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

Date: April 17, 2013

Time: 12 noon

Place: COG Board Room

Meeting of the TPB Bus on Shoulder Task Force: From 10:00 to 11:45 am, the task force will meet in Rooms 4-5 on the first floor. The agenda will include a discussion of an analysis of the feasibility of bus on shoulder operations on selected corridors and routes in the region.

#### AGENDA (BEGINS PROMPTLY AT NOON)

12 noon	Public Comment on TPB Procedures and Activities
	Interested members of the public will be given the opportunity to make brief comments on transportation issues under consideration by the TPB. Each speaker will be allowed up to three minutes to present his or her views. Board members will have an opportunity to ask questions of the speakers, and to engage in limited discussion. Speakers are asked to bring written copies of their remarks (65 copies) for distribution at the meeting.
12:20 pm	Approval of Minutes of March 20 Meeting    Chairman York
12:25 pm	3. Report of Technical Committee
12:30 pm	4. Report of the Citizen Advisory Committee
	Chair, Citizens Advisory Committee
12:40 pm	5. Report of Steering Committee
12:45 pm	6. Chair's Remarks Chairman York

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

#### **ACTION ITEMS**

12:50 pm 7. Approval of Regional Bike to Work Day 2013 Proclamation ......Mr. Ramfos, DTP In an effort to increase public awareness of the viability of bicycle commuting in the Washington region, regional Bike to Work Day events are being organized at seventy-two locations in the region for Friday May 17. These events will encourage the business community and other regional decisionmakers to support increased bicycle commuting through bicycle-friendly policies and initiatives. **Action**: Approve the enclosed Bike to Work Day 2013 Proclamation. 12:55 pm 8. **Briefing on TPB Congestion Mitigation and Air Quality Responsibilities** under MAP-21 and Approval of a TPB Letter to the US Department of Transportation (USDOT) Regarding Performance Measures and Targets for Congestion in the Washington Region ......Mr. Kirby MAP-21 calls for MPOs, state DOTs and public transportation providers to establish and use a performance-based approach to transportation decisionmaking to support national goals. It calls for USDOT to establish performance measures related to national goals for planning processes and for state DOTs, public transportation providers and MPOs to establish performance targets. The Board will be briefed on the responsibilities of the TPB for measures and targets related to congestion mitigation and air quality, and asked to approve the enclosed letter to the Secretary of the USDOT regarding the establishment of performance measures and targets for congestion in the Washington region. **Action**: Approve the enclosed letter to the Secretary of the USDOT regarding the establishment of performance measures and targets for congestion in the Washington region. **INFORMATION ITEMS** Briefing on Activities to Increase Ridership on the Metrobus System 1:10 pm 9. ......Mr. Requa, WMATA In response to a request at the February 20 TPB meeting, the Board will be briefed on on-going activities and initiatives to increase ridership on the Metrobus system. 10. Briefing on Update of the CLRP Aspirations Scenario 1:30 pm ...... Mr. Kirby The CLRP Aspirations Scenario, which was initially built off of the 2008 CLRP and reported to the TPB in October 2011, integrates a regional network of toll lanes and bus rapid transit with more concentrated growth in mixed-use activity centers. The Board will be briefed on the results of an update to this scenario utilizing the 2012 CLRP as the baseline, along with the Version 2.3 travel demand model and a more detailed transportation analysis zone structure. 1:45 pm 11. Update on TPB Bus on Shoulder Task Force Meeting Co-Chairs of TPB Bus on Shoulder Task Force At the September 2012 meeting, the Board established the Bus on Shoulder

Task Force. The Board will be updated on the third meeting of the task force which was held prior to today's TPB meeting.

#### **NOTICE ITEM**

1:50 pm 12. Notice of Proposed Amendment to Update Projects and Funding in the District of Columbia Section of the FY 2013-2018 Transportation Improvement Program (TIP)

Mr. Zimbabwe Notice is provided that the District Department of Transportation (DDOT) has requested an amendment to update projects and funding in the District section of the FY 2013-2018 TIP. The Board will be asked to approve this amendment at the May 15 meeting.

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

2:00 pm 14. **Adjourn** 

#### 2 hours

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

#### NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD

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

#### MINUTES OF THE TRANSPORTATION PLANNING BOARD March 20, 2013

#### Members and Alternates Present

Monica Backmon, Prince William County

Melissa Barlow, FTA

Marc Elrich, Montgomery County

Dan Emerine, DC Office of Planning

Gary Erenrich, Montgomery County

Lyn Erickson, MDOT

Jason Groth, Charles County

Rene'e Hamilton, VDOT

Sandra Jackson, FHWA

John D. Jenkins, Prince William County

Shyam Kannan, WMATA

Carol Krimm, City of Frederick

Bill Lebegern, MWAA

Tim Lovain, City of Alexandria

Michael May, Prince William County

Phil Mendelson, DC Council

Bridget D. Newton, City of Rockville

Mark Rawlings, DC-DOT

Rodney Roberts, City of Greenbelt

Paul Smith, Frederick County

Linda Smyth, Fairfax County Board of Supervisors

Kanathur Srikanth, VDOT

Todd M. Turner, City of Bowie

Jonathan Way, Manassas City

Victor Weissberg, Prince George's County

Patrick Wojahn, City of College Park

Scott York, Loudoun County

Sam Zimbabwe, DDOT

Chris Zimmerman, Arlington County

#### **MWCOG Staff and Others Present**

Ron Kirby
Gerald Miller
Robert Griffiths
Nicholas Ramfos
Andrew Meese
Elena Constantine
Rich Roisman
Eric Randall
Jane Posey
Andrew Austin
Wendy Klancher
John Swanson
Mark Moran

Deborah Kerson Bilek

Sarah Crawford Ben Hampton Bryan Hayes Debbie Leigh Deborah Etheridge

Chuck Bean COG/EO
Lewis Miller COG/OPA
Paul DesJardin COG/DCPS
Betsy Self COG/DPSH
Stuart Freudberg COG/DEP
Bill Orleans HACK
Randy Carroll MDE

Judi Gold Councilmember Bowser's Office

Patrick Durany Prince William County

Christine Green Greater Washington Region Safe Routesto School Network

Wendy Duren Arlington County Commuter Services
Katrina Tucker Tri-County Council for Southern Maryland

Pierre Holloman City of Alexandria

Nick Alexandrow PRTC
Danielle Wesolek WMATA

Calvin Lam Fairfax County DOT
Tom Jacobs UMD – CATT

Taran Hutchinson MATOC William Truong MATOC

Bob Chase Northern Virginia Transportation Alliance

Sean Egan MD DOT

Stephanie Leyka Transportation Transit Raleigh/Durham

Jasmy Methipara

#### 1. Public Comment on TPB Procedures and Activities

Mr. Chase applauded the improvements to regional air quality over the past 20 years, even as the population and vehicle miles traveled in the area continued to grow. He stated that the fastest growing jurisdictions in the region are located outside the beltway, which he said is a trend that he anticipates continuing for years. He encouraged employers to move beyond the beltway, which he said would reduce commutes and strengthen the regional economy. He also encouraged regional planners to emphasize projects that offer the most cost-effective solutions by supporting road and transit investments on facilities and services that promote the greatest time savings and congestion reduction. Copies of his remarks were submitted for the record.

#### 2. Approval of Minutes of February 20 Meeting

Mr. Turner moved to approve the minutes from the February 20 TPB Meeting.

Ms. Smyth seconded the motion, which passed unanimously.

#### 3. Report of Technical Committee

Ms. Erickson said that the Technical Committee met on March 1 and discussed eight items on the TPB's agenda, including: the air quality conformity amendment that will satisfy the new EPA designation requirements; the Unified Planning Work Program for FY 2014; the Commuter Connections Work Program for FY 2014; and the next steps for designating the MWCOG and the TPB as designated recipients for the new MAP-21 5310 program. The Technical Committee also received briefings on MATOC, the MWCOG cooperative forecasting process, and the focused geographic sub-area household travel analysis results. She mentioned that four other items were discussed that were not included on the TPB agenda. These items were: a briefing on the new Transportation Alternatives Program under MAP-21; the Freight Around the Region project; the Street Smart Pedestrian and Bicycle Safety Campaign; and MDOT's update of the statewide long-range transportation plan and bicycle and pedestrian master plan.

#### 4. Report of the Citizen Advisory Committee

Mr. Still thanked the TPB and said that it was an honor to be the 2013 CAC chair. He provided a brief history of his three years on the CAC, and outlined his experience with transportation commissions in Fairfax County. He currently works in airline fleet and network planning. He said that the first CAC meeting with the new members took place on March 20. He characterized this new Committee as a lively, spirited, and intelligent group. He reported all 15 members and most of the alternates were present, and that the meeting started with an opportunity for the members to get to know each other so that the group can learn to work together. He said the overall CAC goal for 2013 is to be action oriented, while also serving as a focus group for the TPB. He said that it is important that the CAC be informed by TPB staff. He provided an

overview of past CAC successes, including its advocacy on issues like the Regional Complete Streets Policy and the Priorities Plan. He emphasized that and he would like the CAC to be more involved in outreach.

He said that the CAC meeting agenda included a TPB staff presentation on the regional freight plan, because many people on the CAC were not familiar with freight issues in the area. He said that the CAC was interested in the interaction between increased freight in the region and other transportation modes, including private automobiles and bicycles. He identified public outreach about regional freight as a potentially important way to raise awareness about freight plans for the future. He said the meeting also included a discussion of what the CAC's goals for the year should be, which he said included: continuing momentum on existing projects like the Regional Transportation Priorities Plan and the Transportation Alternatives Program; and new projects like developing key performance measurement for connectivity within modes and across modes.

#### 5. Report of the Steering Committee

Mr. Kirby said that the Steering Committee met on March 1 and approved three resolutions that add funding to projects in the FY 2013-2018 Transportation Improvement Program. He reviewed the contents of the letters packet, which included a press release that COG distributed regarding the transportation bill passed by the Virginia state legislature, and two press releases announcing the expansion of the District's rollDC program for wheelchair-accessible taxicabs. He stated that the packet also contained two letters of support for the amendment to the Additional Air Quality Conformity Analysis.

#### 6. Chair's Remarks

Chair York commented on the transportation legislation recently passed by the Commonwealth of Virginia. He asked Mr. Kirby to draft a letter to send to Governor McDonnell and the General Assembly acknowledging the passing of this new legislation. Mr. York said that although there is still work to do to improve transportation in northern Virginia, the funding that this legislation makes available will benefit outstanding transportation projects in Loudoun County.

Mr. Turner mentioned that Maryland General Assembly is considering the Transportation Infrastructure Investment Act of 2013. He informed the TPB that the proposed legislation incorporates some ideas that the TPB proposed to Virginia, Maryland, and the District. He said that he is hopeful that this bill will become law.

Mr. Turner made a motion in support of submitting a letter to the Governor of Virginia in recognition of the recently passed legislation.

Ms. Krimm seconded the motion. The motion passed unanimously.

#### **ACTION ITEMS**

# 7. Approval of Amendment to the Additional Air Quality Conformity Analysis Conducted to Respond to the EPA Designation of the Washington Region under the 2008 Ozone National Ambient Air Quality Standards (NAAQS)

Ms. Posey said that in December 2012 TPB approved an Air Quality Conformity Analysis that was required by the EPA's 2008 Ozone NAAQS. She said that part of this analysis included an air quality forecast of the 2012 CLRP and the FY2013-2018 TIP. She said that the EPA has since changed the EPA mobile budgets, and that the TPB is now required to amend the approved analysis to show that the mobile emissions for the 2012 CLRP and FY2013-2018 TIP are below the new EPA mobile budgets. She noted that two letters were submitted that comment on the proposed amendment, and said that those letters were included in mail out.

Chair York moved to approve Resolution R11-2013 to approve an amendment to the recent 2015 forecast year air quality conformity analysis of the 2012 CLRP and FY2013-2018 TIP which was conducted to satisfy the designation requirements of the EPA 2008 Ozone NAAOS.

Mr. Zimmerman seconded the motion, which passed unanimously.

## 8. Approval of Amendments to the FY 2013 Unified Planning Work Program (UPWP), and Approval of the FY 2013 UPWP Carryover Funding to FY 2014

Mr. Kirby explained that it is necessary to update the UPWP annually so that projects that will not be completed before the conclusion of the current fiscal year can continue into the next fiscal year. He said that the FY 2013 UPWP needs to be amended to move some incomplete projects to the FY 2014 UPWP. He said that the FY 2013 UPWP also needs to be amended to move the funds to the UPWP for FY2014.

Mr. Zimmerman asked if the Board could approve the amendments for agenda items eight, nine, and 10 as one block because they are all related to the work program.

Mr. Kirby responded that items eight and nine are related to the UPWP and that Item 10 is about the Commuter Connections work program.

Mr. Zimmerman asked if items eight and nine were part of the same work program.

Mr. Kirby responded that items eight and nine address planning work programs that start on July 1, and said they could be grouped together.

Chair York supported combining items eight and nine.

Mr. Zimmerman moved that the Board approve the Resolutions R12-2013 and R13-2013 to approve the amendments to the FY 2013 UPWP and the FY 2013 carryover funding to FY 2014,

and to approve the final FY 2014 UPWP, put forward under Items 8 and 9.

Ms. Smyth seconded the motion, which passed unanimously.

#### 9. Approval of FY 2014 Unified Planning Work Program (UPWP)

Item nine was approved as part of the previous agenda item.

#### 10. Approval of FY 2014 Commuter Connections Work Program (CCWP)

Mr. Ramfos summarized the draft of the Commuter Connections FY 2014 work program that was included in the mailout. He said that this work program was presented to the TPB last month, and the public comment period has concluded. He explained that there was one change made to the work program from the previous month, which he said referenced funds that were allocated to staff a guaranteed ride home customer satisfaction survey in the Baltimore area. He said that data collection activities would occur during fiscal year 2014, and the findings of the survey will be reported in fiscal year 2015.

Mr. Zimmerman moved the approval of Resolution R15-2013 to approve the final FY 2014 CCWP.

Mr. Todd seconded the motion, which passed unanimously.

# 11. Approval of Request for the Metropolitan Washington Council of Governments (COG), as the Administrative Agent for the TPB, to Become the Designated Recipient for the New Section 5310 Enhanced Mobility Program under MAP-21 in the Washington Region

Ms. Klancher said that the TPB is being asked to approve a resolution authorizing Chair York to send a letter to Mayor Gray, Governor McDonnell, and Governor O'Malley requesting that they designate COG as TPB's administrative agent to be the designated recipient for this new MAP-21 program. The program supports operating and capital transportation services that would assist persons with disabilities and older adults in meeting their transportation needs. She said this request is based upon the TPB's successful implementation of the JARC and New Freedom programs. She said staff worked closely with the District Department of Transportation, the Maryland Transit Administration, and the Virginia Department of Rail and Public Transportation to develop an implementation plan for this new program, which will be overseen by the TPB's Human Service Transportation Coordination Task Force. She added that the TPB will continue to administer the Job Access Reverse Commute (JARC) and New Freedom programs with the expectation that all SAFETEA-LU funding will be expended this year. She said the current solicitation for those programs ends on April 17.

Mr. Zimmerman said he has many questions about the program administration and is skeptical

that the new structure of the old programs will be a good thing for the region. He said the only way the region will get this funding is to take this action, but that he does have some questions and a request. He said it would be helpful if staff would develop a document that clearly explains what is happening under the new program and how it is different from the old program structure. He said this document should explain how the change in programs will affect what agencies will be able to do with the funding and how they will be able to apply for the funding. He said the document should be clear enough, yet detailed enough, so that the average politician can understand it, particularly those who do not serve on the TPB and are not involved in transportation, but who have interests in issues related to the populations served through this program.

Mr. Zimmerman made a motion to adopt resolution R16-2013. Mr. Wojahn seconded the motion.

Mr. Erenrich asked for clarification on future funding for the JARC program. He said it is his understanding that it will no longer be included in the funding the TPB administers, but that it will be available and eligible from the formula funding for which WMATA is the designated recipient.

Ms. Klancher said that the JARC program is eliminated under MAP-21. She said some additional funds for that purpose were added to the urbanized area 5307 program for which WMATA is the designated recipient and that the law says WMATA may spend that funding on JARC activities.

Mr. Erenrich requested that as the TPB sends this letter requesting that it be the designated recipient of the 5310 funding, it also send a letter to WMATA asking for a process for which the region may submit requests for the additional funding allocated to WMATA for JARC activities. He added that JARC activities have been successful throughout the region and that this should not be considered additional funding for 5307, but that it is new funding that is eligible for JARC activities throughout the region.

Mr. Zimmerman accepted the amendment to his motion.

Mr. Wojahn said that, as chair of the Human Service Transportation Coordination Task Force, he appreciates all the time and effort that went into developing this arrangement for the designation of this funding. He said there are a number of complexities within this program, which essentially consolidates two existing programs. He said staff has done a good job addressing the interests of all those vested in this program.

The motion passed unanimously.

#### **INFORMATION ITEMS**

## 12. Update on the Metropolitan Area Transportation Operations Coordination (MATOC) Program

Mr. Jacobs provided a shortened presentation on the Metropolitan Area Transportation Operations Coordination (MATOC) Program, noting that more detailed information about the program could be found in the meeting materials. He highlighted several aspects of the program, including day-to-day operations, operations during incidents or events, and the outlook for the MATOC program.

Mr. Jacobs said the annual budget for MATOC is \$1.2 million and is funded by DDOT, MDOT, and VDOT. He said the funding supports four core program elements: operations; the Regional Integrated Transportation Information System (RITIS) operations and management; RITIS enhancements; and some special studies conducted by staff. He said there are currently 2000 registered users of RITIS, representing transportation, public safety, emergency management, and other disciplines. He said that one of the key benefits of the MATOC program is the strengthened relationship with emergency management officials and transportation agencies.

Mr. Jacobs summarized some key enhancements made to the program as a result of the January 26, 2011 winter storm. He said that MATOC now has an alert Twitter feed and a roam secure network. He summarized how MATOC staff responds to large-scale regional incidents and provides examples of how MATOC was involved during Hurricane Sandy and the 2012 presidential inauguration. He said MATOC staff notifies all agencies about what is happening across the transportation system. He said that during weather events or other planned events, staff conducts pre-event operations and ramps up to 24/7 staffing during the event.

Mr. Jacobs said staff will continue to build relationship with agency partners, conduct RITIS training, and perform a regional construction coordination study. He referenced several incidents that occurred earlier in the week and how MATOC staff provided information in a coordinated fashion. He said the a key value of the MATOC program is to be able to view incidents through a regional lens and provide information and recommendations that take into account the entire regional transportation network.

Mr. Mendelson asked how successful the MATOC program is in making recommendations to the departments of transportation in terms of having those recommendations carried out.

Mr. Jacobs said the recommendations have been well-received and implemented to a large degree, due in part to the relationships that have been built over time between the MATOC staff and operations staff at various agencies. He said agencies likely verify through their own information the recommendations provided to them before they implement the suggestions.

Mr. Mendelson referred to an event that occurred earlier in the week and asked if MATOC was making a number of recommendations to the agency staff.

Mr. Jacobs said that the nature of the event and the RITIS tool available around the region allowed agency staff to view one another's notes and responses as they developed on the incident. He said the information exchange occurs naturally through the tool. He said the MATOC operations chief, Mr. Hutchinson, was in attendance and could elaborate.

Mr. Hutchinson said most of the events that occurred in the previous few days were localized. He said MATOC staff was able to see the decision-making and interaction between agencies through RITIS. He said agencies were coordinating a response through the tool, but the incidents were cleared before the response measures became necessary.

Mr. Mendelson asked for clarification that MATOC staff could see the cooperation between the different jurisdictions.

Mr. Hutchinson said that is absolutely the case.

Mr. Mendelson asked about the status of 24/7 operations for MATOC. He asked if permanent 24/7 operations would be possible with more funding.

Mr. Jacobs said the ability to conduct 24/7 operations is a function of money, but that the necessity of 24/7 operations has evolved as MATOC was being implemented. He said that it was the goal to have 24/7 operations early in the planning phases of the program. He said that as the program was implemented, the focus became on peak periods when the highest amount of traffic is on the roads. He said MATOC staff works closely with the Regional Incident Coordination Committee, which is a 24/7 operation. He said it has been a question as to whether or not there is a need for monitoring in the overnight hours when there are not many traffic incidents. He said that MATOC staff is on call and can open operations from remote locations within 15 minutes of notification.

Mr. Mendelson confirmed that all the jurisdictions are providing their share of the funding and that money is not an issue.

Mr. Jacobs said that is correct.

Mr. Zimmerman said the MATOC program is certainly one of the most important programs in the region that nobody knows about. He said there have been a number of high-profile incidents that demonstrate the reason for greater regional coordination using information technology. He said that when the transportation network and interagency coordination don't work, people talk about it. He said it is harder to convey that delays are not happening because of good coordination – people do not talk about things that are functioning as they should. He said it is important to find a way for these efforts to be better understood in how they are working and making a difference, as well as critically thinking about how operations could be even better. He said he would like to see how the TPB could develop some kind of performance measure that would help demonstrate the benefits of the program, and he referenced information in the materials detailing \$13 million in travel time savings. He said the TPB and the public needs more examples such as this, but also more event-specific examples that measure the program's impact

and effectiveness. He said publicizing this information may bring the program under greater scrutiny, but it may also result in a greater appreciation for the things that are working. He added that it may also make it easier to secure the resources that the TPB struggled with for so many years to get the program off the ground.

#### 13. Briefing on the COG Cooperative Forecasting Process

Mr. DesJardins, referring to a PowerPoint presentation, described how the COG Cooperative Forecasting Process develops population, household, and employment forecasts for use in the regional transportation planning process. He said the cooperative forecasting program is a longstanding technical process carried out by COG that is overseen by the local government planning directors to provide a consistent set of local and regional population, household, and job growth projections. He said that major projection updates, or "Rounds" are conducted about every four years, with more modest updates conducted on an annual basis. He said that Round 8.2 will be used for the conformity analysis to be approved this year. He presented a conceptual design diagram and provided an explanation for how the "top-down and bottom up" forecasting process works. He said a regional econometric model gives the regional totals at the top, and the local forecasts conducted by each jurisdiction are from the bottom. There is then a reconciliation of the regional model projections with the local forecasts. He summarized the reconciliation for the Draft Round 8.2 forecasts and said they are within about 3 percent.

Mr. Griffiths said that TPB staff works closely with Mr. DesJardin and his staff to ensure that accurate transportation planning assumptions are properly derived from current and future population and employment estimates, which is a requirement for the federally mandated air quality conformity analysis conducted by the TPB. He added that assumptions about future development must be consistent with plans for the future transportation system. He said that TPB staff coordinates with the COG Cooperative Forecasting Committee to provide an assessment of the previous CLRP, as well as a briefing on anticipated major new projects, to ensure consistency in the forecasting process. He added that TPB staff works with jurisdiction staff to make sure that planned transportation improvements and associated land-use developments are incorporated into the cooperative forecast.

Mr. Griffiths also provided an overview of a typical schedule for a Cooperative Forecasting Round Update. He emphasized that the Cooperative Forecasts are not necessarily inevitable or preferred, but instead are projections that, absent future policy changes, represent a probable outcome based on current expectations. He added that for each major round, the econometric model is reviewed and a new set of benchmark projections for the 30-year forecasting period are developed based on the best available information. He mentioned that staff also relies on periodic Census data and household travel surveys to help account for changes in demographic trends.

Mr. Griffiths said that issues of uncertainty can be addressed with scenario analysis, which looks at possible future shifts in land use and changes in existing trends. He referred to the regional mobility and accessibility study that TPB conducted in 2006, and the TPB scenario study in 2010

that looked at comprehensive land-use and transportation scenarios based on the 2008 CLRP, as ways to examine future uncertainty. He concluded by saying that the TPB is scheduled to be briefed in April on the results of an update of the CLRP Aspirations Scenario with the Round 8.1 forecast, and with the new TPB transportation model that has a new finer grain transportation analysis zone system.

Mr. Elrich expressed discontent about the way employment and household forecasts are used. He expressed concern, particularly for Montgomery County, that some people do not recognize that these regional projections already take into account local planning efforts to accommodate future household and job growth.

Mr. Griffiths said that such issues have been discussed in the Cooperative Forecasting Committee. He added that the region, collectively, has not provided enough housing opportunities for workers who come to the region, particularly when it comes to affordable housing. He said that long commutes result from this dynamic, which adds stress to the regional transportation system.

Mr. Elrich replied that the demand for housing is based on income and the ability to pay for housing. He added that even if jurisdictions provided for housing by changing zoning in local plans, household income is a major factor that generates demand for – and subsequent building of – new housing. He emphasized this as a major conundrum of the forecasting process.

Mr. Griffiths replied that there is a general recognition among most jurisdictions that there is not enough provision of housing in local plans.

Mr. DesJardin commented that the Round 7 forecast added 130,000 additional households in the region to address the housing issue.

Mr. Griffiths emphasized the role of supply and demand, stating that collectively providing more housing opportunities will result in a lower cost of housing. Conversely, he said that providing fewer housing opportunities will result in driving growth further out of the region, where the cost of housing is more affordable, which causes long commutes.

Mr. Elrich commented that Montgomery County recently went through an explosive period of growth, and is now in the midst of a major recession.

