current prices and is based on over 10 year old project scope. Current preliminary engineering has estimated that the cost could go up to \$32 million. 

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

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6369</b> Agency ID:			<b>Title: Cherry Hill Road III</b>				<b>Complete: 2021</b>		<b>Total Cost: \$1,200</b>	
Facility: Cherry Hill Road	Local	0/0/100		300 a	400 a	500 a				1,200
From: Selman Road										
To: US 1										
Description:										
<b>Total Funds: 1,200</b>										

<b>TIP ID: 6370</b> Agency ID:			<b>Title: Pedestrian Safety Improvements</b>				<b>Complete: 2020</b>		<b>Total Cost: \$26,250</b>	
Facility: Various locations County-wide	Local	0/0/100		800 a	800 a	800 a	400 a			23,000
From:										
To:										
<b>Total Funds: 23,000</b>										
Description: This project will involve the creation of multiple projects to provide for roadway improvements that are oriented toward the enhancement of pedestrian safety, particularly along roadways or at intersections which have a history of crashes. Priority will be given to the correction of problems where there is a high incidence of pedestrian related crashes. This is a project intended for sub-projects with no right-of-way cost, and with a construction cost of \$750,000 each or less.										

<b>TIP ID: 6371</b> Agency ID:			<b>Title: Planning and site acquisition 2</b>				<b>Complete: 2020</b>		<b>Total Cost: \$4,500</b>	
Facility: Various locations County-wide	Local	0/0/100		200 a	200 a	200 a	200 a			2,000
From:										
To:										
<b>Total Funds: 2,000</b>										
Description: This project provides funding for acquiring land for road rights-of-way, reforestation mitigation and wetland banking in developing areas of the County. The demolition of structures on acquired land is also included. It also provides funding for future project planning studies in order to verify need, determine scope and develop preliminary cost estimates.										


<b>TIP ID: 6372</b> Agency ID:			<b>Title: Street Lights and Traffic Signals 2</b>				<b>Complete: 2020</b>		<b>Total Cost: \$18,750</b>	
Facility: Various locations County-wide	Local	0/0/100		150 a	150 a	150 a	150 a			10,000
From:										
To:										
	PRIV	0/0/0		2,350 c	2,350 c	2,350 c	2,350 c			
<b>Total Funds: 10,000</b>										

Description: This project consists of installing traffic control signals and new street lights at various locations throughout the county. The program includes installing new signals, upgrading of existing signals, replacement of aging signals, the Energy Abatement program, installation of traffic surveillance cameras and communications equipment, and the upgrade of existing street lighting on County roadways. This project also provides some funding for the TRIP (traffic Response and Information Partnership) Center.

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

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6373 Agency ID: Title: Traffic Congestion Improvements</b>			<b>Complete: 2020</b>				<b>Total Cost:</b>		<b>\$17,842</b>
Facility: Various locations County-wide	Local	0/0/100	1,000 a	1,000 a	1,000 a	1,000 a			13,000
From:			1,500 c	2,500 c	2,500 c	2,500 c			
To:	PRIV	0/0/0							

**Total Funds: 13,000**

Description: This project provides funding for roadway enhancements including turning lanes, improved approaches, traffic signals, signage at various intersections, bus stop pads, traffic calming devices, landscaping, pedestrian facilities and thermoplastic markings. This project will also provide for roadway improvements that are oriented toward enhancement of pedestrian safety, particularly along roadways or at intersections which have a history of crashes. Included in the work to be performed is the acquisition of right-of-way along the Leeland Road approach to be the Leeland Road/Moores Plains Boulevard intersection. FY 2015 "other" funding includes \$75k from developer contributions. 


<b>TIP ID: 6374 Agency ID: Title: Transportation Enhancements 2</b>			<b>Complete: 2020</b>				<b>Total Cost:</b>		<b>\$7,366</b>
Facility: Various locations County-wide	Local	0/0/100	1,120 c	100 a	100 a	100 a	100 a		3,760
From:			1,120 c	1,120 c	1,120 c				
To:									

**Total Funds: 3,760**

Description: This project provides funding for nonstandard transportation improvements which are time sensitive. Work may entail, but will not be limited to requirements associated with the Americans with Disabilities Act, bus stop pads, traffic calming devices, landscaping, pedestrian facilities, thermoplastic pavement markings to provide maximum safety and nighttime visibility, spot safety road improvements and installation and repair of guardrail.

<b>TIP ID: 6375 Agency ID: Title: Bus Mass Transit/ Metro Access 2</b>			<b>Complete: 2020</b>				<b>Total Cost:</b>		<b>\$250</b>
Facility: Various locations County-wide	Local	0/0/100	50 c	50 c	50 c	50 c			200
From:									
To:									

**Total Funds: 200**

Description: Funds from this project may be used to purchase buses, construct related capital facilities for both bus and rail activities, roadway improvements and provide pedestrian and vehicular access improvement to metro stations and bus stops. 

<b>TIP ID: 6509 Agency ID: Title: Governor's Bridge Road Bridge Reconstruction</b>			<b>Complete: 2020</b>				<b>Total Cost:</b>		<b>\$4,210</b>
Facility: Governor's Bridge Road Bridge Reconstructi	BR	80/0/20	300 a	300 a	50 a				3,700
From: west of Patuxent River				50 b	1,500 c				
To: east of Patuxant river				1,500 c					
	Local	0/0/100		180 e	180 e				360

**Total Funds: 4,060**

Description:



# NORTHERN VIRGINIA

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## FY 2017-2022 TIP Tables

Draft for Public Comment  
October 13, 2016



National Capital Region  
**Transportation Planning Board**



DRAFT  
10/7/2016

**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 4070</b> Agency ID: <b>VRE0007</b> Title: <b>VRE Storage Yards Improvements</b>									Complete: <b>2030</b> Total Cost: <b>\$44,801</b>	
Facility:	Sect. 5307	62/34/4		5,100 c	4,636 c					9,736
From: Systemwide										
To:	Sect. 5337-SGR	62/34/4		18,794 c						18,794
<b>Total Funds: 28,530</b>										

Description: As additional cars are added to accommodate ridership demand, storage yards and maintenance facilities must be obtained and/or upgraded. Improvements to the yards and maintenance facilities will allow additional maintenance to be performed by VRE contractors and additional vehicles to be stored.

<b>TIP ID: 4272</b> Agency ID: <b>DUL0002</b> Title: <b>Dulles Corridor Metrorail Project - Phase 2</b>									Complete: <b>2018</b> Total Cost: <b>\$2,937,421</b>	
Facility:	Local	0/0/100	560,951 c	24,699 c	13,175 c					37,874
From: Wiehle Avenue										
To: VA	State	0/100/0	100,000 c							
	TIFIA	0/0/100	1,875,697 c							
<b>Total Funds: 37,874</b>										

Description: Continue the extension of the Metrorail system for another 11.5 miles to Route 772 in Loudoun County with additional stations at Reston Parkway, Monroe Street (Herndon), VA 28, Dulles Airport and VA 606. Direct access will be provided to Dulles Airport terminal.

<b>TIP ID: 4277</b> Agency ID: <b>VRE0003</b> Title: <b>Security Enhancements Systemwide</b>									Complete: <b>2040</b> Total Cost: <b>\$2,100</b>	
Facility:	Sect. 5307	80/16/4		105 c	105 c	105 c	105 c			420
From: Systemwide										
To:										
<b>Total Funds: 420</b>										

Description: Grantees must certify that at least 1% of 5307 funding received each fiscal year is being used for transit security projects

<b>TIP ID: 4310</b> Agency ID: <b>VRE0011</b> Title: <b>VRE Stations and Facilities</b>									Complete:	Total Cost: <b>\$4,612</b>
Facility: VRE Stations and Facilities	Sect. 5337-SGR	80/16/4		3,930 c	946 c	946 c	946 c			6,768
From: Districtwide										
To:										
<b>Total Funds: 6,768</b>										

Description: Involves the addition of second platforms, canopy and platform extensions, replacement of signage and other related improvements at various VRE stations in order to keep the stations in good repair. This work will be done at various stations including Fredericksburg, Leeland Road, Brooke, Manassas, Manassas Park, Woodbridge, Rippon, Rolling Road, Broad Run, Burke and other stations to be determined.

<b>TIP ID: 4489</b> Agency ID: <b>VRE0008</b> Title: <b>Grant and Project Management</b>									Complete:	Total Cost: <b>\$2,450</b>
Facility: System Wide	Sect. 5307	80/20/0	1,246 a	650 a	650 a	650 a	650 a			2,600
From: Northern Virginia										
To:										
<b>Total Funds: 2,600</b>										

Description: The costs of grants and project management, as well as staff participation in federal grants management seminars, will be capitalized to the grants, reserving operating funds for service provision.



NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 4506 Agency ID: PRTC0005 Title: PRTC - Bus Acquisition / Replacement Program</b>			Complete:				Total Cost:		<b>\$10,338</b>
Facility: PRTC - Bus Acquisition	Sect. 5309	80/20/0	572 a						
From: NOVA Districtwide									
To:	Sect. 5339	80/16/4	10,338 c						
								<b>Total Funds:</b>	<b>10,338</b>

Description: Replacement of sixteen commuter buses manufactured in 2002 that have reached the end of their useful life.

<b>TIP ID: 4534 Agency ID: VRE0009 Title: Rolling Stock Acquisition</b>			Complete:				Total Cost:		<b>\$58,761</b>
Facility: VRE Rolling Stock	Sect. 5307 2	80/16/4	2,726 c	2,726 c	2,726 c	2,726 c	10,904		
From: Systemwide									
To:	Sect. 5337-SGR	80/16/4	3,878 c	3,878 c	3,878 c	3,878 c	15,512		
								<b>Total Funds:</b>	<b>26,416</b>

Description: VRE has purchased from Sumitomo 11 cab cars (base order), 50 cab and trailers (option order) and an additional 10 cars. This project includes funding for a new procurement of up to 42 railcars with of base order of eight cars and option orders of seven, five and nine cars.

<b>TIP ID: 4802 Agency ID: VRE0002 Title: Fare Collection System/Comm. Improvements</b>			Complete: 2030				Total Cost:		<b>\$18,728</b>
Facility:	Sect. 5307	80/16/4	1,200 c		1,200				
From: Systemwide									
To:								<b>Total Funds:</b>	<b>1,200</b>

Description: Ongoing maintenance of the fare collection equipment and the next generation of fare equipment. Fare Collection III

<b>TIP ID: 4818 Agency ID: VRE0001 Title: Rolling Stock Modifications and Overhauls</b>			Complete:				Total Cost:		<b>\$35,765</b>
Facility:	Sect. 5337-SGR	80/16/4	4,900 c		4,900				
From: Systemwide									
To:								<b>Total Funds:</b>	<b>4,900</b>

Description: Technological developments and safety mandates from the Federal Railroad Administration (FRA), may require ongoing improvements to the VRE fleet. Projects that bring VRE into compliance with future federal mandates will be given the highest funding priority. Implementing PTC as required by FRA.

<b>TIP ID: 5489 Agency ID: VRE0012 Title: VRE Track Lease Improvements</b>			Complete:				Total Cost:		<b>\$229,971</b>
Facility: VRE Track	STP	50/34/16	17,024 c	17,490 c	18,190 c	52,704			
From: NoVA and District of Columbia									
To:								<b>Total Funds:</b>	<b>52,704</b>

Description: Provides capitalized access fees in the form of long term and related capital improvements on the railroad systems that VRE operates on, railroad systems owned by Amtrak, CSX, and Norfolk Southern.

**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>5503</b> Agency ID: <b>TIPGRP001</b> Title: <b>Construction: Bridge Rehabilitation/Replacement/Reconstruction</b>				Complete:			Total Cost:		<b>\$322,673</b>	
Facility: District-wide Bridges	AC 4	85/15/0		9,714 c	29,818 c					39,532
From:										
To:	BR 1	90/10/0		1,752 c	837 c					2,589
	BR 3	100/0/0			200 a					200
<b>Total Funds:</b>										<b>42,321</b>

Description: TIP Grouping project for Construction: Bridge Rehabilitation/Replacement/Reconstruction. See CLRP for the derivation of STIP Grouping and how they are part of the TIP. Individual projects within STIP Group are shown on Appendix A.

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**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: 5506 Agency ID: TIPGRP003 Title: TIP Grouping project for Construction: Safety/ITS/Operational Improve			Complete:		Total Cost:		<b>\$832,121</b>		
Facility: Safety/ITS/Operational Projects	AC	95/5/0	507 a	895 a					29,034
From: Districtwide			711 b	1,142 b					
To:			15,070 c	10,709 c					
AC 1	86/14/0		649 a	894 a					1,543
AC 2	83/17/0		1,008 b						1,008
AC 3	85/15/0		189 a						189
AC Conversion	80/20/0		700 a	560 a					1,260
AC Conversion 1	81/19/0		1,209 c	736 c					1,945
BR	80/20/0		769 b						769
CMAQ	75/25/0		107 a	107 a					214
CMAQ 1	81/19/0		11,263 c						11,263
CMAQ 2	74/26/0		108 a	108 a					216
EB/MG	80/20/0		387 b						387
EB/MG 1	81/19/0		840 c	679 c					1,519
EB/MG 2	84/16/0		109 c						109
HSIP	98/2/0		9,379 c	2,044 c					11,423
HSIP 1	52/48/0		96 a						96
HSIP 2	100/0/0		999 b						999
IM	94/6/0		3,581 c						3,581
NHPP	100/0/0		47 c						47
RSTP	80/20/0		2,601 b	7,005 c					11,754
			2,148 c						
RSTP 1	79/21/0		1,957 a	760 a					2,717
State	0/100/0			300 a					300

**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
State/Local	0/50/50			300 a 1,250 b					1,550
STP	100/0/0		40 b 2,627 c						2,667
STP 1	83/17/0		31 a	542 a					573
STP 3	80/20/0		22,334 c	16,092 c					38,426
STP 6	84/16/0		967 b	2,700 b					3,667
STP 7	98/2/0		835 c						835
STP/E	80/20/0		41 b						41
<b>Total Funds:</b>									<b>128,132</b>

Description: TIP Grouping project for Construction: Safety/ITS/Operational Improvements. See Appendix A for specific projects and UPC information.

TIP ID: 5523 Agency ID: TIPGRP004 Title: TIP Grouping project for Construction: Transportation Enhancement By		Complete:	Total Cost:	\$112,321
Facility: Transportation Enhancement Byway Non-Tra	AC	80/20/0	496 c	496
From: NoVA District	AC Conversion	80/20/0	79 c	79
To:	BR	80/20/0	380 c	380
	CMAQ	80/20/0	559 c	559
	RSTP	80/20/0	1,000 a 151 b 4,564 c	6,050
	State	0/100/0	100 a 50 b	150
	State/Local	100/0/0	100 a	100
	STP	80/20/0	1 c 1 c	2
<b>Total Funds:</b>				<b>7,816</b>

Description: TIP Grouping project for Construction: Transportation Enhancement Byway Non-Traditional. See CLRP for the derivation of STIP Grouping and how they are part of the TIP. See Appendix A to see individual projects within this STIP Group.

**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5524 Agency ID: TIPGRP005 Title: TIP Grouping project for Preventive Maintenance and System Preservati</b>			Complete:		Total Cost:		<b>\$341,997</b>		

Facility: Preventive Maintenance and System Preserv	STP	100/0/0	17,265 c	19,132 c					36,397
From: NoVA District									
To:									<b>Total Funds: 36,397</b>

Description: This listing covers a number of projects/programs throughout Northern Virginia District. The nature/scope of these projects are Preventive Maintenance and System Preservation. These projects have been determined to be exempt from conformity requirements and are eligible for a Categorical Exclusion (CE) under NEPA and hence may be grouped as per April 9, 2008 MOA between FHWA, FTA, VDOT & VDRPT which was subsequently adopted by the NCR-TPB. Individual projects within the STIP Group are found in Appendix A.

<b>TIP ID: 5525 Agency ID: TIPGRP006 Title: TIP Grouping for Preventive Maintenance for Bridges</b>			Complete:		Total Cost:		<b>\$184,481</b>		
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Facility: Bridges	STP/E	100/0/0	2,905 c	3,047 c					5,952
From: NoVA District									
To:									<b>Total Funds: 5,952</b>

Description: TIP Grouping for Preventive Maintenance for Bridges. See CLRP for the derivation of STIP Grouping and how they are part of TIP. See Appendix A for listing of individual STIP Grouped projects.

<b>TIP ID: 5526 Agency ID: TIPGRP007 Title: TIP Grouping project for Maintenance: Traffic and Safety Operations</b>			Complete:		Total Cost:		<b>\$127,389</b>		
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Facility: Traffic and Safety Operations	STP 1	100/0/0	4,047 c	4,278 c					8,325
From: NoVA District									
To:									<b>Total Funds: 8,325</b>

Description: TIP Grouping project for Maintenance: Traffic and Safety Operations. See CLRP for the derivation of STIP Grouping and how they are part of TIP. Individual projects within the STIP Group are found in Appendix A.

<b>TIP ID: 5601 Agency ID: PRTC0004 Title: PRTC - Preventive Maintenance</b>			Complete:		2040		Total Cost:		
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Facility:	Sect. 5307	80/0/20	5,095 c	1,513 c	1,600 c	1,650 c	1,700 c	1,750 c	8,213
From:									
To:	Sect. 5337-SGR	80/0/20	1,917 c	1,157 c	1,300 c	1,450 c	1,600 c	1,650 c	7,157
	Sect. 5339	80/0/20		161 c	177 c	194 c	213 c	234 c	979
	STP	80/16/4		938 c					938
									<b>Total Funds: 17,287</b>

Description: Maintenance of the Omniride and Omnilink fleet.

<b>TIP ID: 5707 Agency ID: PRTC0006 Title: PRTC Security Enhancements</b>			Complete:		Total Cost:		<b>\$846</b>		
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Facility: PRTC Transit Center	Sect. 5307	80/16/4	15 c	16 c	17 c	17 c	18 c		83
From:									
To:									<b>Total Funds: 83</b>

Description: Ongoing  
Improves safety and security at the PRTC Transit Center. Grantees must certify that at least 1% of Formula funding received each fiscal year is being used for transit security projects. Projects include cameras, additional lighting, drills, communications systems, facility access, System Safety Security Plan, etc.

**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 5965 Agency ID: 104323</b>		<b>Title: Boundary Chanel Drive Modifications</b>					<b>Complete: 2020</b>		<b>Total Cost: \$9,335</b>		
Facility:	AC	0/100/0		5,537 c						5,537	
From:											
To:	Local	0/0/100									
	REVSH	0/50/50		1,458 c						1,458	
<b>Total Funds:</b>										<b>6,995</b>	

Description: This project involves modifications to the intersection of Boundary Channel Drive and Old Jefferson Davis Highway immediately off of the I-395/Boundary Channel Drive Interchange. The project is part of the County's Long Bridge Park redevelopment initiative which includes the construction of a large regional aquatic Center.

<b>TIP ID: 6041 Agency ID: T11802</b>		<b>Title: Virginia Statewide Vehicle Fuel Conversion Program</b>					<b>Complete:</b>		<b>Total Cost:</b>		
Facility:	AC	80/20/0									
From:											
To:	AC Conversion	80/20/0		1,227 c	600 c					1,827	
	CMAQ	80/20/0	1,130 c								
<b>Total Funds:</b>										<b>1,827</b>	

Description: The project is for implementing the Statewide Vehicle Fuel Conversion Program.

<b>TIP ID: 6080 Agency ID: 103907</b>		<b>Title: Jones Branch Drive Connector</b>					<b>Complete:</b>		<b>Total Cost: \$56,000</b>		
Facility:	Scotts Crossing Rd	AC Conversion	80/20/0	7,594 c						7,594	
From:	Dolly Madison Blvd										
To:	Jones Branch Dr										
<b>Total Funds:</b>										<b>7,594</b>	

Description: The proposed connector is intended to provide a connection between Route 123 and the I-495 Express Lane (HOV/HOT lanes) ramps. By building this connection, the project will connect Route 123 via the extended Scotts Crossing Rd, ultimately to Jones Branch Dr since the segment between I-495 Express lane (HOV/HOT lanes) ramps and Jones Branch Dr is currently being built as part of the I-495 Express lane (HOV/HOT lanes) project.

<b>TIP ID: 6203 Agency ID: 102895</b>		<b>Title: Sycolin Road</b>					<b>Complete:</b>		<b>Total Cost: \$13,500</b>		
Facility:	Sycolin Road	AC	100/0/0		3,481 c					3,481	
From:	Tolbert lane										
To:	Leesburg S Corporate Limits	REVSH	0/50/50	1,000 a	3,500 c					3,500	
		RSTP	80/20/0	2,019 c						2,019	
<b>Total Funds:</b>										<b>9,000</b>	

Description: Widen Sycolin Road from two to four lanes between the above cited limits. This segment is part of a larger project included in the regional air quality conformity analysis (VU33: Widen Sycolin Rd. between VA 7/US 15 Bypass and Leesburg SCL).

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**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6247 Agency ID: 5559 Title: Rolling Road</b>							Complete: 2019	Total Cost:	<b>\$35,199</b>
Facility: VA 638 Rolling Road	AC	100/0/0		1,580	c				1,580
From: VA 286 Fairfax Co. Pkwy (0.369 mi N. of Pkw	CMAQ	80/20/0							
To: VA 644 Old Keene Mill Road	NVTA-BOND	0/100/0							
	REVSH	0/100/0		4,204	c				4,204
	RSTP	80/20/0		3,500	c				3,500
									<b>Total Funds: 9,284</b>

Description: Widening to 4 lanes - PE Only

<b>TIP ID: 6248 Agency ID: 102905 Title: Rolling Road Widening</b>							Complete:	Total Cost:	<b>\$25,500</b>
Facility: VA 638 Rolling Road	RSTP	80/20/0		3,500	a				3,500
From: VA 5297 Delong Dr.									
To: VA 4502 Fullerton Rd.									
									<b>Total Funds: 3,500</b>

Description: Widen to 4 lanes - total of 1.12 miles  
Between Delong Rd. and 0.01 mi N. of Fullerton Rd.

<b>TIP ID: 6256 Agency ID: 104380 Title: Evergreen Mill Road Widening</b>							Complete:	Total Cost:	<b>\$11,300</b>
Facility: VA 621 Evergreen Mill Road	State/Local	0/98/2	351	a	649	a			1,000
From: US S. King Street									
To: City Corp. Limits									
									<b>Total Funds: 1,000</b>

Description: Widening Evergreen Mill Road to 4 Lanes

<b>TIP ID: 6265 Agency ID: 103222 [T1161 Title: I-95 HOV/HOT Lanes Debt Service</b>							Complete:	Total Cost:	<b>\$112,940</b>
Facility: I 95 Interstate 95	AC	100/0/0							
From: Garrisonville Rd.	AC Conversion 1	100/0/0	7,808	c	7,458	c			15,266
To: 1 mi. N. of Edsall Rd.									
									<b>Total Funds: 15,266</b>

Description: Debt service

<b>TIP ID: 6281 Agency ID: 106274 Title: Springfield CBD Commuter Parking Garage</b>							Complete:	Total Cost:	<b>\$58,236</b>
Facility: 644 Old Keene Mill Road	CMAQ	80/20/0		37,789	c				37,789
From:									
To:	Local	0/0/100		11,838	c				11,838
									<b>Total Funds: 49,626</b>

Description: Springfield CBD Commuter Parking Garage

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**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
TIP ID: <b>6296</b> Agency ID: <b>104303</b>		Title: <b>WIDEN ROUTE 1 TO SIX LANES - PE &amp; RW ONLY</b>					Complete:		Total Cost:		<b>\$25,900</b>
Facility: US 1	AC	80/20/0			891 a					891	
From: Feathersotne Rd.											
To: Mary's Way	RSTP	80/20/0			5,409 a					5,409	
<b>Total Funds:</b>										<b>6,300</b>	

Description: Reduce congestion and improve safety by increasing capacity and providing multimodal facilities for pedestrians and bicycles.

TIP ID: <b>6298</b> Agency ID: <b>96721</b>		Title: <b>Route 28 Widening</b>					Complete: <b>2017</b>		Total Cost:		<b>\$13,778</b>
Facility: VA 28 Nokesville Rd	AC	80/20/0		488 c	488 c					976	
From: Godwin Drive											
To: City Southern Corporate Limits	NVTA-BOND	0/100/0		3,294 c						3,294	
	REVSH	50/50/0		2,538 c						2,538	
	RSTP	80/20/0		2,908 c						2,908	
<b>Total Funds:</b>										<b>9,716</b>	

Description: Widen to six lanes

TIP ID: <b>6301</b> Agency ID: <b>99478</b>		Title: <b>Route 7 - Widen to Six Lanes</b>					Complete:		Total Cost:		<b>\$11,000</b>
Facility: RT 7 Leesburg Pike	RSTP	80/20/0		1,200 b						1,200	
From: Reston Ave. (mm 51.5)											
To: Reston Parkway (mm 52)											
<b>Total Funds:</b>										<b>1,200</b>	

Description: Increase capacity and safety by widening Route 7 to six lanes and correcting existing profile deficiencies. Increase mobility by providing pedestrian and bicycle facilities.

TIP ID: <b>6316</b> Agency ID: <b>76256</b>		Title: <b>Colchester Road - RTE 612</b>					Complete:		Total Cost:		<b>\$445,000</b>
Facility: VA 612 Colchster Road	AC	100/0/0			60 a					60	
From: VA 641 Chapel Road											
To: VA 641 0.24 Mile N. W. Of VA 641											
<b>Total Funds:</b>										<b>60</b>	

Description: Reconstruct & Pave Gravel Road

TIP ID: <b>6320</b> Agency ID: <b>T10671</b>		Title: <b>VRE Rippon Platforms</b>					Complete:		Total Cost:		<b>\$10,890</b>
Facility: US 1	AC	100/0/0		3,034 c						3,034	
From: Farm Creek Drive											
To: Rippon Blvd.	AC Conversion	80/20/0			1 c					1	
	CMAQ	80/20/0		5,755 c						5,755	
<b>Total Funds:</b>										<b>8,790</b>	

Description: Project includes additional funding for environmental review, PE/final desing and construction to lengthen the existig platform at the VRE Rippon station from 400 feet to 650 feet and extend the canopy by 100 feet and desing and construction of a second, 650 platform, canopy and elevator.



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**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6328</b>	<b>Agency ID:</b>	<b>Title: Aminities</b>				<b>Complete:</b>			<b>Total Cost: \$9,364</b>	

Facility: AC Conversion 90/10/0 958 c 524 c 1,482  
 From: \_\_\_\_\_  
 To: **Total Funds: 1,482**  
 Description:

<b>TIP ID: 6330</b>	<b>Agency ID:</b>	<b>Title: Transit Ridesharing</b>				<b>Complete:</b>			<b>Total Cost: \$20,431</b>	
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Facility: AC Conversion 85/15/0 4,850 a 4,917 a 9,767  
 From: \_\_\_\_\_  
 To: **Total Funds: 9,767**  
 Description:

<b>TIP ID: 6331</b>	<b>Agency ID:</b>	<b>Title: Transit : Vehicles</b>				<b>Complete:</b>			<b>Total Cost: \$27,559</b>	
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Facility: AC Conversion 85/15/0 1,317 c 8,414 c 9,731  
 From: \_\_\_\_\_  
 To: **Total Funds: 9,731**  
 Description:

<b>TIP ID: 6332</b>	<b>Agency ID: 104374</b>	<b>Title: Wellington rd. Overpass Phase II</b>				<b>Complete:</b>			<b>Total Cost: \$60,000</b>	
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Facility: Wellington Rd. AC 100/0/0 1,000 a 1,000  
 From: Dean Drive  
 To: Dean Park Dr. **Total Funds: 1,000**  
 Description: Improve emergency response times, increase capacity and safety and facilitate pedestrian and bicycle access. 🚲  
 See also CLRP# 1951.

<b>TIP ID: 6333</b>	<b>Agency ID:</b>	<b>Title: Transit : Access</b>				<b>Complete:</b>			<b>Total Cost: \$22,500</b>	
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Facility: AC 85/15/0  
 From: \_\_\_\_\_  
 To: AC Conversion 80/20/0 5,249 c 5,249  
**Total Funds: 5,249**  
 Description:

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**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6335 Agency ID: 76244 Title: VA 659 Reconstruct to 4 Lanes</b>			Complete: 2015						Total Cost: <b>\$61,031</b>	
Facility: VA 659 Belmont Ridge Rd.	AC	100/0/0	1,600 a							
From: Va Hay Rd										
To: VA Gloucester Pkwy	Local	0/0/100	2,100 a							
	NVTA-BOND	0/100/0		13,805 c						13,805
	NVTA-BOND	100/0/0		13,805 c						13,805
	STP	80/20/0								
<b>Total Funds: 13,805</b>										

Description: Reconstruct VA 659 (Belomnt Ridge Rd) to 4 lanes Urban Collector

<b>TIP ID: 6336 Agency ID: 104802 Title: TELEGRAPH RD - RTE 611- WIDEN TO 4 LANES (PE Only)</b>			Complete:						Total Cost: <b>\$2,921</b>	
Facility: Telegaph Rd.	State	0/100/0		928 a	1,992 a					2,920
From: Prince William Parkway										
To: Minnieville Rd.										
<b>Total Funds: 2,920</b>										

Description: WIDEN TELEGRAPH RD TO 4 LANE DIVIDED SECTION WITH BIKE/PED FACILITIES. Associatated with CLRP project numbers 1931 and 1837.

<b>TIP ID: 6347 Agency ID: 54911, 105239 , Title: I 66 Preliminary Engineering for EIS</b>			Complete: 2017						Total Cost: <b>\$55,656</b>	
Facility: I 66	AC	100/0/0			1,000 a					1,000
From: I 495										
To: VA 15	AC Conversion	100/0/0			500 a					500
<b>Total Funds: 1,500</b>										

Description: I-66 Study/Preliminary Engineering for EIS

<b>TIP ID: 6361 Agency ID: 106025 Title: I-495 Northern Section Shoulder Use Debt Service</b>			Complete:						Total Cost:	
Facility: I-495	AC	100/0/0	20,704 c							
From: South of Old Dominion Drive Overpass										
To: George Washington Memorial Highway	AC Conversion	100/0/0		1,428 c	1,428 c	1,428 c	1,428 c			5,712
	NHPP	100/0/0	714 c							
<b>Total Funds: 5,712</b>										

Description: Debt service line item for I-495 Northern Section Shoulder Use. Associated with construction project UPC 105130.

**NORTHERN VIRGINIA  
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CAPITAL COSTS (in \$1,000)**

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 6362 Agency ID: 102891 and F Title: Route 28 Metrorail Station (Innovation Station)</b>			Complete: 2018		Total Cost: \$83,000				
Facility: 28 Innovation Station	CMAQ	80/20/0	2,085 c	7,166 c	1,773 c	45 c			11,069
From: Silver Line at Route 28	NVTA-BOND	0/100/0	48,000 c						
To:	NVTA-PAYGO	0/100/0	21,000 c						
<b>Total Funds:</b>									<b>11,069</b>

Description: This metrorail station, part of PH II of the Silver Line extension, is vital to support the increase in development that has been approved. It will include pedestrian and bicycle improvements, bus bays and bus stop improvements, and park-and-ride and kiss-and-ride facilities. There is \$69 million in prior years (FY 2014) NVTA funding allocated to this project.

<b>TIP ID: 6402 Agency ID: VRE0018 Title: Phase II - Work related potomac shores station</b>			Complete:		Total Cost:				
Facility: CSX RF&P Rail Corridor	State/Local	0/50/50	10,000 c	10,800 c	10,000 c				30,800
From: CF 557 Hamilton Interlocking (HA)									
To: CF 1063 Control Point Slaters Lane (CP)	<b>Total Funds: 30,800</b>								

Description: Track, Signal and Switch work and second platforms that support capacity expansion, operational flexibility and service expansion for the VRE Potomac Shores Station

<b>TIP ID: 6404 Agency ID: Title: VRE Stations and Facilities</b>			Complete:		Total Cost:				
Facility:	AC Conversion	80/15/0	4,923 c						
From:									
To:	<b>Total Funds: 4,923</b>								

Description: Additions of 2nd platforms, signage, related improvements at various VRE stations

<b>TIP ID: 6429 Agency ID: 104300 Title: Rogues Road Reconstruction</b>			Complete: 2020		Total Cost: \$9,391				
Facility: Rogues Road	STP	80/20/0	1,250 b						1,250
From: Fauquier/Prince William County Line									
To: RT 605	<b>Total Funds: 1,250</b>								

Description: Reconstruction without added capacity. Reconstruct and widen travel lanes and shoulders, improve drainage and safety of road and minimize maintenance.

