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National Capital Region Transportation Planning Board (TPB)

Responses to 2010 Certification Review Questions from Federal Highway Administration (FHWA) and Federal Transit Administration (FTA)

March 24, 2010

ACKNOWLEDGEMENTS

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I. INTRODUCTION

This document provides responses to the 2010 planning certification review questions submitted by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to the TPB on March 3, 2010. The National Capital Region Transportation Planning Board (TPB), as a metropolitan planning organization (MPO), is required by Federal law to undergo a planning certification review every four years. The last review was conducted in 2005 by FHWA and FTA; the final report was presented to the TPB on March, 16, 2006. FHWA and FTA asked the TPB to respond to the 160+ certification review questions in preparation a two-day on-site review scheduled for April 19 and 20, 2010.

The Relationship between COG and TPB

The Metropolitan Washington Council of Governments (COG) is a regional organization comprised of 21 local governments surrounding the nation's capital, plus area members of the Maryland and Virginia legislatures and the U.S. Senate and House of Representatives. COG provides a focus for action and develops regional responses to such issues as the environment, affordable housing, economic development, health and family concerns, human services, population growth, public safety and transportation.

COG is the administrative home for the National Capital Region Transportation Planning Board (TPB), which is the federally-designated Metropolitan Planning Organization (MPO) for the region. The TPB became associated with the Metropolitan Washington Council of Governments (COG) in 1966. Although the TPB is an independent body, its staff is provided by COG's Department of Transportation Planning.

A. Recommendations from Previous Review and Metropolitan Planning Organization (MPO) Responses

Include a status of follow-up actions on recommendations from the last TMA certification review.

The last certification review was conducted in 2005. The final Certification Review Summary Report (dated March 16, 2006) identified 16 recommendations and 9 commendations. The table below provides the status of TPB's follow-up actions to the 16 recommendations; all of which have been addressed.

Recommendation from the 2005 Certification Planning Review	Status of TPB Follow-up Actions
1. Work with transit operators to establish a formal written agreement specifying roles and responsibilities for transit planning.	A Memorandum of Understanding (MOU) on the Metropolitan Transportation Planning responsibilities for the National Capital Region was signed and finalized on January 16, 2008 by. The MOU documents the current roles and responsibilities in transit planning and in developing the bus system for the long-range plan, and can be found at: www.mwcog.org/clrp/federal/Planning_Responsiblities_MOU_1-16-2008.pdf
2. Work with FAMPO to reach a resolution on the allocation of regional transit funds.	The TPB and FAMPO worked together to resolve the issue of allocation of regional transit funds through a series of discussions between 2006 and 2007. The TPB's response to FAMPO's request is provided here: www.mwcog.org/uploads/committee-documents/bl5fX1hX20071221135412.pdf
3. Include a signatures page in the annual self-certification.	A signatures page was added to the self-certification document. The three DOT's and the Chair of the TPB now sign the document.
4. Provide an expanded explanation of links between the CLRP and the TIP.	An expanded explanation of the link between the TPB Vision, the TIP and CLRP were added to the TIP document, CLRP website, the UPWP and the CLRP and TIP brochure.
5. Include information in the UPWP on how funds are allocated to the States and the District of Columbia.	The UPWP includes a complete description of how the funds are allocated for technical assistance to the State and D.C. DOTs.
6. Maintain commitments to Transportation Emission Reduction Measures (TERMS).	The Air Quality Conformity Determination report for the 2009 CLRP and FY 2010-2015 TIP includes letters from implementing agencies confirming their commitment to fund TERMS.

Recommendation from the 2005 Certification Planning Review	Status of TPB Follow-up Actions
7. Demonstrate and document how the federal planning factors are addressed in the planning process.	Improved documentation of how the planning factors are addressed in the planning process was added to the TIP document, the CLRP website, and the self-certification. The TPB addresses the planning factors via its Vision, which incorporates the planning factors specified in SAFETEA-LU. An explanation of how security is addressed by the planning process was added which describes TPB's security planning efforts after 9/11.
8. Expand freight planning efforts.	The TPB has expanded freight planning efforts. TPB's Freight Planning Program consists of a Freight Subcommittee, created in 2008, with participation with regional and national level freight groups to better understand freight stakeholders' perspectives, and freight stakeholder outreach. An initial study called *Enhancing the Consideration of Freight in Regional Transportation Planning*
9. Explicitly demonstrate how the safety and security planning factors are addressed in the planning process.	As stated under recommendation 11, improved documentation of how the TPB addresses the planning factors, including safety and security, has been added to the TIP document, the CLRP website and the self-certification.
10. Coordinate more frequently on land use issues.	The TPB has strengthened the coordination on land use issues with local jurisdictions in several ways. First, the TPB created the Transportation Land-Use Connections (TLC) program in 2007. The TLC program has two components: 1) The Regional TLC Clearinghouse is a web-based source of information about transportation/land-use coordination, including experiences with transit-oriented development and other key strategies; and 2) The TLC Technical Assistance Program provides focused consultant assistance to local jurisdictions working on creative, forward-thinking and sustainable plans and projects. On-going coordination on land use occurs during the annual cooperative forecasting process that COG conducts. Finally, the Scenario Study has engaged the TPB and local land use agencies in a dialogue on land use issues. See responses in Section Q for more information.

Recommendation from the 2005 Certification Planning Review	Status of TPB Follow-up Actions
11. Make Title VI compliance more visible and describe the steps taken to ensure compliance in the CLRP update.	To make the TPB's proactive compliance with Title VI more visible, a more thorough description of the steps taken to ensure compliance was added to the TIP document, the CLRP brochure and website, and to the self-certification document. Part of the TPB's proactive compliance includes the Access for All (AFA) Advisory Committee which advises the TPB on issues, projects and programs important to low-income communities, minority communities and persons with disabilities. The AFA Chair is also a TPB member (currently Supervisor Catherine Hudgins, Fairfax County) who briefs the TPB on AFA issues, studies and reports at key times during the year.
12. Evaluate the effectiveness of its public involvement outreach efforts.	The evaluation of the public involvement outreach efforts was finalized in June 2007. More information on this evaluation is provided under question R. 3.

B. DESCRIPTION OF PLANNING AREA

B.1. Please provide a general briefing of the metropolitan area, i.e. demographics, development trends, etc., and discuss any major transportation issues in the area, highlighting any changes since the previous Planning Review.

Information on how the region is expected to develop is essential to forecast transportation conditions and the plan's performance—and the Washington region's population and employment are expected to continue growing over the coming decades. The region (defined for these figures as the Washington DC-MD-VA Metropolitan Statistical Area) is forecast to grow by nearly 1.2 million people and almost 1 million jobs between 2010 and 2030—a 22- percent increase in population and a 29- percent increase in employment. Forecasts indicate that by 2030, the region will include 6.4 million people and 4.2 million jobs. These estimates are from the results of Round 7.2 of the Cooperative Land Use Forecast.

While the region as a whole is fast-growing, some areas are growing faster than others. The outer suburbs are expected to grow much faster than the regional core, with dramatic increases in population and employment. The result of this growth pattern is that the inner suburbs and regional core are expected to have the highest concentrations of jobs in 2030, while the inner and outer suburbs are expected to have most of the population.

What will these trends mean for the future? While our region grows to accommodate more jobs and more people and as jobs and households become increasingly further apart, greater demands will be placed on the transportation system. However, funding—even for rehabilitation and maintenance—will continue to remain in short supply. The result will be more cars squeezed onto our roads and more people squeezed into our buses and trains.

For more information, including charts detailing growth and development trends, see:
http://www.mwcog.org/clrp/performance/metropolitan_growth.asp

C. MPO BOUNDARIES

C.1. Please provide a map(s) showing the following boundaries: Census-Urbanized Area (UZA), FHWA Urban Area Boundary (UAB), Metropolitan Planning Area Boundary (MPA), and air quality Nonattainment/Maintenance Area boundaries. Have there been any changes to the metropolitan planning area boundary since the previous planning review? Which, if any, areas are under consideration for inclusion in an expanded MPA in the next 20 years? What factors will determine the decision on expanded boundaries?

See the attached maps for a description of the above requested boundaries.

There have not been any changes in the metropolitan planning area boundary since the previous planning review in 2005.

After each Census, the TPB will review its planning area boundary in cooperation with the State DOTs and Public Transit Operators to determine if it meets the minimum statutory requirements for new and updated urbanized areas, and will adjust the boundary as necessary.

EXHIBIT 1
Washington, D.C. - Maryland - Virginia
Planning Areas

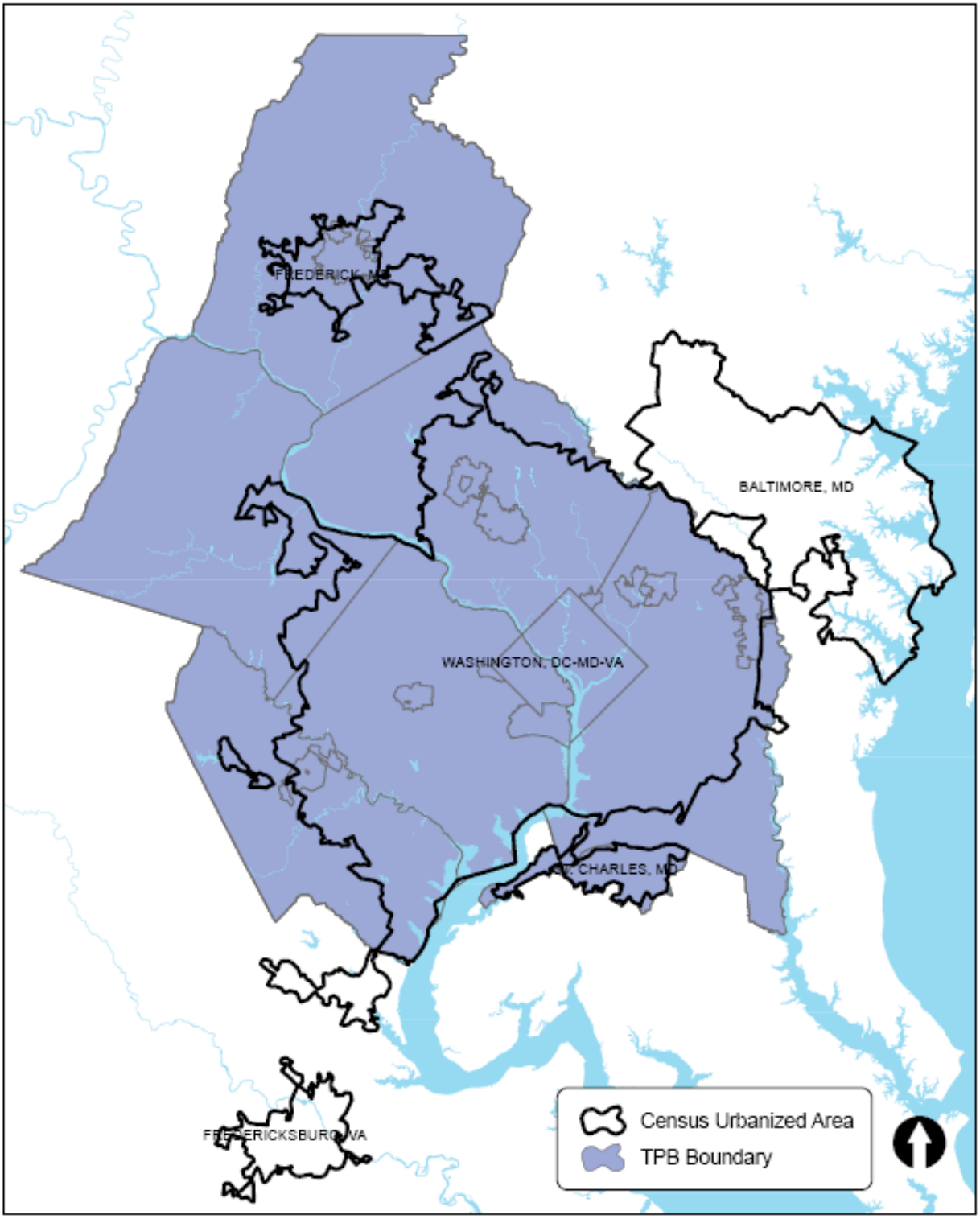
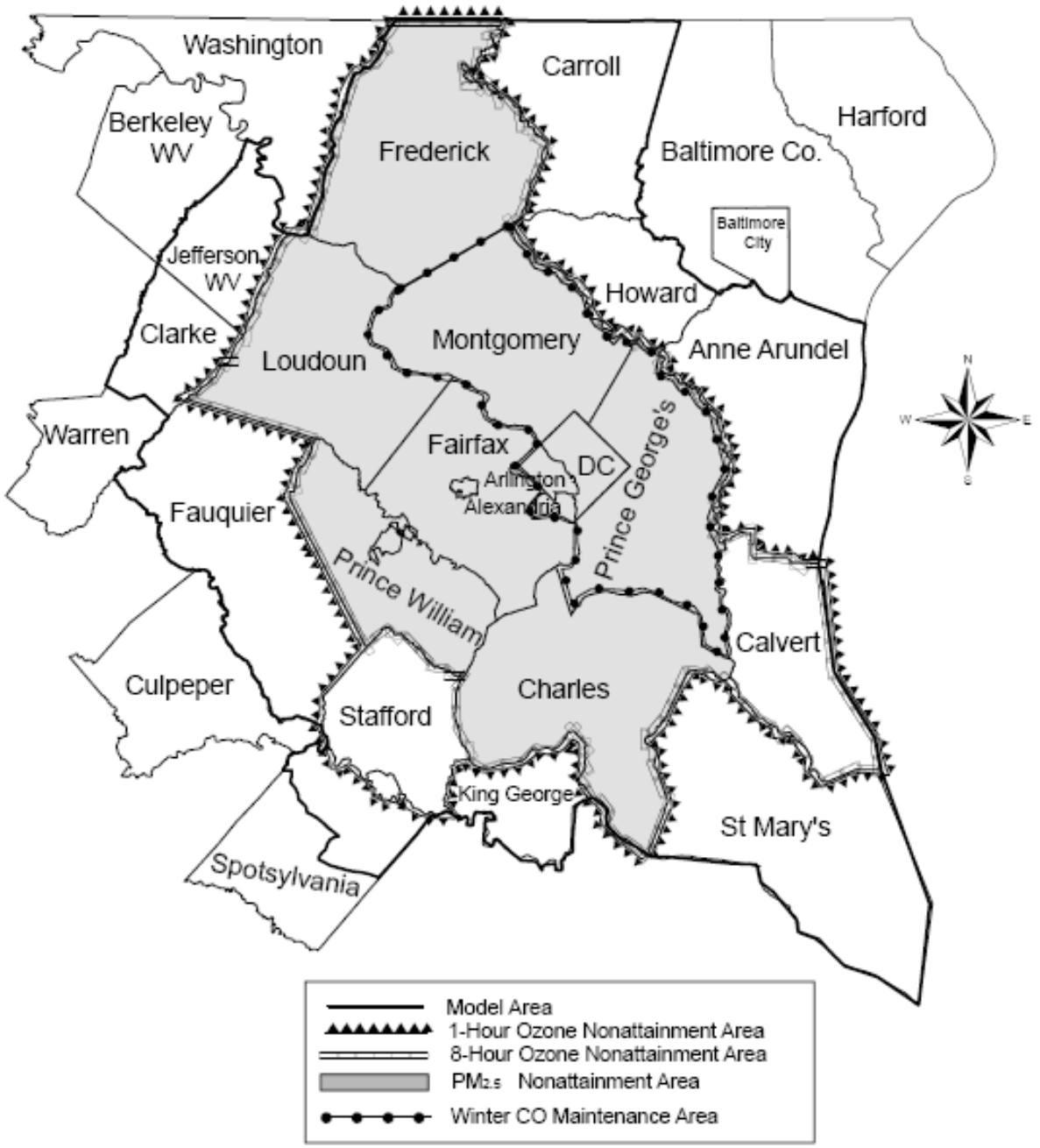


EXHIBIT 2
Washington,D.C.- Maryland - Virginia
Planning Areas



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Source: Air Quality Conformity Determination of the 2009 CLRP and the FY 2010-2015 TIP for the Washington Metropolitan Region.