Mr. Griffiths said that the demand for housing remains high throughout the region, and acknowledged that it often takes two income earners to support the high cost of housing.

Mr. Zimmerman, agreeing with Mr. Elrich, said that it takes less time to move to the region than it does to build a housing unit. He praised the presentation, and emphasized the importance for TPB members to understand how these forecasts are made, and the policy implications they present. He echoed Mr. Elrich's concerns about issues with the aggregation of data that combines individual jurisdictions' asprirational plans to create a regional forecast. He commented that, at the local level, it is appropriate the make assumptions about growth in planning, and said that

aggregating this information to develop a regional growth projection may not reliably predict what will happen in the future. He also addressed the limitations of a forecasting process that is reliant on previous data, which he said does not capture long-term shifts. He said a fundamental problem of this process is that forecasting is necessary to plan, but that planning is also necessary to forecast. He concluded by stating that there needs to be a more rational policy in place for regional planning in order to make regional forecasts relevant.

Mr. Kannan praised the presentation as one that provides a lot of information for both a lay audience and for a professional. He said he was encouraged that the TPB will be revisiting work from its Aspirations Scenario Study.

Mr. Kirby said that the Cooperative Forecasts are the best estimate of what may happen and that they reflect, to the greatest extent possible, the transportation investments that the region is making. He added that the forecasts are not necessarily optimal projections of future growth in terms of regional goals, which he said is one reason for considering scenario studies in the forecasting process.

Mr. Kannan addressed Mr. Elrich's concerns about government's fiscal capacity, and suggested two quantitative approaches: (1) consideration of increasing employment densities within office space, and (2) consideration of housing density, specifically the national trend of decreasing household and unit size.

Mr. Elrich responded to Mr. Kannan's suggested by asking if there was a way to frame these challenges beyond the number of housing units or vehicles. He said that optimum growth should be linked to a jurisdiction's physical ability to provide the required support for growth, which he said goes beyond measuring people and cars.

Mr. Kannan said this was a fascinating idea, and pointed out that physical impact could potentially be tied into the differing scenario outputs.

Mr. Kirby said that schools and the cost of local infrastructure are things to consider when analyzing demand on a transportation system. He said that congestion forecasts have been fairly well on target over the last 20 years. He acknowledged that there are forces that can't be accounted for, but said that these forecasts provide a pretty good benchmark for analyzing likely outcomes.

Chair York said he appreciated the conversation and its challenges. He pointed to the growth that Loudoun and Prince William Counties have experienced, and said it would be interesting to have a discussion about whether a jurisdiction considers housing and other needs when rezoning to attract businesses, or if that jurisdictions relies on other jurisdictions in the region to provide housing and related services. He emphasized the support and services that are needed to accommodate economic growth, and pointed out that Loudoun County has built 50 schools during his time on the County Board in order to keep up with regional growth.

## 14. Briefing on Household Travel Characteristics and Behavior in Seven Focused Geographic Subareas of the Region

Mr. Griffiths briefed the Board on the initial findings of a new round of household travel surveys in seven focused geographic subareas of the region. He provided Board members with copies of the full presentation, but only spoke to a subset of the slides in the interest of time. He explained the purpose of the focused surveys: to make it possible to analyze differences in daily travel behavior in different communities having different densities, physical characteristics, and transportation options; to refine the regional travel demand model; and to assist local planners in their land use and transportation planning efforts. He listed the seven survey areas, which included the New York Avenue and Rhode Island Avenue corridor and the Friendship Heights area in the District of Columbia, the area around the East Falls Church and West Falls Church Metrorail stations in Falls Church and Fairfax and Arlington counties, the Beauregard corridor in Alexandria, the National Harbor/Oxon Hill area in Prince George's County, the area north of Dulles Airport in Loudoun County, and the St. Charles/Waldorf area in Charles County.

Mr. Griffiths explained the trends that emerge from the information on household characteristics, namely that the Beauregard corridor and the two study areas in the District of Columbia -- which have much higher population densities -- have higher proportions of single-person households, households without children, households living in apartments and condos, and households with no car compared to the study areas that are farther out and less dense - Dulles North, St. Charles/Waldorf, National Harbor/Oxon Hill, and East and West Falls Church. He also explained that those areas with higher densities have greater shares of daily trips and commute trips made by walking, biking, and transit compared to the less-dense areas. He also drew the attention of Board members to the shares of commute trips made by bike in the four densest study areas, which were all at least three times the regional average.

Mr. Griffiths told Board members that the challenge moving forward will be to provide family-friendly housing, amenities, and services in areas near transit, since those areas tend now to have much higher shares of single-person households and households without children compared to the rest of the region. He said that if the region hopes to have a significant amount of future population growth in activity centers near transit, they need to be more family-friendly.

Chair York thanked Mr. Griffiths for his presentation. He said it will be interesting to compare the recent results for the Dulles North survey area to 2019, when rail service opens in the Dulles corridor.

Chair York opened the floor to questions.

Mr. Zimbabwe asked Mr. Griffiths how the data collected from the most recent surveys would be used to refine the regional travel demand model. He specifically suggested comparing the output from the model to the trends observed in the survey data to identify any needed revisions. He also asked Mr. Griffiths whether staff could make the survey data available in disaggregated form for the local jurisdictions to use in their own analysis and planning activities. Finally, he commented on the conclusion that Mr. Griffith's presented regarding the New York

Avenue/Rhode Island Avenue corridor and its lack of housing for families with children. Mr. Zimbabwe said he thought the area actually did have a good supply of "family-friendly" housing and that the real question is whether there's enough of the right housing stock to accommodate an aging population.

Mr. Griffiths said that staff will gladly provide the additional data, and that Mr. Zimbabwe was exactly right in his interpretation of the data on the New York Avenue/Rhode Island Avenue corridor: that the higher share of single-person households without children was more likely to be households with older adults with grown children rather than young, single professionals.

Mr. Emerine echoed Mr. Zimbabwe's point about the New York Avenue/Rhode Island Avenue corridor having quite a bit of family-friendly housing. He said that more fine-grained surveys would probably show that certain parts of the survey area are actually mostly housing stock suitable for families with children, and that improved survey methods, like making the survey available online, could increase the sample size and make it easier to analyze results for such small areas.

Mr. Griffiths said that staff are currently working on making an online version of the survey available for future rounds.

Mr. Erenrich thanked Mr. Griffiths for his work on the focused household travel surveys. He said he thought that one of the most important pieces of information that the surveys provide is vehicle-miles of travel per household because it summarizes a lot of the differences in travel patterns that the other measures reveal. He asked Mr. Griffiths whether that data was available from this round of surveys.

Mr. Griffiths said that staff could provide that data.

Finally, Mr. Kirby pointed out to Board members that the results of the most recent surveys add to the ten that were conducted in 2010 and 2011, and that future surveys will add still more to the available data. He said that, increasingly, the information can be used to update the regional travel model and to aid in scenario studies.

#### 15. Other Business

There was no other business brought before the TPB.

#### 16. Adjourn

Chair York adjourned the meeting at 1:57pm.

The Technical Committee met on April  $5^{th}$  at COG. Five items were reviewed for inclusion on the TPB agenda on April  $17^{th}$ .

#### TPB agenda Item 7

The Committee was briefed on regional Bike to Work Day events being organized at seventy-two locations in the region for Friday May 17. At the April 17 meeting, the TPB will be asked to approve a proclamation making May 17 Regional Bike to Work Day 2013.

#### TPB agenda Item 8

The Committee was briefed on the responsibilities of the TPB for measures and targets related to congestion mitigation and air quality under MAP-21, which calls for MPOs, state DOTs and public transportation providers to establish and use a performance-based approach to transportation decision making to support national goals. MAP-21 calls for USDOT to establish performance measures related to national goals for planning processes and for state DOTs, public transportation providers and MPOs to establish performance targets.

#### • TPB agenda Item 9

In response to a request at the February 20 TPB meeting, WMATA staff briefed the Committee on on-going activities and initiatives to increase ridership on the Metrobus system.

#### TPB agenda Item 10

The "CLRP Aspirations" scenario, which was initially built off of the 2008 CLRP and reported to the TPB in October 2011, integrates a regional network of toll lanes and bus rapid transit with more concentrated growth in mixed-use activity centers. The Committee was briefed on the results of an update to this scenario utilizing the 2012 CLRP as the baseline, along with the Version 2.3 travel demand model and a more detailed transportation analysis zone structure.

#### TPB agenda Item 11

The Committee was updated on the activities of the TPB task force to identify promising locations in the region to operate buses on the shoulders of highways. The first meeting of this task force was on October 17, the second on January 23, and the next meeting is scheduled prior to the TPB meeting on April 17.

Four items were presented for information and discussion:

 The Committee was briefed on the scope of work and schedule for a new study to identify strategic recommendations for bicycle and pedestrian access improvements using a complete streets approach that will support housing and employment development close to rail stations. The study is funded under an FY 2012 FHWA Transportation, Community, and Systems Preservation (TCSP) Discretionary Grant to the TPB.

- Staff briefed the Committee on the steps underway to develop Transportation Emissions Reduction Measures (TERMs) for use in the 2013 CLRP & FY2013-18 TIP Air Quality Conformity Determination should the need for additional emissions reductions arise.
- The Committee was briefed on the final version of a more "user-friendly" guide and summary of the FY 2013-2018 TIP.
- At the December 19 meeting, the TPB received a request from the Anacostia Watershed Restoration Partnership to adopt a regional Green Streets policy, parallel to the regional Complete Streets policy adopted by the TPB in May of 2012. The Committee was briefed on ongoing regional activities to address Green Streets, including the agenda for an April 8 workshop on Green Streets.

## TPB TECHNICAL COMMITTEE MEMBERS AND ALTERNATES ATTENDANCE - April 5, 2013

#### **DISTRICT OF COLUMBIA**

#### **FEDERAL/OTHER**

DDOT	Mark Rawlings	FHWA-DC	
	Anthony Foster	FHWA-VA	

DCOP ----- FTA Melissa Barlow

 MARYLAND
 NCPC
 ------ 

 MWAQC
 ------

Charles County Jason Groth MWAA Mike Hewitt

Frederick Co. -----City of Frederick -----Gaithersburg ------

Montgomery Co. Gary Erenrich Prince George's Co. Vic Weissberg

Rockville ------

M-NCPPC
Montgomery Co. ------

Montgomery Co. -----

Prince George's Co. Faramarz Mokhtari

MDOT Lyn Erickson
John Thomas

MTA -----

Takoma Park ------

**VIRGINIA** 

Alexandria Pierre Holloman
Arlington Co. Dan Malouff
City of Fairfax Alexis Verzosa
Fairfax Co. Mike Lake

Falls Church -----

Loudoun Co. Robert Brown

Manassas -----

Prince William Co. Monica Backmon

NVTC Claire Gron

PRTC -----

VRE Christine Hoeffner
VDOT Valerie Pardo
VDDDT

VDRPT Tim Roseboon

NVPDC ------VDOA ------

**WMATA** 

WMATA Mark Kellogg

**COG Staff** 

Ron Kirby, DTP
Gerald Miller, DTP
Elena Constantine, DTP
Andrew Austin, DTP
Erin Morrow, DTP
Mark Pfoutz, DTP
Ron Milone, DTP
Andrew Meese, DTP
Charlene Howard, DTP
Eric Randall, DTP
Feng Xie, DTP

Nicholas Ramfos, DTP Michael Farrell, DTP

Daivamani Sivasailam, DTP

Sarah Crawford, DTP Karin Foster, DTP Joan Rohlfs, DEP Paul DesJardin, DCPS

**Other Attendees** 

Bill Orleans, HACK Randy Carroll, MDE Matt Baker, MDOT

Jameshia Peterson, DDOT

### National Capital Region Transportation Planning Board

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

Item #5

#### **MEMORANDUM**

April 11, 2013

To: Transportation Planning Board

From: Ronald F. Kirby

Director, Department of Transportation Planning

Re: Steering Committee Actions

At its meeting on April 5, 2013, the TPB Steering Committee approved the following resolutions:

- SR18-2013: Resolution on an amendment to the FY 2013- 2018 Transportation Improvement Program (TIP) that is exempt from the air quality conformity requirement to add funding for right-of-way acquisition for the MD 4/Suitland Parkway interchange, as requested by the Maryland Department Of Transportation (MDOT)
- SR19-2013: Resolution on an amendment to the FY 2013- 2018 Transportation Improvement Program (TIP) that is exempt from the air quality conformity requirement to add funding for preliminary engineering for the widening of southbound I-395 between Duke Street and Edsall Road and for right-of-way acquisition and construction of an interchange at VA 7 and Belmont Ridge Road, as requested by the Virginia Department Of Transportation (VDOT)
- SR20-2013: Resolution on an amendment to the FY 2013- 2018 Transportation Improvement Program (TIP) that is exempt from the air quality conformity requirement to add funding for repairs to the East Capitol Street Bridge over the Anacostia River and to update funding and project information for the Bridge Design Consultant Services project, as requested by the District Department Of Transportation (DDOT)

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

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

RESOLUTION ON AN AMENDMENT TO THE FY 2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT TO ADD FUNDING FOR RIGHT-OF-WAY ACQUISITION FOR THE MD 4/SUITLAND PARKWAY INTERCHANGE, AS REQUESTED BY THE MARYLAND DEPARTMENT OF TRANSPORTATION (MDOT)

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

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

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

**WHEREAS**, in the attached letter of March 28, 2013, MDOT has requested an amendment to the FY 2013-2018 TIP to add \$2 million in High Priority Project (HPP) funding to FY 2014 for right-of-way acquisition for the MD 4/Suitland Parkway Interchange project, as described in the attached materials; and

**WHEREAS**, this project is already included in the air quality conformity analysis of the 2012 CLRP and FY 2013-2018 TIP;

**NOW, THEREFORE, BE IT RESOLVED THAT** the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2013-2018 TIP to add \$2 million in HPP funding to FY 2014 for right-of-way acquisition for the MD 4/Suitland Parkway Interchange project, as described in the attached materials.

Adopted by the Transportation Planning Board Steering Committee at its regular meeting on April 5, 2013.



Martin O'Malley Governor

Anthony G. Brown Lt. Governor

Darrell B. Mobley Acting Secretary

Leif A. Dormsjo Acting Deputy Secretary

March 28, 2013

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

#### Dear Chairman York:

The Maryland Department of Transportation (MDOT) requests an amendment to the State Highway Administration (SHA) portion of the FY 2013-2018 Transportation Improvement Program (TIP) as described in the attached memo. The amendment is needed to reflect the addition of \$2 million for the right-of-way phase for the MD 4/Suitland Parkway Interchange. These funds have been made available through Section 1702 of SAFETEA-LU, the High Priority Projects Program (HPP). This project is included in the currently approved air quality conformity analysis. The amendment details are summarized below and in the attached memo.

TIP ID#	Project	Phase	Amount of New Funding
3547	MD 4/Suitland Parkway Interchange	RW	\$2,000,000

MDOT requests that this amendment be approved by the Transportation Planning Board (TPB) Steering Committee at its April 5, 2013 meeting.

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

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

Sincerely,

Michael W. Nixon, Manager

Michael W. Nijon

Office of Planning and Capital Programming

The Honorable Scott York Page Two

#### Attachment

Ms. Mary Deitz, Chief, Regional and Intermodal Planning Division, SHA Ms. Lyn Erickson, Manager, Office of Planning and Capital Programming, Maryland Department of Transportation

Ms. Heather Murphy, Deputy Director, Office of Planning and Capital Programming

Maryland Department of Transportation



Martin O'Malley, Governor Anthony G. Brown, Lt. Governor Darrell B. Mobley, Acting Secretary Melinda B. Peters, Administrator

#### MARYLAND DEPARTMENT OF TRANSPORTATION

#### **MEMORANDUM**

TO:

Mr. Don Halligan, Director

Office of Planning and Capital Programming, MDOT

ATTN:

Mr. Mike Nixon, MDOT

Ms. Lyn Erikson, MDOT

FROM:

Mary Deitz, Chief Mw

Regional and Intermodal Planning Division

DATE:

March 27, 2013

SUBJECT:

Amendment to the Fiscal Year 2013 Transportation Improvement

Program (TIP) for the National Capital Region

MD 4/Suitland Parkway Interchange

Attached is an amendment for inclusion in the FY 2013 National Capital Region Transportation Improvement Program (TIP). The amendment outlined below is needed to reflect the addition of \$2 million in protective right-of-way for the MD 4/Suitland Parkway Interchange project. The funds will be used to purchase the Fort Foote property, which is needed to mitigate impacts to National Park Service property associated with the project. These funds have been made available through Section 1702 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the High Priority Projects Program (HPP).

TIP ID #	Project	Phase	Amount of New Funding
	MD 4/Suitland Parkway		
3547	Interchange	RW	\$2,000,000

After your review, please forward this request to the Washington Metropolitan Council of Governments. Upon approval of the requested TIP amendment, please process an amendment to the FY 2013 STIP using the funding information provided in the attachment. If you have any questions, please do not hesitate to contact me or Vaughn Lewis, Regional Planner, State Highway Administration (SHA) at 410-545-5673 or via email at vlewis@sha.state.md.us.

#### Attachment

cc:

Mr. Vaughn Lewis, Regional Planner, SHA

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

Source	Fed/St/Loc	Previous	FY 13	FY 14	FY 15	FY 16	FY17	FY 18	Source
		Funding							Total

#### **MDOT/State Highway Administration**

**Primary** MD 4, Pennsylvania Avenue TIP ID: 3547 Agency ID: PG6181 Title: Suitland Parkway Interchange Complete: 2016 Facility: MD 4 Pennsylvania Avenue Interchange **HPP** 80/20/0 2,000 b 2,000 From: Suitland Parkway NHS 80/20/0 585 b 400 a 9 a 409 To: 3.210 a

> Total Funds: 2,409

Description: This project will replace the at-grade intersection at Suitland Parkway with a grade-separated interchange, and widen MD 4 to a 6 lane freeway.

Amendment: Additional Right-of-Way Funding for MD 4/Suitland Parkway Interchange

**્** Requested on:

4/5/2013

Amendment to add \$2,000,000 in HPP funds for the purchase of the Fort Foote Road Property for mitigation for National Park Service Property and for right-of-way for the MD 4/Suitland Parkway Interchange project (\$2,000,000 in FY14).

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

RESOLUTION ON AN AMENDMENT TO THE FY 2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT TO ADD FUNDING FOR PRELIMINARY ENGINEERING FOR THE WIDENING OF SOUTHBOUND I-395 BETWEEN DUKE STREET AND EDSALL ROAD AND FOR RIGHT-OF-WAY ACQUISITION AND CONSTRUCTION OF AN INTERCHANGE AT VA 7 AND BELMONT RIDGE ROAD, AS REQUESTED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT)

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

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

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

WHEREAS, in the attached letter of March 27, 2013, VDOT has requested an amendment to the FY 2013-2018 TIP to include \$1.075 million in Highway Safety Improvement Program (HSIP) and matching funds and \$1.075 million in Advanced Construction (AC) funding to FY 2013 for preliminary engineering for the construction of a 4<sup>th</sup> southbound lane on I-395 between Duke Street and Edsall Road, and to include \$495,000 in Surface Transportation Program (STP) and matching funds in FY 2013, \$13.305 million and \$51.2 million in AC funding in FY 2013 and FY 2015 respectively for right-of-way acquisition and construction of an interchange at VA Route 7 and Belmont Ridge Road (VA 659), as described in the attached materials; and

**WHEREAS**, these projects are already included in the air quality conformity analysis of the 2012 CLRP and FY 2013-2018 TIP or are exempt from the air quality conformity requirement, as defined in Environmental Protection Agency (EPA) regulations "40 CFR Parts 51 and 93 Transportation Conformity Rule Amendments: Flexibility and Streamlining; Final Rule," issued in the May 6, 2005, *Federal Register*,

NOW, THEREFORE, BE IT RESOLVED THAT the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2013-2018 TIP to include \$1.075 million in HSIP and matching funds and \$1.075 million in AC funding to FY 2013 for preliminary engineering for the construction of a 4<sup>th</sup> southbound lane on I-395 between Duke Street and Edsall Road, and to include \$495,000 in STP and matching funds in FY 2013, \$13.305 million and \$51.2 million in AC funding in FY 2013 and FY 2015 respectively for right-of-way acquisition and construction of an interchange at VA Route 7 and Belmont Ridge Road (VA 659), as described in the attached materials.

Adopted by the Transportation Planning Board Steering Committee at its regular meeting on April 5, 2013.



#### DEPARTMENT OF TRANSPORTATION

GREGORY A. WHIRLEY
COMMISSIONER

4975 Alliance Drive Fairfax, VA 22030

March 27, 2013

The Honorable Scott York, Chairman National Capital Region Transportation Planning Board Metropolitan Washington Council of Governments 777 North Capitol Street, N.E., Suite 300 Washington, DC 20002-4201

RE: National Capital Region FY 2013-2018 Transportation Improvement Program Amendment

Dear Chairman York:

The Virginia Department of Transportation requests amending the FY 2013-2018 Transportation Improvement Program (TIP) for the following two projects.

The first project is to provide funds for the Preliminary Engineering (PE) phase of the construction of the 4th southbound lane on I-395 between north of Duke Street to south of Edsall Road (UPC# 103316). The proposed amendment adds \$2.15M in new funding for the PE phase of the project in FY13. The proposed addition to the TIP does not affect the federally approved air quality conformity analysis since the PE phase of a project is exempt from such analysis.

The second project is to provide funds for the right-of-way and construction Phases for the construction of an interchange at Route 7 and Belmont Ridge Road (Rte 659) (UPC# 99481). The proposed amendment adds \$13.7 M in funding for the RW phase in FY 13 and adds \$51.2 M for the CN phase in FY15. The proposed addition to the TIP is part of the federally approved air quality conformity analysis for the Metropolitan Washington Region.

The funding proposed in this TIP amendment has been approved by the Commonwealth Transportation Board (CTB) as part of its FY 2013-2018 Six Year Improvement Program. The new funds proposed in the amendment were part of the total federal funding included in VDOT's financial plan for the 2013 CLRP update

VirginiaDot.org
WE KEEP VIRGINIA MOVING

VDOT requests that this TIP Amendment be considered and acted upon by the Transportation Planning Board's Steering Committee at its meeting on April 5, 2013. VDOT's representative will attend the meeting and be available to answer any questions about the amendment. Please find attached a TIP Amendment spreadsheet outlining the funding for both projects.

Thank you for your consideration of this request.

Sincerely,

Renée Hamilton

Assistant. District Administrator

Planning and Investment Management

Northern Virginia District

cc: Ms. Diane Mitchell, VDOT

Mr. Farid Bigdeli, VDOT - NoVA

Mr. Tom Fahrney VDOT - NoVA

Mr. Kanathur Srikanth VDOT - NoVA

# NORTHERN VIRGINIA TRANSPORTATION IMPROVEMENT PROGRAM CAPITAL COSTS (in \$1,000)

TIP Amendment - 4/17/2013

New Funding in BOLD

		Phase	Previous	Funding	Fund	Funding Shares		-	27.40	27.40		2777	0777	Source
100			Funding	Source	Fed	State	Local		21.17	FY13	F Y 14	FY15	FY16	Total
VDOT-Interstate	state													
TIP ID:	Agency ID: UPC# 103316			1	Title: 1-39	95 Cons	Title: 1-395 Construct 4th Southbound Lane	Southbo	und La	16		Complete 2015	015	
Facility:	1-395	PE		HSIP	%06	10%	%0	\$0	\$0	\$1.075	80	7	\$0	\$1.075
From:	North of Duke Street	PE		AC (Other)	100%	%0	%0	\$0	\$0	\$1.075	80		\$0	\$1.075
То:	South of Edsall Rd				%0	%0	%0	\$0	\$0	\$0	\$0		\$0	
			K									Total Funds:	.spu	\$2,150.00
Description:	The project involves the construction of the 4th South	ction of th	ne 4th Soul	thbound lane of I-395 north of Duke Street to South of Edsall Road	of I-395 n	orth of L	Juke Stre	et to Sc	uth of E	dsall Road				
Jurisdiction:	Fairfax County													
Amendment:	Amendment: The Amendment adds \$ 967,500 in HSIP funds & \$1,0	in HSIP	funds & \$1	.075,000 AC-Other funds in FY13 PE phase.	Other fun	ds in FY	13 PE pt	lase.						
Air Quality	The project is for the PE phase only and is exempt fr	only and	is exempt	from the the Air Quality Conformity Analysis for the Metropolitan Washington Region.	Air Quality	Confor	mity Anal	vsis for	the Met	ropolitan W	ashington	Region.		
VDOT-Primary	lry							-						
TIP ID:	Agency ID: UPC# 99481				Title: Inte	erchange	at Rout	e 659 B	elmont !	Title: Interchange at Route 659 Belmont Ridge Road		Complete 2015	015	
Facility:	Rte 7/Belmont Ridge Rd Inter.	RW		Fed-STP	%08	20%	%0	\$0	\$0	\$495	\$0	0\$	\$0	\$495
From:	1.0 mi. west of Rte 659	RW		Fed-AC	100%	%0	%0	\$0	\$0	\$13,305	\$0	\$0	\$0	\$13,305
To:	0.5 mi. east Rte 659	CN		Fed-AC	100%	%0	%0	\$0	\$0	\$0	\$0	\$51,200	\$0	\$51,200
												Total Funds:	nds:	\$65,000.00
Description:	The project involves the construction of an Interchang	ction of a	n Interchar	ige at Route 659 (Belmont Ridge Road) and Route 7.	659 (Belm	ont Ride	ye Road)	and Ro	ute 7.					
Jurisdiction:														
Amendment:	Amendment: The TIP Amendment adds \$396,000 STP,\$13,305,022 AC-BR RW Phase FY13; adds \$33,616,775 AC-Other & \$17,583,203 AC-BR FFY15 Cn phase.	300 STP,	\$13,305,02	22 AC-BR RV	V Phase F	Y13; ad	ds \$33,6	16,775,	4C-Othe	3r & \$17,58	3,203 AC-	-BR FFY15	Cn phase.	
Air Quality	The project is included in the the Air Quality Conform	e Air Qua	ality Confor	mity Analysis for the Metropolitan Washington Region.	for the M	<b>Tetropolit</b>	an Wash	ington	Region.					