<b>TIP ID: 6446 Agency ID: 104303 Title: Route 1 Widening from Featherstone Road to Mary's Way</b>			Complete: 2019		Total Cost: \$96,391				
Facility: US 1 Route 1	AC Conversion	80/20/0	5,185 b						5,185
From: Featherstone Road	NHPP	100/0/0							
To: Mary's Way	NVTA-PAYGO	0/100/0							
	RSTP	80/20/0							
<b>Total Funds:</b>									<b>5,185</b>

Description: Widen from a 4 lane undivided highway to a 6 lane divided highway

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**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 6447 Agency ID: -16861</b>		<b>Title: Belmont Ridge Road (Route 659), South of the Dulles Greenway</b>					<b>Complete: 2018</b>		<b>Total Cost: \$19,500</b>		
Facility: VA 659 Belmont Ridge Road		Local		1,080	a					16,963	
From: VA 625 Truro Parish Road				1,283	b						
To: VA 645 Croson Road				14,600	c						
		NVTA-BOND	0/100/0	19,500	c					19,500	
<b>Total Funds:</b>										<b>36,463</b>	

Description: Widen from a substandard 2-lane rural section to a 4-lane arterial standard with the appropriate auxiliary turn lanes and signalization

<b>TIP ID: 6450 Agency ID: 108720</b>		<b>Title: VA Route 28 Widening (Prince William County Line to Route 29)</b>					<b>Complete: 2020</b>		<b>Total Cost: \$68,829</b>		
Facility: VA 28 Centreville Road		AC	100/0/0		2,072	b				2,072	
From: PW County Line		NHPP	100/0/0								
To: Old Centreville Road		NVTA-PAYGO	0/100/0								
		REVSH	0/50/50		4,351	b				4,351	
<b>Total Funds:</b>										<b>6,423</b>	

Description: Widen from 4 to 6 lanes including intersection improvements and pedestrian/bicycle facilities.

<b>TIP ID: 6457 Agency ID: 106652</b>		<b>Title: Route 28 Widening (SB from the Dulles Toll Road to Route 50)</b>					<b>Complete: 2017</b>		<b>Total Cost: \$20,000</b>		
Facility: VA 28 Sully Road		NVTA-BOND	0/100/0	5,215	c					5,215	
From: VA 267 Dulles Toll Road											
To: US 50 Lee Jackson Memorial Highway											
<b>Total Funds:</b>										<b>5,215</b>	

Description: Widening from 3 to 4 lanes

<b>TIP ID: 6512 Agency ID: 108337</b>		<b>Title: I-66 Inside the Beltway Tolling Systems Integration</b>					<b>Complete: 2017</b>		<b>Total Cost: \$25,000</b>		
Facility: I-66		AC	0/100/0	20,000	c					20,000	
From: I-495											
To: Route 29 Near Roslyn, Arlington County											
<b>Total Funds:</b>										<b>20,000</b>	

Description: Design, build, operate, & maintain rush hour tolling systems to manage traffic in I-66 Corridor

<b>TIP ID: 6513 Agency ID: 108336</b>		<b>Title: I-66 Inside the Beltway Tolling Infrastructure</b>					<b>Complete: 2017</b>		<b>Total Cost: \$30,000</b>		
Facility: I-66		AC	0/100/0	1,000	b	24,000	c			25,000	
From: I-495											
To: Route 29 Near Roslyn, Arlington County											
<b>Total Funds:</b>										<b>25,000</b>	

Description: Construct tolling gantries, signage, and related on I-66 inside the Beltway

**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total	
<b>TIP ID: 6519 Agency ID: 99478 Title: RTE 7 CORRIDOR IMPROVEMENTS HB 2 FY17</b>									<b>Complete: 2022</b>	<b>Total Cost: \$135,872</b>	
Facility: RT 7 Leesburg Pike	AC	0/100/0		17,668	b					17,668	
From: Reston Ave											
To: Jarrett Valley Drive	RSTP	20/80/0		9,331	b					9,331	
<b>Total Funds:</b>										<b>26,999</b>	

Description: Rt 7 Corridor Improvements to add one travel lane both EB and WB; upgrade intersections; and construct pedestrian and bicycle facilities EB and WB.

<b>TIP ID: 6537 Agency ID: 105521 Title: Widen East Spring Street</b>									<b>Complete: 2019</b>	<b>Total Cost: \$6,705</b>	
Facility: Spring Street	AC	100/0/0									
From: Herndon Parkway											
To: Fairfax County Parkway	AC 1	100/0/0		2,000	b	4,000	c			6,000	
	AC 1	96/4/0		2,000	b	4,000	c			6,000	
<b>Total Funds:</b>										<b>6,000</b>	

Description: Widen Spring Street from 4 lanes to 6 lanes, FXCO PKWY ramp improvements, intersection improvements, sidewalk

<b>TIP ID: 6539 Agency ID: 106917 Title: RTE 7 CORRIDOR IMPROVEMENTS</b>									<b>Complete: 2024</b>	<b>Total Cost: \$98,000</b>	
Facility: VA 7 Leesburg Pike	AC	0/100/0		957	a					957	
From: Reston Avenue											
To: 500 ft. E of Colvin Forest Drive	RSTP	80/20/0		43	a					43	
<b>Total Funds:</b>										<b>1,000</b>	

Description: Phase 2 for Rt 7 Corridor Improvements to add one travel lane both EB and WB; upgrade intersections; and construct pedestrian and bicycle facilities EB and WB

Reconstruction w/ Added Capacity - FROM: Reston Avenue TO: 500 ft. E of Colvin Forest Drive (3.2500 MI)

TIP AMD - add \$34,658 (RSTP) & \$956,677 (AC-Other GARVEE) FFY17 PE phase. (lco 9/27/16)

child project of UPC 99478

<b>TIP ID: 6540 Agency ID: 108826 Title: Transform 66 Outside of Beltway</b>									<b>Complete: 2021</b>	<b>Total Cost: \$600,000</b>	
Facility: I 66	AC	0/100/0		300,000	c					300,000	
From: US 15 Haymarket											
To: I 495 Beltway											
<b>Total Funds:</b>										<b>300,000</b>	

Description: The Transform 66 Outside the Beltway Project is a multimodal project which will provide 2 Express Lanes & 3 general purpose lanes in each direction, with a median width designed to accommodate future high quality transit.

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10/7/2016

**NORTHERN VIRGINIA  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)**

FY 2017 - 2022

Source		Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: <b>6541</b> Agency ID: <b>107947</b>		Title: <b>NEABSCO MILLS ROAD - Widen to 4 lanes</b>				Complete: <b>2018</b>		Total Cost:		<b>\$26,300</b>
Facility: Neabsco Mills Road	AC	80/20/0		453	b					453
From: Smoke Court	AC Conversion	80/20/0				453	b			453
To: US 1 Jefferson Davis Highway	REVSH	50/50/0		2,000	b					2,000
	RSTP	80/20/0		1,700	a					3,548
				1,848	b					
<b>Total Funds:</b>										<b>6,454</b>

Description: Widen Neabsco Mills Road to 4 lanes between Smoke Ct (S. of Dale Blvd) and Route 1.



# WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

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## FY 2017-2022 TIP Tables

Draft for Public Comment  
October 13, 2016



National Capital Region  
**Transportation Planning Board**





WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)

Source		Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: 5853 Agency ID:		Title: Rail Cars - Replacement, Rehabilitation, Expansion, & Enhancements								
Facility:	Local	0/0/100		5,380 e						5,380
From:	PRIIA	50/0/50		124,349 e	172,539 e	158,438 e	141,875 e			597,200
To:	Sect. 5307	80/0/20								
	Sect. 5337-SGR	80/0/20		110,000 e	25,663 e	1,426 e	36,439 e			173,529
	WIP	0/0/100								
<b>Total Funds:</b>										<b>776,109</b>

Description: Provides funds for:  
a. Replacement of Rail Cars: replacement of the rail fleet, including the 1000-Series and 4000-Series rail cars.  
b. Rehabilitation of Rail Cars: mid-life rehabilitation of rail fleet.  
c. Rail Fleet Expansion: expansion of the rail fleet to meet ridership growth.  
d. Rail Enhancements: enhancements to the rail fleet that improve safety, reliability, and passenger comfort.

TIP ID: 5854 Agency ID:		Title: Buses - Replacement, Rehabilitation, Expansion, & Enhancements								
Facility:	CMAQ	80/0/20		808 e	6,911 e	7,399 e	4,500 e			19,618
From:	Local	0/0/100		900 e	1,728 e	5,211 e	38,483 e			46,321
To:	Sect. 5307	80/0/20		135,326 e	124,866 e	156,046 e	132,212 e			548,450
	Sect. 5337-SGR	80/0/20			4,283 e	4,283 e	4,283 e			12,849
	Sect. 5339	80/0/20		10,549 e	12,199 e	12,199 e	10,699 e			45,645
<b>Total Funds:</b>										<b>672,883</b>

Description: Provides funds for:  
a. Replacement of Buses: replacement of the bus fleet.  
b. Rehabilitation of Buses: mid-life rehabilitation of the bus fleet.  
c. Bus Enhancements: purchase and/or replacement of equipment that upgrades or enhances the capability of the bus fleet.  
d. Bus Fleet Expansion: expansion of the bus fleet to meet ridership growth.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)

	Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5855 Agency ID: Title: MetroAccess and Service Vehicles</b>										
Facility:	Local	0/0/100				24,319 e				24,319
From:										
To:	Sect. 5307	80/0/20		10,941 e	22,907 e		25,119 e			58,967
	WIP	100/0/0		10,000 e						10,000
<b>Total Funds:</b>										<b>93,286</b>

Description: Provides funds for  
a. MetroAccess Vehicles: purchase/ replacement of Metro Access vehicles.  
b. Replacement of Service Vehicles: purchase/ replacement of vehicles that will be used Authority-wide for service activities.

<b>TIP ID: 5856 Agency ID: Title: Rail Line Segment Rehabilitation</b>										
Facility:	Local	0/0/100		8,812 e						8,812
From:										
To:	PRIIA	50/0/50		50,002 e	40,582 e	45,722 e	64,632 e			200,938
	Sect. 5337-SGR	80/0/20		29,005 e	9,000 e	4,873 e				42,878
	Section 5324	75/0/25		9,500 e	3,752 e					13,252
	WIP	0/0/100								
<b>Total Funds:</b>										<b>265,879</b>

Description: Provides funds for rehabilitation of segments of Metrorail system, particularly the Red, Orange and Blue lines.

<b>TIP ID: 5857 Agency ID: Title: Bus Garages - Systemwide Maintenance, Expansion, Rehabilitation, and Replacement</b>										
Facility:	Local	0/0/100		1,455 e	18,852 e	11,469 e	8,000 e			39,776
From:										
To:	Sect. 5307	80/0/20		27,470 e	19,189 e	13,032 e	8,500 e			68,190
	Sect. 5337-SGR	80/0/20								
	WIP	0/0/100		26,871 e						26,871
<b>Total Funds:</b>										<b>134,837</b>

Description: Provides funds for:  
a. Rehabilitation and Replacement of Bus Garages: upgrades, rehabilitation, and/or replacement of bus garages and maintenance facilities, including the rehabilitation of the Bladensburg bus facility and the replacement of the Southern Avenue, Royal Street (Cinder Bed Road), Shepard Parkway bus garages.  
b. Maintenance of Bus Garages: maintenance of bus garages/maintenance facilities.  
c. Expansion of Bus Garages: expansion of bus garages to meet storage and maintenance needs of growing fleet.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)

		Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: 5858		Agency ID:		Title: <b>Systems and Technology</b>							
Facility:		Local	0/0/100		50,317 e	69,312 e	58,602 e	61,300 e			239,531
From:											
To:		PRIIA	50/0/50		2,445 e						2,445
		Sect. 5307	80/0/20				2,846 e	10,691 e			13,537
		Sect. 5333(b)	80/0/20			6,872 e					6,872
		Sect. 5337-SGR	80/0/20		1,521 e		38,035 e	23,784 e			63,340
		WIP	0/0/100		14,750 e						14,750
<b>Total Funds: 340,474</b>											

Description: Provides funds for

- a. Rail Power Systems: upgrade of rail system's power supply.
- b. Operations Support Software: purchase and/or replacement of software that supports the transit system.
- c. Business Support Software & Equipment: purchase and/or replacement of software and equipment that supports the agency's mission.
- d. Rail Fare Equipment: purchase and/or replacement of fare equipment for the transit system.

TIP ID: 5859		Agency ID:		Title: <b>Track and Structures</b>							
Facility:		Local	0/0/100		7,799 e		64 e				7,863
From:											
To:		PRIIA	50/0/50		52,194 e	50,628 e	63,402 e	56,798 e			223,022
		Sect. 5307	80/0/20		10,000 e						10,000
		Sect. 5337-SGR	80/0/20		31,870 e	28,491 e	18,138 e	28,513 e			107,011
<b>Total Funds: 347,896</b>											

Description: Provides funds for:

- a. Track Rehabilitation: maintain and rehabilitate track and track infrastructure including aerial structures.
- b. Station/Tunnel Rehabilitation: repair of water leaks in stations, vent shafts, air ducts, tunnels, tunnel liners, and other areas in the system.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)

Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
<b>TIP ID: 5860 Agency ID: Title: Passenger Facilities</b>									
Facility:	ARRA/TIGER	100/0/0							
From:	Local	0/0/100	25,448 e	5,129 e	2,715 e	2,992 e			36,284
To:	PRIIA	50/0/50	43,934 e	23,021 e	32,438 e	36,696 e			136,089
	Sect. 5307	80/0/20		6,231 e	2,741 e	4,643 e			13,614
	Sect. 5309-B	80/0/20							
	Sect. 5317	80/0/20							
	Sect. 5337-SGR	80/0/20	11,647 e	91,951 e	91,065 e	64,644 e			259,306
	WIP	0/0/100	6,761 e						6,761
<b>Total Funds:</b>									<b>452,054</b>

Description: Provides funds for

- a. Elevator/ Escalator Facilities: rehabilitation of elevator and escalators and expansion of elevator capacity.
- b. Maintenance of Rail Station Facilities: upgrade, rehabilitation, and/or replacement of station area components.
- c. Bicycle/ Pedestrian Facilities: rehabilitation, replacement and expansion of bicycle and pedestrian facilities.
- d. Rail Station Capacity/ Enhancements: expand the capacity of rail stations, improve passenger access, and protect exposed assets.
- e. Bus Priority Corridor Improvements: bus stops, runningway enhancements, street operations management and safety strategies to produce more reliable bus.
- f. Rail Station Equipment: purchase of equipment to be used in rail stations, including police emergency management equipment and other related.

<b>TIP ID: 5861 Agency ID: Title: Maintenance Equipment</b>									
Facility:	Local	0/0/100	802 e	41,428 e	35,820 e	15,805 e			93,855
From:	PRIIA	50/0/50							
To:	Sect. 5307	80/0/20		3,665 e					3,665
	Sect. 5337-SGR	80/0/20		3,627 e	9,512 e	12,224 e			25,363
<b>Total Funds:</b>									<b>122,883</b>

Description: Provides funds for

- a. Rail Maintenance Equipment: purchase and/or replacement of equipment to maintain the rail system.
- b. Bus Repair Equipment: purchase and/or replacement of repair equipment.
- c. Business Facilities Equipment: purchase and/or replacement of equipment that supports the business process of the agency.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)

		Source	Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: 5862		Agency ID:		Title: Other Support Facilities							
Facility:		Local	0/0/100		2,564 e	15,430 e	3,284 e	6,100 e			27,378
From:											
To:		Sect. 5307	80/0/20			1,733 e	5,000 e				6,733
		Sect. 5337-SGR	80/0/20				2,555 e				2,555
		WIP	0/0/100								
<b>Total Funds:</b>											<b>36,665</b>

Description: Provides funds for:

- a. Business Support Facilities: facilities that support business operations functions.
- b. Metro Transit Police Department (MTPD) Support Facilities Rehabilitation: upgrade and rehabilitation of MTPD facilities.
- c. MTPD Support Facilities Expansion: expansion of MTPD to meet new ridership and facility demands, to include the new District 2, police training facility, and special operations division facility.

TIP ID: 5863		Agency ID:		Title: Credit Facility							
Facility:		Local	0/0/100		6,104 e	3,500 e	2,500 e	2,500 e			14,604
From:											
To:		Sect. 5307	80/0/20				1,500 e				1,500
		Sect. 5339	80/0/20					1,500 e			1,500
<b>Total Funds:</b>											<b>17,604</b>

Description: Provides funds to maintain a line of credit to meet cash flow needs.

TIP ID: 5866		Agency ID:		Title: Rail Yards - Systemwide Maintenance, Expansion, Rehabilitation and Replacement							
Facility:		Local	0/0/100		4,924 e						4,924
From:											
To:		PRIIA	50/0/50		24,076 e	13,231 e					37,307
		Sect. 5337-SGR	80/0/20								
<b>Total Funds:</b>											<b>42,231</b>

Description: Provides funds for

- a. Maintenance of Rail Yards: maintenance and/or rehabilitation of rail maintenance yards.
- b. Rail Maintenance Facilities: construction and/or replacement of rail maintenance facilities.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
TRANSPORTATION IMPROVEMENT PROGRAM  
CAPITAL COSTS (in \$1,000)

Source		Fed/St/Loc	Previous Funding	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Source Total
TIP ID: 5867 Agency ID:		Title: Facilities Maintenance Support – Systemwide Support Equipment, Environmental Compl Projects and Adm Support								
Facility:	DHS	100/0/0		871 e						871
From:	Local	0/0/100		7,631 e	5,792 e	6,651 e	7,830 e			27,904
To:	PRIIA	50/0/50								
	Sect. 5307	80/0/20			2,500 e	3,000 e	3,000 e			8,500
	Sect. 5337-SGR	80/0/20								
	WIP	0/0/100								
<b>Total Funds:</b>										<b>37,275</b>

Description: Provides funds for:

- a. Environmental Compliance Projects: facility or equipment upgrades and/or replacements required to comply with environmental regulatory requirements or directives.
- b. Maintenance Bus & Rail Facilities: upgrades, rehabilitation, and/or replacements of systemwide support equipment, financial planning and project administration, to include a new test track, railcar commissioning facility and New Carrollton Yard capacity improvements.

# FY 2017-2022 TIP

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## Regional Financial Summary

Draft for Public Comment  
October 13, 2016



National Capital Region  
**Transportation Planning Board**





**Table 1A  
DISTRICT OF COLUMBIA  
FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM  
Financial Summary (in \$Millions)**

Source	2017		2018		2019-2020		2021-2022		2017-2022
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	
<b>Title I - FHWA</b>									
Congestion Mitigation and Air Quality Improvement Program	12.21	15.26	2.49	3.11	12.19	15.24			<b>33.61</b>
Demonstration Funding	0.24	0.30							<b>0.30</b>
Federal Lands Access Program	1.50	1.50							<b>1.50</b>
Highway Research and Development Program	0.07	0.14							<b>0.14</b>
National Highway Performance Program	120.36	150.45	123.51	154.39	227.92	284.91			<b>589.75</b>
Safe Routes to School Program	1.15	1.15	1.15	1.15	2.30	2.30			<b>4.60</b>
State Planning & Research Program	5.20	6.50	5.60	7.00	10.80	13.50			<b>27.00</b>
Surface Transportation Program	83.60	104.50	46.23	57.79	94.54	118.17			<b>280.47</b>
Highway Safety Improvement Program (STP)	8.84	10.55	5.93	6.63	11.93	13.35			<b>30.53</b>
Transportation Alternatives Program	0.92	1.15	0.92	1.15	1.84	2.30			<b>4.60</b>
<b>Title I - FHWA Total:</b>	<b>234.10</b>	<b>291.50</b>	<b>185.84</b>	<b>231.23</b>	<b>361.53</b>	<b>449.77</b>			<b>967.90</b>
<b>Title III - FTA</b>									
Section 5303	0.33	0.42	0.33	0.42	0.66	0.83			<b>1.66</b>
Section 5304	0.09	0.11	0.09	0.11	0.18	0.22			<b>0.44</b>
<b>Title III - FTA Total:</b>	<b>0.42</b>	<b>0.53</b>	<b>0.42</b>	<b>0.53</b>	<b>0.84</b>	<b>1.05</b>			<b>2.10</b>
<b>State/Local</b>									
District Funds		88.68		63.70		141.24			<b>293.63</b>
<b>State/Local Total:</b>		<b>88.68</b>		<b>63.70</b>		<b>141.24</b>			<b>293.63</b>
<b>Other</b>									
Grant Anticipation Revenue Vehicles (Bonds)	38.95	48.69	67.42	84.27	61.06	76.33			<b>209.29</b>
GSA Earmark	25.14	31.42	19.84	24.80					<b>56.22</b>
National Recreational Trails Funding Program	0.24	0.30	0.24	0.30	0.48	0.60			<b>1.20</b>
Private Developer		1.20		1.20					<b>2.40</b>
<b>Other Total:</b>	<b>64.33</b>	<b>81.61</b>	<b>87.50</b>	<b>110.57</b>	<b>61.54</b>	<b>76.93</b>	<b>0.00</b>	<b>0.00</b>	<b>269.11</b>
<b>Grand Total:</b>	<b>298.85</b>	<b>462.32</b>	<b>273.75</b>	<b>406.03</b>	<b>423.91</b>	<b>668.99</b>	<b>0.00</b>	<b>0.00</b>	<b>1,537.34</b>

**Table 1B  
DISTRICT OF COLUMBIA  
FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM  
Financial Summary (in \$Millions)**

Project Type	2017		2018		2019-2020		2021-2022		2017-2022	
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	Federal	Total
Interstate	9.42	11.77	10.22	12.77	53.63	67.04			73.27	91.59
Primary	94.58	152.65		160.21	134.82	192.83			229.41	505.70
Secondary	7.32	9.15	1.60	2.00	13.20	16.50			22.12	27.65
Bridge	24.88	31.10	3.40	4.25	19.60	24.50			47.88	59.85
<b>Surface Transportation:</b>	<b>136.20</b>	<b>204.67</b>	<b>15.22</b>	<b>179.24</b>	<b>221.25</b>	<b>300.88</b>	<b>0.00</b>	<b>0.00</b>	<b>372.68</b>	<b>684.79</b>
<b>Transit:</b>	<b>6.42</b>	<b>49.99</b>	<b>25.62</b>	<b>79.73</b>	<b>28.74</b>	<b>135.46</b>	<b>0.00</b>	<b>0.00</b>	<b>60.78</b>	<b>265.19</b>
<b>Bike/Ped:</b>	<b>11.88</b>	<b>14.57</b>	<b>1.88</b>	<b>2.06</b>	<b>13.45</b>	<b>16.23</b>	<b>0.00</b>	<b>0.00</b>	<b>27.20</b>	<b>32.85</b>
Enhancement	0.92	1.15	0.92	1.15	1.84	2.30			3.68	4.60
Freight	4.19	6.49	0.36	1.65	0.68	0.85				
ITS	13.09	16.37	8.89	11.11	17.61	22.01			39.59	49.49
Maintenance	71.53	100.34	48.34	70.92	68.96	103.18			188.84	274.44
Other	54.04	68.05	47.24	59.48	70.25	86.68			171.53	214.20
Safety										
TERMs	0.56	0.70	0.56	0.70	1.12	1.40			2.24	2.80
<b>Miscellaneous:</b>	<b>144.34</b>	<b>193.09</b>	<b>106.30</b>	<b>145.00</b>	<b>160.47</b>	<b>216.42</b>	<b>0.00</b>	<b>0.00</b>	<b>411.11</b>	<b>554.51</b>
<b>Total Funds:</b>	<b>298.85</b>	<b>462.32</b>	<b>149.02</b>	<b>406.03</b>	<b>423.91</b>	<b>668.99</b>	<b>0.00</b>	<b>0.00</b>	<b>871.77</b>	<b>1,537.34</b>

**Table 2A**  
**MARYLAND**  
**FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM**  
**Financial Summary by Funding Source (in \$ Millions)**

Source	2017		2018		2019-2020		2021-2022		2017-2022	
	Federal	Total	Federal	Total	Federal	Total	Federal	Total		
<b>Title I - FHWA</b>										
Bridge Replacement and Rehabilitation Program	0.89	0.89								0.89
Congestion Mitigation and Air Quality Improvement Program	2.45	2.45	2.31	2.31	4.63	4.63	4.27	4.27		13.66
Earmark	4.14	4.14								4.14
High Priority Project	4.77	4.77	13.93	13.93	7.11	7.11				25.81
National Highway Performance Program	98.64	98.64	95.45	95.45	255.47	255.47	110.39	110.39		559.95
Surface Transportation Program	53.88	53.88	39.68	39.68	77.73	77.73	65.47	65.47		236.76
Enhancements (STP)	4.50	4.50	4.46	4.46	9.18	9.18	35.14	35.14		53.28
Highway Safety Improvement Program (STP)	8.60	8.60	3.52	3.52	7.95	7.95	8.40	8.40		28.47
Transportation and Community and System Preservation	0.86	0.86	0.10	0.10						0.96
<i>Title I - FHWA Total:</i>	<i>178.73</i>	<i>178.73</i>	<i>159.45</i>	<i>159.45</i>	<i>362.08</i>	<i>362.08</i>	<i>223.67</i>	<i>223.67</i>		<i>923.91</i>
<b>Title III - FTA</b>										
Section 5307	29.09	39.60	23.55	32.68	47.85	66.30	47.05	65.30		203.89
Section 5309	316.00	395.00	116.00	145.00	232.00	290.00	232.00	290.00		1,120.00
Section 5310	0.47	0.65			0.47	0.65	0.47	0.65		1.95
Section 5311	0.74	1.44	0.74	1.44	1.49	2.89	1.49	2.89		8.66
State of Geed Repair Grant Funds	42.22	52.78	19.24	24.05	24.95	31.18	10.20	12.75		120.76
Transportation Infrastructure Finance and Innovation Act	890	890								890.00
<i>Title III - FTA Total:</i>	<i>1,278.53</i>	<i>1,379.47</i>	<i>159.54</i>	<i>203.18</i>	<i>306.76</i>	<i>391.02</i>	<i>291.21</i>	<i>371.59</i>		<i>2,345.26</i>
<b>State/Local Funds</b>										
State		228.51		227.16		415.31		188.962		1,059.95
Local		10.90		8.51		29.50				
State/Local Combined		2.08		5.92						8.00
<i>State/Local Total:</i>	<i>0.00</i>	<i>241.48</i>	<i>0.00</i>	<i>241.59</i>	<i>0.00</i>	<i>444.81</i>	<i>0.00</i>	<i>188.96</i>		<i>1,116.85</i>
<b>Other Funds</b>										
DOD - Office of Economic Development	7.41	7.41	4.81	4.81	6.20	6.20		1.77		20.18
National Park Service	0.06	0.06								0.06
National Recreational Trails Funding Program	0.41	0.41								0.41
Private Developer				0.90						0.90
Public Lands	8.49	8.49								8.49
Public Private Partnership		17.33		17.33		34.66		34.66		103.98
<i>Other Total:</i>	<i>16.37</i>	<i>33.70</i>	<i>4.81</i>	<i>23.04</i>	<i>6.20</i>	<i>40.86</i>	<i>0.00</i>	<i>36.43</i>		<i>134.03</i>
<i>MDOT Total:</i>	<i>1,473.62</i>	<i>1,833.38</i>	<i>323.79</i>	<i>627.26</i>	<i>675.03</i>	<i>1,238.77</i>	<i>514.87</i>	<i>820.64</i>		<i>4,520.05</i>
<b>County Projects</b>										
Bridge Replacement and Rehabilitation Program	5.38	6.54	1.48	1.85	3.04	4.05				12.44
Surface Transportation Program										0.00
Section 5307	1.60	1.60	1.60	1.60	3.20	3.20				6.40
Local		167.99		171.25		353.89		2.65		695.78
State		5.21		0.40		0.80				6.41
State and Local		1.83		1.85		1.22				4.90
DOD - Office of Economic Development	3.03	3.03	3.11	3.11						6.14
Private Developer		3.00								3.00
<i>Maryland County Total:</i>	<i>10.00</i>	<i>189.20</i>	<i>6.19</i>	<i>180.06</i>	<i>6.24</i>	<i>363.16</i>	<i>0.00</i>	<i>2.65</i>		<i>735.07</i>
<i>Maryland Total:</i>	<i>1,483.63</i>	<i>2,022.58</i>	<i>329.98</i>	<i>807.32</i>	<i>681.27</i>	<i>1,601.93</i>	<i>514.87</i>	<i>823.29</i>		<i>5,255.12</i>

FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM  
Financial Summary (in \$ Millions)

Project Type	2017		2018		2019-2020		2021-2022		2017-2022	
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	Federal	Total
<b>MDOT - SHA/MTA/MdTA</b>										
Interstate	9.32	24.13	24.36	92.49	68.69	245.48	28.70	56.32	131.06	418.42
Primary	36.17	69.08	43.92	78.66	92.87	145.84		19.93	172.95	313.52
Secondary	32.57	61.39	4.83	39.89	11.02	87.47	1.77	46.21	50.18	234.96
Bridge										
Maintenance	19.27	24.09	0.71	0.88	10.32	28.76	23.01	21.50	53.31	75.24
<b>Surface Transportation:</b>	<b>97.33</b>	<b>178.70</b>	<b>73.80</b>	<b>211.92</b>	<b>182.89</b>	<b>507.56</b>	<b>53.48</b>	<b>143.97</b>	<b>407.51</b>	<b>1,042.15</b>
<b>Transit:</b>	<b>1,260.12</b>	<b>1,449.26</b>	<b>159.70</b>	<b>247.40</b>	<b>285.49</b>	<b>452.47</b>	<b>275.75</b>	<b>440.30</b>	<b>1,981.07</b>	<b>2,589.43</b>
<b>Bike/Ped:</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
Other	116.17	204.49	90.28	164.74	194.38	272.84	193.22	232.72	594.05	874.79
TERMs		2.94		3.20		6.33		3.65		16.11
<b>TERMs and Other:</b>	<b>116.17</b>	<b>207.43</b>	<b>90.28</b>	<b>167.94</b>	<b>194.38</b>	<b>279.17</b>	<b>193.22</b>	<b>236.37</b>	<b>594.05</b>	<b>890.90</b>
<b>Total Funds (MDOT):</b>	<b>1,473.62</b>	<b>1,835.38</b>	<b>323.79</b>	<b>627.26</b>	<b>662.76</b>	<b>1,239.19</b>	<b>522.45</b>	<b>820.64</b>	<b>2,982.62</b>	<b>4,522.47</b>
<b>Frederick, Montgomery &amp; Prince George's Counties</b>										
Primary		2.10								2.10
Secondary	1.20	38.11	1.48	31.56	1.24	135.16			3.92	204.82
Bridge	4.18	5.74		1.05	1.80	5.75			5.97	12.55
Urban									0.00	0.00
<b>Surface Transportation:</b>	<b>5.38</b>	<b>45.96</b>	<b>1.48</b>	<b>32.60</b>	<b>3.04</b>	<b>140.91</b>	<b>0.00</b>	<b>0.00</b>	<b>9.89</b>	<b>219.47</b>
<b>Transit:</b>	<b>1.60</b>	<b>23.72</b>	<b>1.60</b>	<b>31.76</b>	<b>3.20</b>	<b>58.60</b>	<b>0.00</b>	<b>0.00</b>	<b>6.40</b>	<b>114.08</b>
<b>Bike/Ped:</b>	<b>3.03</b>	<b>44.32</b>	<b>3.11</b>	<b>49.92</b>	<b>0.00</b>	<b>83.38</b>	<b>0.00</b>	<b>2.65</b>	<b>6.14</b>	<b>180.26</b>
Enhancements		10.84		6.08		3.72				20.65
ITS		3.25		3.25		6.49			0.00	12.98
Maintenance		19.96		17.62		33.23			0.00	70.81
Other		38.65		36.33		31.84				106.82
Safety		2.50		2.50		5.00			0.00	10.00
<b>Enhancements, ITS and Other:</b>	<b>0.00</b>	<b>75.20</b>	<b>0.00</b>	<b>65.78</b>	<b>0.00</b>	<b>80.28</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>221.26</b>
<b>Total Funds (Counties):</b>	<b>10.00</b>	<b>189.20</b>	<b>6.19</b>	<b>180.06</b>	<b>6.24</b>	<b>363.16</b>	<b>0.00</b>	<b>2.65</b>	<b>22.43</b>	<b>735.07</b>
<b>Total Funds (Maryland):</b>	<b>1,483.63</b>	<b>2,024.58</b>	<b>329.98</b>	<b>807.32</b>	<b>669.00</b>	<b>1,602.35</b>	<b>522.45</b>	<b>823.29</b>	<b>3,005.06</b>	<b>5,257.54</b>