D. ORGANIZATION/STRUCTURE

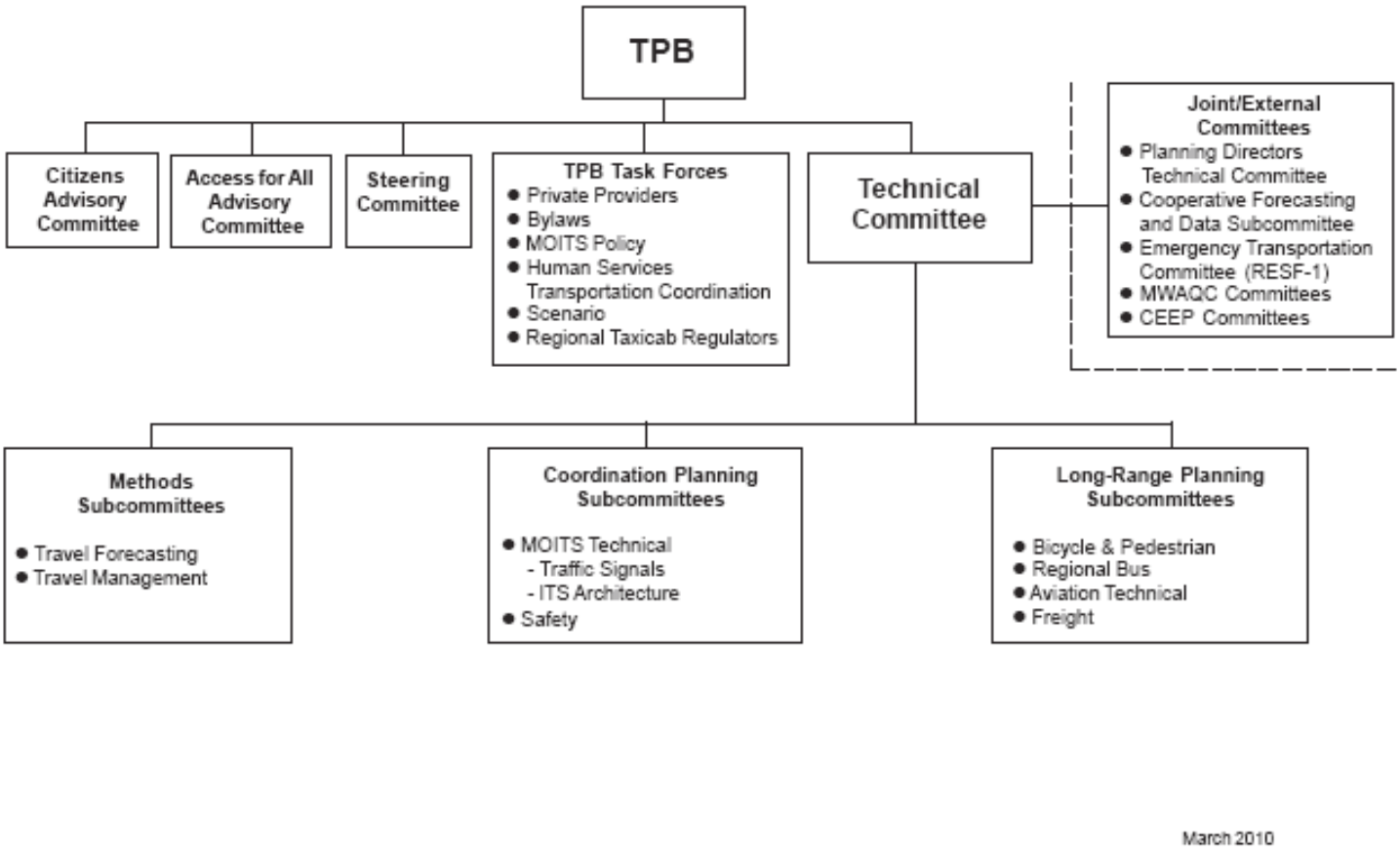
D.1. How are the members chosen for the MPO's executive and technical functions and what jurisdictions do they represent? What are the committee's structures and the responsibilities of each? Are all jurisdictions represented? Are all modes represented?

Members of the TPB and its executive and technical committees are appointed by their respective jurisdiction or agency. Please see the list of TPB members on the website.

Figure 7 (below) from the FY2011 UPWP shows the committee structure; more information on the twenty task forces, committees and subcommittees can be found at: www.mwcog.org/transportation/committee. Note that all UPWP work tasks have a committee that provides oversight for that activity or product.

All jurisdictions and all modes are represented on the TPB, and its twenty task forces, committees and subcommittees.

Figure 7
TPB Committee Structure



D.2. Are any implementing agencies not members of the MPO or policy board? Any operators of major modes of transportation not members?

There are no implementing agencies that are not members of the TPB, and there are no operators of major modes of transportation that are not members of the TPB.

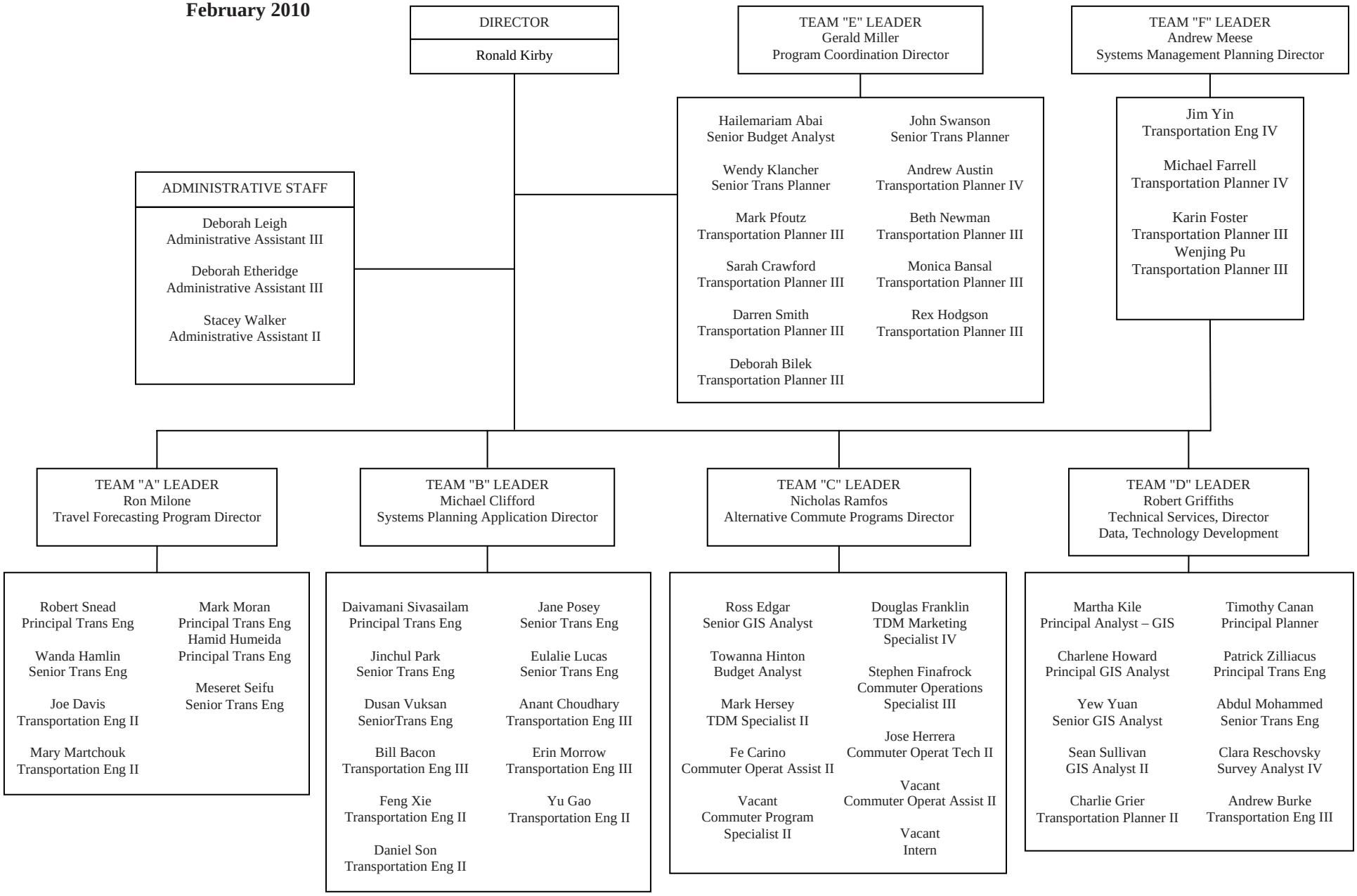
D.3. How is the MPO staff organized and what are their responsibilities?

The Director is responsible for TPB policy coordination, overall management and the integration of UPWP activities. Five Team Leaders manage their assigned specific work activities in the UPWP. The Team Leaders are responsible for staff ting the activity and delivering the work products within budget and on schedule. The organization chart below illustrates how the TPB staff is organized and the overall responsibility of each team.

ORGANIZATION CHART

Department of Transportation Planning
Metropolitan Washington Council of Governments

February 2010



E. AGREEMENTS AND CONTRACTS

2005 Certification Review: Suggested that the TPB and the Fredericksburg Area Metropolitan Area Planning Organization (FAMPO) work cooperatively to reach a resolution on the allocation and sharing of regional transit funds.

E.1. How has the TPB worked with FAMPO to amend and complete this agreement? Is this agreement available online, if not can you provide this document?

As answered under Section A, Recommendation 2, the TPB and FAMPO worked together to resolve the issue of allocation regional transit funds through a series of discussions between 2006 and 2007. The TPB's response to FAMPOs requests is provided here:
www.mwcog.org/uploads/committee-documents/bl5fX1hX20071221135412.pdf

E.2. List current agreements or memorandums of understanding (MOU) identifying planning responsibilities established among the MPO, state DOTs, transit operators, air quality agencies and any other agencies involved in the planning process. Are agreements final, signed, and in effect? Explain any updates being developed or contemplated and any changes that are planned.

The following agreements and MOUs are final, signed and in effect:

1. MOU on Metropolitan Transportation Planning responsibilities for the National Capital Region; January 16, 2008. (This agreement is included in the Appendix of the FY2010 UPWP.)
2. "Agreement for the Support of Metropolitan Planning Organization Transportation Planning Process in the Washington Metropolitan Area"; October 30, 2003. First Amendment September 17, 2008.

The TPB also approved "Procedures for Revisions to the Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP) for the National Capital Region" on January 16, 2008. This document can be found at www.mwcog.org/clrp/process/amendments.asp. No updates or changes are being developed or contemplated.

E.3. Please discuss how you coordinate with other local governments or agencies that impact transportation planning, and whose role may include transit, safety, security, bicycle/pedestrian land use, zoning and other transportation related roles.

The TPB's transportation planning process encompasses multi-modal planning that is occurring at the local level. Local governments that impact transportation planning are part of the TPB process and these agencies belong to the TPB and COG committees, which engage in a number of activities that contribute to the regional planning process. The TPB and COG committees are shown in Figure 7 under Question D.1.; the COG committees are shown under "Joint/External Committees".

E.4. Are there any specific agreements that have been completed or amended since the last review in 2005?

The agreements listed under Question E.2. above have been completed or amended since 2005.

F. MPO Annual Self Certifications

F.1. What process/procedures are used to self-certify the planning process?

The TPB certifies the transportation planning process via a comprehensive document every year when the CLRP is amended. This 18-page self-certification document is prepared by TPB staff and the DOTs staff and addresses all MPO Federal planning regulations. The self-certification is provided to the DOTs for their review and signature. The documentation is presented to the TPB, reviewed by the Board members, adopted by resolution and signed by the TPB chair. The self-certification is published in the TIP and can be found on Page xxiii of the FY2010-2015 TIP.

F.2. How are the transit authority, State DOT's, and other transportation partners involved in the certification process? It was suggested in 2005 that WMATA sign the self-certification; is that occurring? Is there an opportunity for public comment? If so, how are comments addressed? How is the process documented?

The State DOTs, WMATA and other transportation partners that are members of the TPB vote to approve the self-certification. The State DOTs and the TPB chair sign the self-certification. Members of the public may comment on the draft self-certification during the public comment period at the TPB meeting. Significant comments are responded to as part of the CLRP and TIP update process. Responses to comments and the self-certification are documented in the TIP; see FY2010-2015 TIP.

F.3. What educational efforts, background documentation, guidance or supporting documentation is provided to the MPO policy board when the self-Certification is approved? Is the policy board provided with background information and documentation on what is required in the planning process by various laws? When and how?

Each year before the TPB is asked to approve the self-certification, the TPB is briefed on the self-certification document by the Director of Transportation Planning. The comprehensive self-certification document is provided one week prior to the TPB meeting. The TPB is regularly briefed at its monthly meetings by the Director on Federal planning laws and regulations.

F.4. Is there continuity and consistency between the annual self-certification and triennial Federal Certification?

Yes. The annual self-certification document incorporates information on how the TPB addressed recommendations from the most recent triennial Federal certification.

G. LONG-RANGE TRANSPORTATION PLAN (LRTP)

G.1. How are State programs, policies, and processes (such as the State LRTP, other modal/master plans) integrated into the LRTP development process?

Each state has a long-range planning process that brings together project recommendations from local governments, the state DOTs, WMATA, and other sources. The priorities established in these state plans are the primary source of projects submitted for the CLRP. The state DOTs each have methods for identifying projects needed to maintain the integrity of the transportation system, enhance safety or improve mobility or accessibility. At the regional level, the TPB helps identify problems and needs by monitoring current travel conditions and forecasting future travel demand.

At the beginning of each update cycle, the TPB issues its Call for Projects which includes the region's goals and priorities. Implementing agencies then review their long-range plans and priority projects and compare those against future financial forecasts to determine which projects they will advance into the CLRP. These, in addition to previously proposed projects, are then reviewed to make sure they meet the financial constraint requirement as well as the region's air quality attainment goals.

G.2. What is the MPO's process to measure the effectiveness of the Transportation Plan?

The CLRP is updated each year. With these updates, an analysis of the plan's performance is conducted and reported for several performance measures. Data for the analysis are generated by the regional travel model, and show changes that are forecast as a result of the planned implementation of projects contained in the CLRP for the following key indicators: vehicle miles of travel, work trip mode split, accessibility to jobs by auto and transit, air quality, lane miles of congestion, and how transit is serving the region's activity centers. The Air Quality Conformity report also contains additional performance measures. This analysis is performed following adoption of the CLRP and TIP, and documented online and in a brochure. In order to most easily explain what is in the plan and what that means for the region, documentation of the plan and its performance is geared toward the general public.

More Information

- Online documentation of CLRP Performance: http://www.mwcog.org/clrp/performance/
- Summary brochure of the CLRP: http://www.mwcog.org/clrp/resources/default.asp
- Air Quality Conformity Report: http://www.mwcog.org/store/item.asp?PUBLICATION_ID=361

G.3. During the last update of the Transportation Plan, how were the planning assumptions validated?

Validation of planning assumptions occurs in two ways: (1) where published, observed, or surveyed technical data or policies exist, an explicit comparison with planning assumptions can be made to either confirm them or to identify necessary updates to the current set of assumptions; and (2) where such explicit comparisons cannot be made, reliance on the process of documentation and public comment / interagency consultation must be exercised. (See Section M for additional detail on this consultation process.)

In the first instance (i.e., explicit data comparisons), under TPB's continuing process of travel monitoring, travel surveys, and models development, planning assumptions are constantly under review and models or model components are revised, where needed, following this ongoing review of the entire travel demand modeling process. (See also discussion in Section O. Ongoing work activities in this regard are anticipated to yield in FY2011 a significantly revised travel demand forecasting process, based upon the recent regional household travel survey and subsequent analyses.)

In the second instance listed above, in cases where hard data cannot be brought to bear to validate planning assumptions, documentation and public comment / interagency consultation must be utilized to a greater extent. This includes, for example, such fundamental assumptions as projects and land activity to be reflected in each milestone analysis year of the plan and TIP. Given anticipated financial resources and programming priorities, a set of transportation investments staged through time is advanced, documented and released for comment. Should questions arise concerning the ability of an agency to implement a certain project on a specific time frame, the issue can be addressed explicitly via comment and response procedures. Similarly, questions related to land activity assumptions or other inputs for which policy assumptions must be made, e.g., transit fares, HOV carpool definitions, vehicle inspection and maintenance programs, etc., can be dealt with via public comment / interagency consultation.

G.4. How is the disposition of comments and changes in the final Transportation Plan documented, analyzed, and reported when significant oral and written comments are submitted? How much additional time is provided for public review if the "final" document is significantly different from the draft originally made available for public review?

All comments submitted are reviewed and written responses are prepared by TPB staff. If numerous comments are received in support and/or opposition to a proposed project or projects for the plan, they are grouped and tallied according to position. Any substantive arguments or questions are summarized and compiled on a list and responded to by TPB staff. A comprehensive summary of the comments and recommended responses are preened to the TPB for its approval and incorporation in the final TIP document.

If the "final" document is significantly different from the original draft, then a minimum of another 30-day public comment period will be held.

G.5. What is the role of the transit operator and how is it involved in the MPO's overall planning and project development process?

WMATA is represented on the TPB. The region's 16 other transit agencies, which are operated by local governments, are represented on the TPB by the representatives of those jurisdictions. The region's two commuter rail services, VRE and MARC, are represented on the TPB through the state DOTs, and are also directly represented on the TPB Technical Committee. The TPB Technical Committee provides opportunities for the region's transit agencies to provide input and feedback on the transit assumptions and other factors included in various TPB studies and analyses. The TPB's subcommittees – such as the Human Service Transportation Coordination Taskforce, Commuter Connections and the Regional Bus Subcommittee allow the transit agencies to participate in planning and project development at the metropolitan regional level. WMATA's submissions for the TIP and CLRP are directly coordinated with the TPB planning process. Every year, the WMATA Board develops and approves a Capital Improvement

Program, which is then submitted to the TPB for inclusion in the TIP. The region's other transit agencies coordinate their project submissions through their respective local governments.

G.6. How is the distribution of impacts to different socioeconomic and ethnic minorities identified and measured? How are benefits and burdens across all socioeconomic groups examined in the modeling and planning performed in support of Transportation Plan development?

The performance analysis for the CLRP includes an analysis of the accessibility gains and losses across minority, low-income, and disabled population groups. Accessibility is measured in terms of the number of jobs accessible within 45 minutes by auto, transit, and transit specifically accessible by walking. This analysis specifically looks at how accessibility will change between the current condition and the planning horizon year as a result of the implementation of the CLRP. Accessibility to retail jobs is also examined, because these jobs are correlated with shopping opportunities and entry level employment, the latter of which may be of particular interest to the low-income population.