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

RESOLUTION ON AN AMENDMENT TO THE FY 2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) THAT IS EXEMPT FROM THE AIR QUALITY CONFORMITY REQUIREMENT TO ADD FUNDING FOR REPAIRS TO THE EAST CAPITOL STREET BRIDGE OVER THE ANACOSTIA RIVER AND TO UPDATE FUNDING AND PROJECT INFORMATION FOR THE BRIDGE DESIGN CONSULTANT SERVICES PROJECT, AS REQUESTED BY THE DISTRICT DEPARTMENT OF TRANSPORTATION (DDOT)

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

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

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

WHEREAS, in the attached letter of March 29, 2013, DDOT has requested an amendment to the FY 2013-2018 TIP to include \$2 million in FY 2013 and \$16 million in FY 2014 using Bridge Replacement and Rehabilitation Program (BRR) funding for design and reparative construction of the East Capitol St. Bridge over Anacostia River, BR. #233, and to update the project information for the Bridge Design Consultant Services project to include Citywide Engineering Service for Structures and Bridges and to add \$3 million in High Priority Project (HPP) funding between FY 2013 and FY 2015, as described in the attached materials; and

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

**NOW, THEREFORE, BE IT RESOLVED THAT** the Steering Committee of the National Capital Region Transportation Planning Board amends the FY 2013-2018 TIP to include \$2 million in FY 2013 and \$16 million in FY 2014 using BRR funding for design and reparative construction of the East Capitol St. Bridge over Anacostia River, BR. #233, and to update the project information for the Bridge Design Consultant Services project to include Citywide Engineering Service for Structures and Bridges and to add \$3 million in HPP funding between FY 2013 and FY 2015, as described in the attached materials.

Adopted by the Transportation Planning Board Steering Committee at its regular meeting on April 5, 2013.

## GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION



#### d. Policy, Planning, Sustainability Administration

March 29, 2013

The Honorable Scott York, Chairperson
National Capital Region Transportation Planning Board
Metropolitan Washington Council of Governments
777 North Capitol Street N.E., Suite 300
Washington, DC 20002-4290

Dear Chairman York,

The District Department of Transportation (DDOT) requests that the FY 2013-2018 Transportation Improvement Program (TIP) be amended to include the East Capitol St. Bridge Over Anacostia River, BR. #233, and to update funding and project information for the Bridge Design Consultant Services project, TIP ID: 3202 referenced on page D-10 in the FY 2013-2018 TIP.

The East Capitol St. Bridge over Anacostia River, BR. #233 was previously included in the FY 2011-2016 TIP. DDOT is requesting that it be reinstated into the FY 2013-2018 TIP. The proposed amendment would add \$2,000,000 in FY 2013 for Design and \$16,000,000 for Construction in FY 2014 using BR funding source. This project is for design and construction of bridge repairs.

The proposed amendment to the Bridge Design Consultant Services project, TIP ID# 3202, will modify the project description to include Citywide Engineering Service for Structures and Bridges that will provide engineering services, for designing bridges and other structures. The funding will be updated to add \$1,000,000 in FY 2013, \$1,000,000 in FY 2014, and \$1,000,000 in FY 2015, funding source NHPP for Preliminary Engineering final design.

These projects do not add additional capacity for motorized vehicles and do not require conformity analysis or public review and comment. The funding sources have been identified, and the TIP will remain fiscally constrained. Therefore, DDOT requests that the TPB Steering Committee approve this amendment at its April 5, 2013 meeting.

We appreciate your cooperation in this matter. Should you have questions regarding this amendment, please contact Mark Rawlings at (202) 671-2234 or by e-mail at <a href="mark.rawlings@dc.gov">mark.rawlings@dc.gov</a>. Of course, feel free to contact me directly.

Sincerely,

Samuel Zimbabwe

Associate Director, Policy, Planning, and Sustainability Administration (PPSA)

cc: Mark Rawlings, DDOT – PPSA (via e-mail)

Matt Brown, DDOT – Resource Management (via e-mail)

## DISTRICT OF COLUMBIA TRANSPORTATION IMPROVEMENT PROGRAM CAPITAL COSTS (in \$1,000)

	Sc	ource	Fed/St/Loc	Previous Funding	FY 13	FY14	FY 15	FY 16	FY 17	FY 18	Source Total
--	----	-------	------------	---------------------	-------	------	-------	-------	-------	-------	-----------------

Bridge

#### **Bridge Replacement/Rehabilitation Program**

TIP ID: 5804 Agency ID: Title: East Capitol St. Bridge over Anacostia River, Br. # 233 Complete:

Facility: 887 80/20/0 2 000 a 16 000 c

-acility: BR 80/20/0 2,000 a 16,000 c 18,000 From: Total Funds: 18,000

To:

Description: Design and construction of bridge repairs.

Amendment: Add Project Requested on: 4/5/2013

Amendment to reinstate East Capitol St. Bridge over Anacostia River, BR #233 and to add \$2,000,000 in FY 2013 for Design and \$16,000,000 in FY2014 for Construction for bridge repairs.

TIP ID: 3202 Agency ID: CD032C	Title: Bridge Design Consultant Services					Complete:				
Facility: CITYWIDE	BR	80/20/0	550 a	950 a		450 a	450 a	450 a	950 a	3,250
From: To:	NHPP	80/20/0		1,000 a	1,000 a	1,000 a				3,000

Total Funds: 6,250

Requested on:

Description: This project will provide bridge design consultant services to support the preventive maintenance program for bridges and the preventive maintenance and emergency repair project by providing designs for temporary supports for deficient structures and repairs and retrofits not of substantial size for a separate project.

This project also includes Citywide Engineering Service for Structures and Bridges provide engineering services, for designing Bridges and other structures. Service will also include constructability review, investigating structural behavior and providing reports with design details and recommendations; design bridge substructure, superstructure, foundations, retaining walls, sign structures, buildings and other structures as directed. The work also includes providing CADD support, designing related roadways, independent design reviews of temporary and permanent structures and bridges, preparing manuals and standards, geotechnical investigations and reports, surveying, hydraulic and hydrological studies.

#### Amendment: Update Project Information and Funding

Amendment to add \$1,000,000 in NHPP funds to provide engineering services, for designing Bridges and other structures. Service will also include constructability review, investigating structural behavior and providing reports with design details and recommendations; design bridge substructure, superstructure, foundations, retaining walls, sign structures, buildings and other structures as directed. The work also includes providing CADD support, designing related roadways, independent design reviews of temporary and permanent structures and bridges, preparing manuals and standards, geotechnical investigations and reports, surveying, hydraulic and hydrologic studies.

**DDOT** 

4/5/2013

#### National Capital Region Transportation Planning Board

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

Item #5

#### **MEMORANDUM**

**April 17, 2013** 

**TO:** Transportation Planning Board

**FROM:** Ronald F. Kirby

Director, Department of Transportation Planning

**RE:** Letters Sent/Received Since the March 20<sup>th</sup> TPB Meeting

The attached letters were sent/received since the March  $20^{th}$  TPB meeting. The letters will be reviewed under Item #5 of the April  $17^{th}$  TPB agenda.

Attachments

#### One Region Moving Forward

District of Columbia

Bladensburg\*

Bowie

Charles County

College Park

Frederick

Frederick County

Gaithersburg

Greenbelt

Montgomery County
Prince George's County

Rockville Takoma Park Alexandria

Arlington County

Fairfax

Fairfax County
Falls Church

Loudoun County

Manassas Manassas Park

Prince William County

\*Adjunct Member

#### Memorandum

Date: April 10, 2013

To:

From: Paul DesJardin

Director, Community Planning and Services

National Capital Region Transportation Planning Board

**Robert Griffiths** 

**Technical Services Director** 

Subject: PowerPoint Presentation at March 20 TPB Meeting on the

Cooperative Forecasting Process: Corrections to Spreadsheet

Calculations on Slides 14 and 15

The percentage growth calculations in three tables ("How Accurate Have the Household and Population Forecasts Been?" and "How Accurate Have Employment Forecasts Been?") that were presented at the March 20 Transportation Planning Board meeting were incorrect: the 1990 to 2010 "Forecast Growth" and "Actual Growth" increments were divided by the 2010 Forecast Year rather than the 1990 Base Year.

Further, the Round 5.1 Cooperative Forecasts adopted in 1994, three years later than Round 4.1, provide a better benchmark to gauge actual versus projected growth, since Round 5.1 drew on the 1990 U.S. Census and COG's 1990 Regional Employment Census. The tables attached to this memo provide population, households, and employment from Round 5.1 for 1990 and 2010 in place of the Round 4.1 tables included in the March 20 PowerPoint..

The new tables for Round 5.1 have been included in the March 20 PowerPoint presentation to TPB posted on the COG Website in place of the Round 4.1 tables.

### How Accurate Have the Household and Population Forecasts Been?

		Households	Round 5.1		
	Round 5.1 1990	Round 5.1 2010	FORECAST	FORECAST ACTUAL	
Jurisdiction:	Base Year	Forecast Year	% GROWTH	% GROWTH	1990 - 2010
District of Columbia	249,600	252,100	1%	7%	17,100
Arlington Co., VA	78,500	96,300	23%	25%	19,600
City of Alexandria, VA	53,300	64,400	21%	28%	14,800
Montgomery Co., MD	282,000	368,500	31%	28%	79,000
Prince George's Co., MD	258,000	326,400	27%	18%	46,000
Fairfax Co. & Cities, VA	303,900	398,700	31%	31%	95,600
Loudoun Co., VA	30,700	65,300	113%	241%	73,900
Prince William Co. & Cities VA	81,400	131,600	62%	82%	66,400
Frederick Co., MD	52,600	92,500	76%	61%	32,200
Charles Co., MD	33,000	55,900	69%	55%	18,000
Total	1,423,000	1,851,700	30%	33%	462,600
		Population			
	Round 5.1 1990	Round 5.1 2010	FORECAST	ACTUAL	Actual Growth
Jurisdiction:	Base Year	Forecast Year	% GROWTH	% GROWTH	1990 - 2010
District of Columbia	606,900	606,300	0%	-1%	-5,200
Arlington Co., VA	170,900	201,100	18%	21%	36,700
City of Alexandria, VA	111,200	131,200	18%	26%	28,800
Montgomery Co., MD	757,000	940,000	24%	28%	214,600
Prince George's Co., MD	729,300	884,900	21%	18%	134,100
Fairfax Co. & Cities, VA	847,800	1,097,400	29%	29%	243,700
Loudoun Co., VA	86,100	181,400	111%	263%	226,200
Prince William Co. & Cities, VA	250,400	400,400	60%	81%	203,700
Frederick Co., MD	150,200	243,600	62%	55%	83,200
Charles Co., MD	101,200	161,500	60%	43%	43,400
Total	3,811,000	4,637,000	22%	32%	1,209,200

## How Accurate Have the Employment Forecasts Been?

		Employment	Round 5.1		
	Round 5.1 1990	Round 5.1 2010	FORECAST	ACTUAL	Actual Growth
Jurisdiction:	Base Year	Forecast Year	% GROWTH	% GROWTH	1990 - 2010
District of Columbia	747,300	885,900	19%	5%	36,200
Arlington Co., VA	183,100	264,600	45%	22%	40,200
City of Alexandria, VA	92,200	125,000	36%	15%	13,800
Montgomery Co., MD	465,500	625,000	34%	10%	44,600
Prince George's Co., MD	310,400	426,600	37%	10%	32,200
Fairfax Co. & Cities, VA	443,900	653,300	47%	53%	236,100
Loudoun Co., VA	39,300	85,800	118%	266%	104,400
Prince William Co. & Cities VA	84,500	151,400	79%	70%	59,100
Frederick Co., MD	54,000	106,000	96%	83%	44,700
Charles Co., MD	38,700	52,500	36%	61%	23,500
Total	2,458,900	3,464,900	41%	26%	634,800

Round 5.1 Forecasts were adopted in 1994

#### **National Capital Region Transportation Planning Board**

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

April 2, 2013

The Honorable Robert F. McDonnell Governor Commonwealth of Virginia

The Honorable William T. Bolling

Lieutenant Governor

The Honorable William J. Howell

Speaker of the Virginia House of Delegates

The Honorable Thomas K. Norment, Jr.

Majority Leader Senate of Virginia The Honorable Richard L. Saslaw

Minority Leader Senate of Virginia

The Honorable M. Kirkland Cox

Majority Leader

Virginia House of Delegates

The Honorable David J. Toscano

Minority Leader

Virginia House of Delegates

Dear Governor McDonnell, Lieutenant Governor Bolling and Leaders of the Virginia General Assembly:

In a letter to you dated December 31, 2012 the National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the Washington region, expressed its support for your efforts to enact revenue increases for transportation. The letter provided background information underscoring the urgent need for additional revenues to ensure that the region's highway and transit systems are adequately maintained and have the capacity to support anticipated population and employment growth in the region. The letter also provided examples of approaches for raising transportation revenues that have been implemented in other states and localities throughout the country.

The TPB would like to take this opportunity to thank you for enacting a bill that employs reliable sources to significantly increase transportation revenues for present and future years. The bill will provide additional statewide revenues as well as revenues allocated to Northern Virginia to address major local and regional challenges. The TPB recognizes that extensive negotiation and compromise were needed in crafting this bill, and greatly appreciates your leadership and dedication in reaching a successful outcome.

Please feel free to contact me at <a href="Scott.York@loudoun.gov">Scott.York@loudoun.gov</a> or Ronald Kirby, staff director to the TPB, at <a href="rkirby@mwcog.org">rkirby@mwcog.org</a>, if there is any additional information or support that the TPB can provide in the implementation of this important and much needed new legislation.

Sincerely,

Scott K. York

Chairman

National Capital Region

Transportation Planning Board

Det b. Yosh

Local governments working together for a better metropolitan region

District of Columbia

Bowie

College Park

Frederick County Gaithersburg

Greenbelt Montgomery County

Prince George's County

Rockville Takoma Park

Alexandria Arlington County

Fairfax

Fairfax County

Falls Church Loudoun County

Manassas Manassas Park

Prince William County

March 20, 2013

The Honorable Vincent C. Gray Mayor, District of Columbia

John A. Wilson Building

1350 Pennsylvania Avenue NW, Suite 316

Washington, DC 20004

The Honorable Robert F. McDonnell Governor, Commonwealth of Virginia

Patrick Henry Building

1111 E. Broad Street, 3rd Floor

Richmond, VA 23219

The Honorable Martin O'Malley Governor, State of Maryland

State House 100 State Circle

Annapolis, MD 21401-1925

Dear Mayor Gray, Governor McDonnell, and Governor O'Malley:

Pursuant to a resolution adopted by the National Capital Region Transportation Planning Board (TPB) on March 20, 2013, I am formally requesting that you designate the Metropolitan Washington Council of Governments, as the administrative agent for the TPB, the official recipient of the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program funds for the Washington D.C-VA-MD Urbanized Area.

This request for designation was developed in collaboration with the District Department of Transportation (DDOT), the Maryland Transit Administration (MTA), the Virginia Department of Rail and Public Transportation (DRPT), and the Washington Metropolitan Area Transit Authority (WMATA). The TPB is the metropolitan planning organization (MPO) for the Washington Region and its membership includes representatives of the transportation agencies of the District of Columbia, Maryland, and Virginia, local governments, WMATA, the Council of the District of Columbia, the Maryland and Virginia General Assemblies, and non-voting members from the Metropolitan Washington Airports Authority and federal agencies.

The Moving Ahead for Progress in the 21st Century (MAP- 21) established the Section 5310 Enhanced Mobility Program to serve the special needs of transit-dependent populations beyond traditional public transportation services through grants to non-profit and local government agencies. The program provides a single apportionment to the Washington DC-MC-MD Urbanized area. Furthermore, MAP-21 requires that in large urbanized areas, a Section 5310 Enhanced Mobility Designated Recipient be named before funds are awarded.

Since 2006, COG, as the administrative agent for the TPB, has been serving as the designated recipient of the Section 5316 Job Access and Reverse Commute (JARC) program and the Section 5317 New Freedom program under the Safe, Accountable, Flexible and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU). COG and TPB will build upon the successful implementation of the JARC and New Freedom programs to implement the new Section 5310 Enhanced Mobility. This effort will be conducted in accordance with a competitive selection process guided by stakeholder involvement from the TPB Human Service Transportation Coordination Task Force and its Coordinated Human Services Transportation Plan, and approved by the TPB.

The timeliness of this designation is important because Enhanced Mobility funds cannot be utilized until the designation is on file with the Federal Transit Administration (FTA). I am asking that a letter designating COG the recipient of Section 5310 Enhanced Mobility funds for the Washington D.C.-VA-MD Urbanized Area be sent to the FTA Region III Administrator, Brigid Hynes-Cherin, by April 30, 2013.

If you need more information, please contact Ronald Kirby at (202)-962-3310 or <a href="mailto:rkirby@mwcog.org">rkirby@mwcog.org</a>, or Wendy Klancher at (202)-962-3321 or <a href="mailto:wklancher@mwcog.org">wklancher@mwcog.org</a> of the TPB staff, who will be pleased to answer any questions you or your staff may have regarding this request.

Sincerely

Scott K. York

Chairman, National Capital Region Transportation Planning Board Chairman At-Large, Loudoun County Board of Supervisors

cc: Terry Bellamy, Director, District Department of Transportation
Sean Connaughton, Secretary of Transportation, Commonwealth of Virginia
Darrell Mobley, Acting Secretary of Transportation, State of Maryland

#### National Capital Region Transportation Planning Board

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

April 5, 2013

Mr. Tom Downs, Chairman
Washington Metropolitan Area Transit Authority
Board of Directors
600 5th Street, NW
Washington, D.C. 20001

#### Dear Chairman Downs:

Under the SAFETEA-LU transportation legislation, which was effective through September 30, 2012, the National Capital Region Transportation Planning Board (TPB), served as the Federal Transit Administration (FTA) Designated Recipient for the Section 5316 Job Access and Reverse Commute (JARC) program for low-income individuals and the Section 5317 New Freedom program for persons with disabilities. The TPB has successfully implemented robust JARC and New Freedom programs under SAFETEA-LU. The Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21), which became effective October 1, 2012, eliminated the JARC program entirely but made additional funds available for job access and reverse commute activities under the Section 5307 Urbanized Area Formula program, of which WMATA is the recipient. At its March 20 meeting, the National Capital Region Transportation Planning Board (TPB) approved sending a letter to WMATA to inquire about the process WMATA intends to use to select job access and reverse commute projects with the additional funds that were allocated to the Washington DC-VA-MD Urbanized Area.

Under MAP-21, the Federal formula for distributing Section 5307 Urbanized Area funds now includes the number of low-income individuals as a factor. FTA has indicated that of the \$162 million appropriated to the Washington DC-VA-MD Urbanized Area in FY 2013 Section 5307 funds, approximately \$1.3 million was included based on the number of low-income individuals in the region.

MAP-21 also created a new Section 5310 Enhanced Mobility program for persons with disabilities and older adults by combining the New Freedom and old Section 5310 programs. The TPB will build upon its successful JARC and New Freedom programs to implement the new Section 5310 Enhanced Mobility program. The TPB is expected to be the Designated Recipient for the new Enhanced Mobility Program. The TPB developed the Federally-required Coordinated Human Services Transportation Plan which identifies unmet transportation needs for low-income individuals, persons with disabilities and older adults. The Coordinated Plan will be used to select projects and award Enhanced Mobility funds. Because it is important that the critical transportation needs of low-income communities also continue to be addressed, the TPB would like to receive information about the process WMATA is considering to identify and fund job access and reverse commute projects.

The TPB staff would be happy to provide more information regarding low income individuals' travel needs in the region and the job access and reverse commute services and activities supported by TPB JARC

grants since 2007. You can reach Ronald Kirby at (202)-962-3310 or <a href="mailto:rkirby@mwcog.org">rkirby@mwcog.org</a>, or Wendy Klancher at (202)-962-3321 or <a href="mailto:wklancher@mwcog.org">wklancher@mwcog.org</a>.

Sincerely,

Scott York

Chairman, National Capital Region Transportation Planning Board

#### **Metropolitan Washington Air Quality Committee**

Suite 300, 777 North Capitol Street, N.E. Washington, D.C. 20002-4239 202-962-3358 Fax: 202-962-3203

March 27, 2013

Mr. Robert Perciasepe
Acting Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20004

Dear Mr. Perciasepe:

I am writing on behalf of the Metropolitan Washington Air Quality Committee (MWAQC) to urge you to propose and finalize the Tier 3 vehicle emissions and gasoline standards during this calendar year.

MWAQC is certified by the governors of Maryland and Virginia and the mayor of the District of Columbia to develop regional ground-level ozone and PM<sub>2.5</sub> air quality plans and strategies for the Washington, DC-MD-VA non-attainment area.

The Washington region has made great strides in cleaning the air thereby, reducing the health impacts of poor air quality, which cause a number of respiratory problems (e.g., asthma) and premature death. It has done so by lowering emissions of pollutants that produce smog and fine particles in the atmosphere. As a result, the region has met the annual fine particle standards, which were published in 1997 (15  $\mu$ g/m³) and 2013 (12  $\mu$ g/m³) as well as daily fine particle standards, which were published in 1997 (65  $\mu$ g/m³) and 2006 (35  $\mu$ g/m³). Besides this, the region has also met the previous 1-hour ozone standard (0.12 ppm) published in 1979. However, there are tougher challenges ahead for the Washington region. The region needs to meet the current ozone standard (0.075 ppm) by 2015 and also needs to make sure that the region remains in attainment for the current fine particle standards (annual: 12  $\mu$ g/m³, daily: 35  $\mu$ g/m³). EPA is also planning to propose a possibly tougher ozone standard this year. EPA may also further tighten the fine particle standard in the future.

In view of the challenges ahead for meeting and/or maintaining the tougher federal ozone and fine particle standards, the Washington region needs to reduce the emissions of pollutants producing ozone and fine particles (VOC, NOx, PM<sub>2.5</sub>, and SO<sub>2</sub>) significantly. The Tier 3 rule will help the Washington region immensely as it will provide cleaner gasoline and vehicles. This will also help the three jurisdictions in this region as they implement strategies to meet and/or maintain the above mentioned federal standards.

Passenger vehicles are the largest emitters of nitrogen oxides (NOx) and one of the largest emitters of volatile organic compounds (VOCs), carbon monoxide (CO), and PM2.5 in the Washington region. A study by the National Association of Clean Air Agencies (NACAA) estimated that the Tier 3 program can reduce gasoline vehicle emissions of nitrogen oxides, carbon monoxide, and volatile organic compounds by 29, 38 and 26 percent respectively.

Reductions in emissions of the above pollutants will cause reduction in the levels of ozone, fine particles, and carbon monoxide. Clearly, implementation of the Tier 3 rule will lead to significantly cleaner air in the Washington region, providing important health benefits to millions of people.

MWAQC urges you to finalize this rule by the end of 2013 so we don't delay and lose a full model year of emissions reductions.

Sincerely,

Hon. Leta Mach, Chair

Metropolitan Washington Air Quality Committee

fa M. Mach

# **EPA Proposes Tier 3 Tailpipe and Evaporative Emission and Vehicle Fuel Standards**

The U.S. Environmental Protection Agency (EPA) is issuing a **I** proposed rule designed to reduce air pollution from passenger cars and trucks. Starting in 2017, Tier 3 would set new vehicle emissions standards and lower the sulfur content of gasoline, considering the vehicle and its fuel as an integrated system. The proposed vehicle standards would reduce both tailpipe and evaporative emissions from passenger cars, light-duty trucks, medium-duty passenger vehicles, and some heavy-duty vehicles. The proposed gasoline sulfur standard would make emission control systems more effective for both existing and new vehicles, and would enable more stringent vehicle emissions standards since removing sulfur allows the vehicle's catalyst to work more efficiently. The proposed Tier 3 standards are closely coordinated with California's LEV III standards as well as with EPA's and California's programs for greenhouse gas (GHG) emissions from lightduty vehicles. EPA is proposing the Tier 3 standards to address public health issues that exist currently and are projected to continue in the future as requested in a May 21, 2010 Presidential memorandum.