**Table 3A**  
**VIRGINIA**  
**FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM**  
**Financial Summary by Funding Source (in \$ Millions)**

October 7, 2016

Source	2017		2018		2019-2020		2021-2022		2017-2022
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	Total
<b>Title I - FHWA</b>									
Bridge Replacement and Rehabilitation Program	2.50	2.90	0.95	1.04					<b>3.94</b>
Congestion Mitigation and Air Quality Improvement Program	16.00	19.88	36.12	45.17	1.45	1.82			<b>66.86</b>
Equity Balance/Minimum Guarantee	1.08	1.34	0.55	0.68					<b>2.02</b>
Interstate Maintenance	3.37	3.58							<b>3.58</b>
National Highway Performance Program	0.05	0.05							<b>0.05</b>
Regional Surface Transportation Program	19.56	31.47	16.40	20.51					<b>51.98</b>
Surface Transportation Program	52.77	66.11	48.75	61.49	9.10	18.19			<b>145.78</b>
Enhancements (STP)	2.94	2.95	3.05	3.05					<b>5.99</b>
Highway Safety Improvement Program (STP)	10.24	10.47	2.00	2.04					<b>12.52</b>
<i>Title I - FHWA Total:</i>	<b>108.49</b>	<b>138.74</b>	<b>107.82</b>	<b>133.97</b>	<b>10.55</b>	<b>20.01</b>			<b>292.72</b>
<b>Title III - FTA</b>									
Section 5307 - Urbanized Area Formula Program	8.13	11.31	6.95	9.73	8.28	10.35		1.77	<b>33.16</b>
5339 - Alternatives Analysis Funding	8.40	10.50	0.14	0.18	0.33	0.41		0.23	<b>11.32</b>
State of Good Repair Grant Funds	22.74	32.66	4.90	6.12	10.16	12.70		1.65	<b>53.13</b>
<i>Title III - FTA Total:</i>	<b>39.27</b>	<b>54.47</b>	<b>11.99</b>	<b>16.03</b>	<b>18.76</b>	<b>23.45</b>		<b>3.65</b>	<b>97.60</b>
<b>State/Local Funds</b>									
Local Funds		41.66		25.01					<b>66.67</b>
Northern Virginia Transportation Authority		41.81							<b>41.81</b>
State Funds		1.03		2.34					<b>3.37</b>
State/Local Funds		10.45		13.00		10.00			<b>33.45</b>
<i>State/Local Total:</i>		<b>94.96</b>		<b>40.35</b>		<b>10.00</b>			<b>145.31</b>
<b>Other Funds</b>									
Advanced Construction	32.47	380.48	51.36	81.03					<b>461.51</b>
Advanced Construction Conversion	27.94	32.09	31.42	36.02	2.86	2.86			<b>70.97</b>
Revenue Sharing	2.27	6.00		12.06					<b>18.05</b>
<i>Other Total:</i>	<b>62.68</b>	<b>418.57</b>	<b>82.78</b>	<b>129.11</b>	<b>2.86</b>	<b>2.86</b>			<b>550.54</b>
<i>Virginia Total:</i>	<b>210.44</b>	<b>706.73</b>	<b>202.60</b>	<b>319.47</b>	<b>32.17</b>	<b>56.32</b>	<b>0.00</b>	<b>3.65</b>	<b>1,086.17</b>

**Table 3B  
VIRGINIA  
FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM  
Financial Summary (in Millions of Dollars)**

Project Type	2017		2018		2019-2020		2021-2022		2017-2022	
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	Federal	Total
Interstate	9.24	337.23	10.39	34.39	2.86	2.86			22.48	374.47
Primary	6.85	43.64	11.65	18.40					18.50	62.04
Secondary	10.28	64.79	8.54	16.48					18.82	81.27
Urban	4.62	5.37	7.32	11.63					11.94	17.00
Federal Lands										
Bridge	12.74	14.37	29.35	33.90					42.08	48.27
<b>Surface Transportation:</b>	<b>43.71</b>	<b>465.41</b>	<b>67.25</b>	<b>114.79</b>	<b>2.86</b>	<b>2.86</b>	<b>0.00</b>	<b>0.00</b>	<b>113.81</b>	<b>583.05</b>
<b>Transit:</b>	<b>67.88</b>	<b>130.05</b>	<b>72.70</b>	<b>133.40</b>	<b>29.31</b>	<b>53.46</b>	<b>2.92</b>	<b>3.65</b>	<b>172.82</b>	<b>320.56</b>
<b>Bike/Ped:</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
CMAQ	0.00	0.00								
Enhancement	5.88	7.43	0.33	0.45					6.21	7.88
ITS	4.05	4.05	4.28	4.28					8.33	8.33
Maintenance	17.27	17.27	19.13	19.13					36.40	36.40
Other	71.75	82.54		47.42					71.75	129.96
<b>Enhancements, ITS, Maintenance and Other:</b>	<b>98.95</b>	<b>111.28</b>	<b>23.74</b>	<b>71.28</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>122.69</b>	<b>182.56</b>
<b>Total Funds:</b>	<b>210.51</b>	<b>706.71</b>	<b>163.61</b>	<b>319.41</b>	<b>32.11</b>	<b>56.31</b>	<b>2.92</b>	<b>3.65</b>	<b>409.31</b>	<b>1,086.11</b>

**Table 4A**  
**Washington Metropolitan Area Transit Authority**  
**FY 2015-2020 TRANSPORTATION IMPROVEMENT PROGRAM**  
**Financial Summary (in \$ Millions)**

Source	2017		2018		2019-2020		2021-2022		2017-2022
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	
<b>Title I - FHWA</b>									
Congestion Mitigation and Air Quality Improvement Program	0.65	0.81	5.53	6.91	9.52	11.90			<b>19.62</b>
<i>Title I - FHWA Total:</i>	<b>0.65</b>	<b>0.81</b>	<b>5.53</b>	<b>6.91</b>	<b>9.52</b>	<b>11.90</b>	<b>0.00</b>	<b>0.00</b>	<b>19.62</b>
<b>Title III - FTA</b>									
5307 - Urbanized Area Formula Program	146.99	183.74	144.87	181.09	294.66	368.33			<b>733.16</b>
5333(b) - Labor Protection Certifications			5.50	6.87					<b>6.87</b>
5339 - Alternatives Analysis Funding	8.44	10.55	9.76	12.20	19.52	24.40			<b>47.14</b>
Passenger Rail Investment and Improvement Act of 2008	148.50	297.00	150.00	300.00	300.00	600.00			<b>1,197.00</b>
State of Good Repair Grant Funds	147.23	184.04	130.41	163.01	271.82	339.77			<b>686.83</b>
<i>Title III - FTA Total:</i>	<b>451.16</b>	<b>675.33</b>	<b>440.54</b>	<b>663.18</b>	<b>886.00</b>	<b>1332.50</b>	<b>0.00</b>	<b>0.00</b>	<b>2,671.00</b>
<b>State/Local</b>		122.14		161.17		293.64			<b>576.95</b>
<i>State/Local Total:</i>		<b>122.14</b>		<b>161.17</b>		<b>293.64</b>		<b>0.00</b>	<b>576.95</b>
<b>Other Funds</b>									
Department of Homeland Security	0.87	0.87							<b>0.87</b>
Resiliency Grant	7.13	9.50	2.81	3.75					<b>13.25</b>
WMATA Insurance Proceeds	10.00	58.38							<b>58.38</b>
<i>Other Funds Total:</i>	<b>18.00</b>	<b>68.75</b>	<b>2.81</b>	<b>3.75</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>72.51</b>
<b>Grand Total:</b>	<b>469.80</b>	<b>867.03</b>	<b>448.88</b>	<b>835.01</b>	<b>895.52</b>	<b>1638.04</b>	<b>0.00</b>	<b>0.00</b>	<b>3,340.08</b>



**Table 5A  
METROPOLITAN WASHINGTON REGION  
FY 2017-2022 TRANSPORTATION IMPROVEMENT PROGRAM  
Financial Summary by Funding Source (in \$ Millions)**

Source	2017		2018		2018-2020		2021-2022		2017-2022
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	
<b>Title I - FHWA</b>									
Bridge Replacement and Rehabilitation Program	8.76	10.34	2.43	2.89	3.04	4.05			17.27
Congestion Mitigation and Air Quality Improvement Program	31.31	38.40	46.45	57.50	27.79	33.58	4.27	4.27	133.75
Demonstration	0.24	0.30							0.30
Earmark	4.14	4.14							4.14
Equity Balance/Minimum Guarantee	1.08	1.34	0.55	0.68					2.02
Federal Lands Access Program	1.50	1.50							1.50
High Priority Project	4.77	4.77	13.93	13.93	7.11	7.11			25.81
Highway Research and Development Program	0.07	0.14							0.14
Interstate Maintenance	3.37	3.58							3.58
National Highway Performance Program	219.04	249.13	218.97	249.84	483.40	540.38	110.39	110.39	1,149.75
Regional Surface Transportation Planning	19.56	31.47	16.40	20.51					51.98
Safe Routes to School Program	1.15	1.15	1.15	1.15	2.30	2.30			4.60
State Planning & Research Program	5.20	6.50	5.60	7.00	10.80	13.50			27.00
Surface Transportation Program	190.24	224.49	134.66	158.96	181.37	214.10	65.47	65.47	663.01
Enhancements (STP)	7.44	7.45	7.51	7.51	9.18	9.18	35.14	35.14	59.27
Highway Safety Improvement Program (STP)	27.69	29.62	11.45	12.19	19.89	21.30	8.40	8.40	71.52
Transportation Alternatives Program	0.92	1.15	0.92	1.15	1.84	2.30			4.60
Transportation and Community and System Preservation	0.86	0.86	0.10	0.10					0.96
<b>Title I - FHWA Total:</b>	<b>527.34</b>	<b>616.32</b>	<b>460.12</b>	<b>533.41</b>	<b>746.71</b>	<b>847.80</b>	<b>223.67</b>	<b>223.67</b>	<b>2,221.19</b>
<b>Title III - FTA</b>									
5303 - Planning Program	0.332	0.415	0.332	0.415	0.664	0.83			1.66
5304 - State & Planning Research Program	0.088	0.11	0.088	0.11	0.176	0.22			0.44
5307 - Urbanized Area Formula Program	185.80616	236.2497	176.97456	225.1058	353.98992	448.1764	48.4624	67.067	976.60
5309 - New Starts	316	395	116	145	232	290	232	290	1,120.00
5310 - Elderly and Persons with Disabilities Program	3.3068	3.481	2.832	2.832	6.1388	6.313			12.63
5311 - Non-urbanized Area Formula Program	0.743	1.444	0.743	1.444	1.486	2.888	1.486	2.888	8.66
5333(b) - Labor Protection Certifications			5.49736	6.8717					6.87
5339 - Alternatives Analysis Funding	16.838	21.0475	9.90064	12.3758	19.84368	24.8046			58.23
Passenger Rail Investment and Improvement Act of 2008	148.5	297	150	300	300.00005	600.0001			1,197.00
Resiliency Grant	7.125	9.5	2.814	3.752					13.25
State of Good Repair Grant Funds	212.1982	316	154.55344	193.1918	306.92392	383.6549	11.52	14.4	907.25
Transportation Infrastructure Finance and Innovation Act	890	890							890.00
WMATA Insurance Proceeds	10	58.3825							58.38
<b>Title III - FTA Total:</b>	<b>1,790.94</b>	<b>2,228.63</b>	<b>619.74</b>	<b>891.10</b>	<b>1,221.22</b>	<b>1,756.89</b>	<b>293.47</b>	<b>374.36</b>	<b>5,250.97</b>
<b>State/Local</b>									
Grant Anticipation Revenue Vehicles (Bonds)	38.95	48.69	67.42	84.27					132.96
Local		342.69		365.95		677.04		2.65	1,388.31
Northern Virginia Transportation Authority; Bond Financing		41.81							41.81
State or District Funding		323.43		293.61		557.35		188.96	1,363.35
State/Local	0.10	14.36		20.77		11.22			46.35
<b>State/Local Total:</b>	<b>39.05</b>	<b>770.98</b>	<b>67.42</b>	<b>764.59</b>		<b>1,245.61</b>		<b>191.61</b>	<b>2,972.79</b>
<b>Other</b>									
Advanced Construction	32.47	380.48	51.36	81.03					461.51
Advanced Construction Conversion	27.94	32.09	31.42	36.02	2.86	2.86			70.97
Department of Homeland Security	0.87	0.87							0.87
DOD - Office of Economic Development	10.43	10.43	7.92	7.92	6.20	6.20			24.55
GSA Earmark	25.14	31.42	19.84	24.80					56.22
National Park Service	0.062	0.062							0.06
National Recreational Trails Funding Program	0.65	0.71	0.24	0.30	0.48	0.60			1.61
Private Developer		6.20		2.10					8.30
Public Lands	8.49	8.49							8.49
Public-Private Partnership		17.33		17.33		34.66		34.66	103.98
Revenue Sharing	2.27	6.00		12.06					7.00
	108.32	494.09	110.78	181.56	9.54	44.32	0.00	34.66	754.62
<b>Total:</b>	<b>2,465.65</b>	<b>4,110.02</b>	<b>1,258.05</b>	<b>2,370.65</b>	<b>1,977.47</b>	<b>3,894.61</b>	<b>517.13</b>	<b>824.29</b>	<b>11,199.57</b>

**Table 5B**  
**METROPOLITAN WASHINGTON REGION**  
**FY 2015-2020 TRANSPORTATION IMPROVEMENT PROGRAM**  
**Financial Summary (in \$Millions)**

Project Type	2015		2016		2017-2018		2019-2020		2015-2020	
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	Federal	Total
Interstate	27.97	373.14	44.96	139.64	125.18	315.38	28.70	56.32	226.81	884.48
Primary	137.60	267.48	180.30	257.27	227.69	338.68		19.93	545.59	883.36
Secondary	51.37	173.45	16.45	89.92	25.46	239.13	1.77	46.21	95.04	548.71
Urban	4.62	5.37	7.32	11.63					11.94	17.00
Bridge	41.80	51.21	32.75	39.20	21.40	30.25			95.94	120.67
Federal Lands Highway Program										
<b>Surface Transportation:</b>	<b>263.35</b>	<b>870.65</b>	<b>281.78</b>	<b>537.67</b>	<b>399.73</b>	<b>923.43</b>	<b>30.47</b>	<b>122.47</b>	<b>975.32</b>	<b>2,454.21</b>
<b>Transit:</b>	<b>1,805.83</b>	<b>2,520.05</b>	<b>708.51</b>	<b>1,327.30</b>	<b>1,242.26</b>	<b>2,338.03</b>	<b>278.67</b>	<b>443.95</b>	<b>4,035.28</b>	<b>6,629.32</b>
<b>Bike/Ped:</b>	<b>14.91</b>	<b>58.88</b>	<b>4.99</b>	<b>51.98</b>	<b>13.45</b>	<b>99.61</b>	<b>0.00</b>	<b>2.65</b>	<b>33.34</b>	<b>213.11</b>
CMAQ										
Enhancement	6.80	19.42	1.25	7.68	1.84	6.02			9.89	33.12
Freight	4.19	6.49	0.36	1.65	0.68	0.85			5.23	8.99
ITS	17.14	23.66	13.16	18.63	17.61	28.51			47.91	70.80
Human Service Transportation Coordination	2.83	2.83	2.83	2.83	5.66	5.66			11.33	11.33
Maintenance	108.07	161.66	68.18	108.56	91.97	165.17	17.20	21.50	285.43	456.89
Other	241.96	393.72	176.43	307.97	264.63	391.35	193.22	232.72	876.24	1,325.76
Safety		2.50		2.50		5.00				10.00
TERMs	0.56	3.64	0.56	3.90	1.12	7.73		3.65	2.24	18.91
<b>CMAQ, TERMs, Enhancements, ITS, and Other:</b>	<b>381.56</b>	<b>613.92</b>	<b>262.77</b>	<b>453.71</b>	<b>383.52</b>	<b>610.29</b>	<b>210.42</b>	<b>257.88</b>	<b>1,238.28</b>	<b>1,935.80</b>
<b>Total Funds:</b>	<b>2,465.65</b>	<b>4,063.49</b>	<b>1,258.05</b>	<b>2,370.65</b>	<b>2,038.95</b>	<b>3,971.36</b>	<b>519.56</b>	<b>826.94</b>	<b>6,282.22</b>	<b>11,232.45</b>

# FY 2017-2022 TIP Financial Report

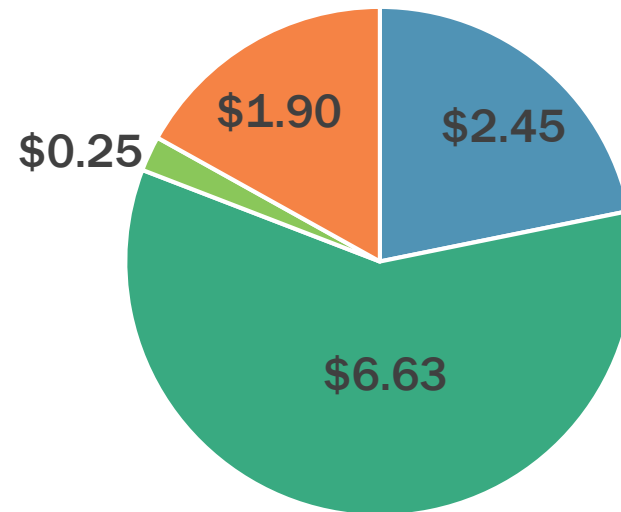
## Over 300 Projects, \$11 Billion

- Capital and Operations & Maintenance projects
- 114 road & bridge
- 55 transit
- 34 bicycle & pedestrian
- Other: ITS, Safety, Freight, Maintenance & Rehabilitation

## FY 2017-2022 Programmed Amounts

- 19 projects over \$100 million
- 224 projects \$20 million or less

Funding by Project Type  
(in Billions of Dollars)

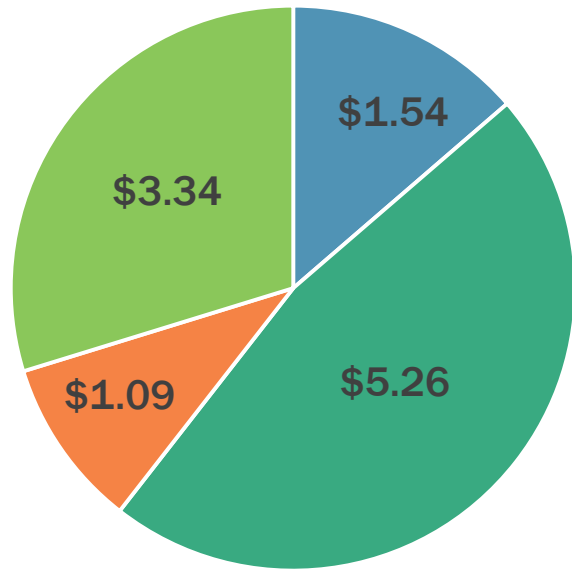


- Roads & Bridges
- Transit
- Bicycle & Pedestrian
- Other



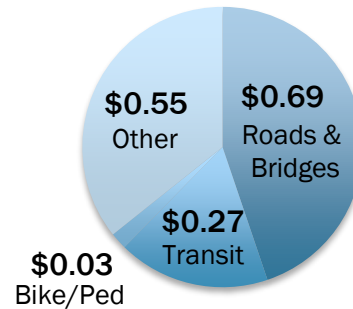
# FY 2017-2022 TIP Financial Report

Funding by Jurisdiction or Agency  
(in Billions of Dollars)

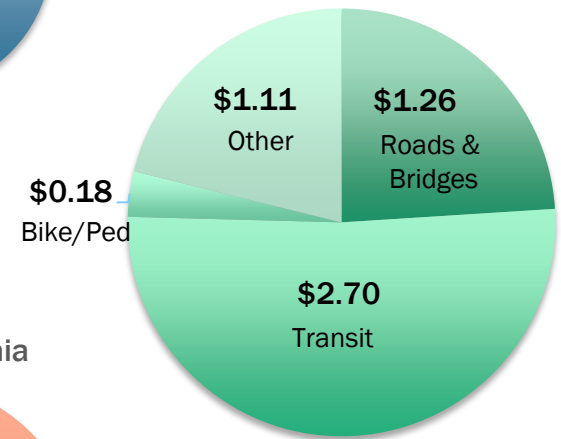


- District of Columbia
- Suburban Maryland
- Northern Virginia
- WMATA

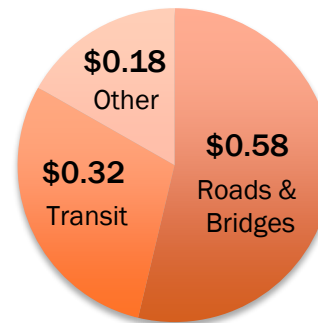
District of Columbia



Suburban Maryland



Northern Virginia



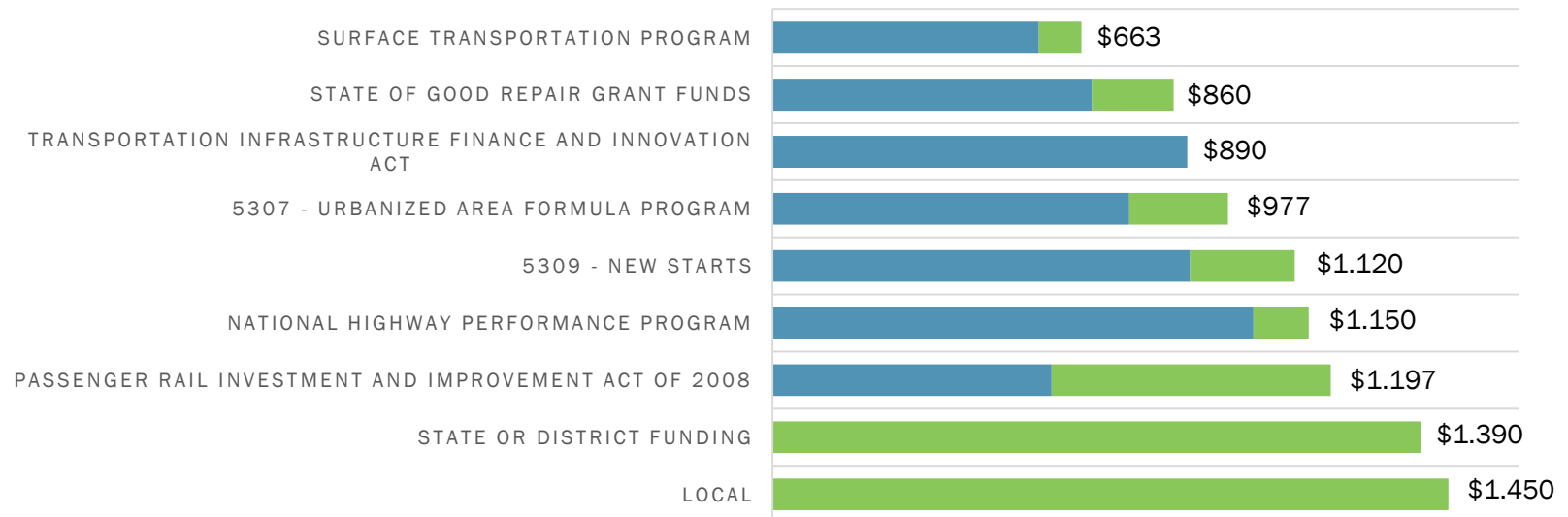
# FY 2017-2022 TIP Financial Report

- \$11 billion programmed between FY 2017 and FY 2022
  - \$6.2 billion is federal funding (55%)
  - 90% of funding from nine sources

## LARGEST FY 2017-2022 FUNDING SOURCES

(In Billions of Dollars)

■ Federal ■ State/Local



**ITEM 11 – Action**  
November 16, 2016

**Certification of the Metropolitan Transportation Planning Process  
for the National Capital Region**

**Staff**

**Recommendation:** Adopt Resolution R6-2017 endorsing the appended Statement of Certification.

**Issues:** None

**Background:** The Joint Planning Regulations issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) require that “the state and MPO shall certify at least every four years that the metropolitan transportation planning process is addressing the major issues in the metropolitan planning area and is being carried out in accordance with all applicable requirements...” The board will be briefed on the Statement of Certification and asked to endorse it.



TPB R6-2017  
November 16, 2016

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

**RESOLUTION ENDORSING THE 2016 CERTIFICATION OF THE  
METROPOLITAN TRANSPORTATION PLANNING PROCESS FOR  
THE NATIONAL CAPITAL REGION**

**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 the Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area; and

**WHEREAS**, the Federal Planning Regulations of the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) implementing the FAST Act, which became effective June 27, 2016, specify that "the state and MPO shall certify at least every four years that the metropolitan transportation planning process is addressing the major issues in the metropolitan planning area and is being carried out in accordance with all applicable requirements..."; and

**WHEREAS**, the Statement of Certification documenting how the TPB's planning process is being carried out and how the process is compliant with all of the applicable requirements is appended to this resolution; and

**WHEREAS**, a Statement of Certification has been prepared with signatures of officials from the District of Columbia Department of Transportation, the Maryland Department of Transportation, the Virginia Department of Transportation, and the TPB and is appended to this resolution.

**NOW, THEREFORE BE IT RESOLVED THAT** the National Capital Region Transportation Planning Board does hereby certify that the planning process is being carried out in conformance with all applicable requirements:

The appended Statement of Certification, dated November 16, 2016 which finds that the transportation planning process is addressing the major issues in the National Capital Region and that the process is being conducted in accordance with all applicable requirements, is hereby endorsed and the Chair of the TPB is authorized to sign it.





**METROPOLITAN PLANNING PROCESS REVIEW CHECK LIST  
FOR THE NATIONAL CAPITAL REGION  
TRANSPORTATION PLANNING BOARD**

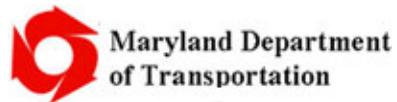
**STATEMENT OF CERTIFICATION**

DEVELOPED BY AND FOR USE OF THE  
DEPARTMENTS OF TRANSPORTATION FROM:

**DISTRICT OF COLUMBIA**



**MARYLAND**



**VIRGINIA**



November 16, 2016

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## Applicable Federal Requirements for Metropolitan Planning Process

The following table identifies the section and pages where each of the applicable federal requirements listed on the signatures pages is addressed in this document.

Requirement	Addressed in Section	Page(s)
(1) 23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR part 450 (Metropolitan Planning);	All	2 to 13
(2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93 (Conformity Determination);	8	4
(3) Title VI of Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1), 49 CFR part 21;	11	6 to 9
(4) 49 U.S.C. 5332 prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;	11	6 to 9
(5) Section 1101(b) of MAP-21 (Pub. L.112-196) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects (DBE Involvement);	11	8
(6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;	11	8
(7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 <i>et seq.</i> ) and 49 CFR parts 27, 37, and 38;	11	6 to 9
(8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;	11	6 to 9
(9) Section 324 of Title 23, U.S.C., regarding the prohibition of discrimination based on gender; and	11	6 to 9
(10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities	11	6 to 9

# NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

## STATEMENT OF CERTIFICATION

November 16, 2016

This document describes how the federal metropolitan transportation planning process is being conducted by the National Capital Region Transportation Planning Board in accordance with all the applicable requirements; this self-certification of the planning process is required under 23 CFR 450.334 and is signed by three state DOT's and the TPB.

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20.	Related Documents and Other Items on the Web.....	12
21.	Federal Review of the TPB's Planning Process.....	13
22.	Signature Pages.....	13

The National Capital Region Transportation Planning Board (TPB) has been designated as the Metropolitan Planning Organization (MPO) for the Washington DC-MD-VA Urbanized Area. The TPB has the responsibility under the provisions of Fixing America's Surface Transportation (FAST) Act for developing and carrying out a continuing, cooperative and comprehensive transportation planning process for the Metropolitan Area. The FAST Act was signed into law on December 4, 2015 and the final planning rule was published on May 27, 2016. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) jointly certified the planning process for the TPB's TMA on June 8, 2015. The TPB, the District of Columbia Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT) self-certify that the metropolitan transportation planning process is addressing the major issues in the metropolitan planning area and is being carried out in accordance with all federal metropolitan planning applicable requirements as evidenced by the descriptions below. The TPB reviewed this self-certification document at its November 16, 2016 meeting.

## **1. The Unified Planning Work Program for Transportation Planning**

The FY 2017 Unified Planning Work Program for Transportation Planning (UPWP) was adopted by the TPB on March 16, 2016 and approved by FHWA and FTA on June 13, 2016. The UPWP was developed to address the applicable metropolitan planning requirements of record in March 2016 as well as to comply with the air quality conformity regulations. The UPWP includes support for 15 standing committees that assist with carrying out the Federally-required metropolitan planning process; Figure 8 on page 22 shows the TPB committee structure.

[mwcog.org/transportation/plans/upwp/](http://mwcog.org/transportation/plans/upwp/)

## **2. Roles and Responsibilities for Transportation Planning and Programming**

In the Washington Metropolitan region, the roles and responsibilities involving the TPB, the three state DOTs, the local government transportation agencies, WMATA and the state and local government public transportation operators for cooperatively carrying out transportation planning and programming have been established over several years. As required under the federal metropolitan 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 state transportation agencies (DDOT, MDOT and VDOT) have an agreement with COG, dated October 30, 2003 that specifies the terms and conditions for funding its administrative support of the transportation planning process. This agreement was reviewed and updated by amendment on September 17, 2008. The responsibilities for the primary planning and programming activities are indicated in the UPWP.

Also included in the UPWP is the 2004 agreement between the TPB and the Fredericksburg Area MPO (FAMPO) in Virginia in which FAMPO committed to being 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. In response to recommendations in the May 2011 federal transportation planning certification review report, the TPB Call for Projects document was transmitted to FAMPO in November 2013 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 was also requested to provide updated information on the Congestion Management System (CMS) for this portion of Stafford County. In December 2013, FAMPO transmitted this information to TPB on the schedule in the TPB Call for Projects document. FAMPO provided updated project inputs for Stafford County for inclusion in the air quality

conformity analysis of the 2016 CLRP amendment prior to the TPB's approval of the project inputs in March 2016.

Representatives of DDOT, MDOT and VDOT, the signatories of this self-certification statement and document, meet every month through the State Technical Working Group (STWG), with WMATA, to coordinate and ensure that the TPB is meeting all applicable metropolitan planning and air quality conformity regulations. At the October 4 and November 1, 2016 STWG meetings, representatives of the state DOT's discussed the process and content for this self-certification statement and document.

### **3. Regional Policy Documents and the Federal Planning Factors**

The TPB's work is guided by two overarching policy documents: the TPB Vision of 1998 and the Regional Transportation Priorities Plan (RTPP) of 2014. MAP-21's eight federal planning factors are encompassed by both the Vision and the RTPP. The mapping of the TPB Vision to the federal planning factors is documented here: [mwcog.org/clrp/process/vision\\_factors.asp](http://mwcog.org/clrp/process/vision_factors.asp).