For more information see: http://www.mwcog.org/clrp/performance/EJ/EJintro.asp

G.7. Are there any comparisons of Transportation Plans with State conservation plans or maps available? Are there any comparisons of Transportation Plans to inventories of natural or historic resources, available?

As part of the TPB's environmental consultation process, described in more detail under section U and on the TPB's CLRP website: http://www.mwcog.org/clrp/elements/environment/default.asp, the TPB has completed an extensive data collection and mapping effort that compares the CLRP with the region's natural and historic resources and associated conservation plans. Under this initiative, the TPB has worked with federal, state, and local resource agencies in the region to collect a wealth of environmental data on locations of floodplains, green infrastructure (as defined by Virginia and Maryland conservation plans), historic sites (as defined by national and separate state registers), impervious surface, protected lands (as defined by state wildlife management and conservation plans), sensitive species, and wetlands. In order to accurately compare the transportation plan with these resources and environmental plans, the TPB directly collaborated with experts at several resource agencies, such as the Maryland Department of Natural Resources, Maryland Historical Trust, National Park Service, Virginia Department of Conservation and Recreation, Virginia Department of Game and Inland Fisheries, and Virginia Department of Historic Resources.

Using this data, the TPB created eight maps showing the overlap between the CLRP and various resource plans throughout the region. Following feedback through the environmental consultation process, the data and maps are updated on an annual basis. They are available for viewing here: http://www.mwcog.org/clrp/elements/environment/envmapping.asp. These maps reflect a comparison between the CLRP and conservation plans, as well as a comparison of the plan to inventories of natural and historic resources, particularly evident in the sensitive species, green infrastructure, wetlands, and historic sites maps.

G.8. Does the plan have a regional coordination element? If so, does the plan take into account regional/state priorities?

All TPB activities, plans and programs include on-going regional coordination. The CLRP, the TIP, and the UPWP are all outcomes of a coordinated regional planning process. The CLRP does reflect and take into account regional and state priorities. See the diagram entitled "Stages in Project Identification, Planning and Programming" on page 8 in the Citizen's Guide for more information.

G.9. How does the plan give emphasis to facilities serving important national and regional transportation functions?

The CLRP includes numerous projects and programs that serve regional and national transportation functions. Many projects have been included to adapt to changes in land-use and job locations brought on by the U.S. military's Base Realignment and Closures (BRAC) Act. Additionally, the Mid-Atlantic Transportation Operations Coordination (MATOC) program was established following the experiences of the 9/11 terrorist attacks and other major incidents.

Furthermore, the TPB includes representatives from the Federal Highway Administration, Federal Transit Administration, National Park Service, Metropolitan Washington Airports Authority, and the National Capital Planning Commission. These agencies are all asked to review and comment on the CLRP and provide their perspective on the national and regional transportation functions.

G.10. Are all plans and programs developed by a single MPO consistent with plans of other MPOs in the area?

The implementing agencies in Maryland and Virginia ensure that the projects and programs in their portions of the CLRP are consistent with the affected MPOs in their respective states. Additionally, the TPB coordinates closely with the Fredericksburg Area Metropolitan Planning Organization (FAMPO), the Baltimore Metropolitan Council (BMC) and MDOT (regarding data for Southern Maryland) to share data and ensure that transportation projects and land activity forecasts in adjacent counties are consistent with the TPB's air quality conformity analyses. At the start of the annual CLRP and TIP update effort, the TPB requests the latest planning assumptions from each relevant agency and incorporates those data into the update. Similarly, the TPB shares its latest adopted planning information with each agency.

H. PLANNING FACTORS

H.1. Please explain how the agency carries out a continuing, cooperative, and comprehensive transportation planning process, and addresses each of the eight planning factors listed in 23 CFR 450.306.

Rather than a static plan, the CLRP is considered to be a continuing plan, or "living document." The TPB updates the region's CLRP and TIP on an annual basis along with the air quality conformity analysis and analyses on metropolitan growth, travel demand, congestion, and accessibility. The TPB makes improvements to the models used for these analyses every year as well. Throughout each annual cycle, the TPB involves each member jurisdiction and agency in a cooperative planning process; from the development of the Call for Projects document, to the response to public input, to the final approval of the CLRP. All projects submitted for inclusion in the CLRP are reviewed and approved by the full TPB.

Additionally, the TPB coordinates technical assistance to its member jurisdictions with planning studies as outlined in the Unified Planning Work Program and through the Transportation/Land-Use Coonnections TLC) Program. The TPB's planning process is comprehensive. The TPB has developed CLRP elements that address every mode of travel as well as land use, freight, intelligent transportation systems, environmental justice, safety and security, congestion management, and human service transportation coordination. The eight planning factors are addressed in these CLRP elements and through the TPB's Vision. Each CLRP project description form asks the submitting agency to identify which planning factors the project supports. For more information on how the CLRP and the TPB Vision address the federal planning factors, please visit http://www.mwcog.org/clrp/federal/vision_factors.asp.

H.2. How is each of the SAFETEA-LU eight planning factors considered in the planning process? In 2005, it was recommended that the TPB demonstrate and document how the federal planning factors are specifically addressed at key points in the transportation planning process as part of the next updates to the CLRP, TIP and UPWP. Describe how this was addressed.

As described under Section A, Question 1, Recommendation 11: improved documentation of how the planning factors are addressed in the planning process was added to the TIP document, the CLRP website, and the self-certification. The TPB addresses the planning factors via its Vision, which incorporates the planning factors specified in SAFETEA-LU. An explanation of how security is addressed by the planning process was added to describe TPB's security planning efforts after 9/11.

I. TIP

The TPB website and call for 2011-2016 TIP projects both explain the relationship between the TIP and the CLRP, and provide some basic information on the sources of projects. The Federal Team is interested in better understanding the process by which TIP projects are selected and prioritized.

I.1. Describe the TIP project prioritization and selection process.

Every year, the TPB issues a draft and final "Call for Projects" document that presents regional goals and priorities based upon the TPB Vision and Federal Planning Factors. Because all of the federal funds in this region go directly to the state DOTs and WMATA, the prioritization and selection of projects to be included in the TIP is largely done at the state and local levels. Each of the three DOTs in the region have their own state-mandated processes for funding capital projects. The DOTs compile a list of projects based on locally-identified priorities and a preliminary analysis of available funds. Projects submitted to the TPB for inclusion in the TIP are reviewed for fiscal constraint and included in the air quality conformity assessment, where necessary. A comprehensive description of the project prioritization and selection process can be found on pages 9-15 of the FY 2010-2015 TIP.

A recent example of a TIP regional priority competing for funding at the state level is the Mid-Atlantic Transportation Operations Coordination (MATOC) program. In 2009, the TPB requested $400,000 per year from each state to operate MATOC as a regional priority, yet to date, funding by all three state DOTs has not been committed.

1a. How are bicycle, pedestrian, and transit needs addressed in the prioritization process?

Each DOT applies its own guidelines for meeting bicycle, pedestrian and transit needs. The TPB also plays an important role in supporting these types of projects. During the development of previous TIPs, the Bicycle and Pedestrian Subcommittee and the Regional Bus Subcommittee have presented lists to the TPB that identified unfunded priority projects for the region. Additionally, the TPB has prepared a further analysis of projects in the TIP that include bicycle/pedestrian accommodations or are that exclusive bicycle/pedestrian projects. This summary can be found on page F-15 of the FY 2010-2015 TIP.

1b. Are there criteria for balancing the number of projects or funds geographically? (e.g., based on state, or county, etc.)

The District, Maryland and Virginia DOTs each use criteria and formulas for selecting projects and funding within their jurisdictions. The TPB prepares maps and interactive visualization using GoogleEarth to show the geographic distribution of projects in the region. TPB staff also prepares an accessibility analysis on all projects in the CLRP and TIP (http://www.mwcog.org/clrp/performance/accessibility.asp).

1c. How do the MPO, the State, and the transit operator collaborate on the development of the TIP?

The District, Maryland and Virginia DOTs, local counties in Maryland and WMATA use an online database to submit their TIP project data. Each agency is provided with multiple iterations of the projects listed in the TIP during the development process to review and comment on. TPB staff provides each

agency with a financial summary of projects in the TIP that it can review to ensure its funding levels are accurate and constrained.

1d. Is there a current version of the brochures and materials presented at the September 2008 public forum, to explain the process for project selection? Are they easily available to the public?

The Summary Brochure for the 2009 CLRP and FY 2010-2015 TIP describes the process for developing the CLRP and TIP, and is available in several locations on the COG and TPB websites. Also, subsections of the CLRP website are dedicated to "Process" and "Participation", and explain the process for project selection.

COG-TPB Publications:
http://www.mwcog.org/publications/departmental.asp?CLASSIFICATION_ID=3&SUBCLASSIFICATION_ID=17

CLRP Documents: http://www.mwcog.org/clrp/resources/

CLRP Website: http://www.mwcog.org/clrp/default.asp

I.2. Are specific criteria used to determine which projects will be included in the TIP?

The TPB has developed a set of goals and criteria based on the TPB Vision and the Federal Planning Factors, as described in the Call for Projects documents. Projects must be shown to support one or more of these goals and meet all federal planning regulations to be included in the CLRP and TIP.

2a. If so, what process was used in developing and weighing these criteria?

The TPB does not use any weighing mechanism for including projects in the Plan.

2b. How are these criteria communicated to stakeholders, including the agencies submitting projects?

The regional goals and criteria for projects are communicated to all stakeholders and implementing agencies in the annual Call for Projects document found at: http://www.mwcog.org/clrp/resources/2010/2010_Call_for_Projects-Final.pdf.

I. 3. How is public involvement incorporated in the TIP development process?

The DOTs and WMATA each have their own public comment processes for projects before they are finalized in the TPB's TIP. Each fall the TPB hosts a public forum to provide citizens with information on the project development process and public involvement opportunities at the local and state level, where they can have a greater influence on projects submitted to the TPB for inclusion in the TIP.

The TPB provides two additional opportunities for public comment once projects are submitted by the DOTs and WMATA. A 30-day public comment period is held prior to including projects in the air quality conformity analysis. After the conformity analysis has been produced, the TPB holds a final 30-day

comment period before approving the TIP and CLRP. Additionally, two citizen-based groups; the Citizens Advisory Committee and the Access for All Advisory Committee are presented with projects proposed for inclusion in the TIP and asked to comment.

3a. How does this involvement affect the content of the TIP?

The DOTs and WMATA have public involvement processes that affect projects long before they are submitted to the TPB for inclusion in the TIP. The TPB encourages citizens to get involved early in the TIP development process by attending meetings hosted by the state and local transportation planning agencies and providing their input on regional project priorities. Information on these various state processes is made available in the Citizens Guide (http://www.mwcog.org/transportation/involved/)
There have been instances where specific public comments have led to minor changes in the TIP. For example, when a significant number of comments received expressed concern about impacts that the Purple Line would have on the adjacent Capital Crescent bicycle and pedestrian trail, MDOT revised the project description to indicate that it would minimize these impacts. Also, in response to comments received from the Citizens Advisory Committee, the TPB recently began providing additional information on bicycle and pedestrian projects.

3b. When does the public have an opportunity to comment on the TIP and TIP amendments?

There is a 30-day public comment period, prior to the approval of the TIP, during which citizens are invited to provide comments either in person, in writing or online. At the beginning of every TPB meeting there is a public comment period, during which citizens are invited to provide comments in person and/or in writing regarding any proposed TIP amendments. Additionally, a 30-day public comment period is held for those TIP amendments that are regionally significant and require additional conformity analysis.

3c. How are significant oral and written comments documented, analyzed, and addressed?

All significant oral and written comments submitted to the TPB during the public comment period on the TIP are posted on the public comment website. Senior staff and/or the DOTs develop a draft response to each significant comment received. The TPB reviews these comments and approves the responses for incorporation in the final TIP document.

3d. How much additional time is provided for public review if the "final" document is significantly different from the draft originally made available for public review?

If significant changes are made to the CLRP or TIP following the public comment period, an additional 30-day comment period will be instituted.

3e. Is the TIP public forum an annual event?

The TPB holds two events annually. The first is a Public Forum on the CLRP and TIP at the beginning of each update cycle; the second is a Forum on the TIP when it is released for public comment along with the Air Quality Conformity Analysis.

I.4. How does TPB demonstrate consistency between the prioritization process and the goals and priorities of communities within the metropolitan planning area?

The implementing agencies (DDOT, MDOT, VDOT and WMATA) prioritize the projects in the TIP with consideration of the TPB Vision goals and priority projects provided in the Call for Projects document.

I.5. How does TPB ensure that the TIP includes all proposed federally and non-Federally funded regionally significant transportation projects? Are there special procedures given the multiple state DOTs?

The TPB works with each implementing agency to ensure that all regionally significant projects included in the air quality conformity analysis are included in the TIP where necessary. Each agency is responsible for ensuring that all federally-funded projects are included in the TIP. Agencies are presented with multiple drafts of the TIP for review during the course of development. The TPB provides a financial analysis so that each agency can review its funding levels for financial constraint.

I.6. How does the TIP serve as a management tool for implementing the CLRP? Does it reflect policies, investment choices, and priorities identified in the Plan? Does it tie specifically back to the eight TPB Vision Goals? How is its success or lack of success determined?

The TIP shows the capital funding for the first six years of the projects planned in the CLRP. The projects in the CLRP and TIP are listed in a database. Each project in the TIP is associated with a "parent" CLRP project in the database. Using this relationship, the TPB is able to track the implementation of CLRP projects through the progress of projects in the TIP. This association also helps to ensure that projects in the TIP reflect the CLRP's policies and priorities. Each record in the CLRP contains data on how that project supports the TPB's Vision goals. An additional financial summary of the TIP is done each year. The summary includes factors such as types of projects in the TIP, funding sources, funding levels by year, and comparisons with previous years.

The TIP itself is successful if it is incorporated into the Maryland, Virginia and DC STIPs and these receive federal approval, enabling funds to flow to the projects. How successful the implementation of the region's CLRP will be continues to depend upon identifying the necessary local, state and federal transportation funding. The 2009 *Region* magazine provides an assessment of the implementation of the CLRP and the TPB's Vision over the past decade.

I.7. How do the States, MPO, and transit operators collaborate on the development of the TIP?

The District, Maryland and Virginia DOTs, local counties in Maryland, and WMATA use an online database to submit their TIP project data. Each agency is provided with multiple iterations of the projects listed in the TIP during the development process to review and comment on. TPB staff provides each agency with a financial summary of projects in the TIP that it can review to ensure its funding levels are accurate and constrained.

7a. Is there coordination or interaction between the three state DOTs and WMATA, or does the development for each agency function separately?

Although the majority of projects in the TIP are developed separately by each implementing agency, the TPB does play a significant role in coordinating development between the DOTs, WMATA and local jurisdictions. The three DOTs work in cooperation with WMATA each year to determine funding amounts for the transit agency. The DOTs also work closely with one another on projects that approach or cross jurisdictional boundaries.

The TPB website explains the reasons for and the basic process related to TIP administrative modifications and amendments. The Federal Team would like to better understand the procedures for how and when such modifications and amendments can occur.

I.8. Briefly describe how often TIP modifications occur and what they consist of (type).

The frequency of administrative modifications has increased over the past year due to changes in ARRA funding. Before then one or two occurred per month.

are usually processed once or twice a week, on average. These modifications typically consist of minor changes to funding amounts or sources, or to project descriptions. According to agreements with DDOT and MDOT, the change in funding amount can be no more than 20 percent of the project cost, whereas VDOT uses a sliding scale. Please see the "Revising the CLRP and TIP" page on our web site at: http://www.mwcog.org/clrp/process/amendments.asp

Amendments are made at the monthly TPB Steering Committee meetings or full Board meetings. These amendments may be for projects being added to the TIP or for significant changes to funding amounts or sources. The TPB typically processes fewer than five amendments per month.

8a Is there a deadline for modifications? After a certain point are they just incorporated into the TIP for the following year?

There are no deadlines for modifications or amendments to the TIP. The District of Columbia, Maryland and Virginia rely upon their own STIPs to draw federal funding. Federal approval of these STIPs typically follows approval of the TPB's TIP by several months. Consequently, amendments to the current TIP are requested and processed up until the approval of the next TIP.

8b. Is a new conformity determination prepared if projects affecting emissions are added or deleted?

Yes.

8c. Is there a limit to the number of modifications that the MPO will make? – related to timing, administrative work, emissions modeling if necessary, etc.?

No.

The TPB website explains that the first year of each TIP is called the Annual Element. Projects that have funds programmed in the Annual Element are eligible to receive federal funding in that fiscal year.

I.9. Does the TPB prepare a regular list of the Annual Element?

Yes. The Annual Element is shown in the TIP.

9a. Is the list for the preceding year available during the TIP development process?

Yes, each agency works with the previous year's TIP and Annual Element as a starting point for creating the new TIP.

9b. It is updated to reflect which projects did have Federal funds obligated in the preceding year?

Yes, the TPB compiles a list of projects from the Annual Element that received Federal Funding. Please see the "Federal Funding Obligation Reports" page on our web site at:
http://www.mwcog.org/clrp/projects/tip/obligations.asp

J. FINANCIAL PLANNING AND FISCAL CONSTRAINT

J.1. Are the financial planning methods documented in *Analysis of Resources for the 2006 Financially Constrained Long-Rang Transportation Plan for the Washington Region* still applicable? Please describe any changes in technical methods and assumptions.