The Tier 3 program continues the successful transition that began with EPA's Tier 2 program, finalized in 2000, in which EPA treated vehicles and fuels as a system to reduce both gasoline sulfur and vehicle emissions. While there were claims at the time that the program would cause fuel prices to increase far in excess of EPA's estimates and would result in closures and fuel supply shortages, the Tier 2 program was a success and resulted in gasoline sulfur reductions of up to 90 percent and enabled the use of new emission control technologies in cars and trucks with no serious negative impacts on the refining industry. EPA's Clean Diesel Program similarly utilized a systems approach to reducing sulfur emissions from diesel fuels and enabling cleaner diesel technologies with the Highway Diesel Rule (finalized in 2001) and the Nonroad Diesel Rule (finalized in 2004) again with no



serious negative impacts. Now that the U.S. refining industry routinely produces lower sulfur fuel products, new market opportunities for international fuel exports have opened up.

#### **Proposed Tailpipe Emissions Standards**

EPA is proposing new tailpipe standards for the sum of non-methane organic gases (NMOG) and nitrogen oxides (NOX), presented as NMOG+NOX, and for particular matter (PM) that would apply to all light-duty vehicles and some heavy-duty vehicles. Compared to current standards, the proposed NMOG and NOX tailpipe standards for light-duty vehicles represent approximately an 80% reduction from today's fleet average and a 70% reduction in per-vehicle PM standards. Proposed heavy-duty tailpipe standards represent about a 60% reduction in both fleet average NMOG+NOX and per-vehicle PM standards. EPA is also proposing to extend the regulatory useful life period during which the standards apply from 120,000 miles to 150,000 miles.

The proposed tailpipe standards include different phase-in schedules that vary by vehicle class, but generally phase in between model years 2017 and 2025. In addition to the gradual phase-in schedules, several other proposed provisions would further ease manufacturers' paths to compliance with the stringent new standards. Depending on the standards and the vehicle class, these flexibility provisions include credits for early compliance and the ability to offset some higher-emitting vehicles with extra-clean models. EPA is proposing more lead time for small businesses and small volume manufactures as well as a hardship provision that would allow for additional time to comply if a manufacturer cannot meet requirements after a good faith effort and would face severe economic hardship without the additional lead time.

**NMOG+NOX Standards:** The proposed standards for NMOG+NOX are fleet-average standards, meaning that a manufacturer calculates the weighted average emissions of the vehicles it produces in each model year and compares that average to the applicable standard for that model year. The standards differ by vehicle class and test cycle. Key elements include:

- NMOG+NOX Standards for Light-Duty Vehicles and Light-Duty Trucks (vehicles below 8,500 pounds (lbs) Gross Vehicle Weight Rating (GVWR)), and Medium-Duty Passenger Vehicles (8,500 to 10,000 lbs GVWR):
  - As measured on the Federal Test Procedure (FTP), the proposed standards decline from today's fleet average of 160 milligrams per mile (mg/mi) to 30 mg/mi by 2025.
  - As measured on the Supplemental Federal Test Procedure (SFTP), the proposed standards decline from today's fleet average of about 100 mg/mi to 50 mg/mi by 2025.
- NMOG+NOX Standards for Heavy-Duty Pick-ups and Vans; Class 2b (8,501-10,000 lbs GVWR) and Class 3(10,001-14,000GVWR)):

- As measured on the FTP, the proposed fleet average standards decline from a fleet average of 278 mg/mi to 178 mg/mi for Class 2b vehicles and 451 mg/mi to 247 mg/mi for Class 3 vehicles by 2022.
- Additional standards for emissions measured over a heavy-duty SFTP are being proposed for the first time and vary by vehicle class and power-to-weight ratio.

**PM Standards:** The proposed PM standards are expressed on a per-vehicle basis, meaning the standards would apply to each vehicle separately (i.e., not as a fleet average). EPA is proposing PM standards that would differ by vehicle class and test cycle. Key elements include:

- ➤ PM Standards for Light-Duty Vehicles, Light-Duty Trucks, and Medium-Duty Passenger Vehicles:
  - As measured on the FTP, the proposed standard is 3 mg/mi for all vehicles and for all model years, as compared to today's standard of 10 mg/mi.
  - As measured on the US06, a high-speed, fast-acceleration component of the SFTP, the proposed standard is 10 mg/mi for lighter vehicles and 20 mg/mi for heavier vehicles.
- > PM Standards for Heavy-Duty Pick-ups and Vans; Class 2b and 3:
  - As measured on the FTP, the proposed PM standards are 8 mg/mi for Class 2b vehicles and 10 mg/mi for Class 3 vehicles.
  - EPA is also proposing PM standards for emissions measured over the SFTP with standards levels and duty cycles varying by vehicle class and power-to-weight ratio.

#### **Proposed Evaporative Emission Standards**

EPA is proposing more stringent standards designed to eliminate fuel vapor-related evaporative emissions and improve durability. The proposed evaporative emissions program represents about a 50 percent reduction from current standards and applies to all light-duty and onroad gasoline-powered heavy-duty vehicles. As with the tailpipe standards, the evaporative emissions standards includes phase-in flexibilities, credit and allowance programs, and more lead time for small businesses and small volume manufactures as well as a hardship provision. EPA is also proposing to extend the regulatory useful life period during which the standards apply from 120,000 miles to 150,000 miles. Key elements of the program include:

- ➤ Evaporative Emissions Standards: Proposed standards over 2-day and 3-day evaporative emission tests vary by vehicle categories and range from 0.300 g/test to 0.500 for light-duty vehicles and medium duty passenger vehicles, with 0.600 g/test for onroad gasoline-powered heavy-duty vehicles.
- ➤ Bleed Test Requirements: EPA is proposing a new testing requirement referred to as the bleed emission test. The bleed emissions test standard for light-duty and medium-duty

- passenger vehicles is 0.020 g/test without averaging. The standard for onroad gasoline-powered heavy-duty vehicles is 0.030 g/test without averaging.
- Leak Test and Emission Standard: EPA is proposing to add a new emission standard and test procedure that would require that the cumulative equivalent diameter of any orifices or "leaks" not exceed 0.02 inches anywhere in the fuel/evaporative system for light-duty vehicles, medium-duty passenger vehicles, and some gasoline-powered heavy-duty vehicles.
- ➤ Onboard Diagnostic System (OBD) Requirements: EPA is proposing to adopt and incorporate by reference the California Air Resources Board's (CARB) current OBD regulations, effective for MY 2017, that would cover all vehicles except those in the heavier fraction of the heavy-duty vehicle class.

#### **Proposed Fuel Standards**

EPA is proposing gasoline sulfur reductions that are critical to enabling manufacturers to comply across the fleet with the stringent proposed vehicle standards. The proposed gasoline sulfur standards would also achieve significant immediate benefits by reducing emissions from existing vehicles. EPA is proposing that federal gasoline contain no more than 10 parts per million (ppm) of sulfur on an annual average basis by January 1, 2017. In addition, EPA is proposing to either maintain the current 80-ppm refinery gate and 95-ppm downstream caps or lower them to 50 and 65 ppm, respectively. The proposed Tier 3 gasoline sulfur standards are similar to levels already being achieved in California, Europe, Japan, South Korea, and several other countries.

For the gasoline sulfur standards, EPA is proposing an averaging, banking, and trading (ABT) program that would allow refiners and importers to spread out their investments through an early credit program and rely on ongoing nationwide averaging to meet the 10-ppm sulfur standard. EPA is also proposing a three-year delay for small refiners and small volume refineries processing 75,000 barrels of crude oil per day or less.

#### **Proposed Changes to Emissions Test Fuel**

EPA is proposing to update the federal emissions test fuel to better match today's in-use gasoline and also to be forward-looking with respect to future ethanol and sulfur content. The new test fuel specifications would apply to new vehicle certification, assembly line, and in-use testing. EPA is proposing to transition to the new test fuel during the first few years that the Tier 3 tailpipe and evaporative standards are phasing in. Key changes include moving to a test fuel containing 15 percent ethanol by volume (seeking comment on 10 percent ethanol by volume), lowering octane, and lowering the existing sulfur specification to be consistent with proposed Tier 3 requirements. EPA is also proposing test fuel specifications for E85 for the first time.

#### **Public Participation Opportunities**

You should consult the Federal Register notice for this proposal for more information about how to submit comments, when the comment period will close, and about where and when public hearings will be held. A copy of the Federal Register notice can be found on our website listed below.

EPA welcomes your comments on this proposed rule. Further information on the public comment period may be found on EPA's website (see For More Information below). All comments should be identified by Docket ID No. EPA-HQ-OAR-2011-0135 and submitted by one of the following methods:

Internet: www.regulations.gov E-mail: A-and-R-Docket@epa.gov

Mail:

Environmental Protection Agency

Air and Radiation Docket and Information Center (6102T)

1200 Pennsylvania Avenue NW

Washington, DC 20460

Hand Delivery:

EPA West building

EPA Docket Center (Room 3340)

1301 Constitution Avenue NW Washington, DC

#### For More Information

You can access the rule and related documents on EPA's Office of Transportation and Air Quality (OTAQ) Web site at:

www.epa.gov/otaq/tier3.htm

For more information on this rule, please contact the U.S. Environmental Protection Agency, Office of Transportation and Air Quality at:

E-mail: otaq@epa.gov

#### One Region Moving Forward

Media Advisory
For Immediate Release
April 5, 2013

#### 512.743.2659

Contact: Jeff Salzgeber

#### New Campaign Warns Motorists, Pedestrians and Bicyclists to Exercise Caution

Dramatic Ads Offer Safety Tips, Promote Increased Traffic Safety Vigilance

**Washington D.C.**—As spring arrives in the metropolitan Washington area, safety officials are launching a new campaign to remind area drivers, cyclists and pedestrians to be alert and watch out for each other as they travel around the region. The campaign gets underway next week in the wake of recent pedestrian crashes that left a 71-year-old woman dead in the 1100 block of Florida Avenue and at least 13 other pedestrians killed in crashes in the Washington metropolitan region in 2013 to date.

To help curb injuries and deaths, representatives from the Metropolitan Washington Council of Governments, local officials and safety advocates will unveil Tuesday (April 9) morning their new "tired faces" safety ads at the Starburst Plaza in northeast Washington, D.C. The effort is part of the larger, semi-annual *Street Smart* public education program in which local officials work with law enforcement officers from across the region to remind people to exercise caution, share the road and obey traffic laws.

Throughout the campaign, which runs through May 13, law enforcement officers in Maryland, the District of Columbia and northern Virginia will be watching for motorists, pedestrians and bicyclists who break traffic safety laws. Violators can face fines that range from \$40 to \$500.

What: Press conference and announcement of spring Street Smart pedestrian and bicycle safety campaign in

District of Columbia, suburban Maryland and northern Virginia

**When:** Tuesday, April 9, 2013, 10:30 a.m.

Where: Starburst Plaza, Intersection of Bladensburg Road, Benning Road, Maryland Avenue and H Street NE,

Washington, DC – Parking will be available off of Maryland Road, just north of the plaza

Who: Mayor Vincent C. Gray, District of Columbia

Sam Zimbabwe, District of Columbia Department of Transportation Gwendolyn Ward, mother of teen killed in Montgomery County

Jeff Dunkel, Department of Transportation, Montgomery County, Maryland

Walter Tejada, Arlington County Board Chair

Shane Farthing, Washington Area Bicyclist Association

**Visuals:** Media option to film live law enforcement activities, 11:15 a.m – 12:15p.m. at Bladensburg Road and

L Street NE

#### About Street Smart

Sponsored by the Metropolitan Washington Council of Governments (COG) and the National Capital Region Transportation Planning Board (TPB), the *Street Smart* public awareness and enforcement campaign is in its eleventh year. Aimed at reducing the number of pedestrian and cyclist injuries and deaths in the Washington metropolitan area, the campaign uses creative radio and television advertising in English and Spanish to reach drivers, pedestrians and cyclists, while targeting them through outdoor and transit advertising on bus shelters and bus sides. In addition, law enforcement and local, county and state agencies will be distributing handouts and tip cards to further spread awareness and educate drivers and pedestrians. For more information about *Street Smart*, please visit <a href="https://www.bestreetsmart.net">www.bestreetsmart.net</a> and <a href="https://www.bestreetsmart.net">twitter.com/COGStreetSmart</a>.

#### About the National Capital Region Transportation Planning Board (TPB)

The TPB is the regional transportation planning organization for the Washington region. It includes local governments, state transportation agencies, the Washington Metropolitan Area Transit Authority (WMATA) and members of the Maryland and Virginia General Assemblies.

#### One Region Moving Forward

News Release For Immediate Release April 9, 2013

## New Campaign Warns Motorists, Pedestrians and Bicyclists to Exercise Caution

Contact: Jeff Salzgeber

512.743.2659

Dramatic Ads Offer Safety Tips, Promote Increased Traffic Safety Vigilance

Like millions of others in the area, most days Stephen Grasty walks several blocks a day—to work, to a Metro stop, to a friend's house. Though he has had his share of close calls, he has never been hit by a car and he would like to keep in that way. Stephen's face—symbolically blemished by a tire tread—will soon be appearing in the Metropolitan Washington Council of Governments' new public awareness safety campaign urging drivers, pedestrians, and bicyclists to look out for each other.

The *Street Smart* campaign offers safety tips to prevent pedestrian and bicyclist deaths and injuries in the DC metro area. The campaign gets underway next week in the wake of recent pedestrian crashes that left a 71-year-old woman dead in the 1100 block of Florida Avenue and at least 12 other pedestrians killed in crashes in the Washington metropolitan region in 2013 to date.

"Most people do not stop to think how vulnerable pedestrians are on our streets and sidewalks," said District of Columbia Mayor Vincent Gray. "But the reality is that we must protect pedestrians from cars and other vehicles, because when they collide with a pedestrian, the pedestrian never wins."

The "tired faces" visuals call attention to the dangers confronting pedestrians and bicyclists with the larger-thanlife faces of area residents on ads on buses and in transit shelters in the District, Virginia and Maryland. State and local officials want drivers to actively watch out for pedestrians and bicyclists, especially when turning. They also are reminding bicyclists to ride with traffic and stop at red lights and urging pedestrians to use crosswalks and wait for the walk signal before crossing the street.

In 2012, preliminary data indicates there were 3,033 crashes in the DC metropolitan region involving pedestrians and bicyclists, which resulted in 70 fatalities. On average, pedestrians and bicyclists account for 30 percent of all traffic fatalities in the Washington region.

During the *Street Smart* campaign, which runs through May 13, law enforcement officers in Maryland, the District of Columbia and northern Virginia will be watching for motorists, pedestrians and bicyclists who violate traffic safety laws. Drivers and cyclists who fail to stop for pedestrians in crosswalks, as well as pedestrians who jaywalk, can face fines that range from \$40 to \$500. Drivers also are subject to getting points on their driver records.

Information on the new campaign and the *Street Smart* public education program may be found at www.bestreetsmart.net.

###

#### About the Street Smart Campaign & the National Capital Region Transportation Planning Board (TPB)

Sponsored by the Metropolitan Washington Council of Governments (MWCOG) and the National Capital Region Transportation Planning Board (TPB), the Street Smart public awareness and enforcement campaign is in its eleventh year. Its goal is to reduce pedestrian and cyclist injuries and deaths in the Washington metropolitan area. For more information about Street Smart, please visit www.bestreetsmart.net and twitter.com/COGStreetSmart. The TPB is the regional transportation planning organization for the Washington region. It includes local governments, state transportation agencies, the Washington Metropolitan Area Transit Authority (WMATA) and members of the Maryland and Virginia General Assemblies.

#### **Street Smart Safety Tips**

(BeStreetSmart.net)

#### If you're driving...

- Slow down and obey the speed limit
- Look twice for people in crosswalks and yield to pedestrians and bicyclists
- Be careful when passing stopped vehicles
- Yield to pedestrians and cyclists at intersections when you're turning
- Allow three feet when passing bicyclists
- Look for cyclists and cars before you open your door
- Avoid using your cell phone and never text while driving

#### If you're walking...

- Cross the street at the corner and use marked crosswalks when they're available
- Wait for the "Walk" signal to cross the street
- Watch for turning vehicles. Before crossing look left, right, and left again
- Be seen! If you're walking after dark or in bad weather, make it easier for drivers to see you by wearing light clothing or something reflective
- Don't text while you're crossing the street
- If you're on an off-street trail, obey all posted signage and approach intersections with caution

#### If you're biking...

- Obey all traffic signs and traffic signals
- Ride in the direction of traffic, at least a car door width away from parked cars
- Use hand signals so drivers, cyclists, and pedestrians know what you're going to do
- Always wear a helmet
- Use lights if you're riding at times of darkness
- If you're on an off-street trail, obey all posted signage and approach intersections with caution
- Slow down and watch for pedestrians on sidewalks, trails and in crosswalks

Laws and regulations differ between jurisdictions. Visit <u>www.BeStreetSmart.net</u> for information on specific trail guidelines and regulations.

## Green Streets Workshop

Policies and Practices Around the Region and the Country



Presentations and Discussion of the Value, Challenges and the Status of Implementation of Green Streets in the Washington, DC Metro Region and Beyond April 8, 2013

> 11:30 a.m. - 12:30 p.m. - Networking Lunch 12:30 - 4:30 p.m. Workshop **Metropolitan Washington Council of Governments** 777 North Capitol Street NE, Washington, DC Training Center - 1st Floor

**Networking Lunch** 11:30 a.m.-12:30 p.m.

Welcome

12:30-12:35 p.m. Mr. Ron Kirby, National Capital Region Transportation Planning Board Staff

**Background on the Workshop** 

12:35-12:40 p.m. Mr. Michael Farrell, National Capital Region Transportation Planning **Board Staff** 

Keynote: Green Streets in the Federal Government and Around the Nation: Valuable to the Nation's Environment and Economy

12:40-12:55 p.m. Ms. Dominique Lueckenhoff, US Environmental Protection Agency 12:55-1:10 p.m. Questions and Comments

A Green Street Perspective from another Region: Philadelphia's Green Street Policy Grows from Its Green City/Clean Water Agenda

1:10-1:25 p.m. Ms. Christine Knapp, City of Philadelphia Water Department 1:25-1:40 p.m. Questions and Comments

Green Streets in a Very Urban Setting, the District of Columbia

1:40-1:55 p.m. Ms. Meredith Upchurch, District of Columbia Department of Transportation 1:55-2:10 p.m. Questions and Comments

Brief Break (2:10-2:20 p.m.)

Green Streets in Northern Virginia

2:20 - 2:30 p.m. Mr. Pawan Sarang, State of Virginia Department of Transportation 2:30-2:40 p.m. Mr. Matthew Meyers, Fairfax County Department of Public Works and **Environmental Services** 

2:40-2:50 p.m. Mr. Jason Papacosma, Arlington County Department of Environmental Services

2:50-3:10 p.m. Questions and Comments

Green Streets in Suburban Maryland

3:10 - 3:20 p.m. Ms. Meg Andrews, Office of Planning and Capital Programming, Maryland Department of Transportation

3:20-3:30 p.m. Ms. Danielle Glaros, Office of the Honorable Eric Olson, Council Member, Prince George's County Council

3:30-3:40 Mr. Jim Wilson, Prince George's County Department of Public Works and **Transportation** 

3:40-4:00 p.m. Questions and Comments

Wrap-up Discussion: What Are the Next Steps? 4:00-4:20 Mr. Michael Farrell

## Green Streets Workshop

Policies and Practices Around the Region and the Country

## AGENDA WORKSHOP ON GREEN STREETS Biographical Information about the Speakers

Ms. Dominique Lueckenhoff serves as Acting Deputy Director of the Water Protection Division and Director of the Office of State and Watershed Partnerships for the United States Environmental Protection Agency's Region 3 Office in Philadelphia. She is responsible for oversight of a variety of programs, including federal grants totaling over half a billion dollars under the Clean Water Act (CWA), covering the states of Pennsylvania, Maryland, Virginia, West Virginia, Delaware and the District of Columbia. Ms. Lueckenhoff has also served as the visionary and driver of the Mid-Atlantic Green Highways Partnership (GHP), a public/private, collaborative effort promoting environmental stewardship, safety and sustainability in the transportation sector - particularly highways. Since its inception in 2004, the GHP has served as a principal incubator of green highway and green street design and development throughout the US.

Christine Knapp is the Director of Strategic Partnerships for the Philadelphia Water Department, where she serves as the main liaison to City Council and engages numerous external stakeholders in the work of the regional drinking water, wastewater and stormwater utility. Over the past 10 years, Christine has been at the heart of Philadelphia's sustainability efforts. Prior to PWD, Knapp served as the Manager of Public and Client Relations for the Energy Efficient Buildings Hub, a U.S. Department of Energy project aimed at increasing energy efficiency in commercial buildings. As the Director of Outreach for PennFuture, Christine Knapp managed statewide environmental advocacy campaigns and was also the coordinator for the Next Great City initiative to implement a common sense, cost effective policy agenda for Philadelphia. Knapp has won the Florence Neilson award for her work on the board of the Recycling Alliance of Philadelphia and the Special Recognition Award from PhilaPOSH for her work building alliances between the environmental and labor movements.

Meredith Upchurch is the Low Impact Development Team lead at DDOT in Washington, D.C. where she implements projects and coordinates stormwater policy for the right-of-way. She is leading projects for RiverSmart Washington, Green Alleys, LID Design Standards and produced DDOT's 2010 LID Action Plan. While at Casey Trees, she developed the guidelines for "Tree Space Design: Growing the Tree Out of the Box". Meredith's first career was in aerospace engineering, but she changed focus to work on solving urban environmental problems. She has degrees in Engineering, Landscape Architecture, and Natural Resources from Duke and Virginia Tech.

Pawan Sarang is a Registered Professional Engineer in the State of Maryland and Commonwealth of Virginia. Mr. Sarang completed Post Graduate studies in Highway Engineering and has served with the Virginia Department of Transportation in the Northern Virginia District as District Drainage Engineer since July 2005. (The Northern Virginia District includes Arlington, Fairfax, Prince William and Loudoun Counties and various cities.) Previously, Mr. Pawang worked in Land Development, Site Design and Highway Hydraulics/Drainage/SWM field for 16 years, with extensive work in Counties of Prince George's, Maryland and Anne Arundel, Maryland.

Jason Papacosma is currently the watershed programs manager for the Arlington County Department of Environmental Services. He has worked for Arlington since 1999. His work unit develops and implements watershed management policies, programs, and projects; manages Arlington County's municipal separate storm sewer system (MS4) permit; and develops and oversees development-related stormwater regulations. Jason's watershed programs team also performs stream assessments, water quality monitoring, and storm-water facility inspections; reviews development plans for stormwater management compliance; and works with citizens on a variety of watershed issues. Jason holds an MS in environmental science from the University of Maryland and a BS in environmental studies and biology from Bowdoin College, Brunswick, Maine.

Ms. Meg Andrews has, since 2000, been Manager of Environmental Programs in the Secretary's Office of Planning and Capital Programming at the Maryland Department of Transportation. She has over 30 years of experience with various modes of transportation, having worked at the Maryland Aviation Administration, the Washington Metropolitan Area Transit Authority, as well as at the State Highway Administration. For the last ten years she has represented the Department on the Critical Area Commission for the Chesapeake and Atlantic Coastal Bays, the Patuxent River Commission and the Maryland Green Building Council.

One Region Moving Forward

#### COG BOARD OF DIRECTORS MEETING

DATE: April 10, 2013 TIME: 12:00 Noon

**PLACE: COG Board Room** 

#### AGENDA

7. FINAL REPORT OF THE INCIDENT MANAGEMENT AND RESPONSE OVERSIGHT COMMITTEE AND UPDATE ON THE METROPOLITAN AREA TRANSPORTATION OPERATION COORDINATION (MATOC) PROGRAM (12:25 – 1:00 p.m.)

Phil Andrews
Councilmember, Montgomery County
Chair, IMR Oversight Committee

Ron Kirby Transportation Planning Director, COG

In the wake of the January 26, 2011 snow and ice storm, COG created a Steering Committee on Incident Management and Response (IMR) to offer recommendations to improve regional coordination, communication, preparedness, and decision-making during incidents and emergencies. The group released its report in November 2011, and it continued to meet and track progress on its recommendations as the IMR Oversight Committee. The Oversight Committee's March 2013 final report highlights significant progress in several areas, including information sharing among officials, messaging to the public, updating employee release policies, and prioritizing backup power for critical infrastructure.

One of the regional initiatives featured in the IMR report is MATOC, a joint program of DDOT, MDOT/SHA, VDOT, and WMATA, to promote real-time interagency information sharing and coordination. The Board will be briefed on the key role MATOC has in the region's transportation operations, including actions taken during the Presidential Inauguration and Super Storm Sandy, and its associated "data fusion engine", the Regional Integrated Transportation Information System (RITIS).

RECOMMENDED ACTION: Receive briefing.

District of Columbia
Bladensburg\*
Bowie
Charles County
College Park
Frederick
Frederick County

Montgomery County Prince George's County Rockville

Takoma Park Alexandria Arlington County

Gaithersburg

Greenbelt

Fairfax
Fairfax County
Falls Church
Loudoun County
Manassas

Manassas Park
Prince William County

\*Adjunct Member

777 North Capitol Street, NE, Suite 300, Washington, D.C. 20002 202.962.3200 (Phone) 202.962.3201 (Fax) 202.962.3213 (TDD)

## **ITEM 7 – Action** April 17, 2013

#### Approval of Regional Bike to Work Day 2013 Proclamation

**Staff Recommendation:** Approve the enclosed Bike to Work

Day 2013 Proclamation.