The 2015 and 2016 amendments to the CLRP were evaluated for performance against key strategies of the RTPP. The TPB was briefed on these analyses as part of the approval of the CLRP amendments. The RTPP can be found at [mwcog.org/RTPP/](http://mwcog.org/RTPP/).

The RTPP, the Vision and the planning factors were also used to guide project submissions for the CLRP and Transportation Improvement Program (TIP). The TPB's annual "Call for Projects" for the CLRP asked submitting agencies to identify how newly proposed projects will address RTPP goals and the federal planning factors. This information about new projects was featured for the first time in "project profiles" that were released in February 2016. The Call for Projects for the new Plan and TIP is here [mwcog.org/clrp/update/KeyDocs\\_2016.asp](http://mwcog.org/clrp/update/KeyDocs_2016.asp).

### **4. Four-Year Updates of the Long-Range Transportation Plan**

Federal metropolitan planning regulations requires the TPB to update the plan every four years. Prior to SAFETEA-LU, TEA-21 required CLRP updates every three years.

The *2014 Update to the Financially Constrained Long-Range Transportation* was the last official quadrennial update. It was approved by the TPB on October 15, 2014 and is documented on the website ([mwcog.org/clrp](http://mwcog.org/clrp)). The next official quadrennial update will be the 2018 CLRP Update.

Documentation of previous updates include:

*2010 Update to the Financially Constrained Long-Range Transportation Plan*. Approved by the TPB on November 17, 2010 and documented on the website the same date, with a report published in 2011.

*2006 Update to the Financially Constrained Long-Range Transportation Plan*. Approved by the TPB on October 18, 2006 and documented on the website the same date, with a brochure "What's in the Plan for 2030? The Regional Long-Range Transportation Plan as adopted October 18, 2006" finalized in March 2007.

*2003 Update to the Financially Constrained Long-Range Transportation Plan for the National Capital Region*. Approved by the TPB on December 17, 2003 and published in 2004.

*2000 Update to the Financially Constrained Long-Range Transportation Plan for the National Capital Region*. Approved by the TPB on October 18, 2000 and published in 2001.

## **5. The Currently Adopted Plan and Transportation Improvement Program (TIP)**

On October 21, 2015 the TPB approved the 2015 CLRP Amendment. On October 15, 2014 the TPB approved the 2014 CLRP and the FY 2015-2020 TIP. The TIP is updated on a two-year cycle, so the FY 2015-2020 TIP is the TIP of record. The TIP includes transit, highway, bikeway and pedestrian and ridesharing improvement projects and transit and ridesharing operating support. It only includes projects that can be implemented with already available and projected sources of transportation revenues while the existing transportation system is being adequately operated and maintained. [mwcog.org/clrp](http://mwcog.org/clrp)

On January 5, 2015, FHWA and FTA found that the 2014 CLRP and FY 2015-2020 TIP conform to the region's State Implementation Plans, and that the conformity determination has been performed in accordance with the Transportation Conformity Rule (40CFR Part 93), as amended. On February 4, 2016, FHWA and FTA found that the 2015 CLRP Amendment conforms to the region's State Implementation Plans.

## **6. The New Plan and TIP**

On December 16, 2015, the TPB began the development of the CLRP by releasing the final solicitation document for the 2016 CLRP Amendment and FY 2017-2022 TIP, which requested that the transportation implementing agencies explicitly consider the Vision, the Regional Transportation Priorities Plan, the eight planning factors, and other TPB and COG policy documents and studies as the policy framework when they submitted projects and programs for inclusion in the CLRP. [mwcog.org/clrp](http://mwcog.org/clrp)

### *Approval of the New Plan and TIP*

The 2016 CLRP Amendment and the FY 2017-2022 TIP were developed according to the provisions of the metropolitan planning regulation of record in December 2015. The 2016 CLRP Amendment and the FY 2017-2022 TIP meet the financial plan requirements to show the consistency of the proposed projects with already available and projected sources of transportation revenues while the existing transportation system is being adequately operated and maintained. The 2016 CLRP Amendment and FY 2017-2022 TIP were adopted by the TPB on November 16, 2016.

## **7. Annual Listing of Projects**

The FAST Act requires that the TPB 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, the TPB has prepared a listing of projects for which federal funds have been obligated each year since 2001. The annual listing of projects is available on the web at [mwcog.org/clrp/projects/tip/obligations.asp](http://mwcog.org/clrp/projects/tip/obligations.asp).

## **8. The Air Quality Conformity Determination for the New Plan**

On November 16, 2016, the TPB approved the air quality conformity analysis of the 2016 CLRP Amendment and the FY 2017-2022 TIP for the Washington Metropolitan Region. The Plan and TIP conform to the requirements (Sections 174 and 176(c) and (d) of the Clean Air Act as amended (42 U.S.C. 7504, 7506(c) and (d)), and meet air quality conformity regulations: (1) as originally published by the Environmental Protection Agency (EPA) in the November 24, 1993 Federal Register, and (2) as subsequently amended, most recently in April 2012, and (3) as detailed in periodic FHWA / FTA and EPA guidance. The air quality conformity report can be found at



## 9. The Financial Plan

The 2014 financial plan for the CLRP demonstrates that the forecast revenues reasonably expected to be available are equal to the estimated costs of expanding and adequately maintaining and operating the highway and transit system in the region through 2040. The TPB conducted an analysis of the financial resources available for the 2010 CLRP which is documented in the report “*Financial Analysis for the 2014 Constrained Long-Range Transportation Plan*” Forecast revenues and expenditures for the 2014 CLRP total \$244 billion in year of expenditure dollars for the period of 2015 through 2040. The forecasts were prepared by the transportation implementing agencies and jurisdictions, with technical integration and documentation provided by consultants. The TPB was briefed on the financial analysis at its September 17, 2014 meeting. More information on the financial plan is available at: [mwcog.org/clrp/elements/financial.asp](http://mwcog.org/clrp/elements/financial.asp).

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. In spring 2016, the financial analysis for the 2014 CLRP was reviewed to ensure that it conforms with requirements in federal transportation law for the 2016 Amendment to the CLRP.

The CLRP must be updated every four years as required by federal transportation law. The last major update of the CLRP which included a full financial analysis was in 2014; the 2018 CLRP will be the next required update and will include a new full financial analysis. In FY 2018, the expected revenues and expenditures to be included in the 2018 CLRP for the years 2019 to 2045 will be analyzed, projecting to reflect new state revenue sources and expenditure estimates in consultation with the state and local DOTs and public transportation operators.

The financial analysis, as in past years, identified a shortfall in the forecasts for WMATA capital funding for Metrorail capacity expansion after 2020. Because funding has not yet been identified to accommodate projected Metrorail demand in the regional core, the TPB’s travel forecasting process is currently configured to “cap” peak period core Metrorail ridership beyond the year 2020 at 2020 levels. This so-called Metrorail “constraint” has been a policy assumption since the 2000 CLRP.

In 2008, Congress passed the Passenger Rail Investment and Improvement Act which provides an additional \$3 billion in revenues over 10 years in funding for WMATA's capital and preventive maintenance projects, with \$150 million per year of federal funding and a matching \$150 million per year in required dedicated local matching revenues, as approved by the legislatures of Maryland, Virginia, and the District of Columbia. This legislation is set to expire in 2020 and currently there is not any federal legislation in place to extend that act beyond 2020. This additional revenue was assumed to be available through 2040 in the financial plan for the 2014 CLRP.

The funding uncertainties affecting the Metrorail system capacity and levels of service beyond 2020 were explicitly accounted for by constraining future peak Metrorail ridership in the regional core to 2020 levels. The Metrorail constraint is applied within the travel demand modeling process as part of the air quality conformity analysis of the CLRP and TIP. The transit constraint effectively suppresses Metrorail demand in the regional core that would have existed without such a constraint. The travel model essentially converts the suppressed Metrorail demand into auto travel, resulting in increased daily automobile trips and increased vehicle emissions.

## **10. Participation Plan and Public Involvement**

The TPB is committed to a transparent interface with the public and with relevant public agencies to support the regional transportation planning process, including the development of the CLRP. An update to the TPB's Participation Plan was approved in 2014 and can be found at [mwcog.org/tpb-participation-plan/](http://mwcog.org/tpb-participation-plan/). The plan includes a policy statement, identification of goals, and description of participation activities, including procedures, committees, website and publications, public meetings and trainings, and general activities.

During the development of the CLRP amendments in 2015 and 2016 and the FY 2017-2022 TIP, the participation procedures outlined in the TPB Participation Plan were followed, and several opportunities were provided for public comment, including presentations and discussion with the TPB Citizens Advisory Committee and Access for All Advisory Committee.

For each annual CLRP amendment or update, the TPB conducts two 30-day public comment periods. This process was used for the CLRP amendments in 2015 and 2016. The first public comment period occurs in the spring before the TPB votes to approve new projects for inclusion in the air quality conformity analysis. The second occurs in the fall prior to the final approval of the CLRP amendment or update. Comments and responses from the two public comment periods were posted on the website. The TPB reviewed and accepted staff responses to the comments. The final versions of the CLRP and TIP documents will include summaries of all comments and responses.

For the FY 2017-2022 TIP, TPB staff conducted a federally required TIP Forum. At this event, TPB staff and staff of the implementing agencies answered questions about projects in the draft TIP, and provided information on the funding and planning processes that are reflected in the TIP.

Beginning in 2010, the TPB has made available to the public an on-line, searchable database of all the transportation projects and programs in the CLRP & TIP. The CLRP website includes area maps of all newly proposed projects; static maps of all major highway, transit, HOV/HOT, and bicycle/pedestrian projects.

## **11. Title VI and Related Nondiscrimination Regulations**

The TPB has complied with longstanding federal regulations and guidance to ensure nondiscrimination in programs, procedures, operations, and decision-making regardless of race, ethnicity, income level, disability status, gender or age.

The state transportation agencies (DDOT, MDOT and VDOT) have an agreement with COG that specifies the terms and conditions for funding its administrative support of the transportation planning process. This agreement was reviewed and updated by amendment on September 17, 2008. The agreement requires COG to meet all US DOT MPO planning requirements and to adhere to Title VI of the Civil Rights Act of 1964 and applicable non-discrimination laws, and to comply with the small, disadvantaged and women-owned business enterprise requirements.

### *Title VI: Civil Rights Act of 1964*

The TPB fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations prohibiting discrimination in all programs and activities. The planning process is consistent with Title VI of the Civil Rights Act of 1964 and the Title VI assurance executed by each state under 23 U.S.C 794, 23 U.S.C. 324 regarding the prohibition of discrimination based on gender and USDOT guidance on environmental justice. The planning process also conforms to the Surface Transportation and Uniform Relocation Assistance Act of 1987, regarding the involvement of minority enterprises in FHWA and FTA funded projects.

The Metropolitan Washington Council of Governments (COG), as the administrative agent for the TPB, has a “Title VI Plan to Ensure Nondiscrimination in all Programs and Activities” to document the ongoing efforts by COG and the TPB to ensure compliance with Title VI based on Federal Highway Administration (FHWA) requirements. The COG Board adopted the Title VI Plan in April 2015 and it includes a policy statement, Title VI assurances and nondiscrimination complaint procedures. COG’s Title VI plan and the Title complaint form are available here: [mwcog.org/nondiscrimination/](http://mwcog.org/nondiscrimination/)

COG also has an FTA-approved Title VI Program which reiterates the policies and practices outlined in the Title VI Plan. In April 2015, the COG Board also adopted the Title VI Program as required by FTA. On Feb 22, 2016, FTA Region 3 concurred with COG’s Title VI Program and stated that the program meets the requirements set out in the FTA’s Title VI Circular, 4702.1A.

#### *Accommodations for People with Disabilities’ and Limited English Speakers*

To provide access to documents, meetings or any other planning activities for limited English proficiency populations and those with disabilities, the TPB follows the COG accommodations policy ([mwcog.org/accommodations](http://mwcog.org/accommodations)). The accommodations policy is translated into the 6 most commonly spoken languages in the region other than English, available on the Accommodations page of the website, the six languages are Spanish, French, Korean, Vietnamese, Amharic and Chinese. The CLRP website includes a Google translation tool that will translate the webpage text from English to one of 90+ different languages. The TPB has a Language Assistance Plan that is provided in Attachment F of COG’s Title VI Plan: [mwcog.org/documents/2015/04/15/title-vi-plan-to-ensure-nondiscrimination-in-all-programs-and-activities/](http://mwcog.org/documents/2015/04/15/title-vi-plan-to-ensure-nondiscrimination-in-all-programs-and-activities/)

#### *Environmental Justice Executive Order*

The USDOT Order 6640.23A issued “FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” in June 2012 to provide guidance on how recipients of federal transportation assistance comply with Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* issued February 11, 1994.

To follow these federal environmental justice requirements, the TPB must identify and address, as appropriate, disproportionately high or adverse effects of its programs, policies, and activities on minority populations and low-income populations.

The TPB has a two-pronged approach to ensuring nondiscrimination and meeting Title VI and Environmental Justice requirements both described here: Analysis: examining forecast impacts of the CLRP on low-income and minority populations, and Involvement: engaging transportation-disadvantaged populations in the planning process.

#### *Analysis of Disproportionate and Adverse Impacts of the CLRP*

An enhanced Environmental Justice Analysis will be conducted of the 2016 CLRP Amendment and again for the major update to the CLRP in 2018. The enhanced EJ analysis will occur in two phases. The first phase is the identification of “Communities of Concern” which are small geographic areas that have significant concentrations of low-income and minority populations based on Census tract-level data. Low-income is defined as individuals with household income less than 1.5 times the Federal poverty level, depending on size. The minority populations that will be used to identify the “Communities of Concern” include African-American, Asian and Hispanic/Latino. Phase 2 of the EJ analysis will include examining accessibility to jobs, educational

institutions, hospitals and travel times for the “Communities of Concern” compared to the rest of the region between the current year and 2040.

More information on the proposed “Communities of Concern”, the proposed enhanced EJ analysis of the CLRP and the last EJ analysis of the 2010 CLRP are available here [mwcog.org/clrp/performance/EJ/EJintro.asp](http://mwcog.org/clrp/performance/EJ/EJintro.asp)

#### *Involvement of Transportation-Disadvantaged Populations in the Planning Process*

To ensure that the voices of traditionally-disadvantaged populations concerns are heard in the planning process, the TPB created the Access for All (AFA) Advisory Committee in 2001 to advise on issues and concerns of low-income populations, minority populations, and persons with disabilities. In 2016, the AFA was enhanced to include the work of the former Human Service Transportation Coordination Task Force and the membership expanded to include community leaders representing people with disabilities, low-income populations, minority populations older adults and people with limited English Skills, as well as ex-officio representation from the transportation agencies in the region. The AFA is chaired by a TPB member who makes regular reports to the TPB on AFA issues and concerns. The AFA website is at [mwcog.org/tpbafa/](http://mwcog.org/tpbafa/).

Each time the region’s Constrained Long Range Transportation Plan (CLRP) and Transportation Improvement Program (TIP) are updated, the TPB solicits comments representing the concerns of traditionally disadvantaged populations. The TPB’s mailing lists include hundreds of community groups that represent Title VI protected groups throughout the Washington Region. Press releases are also sent to newspapers published by and for Title VI protected groups. In addition, the AFA committee reviews maps of proposed major projects and comments on the CLRP. The AFA chair, currently the TPB’s Vice-Chairman Charles Allen, presented those comments to Board on November 16, 2016. The comments are also documented in a memorandum to the TPB, available here: [mwcog.org/clrp/public/afa.asp](http://mwcog.org/clrp/public/afa.asp)

As described under item 12 below, the updated Coordinated Human Service Transportation Plan was adopted by the TPB in November 2014. The Coordinated Plan identifies unmet transportation needs for people with disabilities, low-income individuals and older adults. The Coordinated Plan and information on the Enhanced Mobility funding program is available at [tpbcoordination.org](http://tpbcoordination.org).

#### *Americans With Disabilities Act and Rehabilitation Act of 1973*

The TPB complies with the provisions of the Americans With Disabilities Act of 1990 (Public Law 101-336, 104 Stat. 327, as amended) and the U.S. DOT implementing regulation ensuring the nondiscrimination of individuals with disabilities. The TPB also complies with related regulations under Section 504 of the Rehabilitation Act of 1973.

*The TPB also complies with the Older Americans Act*, confirms opportunity for employment with no discriminatory personnel practices because of age and *Section 324 of 23 U.S.C.* No one of the basis of gender shall be denied participation in or benefits of any program or activity receiving federal assistance under Title 23.

#### *Disadvantaged Business Enterprises (DBEs) Goal and Small Business Participation Element*

It is COG's policy that Disadvantaged Business Enterprises (DBEs), as defined in 49 CFR Part 26, shall have the maximum opportunity to participate in the performance of contracts for COG, and specifically those financed in whole or in part with federal funds under grants, contracts, or cooperative agreements. COG's policy is to seek out and include DBEs in the procurement process for all goods and services to the maximum practicable extent. Accordingly, COG encourages DBEs to compete for COG contracts and subcontracts, and encourages joint ventures between DBE and non-DBE firms who compete for COG contracts and subcontracts.

COG’s “Disadvantaged Business Enterprise Program Administrative Program and Policy” dated April 2013 includes procedures to provide for subcontracting to disadvantaged businesses enterprises, a DBE Goal and a Small Business Participation Element and can be found at

[www.mwcog.org/doingbusiness/dbe](http://www.mwcog.org/doingbusiness/dbe). COG's FY2016-FY2018 DBE goal methodology for Disadvantaged Business Enterprise (DBE) participation was approved by FTA Region III on August 27, 2015. All COG contracts and subcontracts include the required standard clauses, including lobbying prohibition. These documents can be found at [.mwcog.org/purchasing-and-bids/dbe-policy/](http://www.mwcog.org/purchasing-and-bids/dbe-policy/)

## **12. Human Service Transportation Coordination**

The TPB adopted an update to the Coordinated Human Service Transportation Plan in November 2014 to guide the implementation of the FTA Enhanced Mobility for Older Adults and Individuals with Disabilities Program (Section 5310) which can be found here: [mwcog.org/coordinated-human-service-transportation-plan/](http://mwcog.org/coordinated-human-service-transportation-plan/). The Coordinated Plan identifies the unmet transportation needs for people with disabilities, low-income individuals and older adults, and also provides demographic data and maps of traditionally-disadvantaged population groups. The TPB's former Human Service Transportation Coordination Task Force oversaw the development of the updated Coordinated Plan. People with disabilities, older adults and those with low-incomes, in addition to transportation and human service agencies, served on this Task Force, and are now represented on the enhanced Access for All Advisory Committee. Since the work of the Task Force is largely done, and for greater efficiency and effectiveness, the Task Force was merged with the Access for All Advisory Committee, as described earlier.

COG serves as the designated recipient for the FTA Enhanced Mobility Section 5310 programs in the Washington DC-VA-MD Urbanized Area. The Coordinated Plan and information on the Enhanced Mobility Program are available at [tpbcoordination.org](http://tpbcoordination.org).

## **13. Congestion Management Process**

The TPB created a Congestion Management Process (CMP) in 2007 that is part of the regional transportation plan and is committed to management of the existing and future transportation system through the use, where appropriate, of demand management and operational management strategies. These strategies, when taken form a large portion of the CMP. The CMP addresses the requirements laid out in the final planning regulations. The CMP is documented at [mwcog.org/transportation/planning-areas/management-operations-and-safety/congestion-management-process/](http://mwcog.org/transportation/planning-areas/management-operations-and-safety/congestion-management-process/).

The CMP has four main components: 1) Congestion monitoring of major highways; 2) Identification and analysis of strategies to alleviate congestion; 3) Implementation of reasonable strategies and an assessment of their effectiveness and 4) Integration of strategies into major roadway construction projects. With the CMP, the TPB aims to use existing and future transportation facilities efficiently and effectively, reducing the need for highway capacity increases for single-occupant vehicles (SOVs). Congestion Management Process (CMP) documentation is included in the TPB's process for soliciting projects from implementing agencies for the CLRP and TIP. The transportation implementing agencies are required to submit a Congestion Management documentation form for each project or action proposing an increase in SOV capacity. The implementing agencies submit documentation of CMP strategies considered in conjunction with significant federally-funded CLRP or TIP projects.

## **14. Systems Performance, Operations and Technology**

The TPB has several on-going efforts related to management, operations and technology to help the region maximize the efficiency and effectiveness of the transportation system. The TPB has a [Systems Performance](#), Operations and [Technology](#) Subcommittee. Related programs include the Metropolitan Area Transportation Operations Coordination (MATOC) Program, the Regional Intelligent Transportation Systems (ITS) Architecture and the Traffic Signals Subcommittee. More

details on the [committees](#) and programs can be found at [mwcog.org/transportation/planning-areas/management-operations-and-safety](http://mwcog.org/transportation/planning-areas/management-operations-and-safety).

## 15. Freight Planning

The TPB is dedicated to incorporating freight into the transportation planning process. The 2016 TPB Freight Plan provides analysis of current and forecast freight transportation and identifies projects that benefit freight transportation in the National Capital Region, and articulated policies important for freight planning in the region. The TPB Freight Subcommittee meets bimonthly to exchange information and to provide stakeholder input into the TPB freight planning products. For example, the TPB Freight Subcommittee developed the first Top 10 Freight Project List in 2011, and updated the list in 2013. The 2011 TPB Regional Freight Forum, a 1-day conference on regional freight trends brought together TPB board members, Capitol Hill representatives, freight-industry representatives from all modes, and federal, state, and local planners. For more information and to view the freight planning documents and freight subcommittee activities, go to [.mwcog.org/transportation/planning-areas/freight/](http://mwcog.org/transportation/planning-areas/freight/).

## 16. Bicycle and Pedestrian Planning

The TPB approved the *2015 Bicycle and Pedestrian Plan* on January 21, 2015, available here: [mwcog.org/documents/bicycle-and-pedestrian-plan/](http://mwcog.org/documents/bicycle-and-pedestrian-plan/) This plan identifies the capital improvements, studies, actions, and strategies that the region proposes to carry out by 2040 for major bicycle and pedestrian facilities. The Bicycle and Pedestrian Subcommittee of the TPB Technical Committee assisted in the development of the plan, and continues to meet regularly to exchange information among stakeholders and provide advice to the TPB on bicycle and pedestrian issues.

To promote pedestrian and bicycle safety, the TPB sponsors the regional Street Smart campaign, which consists of Fall and Spring waves of advertising, public relations, and enforcement activities. For more information on the campaign see [bestreetsmart.net](http://bestreetsmart.net).

A recent example of how TPB integrates bicycle and pedestrian considerations into the metropolitan planning process was the development of a regional Complete Streets Policy, which was adopted on May 16, 2012. TPB has also sponsored a regional Green Streets workshop as it considers ways to encourage more pedestrian-friendly streetscapes. More information about the TPB's bicycle and pedestrian planning activities can be found at: [mwcog.org/transportation/planning-areas/walking-and-biking/](http://mwcog.org/transportation/planning-areas/walking-and-biking/).

## 17. Environmental Consultation and Mitigation

The TPB established procedures in its Participation Plan for environmental consultation. The TPB has completed an extensive data collection and mapping effort that compares the CLRP with the region's natural and historic resources and associated conservation plans. Under this initiative, the TPB has worked with federal, state, and local resource agencies in the region to collect a wealth of environmental data on locations of floodplains, green infrastructure (as defined by Virginia and Maryland conservation plans), historic sites (as defined by national and separate state registers), impervious surface, protected lands (as defined by state wildlife management and conservation plans), sensitive species, and wetlands. In order to accurately compare the transportation plan with these resources and environmental plans, the TPB directly collaborated with experts at several resource agencies, such as the Maryland Department of Natural Resources, Maryland Historical Trust, National Park Service, Virginia Department of Conservation and Recreation, Virginia Department of Game and Inland Fisheries, and Virginia Department of Historic Resources.

The CLRP also includes an environmental potential mitigation discussion which identifies potential activities to moderate the environmental impacts of the long range transportation plan. The TPB's

environmental consultation process is described in more detail on the CLRP website: [mwcog.org/clrp/elements/environment/default.asp](http://mwcog.org/clrp/elements/environment/default.asp).

## **18. Regional Transportation Priorities Plan and Unfunded Capital Needs**

The TPB approved the Regional Transportation Priorities Plan (RTPP) in January 2014 at the conclusion of a three-year process. The RTPP is a policy document that focuses attention on a limited number of transportation strategies with the greatest potential to advance regional goals rooted in the TPB Vision. The strategies are meant to be “within reach” both financial and politically. They were identified through a combination of technical analysis, stakeholder input, and public outreach.

Seeking ways to promote implementation of the RTPP, the TPB in 2014 asked staff to compile a list of unfunded transportation projects identified by member jurisdictions that could potentially play a role in improving transportation system performance but have not been included in the CLRP due to a lack of anticipated funding. In 2015, the TPB established a working group to identify a limited number of unfunded priority projects that will address key deficiencies in the current CLRP and support implementation of RTPP goals. This TPB working group was later named the TPB Long-Range Plan Task Force. [mwcog.org/committees/lrptf/](http://mwcog.org/committees/lrptf/)

In 2015 and 2016, staff compiled a draft inventory of unfunded capital transportation needs, comprising approximately 500 projects that are included in state, local and regionally approved plans, but are not currently included in the CLRP. In 2016, the task force oversaw scenario planning activities that analyzed the potential impacts of building all the projects in this inventory (the “All-Build Scenario”) and conversely identified the impacts of building no new projects (the “No-Build Scenario”) between now and 2040.

The work of the Long-Range Plan Task Force, including the compilation and analysis of unfunded capital needs, will be incorporated into the next quadrennial update of the region’s long-range transportation plan, which is due in 2018. That new plan, which will replace the current CLRP, will for the first time include an unfunded element.

## **19. Transportation/Land Use Connections (TLC) Program**

The Transportation/Land Use Connections Program provides short-term consultant services to local jurisdictions working on creative, forward-thinking, and sustainable plans and projects. The TPB provides consultant assistance of \$30,000 to \$60,000 for local planning projects, and up to \$80,000 for conceptual design or preliminary engineering. Since 2007, the TLC program has funded more than 100 projects. Technical assistance may include a range of services, such as: transit corridor and station area planning; transit demand and feasibility assessments; pedestrian and bicyclist safety and access studies; streetscape improvement plans; design guidelines and roadway standards; trail design; Safe Routes to School planning; Complete Streets policy guidance; and transit-oriented development studies. [mwcog.org/transportation/activities/tlc](http://mwcog.org/transportation/activities/tlc)

In 2016, the TLC Program focused its project solicitation on key regional objectives, including strengthening Regional Activity Centers, promoting access to transit, and increasing cross-jurisdictional coordination in planning. The TLC Program also includes a Regional Peer Exchange Network, which conducts programs to encourage learning among TPB member jurisdictions and stakeholders about TLC projects and experiences.

Since 2012, the TLC Program has provided staffing support for the TPB’s responsibilities under the MAP-21 Transportation Alternatives Program (TAP). On annual basis, the TPB works with the state DOT to select small capital improvement projects using TAP funding sub-allocated to the Washington metropolitan region.

## 20. Related Documents and Other Items on the Web

This self-certification refers to information and documents available on the website; below is a summary of where to find the latest information after the November 16, 2016 TPB approval of the CLRP amendment, the TIP and the air quality conformity determination.

Item	Specific Location on the Website
2016 CLRP Amendment	<a href="http://mwcog.org/clrp">mwcog.org/clrp</a>
2016 Plan Brochure (not yet published)	<a href="http://mwcog.org/clrp/update/KeyDocs_2016.asp">mwcog.org/clrp/update/KeyDocs_2016.asp</a>
FY2017-2022 TIP	<a href="http://mwcog.org/clrp/projects/tip/fy1722.asp">mwcog.org/clrp/projects/tip/fy1722.asp</a>
Air Quality Conformity Analysis of the 2016 CLRP Amendment	<a href="http://mwcog.org/clrp/update/KeyDocs_2016.asp">mwcog.org/clrp/update/KeyDocs_2016.asp</a>
Call for Projects for 2016 CLRP Amendment	<a href="http://mwcog.org/clrp/update/KeyDocs_2016.asp">mwcog.org/clrp/update/KeyDocs_2016.asp</a>
Public comments on the Plan and TIP	<a href="http://mwcog.org/clrp/public/comments.asp">mwcog.org/clrp/public/comments.asp</a>
Financial Plan	<a href="http://mwcog.org/clrp/elements/financial/default.asp">mwcog.org/clrp/elements/financial/default.asp</a>
Regional Transportation Priorities Plan	<a href="http://mwcog.org/RTPP/">mwcog.org/RTPP/</a>
TPB Vision and Relation to the Planning Factors	<a href="http://mwcog.org/clrp/process/vision_factors.asp">mwcog.org/clrp/process/vision_factors.asp</a>
Participation Plan	<a href="http://mwcog.org/tpb-participation-plan/">mwcog.org/tpb-participation-plan/</a>
COG Accommodations Policy	<a href="http://mwcog.org/accommodations/">mwcog.org/accommodations/</a>
FY2017 UPWP	<a href="http://mwcog.org/transportation/plans/upwp/">mwcog.org/transportation/plans/upwp/</a>
Coordinated Human Services Transportation Plan	<a href="http://mwcog.org/coordinated-human-service-transportation-plan/">mwcog.org/coordinated-human-service-transportation-plan/</a>
Congestion Management Process	<a href="http://mwcog.org/documents/2016/09/09/congestion-management-process-technical-report/">mwcog.org/documents/2016/09/09/congestion-management-process-technical-report/</a>
Annual Listing of Projects	<a href="http://mwcog.org/clrp/projects/tip/obligations.asp">mwcog.org/clrp/projects/tip/obligations.asp</a>
On-line CLRP & TIP Project Database	<a href="http://mwcog.org/clrp/projects/search.asp">mwcog.org/clrp/projects/search.asp</a>
Environmental Mitigation Discussion	<a href="http://mwcog.org/clrp/elements/environment/">mwcog.org/clrp/elements/environment/</a>
Visualization of the CLRP	<a href="http://mwcog.org/clrp/projects/clrpprojects.asp">mwcog.org/clrp/projects/clrpprojects.asp</a>
Freight Plan	<a href="http://mwcog.org/documents/2010/07/28/national-capital-region-freight-plan-freight/">mwcog.org/documents/2010/07/28/national-capital-region-freight-plan-freight/</a>
Bike and Pedestrian Plan	<a href="http://mwcog.org/documents/bicycle-and-pedestrian-plan/">mwcog.org/documents/bicycle-and-pedestrian-plan/</a>
Safety Element	<a href="http://mwcog.org/clrp/elements/safety/">mwcog.org/clrp/elements/safety/</a>
COG Title VI Plan	<a href="http://mwcog.org/documents/2015/04/15/title-vi-plan-to-ensure-nondiscrimination-in-all-programs-and-activities/">mwcog.org/documents/2015/04/15/title-vi-plan-to-ensure-nondiscrimination-in-all-programs-and-activities/</a>
Language Assistance Plan	Attachment F in <a href="http://mwcog.org/documents/2015/04/15/title-vi-plan-to-ensure-nondiscrimination-in-all-programs-and-activities/">mwcog.org/documents/2015/04/15/title-vi-plan-to-ensure-nondiscrimination-in-all-programs-and-activities/</a>
Long-Range Plan Task Force	<a href="http://mwcog.org/committees/lrptf/">mwcog.org/committees/lrptf/</a>
Transportation Land Use Connections (TLC) Program	<a href="http://mwcog.org/transportation/activities/tlc">mwcog.org/transportation/activities/tlc</a>



## **21. Federal Review of the TPB's Planning Process**

In April 2014, FHWA and FTA conducted a certification review of the transportation planning process for the Washington, DC-VA-MD Transportation Management Area (TMA). The review included the Fredericksburg Area Metropolitan Planning Organization (FAMPO) because a small portion of the TMA extends into part of Stafford County which is in the FAMPO area.