The methods documented in the *Analysis of Resources for the 2006 Financially Constrained Long-Rang Transportation Plan for the Washington Region* remain applicable. Although final results for the next update are still being prepared by some of the agencies, the methods utilized are largely the same. The major change is to provide the estimates in year of expenditure dollars as well as constant dollars. Because of updates to data on usage, conditions and performance, the needs for operations, preservation, and maintenance respond to changes in those variables as determined by the agencies. For example, WMATA updates its needs for rehabilitation, and the State DOTs, utilizing their highway asset management procedures, update their needs for preservation and maintenance. However, the procedures applied are generically the same. Updates of revenue forecasts are detailed under J.5. below.

J.2. The region's implementing agencies prepare financial information that is integrated by TPB for the CLRP and TIP.

2a. How are the plans of individual agencies coordinated? What role does the MPO and the metropolitan planning process play in ensuring the accuracy, reliability, and consistency of analysis and forecasts of both revenues and expenses for this multi-state metropolitan area?

The financial plans of individual agencies are coordinated through the process to develop a financial plan for each major CLRP update. As in past CLRP updates, a working group of the financial planning staff from all of the implementing agencies was established to develop the 2010 CLRP Financial Plan. Supported by highly qualified staff from a national transportation consulting firm, TPB staff and the working group review and question all of the financial analyses and forecasts prepared by each implementing agency for the validity of their assumptions and their comparability and consistency with each other. The TPB consultant reviews and compiles all of the agency assumptions and forecasts for accuracy and consistency and prepares sub-regional and regional summary tables. The TPB consultant will identify inconsistencies and request more documentation if necessary. The TPB's consultant reviews the forecasts for consistency and accuracy, but ultimately, each State, regional and local transportation implementing agency is responsible for ensuring the accuracy and reliability of their analysis and forecasts.

2b. What criteria are applied to ensure that forecasts of both revenues and costs are technically sound?

The key step is to fully document the methodologies and assumptions (such as rates of inflation) utilized, and to review them for reasonableness based upon past trends and analyses. Consultant staff and the working group then review and compare the methodologies and assumptions employed by each state, regional or local agency to identify any technical issues. The TPB consultant reviews and compiles all of the agency assumptions and forecasts to ensure that they are technically sound, and prepares sub-regional and regional summary tables. As stated above, the TPB consultant will identify inconsistencies and request more documentation if necessary.

J.3. When amending the MTP or TIP, how is fiscal constraint ensured?

When an implementing agency submits an amendment to the CLRP or TIP to include a new project that was not included in the 2006 financial analysis, it must complete a CLRP and TIP project form documenting the complete financial information detailing proposed cost totals, sources of funding, and timing of the expenditures. In the past few years, the major amendments to the CLRP such as the ICC and Purple Line in Maryland and the Beltway HOT lanes in Virginia have included comprehensive sets of financial information that were extensively scrutinized and commented upon during the public comment process. For the ICC, MDOT had to utilize funding previously identified for some other road projects and defer their completion in the CLRP.

J.4. How is the financial component of the TIP coordinated with the STIPs of the individual states? Is the CLRP financial plan coordinated with the long-range statewide transportation plans of Maryland and Virginia? If so, please describe.

The State DOTs coordinate their inputs with their respective STIPs. TPB staff prepares a detailed comprehensive financial summary for each year in the TIP presenting the funding totals, by mode and funding sources, for Virginia, Maryland, the District of Columbia, and WMATA. These funding summaries are reviewed by the DOTs for consistency with their STIPs, and by the FTA and FHWA when they review and approve the STIPs. The Maryland and Virginia statewide transportation plans do not have to be fiscally constrained.

Revenues

J.5. The *Analysis of Resources for the 2006 Financially Constrained Long-Rang Transportation Plan for the Washington Region* states that revenue forecasts reflect "extrapolation of past trends." Please provide a more specific description of how projected rates of growth in major revenue sources compare to historic rates of growth.

Each major agency prepares its own overall forecasts of future revenues, which must be consistent with its prescribed procedures. The overall revenue forecasts for the Virginia DOT, Maryland DOT, and the District of Columbia DOT are prepared under their own procedural requirements.

MDOT utilizes a trend based forecast model, which ensures that its future forecasts are based on historical rates of growth of its transportation revenues. The MDOT procedure combines all historical revenue sources into one aggregate rate of growth, and thus does not differentiate specific sources of future revenue growth. For MDOT, there is a close match between past rates of growth and future rates of growth. MDOT provides all Maryland funding for WMATA, and so MDOT forecasts include all funding that Maryland assumes to be provided to WMATA.

VDOT must by law utilize commonly prepared forecasts of state revenues, which are all based on assumptions of no change in any rates of taxation, such as for fuel taxes. In fact, Virginia fuel tax rates have remained stable. Virginia has also forecast future federal aid based on the same assumptions about constant fuel tax rates. In past recent reauthorizations at the federal level, decisions have been made to spend down federal highway trust fund accounts more rapidly than under past reauthorizations. Thus Virginia's assumptions may not have tracked exactly with the actual Congressional practice. Virginia's

practice is consistent with extrapolation of past trends for state sources of revenues, and given that there has been no federal fuel tax adjustment since 1993, it is consistent with extrapolations of recent trends. DDOT does not have dedicated transportation revenue sources, other than Federal aid for highways, which lend themselves to forecasting of past trends for particular sources. Rather, the District forecasts the funding to be made available for highways and public transportation out of all funds, and those forecasts reflect extrapolation of past trends. The District's support for WMATA is included in these forecasts by DDOT.

WMATA receives funding from a direct federal allocation, as a designated recipient, and has also historically received special allocations based on its location in the Federal capital and its use by the federal work force. WMATA takes into account its past federal aid of both types and extrapolates this forward as part of its revenue analysis. The funding jurisdictions review WMATA's needs and provide their agreement about future trends in funding from their sources. Of course, agreement on the reasonableness of the WMATA extrapolations of funding needs and on the use of their revenues for WMATA constitutes planning assumptions rather than dedications of long term revenues to WMATA.

Local jurisdictions rely primarily on their own extrapolations of funding sources and allocations to transportation. The mix of highway and transit funding differs between MDOT and VDOT. Since VDOT provides most highway funding in Virginia, local highway funds are a smaller share. Since Maryland counties and cities make substantial highway investments (utilizing their legislatively determined share of state highway revenues) along with local revenues, the Maryland counties and cities extrapolate their past trends.

For FTA New Starts and Small Starts, which are discretionary, the region identifies all projects that will attempt to receive funds from this source, and in the past, a rough constraint has been agreed upon that this will not involve more than an estimated ten percent of future federal discretionary grants for these programs. The extrapolations of past trends that the region has used on this assumption have largely been fulfilled, with those projects that were assumed to be funded with federal assistance (Dulles Rail) received the funding commitments that the region estimated.

J.6. What are the criteria for determining whether new revenue sources are reasonably expected to be available?

The Washington region includes a complex set of revenue sources unique to each State, D,C, and local governments. Therefore each agency sets criteria for "reasonably expected to be available". However, the TPB's regional process has determined that there must be a basis in current practice for funds to be expected and that the funds expected must be consistent with past rates of historical growth. In addition, where new sources have been postulated, but are not yet legislated, the region has identified these as contingent, as happened previously with the proposed funds for Metro Matters and other sources that seemed to be on their way to enactment but had not yet been finalized. The past assumptions made in this regard have proved very reasonable.

J.7. How are revenues from motor fuel taxes and other major state and local sources assumed to change over time? What are the projected impacts on projects and programs?

Please see the response to question J.5. above. MDOT forecasts general growth rates for all its sources, which is appropriate for an agency with such a broad trust fund (which includes state taxes on fuels, motor

vehicle fees, tolls, fares, portions of sales taxes, vehicle sales fees, and federal aid). For example, MDOT over the last eight years received funding boosts from motor vehicle fee increases and from an allocation of sales tax revenues, without a change in the motor fuel tax over that time. For VDOT, the revenue forecasts are based on forecasts of fuel usage in future periods, and changes are expected only with regard to changes in the quantity of fuel. For DDOT, with only very small sales of motor fuel within the District, the forecasts are dominated by expectations about general revenues.

J.8. Have new revenue sources been created since the 2006 Progress Report on the National Capital Region's Short-Term Transportation Capital Funding Needs? Have there been changes in the revenue sources existing since the report was written?

New revenues that have accrued since the 2006 report include federal aid under ARRA and TIGER grants, additional revenues that have become more firm for toll projects in Virginia (i.e. new Beltway toll lanes and I-95/395 conversion to HOT lanes and extensions), refined revenue estimates for the Intercounty Connector in Maryland and an allocation of sales taxes to the trust fund in Maryland.

In contrast to the documented need for massive new revenues for transportation in the region, the adjustments since 2006 have been minor.

Expenses

J.9. What types of historical data are used as a basis for preparing conceptual project estimates? How are the data adjusted for time (schedule), location and other project specific conditions?

Each agency updates its project estimates. As part of the CLRP financial analysis, information was distributed on general changes in producer prices for highways and on consumer prices, along with inflation assumptions used in the most recent Economic Report of the President. Agencies consider these price trends and other factors in their cost updates.

J.10. What procedures are followed to ensure the TIP financial plans within the State are consistent with the STIP?

The State DOTs are responsible for coordinating their inputs with their STIPs. The TPB prepares a detailed comprehensive financial summary for each year in the TIP of the funding totals, by mode and funding sources for Virginia, Maryland, the District of Columbia, and WMATA. These funding summaries are reviewed by the DOTs for consistency with their STIPs, and by the federal funding agencies when they review and approve the STIPs.

J.11. How are cost differences between the long-range planning (MTP) conceptual cost estimates and the programming (TIP) conceptual cost estimates reconciled? How and where is this process documented?

Each transportation implementing agency prepares a cost estimate and completion date for each project when it is included in the CLRP. Every year in the Call for Projects document, these agencies are requested to update the project cost and completion date estimates for the CLRP and TIP. For the TIP projects that are being implemented in the next six years, the cost and completion date estimates are updated when they

are included in the approved TIP and also may be modified as design changes and contract costs are determined.

J.12. What triggers an update of an estimate during the long-range planning and programming process?

12a. Are estimates updated on a continuing basis as project development progresses?

Every year in the fall the Call for Projects document requests the implementing agencies to update the project cost and completion date estimates for the CLRP and TIP.

12b. Are estimates updated when major design changes occur or through some other triggering mechanism?

For some major projects like rail to Dulles or the ICC, the cost and completion date estimates are usually updated when major design changes are approved. For other projects, the annual call for projects document requests agencies to update the project cost and completion date estimates for the CLRP and TIP.

J.13 What process(es) is(are) used to estimate operations and maintenance costs for all modes and in all jurisdictions in the metropolitan area? Is the participation by different agencies documented in a formal agreement?

Operations and maintenance costs for all transit agencies are estimated by the agencies, based on their historical experience and their expectations about services in the future. WMATA's projections are based on recent reports prepared for FTA for the Dulles corridor, which compiled detailed forecasts through 2030. These reports were used for through 2030 and then extended by WMATA to 2040. The other transit agencies use similar assumptions about service and ridership to forecast their operating and maintenance expenses. The State and local highway agencies forecast maintenance, operations, and rehabilitation expenses on a system wide basis, and then, for VDOT and MDOT, an appropriate allocation is made by the agency to the metropolitan region.

The agencies that fund WMATA review their forecasts and determine whether the allocations of subsidies to their agencies can be accommodated within their agencies' forecasts of available funds.

The participation by different agencies in estimating operations and maintenance costs is described in the Financial Plan document.

J.14. How is an "adequate" level of O&M determined?

14a. Are needs derived from a desired level of service or rating of asset condition and how will these be met with expected funding level?

Adequate levels of O&M expenditures are determined by each implementing agency and then the remaining funds, if any, are identified as available for projects in the CLRP.

Desired levels of service for the transit agencies are determined by those agencies based on expectations of demands for services and financial capacity to provide those services. In most instances, desired levels of service for transit agencies are constrained by funding availability. For highway agencies, desired levels of service are also highly constrained by the available funding.

Desired ratings of asset conditions are addressed through each agency's maintenance, rehabilitation, and equipment replacement programs. The agencies have been able to maintain satisfactory asset conditions although the future is not certain. All of the agencies have some type of asset management systems. They do not provide regular condition reports to the region.

14b. How many of the agencies involved have an asset management system?

Four agencies have an asset management system (DDOT, MDOT, VDOT and the Virginia Department of Rail and Public Transportation (VDRPT)). The State DOTs report annually to FHWA on pavement and bridge conditions through HPMS and NBI, as FHWA is aware. The HPMS is a sample of highway segments for which pavement condition data is reported. The NBI includes all bridges on all highway systems. As FTA is aware, conditions of transit assets are not now reported to FTA. DRPT in Virginia has developed an asset management system, PROGGRES, which will be capable of accumulating data on asset conditions for Virginia's transit operators.

J.15. Are levels of service or ratings of facility condition expected for a given funding level communicated to the public? How?

Levels of service or ratings of facility condition expected for a given funding level have not been determined for communication to the public.

J.16. What triggers an update of an O&M estimate during the long-range planning and programming process? Are estimates updated on a periodic basis, when system condition and performance changes occur or through some other triggering mechanism?

As described under question 13, long-range O&M estimates are made by the implementing agencies during each major plan update. Every year, each agency prepares its annual O&M budget reflecting its current system conditions and performance and changes from the previous years.

Impacts of Financial Constraint

J.17. Have financial problems of states and other jurisdictions affected the financing of transportation projects and programs? If so, how has this been reflected in the TIP and updates of the CLRP?

As severe transportation and other revenue shortages have grown the past few years at the state, local and federal levels, the financing of highway and transit transportation projects throughout the region has been dramatically affected. Except for the new ARRA funding in 2009, significantly less state and local funding has been programmed in latest TIP. The financial problems of States and other jurisdictions caused projects to be delayed or removed in both the 2009 CLRP and FY 2010-2015 TIP. For the new FY2011-2016 TIP and 2010 update of the CLRP currently underway, it is expected that funding shown for many

projects in the 2009 CLRP will be reduced or eliminated or the project completion dates will be extended decades into the future.

J.18. Have projected impacts of financial constraint affected the performance of the transportation system, e.g. traffic congestion? Are the public transit "ridership constraints" resulting from revenue shortfalls analyzed through the Congestion Management Process?

Since 2000 the TPB has been projecting the stark financial reality that transportation revenues were not keeping up with region's system needs. The highway and transit systems are aging, and management and operations expenses were forecast to continue to grow and require more and more of the projected federal, state and local revenues. Despite efforts at the local, State and Federal levels, transportation revenues have not grown significantly and management and operations, and construction costs have continued to rise.

The impacts of financial constraint on the future performance of the transportation system, including the public transit ridership constraints currently projected to come into effect by 2030, are reflected in the TPB's travel demand forecasts, the results of which are considered in the CMP. The CMP emphasizes demand and operational management strategies that address congestion at a lower cost than most capital projects.

J.19 Are alternative strategies considered for addressing financial shortfalls through the planning process?

In this region, a major alternative funding strategy considered by the long-range planning process is the use of wide spread value pricing or road pricing. Most recently the TPB completed a pricing study in 2008 entitled "Evaluating Alternative Scenarios for a Network of Variably Priced Highway Lanes in the Metropolitan Washington Region" which was funded by a grant from the Federal Highway Administration's Value Pricing Pilot Program.

In addition, the TPB has examined the "Aspirations Scenario" that includes a regional network of BRTs operating on toll lanes on freeways and major arterials, and assumes funding provided by the land developer beneficiaries of improved transit accessibility.

In the short-term, several projects currently under construction such as the Beltway HOT Lanes in Virginia and the ICC in Maryland are funded utilizing toll revenues.

19a. Are alternatives documented?

The two planning studies described in the previous question are documented; the links are provided above.

A great challenge facing this region is the existence of multiple jurisdictions at several levels, each with their own tax base, tax structure and tax policy. The successful transportation revenue-raising initiatives in other states and major metropolitan areas provide valuable lessons in how to implement new revenue sources. A wide range of revenue sources potentially applicable to the region were documented in "Progress Report on the National Capital Region's Short-Term Transportation Capital Funding Needs," September 2006.

19b. Are the impacts of different levels of funding identified and documented, in terms of investments in physical transportation system improvements and resulting performance?

While the TPB has not attempted to do this for the complex transit and highways systems in this region, the Board has raised awareness about the level of funding and investment needed in the region through the scenario study, the 2008 pricing study and the forum being planned for May 26, 2010 on Regional Transportation Priorities.

J.20. Have financial planning and the impacts of fiscal constraint been addressed through the public participation process?

Since 2000 the TPB has conducted high-level forums and produced brochures to inform the public about the bleak financial picture facing Metrorail, bus transit, and the region's highways and bridges. As mentioned above, the forthcoming May 26 TPB forum on Regional Transportation Priorities will highlight the discouraging transportation revenue funding situation at the federal, state and local levels, and identify the daunting funding challenges of maintaining and rehabilitating our existing transit and road systems as well as expanding them to meet future growth.

K. UNIFIED PLANNING WORK PROGRAM (UPWP)

K.1. How does the UPWP address "Recommendations" and/or "Corrective Actions" from past FHWA/FTA Certification Reviews and recent state certifications?

The FHWA/FTA approved the TPB Planning Process in March 2006, and no corrective actions were found. All 16 recommendations and 9 commendations from that Planning Certification Review have since been addressed in subsequent Unified Planning Work Programs (UPWPs). For a more detailed account of how specific recommendations have been addressed, please see the chart in Section A.