**Issues:** None

Background: In an effort to increase public

awareness of the viability of bicycle commuting in the Washington region, regional Bike to Work Day events are

being organized at seventy-two

locations in the region for Friday May 17. These events will encourage the

business community and other

regional decision-makers to support increased bicycle commuting through bicycle-friendly policies and initiatives.

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

## PROCLAMATION ESTABLISHING MAY 17, 2013 AS BIKE TO WORK DAY IN THE METROPOLITAN WASHINGTON REGION

**WHEREAS,** bicycle commuting is an effective means to improve air quality, reduce traffic congestion, and conserve energy; and

WHEREAS, bicycle commuting benefits both employees and employers through better employee health and fitness; reduced commuting and parking costs; and

**WHEREAS**, increasing numbers of employers have installed bicycle parking and shower facilities to help encourage employees to commute by bicycle; and

WHEREAS, the federal bicycle commuter benefit can be used by employers to assist employees with bicycle purchases, improvements, repair and storage; and

**WHEREAS,** Capital Bikeshare's regional bike sharing system has reached the milestone of 200 stations within the District of Columbia, Alexandria and Arlington, and is poised for continued expansion into more jurisdictions.

WHEREAS, the TPB through its Commuter Connections program promotes bicycling and organizes Bike to Work Day along with the Washington Area Bicyclist Association; and

**WHEREAS,** the week of May 13th is National Bike to Work Week, which promotes bicycling as a viable means of transportation to and from work;

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

- 1. Proclaims Friday May 17, 2013 as Bike to Work Day throughout the Washington metropolitan region; and
- 2. Encourages TPB member jurisdictions to adopt similar proclamations in support of the event; and
- 3. Reminds all members of the importance of bicycle safety as advocated by the Street Smart campaign.

#### ITEM 8 – Action

April 17, 2013

Briefing on TPB Congestion Mitigation and Air Quality
Responsibilities under MAP-21 and Approval of a TPB Letter to
the US Department of Transportation (USDOT) Regarding
Performance Measures and Targets for Congestion in the
Washington Region

#### **Staff Recommendation:**

- Receive briefing on the responsibilities of the TPB for measures and targets related to congestion mitigation and air quality
- approve the enclosed letter to the Secretary of the USDOT regarding the establishment of performance measures and targets for congestion in the Washington Region.

Issues: None

**Background:** MAP-21 calls for MPOs, state DOTs and public transportation providers to

establish and use a performancebased approach to transportation decision making to support national goals. It calls for USDOT to establish performance measures related to national goals for planning processes

and for state DOTs, public

transportation providers and MPOs to

establish performance targets.

#### National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

DRAFT

April 17, 2013

The Honorable Ray LaHood Secretary U.S. Department of Transportation (USDOT) 1200 New Jersey Avenue, SE Washington, DC 20590

Dear Secretary LaHood,

The National Capital Region Transportation Planning Board (TPB), the metropolitan planning organization (MPO) for the Metropolitan Washington Area, greatly appreciates your efforts and those of USDOT staff to provide opportunities for input and consultation on the development of transportation performance measures and targets required under the Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21) legislation, which became effective on October 1, 2012. The TPB looks forward to working closely with the USDOT and our state and transit agency partners in the implementation of this new performance-based approach to transportation decision-making.

MAP-21 calls upon MPOs like the TPB to provide for a performance-based approach within their metropolitan planning processes. Larger MPOs with over one million people are required to develop a performance plan under the Congestion Mitigation and Air Quality Improvement (CMAQ) Program that includes "an area baseline level for traffic congestion and on-road mobile source emissions for which the area is in non attainment or maintenance", describes progress in achieving performance targets for emission and traffic congestion

reduction, and describes how projects funded under the CMAQ program contribute to achieving these targets. In developing an approach to addressing these responsibilities under the CMAQ program, the TPB is very interested in participating in the consultation process with USDOT on how performance measures and targets are to be established for mobile source emissions and traffic congestion.

With regard to mobile source emissions, the TPB is hopeful that the USDOT will develop performance measures that are consistent with the existing air quality conformity requirements under the Clean Air Act Amendments (CAAA) of 1990. The TPB already devotes substantial resources on an ongoing basis to the development of mobile source emissions estimates for the Washington region, and to their use in the development of air quality plans and determinations of conformity to these plans under regulations promulgated by the Environmental Protection Agency (EPA). Building on performance measures already established under the EPA requirements would ensure consistency between MAP-21 and CAAA provisions, and minimize the need for additional technical and policy analyses under MAP-21.

With regard to traffic congestion, the TPB suggests that USDOT focus on the development of measures that are meaningful and easily understood by the general public, can be quantified using data that are readily available to MPOs throughout the country, and can be disaggregated by location and time-of-day within MPO areas to permit target-setting by MPOs that is responsive to locally-established goals and the resources reasonably expected to be available for the transportation system. While traffic congestion reduction is an important goal for certain locations and time periods, the benefits and costs of traffic congestion strategies must be assessed with all of the goals of the transportation system in mind. In some locations, for example, some increase in traffic congestion may be acceptable in order to achieve goals related

to encouraging concentrated mixed used development along with increased use of pedestrian and bicycle facilities and other alternatives to single-occupancy vehicle travel.

Thank you for considering these comments on the development of MAP-21 performance measure and target-setting procedures. Please feel free to contact me at <a href="mailto:Scott.York@loudoun.gov">Scott.York@loudoun.gov</a> or Ronald Kirby, Director of Transportation Planning for the TPB at <a href="mailto:rkirby@mwcog.org">rkirby@mwcog.org</a>, if we can provide any additional information.

Sincerely,

Scott York Chairman National Capital Region Transportation Planning Board

Item #8



# MAP-21 Performance-Based Planning: A Focus on Congestion Mitigation and Air Quality Moving Ahead for Progress in the 21st Century

Presentation to the Transportation Planning Board

Ronald F. Kirby

Director, Department of Transportation Planning
April 17, 2013

## Performance-Based Approach

- MAP-21, Section 150. <u>National Goals and Performance Management</u> <u>Measures</u>
  - (a) Declaration of Policy—Performance management will...provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals...and improving project decisionmaking through performance-based planning and programming.
- MAP-21, Section 1201. <u>Metropolitan Transportation Planning</u>
   The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decisionmaking to support the national goals...
- Funding mostly formula, some USDOT discretion, no earmarks

## Performance-Based Planning and Programming New National Goals Under MAP-21

## Metropolitan Planning Process continued from previous law

	Scope of Planning Process
1	Economic Vitality
2	Safety
3	Security
4	Accessibility
5	Environment
6	Connectivity Across Modes
7	System Management and Operation
8	System Preservation

#### **New National Goals from MAP-21**

	National Goals
1	Safety
2	Infrastructure Condition
3	Congestion Reduction
4	System Reliability
5	Freight Movement and Economic Vitality
6	Environmental Sustainability
7	Reduced Project Delivery Delays

#### **National Goals related to Scope of Metropolitan Planning Process**

## Performance Measures Required by MAP-21 Title 23, Section 150(c)-Highways

- Secretary shall...limit performance measures only to those described in this subsection:
- 1. National Highway Performance Program
  - Minimum standards...in developing and operating bridge and pavement management systems
  - Condition of pavement on the Interstate System and on the National Highway System (NHS) (excluding Interstate)
  - Condition of bridges on the NHS
  - Performance of the Interstate System and the NHS (excluding Interstate)
  - Minimum levels for the condition of pavement on the Interstate System
- 2. Highway Safety Improvement Program
  - Serious injuries and fatalities per vehicle mile traveled and the number of serious injuries and fatalities
- 3. Congestion Mitigation and Air Quality Program
  - Traffic congestion
  - On-road mobile source emissions
- 4. National Freight Movement
  - Assess freight movement on the Interstate System

## Performance Measures Required by MAP-21 Title 49, Chapter 53-Public Transportation

Applies to all recipients. 'Recipient' means a State or local governmental authority, or any other operator of the public transportation system, that receives federal financial assistance

### 1. Transit Asset Management Plan

- Definition of 'state of good repair' that includes objective standards for measuring the condition of capital assets of recipients, including equipment, rolling stock, infrastructure, and facilities
- Secretary shall issue a final rule to establish performance measures based on the 'state of good repair' standards

### 2. National Public Transportation Safety Plan

- Safety performance criteria for all modes of public transportation
- Minimum safety performance standards for public transportation vehicles
- Public transportation safety certification training program

### 3. Public Transportation Agency Safety Plan

 States/transit recipients establish a comprehensive agency safety plan (1-year after the effective date of the performance measures on 'state of good repair' final rule)

## PBPP Accountability/Penalties

- State Performance Management
  - States that do not achieve or make significant progress toward targets for two reporting periods must address in following report how the state will achieve the targets
- Interstate System and National Highway System (NHS) Bridge Conditions
  - If, for two reporting periods, the condition of the Interstate System...falls below the minimum condition level, the State shall be required to obligate and transfer funds to meet minimum conditions
  - If greater than 10% of the deck area of bridges in the State on the NHS is located on bridges that have been classified as structurally deficient, a specified portion of funds...shall be set aside...only for eligible projects on bridges on the NHS
- High-Risk Rural Road Safety
  - If rural road fatality rates increase over the most recent 2-year period for which data is available, the State shall obligate in the next fiscal year an amount equal to at least 200% of the amount of funds the State received for fiscal year 2009 for high risk rural roads
- MPO Certification
  - If a metropolitan planning process serving a transportation management area is not certified (as required every 4 years), the Secretary may withhold up to 20% of the MPO's funds under metropolitan transportation planning

## Timeline on PBPP Requirements

MAP 21 PBPP Implementation Timeline				
Date	Action			
10/1/12	MAP-21 date of Enactment			
10/1/13	Final rule for public transport state of good repair performance measures and standards			
1/1/14	Federal public transport recipients shall establish performance targets in relation to performance measures established by the Secretary, and report each year			
Fall 2013, FTA est.	National Public Transportation Safety Plan			
Fall 2014	Public Transportation Agency Safety Plan (1 year after National Public Transportation Safety Plan)			
4/1/14	Secretary promulgates rulemaking that establishes performance measures and standards required under MAP-21, following 90-day comment period			
4/1/15	States set performance targets for measures established by Secretary			
10/1/15	MPOs establish performance targets 180 days after States/public transportation providers establish performance targets			
10/1/16	States submit to Secretary report on progress in achieving targets			
10/1/17	Secretary submits to Congress a report on the effectiveness of the performance-based planning process of metropolitan planning organizations			

## KEY Public Transportation Highway Metropolitan Planning Federal Action

# Performance Measures 3-Tier Staged Rule STAGED RULE SCHEDULE

Measures / Fiscal Year FY / QUARTER		Safety Measures	Pavement & Bridge Measures	CMAQ, Performance, and Freight Measures		
		Status I	Status II	Status III		
FY13 (Year 1 of MAP-21)	Q1 Q2	Consultation/	C			
		Q3	NPRM	Consultation/ NPRM	Consultation/	
	Q4		INFINI	NPRM		
EVA 4	Q1	Comments				
FY14 (Year 2 of MAP-21)	Q2		Comments		Cinal	
		Q3	Final Rule		Comments	Singl Effec
		Q4		Final Rule		Date:
FY15	Q1			Final Rule	Sprir	
	Q2				2015	

Source: FHWA sponsored MAP-21 Webinar, March 18, 2013

## PBPP Coordination Efforts Underway

- FHWA consultation meetings with states/MPOs/associations
- January 8<sup>th</sup>: FHWA MAP-21 Performance Management Listening Session on Target Setting: Facilitated "Conversations": Considerations in Target Setting
  - Targets are bound by available resources
  - States and MPOs will need to be balancing performance in many areas
  - Many entities may be key in achieving targets
  - Unplanned events may impact the ability to achieve a target

## PBPP Coordination Efforts Underway Cont.

Association letters for consideration by US DOT as part of rulemaking process

#### **AASHTO Letter,** November 26, 2012

- A few themes:
  - Reduce and Re-use

"[N]ational-level performance measures should build upon existing performance measures, management practices, data sets and reporting processes"

Communicate

"Messaging the impact and meaning...to the public...is vital to the success of this [PBPP] initiative"



#### AMPO Letter, December 7, 2012

- A few themes:
  - Financial Constraint
     "MPOs will have to assess and
     balance the targets in context
     of the overall goals and
     financial capabilities of their
  - Air Quality Conformity

"Measurements chosen for on-road mobile source emissions should be consistent with existing federal air quality planning and conformity requirements"

individual metropolitan areas"



## PBPP Focus for the TPB

FY 2014 UPWP begins to address new PBPP responsibilities

- Responsibilities to be coordinated with States/transit agencies
  - State of Good Repair
  - Safety
- 2) Explicit TPB Responsibilities for Congestion Mitigation and Air Quality
  - MPO Performance Plan
  - Requirement/opportunity for increased focus on congestion, with active engagement of all TPB member agencies and processes
  - Mobile emissions likely to be governed largely by current air quality requirements

- (i) Evaluation and Assessment of Projects
- (k) Priority for Use of Funds in PM 2.5 Areas
- (I) Performance Plan

## (i) Evaluation and Assessment of Projects

### 1. Database

"Secretary shall maintain and disseminate a <u>cumulative database</u> <u>describing the impacts of the projects</u>, including specific information about each project...based on reductions in congestion and emissions"

### 2. Cost Effectiveness

"Secretary, in consultation with the Administrator of the EPA, shall evaluate projects on a periodic basis and <u>develop a table...that</u> <u>illustrates the cost-effectiveness of a range of project types...as to how the projects mitigate congestion and improve air quality. The table shall show measures of cost-effectiveness, such as dollars per ton of emissions reduced."</u>

## (k) Priority for Use of Funds in PM 2.5 Areas

### 1. Requirement

"For any State that has a nonattainment or maintenance area for fine particulate matter, an amount equal to 25 percent of the funds apportioned under section 104(b)(4) ...shall be obligated to projects that reduce such fine particulate matter emissions in such area, including diesel retrofits"

2. Applicability to CMAQ funds for FY 2013 and FY 2014

25 Percent of					
CMAQ Funding Allocations					
(Millions \$ per Year for					
FY 2013 and FY 2014)					
DC	2.42				
MD	12.38				
VA	6.38				

- (I) Performance Plan-Each MPO...representing a nonattainment or maintenance area shall develop a performance plan that:
  - (A) Includes an <u>area baseline level</u> for traffic congestion and on-road mobile source emissions for which the area is in nonattainment or maintenance;
  - (B) Describes progress made in achieving the performance targets; and
  - (C) Includes a description of projects identified for funding under this section and how such projects will contribute to achieving emission and traffic congestion reduction targets.

- Some TPB Programs have been designed to support congestion reduction and improve air quality
  - Commuter Connections Program
  - Metropolitan Area Transportation Operations Center (MATOC)
- TPB already develops "baseline level for traffic congestion and on-road mobile source emissions"
- Target-Setting will be a new undertaking
  - Await establishment of performance measures by US DOT due by 4/1/2014, then targets must be set by 10/1/2015
- TPB coordination with states and public transit agencies to describe how CMAQ-funded projects contribute to achieving emissions and traffic congestion reduction targets

## Recent TTI Report on Congestion

Texas Transportation Institute 2012 Urban Mobility Report

- National Capital Region #1 in congestion with regard to average congestion delay per commuter
- TTI Planning Time Index represents an unrealistically high level for "reliability planning"
- Can we develop additional measures and targets to address congestion in our region with more specificity by location, direction, and time-of-day?
- Our region also ranks high in transit, bicycle, pedestrian, and carpool measures, which help mitigate the impact of traffic congestion for many residents



## Proposed TPB Comment to US DOT on Performance Measures and Target-Setting

### Performance Measures should be:

- Based on readily available data and technical methods
- Meaningful to the general public
- Amenable to disaggregation to reflect local priorities

### <u>Target-Setting</u> should be:

- Based on local cost-effectiveness and cost benefit analyses
- Bounded by available resources

## Questions?

Ronald F. Kirby

Director, Department of Transportation Planning

#### Transportation Planning Board April 17, 2013

#### **Item #8**

The following portions of text from the recently enacted transportation legislation, "Moving Ahead for Progress in the 21<sup>st</sup> Century Act" or "MAP-21", have been selected for reference in today's discussion on the requirements for performance-based planning and programming.

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#### I. TITLE 23 – HIGHWAYS

- a. SEC. 1203. NATIONAL GOALS AND PERFORMANCE MANAGEMENT MEASURES.
- (a) IN GENERAL.—Section 150 of title 23, United States Code, is amended to read as follows:
- § 150. National goals and performance management measures
  - (a) DECLARATION OF POLICY.—Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decisionmaking through performance-based planning and programming.
  - (b) NATIONAL GOALS.—It is in the interest of the United States to focus the Federal-aid highway program on the following national goals:
    - (1) SAFETY.—To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
    - (2) INFRASTRUCTURE CONDITION.—To maintain the highway infrastructure asset system in a state of good repair.
    - (3) CONGESTION REDUCTION.—To achieve a significant reduction in congestion on the National Highway System.
    - (4) SYSTEM RELIABILITY.—To improve the efficiency of the surface transportation system.
    - (5) FREIGHT MOVEMENT AND ECONOMIC VITALITY.—To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
    - (6) ENVIRONMENTAL SUSTAINABILITY.—To enhance the performance of the transportation system while protecting and enhancing the natural environment.
    - (7) REDUCED PROJECT DELIVERY DELAYS.—To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.
  - (c) ESTABLISHMENT OF PERFORMANCE MEASURES.—
    - (1) IN GENERAL.—Not later than 18 months after the date of enactment

of the MAP–21, the Secretary, in consultation with State departments of transportation, metropolitan planning organizations, and other stakeholders, shall promulgate a rulemaking that establishes performance measures and standards.

- (2) ADMINISTRATION.—In carrying out paragraph (1), the Secretary shall—
  - (A) provide States, metropolitan planning organizations, and other stakeholders not less than 90 days to comment on any regulation proposed by the Secretary under that paragraph;
  - (B) take into consideration any comments relating to a proposed regulation received during that comment period; and
  - (C) limit performance measures only to those described in this subsection.

#### (3) NATIONAL HIGHWAY PERFORMANCE PROGRAM.—

- (A) IN GENERAL.—Subject to subparagraph (B), for the purpose of carrying out section 119, the Secretary shall establish—
  - (i) minimum standards for States to use in developing and operating bridge and pavement management systems;
  - (ii) measures for States to use to assess—
    - (I) the condition of pavements on the Interstate system;
    - (II) the condition of pavements on the National Highway System (excluding the Interstate);
    - (III) the condition of bridges on the National Highway System;
    - (IV) the performance of the Interstate System; and
    - (V) the performance of the National Highway System (excluding the Interstate System);
  - (iii) minimum levels for the condition of pavement on the Interstate System, only for the purposes of carrying out section 119(f)(1); and
  - (iv) the data elements that are necessary to collect and maintain standardized data to carry out a performancebased approach.

- (B) REGIONS.—In establishing minimum condition levels under subparagraph (A)(iii), if the Secretary determines that various geographic regions of the United States experience disparate factors contributing to the condition of pavement on the Interstate System in those regions, the Secretary may establish different minimum levels for each region;
- (4) HIGHWAY SAFETY IMPROVEMENT PROGRAM.—For the purpose of carrying out section 148, the Secretary shall establish measures for States to use to assess—
  - (A) serious injuries and fatalities per vehicle mile traveled; and
  - (B) the number of serious injuries and fatalities.
- (5) CONGESTION MITIGATION AND AIR QUALITY PROGRAM.—For the purpose of carrying out section 149, the Secretary shall establish measures for States to use to assess—
  - (A) traffic congestion; and
  - (B) on-road mobile source emissions.
- (6) NATIONAL FREIGHT MOVEMENT.—The Secretary shall establish measures for States to use to assess freight movement on the Interstate System.

#### (d) ESTABLISHMENT OF PERFORMANCE TARGETS.—

- (1) IN GENERAL.—Not later than 1 year after the Secretary has promulgated the final rulemaking under subsection (c), each State shall set performance targets that reflect the measures identified in paragraphs (3), (4), (5), and (6) of subsection (c).
- (2) DIFFERENT APPROACHES FOR URBAN AND RURAL AREAS.—In the development and implementation of any performance target, a State may, as appropriate, provide for different performance targets for urbanized and rural areas.
- (e) REPORTING ON PERFORMANCE TARGETS.—Not later than 4 years after the date of enactment of the MAP–21 and biennially thereafter, a State shall submit to the Secretary a report that describes—
  - (1) the condition and performance of the National Highway System in the State;
  - (2) the effectiveness of the investment strategy document in the State asset

management plan for the National Highway System;

- (3) progress in achieving performance targets identified under subsection (d); and
- (4) the ways in which the State is addressing congestion at freight bottlenecks, including those identified in the National Freight Strategic Plan, within the State."

#### II. TITLE 49, CHAPTER 53 – PUBLIC TRANSPORTATION

- a. § 5301. Policies and Purposes
  - (a) DECLARATION OF POLICY.—It is in the interest of the United States, including the economic interest of the United States, to foster the development and revitalization of public transportation systems with the cooperation of both public transportation companies and private companies engaged in public transportation.
- b. § 5326. Transit asset management
  - (b) TRANSIT ASSET MANAGEMENT SYSTEM.—The Secretary shall establish and implement a national transit asset management system, which shall include—
    - (1) a definition of the term 'state of good repair' that includes objective standards for measuring the condition of capital assets of recipients, including equipment, rolling stock, infrastructure, and facilities;
    - (2) a requirement that recipients and sub-recipients of Federal financial assistance under this chapter develop a transit asset management plan;
    - (3) a requirement that each designated recipient of Federal financial assistance under this chapter report on the condition of the system of the recipient and provide a description of any change in condition since the last report;
    - (4) an analytical process or decision support tool for use by public transportation systems that—
      - (A) allows for the estimation of capital investment needs of such systems over time; and
      - (B) assists with asset investment prioritization by such systems; and
    - (5) technical assistance to recipients of Federal financial assistance under this chapter.

#### (c) PERFORMANCE MEASURES AND TARGETS.—

- (1) IN GENERAL.—Not later than 1 year after the date of enactment of the Federal Public Transportation Act of 2012, the Secretary shall issue a final rule to establish performance measures based on the state of good repair standards established under subsection (b)(1).
- (2) TARGETS.—Not later than 3 months after the date on which the Secretary issues a final rule under paragraph (1), and each fiscal year thereafter, each recipient of Federal financial assistance under this chapter shall establish performance targets in relation to the performance measures established by the Secretary.
- (3) REPORTS.—Each designated recipient of Federal financial assistance under this chapter shall submit to the Secretary an annual report that describes—
  - (A) the progress of the recipient during the fiscal year to which the report relates toward meeting the performance targets established under paragraph (2) for that fiscal year; and
  - (B) the performance targets established by the recipient for the subsequent fiscal year.

#### c. § 5329. Public transportation safety program

(a) DEFINITION.—In this section, the term 'recipient' means a State or local governmental authority, or any other operator of a public transportation system, that receives financial assistance under this chapter.

#### (b) NATIONAL PUBLIC TRANSPORTATION SAFETY PLAN.—

- (1) IN GENERAL.—The Secretary shall create and implement a national public transportation safety plan to improve the safety of all public transportation systems that receive funding under this chapter.
- (2) CONTENTS OF PLAN.—The national public transportation safety plan under paragraph (1) shall include—
  - (A) safety performance criteria for all modes of public transportation;
  - (B) the definition of the term 'state of good repair' established under section 5326(b);
  - (C) minimum safety performance standards for public transportation vehicles used in revenue operations that—

- (i) do not apply to rolling stock otherwise regulated by the Secretary or any other Federal agency; and
- (ii) to the extent practicable, take into consideration—
  - (I) relevant recommendations of the National Transportation Safety Board; and
  - (II) recommendations of, and best practices standards developed by, the public transportation industry; and
- (D) a public transportation safety certification training program, as described in subsection (c).

#### (d) PUBLIC TRANSPORTATION AGENCY SAFETY PLAN.—

- (1) IN GENERAL.—Effective 1 year after the effective date of a final rule issued by the Secretary to carry out this subsection, each recipient or State, as described in paragraph (3), shall certify that the recipient or State has established a comprehensive agency safety plan that includes, at a minimum—
  - (A) a requirement that the board of directors (or equivalent entity) of the recipient approve the agency safety plan and any updates to the agency safety plan;
  - (B) methods for identifying and evaluating safety risks throughout all elements of the public transportation system of the recipient;
  - (C) strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions;
  - (D) a process and timeline for conducting an annual review and update of the safety plan of the recipient;
  - (E) performance targets based on the safety performance criteria and state of good repair standards established under subparagraphs (A) and (B), respectively, of subsection (b)(2);
  - (F) assignment of an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the recipient; and
  - (G) a comprehensive staff training program for the operations personnel and personnel directly responsible for safety of the recipient that includes—(i) the completion of a safety training program; and (ii) continuing safety education and training.

#### III. SEC. 1201. METROPOLITAN TRANSPORTATION PLANNING.

- (a) IN GENERAL.—Section 134 of title 23, United States Code, is amended to read as follows:
- § 134. Metropolitan Transportation Planning
  - (a) POLICY.—It is in the national interest—
    - (1) to encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas, while minimizing transportation-related fuel consumption and air pollution through metropolitan and statewide transportation planning processes identified in this chapter; and
    - (2) to encourage the continued improvement and evolution of the metropolitan and statewide transportation planning processes by metropolitan planning organizations, State departments of transportation, and public transit operators as guided by the planning factors identified in subsection (h) and section 135(d).