The certification review is documented in a June 2015 report. Five TPB planning elements received commendations and four FAMPO planning elements were commended.

## **22. Signature Pages**

After the table on page 14 showing where each applicable requirement is described in the document, the signature pages are provided from the Departments of Transportations of the District of Columbia, Maryland, Virginia and the Transportation Planning Board certify that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all the applicable requirements.

**Metropolitan Transportation Planning Process  
Applicable Federal Requirements**

The following table identifies the section and pages where each of the applicable federal requirements listed on the signatures pages is addressed in this document.

Requirement	Addressed in Section	Page(s)
(1) 23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR part 450 (Metropolitan Planning);	All	2 to 13
(2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93 (Conformity Determination);	8	4
(3) Title VI of Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1), 49 CFR part 21;	11	6 to 9
(4) 49 U.S.C. 5332 prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;	11	6 to 9
(5) Section 1101(b) of MAP-21 (Pub. L.112-196) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects (DBE Involvement);	11	8
(6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;	11	8
(7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;	11	6 to 9
(8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;	11	6 to 9
(9) Section 324 of Title 23, U.S.C., regarding the prohibition of discrimination based on gender; and	11	6 to 9
(10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities	11	6 to 9

**METROPOLITAN TRANSPORTATION PLANNING PROCESS  
SELF-CERTIFICATION  
FOR THE NATIONAL CAPITAL REGION**

November 16, 2016

In accordance with 23 CFR 450.334, the District Department of Transportation, the Maryland Department of Transportation, the Virginia Department of Transportation and the National Capital Region Transportation Planning Board (TPB) which is the Metropolitan Planning Organization for the Washington DC-MD-VA Urbanized Area, hereby certify that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all the applicable requirements of:

- (1) 23 U.S.C. 134, 49 U.S.C. 5303, and 23 CFR part 450 (Metropolitan Planning);
- (2) In nonattainment and maintenance areas, sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93 (Conformity Determination);
- (3) Title VI of Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1), 49 CFR part 21;
- (4) 49 U.S.C. 5332 prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- (5) Section 1101(b) of MAP-21 (Pub. L.112-196) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects (DBE Involvement);
- (6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
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Timothy Lovain, Chairman  
National Capital Transportation Planning Board (TPB)

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Date

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Leif Dormsjo, Director  
District Department of Transportation

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Date

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R. Earl Lewis

Deputy Secretary of Policy, Planning, and Enterprise Services  
Maryland Department of Transportation

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Date

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Helen Cuervo, P.E., District Engineer  
Virginia Department of Transportation

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Date

**ITEM 12 – Information**  
November 16, 2016

**WMATA – COG Technical Panel “Interim Report”  
And Metro Safety Commission Update**

**Staff**

**Recommendation:** Receive briefing

**Issues:** None

**Background:** In June, the COG Board authorized the convening of a technical panel to prepare an assessment of Metrorail safety, reliability, and state of good repair needs and revenue. In addition, progress has been made on the development of the Metro Safety Commission. The Committee will be briefed on both issues.





# COG TECHNICAL PANEL INTERIM REPORT ON METRO

October 2016

## **COG TECHNICAL PANEL INTERIM REPORT ON METRO**

Prepared by the COG Chief Administrative Officers Technical Panel on Metro, October 2016

### **ABOUT COG**

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.

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## PURPOSE

The purpose of this Interim Report is to provide a preliminary analysis of data on the Washington Metropolitan Area Transit Authority (WMATA or Metro) - focused on safety, reliability, customer experience and the system's benefits to the region - to provide the technical foundation necessary to pursue a comprehensive, long-term approach to funding Metro and provide it with a solid financial foundation. It describes the essential role Metro plays in the continued prosperity and livability of the region, and seeks to define regional expectations on system performance focused on customer expectations. The Interim Report incorporates a robust financial forecasting model that enables projecting the long-term (ten year) financial needs of Metro. The model includes a range of revenue, cost and other critical assumptions that are still under active review by the Panel. The model was applied on a preliminary basis using existing operating and capital budget information derived from the currently adopted Metro budget and currently available estimates of capital funding needs. While there is a consensus among the panel members on the validity of the modeling tool, the panel has not reached a consensus on Metro's financial needs or is ready to provide recommendation regarding revenue options. The panel expects to provide its formal evaluation of needs and revenues later in 2016 after new Metro operating and capital budgets are available.

The Metropolitan Washington Council of Governments (COG) Chief Administrative Officers Technical Panel will present a final report to the COG Board of Directors in the first quarter of 2017.

## SUMMARY

The Technical Panel is building a compelling technical picture of Metro's economic importance, performance goals, and funding needed to restore the system to a safe, reliable system in a state of good repair. Though restoration of Metro will take time and sustained investment, it is already clear that Metro – through its SafeTrack efforts and other actions by the WMATA General Manager and Board – is working hard to restore the system and rebuild the public's trust.

*The entire region has a critical stake in the outcome of Metro's efforts.*

While Metro must be held accountable, it must also be supported, politically and financially if it is to be successful and provide metropolitan Washington with the high-performing system needed for the region to prosper and thrive.

*Failure is not an option.*

The cost of doing nothing is too high. This report builds on the many existing studies and analyses on Metro's economic value, financial needs, performance metrics and goals – focused on key factors including Metro safety, reliability, and customer service. This information – coupled with ongoing improvements and new analysis planned in the coming months – will enable development of a clear roadmap for restoring public confidence in Metro. The region needs to be confident that Metro will continue to improve, increase ridership, and is worthy of sustainable long-term investment.

# BACKGROUND

In January 2016, the COG Board of Directors, led by Chairman Roger Berliner (Montgomery County Council), identified restoring Metro to a world-class transit system as its top priority. To work towards that goal, the COG Board of Directors on June 8, 2016 created the COG Chief Administrative Officers Technical Panel<sup>1</sup> and charged it with three tasks:

- develop performance metrics for Metro, focused on safety and reliability;
- analyze operating and capital funding needs; and
- assess revenue options to meet operating and capital funding needs.

Later, the panel added a fourth task:

- analyze the economic value of Metro and its importance to the region. The panel felt this task was key to support the first three tasks by providing the larger context for the other three tasks.

The panel met on July 6, August 3, September 7, and September 28. The panel worked with WMATA, the District of Columbia Office of the Chief Financial Officer (DC CFO), and coordinated with the Greater Washington Board of Trade. In addition, COG, together with the Board of Trade, convened sessions on March 30 and June 17, to gain information regarding performance metrics and funding of other regional systems in the U.S. and abroad.

The panel has made significant progress on all four tasks. It surveyed reports that clearly illustrate the fundamental role that Metro plays in the region's economy, and, conversely, how a poorly functioning Metro system poses a threat to the region's economic prosperity.

Panel members relied on existing data and reports, including recent analysis by the Chief Financial Officer of the District of Columbia. Of particular use have been:

- December 2015 report: A Recommended Capital Planning Process for Remediation of Metrorail's Infrastructure Challenges<sup>2</sup>, by the District of Columbia Office of the Chief Financial Officer.
- WMATA November 2011 Technical Report: Making the Case for Transit: WMATA Regional Benefits of Transit<sup>3</sup>

Other reports that have been helpful to the panel have been:

- 2005 report by COG, Board of Trade and Federal City Council on Funding Options for Metro<sup>4</sup>
- 1994 study by KPMG for Northern Virginia Transportation Commission (NVTC): Technical Report: Fiscal Impact of Metrorail on The Commonwealth of Virginia, which evaluated the benefits of Metro to Virginia on development<sup>5</sup>

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<sup>1</sup> <https://www.mwcog.org/documents/2016/06/08/certified-resolution-r39-2016---metrorail-assessment-technical-panel/>

<sup>2</sup> Not online; hard copy available from COG staff.

<sup>3</sup> <https://www.wmata.com/pdfs/planning/Wmata%20Making%20the%20Case%20for%20Transit%20Final%20Report%20Jan-2012.pdf>

<sup>4</sup> <https://www.mwcog.org/documents/2005/01/06/report-of-the-metro-funding-panel-wmata-metro-funding/>

<sup>5</sup> <http://69.195.124.133/~thinkou7/uploads/studiesarchive/1994FiscalImpactMetro.pdf>

## VALUE OF METRO TO THE REGION

Review of the reports reveals the same fundamental conclusion: the Metrorail system is *essential to the prosperity of the region*. Despite this vital role, Metro is currently subject to a year-to-year funding method, while transit systems of other major cities have more reliable, sustainable (dedicated) funding, which enables use of long-term planning for necessary capital needs. While it is premature to definitively quantify Metro's long-term funding and financing needs until it completes its operating budget and capital needs inventory later this year, the panel's review of preliminary operating and capital needs analysis prepared by the District of Columbia's Chief Financial Officer indicates that the recent pattern of underinvestment in preventative maintenance and capital upgrades will certainly need to change to ensure safe, reliable, high-quality customer service.

Panel members concurred with the December 2015 District of Columbia Office of the Chief Financial Officer's report, which stated that Metro's overall health is "absolutely imperative to accommodate business and population growth" across the region. Metro fosters smart growth and without it will encourage more sprawl and a more car-dependent community.

A poorly functioning Metro that is unsafe, unreliable, and lacks adequate capacity harms the region by causing delays that keep workers from getting to their jobs on time; increasing traffic congestion and disrupting the flow of people and commerce in the region; and harming Metro's ability to operate and improve as it loses riders and fare revenues.

The answer is "focused and prioritized infrastructure investments ... to increase safety," the Office of the District of Columbia Chief Financial Officer report found.

The 2005 Report of the Metro Funding Panel similarly found: "there is, and will continue to be, an expanding shortfall of revenues available to address both capital needs and operational subsidies of the Metrorail and Metrobus systems." Noting that Metro not only plays a vital role in carrying federal employees to and from work, but also is a key component of the region's emergency response system, the report warned that "continued success in this role is at material risk by failure to invest adequately in the system's capital needs and to provide funding for critical operating requirements with a resulting decline in the system's condition and unacceptable levels of performance."

### The High Value of Properties Near Metrorail Stations

The 2011 WMATA technical report, *Making the Case for Transit*, measured and assessed benefits such as avoidance of additional road capacity and parking costs; travel time savings; travel cost savings; accident reduction savings; emissions reduction savings; and land value premium impacts. "With Metro, the region works. Without Metro, the region would be less wealthy, harder to get around, and have less economic activity," the report found. Furthermore, the report found that properties near Metro stations had higher real estate values and produced more property tax revenues.

**Table 1: Real estate value premiums - properties within 1/2 mile of a station**

Type of property	Premium value
Residential	6.8%
Multi-family	9.4%
Commercial office	8.9%

Source: Making the Case for Transit, WMATA

**Table 2: Higher property tax revenues from real estate near stations**

Distance	Additional revenue
Within ¼ mile	\$133 million
Within ½ mile	\$224 million

Source: Making the Case for Transit, WMATA

Real estate located within ¼ mile and ½ mile of Metrorail stations generated approximately \$1.8 billion and \$3.1 billion (respectively) in property tax revenues for the Compact area in 2010.

**Table 3: Property Tax Revenues -- located within ½ mile and ¼ mile of Metrorail stations**

	Within ¼ mile	Within ½ mile
D.C.	\$1.37 billion	\$2.26 billion
Virginia	\$290 million	\$470 million
Maryland	\$124 million	\$355 million
Totals	\$1.78 billion	\$3.09 billion

Source: Making the Case for Transit, WMATA

Researchers at Jones Lang LaSalle estimate that more than 105 million square feet of development is planned within a half-mile of a Metrorail station.<sup>6</sup> Based on square footage, WMATA shows a rough estimate of this projected new construction of \$50 billion either under construction or planned.

In 1994, KPMG’s study found that “without Metrorail, the region loses an important attraction: fixed-route, rapid, and reasonably priced transportation.”

This second study (updating a 1985 study) investigated the real estate price premium of properties near Metrorail stations, as reflected in higher property tax revenues. A 2011 study by Metro found that properties within a ½ mile of a Metro station command a premium ranging from 6 to 9 percent for commercial and multi-family properties.

Virginia’s investment in the rail system, the KPMG report found, was \$941 million for 1978-2000, with a net return in tax revenue of \$2.1 billion, for a net gain to the Commonwealth of \$1.2 billion on a dollar-for-dollar basis.

<sup>6</sup> <http://planitmetro.com/2015/04/07/going-up-why-the-construction-pipeline-means-higher-metrorail-ridership-part-two/>

The Chief Financial Officer's December 2015 report based its conclusions on two studies conducted by its Office of Revenue Analysis on the economic and fiscal importance of Metrorail to the region and the District of Columbia. Their main findings:

1. Metro delays impose an economic cost on the region.
2. A reliable Metro system boosts tax revenue to the District and the region.

The D.C. CFO's report concludes that failure to invest in Metro, to restore it to a safe, reliable system in state of good repair, could reduce regional economic growth by  $\frac{1}{4}$  to  $\frac{1}{2}$  percent or more, reducing regional economy and tax revenues by \$1 billion to \$2 billion.<sup>7</sup>

## The Cost of Metro Disruptions and Delays

The first study examined detailed data of disruptions and delays on the system, and then combined that data with income data from a 2012 Metro survey of riders.

The data allowed an estimate of the productivity loss of workers throughout the region due to delays (morning commute only). The report estimated the economic loss of these delays at \$51-\$61 million.

Between June 2014 and June 2015, there were 1,942 delays during morning rush hours, affecting approximately 9.8 million riders. With an average delay of eight minutes, and 10 percent of delays lasting more than 15 minutes, 1.2 million person hours total were lost – the equivalent of 586 full-time workers' annual hours. Anecdotal experience over the past year indicates the level of delay has likely increased.

## METRICS

Metro tracks hundreds of metrics internally and reports a focused set of them publically on a quarterly basis that the panel reviewed to narrow down a few key metrics. Of the many metrics, the panel zeroed in on those relating to safety, reliability, and customer experience as the most critical factors to Metro's success - and addressing the public's most important concerns.

The metrics outlined below reflect the current interim analysis by the panel. The panel will continue to examine additional metrics and benchmarking data comparing Metro to other large transit systems. Metro tracks a range of performance metrics, reporting quarterly and annually to its Board of Directors. Those metrics are posted publicly, online in Metro's "Vital Signs"<sup>8</sup> reports.

The Key Performance Indicators reported in Vital Signs provide a focused set of metrics, organized by the WMATA Board's adopted strategic goals, that "align actions to improve performance and deliver results." The detailed data answers two key questions for the WMATA Board and public: Why did performance change? What actions are being taken to improve it?

<sup>7</sup> How this is calculated: the  $\frac{1}{4}$ % that equals \$1.0 billion is the impact of reducing the total tax revenue growth derived from the COG demographic forecast that is estimated at 2.5% annually. In other words, the population, household and employment forecast translates into about 2.5% annual growth in the combined income, property, and sales taxes for the Metro Compact area. Keeping the math simple, that is about \$40 billion a year as the total tax base today. If, over 10 years, that grows at 2.5% per year, ignoring compounding, that is \$10 billion more in year 10 ( $2.5\% \times 40$ ). If growth is reduced from 2.5% to 2.25%, or 0.25 percent, that is a 10% reduction in growth ( $0.25/2.5$ ). Ten percent of \$10 billion in growth is \$1.0 billion. This is oversimplified, as the calculation would be a bit larger with compounding. (Source: Office of the Chief Financial Officer, District of Columbia.)

<sup>8</sup> [https://www.wmata.com/about\\_metro/docs/VitalSignsReport2015FINAL.pdf](https://www.wmata.com/about_metro/docs/VitalSignsReport2015FINAL.pdf)



The panel also reviewed WMATA’s Customer Accountability Reports (CARE<sup>9</sup>) reports, as part of the data review. This online tool enables the public to track Metro’s progress in the areas of safety, service reliability and fiscal accountability.

## Safety

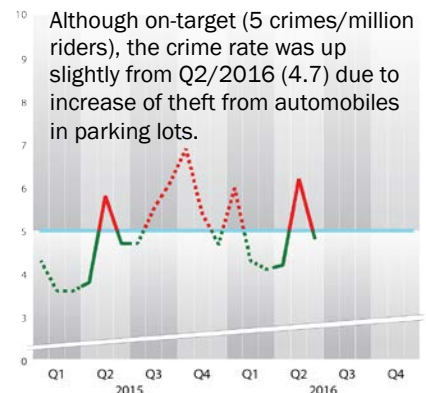
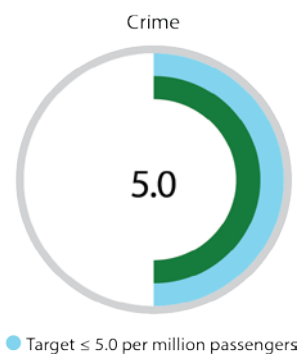
The panel focused on identifying metrics defining personal safety – these included crime rate, customer satisfaction which incorporates perceptions of personal safety, and passenger injuries and deaths per million passenger trips. For the purpose of the Interim Report the Crime Rate metric is provided below.

**Figure 1: Regional Measures**

**Safety** – How Metro is making safety its first priority and ensuring it will continue to significantly improve in a way that restores the trust of the public and regulators.

As measured by:

- Crime rate
- Customer Satisfaction (incl. perceptions of safety)



Source: WMATA

Additionally, Metro annually tracks safety metrics in the National Transit Database of Reportable Events. Reportable safety events in the following categories are included:

- Fatalities (confirmed within 30 days)
- Injuries
- Property damage
- Collisions
- Evacuations
- Derailments
- Collisions

The panel will work with Metro to further analyze and refine the application of these personal safety metrics to include in the final Technical Panel report.

## Reliability

Metro must continue to improve its on-time performance to get riders to their destinations on time and attract riders back to the system.

Metro is tracking quarterly rail customer on-time performance - how often customers get to their destination on time - including factors such as railcar, fare gate, elevator and escalator availability;

<sup>9</sup> [http://www.wmata.com/about\\_metro/general\\_manager/performance/CARe.pdf](http://www.wmata.com/about_metro/general_manager/performance/CARe.pdf)

infrastructure conditions; single-tracking around scheduled track work; railcar delays or delays caused by sick customers.

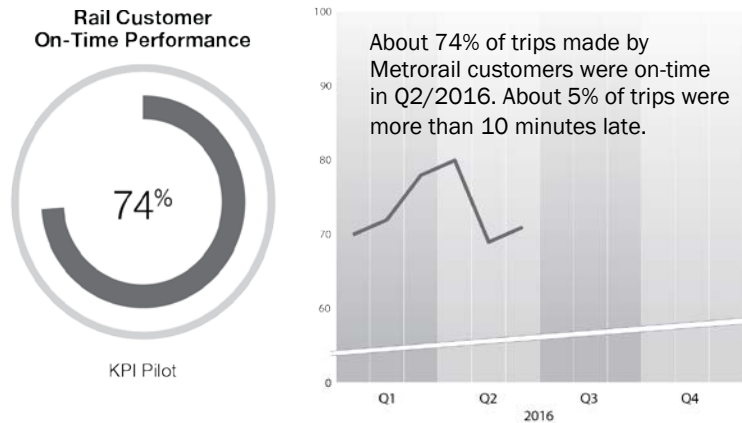
As of this writing, a performance target has not been established by the WMATA General Manager for reliability, but the panel expects that the target once set will be considerably higher than the current 74 percent for Metrorail to meet the public's expectations for a dependable system.

### Figure 2: Regional Measures

**Reliability** – How Metro is ensuring riders will get to destination on time.

As measured by:

- Rail customers on time
- Customer Satisfaction (incl. perceptions of reliability)



Source: WMATA

## Customer Experience

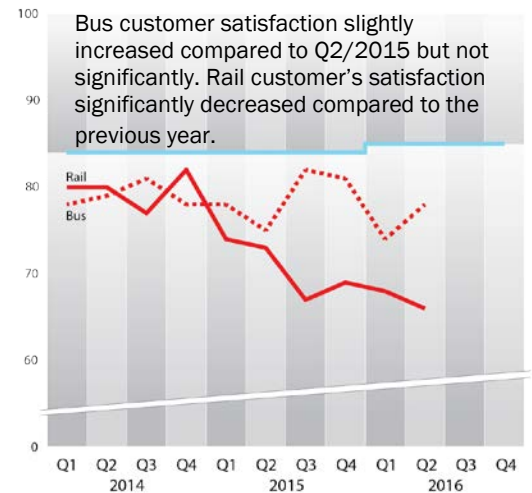
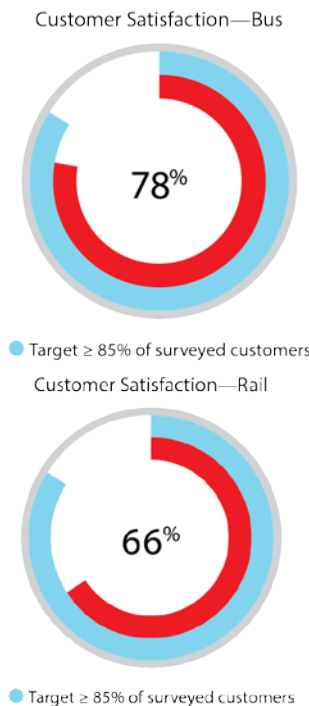
Metro uses a variety of tools to track the system's ability to deliver a trouble-free riding experience through a variety of means. It reviews the average number of problems a customer experiences in a trip and the percentage of customers who had a comfortable ride (e.g. vehicle temperature, seating availability, crowding on platforms, escalator and elevator performance, etc.) and overall problem-free experience.

**Figure 3: Regional Measures**

**Customer Experience – How Metro is providing quality customer service.**

As measured by:

- Customer Satisfaction



Source: WMATA

Metro also is examining, quarterly, customer feedback on service and the rider experience, using a scientific sampling of the region conducted by phone to residents who have used the bus or rail system in the past 30 days. It is working to rebuild community trust through efficiencies and building ridership.

## FINANCIAL MODEL OF WMATA'S OPERATING AND CAPITAL NEEDS

As part of its deliberations, the Technical Panel was briefed on the application of the DC CFO's recently developed financial model using existing WMATA operating and capital cost data to estimate funding needs over a ten-year period, compare the needs with expected revenues over this time period, and then calculate a potential gap between revenues and operating costs.

The panel concluded that the DC CFO's model was a very robust tool enabling calculations of operating and capital needs as well as cost allocations to jurisdictions and has the capability to support analysis of revenue options.

The panel notes that while there is a consensus regarding the value of the financial model, it has not reached consensus on the DC CFO needs analysis in recognition that changing assumptions can yield significantly different conclusions.

# Application of Financial Model by DC CFO Using Existing WMATA Operating and Capital Budget Data

The assumptions and results of the DC CFO analysis are provided below. The panel emphasizes the preliminary nature of the results, the significant sensitivity of the results to the major assumptions, and the expectation that a far more precise analysis will be prepared by early 2017 using Metro's FY 2018 operating budget and future estimates of operating costs and capital needs.

## Key model input assumptions for 10 year needs assessment:

- Sources of data:
  - WMATA's FY 2017 adopted budget
  - Included inflation factors for projecting revenues and costs
  - Added additional amounts for continued Safe Track operations
  - Used WMATA's 6-year CIP as basis for capital needs
  - Added Metro 2025 CIP in addition to the baseline 6-year CIP
- Primary Revenue assumptions:
  - Federal funding (PRIIA) is reauthorized in FY 2020 and remains at current levels (\$150M annually)
  - Local jurisdictions continue to match federal funding at current levels
  - Existing jurisdictional contributions (local and state) rise 3 percent annually above FY 2017 levels
  - Assumes passenger revenues decline by approximately 10 percent in FY2017 to reflect decrease in ridership and remain flat until FY 2022 – then grow at 3 percent annually
- Primary Cost assumptions – Operating and Maintenance
  - Personnel, services, materials and supplies are grow at 3 percent annually compounded rate.
  - Continued annual Safe Track costs inflated 3 percent per year (\$100M base FY 2018)
  - Fuel, propulsion power and utilities are inflated at a 2 percent compounded annual rate.
  - Other Post-employment benefits (OPEB) contributions at recommended levels by WMATA CFO
- Primary Cost assumptions – Capital
  - 6 year CIP from WMATA's FY 2017 Proposed Budget – Effective July 1, 2016
  - Assumes complete Metro 2025 capital program (power supply and railcars for 8 car trains, core station improvements, new blue line connections, pocket tracks, maintenance facility, etc.)

## Projected Operating Funding Gap: FY 2017-FY 2026

Estimated 10-year operating revenues: \$18.930 billion

Estimated 10-year operating funding needs: \$21.050 billion

Estimated total operating gap is approximately \$2.1B – over 10 years

## Projected 10-year Capital Funding Gap: FY 2017-FY 2026

Estimated 10-year capital funding revenues: \$8.133 billion

Estimated 10-year capital funding needs: \$17.980 billion (complete Metro 2025 program; 18B scenario)

Estimated 10-year capital funding needs: \$11.734 billion (most of Metro 2025 deferred beyond 10 year period; \$12B scenario)

**Estimated 10-year total capital gap is approximately \$9.846 billion for an \$18 billion CIP scenario (assumes complete Metro 2025 program)**

**Estimated 10-year total capital gap is approximately \$3.303 billion for an \$12 billion CIP scenario (assumes majority of Metro 2025 deferred)**

The DC CFO concluded based on an assessment of Metro’s historical capacity to expend capital funds that the lower level of capital funding over 10 years of approximately \$12 billion is a realistic estimate of what Metro could actually execute for capital projects over 10 years.

Therefore, using the \$12B CIP scenario, which the DC CFO views as more realistic, the total combined 10-year operating and capital funding gap using all of the assumptions above would be:

**Figure 2: Application of Financial Model by DC CFO**

(\$ Millions)	
CIP Funding Gap	\$ 3,303.39
Operating and Maintenance Effort Budget Gap	2,119.16
Total	5,422.55
Annual Average	\$ 542.26

Source: DC CFO

## Use of Debt Financing

Without debt financing, the DC CFO’s analysis results in an annual average funding gap of \$542 million. To mitigate the impact of this additional funding requirement, the DC CFO then applied an assumption of the use of bond funding to finance the capital funding gap. He notes that a reliable funding source, such as a dedicated tax or fee could be leveraged to achieve a reasonable borrowing cost. The reliable funding source would also be used to cover the additional annual operating costs.

Additional assumptions applied by the DC CFO for debt financing were an “A” credit rating or higher, 30-year financing term, and a 5 percent long-term borrowing cost, to debt finance the \$3.3 billion CIP funding gap. Use of long-term financing spreads the capital costs over the life expectancy of the capital assets as well as extends the repayment costs to the current and future beneficiaries of the projects.

Application of the above assumptions results in a 10-year total funding gap of \$2.9 billion or an average of \$290 million per year (operating average \$210 million plus debt service of \$80 million), thereby reducing the total average additional annual funding requirement from \$540 million to \$290 million, approximately a 54 percent reduction.

On October 12 the DC CFO Jeff DeWitt, presented the above analysis with estimates of Metro’s needs over the next 10 years to a joint meeting of the Mayor of the District of Columbia, the

Governor of Maryland, and the Governor of Virginia. It was characterized as a working draft assessment, to be revised once WMATA provides new updated operating and long-term capital cost needs. WMATA is scheduled to submit their operating and capital needs data by December 2016.

The panel again emphasizes its support for the DC CFO modeling tool, but notes it has not reached consensus on Metro's financial needs. The panel plans a detailed review of critical assumptions including fares, jurisdictional subsidies, operating costs, and operating efficiencies capital project assumptions, and other factors that will ultimately be considered to enable the panel to provide recommendations on how to meet Metro's long term financial needs.

## **NEXT STEPS**

The WMATA General Manager is now presenting his proposed FY 2018 operating budget in October 2016. The capital needs inventory will be completed by year-end 2016, and will inform the FY 2018 budget and longer-term capital funding needs. Once WMATA's updated data is available, the DC CFO's funding model will be used to provide updated information including funding needs and financing alternatives.

By the end of the first quarter of 2017, the Technical Panel plans to complete its technical foundation work and provide the COG Board of Directors with its final report. The final report will include an update of the analysis of metrics and benchmarking, associated performance goals and targets, updated data on the economic value of Metro, and importance to the regional economic and tax base of a restored Metro system. The report will also provide the COG Board with its conclusions on funding needs, as well as revenue and financing options for regional consideration and action by policymakers.

# APPENDIX

Resolution R39-2016  
June 8, 2016

**METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS  
777 North Capitol Street, N.E.  
Washington, D.C. 20002**

**RESOLUTION AUTHORIZING THE EXECUTIVE DIRECTOR TO CONVENE A TECHNICAL PANEL TO PREPARE A METRORAIL SAFETY, RELIABILITY AND STATE OF GOOD REPAIR NEEDS AND REVENUE ASSESSMENT AND COORDINATE WITH WMATA ON DEVELOPMENT OF OPERATING BENCHMARKS AND PERFORMANCE METRICS**

**WHEREAS**, the Metro rail system is the most significant regional transportation system and plays a critical role in meeting the National Capital Region's socio-economic and mobility needs and has served this need for the past 40 years; and

**WHEREAS**, a series of recent events including the January 12, 2015 L'Enfant Plaza smoke incident, subsequent smoke, fire and other disruptive events in 2015 and 2016 have undermined Metrorail's reliability and strongly reinforce the urgent need to restore the safety of the aging Metrorail system; and

**WHEREAS**, these recurring issues led to a 29-hour complete shutdown of the system in March of this year and the region is now faced with an extended period of safety-related repair and maintenance work activities called SafeTrack, which is anticipated to cause significant inconvenience and disruption of socio-economic activities in the region; and

**WHEREAS**, on March 30, 2016 COG in partnership with the Greater Washington Board of Trade held a summit of the regional elected and business leaders to discuss the importance of restoring Metro rail to a World Class System by addressing the safety and service reliability challenges the system is facing at present; and

**WHEREAS**, the region's leaders are unified in their desire to help the Washington Metropolitan Area Transit Authority address the safety and service reliability issues faced by its Metro rail system; and

**WHEREAS**, the current safety and service reliability issues of Metro are partly due to the funding constraints it faces; and

**WHEREAS**, on January 6, 2005, COG, the Greater Washington Board of Trade and the Federal City Council issued "The Report of the Metro Funding Panel", and

**WHEREAS**, the 2005 report examined and documented Metrorail operating and capital funding needs for 2005-2015, and evaluated a range of financing alternatives for providing funding to meet the needs; and

**WHEREAS**, the 2005 report concluded that insuring safety, reliability, and state of good repair for the Metrorail system requires stable and predictable funding; and

**WHEREAS**, in 2008, the United States Congress adopted the Passenger Rail Investment and Improvement Act (PRIIA) which established an annual, ten year dedicated federal appropriation of \$150 million annually, matched by \$50 million each from the District of Columbia, Maryland and Virginia, and such funding has helped address some of the capital cost needs to bring Metrorail into a state of good repair identified in the 2005 study; and

**WHEREAS**, the current state of safety and service concerns associated with Metrorail and the resultant disruptions to mobility and commerce in the region reaffirms the need to thoroughly explore and address to the best of the region's ability the funding and revenue needs of the Metrorail system;

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS THAT:**

- A. The Board authorizes the Executive Director to convene a Technical Panel of Chief Administrative Officers and Chief Financial Officers, who in partnership with the Washington Metropolitan Area Transit Authority Chief Financial Officer will:
  1. Document current funding projections for:
    - a. Operating the current Metrorail system in a safe and reliable manner;
    - b. Fully implementing the Metrorail system's replacement/rehabilitation program.
  2. Provide the Board with an interim report by October 12, 2016 or in a timely manner following release of WMATA's needs assessment; and
  3. Explore potential sources for any additional revenue the region may need to meet the above safety and reliability funding needs of the Metrorail system, and
  4. Resources to carry out the work of the Technical Panel shall be mainly provided by in-kind contributions, however, the Executive Director is authorized to allocate additional resources to support this initiative drawn from the existing FY 2016 and FY 2017 approved work program and budget.
- B. The COG Board further authorizes the Executive Director to coordinate with WMATA on development of operating benchmarks and performance metrics for the Metrorail system for review and input from the Technical Panel with the report issued to the Board.