K.2. How do the activities in the UPWP relate to the goals and priorities identified in the State Transportation Plan?

The TPB is a Metropolitan Planning Organization comprised of Maryland, Virginia, and the District of Columbia. Each of these entities has individual State Transportation Plans that reflect their goals and priorities. TPB membership includes state-level representatives as well as members from the Maryland Department of Transportation (MDOT), the Virginia Department of Transportation (VDOT), and the District Department of Transportation (DDOT). As a matter of process, these TPB members are involved and provide input in all phases of regional planning, including drafting, review, and final approval of the UPWP. As such, the activities in the UPWP directly relate to the goals and priorities set forth by the individual State Transportation Plans in the Metropolitan Washington Region.

K.3. Discuss with examples how the activities in the UPWP relate to the goals and priorities identified in the CLRP.

The UPWP describes all transportation planning activities utilizing federal funding, including Title I Section 112 metropolitan planning funds, Title III Section 5303 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. Furthermore, the UPWP identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds. The CLRP identifies all regionally significant transportation projects and programs that are planned in the Washington metropolitan area between 2009 and 2030. Over 750 projects are included, ranging from simple highway landscaping to billion-dollar highway and transit projects. For more information on the UPWP, please see: http://www.mwcog.org/publications/departmental.asp?CLASSIFICATION_ID=3&SUBCLASSIFICATION_ID=23. For more information on the CLRP, please see: http://www.mwcog.org/clrp/

The interrelated technical assistance products, methods, and data activities that are outlined in the UPWP directly contribute to the transportation projects outlined in the CLRP. For instance, one activity of the UPWP is Travel Monitoring, which includes but is not limited to cordon counts, congestion monitoring and analysis, and travel and household survey analysis. This activity serves to validate TPB modeling, which, in turn, provides supporting information for project selection for the CLRP. Every year, as priorities change and are identified in the CLRP process, the UPWP work tasks are modified to provide necessary technical analysis and data. For example, the inclusion of HOT lanes in Virginia required enhancements to the TPB travel demand model.

K.4. In the current UPWP, are all Federal fiscal resources budgeted that are available for planning? Are there ongoing issues concerning over- or under-budgeting Federal-planning funds? How are these issues being addressed?

All federal resources that are available for planning are budgeted in the current FY 2010 UPWP. The ongoing issue concerning federal planning funds is due to the perennial Congressional problem of not approving USDOT annual budgets by October 1. For the past few years, when the TPB approves the next fiscal year's UPWP in March, there has been uncertainty regarding state and federal funding totals for the MPO-related planning funds from FTA and FHWA. The TPB addresses this issue by making conservative assumptions about funding, and then amending the UPWP after July 1 when the funding totals are finalized.

K.5. How are Federal Funds and expenditures monitored in your organization?

Mr. Miller, Director, Program Coordination and a Senior Budget Analyst in the Department of Transportation Planning (DTP) have overall responsibility for managing and monitoring the UPWP funds (federal, state and local) and expenditures. Each of the 29 work activities or projects and each of the four technical assistance programs (with several projects) are the responsibility of one of the team leaders in DTP. The team leaders may assign management responsibility for some of their activities to senior staff on their team. To manage and monitor labor costs, which are the primary expenditures for all work activities, the team leaders review and sign staff time sheets every two weeks. Biweekly, the COG Accounting Department provides all project managers with employee labor distribution reports that show the labor charged to projects for each employee, as well as the employee hours charged for each project. To monitor project expenditures, the accounting department provides biweekly project status reports that show the labor and direct expenditure budget line items, current month expenditures, current year expenditures and remaining budget totals.

Ron Kirby, Director of DTP, and the team leaders meet at least monthly to review the status of the UPWP activities and the budgets and expenditures. At the monthly meeting of the State Technical Working Group, representatives of the three state DOTs, WMATA, FTA and FHWA also receive and review copies of the monthly progress reports on the UPWP that contain summaries of project expenditures. Copies of the monthly progress report and expenditure summary are provided with the invoices submitted to the District Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), the Virginia Department of Transportation (VDOT), and the Virginia Department of Rail and Public Transportation (VDRPT).

K.6. Discuss with examples how the UPWP is used as a management tool for the MPO and its transportation activities.

The UPWP comprises seven major activities and over fifty work tasks or projects. It is structured to identify the specific products to be developed, their schedules, the linkages between activities, and the TPB committee or subcommittee responsible for oversight of the products. After the March approval by the TPB of the UPWP, all new transportation planning activities have to be approved by amendment to ensure that the staff or consultant resources are available. The answer to question K.5. describes how, on a daily and monthly basis, the team leaders and project managers monitor the budgets and expenditures to ensure that the work activities and products are on schedule and within budget. When new planning issues or opportunities are identified, such as when the TPB decided to develop and submit a TIGER grant

application for a regional priority bus system, the team leaders identified staff and other resources in the Regional Studies work activity to utilize in the preparation of the application.

In February, as part of the development of the UPWP for the new fiscal year that begins in July, project managers review the status of all work activities in order to modify projects and identify any products and budgets that will not be completed by June 30. In March, these carryover projects and budgets are approved by the TPB for inclusion in the new UPWP.

K.7. How are the State, public transit agencies and MPO subcommittees involved in UPWP development? What about the role of freight, nonmotorized transportation, bicycles, pedestrians, and other modal interests?

In January, the Technical Committee and the TPB are briefed on an outline and preliminary budget for the new UPWP that covers July 1 to June 30. This briefing identifies any proposed changes to the current year's work activities, products, schedules, and budgets. A complete draft of the program is presented to the committee and TPB in February and released for public comment. Also in February, the subcommittees such as freight, safety planning and bicycle and pedestrian are briefed on the UPWP, and specifically on the work activities for which they have oversight responsibility. Any comments are provided to staff for consideration in preparing the final draft document. In March, the final draft of the UPWP is presented to the Technical Committee and TPB for approval. The UPWP is then submitted to FTA and FHWA for their review and approval by July 1.

K.8. How are UPWP activities developed, selected, prioritized?

In December and January, the Director and team leaders review the total budget estimate for the new year's UPWP and compare it to the current year's UPWP. If the budget estimate is higher than the current year, this suggests that new or expanded work activities can be considered. If it is lower, it means that the current work activity budgets or activities need to be scaled back. They also consider reallocation of the current project budgets.

The group also identifies new transportation planning issues or opportunities. For example, in the 2009 UPWP, it was anticipated that transportation impacts on climate change would be major concerns at the federal, state and regional levels. Consequently, resources were identified for this new effort. In January, after the Technical Committee and the TPB are briefed on an outline and preliminary budget for the new UPWP that covers July 1 to June 30, staff considers any comments and suggestions received, and then prepare the full draft document. A complete draft of the program is presented to the Technical Committee and TPB in February and released for public comment. Also in February, the subcommittees such as the freight, safety planning and bicycle and pedestrian are briefed on the UPWP and specifically on the work activities for which they have oversight responsibility. Any comments made by TPB members or the public, agency staff, or at the committee and subcommittee meetings are considered and addressed by the Director and team leaders in preparing the final document for approval in March.

K.9. Which MPO partners review the draft and final UPWP? How are comments elicited and addressed?

As described above, all the MPO partners review the draft and final UPWP, and can provide comments that are addressed in preparing the final draft for TPB approval.

K.10. How often are modifications made to UPWP? What kind?

Major modifications due to the uncertainty of the federal MPO planning funding totals have been made in the past few years as described under question K.4. The UPWP is also amended in March to remove the carryover projects for the new year's UPWP. Throughout the year, it is sometimes necessary to modify the scope of a project to identify consultant funding, or revise the product, schedule or budget.

L. CONGESTION MANAGEMENT PROCESS (CMP)

The Congestion Management Process (CMP) as outlined on the MWCOG website identifies four specific components for your CMP. This includes: Monitoring and evaluation, defining and analyzing strategies, implementing strategies, and compiling information.

L.1. Explain how these four CMP components lead to the development of programs and projects contained in the CLRP and TIP. How are these activities supported in the UPWP?

The four major components of the CMP as described in the CLRP are:

- Monitor and evaluate transportation system performance
- Define and analyze strategies
- Implement strategies and assess
- Compile project-specific congestion management information

In monitoring and evaluating transportation system performance, the TPB uses Skycomp aerial photography freeway monitoring and a number of other travel monitoring activities to support both the CMP and travel demand forecast model calibration, complementing operating agencies' own information, and illustrating locations of existing congestion. CLRP travel demand modeling forecasts, in turn, provide information on future congestion locations. This provides an overall picture of current and future congestion in the region, and helps set the stage for agencies to consider and implement CMP strategies, including those integrated into capacity-increasing roadway projects.

The CMP component of the CLRP defines and analyzes a wide range of potential demand management and operations management strategies for consideration. TPB, through its Technical Committee, Travel Management Subcommittee, Travel Forecasting Subcommittee, and other committees, reviews and considers both the locations of congestion and the potential strategies when developing the CLRP.

For planned (CLRP) or programmed (TIP) projects, cross-referencing the locations of planned or programmed improvements with the locations of congestion helps guide decision makers to prioritize areas for current and future projects and associated CMP strategies. Maps in the 2009 CLRP showed a high correlation between the locations of planned or programmed projects and locations where congestion is being experienced or is expected to occur.

Thus CLRP and TIP project selection is informed by the CMP, and implementation of CMP strategies is encouraged. The region relies particularly on non-capital congestion strategies in the Commuter Connections program of demand management activities, and the Management, Operations, and Intelligent Transportation Systems (MOITS) program of operations management strategies. Assessments of these programs are analyzed, along with regular updates of travel monitoring to look at trends and impacts, to feed back to future CLRP cycles.

The TPB also compiles information pertinent to specific projects in its CMP documentation process (form) within the annual CLRP Call for Projects. This further assures and documents that the planning of federally-funded SOV projects has included considerations of CMP strategy alternatives and integrated components.

These CMP activities are supported by several work activities specified in the UPWP, including (using the FY 2010 UPWP as an example):

- 2.A. Congestion Management Process (CMP) – compiles information and supports its review and consideration in the overall planning process.
- 2.B. Management, Operations, and Intelligent Transportation Systems Planning – focuses on management and operations activities particularly critical for addressing non-recurring congestion.
- 5.B. Congestion Monitoring and Analysis – collects transportation systems usage data critical for CMP consideration.
- Regional consideration and implementation of demand management strategies is also significantly supported by the Commuter Connections Work Program (CCWP) separate from but coordinated with the UPWP.

L.2. Please list specific strategies that have been implemented as a result of the Congestion Management Process. How does the TPB assess previously implemented strategies?

The CMP has been playing an important role in developing strategies, including strategies in association with capacity-expanding projects, to combat congestion or mitigate the impact of congestion. The CLRP and TPB member agencies have pursued many alternatives to capacity increases, with considerations of these strategies informed by the CMP. Implemented or continuing strategies include:

1) Demand Management Strategies
   - Commuter Connections Program – Including strategies such as Telework, Employer Outreach, Guaranteed Ride Home, Live Near Your Work, Carpooling, Vanpooling, Ridematching Services, Car Free Day, and Bike To Work Day.
   - Promotion of local travel demand management – Local demand management strategies are documented in the CMP Technical Report.
   - Public transportation improvements – The Washington Region continues to support a robust transit system as a major alternative to driving alone.
   - Pedestrian and bicycle transportation enhancements as promoted and tracked through the Bicycle and Pedestrian Planning program – The number of bicycle and pedestrian facilities in the region has increased in recent years; the District of Columbia bikesharing program was one of the first of its kind in North America.
   - Land use strategies – Including those promoted by the Transportation/Land-Use Connections (TLC) Program.

2) Operational Management Strategies
   - High Occupancy Vehicle (HOV) facilities – Existing HOV facilities include I-66, I-95/I-395, I-270, US-50 and the Dulles Toll Road.
   - Variably-Priced Lane Facilities – Facilities that are planned or currently under construction include the Maryland Intercounty Connector (ICC) (all lanes will be tolled as a variable-rate express toll facility), the Northern Virginia Capital Beltway High Occupancy Toll (HOT) lanes, and the Northern Virginia I-95/I-395 HOT lanes.
   - Incident Management – Notably the Metropolitan Transportation Operations Coordination (MATOC) program, whose development the TPB helped shepherd, uses real-time transportation systems monitoring and information sharing to help mitigate the impacts of non-recurring congestion.

- Intelligent Transportation Systems are considered, particularly through the Management, Operations, and Intelligent Transportation Systems (MOITS) program and committees. Examples include traffic signal optimization, safety service patrols, and traveler information.

3) Capacity Increase Projects
   - Federal law and regulations list capacity increases as another possible component of operational management strategies, for consideration in cases of elimination of bottlenecks, safety improvements and/or traffic operational improvements. These capacity increase projects are documented in CLRP or TIP.

The TPB assesses the implemented congestion management strategies in a variety of ways. Many strategies have specific assessments and the overall effectiveness of all strategies is repeatedly evaluated by congestion monitoring and analysis:

1) Specific assessments (of individual or several strategies)
   - A variety of surveys within the Commuter Connections Program are regularly conducted to provide firsthand data inputs for the assessments, including the Guaranteed Ride Home Customer Satisfaction Survey, Commuter Connections Applicant Placement Rate Survey, State of the Commute Survey, Employee Commute Surveys, Carshare Survey, Vanpool Driver Survey, Employer Telework Assistance Follow-up Survey, and the Bike-to-Work Day Participant Survey. Also, in conjunction with the regional air quality process, vehicle trips reduced, vehicle miles of travel (VMT) reduced and environmental benefits are assessed in the Transportation Emission Reduction Measure (TERM) Evaluations.
   - Public transportation improvements, pedestrian and bicycle transportation improvements, and land-use strategies are assessed in Regional Household Travel Surveys, Regional Bus Surveys, Regional Activity Centers and Regional Activity Clusters Studies, the Regional Travel Trends Report, and Cordon Counts.
   - The region's HOV facilities are monitored by the TPB's HOV monitoring and surveys.

2) Overall assessments (of all implemented strategies)

   - The TPB's aerial photography survey of the region's freeway system congestion conditions (every three years for AM and PM peak periods and every five years for weekend and off-peak period).
   - The TPB's arterial floating car travel time and speed studies (every year a sample of major arterials in DC, MD and VA is studied and the same sample is repeated every three years).
   - In addition to the TPB's monitoring activities, the TPB also utilizes other regional and national monitoring activities to complement and enhance the congestion monitoring and analysis in the National Capital Region. These utilized "outside" monitoring activities include:
     - I-95 Corridor Coalition/INRIX, Inc. probe-vehicle-based traffic monitoring data
     - The FHWA Transportation Technology Innovation and Demonstration (TTID) Program/ Traffic.com traffic monitoring
     - Texas Transportation Institute's Urban Mobility Report.

L.3. Does the TBP have a stand-alone CMP document? If so, please provide a weblink to the document.

TPB includes the official CMP within the CLRP at www.mwcog.org/clrp/elements/cmp. In addition, a separate stand-alone report provides technical support information; the current document is the 2008 CMP Technical Report at: www.mwcog.org/commuter2/pdf/2008_CongestionManagement_Process.pdf. The 2010 CMP Technical Report, which will have expanded and updated information, is under development and is anticipated to be completed by June 2010.

M. AIR QUALITY

M.1. What agency is designated for air-quality planning under Section 174 of the CAA? If this agency is not the MPO, what agreements exist between the MPO and the designated air-quality-planning agency describing their respective roles and responsibilities?

The Metropolitan Washington Air Quality Committee (MWAQC) has been designated responsibility by the District of Columbia, Maryland and Virginia for preparation of the Washington region's state implementation plans (SIPs) for attainment of ozone and fine particulate matter (PM 2.5) standards and for maintenance of carbon monoxide standards. See the following link for more details: http://www.mwcog.org/environment/committee/committee/default.asp?COMMITTEE_ID=14

MWAQC, which is housed at the Council of Governments, consists of: the COG Board expanded to include jurisdictions within the nonattainment area but beyond the COG membership; air management and transportation directors from DC, Maryland and Virginia; members of the Maryland and Virginia General Assemblies; and the Chair of the TPB.

The TPB's and MWAQC's roles and responsibilities with respect to air quality conformity and SIP development are described within the May 1998 report, TPB Consultation Procedures. Regarding these roles, in summary, the TPB has the lead role in air quality conformity determinations and MWAQC has the lead role in SIP development. See the following link for more details: http://www.mwcog.org/store/item.asp?PUBLICATION_ID=233

M.2. Does the MPO planning area include the entire nonattainment/maintenance area? If not, what agreements exist to describe the process for cooperative planning within the full nonattainment/maintenance area?

While the TPB's modeled area is larger than each nonattainment (ozone and fine particles) or maintenance (carbon monoxide) area for which the Washington region has been designated, there are geographic areas beyond the TPB's membership or area of planning responsibility. Cooperative agreements for planning responsibilities in such outlying areas in Maryland and Virginia may be found in Appendices C and D, respectively, in the above-referenced TPB Consultation Procedures report.

M.3. How does the MPO coordinate the development of the Transportation Plan with SIP development and the development of TCMs if applicable (Not all SIPS have TCMs)? (Also see *Transportation Plan* topic area.) How do the Transportation Plan and SIP reflect this coordination?