#### (h) SCOPE OF PLANNING PROCESS.—

- (1) IN GENERAL.—The metropolitan planning process for a metropolitan planning area under this section shall provide for consideration of projects and strategies that will—
  - (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 motorized and nonmotorized users;
  - (C) increase the security of the transportation system for motorized and nonmotorized users:
  - (D) increase the accessibility and mobility of people and for freight;
  - (E) 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;

- (F) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- (G) promote efficient system management and operation; and
- (H) emphasize the preservation of the existing transportation system.

#### (2) PERFORMANCE-BASED APPROACH.—

(A) IN GENERAL.—The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decisionmaking to support the national goals described in section 150(b) of this title and in section 5301(c) of title 49.

#### (B) PERFORMANCE TARGETS.—

- (i) SURFACE TRANSPORTATION PERFORMANCE TARGETS.—
  - (I) IN GENERAL.—Each metropolitan planning organization shall establish performance targets that address the performance measures described in section 150(c), where applicable, to use in tracking progress towards attainment of critical outcomes for the region of the metropolitan planning organization.
  - (II) COORDINATION.—Selection of performance targets by a metropolitan planning organization shall be coordinated with the relevant State to ensure consistency, to the maximum extent practicable.
- (ii) PUBLIC TRANSPORTATION PERFORMANCE TARGETS. —Selection of performance targets by a metropolitan planning organization shall be coordinated, to the maximum extent practicable, with providers of public transportation to ensure consistency with sections 5326(c) and 5329(d) of title 49.
- (C) TIMING.—Each metropolitan planning organization shall establish the performance targets under subparagraph (B) not later than 180 days after the date on which the relevant State or provider of public transportation establishes the performance targets.

- (D) INTEGRATION OF OTHER PERFORMANCE-BASED PLANS.—A metropolitan planning organization shall integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under chapter 53 of title 49 by providers of public transportation, required as part of a performance-based program.
- (3) FAILURE TO CONSIDER FACTORS.—The failure to consider any factor specified in paragraphs (1) and (2) shall not be reviewable by any court under this title or chapter 53 of title 49, subchapter II of chapter 5 of title 5, or chapter 7 of title 5 in any matter affecting a transportation plan, a TIP, a project or strategy, or the certification of a planning process.

#### (i) DEVELOPMENT OF TRANSPORTATION PLAN.—

#### (1) REQUIREMENTS.—

(A) IN GENERAL.—Each metropolitan planning organization shall prepare and update a transportation plan for its metropolitan planning area in accordance with the requirements of this subsection.

#### (B) FREQUENCY.—

- (i) IN GENERAL.—The metropolitan planning organization shall prepare and update such plan every 4 years (or more frequently, if the metropolitan planning organization elects to update more frequently) in the case of each of the following:
  - (I) Any area designated as nonattainment, as defined in section 107(d) of the Clean Air Act (42 U.S.C. 7407(d)).
  - (II) Any area that was nonattainment and subsequently designated to attainment in accordance with section 107(d)(3) of that Act (42 7407(d)(3)) and that is subject to a maintenance plan under section 175A of that Act (42 7505a).
- (ii) OTHER AREAS.—In the case of any other area required to have a transportation plan in accordance with the requirements of this subsection, the metropolitan planning organization shall prepare and update such plan

every 5 years unless the metropolitan planning organization elects to update more frequently.

(2) TRANSPORTATION PLAN.— A transportation plan under this section shall be in a form that the Secretary determines to be appropriate and shall contain, at a minimum, the following:

#### (A) IDENTIFICATION OF TRANSPORTATION FACILITIES.—

- (i) IN GENERAL.—An identification of transportation facilities (including major roadways, transit, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions.
- (ii) FACTORS.—In formulating the transportation plan, the metropolitan planning organization shall consider factors described in subsection (h) as the factors relate to a 20-year forecast period.
- (B) PERFORMANCE MEASURES AND TARGETS.—A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with subsection (h)(2).
- (C) SYSTEM PERFORMANCE REPORT.—A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in subsection (h)(2), including—
  - (i) progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports; and
  - (ii) for metropolitan planning organizations that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.

#### (4) OPTIONAL SCENARIO DEVELOPMENT.—

- (A) IN GENERAL.—A metropolitan planning organization may, while fitting the needs and complexity of its community, voluntarily elect to develop multiple scenarios for consideration as part of the development of the metropolitan transportation plan, in accordance with subparagraph (B).
- (B) RECOMMENDED COMPONENTS.—A metropolitan planning organization that chooses to develop multiple scenarios under subparagraph (A) shall be encouraged to consider—
  - (i) potential regional investment strategies for the planning horizon;
  - (ii) assumed distribution of population and employment;
  - (iii) a scenario that, to the maximum extent practicable, maintains baseline conditions for the performance measures identified in subsection (h)(2);
  - (iv) a scenario that improves the baseline conditions for as many of the performance measures identified in subsection (h)(2) as possible;
  - (v) revenue constrained scenarios based on the total revenues expected to be available over the forecast period of the plan; and
  - (vi) estimated costs and potential revenues available to support each scenario.
- (C) METRICS.—In addition to the performance measures identified in section 150(c), metropolitan planning organizations may evaluate scenarios developed under this paragraph using locally-developed measures.

#### (j) Metropolitan TIP.—

#### (1) DEVELOPMENT.—

(A) IN GENERAL.—In cooperation with the State and any affected public transportation operator, the metropolitan planning organization designated for a metropolitan area shall develop a TIP for the metropolitan planning area that—

- (i) contains projects consistent with the current metropolitan transportation plan;
- (ii) reflects the investment priorities established in the current metropolitan transportation plan; and
- (iii) once implemented, is designed to make progress toward achieving the performance targets established under subsection (h)(2).
- (B) OPPORTUNITY FOR COMMENT.—In developing the TIP, the metropolitan planning organization, in cooperation with the State and any affected public transportation operator, shall provide an opportunity for participation by interested parties in the development of the program, in accordance with subsection (i)(5).
- (C) FUNDING ESTIMATES.—For the purpose of developing the TIP, the metropolitan planning organization, public transportation agency, and State shall cooperatively develop estimates of funds that are reasonably expected to be available to support program implementation.

#### (D) UPDATING AND APPROVAL.—The TIP shall be—

- (i) updated at least once every 4 years; and
- (ii) approved by the metropolitan planning organization and the Governor.

#### (2) CONTENTS.—

- (A) PRIORITY LIST.—The TIP shall include a priority list of proposed Federally supported projects and strategies to be carried out within each 4-year period after the initial adoption of the TIP.
- (B) FINANCIAL PLAN.—The TIP shall include a financial plan that—
  - (i) demonstrates how the TIP can be implemented;
  - (ii) indicates resources from public and private sources that are reasonably expected to be available to carry out the program;
  - (iii) identifies innovative financing techniques to finance projects, programs, and strategies; and

- (iv) may include, for illustrative purposes, additional projects that would be included in the approved TIP if reasonable additional resources beyond those identified in the financial plan were available.
- (C) DESCRIPTIONS.—Each project in the TIP shall include sufficient descriptive material (such as type of work, termini, length, and other similar factors) to identify the project or phase of the project.
- (D) PERFORMANCE TARGET ACHIEVEMENT.—The transportation improvement program shall include, to the maximum extent practicable, a description of the anticipated effect of the transportation improvement program toward achieving the performance targets established in the metropolitan transportation plan, linking investment priorities to those performance targets.
- (l) Report on performance-based planning processes.—
  - (1) IN GENERAL.—The Secretary shall submit to Congress a report on the effectiveness of the performance-based planning processes of metropolitan planning organizations under this section, taking into consideration the requirements of this subsection
  - (2) REPORT.—Not later than 5 years after the date of enactment of the MAP–21, the Secretary shall submit to Congress a report evaluating—
    - (A) the overall effectiveness of performance-based planning as a tool for guiding transportation investments;
    - (B) the effectiveness of the performance-based planning process of each metropolitan planning organization under this section;
    - (C) the extent to which metropolitan planning organizations have achieved, or are currently making substantial progress toward achieving, the performance targets specified under this section and whether metropolitan planning organizations are developing meaningful performance targets; and
    - (D) the technical capacity of metropolitan planning organizations that operate within a metropolitan planning area of less than 200,000 and their ability to carry out the requirements of this section.
  - (3) PUBLICATION.—The report under paragraph (2) shall be published or otherwise made available in electronically accessible formats and means, including on the Internet.

### IV. SEC. 1113. CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT PROGRAM.

- (c) Special rules.—
  - (1) PROJECTS FOR PM–10 NONATTAINMENT AREAS.—A State may obligate funds apportioned to the State under section 104(b)(4) for a project or program for an area that is nonattainment for ozone or carbon monoxide, or both, and for PM–10 resulting from transportation activities, without regard to any limitation of the Department of Transportation relating to the type of ambient air quality standard such project or program addresses.
  - (2) ELECTRIC VEHICLE AND NATURAL GAS VEHICLE INFRASTRUCTURE.—A State may obligate funds apportioned under section 104(b)(4) for a project or program to establish electric vehicle charging stations or natural gas vehicle refueling stations for the use of battery powered or natural gas fueled trucks or other motor vehicles at any location in the State except that such stations may not be established or supported where commercial establishments serving motor vehicle users are prohibited by section 111 of title 23, United States Code.
  - (3) HOV FACILITIES.—No funds may be provided under this section for a project which will result in the construction of new capacity available to single occupant vehicles unless the project consists of a high occupancy vehicle facility available to single occupant vehicles only at other than peak travel times.;
- (i) Evaluation and Assessment of Projects—
  - (1) DATABASE-
  - (A) IN GENERAL- Using appropriate assessments of projects funded under the congestion mitigation and air quality program and results from other research, the Secretary shall maintain and disseminate a cumulative database describing the impacts of the projects, including specific information about each project, such as the project name, location, sponsor, cost, and, to the extent already measured by the project sponsor, cost-effectiveness, based on reductions in congestion and emissions.
  - (B) AVAILABILITY- The database shall be published or otherwise made readily available by the Secretary in electronically accessible format and means, such as the Internet, for public review.

#### (2) COST EFFECTIVENESS-

- (A) IN GENERAL- The Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall evaluate projects on a periodic basis and develop a table or other similar medium that illustrates the cost-effectiveness of a range of project types eligible for funding under this section as to how the projects mitigate congestion and improve air quality.
- (B) CONTENTS- The table described in subparagraph (A) shall show measures of cost-effectiveness, such as dollars per ton of emissions reduced, and assess those measures over a variety of timeframes to capture impacts on the planning timeframes outlined in section 134.
- (C) USE OF TABLE- States and metropolitan planning organizations shall consider the information in the table when selecting projects or developing performance plans under subsection (l).

#### (k) Priority for use of funds in PM2.5 areas.—

- (1) IN GENERAL.—For any State that has a nonattainment or maintenance area for fine particulate matter, an amount equal to 25 percent of the funds apportioned to each State under section 104(b)(4) for a nonattainment or maintenance area that are based all or in part on the weighted population of such area in fine particulate matter nonattainment shall be obligated to projects that reduce such fine particulate matter emissions in such area, including diesel retrofits.
- (2) CONSTRUCTION EQUIPMENT AND VEHICLES.—In order to meet the requirements of paragraph (1), a State or metropolitan planning organization may elect to obligate funds to install diesel emission control technology on nonroad diesel equipment or on-road diesel equipment that is operated on a highway construction project within a PM2.5 nonattainment or maintenance area.

#### (l) Performance plan.—

(1) IN GENERAL.—Each metropolitan planning organization serving a transportation management area (as defined in section 134) with a population over 1,000,000 people representing a nonattainment or maintenance area shall develop a performance

#### plan that—

- (A) includes an area baseline level for traffic congestion and onroad mobile source emissions for which the area is in nonattainment or maintenance;
- (B) describes progress made in achieving the performance targets described in section 150(d); and
- (C) includes a description of projects identified for funding under this section and how such projects will contribute to achieving emission and traffic congestion reduction targets.
- (2) UPDATED PLANS.—Performance plans shall be updated biennially and include a separate report that assesses the progress of the program of projects under the previous plan in achieving the air quality and traffic congestion targets of the previous plan.

#### V. ACCOUNTABILITY FOR ACHIEVEMENT OF PERFORMANCE TARGETS.

#### SEC. 1106. NATIONAL HIGHWAY PERFORMANCE PROGRAM.

(a) In General- Section 119 of title 23, United States Code, is amended to read as follows:

#### Sec. 119. National highway performance program

- (e) State Performance Management-
  - (7) PERFORMANCE ACHIEVEMENT- A State that does not achieve or make significant progress toward achieving the targets of the State for performance measures described in section 150(d) for the National Highway System for 2 consecutive reports submitted under this paragraph shall include in the next report submitted a description of the actions the State will undertake to achieve the targets.
- (f) Interstate System and NHS Bridge Conditions-

#### (1) CONDITION OF INTERSTATE SYSTEM-

- (A) PENALTY- If, during 2 consecutive reporting periods, the condition of the Interstate System, excluding bridges on the Interstate System, in a State falls below the minimum condition level established by the Secretary under section 150(c)(3), the State shall be required, during the following fiscal year--
  - (i) to obligate, from the amounts apportioned to the State under section 104(b)(1), an amount that is not less than the amount of funds apportioned to the State for fiscal year 2009 under the Interstate maintenance program for the purposes described in this section (as in effect on the day before the date of enactment of the MAP-21), except that for each year after fiscal year 2013, the amount required to be obligated under this clause shall be increased by 2 percent over the amount required to be obligated in the previous fiscal year; and
  - (ii) to transfer, from the amounts apportioned to the State under section 104(b)(2) (other than amounts suballocated to metropolitan areas and other areas of the State under section 133(d)) to the apportionment of the State under section 104(b)(1), an amount equal to 10 percent of the amount of funds apportioned to the State for fiscal year 2009 under the Interstate maintenance program for the purposes described in this section (as in effect on the day before the date of enactment of the MAP-21).

(B) RESTORATION- The obligation requirement for the Interstate System in a State required by subparagraph (A) for a fiscal year shall remain in effect for each subsequent fiscal year until such time as the condition of the Interstate System in the State exceeds the minimum condition level established by the Secretary.

#### (2) CONDITION OF NHS BRIDGES-

- (A) PENALTY- If the Secretary determines that, for the 3-year-period preceding the date of the determination, more than 10 percent of the total deck area of bridges in the State on the National Highway System is located on bridges that have been classified as structurally deficient, an amount equal to 50 percent of funds apportioned to such State for fiscal year 2009 to carry out section 144 (as in effect the day before enactment of MAP-21) shall be set aside from amounts apportioned to a State for a fiscal year under section 104(b)(1) only for eligible projects on bridges on the National Highway System.
- (B) RESTORATION- The set-aside requirement for bridges on the National Highway System in a State under subparagraph (A) for a fiscal year shall remain in effect for each subsequent fiscal year until such time as less than 10 percent of the total deck area of bridges in the State on the National Highway System is located on bridges that have been classified as structurally deficient, as determined by the Secretary.

#### SEC. 1112. HIGHWAY SAFETY IMPROVEMENT PROGRAM.

(a) In General- Section 148 of title 23, United States Code, is amended to read as follows:

#### Sec. 148. Highway safety improvement program

- (g) Special Rules-
  - (1) HIGH-RISK RURAL ROAD SAFETY- If the fatality rate on rural roads in a State increases over the most recent 2-year period for which data are available, that State shall be required to obligate in the next fiscal year for projects on high risk rural roads an amount equal to at least 200 percent of the amount of funds the State received for fiscal year 2009 for high risk rural roads under subsection (f) of this section, as in effect on the day before the date of enactment of the MAP-21.
  - (2) OLDER DRIVERS- If traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, that State shall be required to include, in the subsequent Strategic Highway Safety Plan of the State, strategies to address the increases in those rates, taking into account the recommendations

included in the publication of the Federal Highway Administration entitled 'Highway Design Handbook for Older Drivers and Pedestrians' (FHWA-RD-01-103), and dated May 2001, or as subsequently revised and updated.

#### (i) State Performance Targets-

If the Secretary determines that a State has not met or made significant progress toward meeting the performance targets of the State established under section 150(d) by the date that is 2 years after the date of the establishment of the performance targets, the State shall—

- (1) use obligation authority equal to the apportionment of the State for the prior year under section 104(b)(3) only for highway safety improvement projects under this section until the Secretary determines that the State has met or made significant progress toward meeting the performance targets of the State; and
- (2) submit annually to the Secretary, until the Secretary determines that the State has met or made significant progress toward meeting the performance targets of the State, an implementation plan that--
  - (A) identifies roadway features that constitute a hazard to road users;
  - (B) identifies highway safety improvement projects on the basis of crash experience, crash potential, or other data-supported means;
  - (C) describes how highway safety improvement program funds will be allocated, including projects, activities, and strategies to be implemented;
  - (D) describes how the proposed projects, activities, and strategies funded under the State highway safety improvement program will allow the State to make progress toward achieving the safety performance targets of the State; and
  - (E) describes the actions the State will undertake to meet the performance targets of the State.

#### SEC. 1201. METROPOLITAN TRANSPORTATION PLANNING.

#### Sec. 134. Metropolitan transportation planning

#### (5) CERTIFICATION-

#### (A) IN GENERAL- The Secretary shall--

(i) ensure that the metropolitan planning process of a metropolitan planning organization serving a transportation

- management area is being carried out in accordance with applicable provisions of Federal law; and
- (ii) subject to subparagraph (B), certify, not less often than once every 4 years, that the requirements of this paragraph are met with respect to the metropolitan planning process.
- (B) REQUIREMENTS FOR CERTIFICATION- The Secretary may make the certification under subparagraph (A) if--
  - (i) the transportation planning process complies with the requirements of this section and other applicable requirements of Federal law; and
  - (ii) there is a TIP for the metropolitan planning area that has been approved by the metropolitan planning organization and the Governor.

#### (C) EFFECT OF FAILURE TO CERTIFY-

- (i) WITHHOLDING OF PROJECT FUNDS- If a metropolitan planning process of a metropolitan planning organization serving a transportation management area is not certified, the Secretary may withhold up to 20 percent of the funds attributable to the metropolitan planning area of the metropolitan planning organization for projects funded under this title and chapter 53 of title 49.
- (ii) RESTORATION OF WITHHELD FUNDS- The withheld funds shall be restored to the metropolitan planning area at such time as the metropolitan planning process is certified by the Secretary.
- (D) REVIEW OF CERTIFICATION- In making certification determinations under this paragraph, the Secretary shall provide for public involvement appropriate to the metropolitan area under review.

### **ITEM 9 – Information**

April 17, 2013

## Briefing on Activities to Increase Ridership on the Metrobus System

Staff Recommendation: Receive briefing on on-going activities

and initiatives to increase ridership on

the Metrobus system.

**Issues:** None

**Background:** In response to a request at the

February 20 TPB meeting, WMATA staff will review on-going activities and initiatives to increase ridership on

the Metrobus system.



## Washington Metropolitan Area Transit Authority

# Technologies and Programs that Encourage Metrobus Ridership

National Capital Region Transportation Planning Board

April 17, 2013



## Metro Supports Bus Ridership by...

- Using advanced technology to provide customer information & enhance bus operations
- Conducting planning studies to evaluate and enhance bus service
- Engaging public to assess and improve service quality





# **Customer Information System Technologies**

- Real-time bus arrival predictions
  - Customer information server interfaced to CAD/AVL to receive bus schedule and adherence information
  - Customers get bus arrival predictions through websites, text messages, voice calls, and smart phones
  - Next Bus receives more than 3M inquiries each month; 30% of trips





# **Customer Information System Technologies**

- Customer Information System Signage
  - 50 signs distributed throughout the operational area displaying bus arrival information
  - Plans to install hundreds of LCD and LED signs at bus shelters and transit centers





# On-Board & Back-End Technologies that Support Metrobus Operations

- In process of implementing Consolidated Ancillary Bus Equipment and Fixed-end Systems project
  - Replaces on-board technologies and back-end CAD/AVL system in the bus operations control center





### Back-End

AVL- incident & on-time performance monitoring

Next stop and public service annunciation, destination signs, AVL, automatic passenger counters, vehicle health monitors



## Improved Operations with Metrobus System Technology

- Currently operating transit signal priority technology on Georgia
   Avenue and Columbia Pike
- New transit signal priority installation
  - Funded by the TPB's TIGER Grant
  - VA Rt. 7 and up to six additional corridors



Recommended TSP locations in the Downtown core



# Additional Efforts that Encourage Metrobus Ridership

- Bus driver training
- On-board cameras
- On-time performance
- New Shepherd Parkway facility
- Expanded service
- Limited stop service
- User surveys
- New bus maps



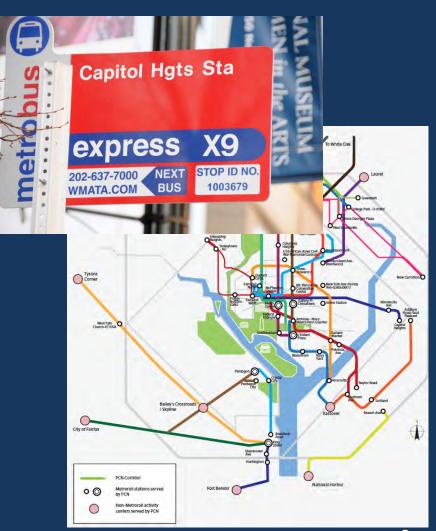






# Metrobus Planning, Development, and Implementation

- Regional Bus Study
- Priority Corridor Network
- Crystal City/Potomac Yard Transit Improvement Project
- Bus Priority Studies
  - H&I Streets Bus Lane Study
  - Service EvaluationStudies





## Challenges

- Traffic congestion/reliability
- Increased dwell times
- Funding fleet expansion
- Right-of-Way issues
- Meeting demand









Thank you for your attention...

Questions?

#### **ITEM 10 – Information**

April 17, 2013

Briefing on Update of the CLRP Aspirations Scenario

Staff Recommendation: Receive briefing on the results of an

update to CLRP Aspirations Scenario

utilizing the 2012 CLRP as the

baseline, along with the Version 2.3 travel demand model and the more detailed transportation analysis zone

structure.

**Issues:** None

**Background:** The CLRP Aspirations Scenario,

which was initially built off of the 2008

CLRP and reported to the TPB in October 2011, integrates a regional network of toll lanes and bus rapid transit with more concentrated growth

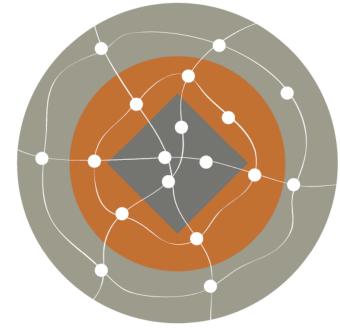
in mixed-use activity centers.