**I HEREBY CERTIFY THAT the foregoing resolution was adopted by the COG Board of Directors on June 8, 2016.**

**Laura Ambrosio  
COG Communications Specialist**



# CHIEF ADMINISTRATIVE OFFICERS TECHNICAL PANEL ON METRO

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## Interim Report

Transportation Planning Board  
November 16, 2016



Metropolitan Washington  
Council of Governments

# Technical Panel

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## **District of Columbia**

- Rashad Young, City Administrator, District of Columbia

## **Maryland**

- Tim Firestine, Chief Administrative Officer, Montgomery County
- Nicholas Majett, Chief Administrative Officer, Prince George's County

## **Virginia**

- Mark Jinks, City Manager, City of Alexandria
- Mark Schwartz, County Manager, Arlington County
- Ed Long, County Executive, Fairfax County
- Tim Hemstreet, County Administrator, Loudoun County

## **Office of the Chief Financial Officer, District of Columbia**

- Jeffrey DeWitt, Chief Financial Officer

## **Washington Metropolitan Area Transit Authority**

- Dennis Anosike, Chief Financial Officer
- Barbara Richardson, Chief External Affairs
- Andrea Burnside, Chief Performance Officer

# The Interim Report – An Overview

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- Background – COG Board asks for help
  - Resolution R39-2016, June 8, 2016
- Process for CAOs
  - Meetings – July 6, Aug. 3, Sept. 7, Sept. 28
  - Work with WMATA, Office of DC Chief Financial Officer
  - Coordinated with Board of Trade; convened info sessions March 30 and June 17
  - Reviewed many existing studies, data

# Four Key Technical Panel Focus Areas

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1. **Value of Metro to the region** – outlining many earlier reports; DC CFO updates
2. **Metrics** – tracking the public’s concerns
3. **WMATA funding needs** -- analyzing them through financial model developed by District of Columbia Chief Financial Officer
4. **Revenues** – reviewing data; looking at funding options

# 1. Value of Metro to the Region

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- Review of the many existing regional reports on the value of Metro have drawn similar conclusions
  - Metro spurs economic activity, jobs, incomes and sales that generate additional revenues for the region
  - Creates more efficient land use
  - Community and environmental benefits
  - Reduced traffic congestion
  - Enhances tax revenues to 3 major jurisdictions due to economic growth and increased land valuations



# Value of Metro to the Region

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- Regional benefits from Property Tax Revenue generated within half-mile of Metro Stations is estimate to bring in \$3.1 billion annually.
- In addition, an estimate 105 million square feet of development is planned within a half- mile. WMATA shows a rough estimate of this projected new construction of \$50 billion either under construction or planned.

# Damage to Economy of Not Supporting Metro

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- Cost of not supporting Metro
  - DC finance report suggests a conservative estimate of morning rush hour delays would cost the region \$51-\$61 million.
  - The second part of the study addresses the value of property around Metro stations where values are higher than a conservative 6-9% within  $\frac{1}{4}$  and  $\frac{1}{2}$  mile of a Metro station.  
**Without investment in Metro this “premium” would decrease.**
- Failure to invest in Metro to restore to a safe, reliable system in state of good repair could reduce regional economic growth by  $\frac{1}{4}$  to  $\frac{1}{2}$  % or more, reducing regional economy and tax revenues by \$1B to \$2B.



## 2. Metrics

---

- **Safety**
  - How will Metro continue to make rider safety its first priority and ensure it will continue to significantly improve in a way that restores the trust of the public and regulators?
- **Reliability**
  - How will Metro ensure that riders will get to their destination on time and attract riders back to the system?
- **Customer Experience**
  - How is Metro measuring the system's ability to deliver a comfortable ride and trouble-free experience?





# Metrics: Safety

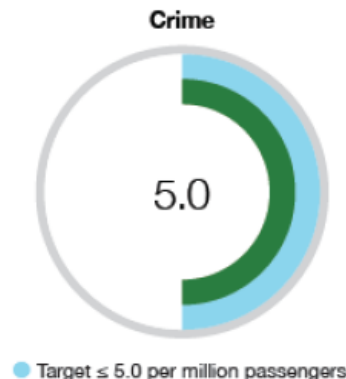
**Safety** - How Metro is making safety its first priority and ensuring it will continue to significantly improve in a way that restores the trust of the public and regulators

As measured by

- Crime rate ★
- Customer satisfaction (incl. perceptions of safety)

★The Panel focused on identifying metrics defining personal safety – these included crime rate, customer satisfaction which incorporates perceptions of personal safety, and passenger injuries and deaths per million miles. For the purpose of the Interim Report, the crime rate metric is provided.

CURRENT QUARTER PERFORMANCE



2-YEAR TREND IN PERFORMANCE



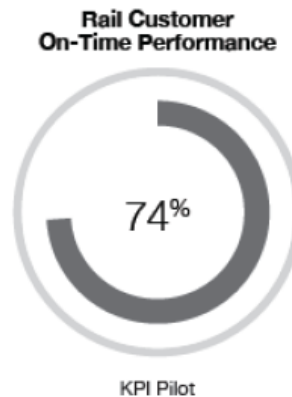
# Metrics: Reliability

**Reliability** - How Metro is ensuring riders will get to destinations on time

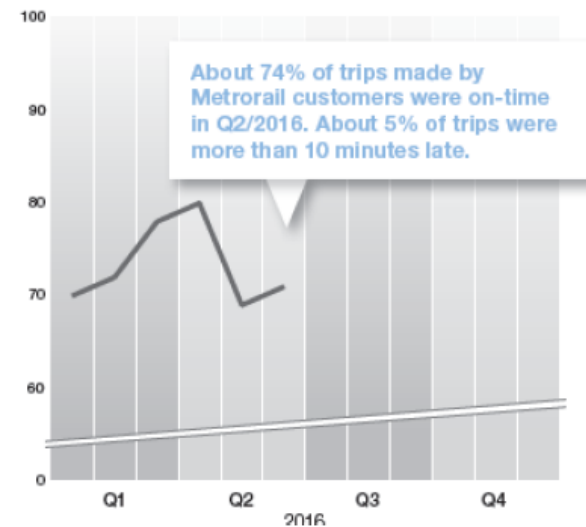
As measured by

- Rail customers on time
- Customer satisfaction (incl. perceptions of reliability)

CURRENT QUARTER PERFORMANCE



1-YEAR TREND IN PERFORMANCE



As of this writing, a performance target has not been established by the WMATA Board for reliability, but the Panel expects that the target once set will be considerably higher than the current 74% for Metrorail to meet the public's expectations for a dependable system.

# Metrics: Customer Experience

## Customer Experience -

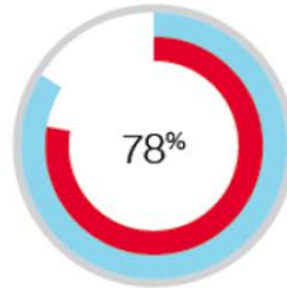
How Metro is providing quality customer service

As measured by

- Customer satisfaction

CURRENT QUARTER PERFORMANCE

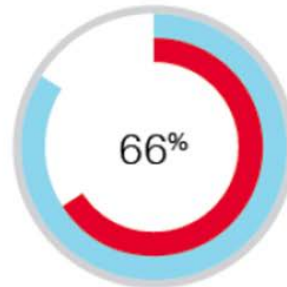
### Customer Satisfaction—Bus



● Target ≥ 85% of surveyed customers

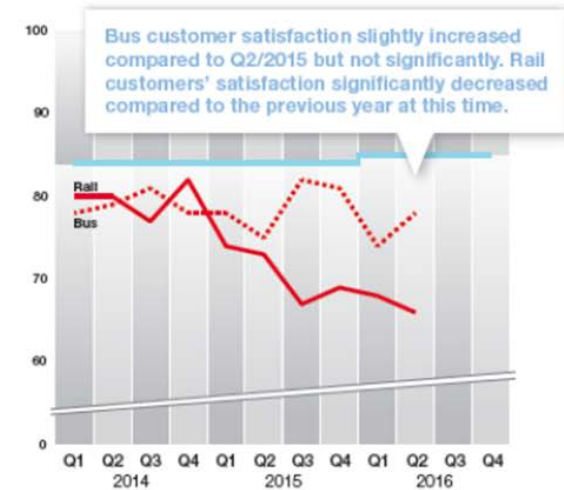
CURRENT QUARTER PERFORMANCE

### Customer Satisfaction—Rail



● Target ≥ 85% of surveyed customers

3-YEAR TREND IN PERFORMANCE



### 3. Financial Model to Evaluate WMATA's Funding Needs

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- District of Columbia Chief Financial Officer prepared financial model to provide rough order of magnitude of WMATA's funding needs for the region.
- Model “tested” using existing WMATA FY 2017 budget, existing 6 year CIP and Metro 2025 CIP.
- COG CAOs Technical Panel and financial/transportation staff and WMATA CFO reviewed the DC CFO model and concluded it was a robust tool that can be readily applied for supporting regional policy decisions on WMATA funding.

# DC CFO Model: Key Revenue Inputs

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- State and local capital funding contributions and future year growth rates
- State and local operating subsidy levels and future year growth rates
- Federal “PRIIA” (capital) funding and associated DC-MD-VA match
- Federal FTA grants
- Federal operating subsidy contribution
- Passenger revenues (fare box recovery)
- Miscellaneous other revenues (parking, advertising, etc.)

# DC CFO Model: Key Capital Needs Inputs

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## Capital assumptions

- Timing of major capital expenditures over next 10 years, for example:
  - Replacement rate of 7000 series rail cars
  - Power supply needs for 8 car trains
  - Blue Line connections
  - Pocket tracks
  - Bus fleet size
  - Constructing additional maintenance facility
  - Metrorail system expansion



# DC CFO Model: Key Operating Cost Inputs

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## Operating assumptions

- Personnel costs
- Materials, supplies, electric power, other utilities, insurance
- Preventative maintenance costs (extended Safetrack)
- Inflation
- OPEB (Other post-retirement benefits), such as retiree healthcare

## Additional model elements

- Operating efficiencies
- Annual funding for capital projects (WMATA project engineering and management capacity)
- Pay-as-you-go vs. debt financing
- Interest rate on long-term debt
- Length of long-term bonds
- Allocation of costs to federal, state and local governments

# WMATA Funding Needs: Application of DC CFO Model

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- WMATA presenting its FY 2018 operating budget to WMATA and community (mid-October).
- WMATA capital needs inventory will be completed by the end of 2016. Will inform WMATA capital budget and longer-term capital funding needs.
- Once WMATA data is available, it will be input into DC CFO funding model to provide foundational data for policy makers on additional funding needs and financing alternatives (pay-go vs. debt financing).



# 4. Exploring Revenue Options

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- Tax base work has been compiled by the DC CFO to identify the types of revenues that could be used to help meet the funding gap for Metro.
- A regional study was completed in 2005; comprehensively reviewed revenue options to support Metro.
- These are challenging times for the region, with many competing jurisdictional needs.
- This revenue discussion will be part of the later phase of the report.
- Also, many trade-offs must be factored into the discussion before funding is put in place.

# Technical Panel: Next Steps

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- Coordinate with WMATA General Manager and WMATA Board.
- Input updated operating and capital data into DC CFO financial model.
- Coordinate with Board of Trade/private sector on strategy for supporting WMATA.
- By March 2017: Technical Panel provides updated report to the COG Board of Directors covering metrics, economic value of Metro, funding needs and financing/revenue options.

## COG Staff:

- Chuck Bean, Executive Director
- Stuart Freudberg, Deputy Executive Director and Project Manager
- Kanti Srikanth, Director, Transportation Planning
- Eric Randall, Principal Transportation Engineer
- Monica Beyrouti, Government Relations and Member Services Coordinator

## Consultant:

- Barbara M. Donnellan, President, Castle Gray Associates

[mwcog.org](http://mwcog.org)

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777 North Capitol Street NE, Suite 300  
Washington, DC 20002



Metropolitan Washington  
Council of Governments





## MEMORANDUM

**TO:** Transportation Planning Board  
**FROM:** Chuck Bean, Executive Director of Metropolitan Washington Council of Governments  
**SUBJECT:** Metro Rail Safety Commission Update  
**DATE:** November 10, 2016

---

## BACKGROUND

In April of 2015, a Memorandum of Understanding (MOU) between COG and Virginia, Maryland and the District of Columbia (referred herein as the three states) was executed to have COG serve as the designated recipient of FTA's 49 U.S.C. Section 5329(e) (State Safety Oversight SSO program) funds, and to provide decision support to the three states in their work to stand up the Metrorail Safety Commission (MSC). The MAP-21 Act required the states with an urban rail system to reconstitute the State Safety Oversight Agency (SSOA) established under earlier federal laws. The FTA provides grant funding to support the staffing and professional development of SSOA programs under its Section 5329 (e) program). Consistent with the previous law the three states established the Tristate Oversight Committee (TOC) to oversee Metrorail compliance with its safety plans and programs. The TOC was established in 1997 and the COG has been serving as the administrative agent of TOC since 1999. The TOC continues to operate while the three states work to reconstitute its responsibilities and authorities as required under MAP-21 and FAST Acts. In October 2015, the U.S. Secretary of Transportation directed the Federal Transit Administration (FTA) to assume temporary and direct safety oversight of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system. FTA is performing this safety oversight responsibility in collaboration with the TOC.

The FAST ACT (and previously MAP-21) directs States to assume greater responsibility for overseeing the safety of their rail fixed guideway systems. The new requirement was aimed to address the following deficiencies of the existing SSOAs: lack of adequate and consistent safety practices across the rail transit industry; lack of regulatory, oversight, and enforcement authority for state agencies; limited SSO program funding, staff, training, and other resources; and lack of SSO financial and legal independence from the rail transit agencies they oversee. The new law requires, among other things, that each SSOA be financially and legally independent from any rail transit agency it oversees, and has investigative and enforcement authority with respect to the safety of the rail transit system. To undertake this enhanced responsibility each state must ensure that its SSOA has the legal authority to review, approve, oversee, and enforce a rail transit agency safety plan and has staffing levels and qualifications commensurate with the number, size and complexity of the rail transit agencies in the program and that SSO program staff and contractors receive training and certification through FTA.

## **WORK ACTIVITIES TO ESTABLISH AN MSC**

As the Designated Recipient for the FTA's SSOA program funds COG has been working since mid-2015 with representatives of the DC Department of Transportation, Maryland Department of Transportation and Virginia Department of Rail and Public Transportation on MSC-related work activities. A MSC Policy Working Group was established to conduct the work. FTA Grants totaling \$2,043,320 from federal FY 2013 and \$2,062,034 from federal FY14 funds have been approved and secured. Annual Work Programs for COG's FY16 and FY17 were also developed.

The MSC Policy Working Group has held both bi-weekly and monthly meetings with the FTA to discuss transitioning the current TOC that has been overseeing Metrorail safety to the MSC. A detailed Work Program has been developed in coordination with the FTA outlining the tasks to be completed that will lead to the FTA's certification of the Metrorail Safety Commission.

Most of the work activities can be sorted under two groups: legal and management. The legal work activities are associated with having laws enacted in the three states (and eventually ratified by the US Congress) that would provide the MSC with the legal authority it needs to conduct its work activities including having the authority to compel WMATA to take safety corrective actions developed by the MSC. The management work activities relate to all aspects of the MSC as an organization and includes tasks such as establishing a governance structure, operational by-laws, staffing plans, housing the entity, etc.

Under the legal work activities COG and the policy team is working with a legal consultant together with the State's Attorneys on developing an MSC Compact (Bill to be enacted by the legislators in the three states) that will allow for the MSC to be a legal independent agency with enforcement powers. Hearings on the MSC Compact occurred last month in DC and Virginia and earlier this week in Maryland. The expectation is that the Compact will be passed in identical form by the DC City Council and both the Maryland and Virginia state legislatures and then ratified by the US Congress by mid-to late Spring next year. Once the compact is ratified, the MSC will be implemented.

Under the management work activities, a milestone timeline to stand-up the MSC has been developed and approved by the FTA. Some of the activities underway includes: developing a Conflict of Interest Policy that centers on the policies and procedures for identifying, documenting, eliminating, or sufficiently mitigating instances where the MSC is not legally or financially independent from WMATA as required by law, and developing a Program Standard describing the Washington MSC's approach to implementing the requirements of its SSO program over the Metrorail system which has been submitted to FTA for their review and comment. Additionally, COG and the policy team are working with a management consultant to develop an organizational management structure for the MSC and has been working on drafting position descriptions, governance documents, recommended housing options, and an implementation schedule. The goal of these documents is to provide a basic framework that the eventual MSC Executive Director, staff and Board of Commissioners can use to fully implement the MSC. All of the management work activities are anticipated to be completed by late Spring of 2017.

The completion of the legislative and management activities will enable the Metrorail Safety Commission to be up and running with its enhanced responsibilities and authority and replace the existing TOC.

**ITEM 13 – Information**  
November 16, 2016

Long-Range Plan Task Force Phase 1 Report

**Staff**

**Recommendation:** Receive update

**Issues:** None

**Background:** The committee will receive an update on the activities to date and the outline for the Phase 1 report, which documents the work of the task force.





# FROM NO-BUILD TO ALL-BUILD

## Analyzing a Continuum of Transportation Scenarios for the National Capital Region

Report on Phase I of the Long-Range Plan Task Force

November 2016

**DRAFT 11/10/16**



National Capital Region  
**Transportation Planning Board**

## **FROM NO-BUILD TO ALL-BUILD: ANALYZING A CONTINUUM OF TRANSPORTATION SCENARIOS FOR THE NATIONAL CAPITAL REGION**

November 2016

### **ABOUT THE TPB**

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 22 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

### **CREDITS**

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## BACKGROUND

Twenty-five years ago, federal legislation fundamentally changed the way that planning bodies like the TPB do business. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 required Metropolitan Planning Organizations (MPOs) to develop financially constrained long-range transportation plans that would only include projects for which funding is “reasonably anticipated to be available.” The TPB’s Constrained Long-Range Plan (CLRP) is a legacy of that federal mandate.

The TPB developed its first CLRP under the new rules of ISTEA in 1994. Since that time, updates of the plan have only included projects that are expected to be funded. That means the CLRP truly is a reflection of the priorities of the TPB’s member jurisdictions. But it also means the plan does not offer a picture of what the region has collectively determined it wants the future to look like; rather it is a forecast of what can be expected, given anticipated revenues. Increasingly, those revenues are expected to be tight and the CLRP’s anticipated performance has been less than inspiring. Over the years, TPB members have frequently expressed concerns with the forecast performance of the CLRP, mainly with respect to worsening roadway congestion.

Federal law requires MPOs to develop financially constrained plans, but it does not prohibit regions from also developing larger regional plans that include unfunded or “aspirational” components. Indeed, most large MPOs in the United States currently develop long-range plans that comprise both funded and unfunded elements. Since the passage of ISTEA, however, the TPB’s long-range plan has only included “funded” projects.<sup>1</sup>

That pattern is now set to change. Through the work of its Long-Range Plan Task Force, the TPB has embarked upon a set of planning activities that will culminate in the approval in 2018 of a long-range transportation plan that for the first time will highlight unfunded priority projects that the region will jointly agree are important to our future—and worth pushing for. This report, from Phase I of the task force’s work, represents a first step in that new planning process.

### Looking beyond the CLRP

The year 2014 saw the development of a CLRP update that again received mixed reviews from many TPB members. As in previous years, analysis of the plan predicted that road congestion and transit crowding would increase significantly in the coming decades. At the same time, the plan did better in some measures, including growth in the share of transit and non-motorized trips, and declines in levels of criteria pollutants. Nonetheless, board members noted that of the approximately \$250 billion in investment included in the 2014 CLRP, about 83 percent was to be spent on system maintenance and only 17 percent for system expansion. Relative to the forecast growth in demand for mobility and accessibility, the proposed capital investment was noted to be inadequate, leading to system performance that could be less than desirable for some key measures.

Concerns about the CLRP contrasted with the aspirations of the Regional Transportation Priorities Plan, a new policy guide that the TPB approved in January of 2014. The Priorities Plan called upon the region to implement common-sense strategies to improve mobility and accessibility over the

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<sup>1</sup> The documentation for the CLRP includes a database with projects classified as “studies” that do not currently have anticipated funding. However, these studies are not coded and modeled for performance analysis or air quality conformity.

coming decades. Some TPB members argued that was time to use the new Priorities Plan to promote the implementation of projects that could make a positive difference in transportation system performance.

In September 2014, the TPB asked staff to compile an unfunded capital needs inventory that would encompass transportation projects that have been included in the plans of TPB member jurisdictions but have not been submitted for the CLRP due to lack of anticipated funding. At that time, TPB members asked staff to analyze this master list in order to better understand the opportunities for improved system performance. In October, the TPB's Citizens Advisory Committee passed a resolution supporting the TPB's request to develop an inventory of unfunded projects. The CAC also asked that the list be made available for use in public outreach and other regional planning activities.

The TPB staff issued a solicitation in February 2015 for project inputs for the inventory. This solicitation specified that submitted projects should: 1) affect regional travel and 2) be in state, local, and regionally approved plans, but 3) they should not currently be in the CLRP due to lack of anticipated funding.

The list of unfunded transportation network improvement projects in the final inventory comprise more than a thousand projects including a large number small-scale bicycle and pedestrian facility improvement projects as well as over 550 highway and transit projects.

## Task force work plan

As the inventory was being assembled, TPB leaders discussed how it might be used. In July of 2015, TPB Chairman Phil Mendelson established an Unfunded Capital Needs Working Group to 1) oversee the completion of the draft inventory and 2) develop a scope of work for regional planning activities that will use the inventory as the basis for analysis and outreach.

In the fall of 2015, the working group, led by TPB members Bridget Newton and Jonathan Way, oversaw the completion of the inventory and approved a work plan in November that was presented to the TPB in January 2016. Deciding that they did not want their work to "sit on a shelf," the group determined that, for the first time, unfunded capital needs would be incorporated into the next major update of the region's long-range transportation plan, scheduled for approval in 2018. Reflecting this new emphasis, the working group was renamed the Long-Range Plan Task Force in April 2016. The group also decided that after a full analysis of the inventory was conducted, the next phase of their work would focus on the development of a smaller set of unfunded projects with the greatest potential to improve mobility, accessibility and equity.

The work plan for the task force comprises the following three phases, which were to be conducted over three years, between FY 2016 and FY 2018:

- **PHASE I: DEVELOP A BASELINE REPORT**

To provide a context for future priority setting, Phase I would examine three scenarios of the region's long-term (2040) transportation system performance. All three scenarios would use the same land-use forecasts of population and job growth for 2040 (Round 8.4 Cooperative Forecasts), but would provide very different transportation inputs:

- *No-Build* – Includes only those projects that were on the ground in 2015. It includes none of the capital improvements in the current CLRP (as of 2015).
- *Planned-Build* – Includes projects planned to be built and implemented between 2015 and 2040 that are included in the current CLRP (as of 2015).
- *All-Build* – Includes all of the unfunded capital improvements inventoried by the TPB, in addition to projects included in the Planned-Build Scenario.

- **PHASE II: DEVELOP A PLAN OF UNFUNDED REGIONAL PRIORITY PROJECTS**

In FY 2017, the task force will oversee planning activities that will identify a limited set of priority projects that will address deficiencies in the CLRP and will help the region meet the goals and objectives of the TPB's Regional Transportation Priorities Plan.

- **PHASE III: INCORPORATE UNFUNDED PRIORITY PROJECTS INTO THE REGION'S LONG-RANGE TRANSPORTATION PLAN AND PROMOTE IMPLEMENTATION**

The three-year process will culminate in a new long-range transportation plan, which will be approved in 2018. This plan will be designed to reflect the region's aspirations for the future. Compared to the current CLRP, the new long-range plan will be redefined to include unfunded priorities as well as a constrained element.

This report represents the conclusion of Phase I of the work plan described above. It comprises analysis of the No-Build Scenario, which was presented to the Long-Range Plan Task Force in April 2016, and the All-Build Scenario, which was presented in September 2016. The Planned-Build Scenario, which is equivalent to the 2015 CLRP, was approved by the TPB in November 2015.

## SCENARIOS: PURPOSE AND DESCRIPTION

The scenarios in this study comprise the outer bounds for understanding what new transportation capacity could potentially achieve over the next 25 years. The No-Build Scenario essentially asks: “What if we built nothing between now and 2040 – not even the projects in the CLRP?” And, in sharp contrast, the All-Build alternative asks: “What if we built all the major transportation projects included in the approved plans of the region’s local, state and sub-regional governments?”

Clearly, neither of these scenarios is likely to come true. Although funding is tight, a No-Build future would be highly unlikely. And the All-Build Scenario, with its massive price tag, is equally far-fetched. So why bother to analyze these extreme visions of 2040?

The purpose of looking at these two “bookend scenarios” is to provide context for future decision making and to establish parameters to aid in the identification of a smaller list of priority projects. On one extreme, the All-Build scenario serves as a fully unconstrained list of transportation projects that represents jurisdictions’ “wish lists” of projects that would expand capacity along with the forecasted growth in population and employment. On the other extreme, the No-Build scenario serves as a baseline case where no new investments would be made, but our region’s population and employment would still grow. By comparing these two scenarios to the performance of our present-day transportation system as well as in comparison to our regional commitment to the Planned-Build scenario to which the region is currently committed in the form of the 2015 CLRP, we can see how the different levels of investment produce some vast differences in system performance. These results are meant to help shape the task force’s aim of selecting a smaller, targeted set of projects to improve regional performance. These scenarios will be folded directly into the TPB’s 2018 long-range transportation plan, providing context for the new planning activities to come.

### Land-use and transportation inputs

The scenarios were framed around the following inputs:

- Land Use – In order to isolate the impacts of transportation system capacity, the study used the same land-use forecasts for No-Build, Planned-Build, and All-Build scenarios. These forecasts are updated on a regular basis through the Cooperative Land-Use Forecasting Program at COG which combines regional data (based upon national economic trends and regional demographics) with local projections of population, households and employment.

The study used the Round 8.4 Cooperative Forecasts, which were available in early 2016 at the time of the analysis. These forecasts assume population growth of 24% and employment growth of 36% by 2040.

- Transportation – Different packages of transportation projects were identified for each of the three scenarios.
  - No-Build – This scenario includes the facilities that were in place as of 2015. It does not include the new capital improvements in the CLRP (based on the 2015 CLRP amendment) that would be built between today and 2040. For example, the No-Build



package includes the Metrorail Silver Line Phase I extension to Wiehle Avenue, which opened in 2014, but it does not include the Silver Line Phase II extension to Dulles Airport and into Loudoun County.

- Planned-Build – This scenario is synonymous with the version of the CLRP that was approved in 2015, which at the time of the analysis for this study was the TPB’s most recently approved long-range plan.<sup>2</sup> The scenario includes all unbuilt projects in the CLRP. Again, these projects have been included in the CLRP because project sponsors anticipate they can be funded. Continuing the example from above, the Planned-Build Scenario would include Phase II of the Silver Line.
- All-Build – This all-encompassing scenario includes a comprehensive inventory of unfunded capital needs, which was compiled by TPB staff. It was designed to include all the major transportation projects in the plans of the TPB’s member jurisdictions, even if those projects are not currently anticipated to be funded. More information about the process for compiling this inventory is provided below.

## Compiling the All-Build inventory

TPB staff issued a solicitation for project inputs for the All-Build Scenario in February 2015. The solicitation was distributed through the TPB Technical Committee. Throughout 2015, staff worked to refine the inventory. The threshold requirements for submissions stipulated that projects should 1) affect regional travel and 2) be in state, local, and regionally approved plans, but 3) are not currently in the CLRP.

The identification of unfunded projects was not a clear-cut task. Projects that are included in local and state plans are often conceptual, particularly when their proposed construction is long-term and full agreement about necessary implementation steps is still in the distant future. Such long-term aspirational projects often do not have identified geographic alignments or details regarding mode.

Further, the various jurisdictions of our region have different planning mechanisms for identifying unfunded capital needs. In developing the inventory, staff worked to ensure consistency among the states and jurisdictions in the types of projects included in the inventory. Earlier versions of the draft list showed far fewer projects in Maryland in comparison to the District of Columbia and Virginia because of the different ways that member jurisdictions approached this exercise. The District and members in Virginia essentially submitted all the projects in their respective plans, while jurisdictions in Maryland largely submitted only those projects from their plans that had been designated as priorities in their annual “priority letters” submitted to the Maryland Department of Transportation (MDOT). Thus, initially there were fundamental differences in the source documents and the types of unfunded projects that were submitted by the Maryland and Virginia jurisdictions creating an imbalance in the number of projects and the potential cost of the unfunded needs. To address this imbalance, TPB staff and MDOT staff decided to include all the long-term unfunded projects in the Highway Needs Inventory of the State Highway Administration (SHA). The inclusion of these projects

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<sup>2</sup> New road and transit projects that will be added in the 2016 CLRP Amendment were not included in the Planned-Build Scenario for this study, but they were included in the All-Build Scenario. The 2016 CLRP Amendment was scheduled for approval in November of 2016.

provided an unfunded project listing for Maryland jurisdictions more similar to those lists provided by the District of Columbia and Northern Virginia jurisdictions.

Developing cost information for projects was another challenge. MDOT noted that the unfunded projects in the Maryland SHA Highway Needs Inventory did not have cost estimates attached to them. In addition, many of the unfunded project submissions received from other jurisdictions did not have cost estimates attached to them. Staff suggested that rather than attach specific cost estimates to individual projects, the projects could be put into groups of similar size and scale, and cost ranges could be established for those types of projects. More detail about cost estimation can be found below.

Finally, TPB staff grappled with the way in which bicycle and pedestrian projects would be included in the list. As an expression of regional priorities, the projects in the TPB's Bicycle and Pedestrian Plan were added to the list. Additional submissions of bike/ped projects by individual submissions were also included in the inventory.<sup>3</sup>

## Specifying project details

After the preliminary inventory was compiled, staff noted gaps in project details that required further attention. In many cases, projects were derived from plans with long-term time horizons and thus, individual projects were often conceptual and insufficiently specified. Staff needed to elaborate project details for inclusion in the travel demand analysis that formed the basis for the study's findings.

In the spring of 2016, project submitters were asked to fill in some of the missing project details such as number of lane miles, roadway facility type, and transit service characteristics (e.g., headway, run time). In situations in which submitting agencies did not provide the information requested, TPB staff used "default criteria and rules" to develop the missing project specifications. Default specifications included number of lanes, and transit route headways and run times, and other features.

Cost estimates for the study were developed as planning-level calculations based on concept-level details only. As previously noted, project cost estimates were provided by implementing agencies for some projects, but not for others. Where available, the number and length of lane-miles added was used with a unit cost estimate to calculate a planning level cost for projects where that data was not available. For projects where cost or length data were not available, projects were matched with similar projects that did have cost estimates to develop a planning level order of magnitude cost estimate. To account for these variations in project cost estimates, all projects were assigned to a cost range, rather than a specific cost.

In finalizing the project details, TPB staff reviewed dozens of local, state and sub-regional plans and held individual meetings with the TPB's partners. Throughout this process, staff worked to refine the list of unfunded projects in order to achieve the highest possible level of accuracy and consistency across jurisdictions in the representation of projects. However, it should be recognized that the inventory used for the All-Build Scenario is essentially in a permanent draft state. Therefore, it should not be viewed as a final product, but as a resource for regional discussion and analysis.

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<sup>3</sup> As noted later in this report, bicycle and pedestrian projects for the most part are not modeled for regional travel demand forecasts.

## Tools and measures for analysis

For many years, TPB staff has used a series of standard transportation evaluation measures—such as mode choice, vehicle miles of travel, levels of congestion, and access to jobs— to evaluate the forecast impacts of the CLRP. For this analysis, these measures were applied to groups of strategies from the Regional Transportation Priorities Plan, which are described in the next section.