The TPB coordinates development of the transportation plan with SIPs and applicable TCMs through joint work programs and cooperative working relationships among TPB and MWAQC staff, and through the TPB's interagency consultation procedures. The TPB consults with the public and with the air quality agencies on a monthly outreach basis and at specific milestone points in the developmental processes for the transportation plan, TIP, UPWP and any other topics relevant to air quality conformity. Similar activities are conducted with respect to SIP development. This same consultation process provides notice and opportunity for TCM inclusion in SIPs, which has resulted in several TCMs being advanced to the current SIPs in the Washington region.

M.4. How does the MPO's UPWP incorporate all of the metropolitan transportation-related air-quality-planning activities addressing air-quality goals, including those not funded by FHWA/FTA? (Also see *UPWP* topic area.)

Request for identification of all transportation planning activities in the region takes place every year through outreach to all state, local and regional planning agencies within the preparation of the UPWP, and as part of the public comment / interagency consultation process. Figure 4 of the UPWP documents these transportation planning studies (including air quality planning activities) scheduled each year within the Washington metropolitan area.

M.5. Does the metropolitan planning process include a CMP that meets the requirements of 23 CFR Part 450.320? (Also see *Planning Process* topic area.) What assurances are there that the Transportation Plan incorporates travel demand and operational management strategies, and that necessary demand reduction and operational management commitments are made for new SOV projects?

The metropolitan planning process does include a CMP that meets these requirements. The requirements of 23 CFR Part 450.320 are: to include a CMP in the metropolitan planning process; to ensure that federally-funded SOV projects come from a CMP; to manage congestion on both existing and new facilities; and to evaluate effectiveness of implemented strategies. TPB meets these requirements by:

- *Including a CMP in the metropolitan planning process:* The CMP is fully integrated as a component of the CLRP. The goals, objectives, and strategies of the TPB Vision include emphases on demand reduction and operational management. The CLRP follows the TPB Vision and includes implementation or continuation of a number of demand reduction and operational management strategies.
- *Ensuring federally-funded single occupant vehicle capacity projects are in the CMP:* Major single-occupant vehicle capacity expansion projects in the CLRP include information on consideration and implementation of alternate congestion management strategies. TPB compiles this information through the CMP Documentation Process (Forms) in the annual Call for Projects.
- *Managing existing and new facilities:* The CLRP includes extensive information on how the CMP addresses effective management of new and existing transportation facilities through the use of travel demand reduction and operational management strategies; these are major focuses of the TPB's Commuter Connections and MOITS programs.
- *Evaluating effectiveness:* The CMP is advised by assessments of strategies under the Commuter Connections Program, by Transportation Emission Reduction Measures (TERMs) evaluations, by a variety of surveys such as the Regional Household Travel Survey and by the Travel Monitoring Program.

M.6. Does the Transportation Plan include design concept and scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, to permit conformity determinations?

Yes, the plan does include such project specifications. Project design concept and scope descriptions, advanced as part of project submissions to the plan and program, must be specified in sufficient detail to enable network coding to occur, which is a prerequisite before travel demand modeling and preparation of the plan can proceed.

M.7. How does the MPO ensure that the TIP includes all proposed federally and non-federally funded regionally significant transportation projects, including intermodal facilities? (Also see *TIP* topic area.)

Outreach to all state, local and regional planning agencies in the region for project submissions to the plan and TIP (including highway, transit and intermodal facilities) takes place within the Call For Projects document each year. This outreach effort, which is included as part of public comment / interagency consultation, yields a document which must be formally approved by the TPB. Submitted projects, which go well beyond the regionally significant category, are reviewed and regionally significant projects are identified in a 'conformity table'. These efforts are documented as a separate 'milestone review point' in the consultation process, i.e., also subject to TPB approval before travel demand modeling can begin.

M.8. Does the TIP include a list of all projects found to conform in a previous TIP that are now part of the air-quality-planning base case?

Appendix B in each year's air quality conformity assessment report documents all projects found to conform in each year's plan and TIP conformity assessments.

M.9. How does the MPO ensure priority programming and expeditious implementation of TCMs from the SIP if applicable (Not all SIPS have TCMs)? Does the TIP describe progress in implementing required TCMs if applicable?

All TCMs advanced through time to the region's various SIPs have now been fully implemented.

M.10. How are the public, local transit operators, and air-quality agencies involved in the prioritization and selection of possible CMAQ program-funded projects?

Each year, as a part of work activities within the mobile source emissions analysis project in the UPWP, DTP staff analyzes a host of existing and new transportation emissions reduction measures (TERM)s. These projects and programs are analyzed to ascertain their effectiveness in SIP planning and for possible emissions mitigation use in air quality conformity. These efforts produce estimates of emissions reduction benefits and cost-effectiveness and provide a basis for use in selecting CMAQ (or other) funded air quality projects. Such projects are prioritized / selected through each jurisdiction's own planning and programming process and are advanced to the TPB by the implementing agencies in DC, Maryland and Virginia.

M.11. What annual opportunities does the MPO offer for a public hearing to review the planning assumptions and the plan development process? (Note: This is good practice and should be included in the PPP but is no longer required under planning regulations.)

The interagency consultation process does not involve a public hearing, but does include multiple comment / consultation opportunities at several milestone points in each year's conformity process, e.g., Call For Projects, Project Submissions, Scope of Work (which documents planning assumptions and technical methods), and Draft and Final Reports.

M.12. What activities/efforts are underway that involve the MPO related to air quality?

In addition to conducting the above-mentioned annual cycle of air quality conformity assessment of transportation plans and programs, the TPB also addresses any regionally significant amendment which may be advanced on an 'off-cycle' basis, as well as any non-systems level conformity reviews required throughout the year. Where requested, the TPB also reviews and provides comment on PM 2.5 hotspot analyses and project level conformity assessments performed by implementing agencies.

The TPB is responsible for preparation of mobile source emissions inventories and emissions reduction analyses for all regional SIPs developed in the Washington region. The TPB provides review and comment to MWAQC on transportation policy issues relevant to any of the SIPs.

The TPB also performs mobile source emissions inventory development and emissions reduction analyses for greenhouse gas emissions and coordinates its work activities with those of COG's Climate, Energy and Environment Policy Committee.

N. INTELLIGENT TRANSPORTATION SYSTEM (ITS)

I.1. How is the regional ITS architecture being used in the transportation planning process (23 CFR 940.5)?

The Regional ITS Architecture provides technical guidance to the activities of the Management, Operations, and Intelligent Transportation Systems (MOITS) planning program, committees, and participating agencies. The Regional ITS Architecture is referenced in the Management, Operations, and Technology component of the CLRP, and is available on the Regional ITS Architecture portion of the TPB web site. The Regional ITS Architecture comprises information on regional-level multi-agency, inter-jurisdictional projects and programs, and wholly incorporates by reference the ITS architectures of the States of Maryland and Virginia, the District of Columbia, and the Washington Metropolitan Area Transit Authority for agency or jurisdictional projects. For any ITS project submitted to the CLRP through the Call for Projects, implementing agencies indicate that the project references the most appropriate ITS architecture, as well as indicating use of a federal Rule 940-compliant systems engineering process. Major activities addressed by the Regional ITS Architecture are discussed at the MOITS Technical Subcommittee and are brought to the attention of the TPB as needed.

I.2. If MPO/TMA has adopted the regional ITS architecture, how are changes being documented and processed?

The TPB is advised by a Regional ITS Architecture Subcommittee which acts as a change advisory board for the Regional ITS Architecture. TPB staff maintains the architecture as a living document, and updates whenever changes are needed to maintain consistency with state, agency, or jurisdictional architectures or activities. Minor updates of the architecture are made approximately semi-annually, and major updates approximately biennially.

I.3. How are ITS activities coordinated in the MPO/TMA? Discuss current and future ITS efforts, activities, and plans.

The TPB is advised by its Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee, providing oversight to a longstanding MOITS planning task in the UPWP. Key MOITS activities include:

- Advising the TPB and other committees on management, operations, and technology issues, and providing a forum for information exchange on these issues among member agencies;
- Coordinating with the Regional Emergency Support Function #1 (RESF-1) Emergency Transportation Committee (which is within the structure of COG's public safety committees);
- Providing planning input to the Metropolitan Area Transportation Operations Coordination (MATOC) Program (an implementation consortium of regional transportation agencies of which TPB is an ex-officio member);
- Examining traffic signal optimization;
- Coordinating with the Congestion Management Process; and
- Maintaining the Regional ITS Architecture.

A MOITS Strategic Plan is under development, anticipated to be completed by June 2010. The Strategic Plan will identify key future focus areas for the MOITS Technical Subcommittee as well as recommendations for best practices and potential regional projects in the MOITS arena.

I.4. What is/has been the MPO's role and involvement with the development and maintenance of the regional ITS architecture? (23CFR 940.9)? Who are the stakeholders in this process?

Initial development by the TPB in 2002 of the Regional ITS Architecture was sponsored in part by funding from an FHWA TEA-21 earmark. The Regional ITS Architecture underwent a major upgrade in 2005 to better address federal requirements. The TPB maintains the Regional ITS Architecture in conjunction with the MOITS Technical Subcommittee (with broad participation from TPB-member agencies and jurisdictions), and a dedicated Regional ITS Architecture Subcommittee (which also serves as a change advisory board). The Regional ITS Architecture is in a context of robust Maryland and Virginia state architectures and processes, and fledgling District of Columbia and Washington Metropolitan Area Transit Authority architectures, with cross-references and coordination among these architectures. The state departments of transportation and WMATA are major stakeholders, and input is actively sought from the local jurisdictions and other participants on the MOITS Technical Subcommittee. The MOITS Strategic Plan now under development has provided new opportunities for broad input to MOITS activities and in turn to the Regional ITS Architecture.

I.5. Who maintains the regional ITS architecture in the region? Who is/will be responsible for ensuring that all future ITS projects are consistent with the regional ITS architecture? Is maintenance of the regional ITS architecture included as an item within the UPWP?

The Regional ITS Architecture Subcommittee of the TPB advises staff's maintenance of the Regional ITS Architecture, and ensures consistency with the federal, state, DC, and WMATA architectures. ITS projects reference their consistency with the appropriate architecture – the Regional ITS Architecture for regional projects, the state, DC, or WMATA architecture for agency or jurisdictional projects. Maintenance of the Regional ITS Architecture is included as an item within the MOITS task of the UPWP.

I.6. Is a system engineering process in place for the development of ITS projects in the region? Who is/will be responsible for ensuring that all future ITS projects will be developed using the systems engineering process?

The states and jurisdictions of the Washington region guide ITS projects through systems engineering processes that are consistent with state laws and procedures. This is undertaken on a state basis because of the strong need for statewide consistency in Maryland and Virginia. For regional-level projects, project sponsors are asked to undertake a systems engineering process, with the advice of the Regional ITS Architecture Subcommittee.

I.7. What is the MPO's involvement with other ITS organizations in the region? What types of public outreach activities has the MPO facilitated with respect to ITS?

TPB has worked with and attended meetings and conferences of ITS Maryland and ITS Virginia (there is no "ITS DC"). TPB staff also participated in ITS America events, including their annual meeting held at National Harbor, Maryland in 2009. The MOITS Technical Task Force welcomes and has strong participation from private sector and academia ITS practitioners, and regularly outreaches to them for their important input to regional ITS.

I.8. How is the planning/consideration of ITS being mainstreamed and incorporated into the overall planning process? (LRTP, TIP, UPWP)

The TPB has formed the MOITS Policy Task Force to guide the MOITS Technical Subcommittee and planning program, providing direct ties from the elected official-level to the technical staff level. The TPB has regularly identified management and operations as a priority, most recently in Chair David Snyder's remarks at the January 20, 2010 meeting. The TPB has received frequent presentations on the MOITS and Metropolitan Area Transportation Operations Coordination programs. Also, the CLRP contains a robust Management, Operations, and Technology component. MOITS is also critical to the consideration of non-recurring congestion and associated mitigation strategies in the Congestion Management Process.

O. TRAVEL DEMAND FORECASTING AND MODELS DEVELOPMENT

O.1. Describe the travel demand forecast model the MPO uses for its transportation planning process. When (in what year) was the current set of travel models last revised (e.g., new variables, new model algorithms, recalibrated using new data)?

The TPB's currently adopted travel forecasting process is known as the Version 2.2 model. The model was released in March 2008 (http://www.mwcog.org/uploads/committee-documents/kl5fWlle20080303164551.pdf). The Version 2.2 model is a trip-based (or "four-step") travel forecasting process. It was developed on a TP+ software platform and is applied on a 2,191 transportation analysis zone (TAZ) system. The study area covers approximately 6,800 square miles and contains 22 of the Washington, D.C. region's major jurisdictions. It extends well beyond the region's non-attainment area into some Baltimore area jurisdictions and one county in West Virginia. The Version 2.2 model includes four residential trip purposes and three commercial/truck purposes:

- Home Based Work (HBW)
- Home Base Shop (HBS)
- Home Based Other (HBO)
- Non-Home Based (NHB)
- Commercial Vehicle (CV)
- Medium (2-axle 6-tire) Truck (MTK)
- Heavy (all combination vehicles) Truck (HTK)

The development and specification of the Version 2.2 model's individual model steps (trip generation, trip distribution, mode choice, and traffic assignment) are well detailed in the above cited documentation. Some notable features of the model include:

- The consideration of transit accessibility and land development density as factors in vehicle ownership;
- A series of demographic models which apportion total households at the zone level among 64 socio-economic categories;
- The inclusion of non-motorized travel, as well as motorized travel, for the HBW purpose in trip generation;
- The addition of a new commercial vehicle model, representing a travel market that was previously subsumed in the NHB purpose;
- The use of a composite (highway and transit) time impedance measure within the trip distribution step;
- Income stratification within trip distribution;
- The use of special F-Factors for external trip markets in trip distribution;
- A sequential multinomial mode choice model;
- Separate highway assignments for three discrete time periods, each segmented by five vehicle markets;
- Capability to model highway pricing by converting highway toll values into "equivalent time." The conversion enables highway pricing policies to be reflected more seamlessly into other modeling steps, including trip distribution and the highway assignment;
- The inclusion of a queuing delay function that is incorporated in the speed-flow relationship used in

the traffic assignment process; and
- An iterative speed-feedback application, linking restrained speeds back into the trip distribution and mode choice steps

TPB staff has used the Version 2.2 model in a variety of MPO planning functions including state air quality implementation plan (SIP) development, air quality conformity work, project planning studies, and other special regional planning studies. The model has also been applied by local transportation agencies and consultants to support local planning efforts. As with any new model release, TPB understands that it is important to monitor the performance and reasonableness of modeling results in application, both by internal staff and by external users of the model. Model application experiences often indicate areas in which further refinement to the model is necessary. Accordingly, the TPB executes a continuing models development program in which incremental updates to the regional model are implemented as deemed necessary. The program also includes developmental work on a new model set known as the Version 2.3 model. The model is being developed with new travel survey data and with a more detailed transportation analysis zone (TAZ) system. The model is planned to feature a nested logit mode choice model and updated truck models, in addition to other enhancements. TPB anticipates adopting the Version 2.3 model at the end of calendar year 2010.

O.2. How was the model calibrated and set (e.g., local home interview survey, national surveys [NHTS, CTPP], models "borrowed" from another urban area)? How current is the data source?

Given the unique travel-related characteristics of the Washington, D.C. region, the TPB strongly prefers the use of local data to support model development work. The primary data sources supporting the Version 2.2 model estimation and calibration were the 1994 Household Travel Survey (4,800 households sampled), the 1994 External Auto Survey, and the 2000 Census Transportation Package (CTPP). TPB has recently conducted a new round of travel surveys including the 2007/08 Household Travel Survey (11,400 households sampled) and the 2008 Regional Bus On-Board Survey. Processing, cleaning, and geocoding of these surveys is nearing completion at the current time and will be used to calibrate the TPB's travel model currently in development, the Version 2.3 model. As mentioned above, the Version 2.3 model is being developed on a more detailed TAZ system (3,722 TAZs), and so the Version 2.3 development will also include new highway and transit networks.

O.3. Briefly describe how non-home-based travel (e.g., freight, commercial services, through traffic, tourists) and transit trips are modeled.

Non-home-based (NHB) travel is one of four residential trip purposes included in the Version 2.2 model. NHB non-resident travel, as defined in the Version 2.2 model, consists of: external and through trips, commercial vehicle trips, truck trips, non-resident airport trips, visitor/tourist auto trips, and taxi trips. The Version 2.2 model also includes Commercial Vehicle, Medium truck (2-axle, 6 tire), and Heavy truck (all combination vehicles) models within its framework. As noted above, the Commercial Vehicle model is a newly added feature of the Version 2.2 model. The model was developed with consultant assistance following a special data collection effort undertaken in 2005.

The remaining NHB non-resident travel markets are developed exogenously. External and through trip forecasts are developed by extrapolation of observed base year data. First, base-year HPMS traffic counts are collected at external stations and are apportioned by mode (auto and truck), trip type (external and through), and trip purpose using available external survey data at, or near, each external station. The resulting apportionment is assumed to remain constant over time. The rate of growth at each station is

based on a number of factors, including historical traffic growth at each station and regional employment growth. More recent versions of external traffic forecasts have taken into account the amount of physical capacity at specific external stations. TPB appreciates the importance of formulating external and through traffic forecasts in a deliberative manner given that: 1) job growth in the outer suburbs is increasingly generating residential development beyond the modeled study area, and 2) external forecast assumptions are important factors in achieving production -attraction balance. External transit trips are not currently addressed in the Version 2.2 model. However, forecasts of this travel market have been developed during the course of previous special studies.