Item 10

## **TPB CLRP Aspirations Scenario**

2012 CLRP and Version 2.3 Travel Forecasting Model Update

**Initial Results** 



Ron Kirby
Department of Transportation Planning

Presentation to the Transportation Planning Board April 17, 2013

## Scenario Planning



- Updated planning assumptions and new modeling tools, most notably the Version 2.3 Travel Forecasting Model, are now available for scenario analysis
- The CLRP Aspirations Scenario, last presented to the TPB in October 2011, has been updated
- The updated work allows for the testing of variations on the CLRP Aspirations Scenario

## What's New?



	October 2011	April 2013
Constrained Long-Range Plan	2008	2012
Cooperative Forecast	7.2	8.1
Horizon Year	2030	2040
Travel Forecasting Model	Version 2.2	Version 2.3
TAZ System	2191	3722
Emissions Model	Mobile 6.2	MOVES2010a

## Version 2.3 Model



- Developed with the <u>latest travel survey data</u> available
- Developed using a more <u>detailed zone system</u>
- Several technical refinements have also been made...
  - Greater specificity of travel markets by trip purpose and by time of day
  - More detailed treatment of travel with regard to individual transit modes and non-motorized (walking and bicycle) modes

## What is the CLRP Aspirations Scenario?



- Developed under the TPB Scenario Study Task
   Force based on financially constrained long range plan (CLRP) adopted by the TPB in 2008
- Included strategies explored in previous scenario studies such as the Regional Mobility and Accessibility Study and the Value Pricing Study
- Scenario should be "within reach" both financially and administratively, while pushing the envelope in terms of improving conditions in relation to a CLRP baseline

# CLRP Aspirations Scenario Timeline (



- September 2010: First results presented to the TPB
- October 2011: "Streamlined" Variably Priced Lane Network Sensitivity Test Presented to the TPB
- April 2013: Presentation of updated analysis using the latest planning assumptions and modeling tools, and reflecting MAP-21 legislation

## Section 1512 "Tolling" of MAP-21



 Allows for "initial construction of 1 or more lanes...that increase the capacity of a highway...if the number of toll-free non-HOV lanes, excluding auxiliary lanes, is not less than the number of toll-free non-HOV lanes, excluding auxiliary lanes, before such construction"

## Growth between 2015 and 2040



Round 8.1 Cooperative Forecasts; 2012 CLRP

Households	26%
Population	23%
Employment	32%
Vehicle Miles Traveled (VMT)	24%
VMT per Capita	0.8%
Average Trip Length	1.2%
Auto Person Trips	23%
Transit Trips	26%
Non-Motorized Trips	35%
Vehicle-hours of Delay	98%

## **CLRP Aspirations Scenario**



### Land Use Shifts

- Concentrating projected growth in activity centers and existing/planned transit stations
- Consistent review and refinement by planning directors

### Regional VPL Network

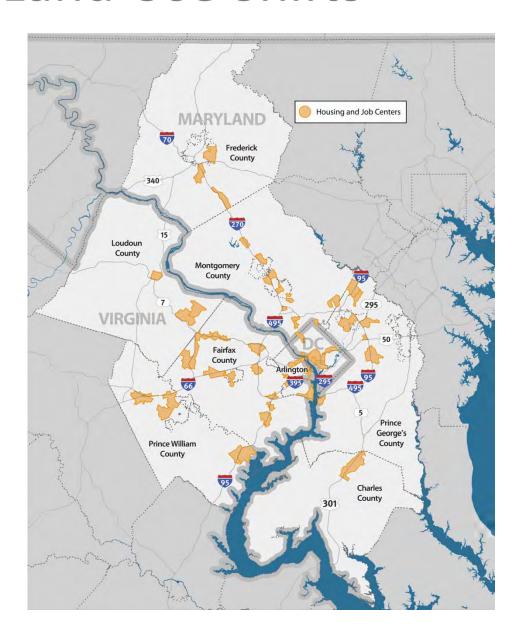
- Address congestion through pricing of 740 new lane miles and 186 existing lane miles
- Provide alternatives through enhanced transit

# **Supportive Transit**

- Use menu of transit options from past scenarios
- Connect activity centers
- •Bus Rapid Transit (BRT) and circulator service with 274 new buses and approximately a 20% increase in service hours

## Land Use Shifts

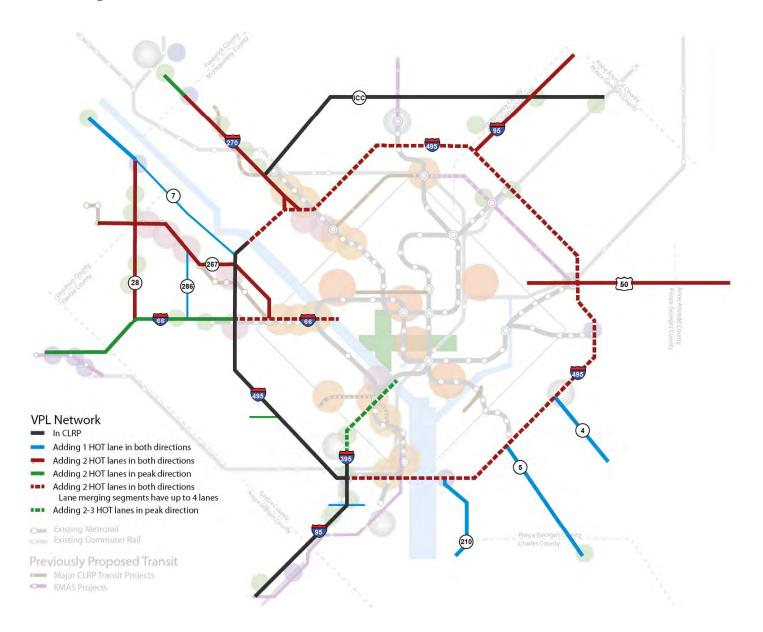




- Jobs and households are shifted within the region into targeted growth areas (TGA)
- Additional jobs (0.6%) and households (2.6%) are brought into the region
- Round 8.1 Cooperative
   Forecast: from 2015 –
   2040, 25% of new
   households and 35% of new
   jobs are located in TGAs
- CLRP Aspirations: from 2015 – 2040, 57% of new households and 58% of new jobs are located in TGAs

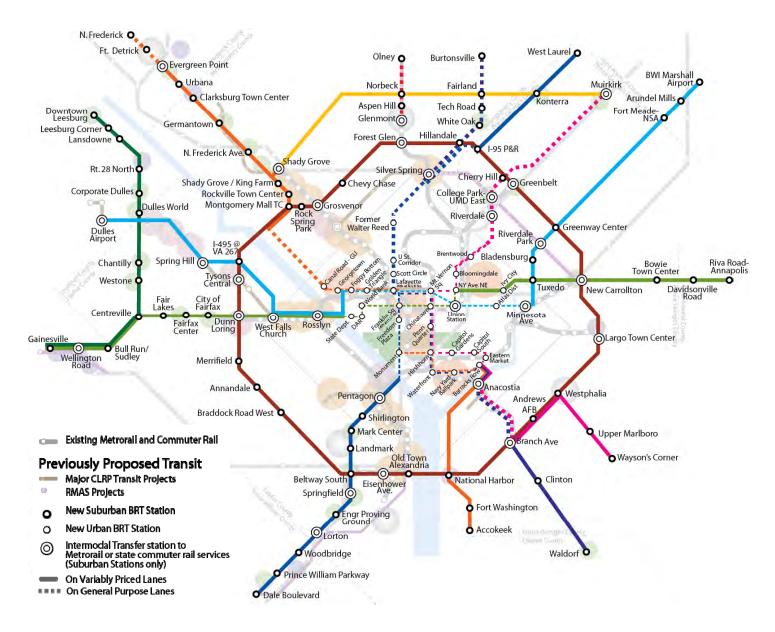
## Variably Priced Lane Network





## Bus Rapid Transit Network





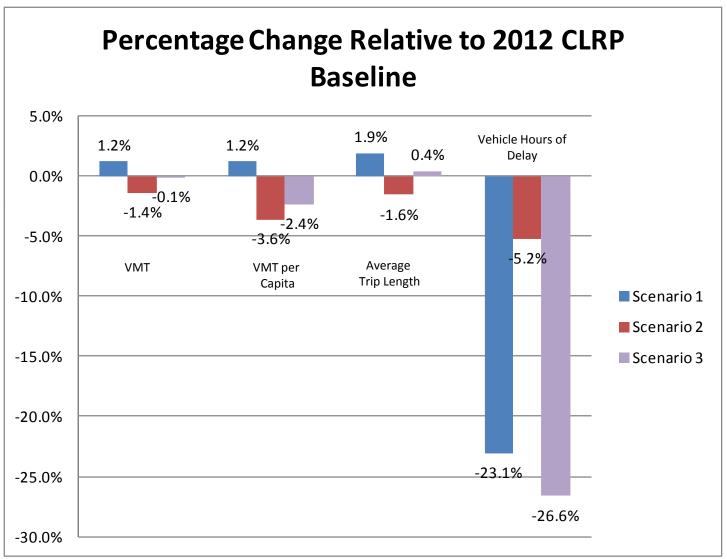
## Three Scenarios



	Land Use	Transportation
2040 Baseline	Round 8.1 Cooperative Forecast	2012 CLRP
Scenario 1: Transportation Component-only	Round 8.1 Cooperative Forecast	CLRP Aspirations
Scenario 2: Land use Component-only	CLRP Aspirations	2012 CLRP
Scenario 3: CLRP Aspirations Scenario	CLRP Aspirations	CLRP Aspirations

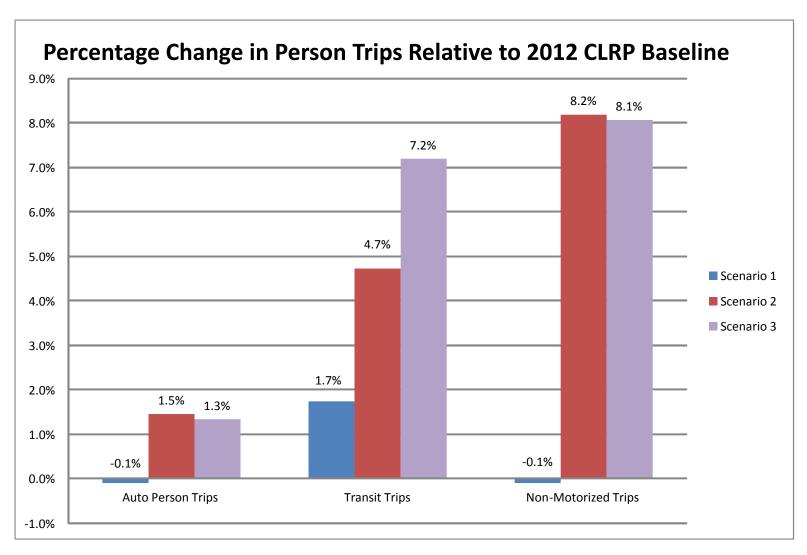
## Regional Travel





## Regional Mode Choice





## Regional Transit Mode Share



To address the lack of identified funding for WMATA's future rehabilitation and maintenance needs beyond 2020, transit ridership to or through the core area was constrained to 2020 levels for both the CLRP and the three scenarios.

### Percent Transit Mode Share

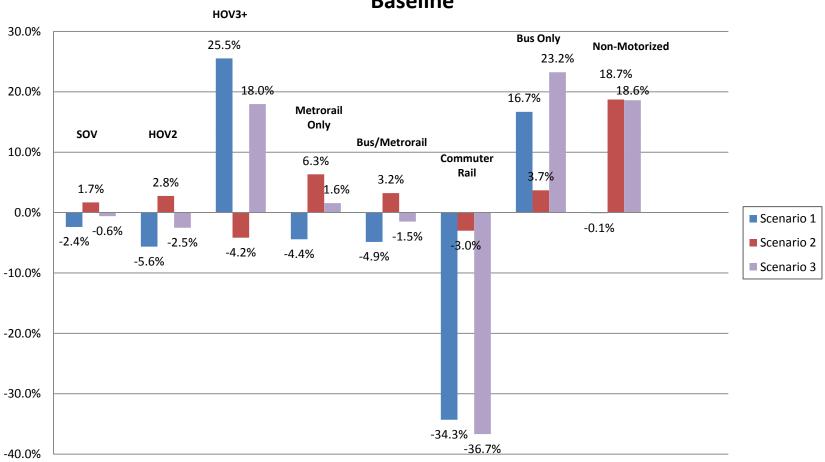
		Baseline	Scenario 1	Scenario 2	Scenario 3
Home-based Work	Constrained	20.4%	20.4%	20.8%	21.0%
	Unconstrained	21.0%	20.6%	21.6%	21.3%
All Trip Purposes	Constrained	6.0%	6.1%	6.1%	6.3%
	Unconstrained	6.1%	6.1%	6.3%	6.4%

The increases from the constrained to the unconstrained transit mode shares would be more pronounced in the core and inner suburbs served by Metrorail.

## Commuter Mode Choice



## Percent Change in Person Trips by Mode Relative to 2012 CLRP Baseline



## Air Quality



### Change in Emissions Relative to 2015 Forecasted with MOVES2010a

		2040			
	2015	Baseline	Scenario 1	Scenario 2	Scenario 3
Precursor NOx*	49330 tons/year	-46.2%	-45.6%	-46.0%	-45.3%
PM2.5*	2002 tons/year	-33.1%	-33.7%	-33.2%	-33.7%
VOC**	60.1 tons/day	-22.2%	-22.5%	-22.2%	-22.5%
NOx**	138.2 tons/day	-47.7%	-47.4%	-47.6%	-47.1%

<sup>\*</sup> Forecasted for the PM2.5 Non-Attainment Area

<sup>\*\*</sup> Forecasted for the 8-Hour Ozone Non-Attainment Area

## Financial Analysis



- Sketch-level analysis of Scenarios 1 and 3 show revenue to cost ratios of 0.40 and 0.38, respectively
- Results presented in October 2011 showed much higher revenue to cost ratios. Removing tolls on existing general purpose lanes, most notably the parkways, significantly reduced the revenue from the VPL network.

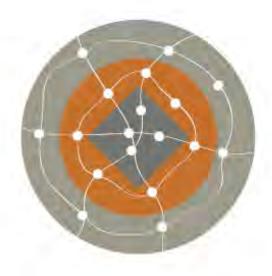
## What's Next?



- Update of CLRP Aspirations Scenario Study will allow for future analysis of
  - Variations on land use and VPL network
  - Analysis of smaller geographies, such as subareas or corridors

## **TPB CLRP Aspirations Scenario**

2012 CLRP and Version 2.3 Travel Forecasting Model Update



Technical Memorandum April 11, 2013

National Capital Region Transportation Planning Board

#### **ACKNOWLEDGEMENTS**

#### Director,

#### **Department of Transportation Planning**

Ronald F. Kirby

**Project Staff** 

William Bacon

Yu Gao

Robert E. Griffiths

Erin M. Morrow

Jinchul Park

Jane Posey

Eric Randall

Clara Reschovsky

Daivamani Sivasailam

Daniel Hojun Son

\*\*\*\*\*\*

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#### INTRODUCTION

The National Capital Region Transportation Planning Board's (TPB) Constrained Long Range Plan (CLRP) Aspirations Scenario was developed in an effort to pull together alternatives from previous TPB scenario studies into a comprehensive scenario that could offer a promising path forward for the region. The CLRP Aspirations Scenario is an alternative land use and transportation scenario for the future whose purpose is not just to explore a single regional challenge or experiment with a single strategy, but instead to take a comprehensive approach to long-range regional planning. The Aspirations Scenario combines an alternate land use scenario with more dense, transit-oriented development; a regional network of variably price lanes (VPLs); and high quality bus rapid transit (BRT) and circulator bus service focused on supporting the land use plan.

The first report for the CLRP Aspirations Scenario Study was completed and presented to the TPB in September 2010. (1) In October 2011, the "Streamlined" VPL Network Sensitivity Test, which was designed reduce construction costs without significantly compromising the performance of the VPL network, was presented to the TPB. (2) The findings of the "Streamlined" VPL Network Sensitivity Test and a discussion of how well the TPB's scenario planning process for designing and analyzing scenarios compares to the guidance in the new federal surface transportation legislation, MAP-21, was presented at the 92<sup>nd</sup> Annual Meeting of the Transportation Research Board in January 2013 and will be published in an upcoming issue of the Transportation Research Record. (3)

This memorandum presents the initial results of updates to the CLRP Aspirations Scenario Study for the modeled region. The updates were made based on the lessons learned from the "Streamlined" VPL Network Sensitivity Test using new baseline regional planning assumptions and newly available modeling tools. In addition to the changes in planning assumptions and modeling tools, the variably priced lane (VPL) network was refined to align with requirements in MAP-21. Table 1 illustrates the changes in planning assumptions and modeling tools.

**Table 1: Differences in Planning Assumptions and Modeling Tools** 

	October 2011	April 2013
Constrained Long-Range Plan	2008	2012
Cooperative Forecast	7.2	8.1
Horizon Year	2030	2040
Travel Forecasting Model	Version 2.2	Version 2.3
TAZ System	2191	3722
Emissions Model	Mobile 6.2	MOVES2010a

# THE CLRP ASPIRATIONS SCENARIO

The CLRP Aspirations Scenario has two components, land use and transportation, which are built upon the adopted COG Cooperative Forecast and TPB CLRP respectively. For this update, the baseline is the Round 8.1 Cooperative Forecast (adopted by the COG Board of Directors in July 2012) and the 2012 CLRP (adopted by the TPB in July 2012). The analysis year for the scenario is the current planning horizon year 2040. A detailed description of the previous TPB scenario studies and outreach that were used to develop the initial land use and transportation assumptions for the CLRP Aspirations Scenario can be found in the September 2010 report. (1)

# **Land Use Component**

The land use component focuses on shifting projected household and employment growth into "targeted growth areas" based in part on the findings from the TPB's Regional Mobility and Accessibility Study (RMAS), (1) The areas designated as targeted growth areas are a combination of: (1) Regional Activity Centers and Clusters previously identified by COG through extensive collaboration with local jurisdictions in the region as places where it would be desirable for future growth to occur; and (2) other areas near existing or planned transit infrastructure. In the scenario, a portion of the residential and employment growth anticipated in the region between 2015 and 2040 was shifted into the targeted growth areas to make those areas supportive of transit and mixed use development, and to make them walkable, while still reflecting local-level planning realities. (1)

Because local jurisdictions in the Washington region have primary responsibility for comprehensive land-use planning and zoning, determining how much development could realistically be shifted into targeted growth areas required a collaborative process much like that used by COG to compile its Cooperative Forecasts of residential and employment growth. After TPB staff developed the basic framework for the land use component of the Aspirations Scenario, local jurisdictions were asked to provide realistic estimates of how much growth could take place in areas identified as targeted growth areas. (3)

In the development of the land use component, there was a certain recognition that redistribution of jobs and households will benefit individual jurisdictions as well as the region. Many jurisdictions sought to improve the balance between jobs and households within their jurisdictions. Another common interest was to improve utilization of the existing transportation network by shifting growth away from areas where the network is forecasted to be overburdened, and adding growth to less developed areas such as areas around those Metrorail stations that are not currently meeting their development potential. (3)

The CLRP Aspirations land use component was originally built upon the Round 7.2 Cooperative Forecast on the 2191 zone system for the forecast year 2030. For this updated analysis, the same principles for shifting growth were used to build the land use component on the Round 8.1 Cooperative Forecast on the 3722 zone system for the forecast year 2040.

Based on the Round 8.1 Cooperative Forecast, the region is forecasted to add 26% more households and 32% more jobs between 2015 and 2040. The Aspirations land use assumptions begins by shifting forecasted job and households in 2040 from outside the region into targeted growth areas. The result is the number of households in the modeled region increase by 2.6% and the number of jobs by 0.3% between the 2040 Cooperative Forecast and the CLRP Aspirations Scenario. Jobs and households growth in the region between 2015 and 2040 is then shifted within the region into targeted growth areas. In the Round 8.1 Cooperative Forecast, 25% of household growth and 35% of employment growth between 2015 and 2040 takes place in zones with targeted growth areas. In the CLRP Aspirations land use component, 57% of household growth and 58% of employment growth between 2015 and 2040 takes place in zones with targeted growth areas.

# **Transportation Component**

The transportation component contains three elements: a regional network of priced lanes, an extensive bus rapid transit network, and selected projects identified by the RMAS. The scenario's transportation component was designed to support the land use component by providing "increased accessibility to targeted growth areas, specifically for transit riders, carpools, and those willing to pay tolls to drive low-occupant vehicles on variably priced lanes." (1)

The regional network of priced lanes is built upon the 2012 CLRP which contains three priced lane facilities in 2040: the Intercounty Connector in Maryland, the Express Toll Lanes on I-495 in Virginia, and the Express Toll Lanes on I-95 in Virginia. The regional network of priced lanes is based on the network developed in the "Streamlined" VPL Network Sensitivity Test. This network was designed in response to concerns that the original CLRP Aspirations VPL network was too expensive. The "streamlined" VPL network reduced the number of lane miles constructed by 30% and the new interchanges constructed by 33% over the original VPL network. The travel forecasting analysis showed that the "streamlined" network performed comparably to the original VPL network with a sketch-level financial analysis showing that for the "streamlined" scenario toll revenues covered most of the highway and transit costs, both capital and operating.

The VPL network for this analysis was edited based on provisions in MAP-21, which became effective October 1, 2012. Section 1512 "Tolling" in MAP-21 allows for "initial construction of 1 or more lanes...that increase the capacity of a highway...if the number of toll-free non-HOV lanes, excluding auxiliary lanes, is not less than the number of toll-free non-HOV lanes, excluding auxiliary lanes, before such construction." (4) To account for this, all non-HOV lanes conversions to VPL were removed from the VPL network. This includes all National Park Service parkways in the region and existing lanes in the District of Columbia that were tolled in the original Aspirations network, and the "add-a-lane, take-a-lane" on the Beltway in Maryland that was included in the "streamlined" network.

The CLRP Aspirations VPL network adds 740 lane-miles of new construction, 186 lane-miles of HOV conversion, and 100 interchanges to the 2040 network. All BRT and circulator bus service for the original scenario remained in place. Buses that had been routed on VPLs that no longer exist in the network are now traveling on the same facility in general purpose lanes. The projects from RMAS that are in the network are unchanged. Table 2 describes the variably priced lanes in 2040 in the CLRP and in the CLRP Aspirations Scenario. Attachments A and B are maps of the VPL and BRT networks, respectively.

Table 2: Variably Priced Lane Facilities in the CLRP and CLRP Aspirations Scenario, 2040

Facility	Start	End	Assumptions
1-495	I-395	American Legion Bridge	2-4* HOT lanes both directions; 24/7
I-395	I-495	VA 648 - Esdall Rd.	2-3 HOT lanes peak direction
I-95 (VA)	Spotsylvania Pkwy.	I-495	2-3 HOT lanes peak direction
MD 200	I-370	US 1 - Baltimore Ave.	Entire Facility**
Aspirations Scenario	Additions:		
Facility	Start	End	Assumptions
I-95 (MD)	I-495	Anne Arundel Co. line	2 HOT lanes both directions; 24/7
I-495 (MD & VA)	American Legion Bridge	I-395	2-4* HOT lanes both directions; 24/7
l-270	I-495	Old Hunters Rd (Co. line)	2 HOT lanes both directions; 24/7
l-270	Old Hunters Rd (Co. line)	I-70	2 HOT lanes peak direction
US 50	MD 295	US 301	2 HOT lanes both directions; 24/7
US 50	US 301	Chesapeke Bay Bridge	2 HOT lanes peak direction
MD 4	I-495	US 301 - Crain Hwy	1 HOT lane both directions; 24/7
MD 5	I-495	US 301 - Crain Hwy	1 HOT lane both directions; 24/7
MD 210	I-495	MD 228	1 HOT lane both directions; 24/7
I-66 inside I-495	GW Memerial Pkwy	I-495	2-4* HOT lanes both directions; 24/7
I-66 outside I-495	I-495	US 17 - Winchester Rd	2 HOT lanes peak direction
I-395/I-95	VA 648 - Esdall Rd.	US 1 - Jefferson David Hwy	2-3 HOT lanes peak direction
VA 267	I-66	VA 28 - Sully Rd.	2 HOT lanes both directions; 24/7
VA 7	VA 267	Leesburg	1 HOT lane both directions; 24/7
VA 28	VA7	I-66	2 HOT lanes both directions; 24/7
Fairfax Co. Parkway	VA 267	I-66	1 HOT lane both directions; 24/7
Braddock Road	I-495	VA 645 - Burke Lake Rd.	2 HOT lane peak direction
Franconia-SP Parkway	VA 286 Faifax Co. Pkwy.	Frontier Rd.	1 HOT lane both directions; 24/7
* Lane merging segme	nts have more than 2 lanes		
** Intercounty Connect	or is not variably tolled as a	fixed toll by MDTA by time p	eriod is being administered.

# **METHOD FOR ANALYSIS**

This analysis looks at a baseline (2012 CLRP with Round 8.1 Cooperative Forecast) and three scenarios: a transportation component-only scenario (Scenario 1), a land use component-only scenario (Scenario 2), and the updated CLRP Aspirations Scenario (Scenario 3). Table 3 summarizes the land use and transportation assumptions for the baseline and the three scenarios.

**Table 3: Baseline and Scenario Land Use and Transportation Assumptions** 

	Land Use	Transportation
Baseline	Round 8.1 Cooporative Forecast	2012 CLRP
Scenario 1: Transportation Component-only	Round 8.1 Cooporative Forecast	CLRP Aspirations
Scenario 2: Land Use Component-only	CLRP Aspirations	2012 CLRP
Scenario 3: CLRP Aspirations Scenario	CLRP Aspirations	CLRP Aspirations

In reality, planners would be unlikely to suggest concentrating land use around transit-friendly areas without planning transit improvements to serve that growth or assume that an extensive VPL and BRT network would not have an impact on land use. The sensitivity tests provide a better understand of the performance of the CLRP Aspirations Scenario by isolating the impacts of the land use and transportation components.

The travel forecasting analysis for this update uses the TPB's Version 2.3 Travel Forecasting Model which was adopted in November 2011. This model provides a significant update for conducting scenario studies. Inputs to the model are based on newer travel data including the 2007/2008 Household Travel Survey and transit surveys including a bus on-board survey and a Metrorail passenger survey. The model uses a more refined zone system (3722 vs. 2191) which allows for more sensitivity to changes in the networks. Additionally, the model has improved forecasting capabilities for non-motorized trips, high-occupancy vehicle trips, and transit trips.

The emissions analysis was conducted using the new EPA MOVES2010a model which on average estimates higher emissions than the Mobile6.2 model previously used in the CLRP Aspirations Scenario analysis.

#### **MAJOR FINDINGS**

Unless noted, all of the analysis presented in this memorandum was conducted for the TPB modeled area. As there is a great deal of variability in land use and travel throughout the region, an analysis conducted at a smaller geography would yield different findings.

# **Regional Travel**

Table 4 shows the regional travel for the baseline and the three scenarios with respect to 2015 for the TPB modeled area. The Round 8.1 Cooperative Forecasts contains a 26% growth in households and a 32% increase in employment between 2015 and 2040. For the 2012 CLRP baseline, the travel forecasting model shows notable growth in vehicle-miles traveled (VMT) (24%) and transit trips (26%) between 2015 and the baseline in 2040. None of the three scenarios have a significant impact on reducing VMT growth, but all of them slow the growth in vehicle-hours of delay (VHD).