TPB staff used its travel demand forecasting models to analyze both the No-Build and All-Build scenarios. Forecast for the Planned-Build Scenario were done in 2015 as part of that year’s CLRP Amendment. In addition, staff used GIS and other means for this study to analyze All-Build inventory inputs. For example, such analysis included as identifying changes in the number of jobs or households that will be in proximity to transit.

## All-Build overview

The final list used for the All-Build Scenario comprised more than 550 new projects. In comparison, the Planned-Build Scenario (based upon all the projects included in the 2015 CLRP Amendment) included 372 new projects.

**Figure 1: Overview of Planned-Build and All-Build Scenario Inputs**

2015 to 2040	Planned Build (PB)	All-Build (AB)
Population Growth	24%	24%
Employment Growth	36%	36%
New transportation projects	372	550 <i>additional</i>
Capital funding for new projects	\$42 billion - \$27 billion - highway - \$15 billion - transit	\$70-100 billion <i>additional</i> - \$25-55 billion - highway - \$45 billion - transit

The All-Build inputs were drawn from 33 plans and other sources from jurisdictions throughout the region.<sup>4</sup> Some of the key sources include the Northern Virginia Transportation Authority’s “TransAction 2040” plan, WMATA’s “Momentum” and “Connect Greater Washington” plans, the District of Columbia’s “moveDC” plan, the Joint Transportation Priorities Letters from Charles, Frederick, Montgomery, and Prince George’s counties in Maryland, and the Highway Needs Inventory

<sup>4</sup> The full inventory and a list of source documents can be found at: [https://www.mwcog.org/assets/1/28/09212016\\_-\\_AB\\_Project\\_List.pdf](https://www.mwcog.org/assets/1/28/09212016_-_AB_Project_List.pdf)

A GIS map of the projects can be found at: <https://gis.mwcog.org/webmaps/tpb/lrptf/allbuild/>

of the Maryland State Highway Administration (SHA). Jurisdictions also submitted projects derived from various other adopted comprehensive or master plans from the individual counties and cities.

The cost estimates for the new capacity in the All-Build Scenario range from \$70 billion to \$100 billion. Approximately \$45 billion would be needed for new transit, while the cost estimates for the new All-Build highway projects ranged from \$25 to \$55 billion. In comparison, new capacity in the Planned-Build Scenario was estimated at a total of \$42 billion – \$27 billion for roads and \$15 billion for transit.

# SCENARIO ANALYSIS

The Regional Transportation Priorities Plan (RTPP), approved in January 2014, is the policy framework that guides the analysis in this report. The Priorities Plan was designed to assist local, state and regional leaders in “thinking regionally and acting locally” – that is, in considering regional needs when identifying transportation improvements to advance to implementation. The RTPP lists the multi-modal goals that were derived from the TPB Vision, which serves as the policy document for the TPB’s transportation plans.

Recognizing that the region’s economy and quality of life depend on our transportation system, the Priorities Plan identified a host of practical strategies to alleviate congestion and crowding and accommodate future growth. The analysis in this study utilizes those strategies as a way to examine different packages of potential transportation improvements.

## FRAMEWORK FOR ANALYSIS

The Priorities Plan identified 19 specific strategies with the greatest potential to advance our regional transportation goals. Some of these strategies call for transportation capacity expansion projects (e.g., Express Toll Lanes), which the All-Build and Planned-Build scenarios provide. Other strategies are oriented toward policy or program changes (e.g., support and promote electric vehicles), which are not typically addressed by the scenarios in this report.

To better understand the impacts of the All-Build and No-Build scenarios, TPB staff developed a framework for analysis using the RTPP strategies. The development of this framework included two preliminary tasks to streamline the categories for analysis: 1) those strategies that would be addressed through transportation capacity increases were culled from the full list of 19 strategies, and 2) similar strategies were grouped into categories that could be analyzed in a unified manner.

Five packages of RTPP strategies, listed below, have been given succinct titles (in italics below) that reflect thematic objectives. They form the basis for the analysis in this report.<sup>5</sup>

### *Transit Improvements*

- Provide additional capacity on the existing transit system
- Implement bus rapid transit (BRT) and other cost-effective transit alternatives
- Apply priority bus treatments

### *Targeted Congestion Relief*

- Build/Implement Express Toll Lanes
- Alleviate roadway bottlenecks

### *Pedestrian and Bicycle Capacity*

- Expand pedestrian infrastructure
- Expand bicycle infrastructure

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<sup>5</sup> The following RTPP strategies are not directly addressed by scenario capacity increases, and therefore, they generally were not used in this report’s analysis: ensure maintenance of the transit system; ensure maintenance of roads and bridges; promote system efficiency through management and operations, and the appropriate use of technology; Increase roadway efficiency; concentrate growth in Activity Centers; update and enforce traffic laws; support and promote electric vehicles; promote commute alternatives; and engage and communicate with the public.

#### *Circulation in Activity Centers & Access to Transit*

- Improve access to transit stops and stations
- Enhance circulation within Activity Centers

#### *Environmental Justice Communities*

- Ensure accessibility for persons with disabilities, low incomes, and limited English proficiency

## Transit Improvements

The Priorities Plan called for the development of a wide variety of public transit options— diverse systems that will serve diverse needs throughout our region. The transit strategies in the plan included implementing cost effective transit expansions such as bus rapid transit, providing additional capacity on the existing system, and applying priority bus treatments.

### WHAT'S IN THE SCENARIOS?

The Planned-Build Scenario (the 2015 CLRP) is expected to expand the region's high-capacity transit<sup>6</sup> miles by 22% between 2015 and 2040.

Projects in the CLRP, totaling 64 new transit miles, include Phase II of the Silver Line and the Purple Line between Bethesda and New Carrollton.

The All-Build Scenario would expand high-capacity transit miles (Figure 2) by an additional 150% beyond the projects already in the Planned-Build Scenario. With a total of 368 new transit miles, the scenario includes 33 additional miles of Metrorail, 66 additional miles of light rail, 259 additional miles of bus rapid transit (BRT) and streetcar, and 10 additional miles of commuter rail. It also would widely add priority bus treatments to roads across the region, including the facilities identified in WMATA's Priority Corridor Network. The scenario includes many bold, high-profile projects, such as a Metrorail extension to Centreville, light rail to Charles County, and build-out of Montgomery County's currently planned BRT network.

More fundamentally, the All-Build package of improvements would make sure the existing transit system has the capacity to handle new riders. The scenario would add all the projects featured in WMATA's Momentum Plan for 2025, including all eight-car trains during rush hour, core station improvements, and a new station at Rosslyn. To expand capacity on the existing commuter rail system, the All-Build package would implement a host of other improvements, including major upgrades to Union Station and replacement of the Long Bridge.

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#### **RTTP STRATEGIES:**

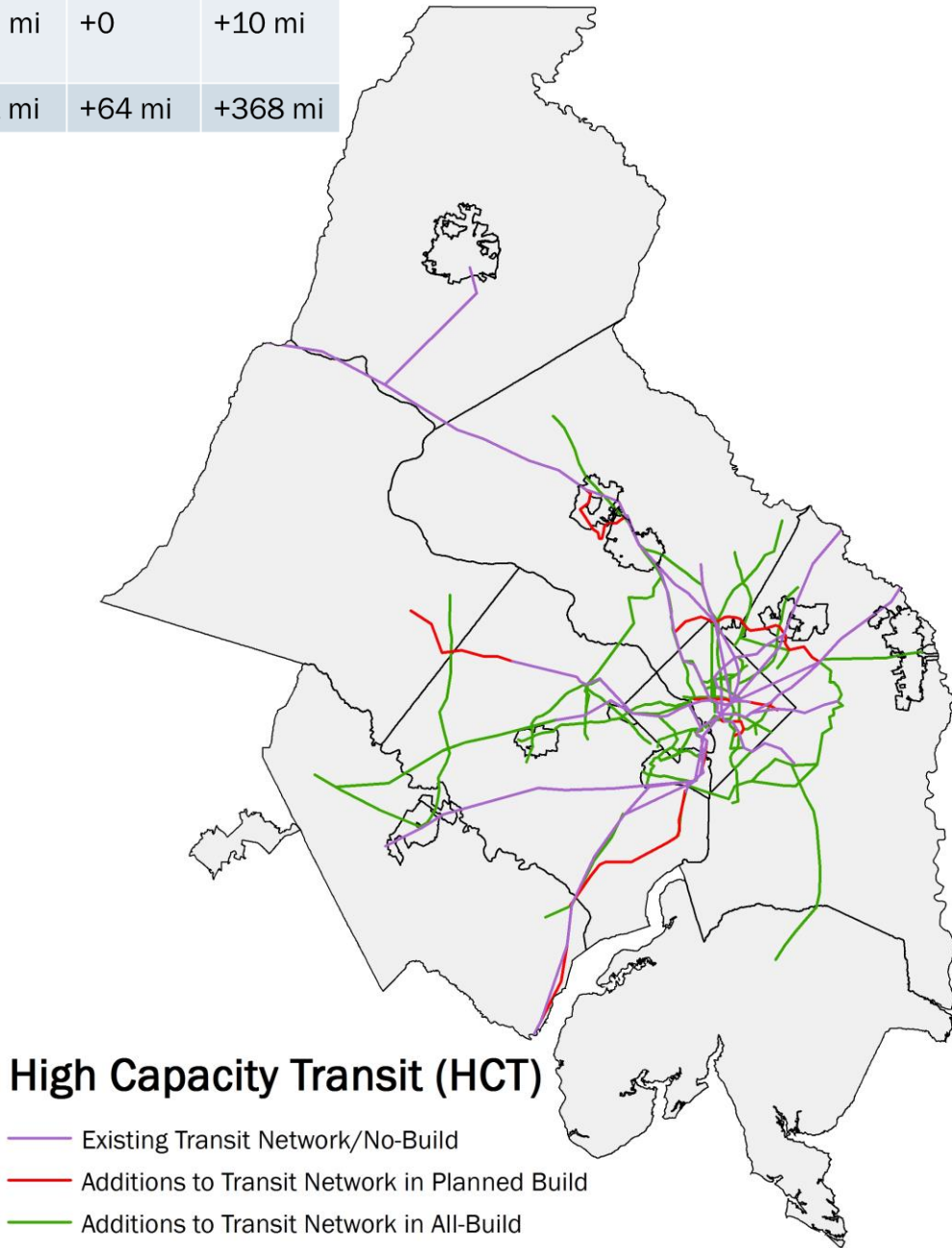
- **Implement bus rapid transit and other cost-effective transit alternatives.**
- **Provide additional capacity on the existing transit system.**
- **Apply priority bus treatments.**

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<sup>6</sup> "High-capacity transit" was defined to include Metrorail, commuter rail, light rail, streetcar and bus rapid transit.

**Figure 2: New Transit in Planned-Build and All-Build**

System	Existing	Planned Build	All Build (additional)
Metro Rail	119 mi	+12 mi	+33 mi
Light Rail	0	+16 mi	+66 mi
BRT / Street Cars	5 mi	+36 mi	+259 mi
Commuter Rail	167 mi	+0	+10 mi
<b>TOTAL</b>	<b>291 mi</b>	<b>+64 mi</b>	<b>+368 mi</b>

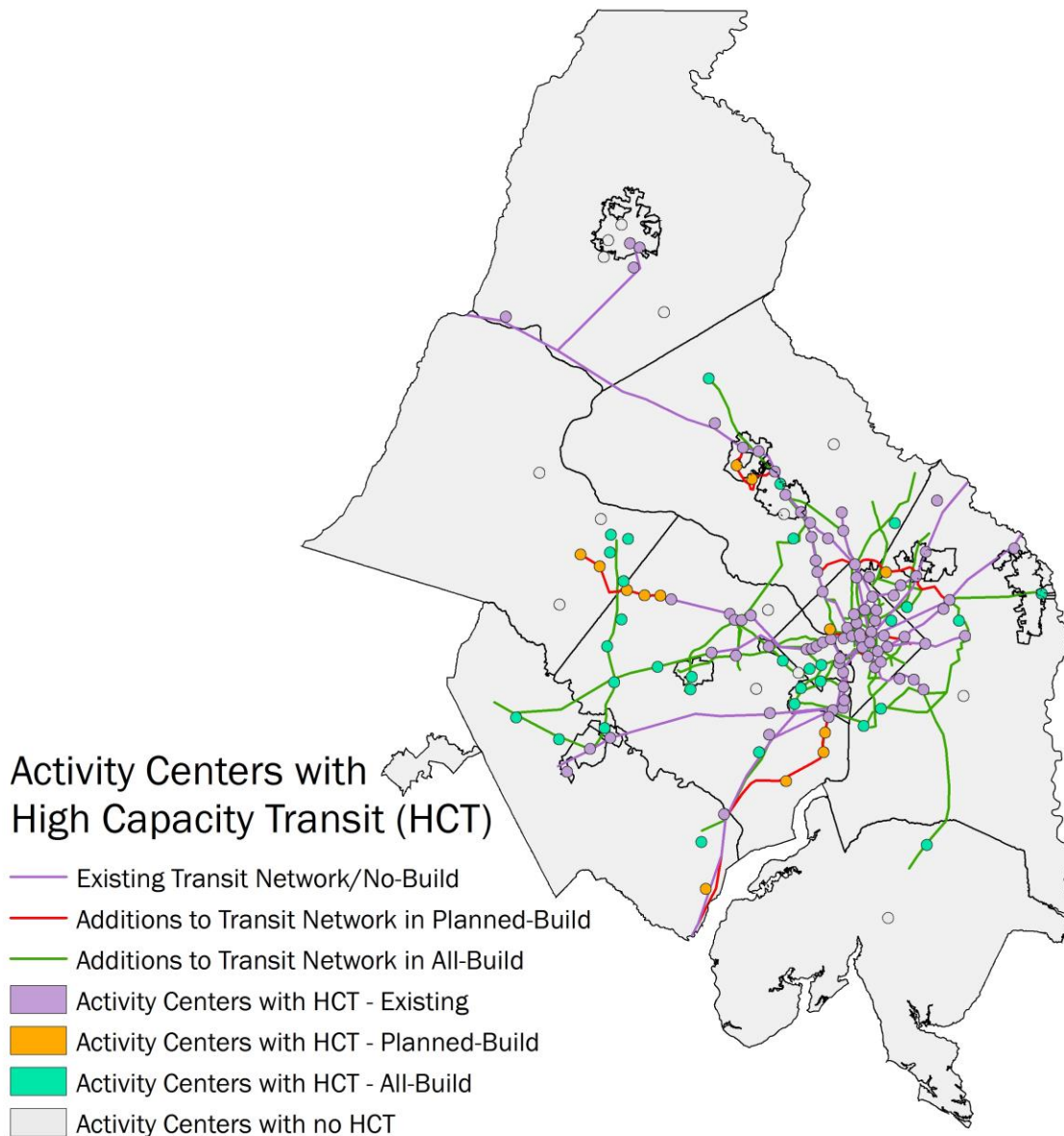


## HOW WOULD THE SCENARIOS AFFECT TRANSIT?

### Proximity to transit

Under the All-Build Scenario, many more people would live close to high-quality transit (Figure 4). With significant new transit capacity in this scenario, 48% of the region's population in 2040 would live within walking distance of quality transit.<sup>7</sup> In contrast, the Planned-Build Scenario would provide transit access for 36% of the population, while the No-Build Scenario would provide access to high-quality transit to 31% of the region's people.

**Figure 3: Activity Centers with High-Capacity Transit**



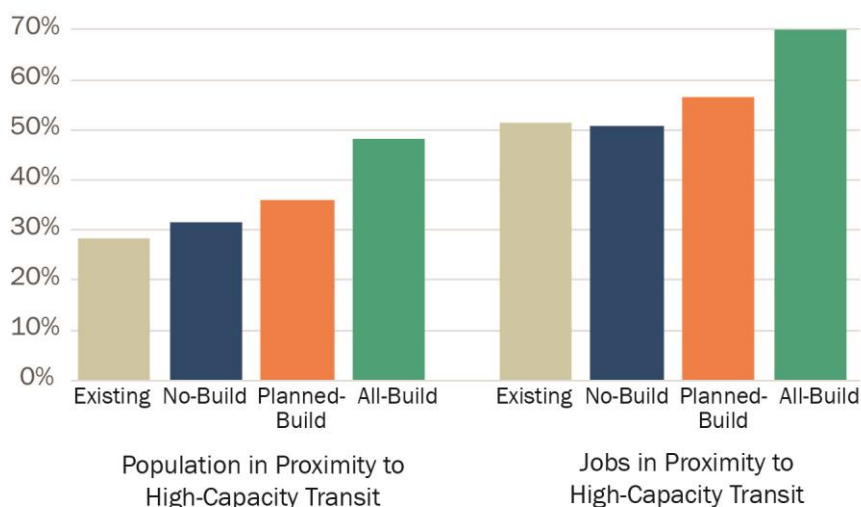
<sup>7</sup> For this analysis, reasonable proximity was defined as within a mile of rail or within a ½ mile of BRT. This is considered a reasonable walking distance.



Improvements in proximity to jobs are even more dramatic under All-Build. Seven out of ten jobs (70%) would be within walking distance of transit under All-Build, compared to 57% under the Planned-Build Scenario and 51% with No-Build.

As shown in Figure 3, the All-Build Scenario would also significantly increase transit connections to Regional Activity Centers, the region’s economic growth centers. Under All-Build, 91% of Activity Centers will be connected by quality transit. In comparison, 68% of Activity Centers would be served by quality transit under the 2015 CLRP, and 59% would be connected by transit under the No-Build Scenario.

**Figure 4: Population and Jobs in Proximity to High-Capacity Transit**



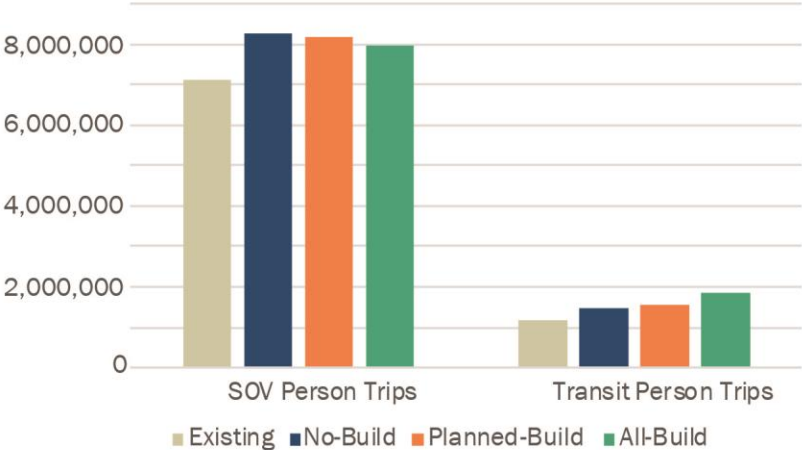
### Transit ridership

Compared to the other options, the All-Build Scenario would dramatically increase the use of transit over the next 25 years.<sup>8</sup> In 2040 under the All-Build Scenario (Figure 5), the number of transit trips taken in the region is forecast to be 62% higher than in 2015. This increase in transit use far exceeds the growth in population, which is forecast to increase by 24% over the same period. In comparison, the 2015 CLRP would see an increase of 34% in transit trips, while the No-Build would increase transit trips by 28%.

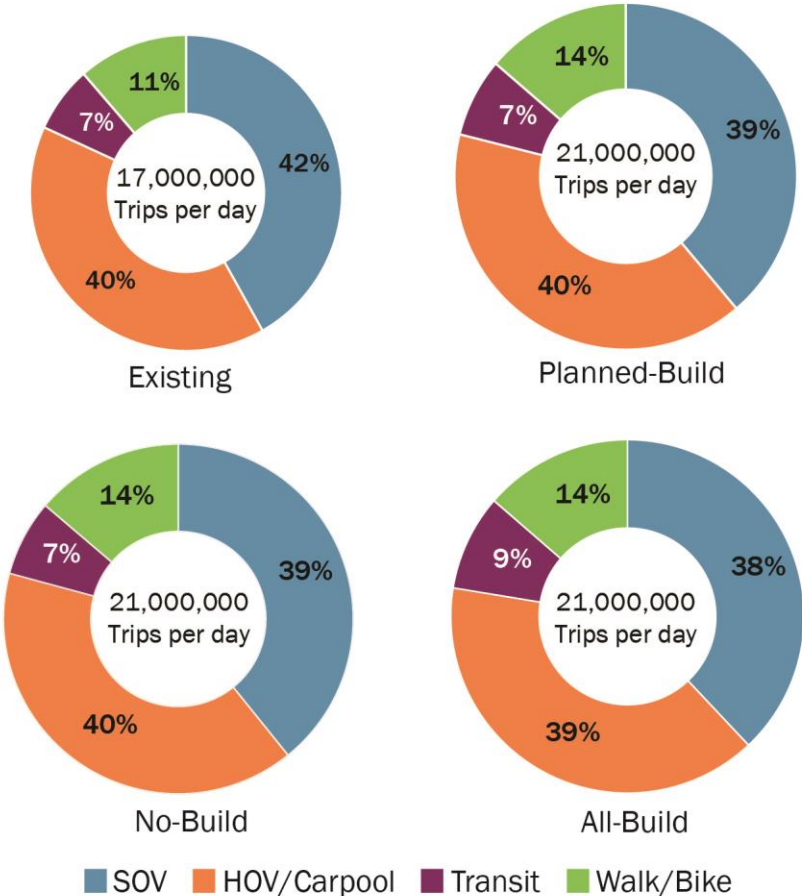
Single-occupant vehicle (SOV) trips are forecast to experience a reverse trend when comparing the three scenarios. Under All-Build, SOV trips in 2040 will be 11% higher than today, but they would be 15% greater under the CLRP and 16% more under No-Build.

<sup>8</sup> It is important to note that forecast changes in transit use would not result solely from the transit capacity increases in the various scenarios. Rather, the forecast performance of the 2040 scenarios is the result of systems that synergistically combine land-use and transportation inputs, including road improvements. The discrete effects of transit capacity inputs have not been disaggregated for this analysis.

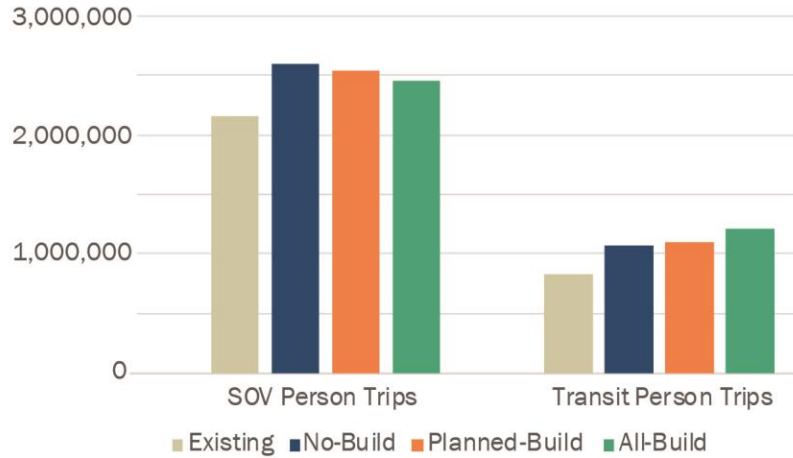
**Figure 5: All Trips - Changes in Solo Driving and Transit**



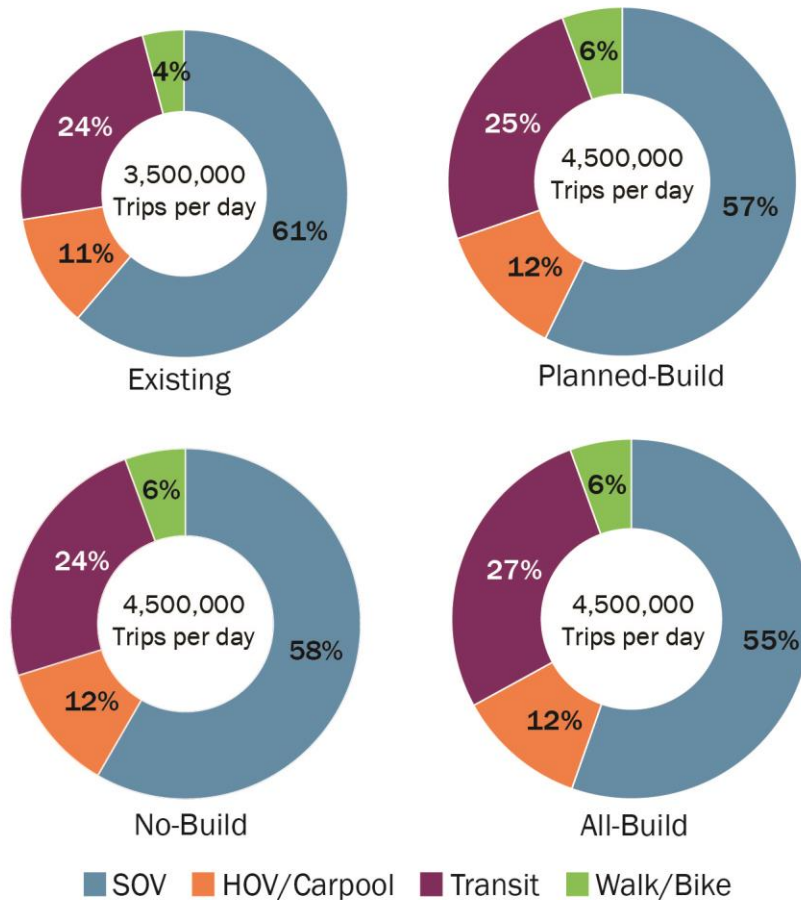
**Figure 6: All Trips - Mode Share**



**Figure 7: Work Trips - Changes in Solo Driving and Transit**



**Figure 8: Work Trips - Mode Share**



For work trips (Figure 7), transit trips will increase by 47% under All-Build and 33% under Planned-Build. Again, SOV trips would follow a reverse pattern for work trips, increasing 18% under the Planned Build and 14% under All-Build.

Today, the people of the region take an average of 17 million trips every day. In 2040, that number is expected to grow to 21 million. As shown in Figure 6, under the All-Build Scenario, the percentage of all trips (“mode share”) on transit would increase at a small, but significant, rate. Under All-Build, the share of trips on transit will be 9%, compared to a 7.4% mode share for transit under the 2015 CLRP and 7% under No-Build. Transit mode share in 2015 was 7%.

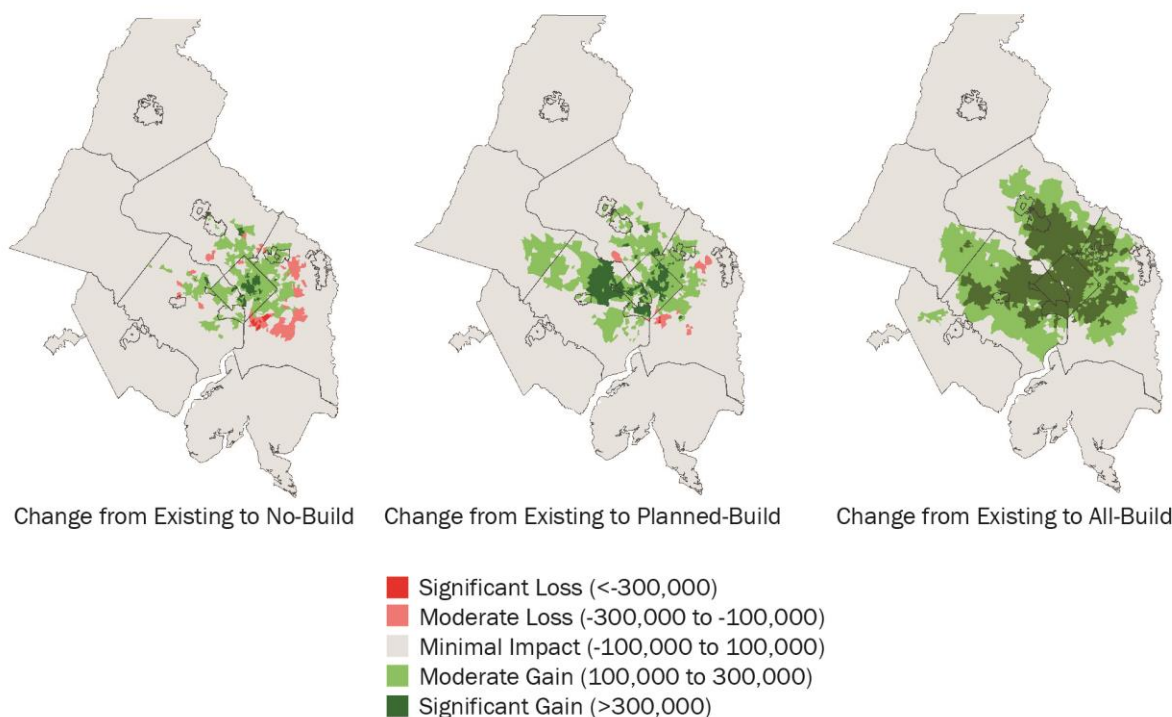
The same trends are found for trips to and from work – and it should be noted that transit ridership already constitutes 24% of commuting trips, a much larger base than for all trips. Figure 8 shows that under the All-Build Scenario, commuting on transit will represent 27% of work trips, compared to 25% under the 2015 CLRP and 24% under No-Build.

Nonetheless, driving will continue to be the dominant mode of travel in 2040. Driving, either alone or in carpools, under all scenarios will continue to constitute the largest share of all trips taken in the region. However, the share of driving trips is smaller under All-Build – by one to three percentage points – than under the CLRP and No-Build scenarios.

### Access to jobs by transit

Compared to today, more jobs will be located near transit in 2040, and therefore all three scenarios show some increases in access to jobs by transit within 45 minutes (Figure 9). With the added transit capacity in the Planned-Build Scenario, however, that access will increase significantly, and the gains will be particularly dramatic under the All-Build Scenario.

**Figure 9: Access to Jobs by Transit within 45 Minutes**



## Targeted Congestion Relief

The RTPP focused attention on targeted roadway improvements that provide congestion relief for drivers and support economic productivity. The plan called for expanded use of toll lanes to manage congestion and raise much-needed revenue. It also said the region should strategically target bottlenecks in determining whether to build new road capacity.

### WHAT'S IN THE SCENARIOS?

The Planned-Build Scenario (the 2015 CLRP) is expected to expand the region's road network by 1,130 lane miles—a 7% increase between 2015 and 2040. Road projects include express lanes on I-395 and I-66 (inside and outside the Beltway), and widening/HOV construction on I-270.

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#### RTPP STRATEGIES:

- **Build/implement express toll lanes**
- **Alleviate roadway bottlenecks**

The All-Build Scenario would more than double the amount of new lane miles in the Planned-Build—an increase of 14% over today's road network. This package includes 1,175 more lane miles, and out of this additional road capacity, 419 lane miles (36%) would be tolled. The projects include new capacity on the American Legion Bridge, I-270, and the Capital Beltway between Springfield and the Wilson Bridge, as well as county parkways in Loudoun, Prince William, and Fairfax.

The additional road capacity in the All-Build or Planned-Build scenarios have been derived from local and state planning processes that seek to prioritize efforts to reduce congestion and provide relief to bottlenecks. For example, under Virginia's Smart Scale project selection system, congestion mitigation is weighted highest among the factors in the prioritization process.

### HOW DO THE SCENARIOS AFFECT CONGESTION AND DRIVING?

#### Lane miles of congestion

Under the All-Build Scenario, system-wide congestion would still increase, but at a much slower rate than under the other scenarios.<sup>9</sup> In 2015, during the peak hour of morning congestion, 10% of lane miles in the region were congested. In 2040, under the All-Build Scenario, 12% of lane miles will be congested during the a.m. peak hour. That represents an increase of 32% in congested lane miles during the morning peak.