Non-resident airport trips, visitor trips, and taxi trip forecasts are also developed using observed travel patterns that are growth-factored over time.

O.4. How does the MPO participate in the development, review and oversight of the forecasting process?

The TPB's Travel Forecasting Subcommittee (TFS) has been designated as the oversight body of the TPB's Models Development program. The TFS includes representatives of state and local transportation agencies, consultants, and other interested parties. Specific activities in the Models Development program are logically structured to address short-term modeling improvements, longer-term improvements, data collection, and research. TPB staff strives to promote consensus among stakeholders in the formulation of development activities. The TPB is fortunate in that it employs an "in-house" models development capability with a staff that has established relationships with the local transportation agencies and consultants over a period of several years. This is an increasingly rare position among MPOs, but is vital for the continuity of the program. TPB is also fortunate in that the travel forecasting community in the Washington region is actively engaged in the regional travel model development and application.

The formulation of the TPB's models development activities is based largely on evolving methods being developed by other MPOs across the U.S. Ronald Milone of the TPB staff currently serves as the chairman of the Association of Metropolitan Planning Organization's (AMPO's) Travel Modeling Work Group, a technical forum which functions to promote understanding between MPOs regarding the travel forecasting methods presently being used in practice. The group meets one to two times per year and allows MPOs the opportunity to share modeling improvement experiences with peers. A prime example of AMPO's role in promoting advanced methods is a national study that is now underway to examine what has been learned thus far from a small number of MPOs that have delved into the development of advanced (or "Activity-Based") modeling. The study has been established through a pooled funding arrangement under AMPO's administration and oversight (the TPB is one of the funding donors and has played a leadership role in initiating the AMPO study). The TPB is currently considering the development of an Activity–Based model for the Washington, D.C. region but has deferred such development until the results of the AMPO study are released.

TPB also remains current with MPO practice by retaining a consultant to conduct focused "scans" of MPO modeling procedures. This type of retainer has been a part of the models development program for the past few years and has proved to be an effective way at keeping current with best practices across the U.S.

O.5. Who is responsible for travel forecasting at the MPO? If another agency or consultant provides required modeling technical expertise, is there a formal memorandum of agreement between the entities to delineate technical responsibilities, lines of communication and review, authorized expenditures, and reimbursement procedures?

Ronald Milone serves as the TPB's Travel Forecasting Director. He assumes administrative responsibility for the TPB's Models Development program. Most of the TPB's technical development work is undertaken by TPB staff as opposed to contractors. Occasionally, the TPB outsources model development work to a consultant under contractual arrangements.

O.6. If in-house staff actively participates in model development and application, what formal training has the MPO technical staff received in travel demand forecasting? Does the MPO technical staff require training in specific technical areas?

The TPB's Models Development program staff consists of five individuals, including Mr. Milone. All have attained masters degrees in transportation engineering/planning. One individual on staff holds a Ph.D. in civil/transportation engineering. TPB staff is encouraged to keep abreast of ongoing research by attending the TRB's Annual Meeting. Staff also keeps abreast of the practice by attending the bi-annual TRB Application of Transportation Planning Methods Conference, and by attending AMPO Travel Modeling Work Group meetings which occur 1 to 2 times per year. The TPB understands the importance of keeping current with advanced methods particularly as computer hardware and software capabilities evolve. Consequently, training requirements evolve accordingly.

In recent years, the TPB has retained a consultant to conduct focused research on technical subjects of interest to the Models Development staff. As consultants are knowledgeable with transportation planning methods in other metropolitan areas, this type of arrangement has proven to be an efficient way for TPB staff to remain current with best practices and to identify areas where staff training might be considered.

O.7. Has the MPO convened a peer review or other independent assessment of its travel forecasting methods? If so, provide the following information:

- **The date of the most recent peer review**
- **The stated purpose of the peer review**
- **A list of participants**
- **Recommendations arising from the peer review**
- **The MPO's plan and/or schedule to address the peer-review Recommendations**

The last independent review of TPB's travel modeling practice was undertaken in 2003. An expert panel was appointed by the National Research Council to assess the TPB's Travel Demand Modeling at the request of the TPB chairman in May of 2002. The review was discussed in the TPB's previous certification summary report (dated March 16, 2006).

Since 2006, the TPB has implemented several changes to the regional travel model to reflect recommendations made in the last review of the TPB's travel modeling practice. The changes include refinements to the trip distribution step, the speed feedback process, and the process for developing future bus-related service levels.

O.8. What transportation projects are proposed for the Washington metropolitan area where there is strong and coordinated opposition by local advocacy groups? Has the MPO been a defendant in, or been threatened with, legal action in which the adequacy of its travel forecasting methods was challenged? If so, what was the outcome of this action?

The "Intercounty Connector" (or ICC), a 6 lane, 19-mile facility connecting Montgomery County and Prince George's County in Maryland, was a project with strong opposition by local advocacy groups. In the fall of 2007, Environmental Defense, the Sierra Club, the Audubon Naturalist Society, and the Maryland Native Plant Society brought two lawsuits in U.S. District Court in an attempt to halt the project. It was argued that the U.S. Department of Transportation violated federal law by approving a faulty state environmental review. It was also argued that federal agencies did not consider less environmentally damaging alternatives and that the traffic and pollution forecasts inaccurate. The MPO was not a defendant in the lawsuit, although initially, the regional planning agency (the Metropolitan Washington Council of Governments) was considered as a defendant but was subsequently dismissed. The U.S. District judge ultimately ruled against the plaintiff's arguments on all counts, determining that sound process was followed in the federal decision to proceed with the project. The ICC is currently under construction and is scheduled to open in sections between 2010 and 2012.

P. FREIGHT PLANNING

P1. How does the MPO explore the need for enhanced intermodal connectivity by identifying major facilities serving air, rail, transit, and freight and demonstrating the linkages between these modes?

The TPB Freight Subcommittee meets bimonthly. At each Freight Subcommittee meeting an invited speaker(s) describes their major facility or transportation mode. These presentations are followed by group discussion. In addition, the *Enhancing Consideration of Freight in Regional Transportation Planning* study was completed by a consultant in May 2007. This study identified major freight corridors and activity centers in the region. Furthermore, TPB completed the *2008 Washington-Baltimore Regional Air Cargo Study* in June 2008. This study analyzed current and forecast demand of air cargo at Washington Dulles International Airport (IAD), Ronald Reagan Washington National Airport (DCA), and outside our planning region at Baltimore Washington Thurgood Marshall Airport (BWI).

P2. How does the MPO assess the future demand placed on intermodal links and identify specific projects to facilitate access to these facilities?

The TPB undertakes an aerial survey of transportation in the region every three years to identify congestion on a density of vehicles per mile basis. One TPB freight analysis combined this aerial survey data with available state DOT classified vehicle counts (trucks) to determine the percentage of trucks travelling along these congested routes.

As part of the *National Capital Region Freight Plan 2010* (underway), specific truck and rail projects were compiled for our region. These projects were compiled from existing documents, such as our CLRP, MDOTs Maryland Freight Plan, the I-95 Corridor Coalition's Mid-Atlantic Rail Operations Plan, and CSX and Norfolk Southern railroads. The CLRP highway projects included in the freight plan are only those that fall along truck routes in our region or were identified by another jurisdiction as important to freight.

P3. What process does the MPO use to identify and analyze existing and projected goods movement in the region?

The TPB relies primarily on publicly available data sources from the FHWA Freight Analysis Framework to identify and analyze goods movement in the region. A "Freight Profile" was prepared for the region, the *Enhancing Consideration of Freight in Regional Transportation Planning* study in May 2007. This study provides analysis on existing and projected goods movement in the region. This information was based largely on the FHWA Freight Analysis Framework and some additional publicly available sources.

P4. Are freight shippers and transit engaged in the development of the LRTP, TIP, and other MPO products? What opportunities do private enterprises, including private transit providers, have to participate in the planning process?

Members of the freight stakeholder community are engaged in the TIP and CLRP process, as well as the *National Capital Region Freight Plan 2010* (underway) via the Freight Subcommittee. The Freight Subcommittee periodically updates the Technical Committee and the TPB. The Freight Subcommittee Chairman also sits on the Technical Committee and TPB and serves as a Freight Subcommittee liaison.

Our freight stakeholder community is also informed about upcoming meetings and freight-related issues via our monthly *Focus on Freight Newsletter* and information posted on the Freight Subcommittee Web Site.

Q. LAND USE/MULTIMODAL/TRANSIT PLANNING AND SUSTAINABILITY

Q.1. Describe how the MPO encourages the coordination of local land-use policies and Transit Oriented Development (TOD). To what extent does your MPO use Context Sensitive Solutions in transportation projects?

The TPB Vision recognizes that transportation and land use are inextricably linked and identifies better coordination and planning of these as one of its policy goals (Goal 6). The Vision called for the development of a composite land use and transportation map of the region. This map introduced the concept of regional activity centers, areas of the region intended to have a mix of jobs, housing and services in a walkable environment. The maps and data were developed for use by local jurisdictions, the TPB and other regional bodies to encourage mixed-use development and to significantly increase the percentage of jobs and households that are found in regional activity centers, particularly those accessible to transit. The region's Constrained Long-Range Transportation Plan (CLRP) is also analyzed in relation to land use goals and transit infrastructure.

The regional activity centers served as the focal point of the Regional Mobility and Accessibility Scenario Study, a long-term planning exercise initiated in 2000 that explores alternative land use and transportation scenarios for the region's future. The Scenario Study identifies the potential benefit that more compact, transit-oriented development could have in helping to alleviate travel congestion. The Washington Region is already nationally known for successes in concentrating mixed-use development in regional activity centers, especially those served by transit, though challenges still remain in addressing community-level challenges.

In an effort to assist municipalities in implementing strategies suggested by the Scenario Study, the TPB created the Transportation/Land-Use Connections (TLC) Program in 2006. The TLC Program addresses the "how to" challenges related to improving transportation/land-use coordination and realizing an alternative future for the region, through providing both direct technical assistance and information about best practices and model projects. Through the program, the TPB provides communities with up to $20,000 worth of technical assistance to catalyze or enhance planning efforts. Any local jurisdiction that is a member of the TPB is eligible to apply. The second part of the TLC program is the Clearinghouse, a web-based source of information about transportation/land use coordination, including regional and national experience with transit-oriented development and other key strategies. TLC projects have included those that facilitate TOD and Context Sensitive Solutions through market analysis, transportation infrastructure needs identification, and design assistance. The TLC Clearinghouse also provides national best practices information regarding both TOD and CSS strategies.

The transportation implementing agencies in the Washington Region also are developing or have developed policies that encourage TOD and CSS strategies.

Q.2. How does the MPO promote equitable and affordable housing? In areas where access to transportation has driven up the local real estate market, such as in TOD communities, has the MPO been involved with any regional or local efforts to ensure that affordable housing is available for people of all ages, incomes, races, and ethnicities?

In a series of public forums conducted by the TPB between 2005 and 2007 that presented the findings of the TPB Scenario Study, community members throughout the Washington Region identified provision of equitable and affordable housing, particularly near transit, as a crucial challenge. A report (see esp. pages 4-5) summarizing the feedback gathered from this outreach effort noted this concern and suggested a greater role for the TPB in conveying a regional message about the need for affordable housing and promoting the types of transportation projects that might catalyze development and re-development near transit stations that would include affordable housing for a range of household types.

Although the TLC program described in Q.1. began before the publication of the outreach feedback report, the results of the outreach process emphasized the importance of the program and its work in assisting localities with the challenges of TOD and provision of affordable housing. A key component of the TLC Clearinghouse is the resource page on "[Developing] Housing Affordable for a Range of Incomes Around Regional Transit Networks." In addition, the TPB funded through the TLC Program the development of a public presentation on issues related to land-use density, including the relationship between density and housing affordability.

MWCOG also has produced several resources related to this subject, including the Toolkit for Affordable Housing Development, Finding A Way Home: Building Communities with Affordable Housing, and Transportation Issues for Low-Income Populations: Findings and Recommendations. In addition, MWCOG has helped create the Washington Regional Smart Commute Initiative, a program to help facilitate homeownership near transit.

Q.3. Does the MPO target resources towards existing communities, focusing on community revitalization, infill development, and curtailing suburban sprawl?

As noted in Q.1., the concept of "regional activity centers" was developed for use by local jurisdictions, the TPB and other regional bodies to encourage mixed-use development and to significantly increase the percentage of jobs and households that are found in existing developed areas, particularly those accessible to transit. As part of the performance analysis of the region's Constrained Long-Range Transportation Plan (CLRP) the TPB looks at patterns of metropolitan growth.

Goal 2 of the TPB Vision includes strategies for concentrating development and curtailing sprawl, including the encouragement of the region's largest employer, the federal government, to locate jobs within or near the region's activity centers and in areas with existing infrastructure. The TPB has also sought to demonstrate through scenario analysis the potential congestion-reduction benefits of concentrated development focused in the regional core and inner jurisdictions, as well as the benefits of preserving natural areas and farmland.

The TPB's TLC Program, described in Q1, has as one of its founding principles the maximization of existing investments, particularly under-utilized transit stations which are most prevalent on the eastern side of the region. Several of the technical assistance projects completed through the TLC Program have

focused on these areas and helped local governments plan for infill development and revitalization through context sensitive transportation solutions that will help create walkable, livable communities.

Q.4. Describe how the MPO promotes any activities to encourage private sector investment in community revitalization and infill development, as well as brownfields redevelopment.

The TPB has recognized how important private sector investment is to creating livable communities in the Washington Region. Every land-use and transportation decision has a range of stakeholders, including property owners, residents, business owners, and government staff and elected officials. In addition to such stakeholders, many transportation services are provided by the private sector, and the TPB includes these interested parties in regional discussions through the Private Providers Task Force.

The TLC Program, described in Q.1., has included technical assistance projects focused on areas where revitalization and infill development is desired, but for various reasons has not yet fully taken hold. Projects have involved marketing assistance for localities looking to appeal to a certain type of land development, and prioritization and design assistance for streetscape improvements and other infrastructure needed to catalyze desired development.

Because the Washington Region does not have the industrial history of many other metropolitan areas, there are fewer brownfields available for redevelopment; nonetheless, opportunities exist, and MWCOG included discussion of brownfield strategies in its report on Green Building in the Washington Region.

Q.5. How does the LRTP consider alternative land use scenarios? Briefly describe how the MPO utilizes GIS in coordinating transportation and land use planning.

The TPB has undertaken a series of alternative land use scenarios and is currently completing an extensive land-use and transportation scenario. In 2007, the TPB began studying the "CLRP Aspirations" scenario, which examines an alternative land-use growth scenario in which growth is concentrated in COG Regional Activity Centers and around transit stations, as well as an extensive variably priced lane and bus rapid transit network. Through this scenario, the TPB has been proactive in indentifying regional land use issues and implications for transportation, such as regional imbalances in household growth and commercial development resulting in directional congestion. Development of the scenario has involved significant stakeholder participation, which has enabled the scenario to pursue alternatives that can be considered in the future by local and state land-use and transportation agencies.

A significant portion of the TPB scenario analysis is done using GIS. A primary input into the travel demand model and the scenario study is the COG cooperative land use forecast, which is developed by local planning staff for each jurisdiction. The cooperative forecast includes detailed land use forecasts at the transportation analysis zone (TAZ) level and linked geographically for use in GIS. Additional inputs are the COG Regional Activity Centers, which have also been spatially defined in GIS for analysis. GIS has been used to determine which activity centers remain without current/planned transit with each plan update. It has also been used to develop land use scenarios, where growth is shifted at a TAZ level according to spatial criteria, such as location in a regional activity center or proximate to a transit station.

Additionally, GIS is used to analyze and visualize accessibility information from the performance analysis of the CLRP. This analysis displays accessibility to jobs separately by auto and transit within 45 minutes.

Another recent effort of note is the mapping of CLRP projects using Google Earth in 2007, which will be updated shortly to include a mapping of the projects approved for the 2009 CLRP.

More Information
TPB Scenario Study:
http://www.mwcog.org/transportation/committee/committee/default.asp?COMMITTEE_ID=230
CLRP Accessibility Analysis: http://www.mwcog.org/clrp/performance/accessibility.asp
Google Earth: http://www.mwcog.org/clrp/projects/current/ge_intro.asp

Q.6. How is the transit authority's planning process coordinated with the MPO's planning process?

The primary transit provider (and designated recipient of FTA formula funds) in the Washington Region, WMATA, is a regular participant in TPB business and on TPB committees such as the Technical Committee, the Bicycle and Pedestrian Subcommittee, the Regional Bus Subcommittee, the Access for All Advisory Committee, the Human Service Transportation Coordination Task Force, and the Scenario Study Task Force. The interaction that takes place through these planning activities helps ensure that discussions ranging from long-range capital improvements planning to everyday operations concerns are aired in a regional forum before additional agency stakeholders and interested citizens.

> A Memorandum of Understanding (MOU) on the Metropolitan Transportation Planning responsibilities for the National Capital Region was signed and finalized on January 16, 2008 by. The MOU documents the current roles and responsibilities in transit planning and in developing the bus system for the long-range plan, and can be found at: www.mwcog.org/clrp/federal/Planning_Responsiblities_MOU_1-16-2008.pdf

Close collaboration between WMATA and the TPB has also led to recent success in obtaining federal grants through the American Recovery and Reinvestment Act (ARRA). An application developed jointly by WMATA and the TPB with input from other TPB members was awarded funding through the TIGER program; this award will fund first steps in the creation of a Regional Priority Bus Network that will extend high-quality transit service to and connect more of the region's activity centers. WMATA, as the FTA designated recipient, also recently submitted an application for funding of region-wide bus stop improvements through the FTA's Livability Bus Program. WMATA and the TPB coordinated on the submission of this application.