Table 4: Change in Regional Travel for the Scenarios Compared to the 2015 for the TPB Modeled Area, Average Weekday

	2015		2040								
	2012 CLRP	Baseline	% Diff	Scenario 1	% Diff	Scenario 2	% Diff	Scenario 3	% Diff		
Households	2,653,905	3,349,025	26%	3,349,025	26%	3,434,878	29%	3,434,878	29%		
Population	7,028,991	8,660,697	23%	8,660,697	23%	8,859,200	26%	8,859,200	26%		
Employment	4,175,373	5,507,271	32%	5,507,271	32%	5,522,704	32%	5,522,704	32%		
Vehicle Miles Traveled (VMT)	171,523,126	212,923,598	24%	215,450,668	26%	209,936,143	22%	212,699,019	24%		
VMT per Capita (miles)	24.40	24.59	0.8%	24.88	2.0%	23.70	-3%	24.01	-1.6%		
Average Trip Length (miles)	9.96	10.08	1.2%	10.27	3.1%	9.92	0%	10.12	1.6%		
Total Auto Person Trips	19,937,253	24,524,649	23%	24,497,539	23%	24,880,707	25%	24,852,509	25%		
Total Transit Trips	1,295,088	1,628,359	26%	1,656,658	28%	1,705,251	32%	1,745,488	35%		
Total Non-Motorized Trips	1,999,553	2,691,874	35%	2,688,987	34%	2,912,279	46%	2,909,028	45%		
Vehicle Hours of Delay			98%		53%		88%		45%		
*VHD is only reported as a relati	ive difference										

Table 5: Percentage Change in Regional Travel for the Scenarios Relative to the 2012 CLRP Baseline for the TPB Modeled Area, 2040 Average Weekday

	Scenario 1	Scenario 2	Scenario 3
Households	0.0%	2.6%	2.6%
Population	0.0%	2.3%	2.3%
Employment	0.0%	0.3%	0.3%
Vehicle Miles Traveled (VMT)	1.2%	-1.4%	-0.1%
VMT per Capita (miles)	1.2%	-3.6%	-2.4%
Average Trip Length (miles)	1.9%	-1.6%	0.4%
Total Auto Person Trips	-0.1%	1.5%	1.3%
Total Transit Trips	1.7%	4.7%	7.2%
Total Non-Motorized Trips	-0.1%	8.2%	8.1%
Vehicle-Hours of Delay (VHD)*	-23.1%	-5.2%	-26.6%

Scenario 1 has the same land use assumptions as the baseline, a larger transportation network, but fewer overall auto person trips. The travel forecasting model has a demographic submodel which considers the number of jobs accessible by Metrorail or by Bus/Metrorail within 45 minutes for each zone as an input to forecasting the breakdown of vehicle availability by household. (5) The increase in transit in Scenario 1 contributes to the model estimating more zero (2.1%) and one (0.3%) car households than in the Baseline and those households generate a lower number of trips. Additionally, the VMT, VMT per capita and average trip length all increase, indicating that drivers may be making fewer, longer trips.

In Scenario 2, jobs and households in the region are shifted into targeted growth areas and additional jobs and households are brought in from outside the region. There is a resulting increase in auto person trips; however, VMT, VMT per capita, and average trip length decrease with the more concentrated land use. Despite not adding transit, there is an increase in overall transit trips as jobs and households were shifted to areas in close proximity to existing baseline transit.

The combination of concentrated land use and the VPL and BRT networks in Scenario 3 result in only a slight decline in VMT over the baseline, but a significant reduction in delay in the modeled area (26.6%). The addition of the BRT network and the relocation of jobs and households to the targeted growth areas resulted in the highest increase in total transit trips over the baseline of the three scenarios.

Non-motorized trips are based mostly on land use. The scenarios with more concentrated land use showed significant increases non-motorized trips.

All scenarios reduce congestion in the modeled region as calculated by vehicle hours of delay. The reduction is most significant in the scenarios that add highway capacity, pricing it to maintain free flow conditions.

# **Commuter Mode Split**

Table 6 shows the mode split for commuter (home-based work) trips for the baseline and the three scenarios compared 2015. Table 7 shows the relative change in commuter mode split between the scenarios and the baseline.

Table 6: Change Commuter Person Trips by Mode for the Scenarios Compared to 2015 for TPB Modeled Area, Average Weekday

	2015	Baseline	% Diff	Scenario 1	% Diff	Scenario 2	% Diff	Scenario 3	% Diff
Total HBW Auto Person Trips	3,189,858	3,995,829	25.3%	3,987,162	25.0%	4,046,714	26.9%	4,030,478	26.4%
Single Occupant Vehicle	2,710,305	3,265,604	20.5%	3,188,179	17.6%	3,320,685	22.5%	3,246,404	19.8%
HOV2	354,008	377,662	6.7%	356,395	0.7%	388,101	9.6%	368,179	4.0%
HOV3+	125,546	352,563	180.8%	442,588	252.5%	337,928	169.2%	415,895	231.3%
Total HBW Transit Trips	861,667	1,082,797	25.7%	1,084,419	25.9%	1,132,431	31.4%	1,141,529	32.5%
Metrorail Only	416,406	520,342	25.0%	497,377	19.4%	553,304	32.9%	528,524	26.9%
Bus/Metrorail	191,864	211,496	10.2%	201,232	4.9%	218,327	13.8%	208,338	8.6%
Commuter Rail	26,470	46,521	75.7%	30,567	15.5%	45,125	70.5%	29,464	11.3%
Bus Only	226,927	304,439	34.2%	355,244	56.5%	315,675	39.1%	375,204	65.3%
Total HBW Non-Motorized Trips	155,171	231,783	49.4%	231,557	49.2%	275,170	77.3%	274,889	77.2%
Total HBW Person Trips	4,206,696	5,310,409	26.2%	5,303,138	26.1%	5,454,315	29.7%	5,446,896	29.5%

Table 7: Change in Commuter Person Trips by Mode for the Scenarios Relative to the 2012 CLRP Baseline for the TPB Modeled Area, 2040 Average Weekday

	Scenario 1	Scenario 2	Scenario 3
Total HBW Auto Person Trips	-0.2%	1.3%	0.9%
Single Occupant Vehicle	-2.4%	1.7%	-0.6%
HOV2	-5.6%	2.8%	-2.5%
HOV3+	25.5%	-4.2%	18.0%
Total HBW Transit Trips	0.1%	4.6%	5.4%
Metrorail Only	-4.4%	6.3%	1.6%
Bus/Metrorail	-4.9%	3.2%	-1.5%
Commuter Rail	-34.3%	-3.0%	-36.7%
Bus Only	16.7%	3.7%	23.2%
Total HBW Non-Motorized Trips	-0.1%	18.7%	18.6%
Total HBW Person Trips	-0.1%	2.7%	2.6%

Both scenarios with the VPL network showed a decrease in HOV2 trips and a significant increase in HOV3+ trips likely because HOV3+ trips in Virginia are toll-free.

Home-based work transit trips increase in all three scenarios, more so in the scenarios with the CLRP Aspirations land use. The BRT network relieves some of the ridership burden on Metrorail and commuter rail in Scenarios 1 and 3. Compared to Metrorail, the BRT provides suburb-to-suburb service without transfers, and in many cases the BRT fare is lower. Commuter rail shows over a 30% decline between the baseline and the two scenarios with the VPL and BRT networks; however, as shown in Table 6, commuter rail ridership still increases by more than 11% between 2015 and each of those scenarios. BRT travels in many of the same corridors as commuter rail, with transfer-free service to more downtown locations and more frequent headways. Further analysis could be done to determine where BRT demand is greatest.

Table 8 shows the transit mode share for 2015, the baseline, and the scenarios for commuter (home-based work) trips and all trips. The overall transit mode share changes little between the baseline and the scenarios.

Table 8: Transit Mode Share for Commuter Trips and All Trip Purposes, Average Weekday

	2015	Baseline	Scenario 1	Scenario 2	Scenario 3
Home-based Work	20.5%	20.4%	20.4%	20.8%	21.0%
All Trip Purposes	6.0%	6.0%	6.1%	6.1%	6.3%

In order to be consistent with the CLRP baseline, all scenarios were modeled with transit ridership constrained to 2020 levels through the core area to address the lack of identified funding for WMATA's future rehabilitation and maintenance needs beyond that time. Table 9 shows an estimate of the transit mode share when the transit constraint is lifted. Transit mode share is slightly higher for the TPB modeled area. It is expected that this higher transit mode

would be more pronounced from the constrained to the unconstrained transit percentages in the core and inner suburbs served by Metrorail.

Table 9: Transit Mode Share for Commuter Trips and All Trip Purposes without Transit Constraint,
Average Weekday

	Baseline	Scenario 1	Scenario 2	Scenario 3
Home-based Work	21.0%	20.6%	21.6%	21.3%
All Trip Purposes	6.1%	6.1%	6.3%	6.4%

#### **Mobile Emissions**

The MOVES2010a model was used to forecast emissions for 2015, the baseline, and the three scenarios. At this time, mobile emissions budgets for the region have not yet been established and adopted with the MOVES2010a model. Table 10 shows the percentage difference in emissions for the baseline and the three scenarios as compared to 2015. Despite the growth in travel from 2015 to 2040, all criteria pollutant emissions decrease due to improvements in vehicle technologies in the future. Greenhouse gas emissions were not calculated as the current release of the MOVES model does not reflect new light-duty fuel economy standards beginning in model year 2017 and medium- and heavy-duty fuel efficiency standards for model years 2014-218 which are expected to lower greenhouse gas emissions in the future.

Table 10: Percentage Change in Mobile Emissions Relative to 2015

Category	Pollutant	2015	Baseline	Scenario 1	Scenario 2	Scenario 3
ANNUAL* (tons/year)	Precursor NOx	49,330.166	-46.2%	-45.6%	-46.0%	-45.3%
	PM2.5	2,002.494	-33.1%	-33.7%	-33.2%	-33.7%
OZONE DAY** (tons / day)	VOC	60.074	-22.2%	-22.5%	-22.2%	-22.5%
	NOx	138.215	-47.7%	-47.4%	-47.6%	-47.1%

<sup>\*</sup> Forecasted for the PM2.5 Non-Attainment Area

## FINANCIAL ANALYSIS

A financial analysis was performed to gauge whether the toll revenue generated by the VPL network could offset the cost of constructing the VPL network and the enhanced transit system in either the Full or Streamlined scenarios. The financial analysis for 2040 conditions in 2010 dollars considered the following:

- The cost of constructing the highway facilities
- The capital and operating cost of enhanced transit
- The toll revenue from the VPL network
- The fare revenue from the increased transit ridership

<sup>\*\*</sup> Forecasted for the 8-hour Ozone Non-Attainment Area

While the cost of constructing the VPLs and the toll revenue from such a system can be estimated at the state level, the cost and fare box recovery from the transit system can be estimated only at the regional level since the regional travel forecasting model is not capable of providing the increase in transit ridership at the state level, or by the different transit types such as commuter rail, light rail, bus rapid transit, or Metrorail.

Cost of Highway Facilities: The number of new VPL miles to be constructed, and the number of HOV lane miles converted to VPLs, were identified for each of the three states. In addition, the number of new interchanges to be constructed to support the VPL network was identified by state. Cost information was obtained from the state DOTs for new construction and conversion of existing lanes, and a regional unit cost number per lane mile and per interchange in 2010 dollars was developed. It is assumed 4% of the capital cost would be needed on an annual basis for debt financing, and 1% for maintenance of the facility, administration, and other expense. This is based on the revenue expenditure analysis of Virginia's Capital Beltway HOT Lane Project. (6) The total capital cost was calculated and amortized over a 20 year period. Annualized cost expenses which account for debt financing, maintenance and other expenses were estimated using the amortized cost.

Capital and Operating Cost of Enhanced Transit: The transit network plan is the same for both Scenario 1 and Scenario 3. Infrastructure capital costs for the network are estimated at \$1.13 billion. This does not include vehicle costs, which are annualized over 20 years. The BRT Network and its feeder buses would require some 274 vehicles for peak operations. Additional commuter rail and light rail service and infrastructure are also included. The BRT and circulator network would have annual operating costs of approximately \$214 million. Some of the capital costs such as station costs and rail cost were amortized over a 50 year period whereas rolling stock such as buses were amortized over a 20 year period.

The three scenarios have different operating expenses. Scenario 1 would have slightly higher operating expenses while revenues decreased, as more travel would take place by bus and travel on Metrorail and commuter rail would decrease. Net operating subsidies would increase by just under thirty million dollars to about \$166 million a year, as more bus service is provided on the BRT Network and its feeder buses. Scenario 2 would have higher operating transit expenses, as additional Metrorail and additional bus capacity is needed. Vehicle fleets would require 50 more railcars and 100 more buses. Net operating subsidy would be higher than the Base, but comparable to Scenario 1 due to the increased cost efficiency of Metrorail. Scenario 3 has higher costs than either the other two. Metrorail ridership would increase slightly, requiring more service (10 more railcars). Though commuter rail service and costs would decrease, there would be much higher bus costs, with an additional 100 buses needed beyond the 274 buses of the BRT Network and its feeder buses. Net operating subsidy would be highest under this scenario, increasing by over sixty million dollars to just over \$200 million.

<u>Toll Revenue</u>: The regional travel forecasting model output was used to develop revenue estimates for the weekday peak period. It was assumed that 50% of the peak period traffic would use the VPL lanes during the off-peak period, and during weekend and holidays. Since HOV3+ do not pay tolls on Virginia VPLs, they were excluded in the revenue estimation.

<u>Transit Fare-Box Revenue:</u> Based on the increase in transit ridership of the scenarios allocated across modes in proportion to the increased capacity and based on a typical average recovery ratio for each mode, the estimate of annual farebox revenue was completed.

<u>Final Cost Analysis:</u> Table 11 shows the total annualized capital and operating cost of the highway and transit system together with annualized revenue from the tolls and the fare-box revenue together. Revenue to cost ratio of one would indicate the total revenue would be sufficient to meet the capital and operating expenses of the variably priced lanes and transit.

The analysis completed as part of this scenario study is a sketch level analysis and is not a substitute for a detailed financial analysis.

Annualized Annual Cost Revenue Scenario (millions) Revenue/Cost (millions) Scenario 1 \$ 1,662 \$ 1,110 0.40 \$ Scenario 3 2,017 1,048 0.38

Table 11: Year 2040 Revenue to Cost Analysis of VPL Scenarios (2010\$)

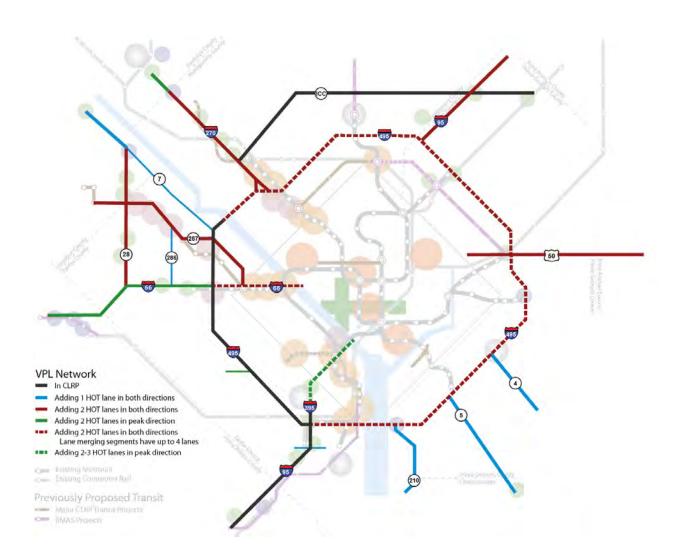
## **DISCUSSION AND NEXT STEPS**

This update of the CLRP Aspirations Scenario Study was used the latest planning assumptions and modeling tools. With the exception of the changes to the VPL network in response to the MAP-21 legislation, the underlying principles guiding the original scenario development were unchanged. The inputs to the travel forecasting model developed for the CLRP Aspirations Scenario can be used as a basis to study variations on the scenario such as alternative land use forecasts and variations on the VPL and BRT networks. Additionally, analysis can be conducted for smaller areas such as jurisdictions or corridors to see the impacts on travel and congestion. The financial analysis in this memorandum is a conservative, sketch-level analysis. Other financing possibilities can be studied.

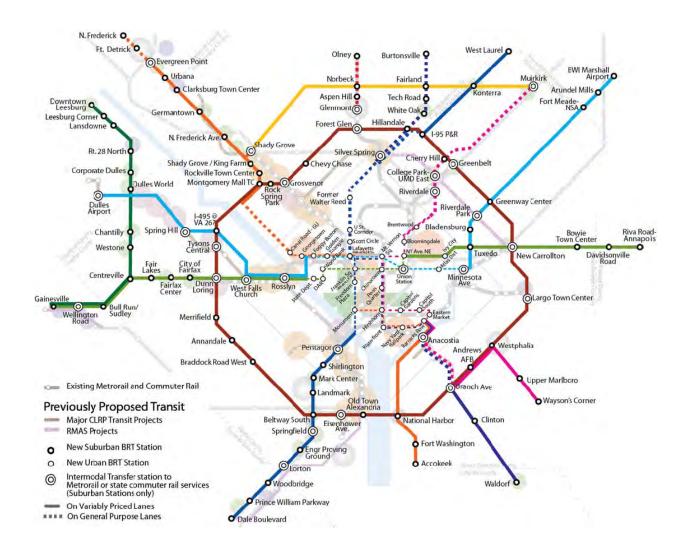
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- 6. Cambridge Systematics, Inc. Analysis of Resources for the 2006 Financially Constrained Long-Range Transportation Plan for the Washington Region. Prepared for the National Capital Region Transportation Planning Board, September 2006. http://www.mwcog.org/clrp/resources/Final\_2006\_Financial\_Analsyis\_Rpt.pdf

Attachment A: Regional Network of Variaby Priced Lanes for CLRP Aspirations Scenario



# Attachment B: Regional Bus Rapid Transit Network for CLRP Aspirations Scenario



# **ITEM 12 – Notice** April 17, 2013

Notice of Proposed Amendment to Update Projects and Funding in the District of Columbia Section of the FY 2013-2018 TIP

Notice is provided that the District Department of Transportation (DDOT) has requested an amendment to update projects and funding 3

in the District section of the FY 2013-2018 TIP. The Board will be asked to approve this amendment at the May 15 meeting.

The complete draft tables for the update to the DDOT portion of the FY 2013-2018 TIP can be reviewed online at <a href="https://www.mwcog.org/transportation/Draft-DDOT-TIP">www.mwcog.org/transportation/Draft-DDOT-TIP</a>. Printed copies will be made available at the TPB meeting.

# GOVERNMENT OF THE DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION



d. Policy, Planning and Sustainability Administration

April 11, 2013

The Honorable Scott York, Chairperson National Capital Region Transportation Planning Board Metropolitan Washington Council of Governments 777 North Capitol Street N.E., Suite 300 Washington, DC 20002-4290

Dear Chairman York,

The District Department of Transportation (DDOT) requests that the FY 2013-2018 Transportation Improvement Program (TIP) be amended to include the District's updated Obligation Plan.

The Obligation Plan is a six-year plan for obligating (initiating) projects. DDOT updates it Obligation Plan annually. The proposed amendment will update the District's element of the FY 2013-2018 TIP with project information and additional funding for the FY 2014-2018 program years as reflected in DDOT's most recently approved Obligation Plan.

We appreciate your cooperation in this matter. Should you have questions regarding this amendment, please contact Mark Rawlings at (202) 671-2234 or by e-mail at <a href="mark.rawlings@dc.gov">mark.rawlings@dc.gov</a>. Of course, feel free to contact me directly.

Sincerely,

Samuel Zimbabwe

Mans Keys

Associate Director, Policy, Planning, and Sustainability Administration (PPSA)

Table 1A
DISTRICT OF COLUMBIA
FY 2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM
Financial Summary (in \$Millions)

	2013		20	14	2015-	2016	2017-2	2018	2013-2	018
Source	Federal	Total	Federal	Total	Federal	Total	Federal	Total	Federal	Total
Title I - FHWA										-
American Recovery and Reinvestment Act	1.20	1.20	1.20	1.20					2.40	2.40
Bridge Replacement and Rehabilitation Program	34.44	43.05	64.12	80.14	68.38	85.48	10.62	13.28	177.57	221.96
Congestion Mitigation and Air Quality Improvement Program	8.60	10.65	7.10	8.85	15.92	19.88	43.53	54.39	75.15	93.78
Demo	13.92	17.40	47.04	58.80	31.31	39.14			92.27	115.34
Earmark	0.77	0.97							0.77	0.97
Federal Lands Transportation Program	1.30	1.30	4.00	4.00					5.30	5.30
Interstate Maintenance			0.64	0.80	2.03	2.54	0.64	0.80		
National Highway Performance Program			16.16	20.20	5.04	6.30	12.80	16.00	34.00	42.50
National Highway System	39.10	48.31	33.47	41.54	101.48	126.16	94.46	117.09	268.52	333.10
Safe Routes to School Program	1.15	1.15	1.15	1.15	2.30	2.30	2.30	2.30	6.91	6.91
State Planning & Research Program	2.64	3.29	2.80	3.50	5.60	7.00	5.60	7.00	16.64	20.79
Surface Transportation Program	81.84	101.02	73.52	90.71	175.35	215.91	191.28	235.77	521.99	643.41
Enhancements (STP)	2.76	3.45	2.76	3.45	5.52	6.90	5.52	6.90	16.56	20.70
Highway Safety Improvement Program (STP)	3.75	4.31	7.10	8.23	14.49	16.81	14.92	17.32	40.26	
Title I - FHWA Total:	191.47	236.11	261.06	322.58	427.43	528.42	381.68	470.85	1,261.64	1,557.96
Title III - FTA									•	ŕ
ARRA/TIGER	1.00	10.00							1.00	10.00
5303 - Planning Program	1.03	1.28	1.03	1.28	2.05	2.57	1.29	1.62	5.40	6.75
5309 - Capital Program	3.60	4.50							3.60	4.50
5310 - Elderly and Persons with Disabilities Program	0.36	0.45	0.36	0.45	0.72	0.90	0.72	0.90	2.16	2.70
Title III - FTA Total:	5.99	16.23	1.39	1.73	2.77	3.47	2.01	2.52	12.16	23.95
State/Local										
District Funds		157.16		1,645.79		846.43		226.74		2,876.12
State/Local Total:		157.16	-	1,645.79		846.43		226.74		2,876.12
Other				.,		0.0				_,0.0
AMTRAK	1.02	1.02							1.02	1.02
Federal Railroad Administration	1.77	3.54	2.00	4.00					3.77	7.54
GARVEE Bonds					63.37	79.21	202.38	252.97	265.74	332.18
GSA Earmark			50.32	50.32	58.66	58.66	202.00	202.07	108.98	108.98
National Park Service	1.09	1.09	00.02	00.02	00.00	00.00			1.09	1.09
National Recreational Trails Funding Program	2.56	3.21	5.06	6.33	11.10	13.87	7.76	9.70	26.48	33.10
Private		51.10	0.00	50.50		100.30	0	00		••••
Public Lands	1.42	1.77	1.60	2.00	4.00	5.00	4.00	5.00	11.02	13.77
Other Total:	7.86	61.73	58.98	113.15	137.12	257.04	214.14	267.67	418.10	699.58
Grand Total:	205.32	471.24	321.43	2,083.24	567.33	1,635.36	597.83	967.78	1,691.90	5,157.61
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Table 1B
DISTRICT OF COLUMBIA
FY 2013-2018 TRANSPORTATION IMPROVEMENT PROGRAM
Financial Summary (in \$Millions)

Project Type	2013		2014		2015-2016		2017-2018		2013-2018	
	Federal	Total	Federal	Total	Federal	Total	Federal	Total	Federal	Total
Interstate		51.10		50.50		100.30				201.90
Primary	16.40	20.15	66.56	69.54	90.26	97.64	35.44	43.57	208.67	230.90
Secondary	0.57	1.27	0.96	1.20	3.09	3.86			4.62	6.33
Bridge	54.84	72.58	126.04	1,627.26	218.69	782.87	308.44	409.29	708.01	2,892.01
Surface Transportation:	71.81	145.10	193.56	1,748.50	312.04	984.67	343.88	452.86	921.30	3,331.14
Transit:	5.97	88.12	9.59	123.48	36.37	268.09	8.41	140.65	60.35	620.33
Bike/Ped:	6.36	16.91	12.50	15.34	24.29	29.78	11.13	13.33	54.27	75.36
Enhancement	5.88	7.35	2.76	3.45	5.52	6.90	5.52	6.90	19.68	24.60
ITS	14.45	17.43	11.49	13.84	25.97	31.28	24.23	29.19	76.14	91.75
Maintenance	16.92	32.62	16.40	30.09	33.08	59.62	27.37	48.51	93.77	170.83
Other	83.38	162.96	74.56	147.79	128.94	253.50	176.16	274.93	463.04	839.18
TERMs	0.56	0.75	0.56	0.75	1.12	1.51	1.12	1.40	3.36	4.42
CMAQ, TERMs, Enhacements, ITS, and Other:	121.18	221.11	105.77	195.93	194.63	352.81	234.40	360.93	655.98	1,130.78
Total Funds:	205.32	471.24	321.43	2,083.24	567.33	1,635.36	597.83	967.78	1,691.90	5,157.61