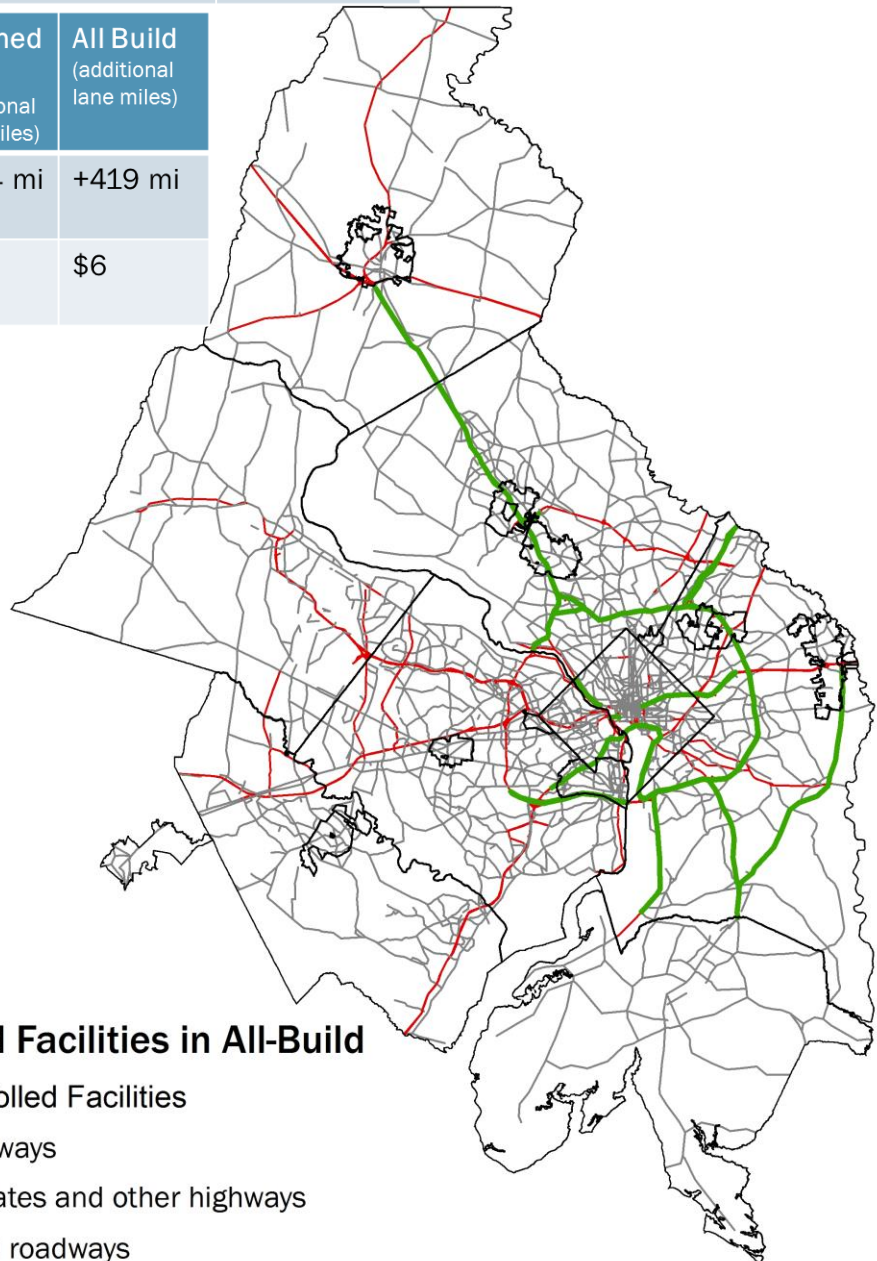
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<sup>9</sup> As was noted earlier for transit, the changes in congestion and road use that are forecast for different scenarios would not result solely from changes in the region's road network. Rather, the forecast impacts of the 2040 scenarios are derived from synergistic combinations of land-use and transportation inputs, including both road and transit improvements. The discrete effects of road capacity inputs have not been disaggregated for this analysis.

**Figure 10: New Roadways and Tolled Roadways in Planned-Build and All-Build**

System	Existing (lane miles)	Planned Build (additional lane miles)	All Build (additional lane miles)
Freeways / Expressways	3,549 mi	+444 mi	+453 mi
Arterials	13,396 mi	+686 mi	+722 mi
<b>TOTAL</b>	<b>16,945 mi</b>	<b>+1,130 mi</b>	<b>+1,175 mi</b>

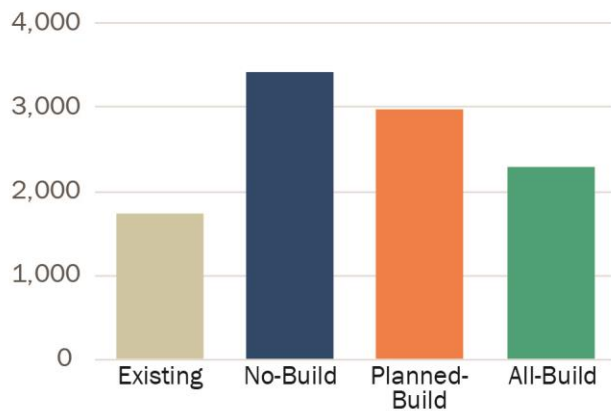
System	Existing (lane miles)	Planned Build (additional lane miles)	All Build (additional lane miles)
Tolled Lane Miles	394 mi	+194 mi	+419 mi
Cordon Charge *	\$0	\$0	\$6



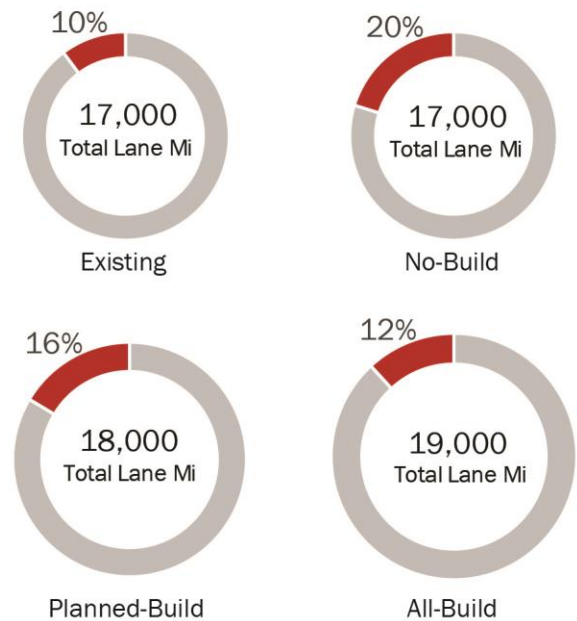
**New Tolled Facilities in All-Build**

- New Tolled Facilities
- Existing Roadways
- Interstates and other highways
- Arterial roadways

**Figure 11: Lane Miles of Congestion (A.M. Peak Hour)**



**Figure 12: Lane Miles of Congestion (A.M. Peak Hour)**

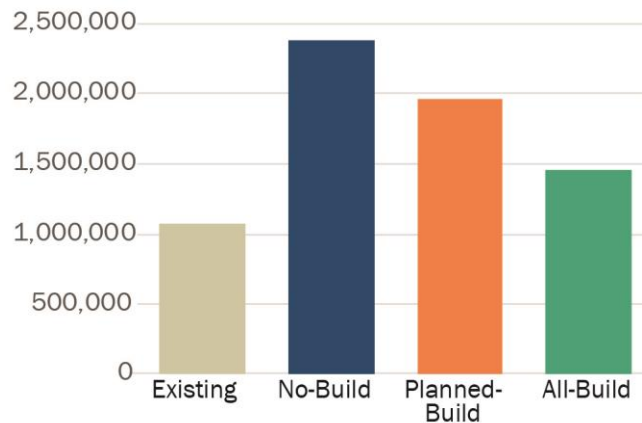


In contrast, the Planned-Build Scenario would increase congestion during the morning peak hour by 72%. More than 16% of lane miles would congested during the morning peak hour under Planned-Build. And if no highway capacity projects were constructed, congested lane miles would nearly double. With the No-Build Scenario, congested lane miles would represent 20% of all lane miles in the region during the morning peak hour, representing a 98% increase between 2015 and today.

### Vehicle hours of delay

The trends for time wasted in traffic are similar to the forecasts for lane miles of congestion (Figure 13). Essentially, delay would still get worse under All-Build, but the increase would be dampened.

**Figure 13: Total Daily Vehicle Hours of Delay**



Under the Planned-Build Scenario, total vehicle hours of delay would increase by 82%. In contrast, under the All-Build Scenario, total daily vehicle hours of delay would increase by 35%.

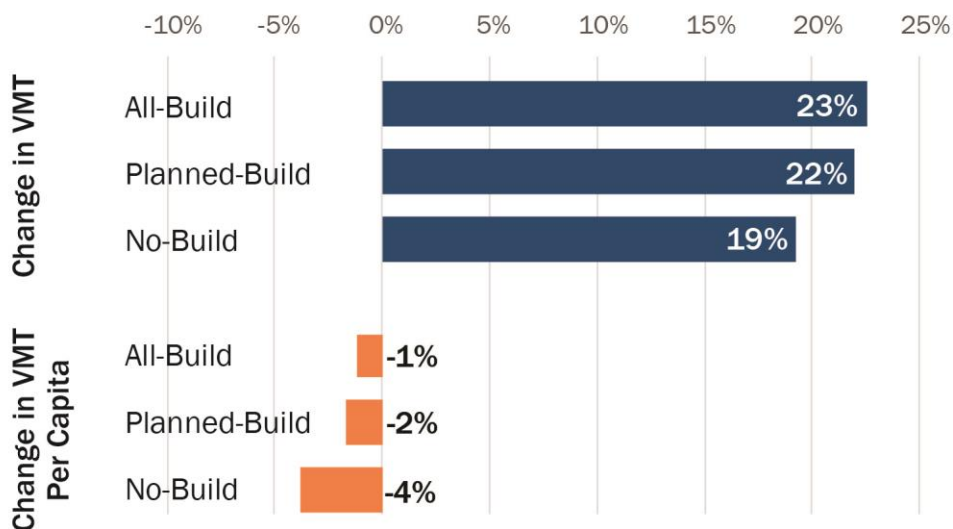
Bottlenecks, a major concern of the Priorities Plan, would be effectively targeted by the All-Build Scenario. In 2015, time wasted in the region’s Top 10 Bottlenecks during peak periods accounted for 25% of total vehicle hours of delay in the entire region. Under the All-Build Scenario, peak-hour delay would be 28% less in bottleneck locations, compared to the Planned-Build Scenario. This comparative reduction (between the Planned-Build and All-Build scenarios) is the same for the bottlenecks as for the system as a whole.

### Vehicle miles of travel

The amount of driving in the region, measured as vehicle hours of travel or VMT, would not be significantly affected by any of the scenarios (Figure 14). Under the All-Build and Planned-Build scenarios, VMT would increase slightly slower than population growth. Therefore, VMT per capita will decrease slightly.

With more forecast congestion, the No-Build Scenario would see the smallest increase in VMT—19% between now and 2040, representing a 4% reduction in VMT per capita.

**Figure 14: Vehicle Miles of Travel: Total and Per Capita**



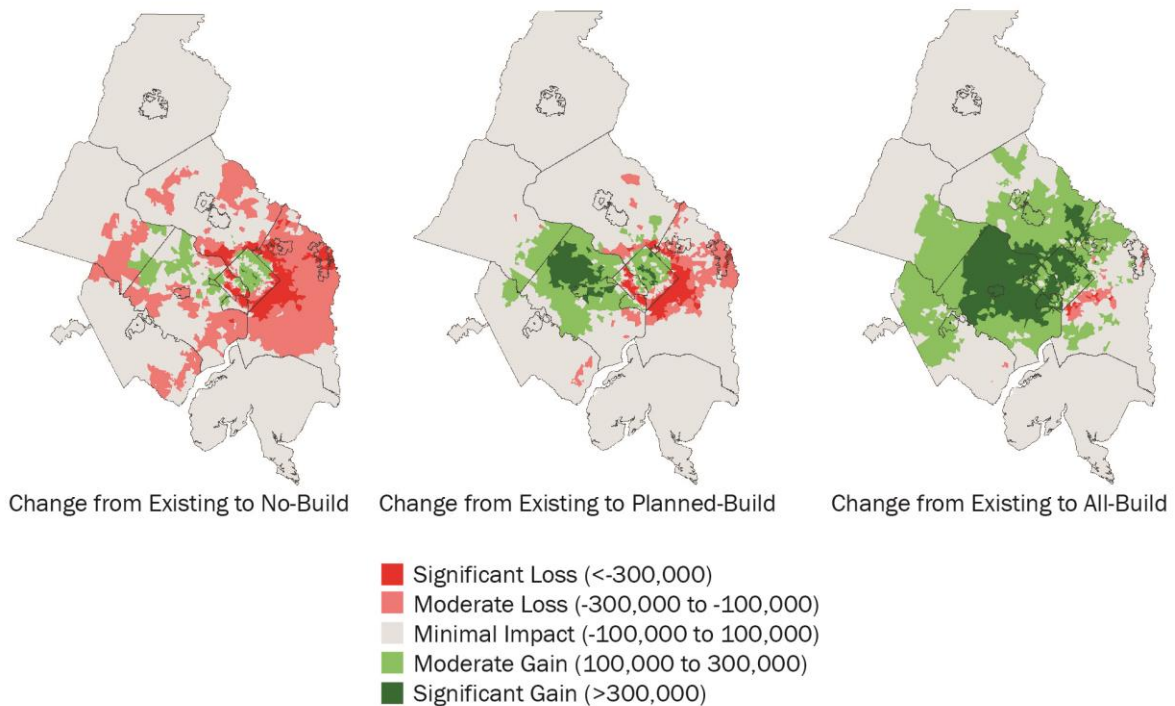


## Access to jobs by automobile

Under the Planned-Build Scenario, many parts of metropolitan Washington, mainly on the eastern side of the region and the inner suburbs, will see declines in access to jobs by auto within a 45-minute commute (Figure 15). These declines are likely the result of anticipated increases in roadway congestion and the fact that more of the new jobs anticipated between now and 2040 are forecast to be located on the western side of the region, more than 45 minutes from many locations on the eastern side.

By significantly expanding roadway capacity, the All-Build Scenario would largely mollify losses in job access by auto that were forecast under the Planned-Build Scenario. It is important to note that these access increases are not a result of land-use factors since the same land-use forecasts were used for both future scenarios. Conversely, if we build no new transportation capacity, as shown in the No-Build Scenario, the region could expect an acute decrease in access to jobs by auto.

**Figure 15: Access to Jobs by Auto Within 45 Minutes**



# Pedestrian and Bicycle Capacity

The Priorities Plan called for the region to make walking and biking more viable for more people. Accordingly, the plan called for the expansion of non-motorized transportation facilities.

## WHAT'S IN THE SCENARIOS?

The No-Build scenario includes the region's existing 645 miles of non-motorized bike trails and off-road/separated paths. Bike lanes and shared roadways were excluded from this inventory in order to identify the specific infrastructure which provides opportunities for biking and walking which provide the most access to the most people regardless of age or ability. In addition, the analysis in this section focuses on bike and pedestrian projects that can be quantified region-wide. Unfortunately, throughout the region, there is a lack of data about the presence and condition of sidewalks and other small-scale pedestrian amenities, like crosswalks and curb-cuts. For this reason, off-street trails and paths comprise the All-Build inventory of bicycle and pedestrian projects because data for those is more readily available.

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### RTTP STRATEGIES:

- Expand pedestrian infrastructure
- Expand bicycle infrastructure

The All-Build Scenario includes unfunded trails and paths from the TPB's Bicycle and Pedestrian Plan,<sup>10</sup> which identifies major bicycle and pedestrian projects the region wishes to carry out by 2040, as well as the projects jurisdictions submitted during the call for unfunded projects. Under the All-Build scenario, there would be 1,340 additional miles of pedestrian and bicycle infrastructure in the region. Those additional miles would add to the existing network of paths and trails, representing an increase of 307%. Some highlighted projects include the New York Avenue Trail in the District of Columbia, the Macarthur Boulevard Bikeway Improvement Segment 3 in Maryland, and the Route 234 Trail from Country Club Drive to Route 1 in Virginia.

There is no Planned-Build scenario for bicycle and pedestrian capacity expansion because the CLRP, which is the basis for the Planned-Build scenario analyzed in other sections of this report, only includes road and transit projects. The CLRP does not typically include a package of funded bicycle and pedestrian projects. Under federal requirements, the CLRP must include projects that may impact regional air quality, as measured through the TPB's travel demand models. Discrete pedestrian and bicycle projects, such as trails, typically do not have such impacts, and thus they are not included in the transportation network that is coded for the CLRP. Therefore, the modeled analysis for the CLRP (Planned-Build Scenario) did not include a package of pedestrian and bicycle, and similarly, the All-Build Scenario travel demand modeling did not include bicycle and pedestrian projects either

## HOW WOULD THE SCENARIOS AFFECT PEOPLE WHO WALK OR BIKE?

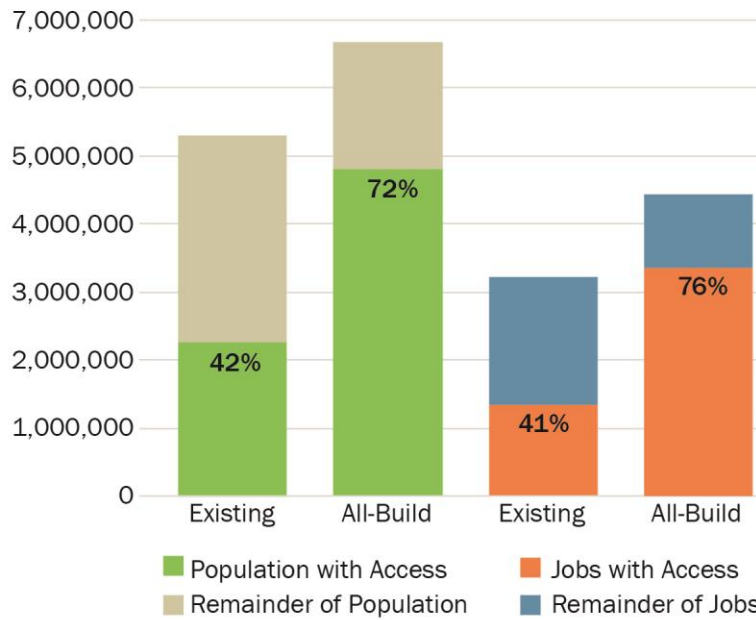
If we build all the Bike-Ped projects in the All-Build Scenario (Figure 16), 72% of people and 76% of jobs will be connected to paths in 2040.<sup>11</sup> In comparison, under existing conditions, 42% of people and 41% of jobs are connected to paths. By 2040 our region's population is expected to increase by

<sup>10</sup> The TPB's Bike-Ped Plan can be found at [http://www.mwcog.org/store/item.asp?PUBLICATION\\_ID=503](http://www.mwcog.org/store/item.asp?PUBLICATION_ID=503)

<sup>11</sup> Population and employment numbers come from TAZs which intersected with bicycle and pedestrian paths as described above.

24% but the population’s access to bike and pedestrian paths would increase at a higher rate of 112% under the All-Build scenario. Similarly, by 2040 our regional supply of jobs is expected to increase by 36% but job access to bike and pedestrian paths would increase at a higher rate of 155% under the All-Build scenario.

**Figure 16: Population and Jobs with Access to Ped/Bike Paths**



## Access to Transit & Circulation in Activity Centers

The Priorities Plan called for small capital improvements to promote circulation within Activity Centers and to provide first-mile and last-mile connections to transit. Such improvements typically emphasize walking and bicycling.

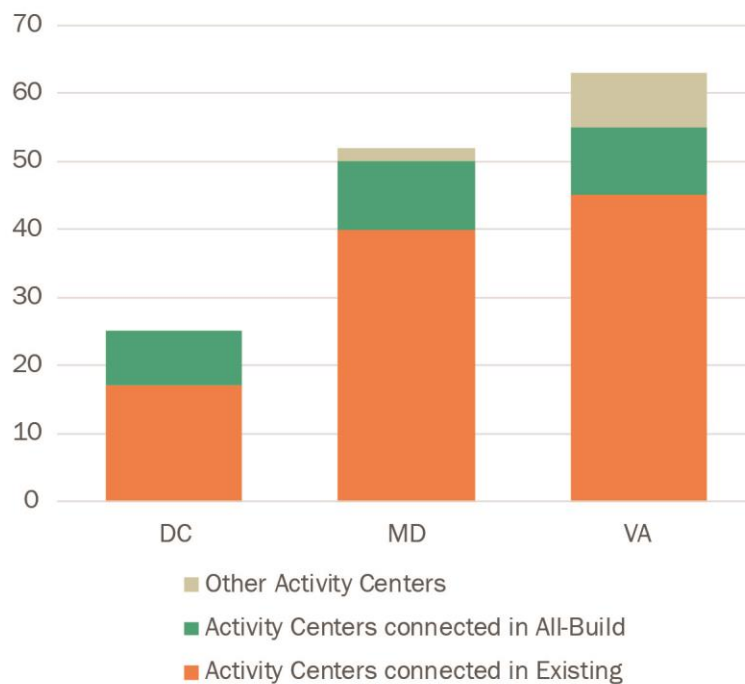
### WHAT'S IN THE SCENARIOS?

Bicycle and pedestrian projects in the All-Build scenario will provide additional access to transit in Activity Centers and will also enhance circulation within Activity Centers. Additionally, WMATA provided a dataset from their Metrorail Station Investment Strategy project which contains pedestrian and bicycle projects near Metrorail stations. That dataset contains over 900 miles of pedestrian and bicycle projects and many spot projects or improvements which were gathered from local plans throughout the region. These projects would improve access to Metrorail stations by adding or improving sidewalks, crosswalks, bicycle facilities and other bicycle and pedestrian infrastructure. WMATA's inventory of projects is added to the bicycle and pedestrian paths in the All-Build scenario for the purposes of this section. Similar to the previous section, the No-Build scenario consists of what is on the ground today, and there is no Planned-Build scenario.

### RTPP STRATEGIES:

- Improve access to transit stops and stations
- Enhance circulation within Activity Centers

**Figure 17: Activity Centers Connected to Ped/Bike Paths & Trails**



## HOW WOULD THE SCENARIOS AFFECT ACCESS TO TRANSIT?

Under the All-Build scenario, there would be a dramatic increase in Activity Centers connected to high quality paths. Transit stations are frequently located in Activity Centers, where population and jobs are concentrated - new bicycle and pedestrian connections to Activity Centers would connect more people to transit. Under the All-Build scenario 92% of the region's Activity Centers will be connected to regionally significant bike-pedestrian paths, compared to 72% today.

The inventory of bicycle and pedestrian projects near Metrorail stations consists of many projects that would improve the surrounding communities' access to Metro. There are many places throughout the region where homes and destinations are cut off from nearby transit due to a lack of local connectivity or a lack of safe routes to walk or bike. WMATA created an index to identify groups of projects that would have the greatest impact on potential ridership based on factors like safety, and hopes to champion those projects for implementation. One of WMATA's measures looks at projects that are within a half mile of a Metro station, but outside of the station's current half-mile walkshed, meaning that they are located in places that people cannot currently walk due to a lack of connectivity. If all these projects were built, there would be 122 additional miles of sidewalks and paths that are within a half mile of a Metro station in places that were previously unwalkable. This could greatly improve local access to Metro stations and therefore provide greater regionwide access to jobs and other services. The jurisdictions with the greatest length of projects to expand walksheds are Prince George's County (45 miles), Washington, DC (24 miles) and Fairfax County (22 miles).

## HOW WOULD THE SCENARIOS AFFECT CIRCULATION WITHIN ACTIVITY CENTERS?

Because most of the bike and pedestrian projects in the All-Build scenario are longer range paths, it is difficult to draw conclusions about how circulation within Activity Centers would be improved. However, WMATA's project inventory of projects to improve access to Metrorail can be used as a proxy for how the All-Build could affect circulation within Activity Centers. The projects in that inventory are meant to improve access to Metrorail stations, many of which are within Activity Centers. If all the projects in WMATA's inventory were built, circulation within many Activity Centers throughout the region could be greatly improved.

## Environmental Justice Considerations

The Priorities Plan called upon the region to enhance transportation options for traditionally disadvantaged populations. Such communities are found throughout Metropolitan Washington, although these populations are located in higher concentrations on the eastern side of the region.

### FORTHCOMING ANALYSIS

Environmental justice is a theme of the Priorities Plan and will be featured in future scenario analysis. TPB staff is currently developing a revised methodology to conduct an Environmental Justice analysis of the CLRP, which will be released in early 2017. This analysis will identify the impacts of the CLRP – essentially the Planned-Build Scenario – on low-income and minority populations. The new methodology will identify “Communities of Concern” throughout the region. These are locations with high concentrations of low-income and minority populations relative to regional averages. After the “Communities of Concern” map has been approved, staff will analyze the impacts of CLRP transportation investments on these communities compared to the rest of the region. In addition, this methodology will be used to examine the impacts of the All-Build Scenario on traditionally disadvantaged communities.

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#### **RTPP STRATEGY:**

- **Ensure accessibility for persons with disabilities, low incomes, and limited English proficiency.**

## SUMMARY OF FINDINGS

The results of this study raise numerous fascinating questions: What projects were included? What caused certain results? While it is tempting, we must be careful not to directly link our understanding of outcomes to specific projects or types of inputs. The scenarios were analyzed as complete packages and the results are derived from many complex, symbiotic factors.

But on the regional systems level, what do these extreme visions of the future— ranging from “do-nothing” to “do everything”— tell us about the opportunities we face over the coming decades? A few broad observations can be made:

### MAJOR CAPITAL INVESTMENTS WOULD MAKE A DIFFERENCE IN MOBILITY

The scenarios show that dramatically increasing the supply of transportation options would significantly change the way people get around in 2040. Under the All-Build Scenario, the number of miles of high-capacity transit would expand by 432 miles— an increase of 150% compared to today. Road capacity would also increase under the scenario— by 14% with the addition of 2,305 new lane miles.

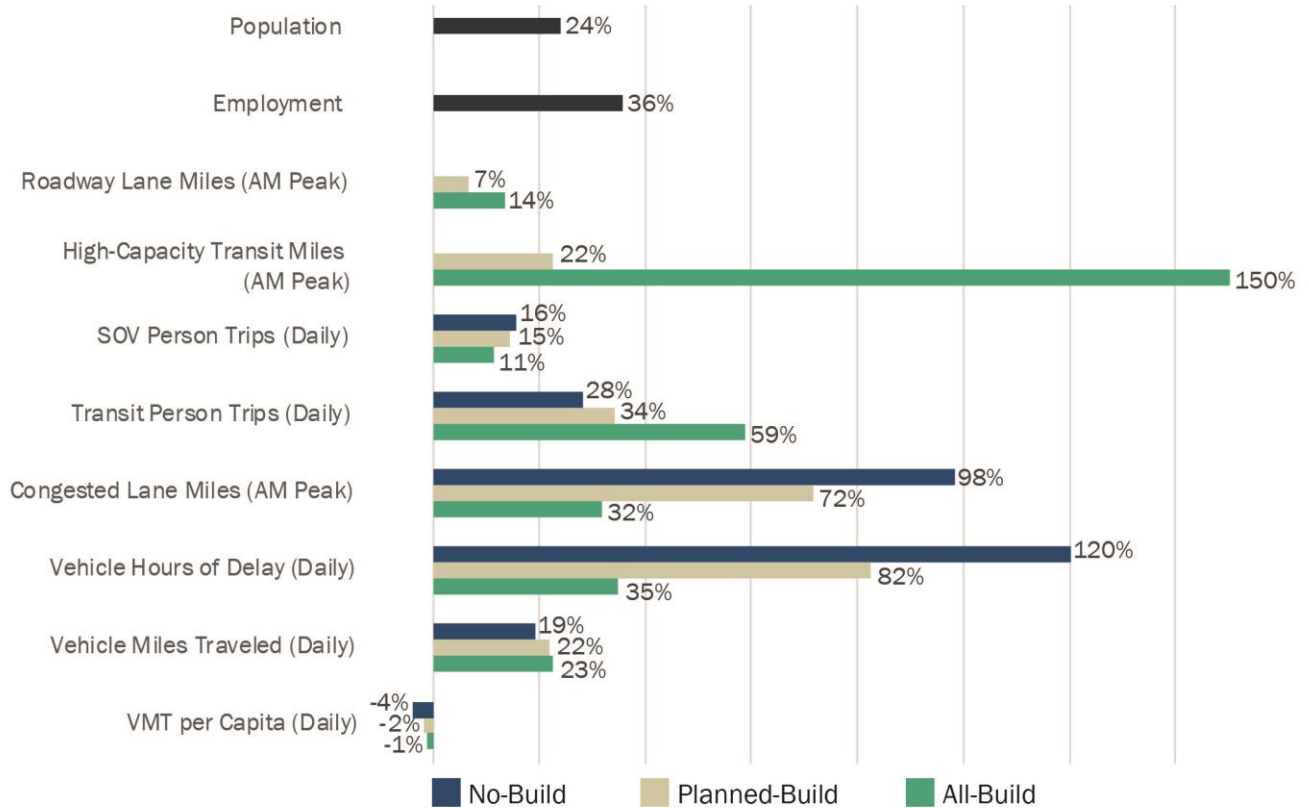
These capacity increases would be felt in a variety of ways. In some cases, they would accelerate positive trends that we already are anticipating. For example, transit ridership is expected to increase relative to today by 34% under the Planned-Build Scenario, but it would grow 59% under All-Build. In other cases, we might see a reversal of negative trends. Access to jobs by auto is forecast to decline for much of the region under the Planned-Build Scenario, but under the All-Build Scenario, more jobs would be accessible by auto in 2040 than today. And in some cases, negative trends might not be reversed, although they would be dampened by the additional capacity in the scenarios. Under the No-Build Scenario, for example, the number of congested lane miles during the morning rush hour would nearly double (98% increase). Under the Planned-Build option, congested lane miles would increase by 72%, while they would increase only 32% under All-Build.

These changes are impressive, especially when considering that the scenarios were based solely on variations in transportation capacity. The analysis did not consider different forecasts for land use, which is a major factor in determining transportation demand.

### BUT NEW CAPACITY ALONE WON'T SOLVE OUR PROBLEMS

While it can make a difference, new transportation capacity is not likely to be enough. “We cannot build our way out of congestion” is an oft-repeated phrase that seems to be validated by the analysis in this study. As noted above, the All-Build Scenario would reduce the rate of growth in congestion, but reversing it will be very difficult through new capacity alone.

**Figure 18: Changes in System Performance, 2015-2040**



Clearly if we want to “solve” our transportation problems we will need to manage transportation demand as well as provide new supply. Making changes in land-use patterns can have a profound impact on demand. As noted earlier, this study did not vary land-use inputs for different scenarios, but it is important to note that the job and population forecasts that were used for all three scenarios show that the region is moving away from the dispersed land-use patterns of the past. Those forecasts indicate that the majority of new growth—76% of new jobs and 59% of new households—will occur in Regional Activity Centers.

Pricing mechanisms, including tolls, could also curtail demand. The All-Build Scenario did feature some major road pricing projects— most notably a cordon charge in downtown D.C. and 419 miles of managed lanes throughout the region. These would be bold changes, although pricing advocates would likely argue that much deeper reductions in driving would be achieved if tolls were established even more pervasively.

One lesson of this analysis might be that we need to temper our expectations when we examine new capacity, and perhaps we need to find new ways to measure success. For example, some participants in the TPB process have suggested certain levels of congestion are acceptable or



perhaps even good as a byproduct of economic vitality. The more useful question for planners could be how to ensure that congestion is not debilitating.

## **NEXT STEP: IDENTIFYING PRIORITY PROJECTS**

This study was framed to include projects that have some level of viability. The All-Build inventory only included capital improvements that were already featured in the approved plans of the TPB's member jurisdictions. Yet even though local and state governments have officially approved the projects in the All-Build Scenario, the likelihood that they will all be constructed in the next 25 years is extremely low. The cost of the scenario— perhaps \$100 billion—is simply too enormous.

The next phase of this planning process will bring together regional leaders, stakeholders, and residents to determine which of the All-Build projects are most urgent and most compelling. The All-Build inventory represents a master list—a source for further planning and discussion. The challenge now is for the region to identify a limited number of projects that we can jointly get behind, demonstrating to ourselves and to each other that we can pro-actively take charge of our future.