The Access for All (AFA) Advisory Committee has worked closely with WMATA on services for people with disabilities and limited English proficiency (LEP). As a result of coordination between the TPB AFA and WMATA, WMATA's language assistance plan was strengthened based on AFA comments and AFA member organizations have helped WMATA outreach to LEP communities. The AFA helped oversee the TPB's Independent Review of MetroAccess in 2008 and in December 2009 sent a letter to the WMATA outlining AFA concerns about proposals to reduce the use of MetroAccess with recommendations on other ways to reduce costs.

Q.7. What role does the MPO play in development of a coordinated human service transportation plan and competitive selection of projects?

In 2006 the TPB established a Human Service Transportation Coordination Task Force to oversee the development of the coordinated human service transportation plan. The task force is comprised of human service agencies, public and private transportation providers, and consumers who provided insight into local transportation needs and strategies for improvement. The first Coordinated Human Service Transportation Plan was adopted by the TPB in 2007. While there is no federal requirement mandating the frequency of coordinated planning activities, the Human Service Transportation Coordination Task Force updated the Coordinated Plan in light of the services that have been implemented under the TPB's JARC and New Freedom programs and the impact of the economy on traditionally disadvantaged populations and the agencies that serve them. In 2009, the TPB approved the updated plan which is available at http://www.mwcog.org/tpbcoordination/documents/Updated_Coordinated_Human_Service_Transportation_Plan.pdf.

The TPB became the designated recipient of the JARC and New Freedom funds in 2006. The criteria for selecting JARC and New Freedom projects for funding is established in the Coordinated Human Services Transportation Plan. The TPB conducts an annual solicitation for projects and convenes an independent, arms-length selection committee of local and national subject matter experts, chaired ex-officio by a TPB member, to review and score applications, and to make funding recommendations. Those recommendations are then presented to the TPB for final approval. By being both the developer of the plan and the designated recipient of the funds, the TPB plays an active role in implementing the coordinated plan to help meet the transportation needs of low-income workers and persons with disabilities.

As a result of the TPB's solicitations for JARC and New Freedom projects over the past three years, the TPB has funded 25 projects to improve mobility for many of the region's residents, visitors, workers and students. In total, over $7 million in projects – $3.9 million in JARC projects and $3.8 million in New Freedom projects – have been approved to improve access to transportation for workers with limited incomes and persons with disabilities.

Q.8. Transit operators, describe the major issues facing your organizations and the major needs of the transit riders you serve. How are these issues and needs addressed through the metropolitan planning process?

Transit operators are represented in several TPB committees and subcommittees, including the Regional Bus Subcommittee which coordinates bus planning throughout the Washington region, and works to incorporate regional bus plans into the Constrained Long Range Plan (CLRP) and Transportation Improvement Program (TIP).

For more information see "Moving Forward: Status of the Bus Systems of the National Capital Region." September 2008. Brochure. National Capital Region Transportation Planning Board. The full report is at: http://www.mwcog.org/TPB/RBS/docs/Status_Report_FINAL.pdf

The following transit operators below were invited to respond to this question:

1. Alexandria DASH
2. Arlington Transit (ART)

3. City of Fairfax CUE
4. DC Circulator
5. DC Streetcar
6. Fairfax Connector
7. Falls Church GEORGE
8. Frederick County TransIT
9. Laurel Connect-a-Ride
10. Loudoun Commuter Transit
11. Maryland Commuter Rail
12. Montgomery County Ride On
13. MTA Commuter Bus
14. Prince George's County TheBus
15. PRTC Omni Ride
16. Virginia Railway Express
17. Washington Metropolitan Area Transit Authority (WMATA)

As of March 24, 2010, the following responses were received:

Fairfax County

Two major issues are: (a) more efficient public transportation operations; and (b) customer satisfaction. One of the ways they were addressed through the metropolitan process was Fairfax County's membership and participation on the Regional Bus Subcommittee. The Regional Bus Committee provides a forum for the coordination of bus planning throughout the Washington region. High quality bus service in the region depends upon successfully linking vehicles, services, stops and stations, running ways, operating facilities, maintenance shops, storage yards, and passenger and operating support systems to produce a service that is easy to use, provides rider information where and when needed, and facilitates intra- and inter-agency service transfers. Considerable cooperation among the agencies responsible for bus service and transportation in the region is required to implement these high quality bus services, owing to the complex nature of transit service provision and transportation facility ownership in this multi-state region. Increased customer satisfaction can broaden the appeal of transit in the transportation market place and generate increased ridership. Hence, through the metropolitan planning process, an on-board survey of over 6,000 Fairfax Connector riders was conducted on behalf of Fairfax County, in conjunction with MWCOG's regional on-board bus survey. The questionnaire distributed on Fairfax Connector buses contained questions related to passengers' perceptions of various aspects of Connector bus operations and information, as well as the queries included in the MWCOG's regional on-board survey instrument. One question asked respondents to identify the three most important things that should be done to improve their Fairfax Connector service. The most frequently identified areas for improvement were:

- more frequent service/shorten wait time: 49%
- longer service hours: 37%
- faster service: 34%
- more reliable/on-time performance :29%
- better stops/more shelters: 23%

More details on the Fairfax Connector Bus services are available at the following web site: http://www.fairfaxcounty.gov/connector/

PRTC

The Potomac and Rappahannock Transportation Commission (PRTC) operates public transit services within the Prince William/Manassas area of Northern Virginia and between this area and the traditional core employment areas within and near Washington, DC. PRTC also provides connecting service to two outlying Metrorail stations and recently began operating buses to the largest suburban employment center, Tysons Corner. Like many transit agencies in the region, PRTC is confronted with chronic congestion on roadways serving the downtown core and nearby activity centers. Consequently, PRTC must continually adjust our services in order to maintain provide reasonable public schedules; longer running times increase costs. PRTC is also dealing with significant overcrowding on most of its bus routes. Over the past decade, PRTC had the operating and capital funding to generally keep up with demand and to add limited new/expanded services. Since the economic downturn, funding has been limited to maintaining existing services, resulting in widespread, chronic overcrowding and a growing list of unmet needs.

Growth in service required expanding PRTC's bus fleet and in doing so, PRTC has outgrown its only bus maintenance and storage facility in eastern Prince William County. While some funding is in place to plan and purchase property for a western maintenance and storage facility, PRTC expects it will be at least five years before full funding is available and a facility is built. In the meantime, should economic conditions improve, the existing facility will limit how much fleet growth can be accommodated.

In the PRTC service area, there is a growing demographic of older adults and persons with disabilities. These population groups often ask PRTC for transportation services that are beyond the reach of existing bus services. Our agency does not have the ability to provide additional services due to limited state and member government funding support.

The TPB Technical Committee provides an opportunity for PRTC to provide input and feedback on the transit assumptions for TPB sponsored air quality analysis, regional travel assessments and commuter surveys. Also, TPB's subcommittees – such as the Human Service Transportation Coordination Taskforce, Commuter Connections and Regional Bus – enable PRTC to advocate for resources and project priorities designed to address the commuting and travel needs from our service area and within major activity centers, such as downtown DC. In addition, the Steering Committee provides PRTC with a forum to request TIP amendments or adjustments to account for State or Federal funding received to support our capital projects.

Loudoun County Transit

Loudoun County Transit currently owns 45 commuter coaches and contracts the operation, storage and maintenance of these coaches with Veolia Transportation. Commuter bus service is provided from 10 park and ride lots in Loudoun to West Falls Church Metro, Rosslyn, the Pentagon, Crystal City and the District of Columbia. Service is weekdays only, and only during peak commuting hours. The daily peak ridership total is 4,469.

The County is facing three major needs: park and ride lots, more equipment and a maintenance and storage facility. The commuter bus service program grew very rapidly and unfortunately, the County was not prepared for the growth in terms of parking spaces needed for the commuters who want to ride the buses. The growth in ridership has caused overcrowding on the existing buses and purchasing new equipment is very expensive and has to also be placed in the budget documents ahead of time for approval to purchase. The County has completed a feasibility study that indicates a storage and maintenance facility will be needed in the immediate future. The County began the process to obtain a consultant to design and

someday build this facility. We have also submitted a request to the State (DRPT) to help fund this facility.

The major needs of our transit riders are very similar to our organizational needs: parking spaces and bus seats, which in turn can offer the riders time, comfort and the ability to do other things while riding the bus in these congested corridors.

These issues are not addressed through the metropolitan planning process. Loudoun County Transit does not accept federal funding for capital or operations of the commuter bus. We have used CMAQ funds for park and ride lot spaces, but no transit infrastructure. Financial assistance is obtained only from the Virginia Department of Rail and Public Transportation, local gasoline tax and commuter bus fares. The farebox recovery ratio is about 69 percent. Loudoun County has worked with the State, Towns and its own Board of Supervisors to try and alleviate the overcrowding issues we face on our lots and on our buses.

WMATA

The region continues to support goals around sustainability, energy independence, economic development, equitable economic achievement, affordable housing, Access for All, health and fitness, transit ridership growth, and pedestrian and bike activity which, in combination, have established elevated expectations for accelerating the pace of delivery of transit service expansion, transit-oriented development projects, multi-modal transit access improvements, and "alternative transportation" facilities and services.

Some of the key issues facing WMATA include the following:

- Funding WMATA's **capital improvement needs** to maintain the system in a state of good repair.
- Addressing Metrorail **core capacity**, particularly the need to fund rail fleet and facility expansion needed to operate 100% 8-car trains in the peak periods. Beyond 2025, there will also be a need to address the long-term capacity constraint of the rail system.
- Seeking **priority treatment for buses** along the region's roadways. The reliability of Metrobus service has become increasingly uncertain, and trip travel times have grown as the Metrobus fleet has become mired in the same traffic congestion that slows commutes region-wide.
- In the area of paratransit, there is a need to manage the **pace of ridership and subsidy growth for MetroAccess** service which has reached levels where the region is confronting the choice between meeting Federal mandates to provide paratransit service and being able to afford current levels of bus and rail service. WMATA worked with TPB staff on a study of accessible pathways that could identify sidewalk and bus stop access capital improvements that could make it possible for some MetroAccess customers to use fixed-route services.

Many of these issues are being addressed through close coordination between WMATA and TPB. For example, short-range planning by WMATA on priority bus corridors was instrumental in the planning at TPB that led to submittal of a TIGER grant. WMATA's long-range planning effort to develop a regional transit plan is using the same land use inputs that COG has adopted and TPB uses, and the TPB zone system and base-case transportation network that reflects implementation of the TPB-adopted Constrained Long-Range Plan (CLRP). A TPB staff member is included on the Technical Advisory Group for this effort. WMATA's planning efforts are included in the UPWP and Metro funds service account work that is documented in the UPWP and coordinated with TPB staff, and often utilizes TPB staff work and expertise.

Montgomery County
Major Needs of the organization – Additional funding for maintaining services (operating funds); adequate staffing levels.

Major needs of riders – reliability improvements; safety and security improvements

These issues are reflected in the MPO's planning process and its establishment of regional subcommittees (e.g. MOITS and Regional Bus Subcommittee) review of grants.

Q.9. Transit operators, do you have a plan than describes your long and short term systems level goals? If so, how has development and implementation of these plans been coordinated with the MPO's planning process; i.e. inclusion in the LRP, UPWP, TIP?

The transit operators listed in the response to question Q.8. were invited to respond to this question. As of March 24, 2010, the following responses were received:

Fairfax County
Fairfax County and a consultant team recently completed a 10-year transit development plan (TDP) for the County. This TDP includes the goals for bus transit service in the County for the next 10 years. The needs for new services and for enhancements to existing services were identified in part by the consultant team's use of the most recent available MWCOG Cooperative forecasts for land use, population, employment, and travel demand for 2020, the horizon year for the transit development plan. The Cooperative Forecasting and Data Subcommittee (CFDS) is a technical subcommittee to the Planning Directors Technical Advisory Committee (PDTAC) and the Metropolitan Development Policy Committee (MDPC). The committee is responsible for preparing 25-year population and employment forecasts at the traffic analysis zone (TAZ) level for the entire metropolitan Washington region. The committee is composed of planners and demographers from COG member jurisdictions. Selected elements of the TDP for which funding is anticipated will be proposed for inclusion in the CLRP, and will soon be forwarded to the Commonwealth of Virginia Department of Transportation (VDOT). The current CLRP includes anticipated increases in Fairfax Connector service funded with a local commercial and industrial property tax for transportation authorized by the Virginia General Assembly in 2007 and approved by the Fairfax County Board of Supervisors in 2008.

PRTC
PRTC's long-term goals are articulated in the agency's 20-year long-range plan. Additionally, a state-assisted transportation development plan (TDP) is currently being prepared. In TPB's CLRP and TIP documents, TPB staff has documented funding support for our agency's future maintenance facility in western Prince William County and for our enhanced bus shelter program. In addition, these documents include ancillary projects that provide extra commuter parking capacity near P&R lots in Prince William County.

In the development of our long-term service plan, TPB provided PRTC with trip table outputs for the regional travel demand model used for air quality conformity modeling. This information allowed PRTC to identify patterns between the PRTC service area and activity centers that could be targeted for future bus service. From this analysis, TPB incorporated our anticipated future bus routes into their long-range air quality conformity analysis effort.

PRTC has also developed a long-range travel demand management (TDM) plan that examines the agency's programs and acts as the basis for prioritizing funding and programs for inclusion in the TIP and CLRP. PRTC's OmniMatch program is supported through MWCOG's Commuter Connections program and this activity is reflected through TPB's annual UPWP.

Loudoun County Transit

Loudoun County has an adopted 2001 Countywide Transportation Plan (CTP) that is currently being revised by the Planning Commission and the Board of Supervisors. This revised plan will contain a new chapter dedicated to transit planning. This chapter of the CTP contains transit land use policies, public transit policies, infrastructure policies and transportation demand management strategies. The draft document also contains an appendix that outlines conceptual route profiles for new and modified future transit routes.

This document is being reviewed by the Planning Commission and staff anticipates it will be certified by the PC in April. Then the Board of Supervisors will begin their review, public hearing and approval process. It is anticipated the document will be approved by June 2010.

Loudoun County has representation on the TPB and TPB Technical Committee as well as other subcommittees at MWCOG. Loudoun County staff work with VDOT and the MWCOG staff to place appropriate projects on the CLRP and TIP as required by the federal government. Once the Board of Supervisors approves the CTP, then staff works with VDOT and MWCOG to coordinate this plan into the MPO's planning process.

WMATA

WMATA's planning department has developed a number of long- and short-term plans covering rail and bus system expansion, capital needs planning, station area plans, system access studies, etc. Many of these plans are available on-line at:
http://www.wmata.com/about_metro/planning_dev.cfm
WMATA provides a list of current planning studies to TPB and these are included in the annual UPWP document.

Of particular note, Metro recently updated a 10-year inventory of capital improvement needs and is currently undertaking the development of a long-range Regional Transit System Plan. The previous system expansion plan was developed in 1999. As planning studies are completed, WMATA frequently presents results and findings to the TPB and technical committees. WMATA has worked closely with the Bus Subcommittee to ensure that implementation plans for priority bus corridors are integrated into the CLRP bus service assumptions.

Montgomery County

We have a long term strategic transit plan with broad ridership goals and delineation of capital needs. Short term goals are reflected in our annual performance plan. Neither of these has been incorporated into MWCOG's planning process. The County submits our capital projects for inclusion in the TIP and we have worked with TPB staff on several USDOT grant opportunities including the TIGER grant and the livability grant applications.

Q.10. What is the role of each transit operator in developing the financial forecasts that are used in preparing the TIP and Plan? Is this process described in any document adopted by the MPO and transit operators? If so, provide a copy of the document.

The roles and responsibilities of the public transportation operators as defined in the federal planning regulations are described in the "Memorandum of Understanding on Metropolitan Planning Responsibilities for the National Capital Region" as adopted by the TPB and the public transit operators on January 16, 2008. A copy of this document is included in the Appendix of the current FY 2010 UPWP.

For the Constrained Long-Range Transportation Plan (CLRP) financial plan, WMATA provides inputs and analysis on the projected operating and capital expenditures and revenues. Operating expenditures are projected based on annual service plans and operating cost drivers by mode. Capital expenditures are projected based on life-cycle state-of-good-repair needs and expected system capacity enhancements needs. WMATA develops forecasts of passenger and other revenue that will be available to the agency over the period of the CLRP. WMATA then makes projections of federal formula funding for capital improvements, bus discretionary and 'New Starts' that are expected to be reasonably available to the agency, as well as non-federal funds from states and local governments, over the period of the CLRP. The assumptions and projections are reviewed with the TPB, the states and local governments prior to finalizing the CLRP. Once all local jurisdictions, state governments and transit operators have done so, any gaps between costs and revenues are identified and adjustments are made as necessary.

WMATA is an active participant in the development of the 6-year TIP. WMATA provides inputs on the capital projects and programs expected to be funded, as well as the funding sources on a year-by-year basis for the six-year period. WMATA participates in the MPO-sponsored public forums on the CLRP and TIP.

Q.11. How would you learn of significant privately funded transit projects proposed or under development within the MPA boundaries? Are there any privately funded transit projects planned in the region? Major projects in a nonattainment area must be in the TIP, regardless of funding source.

A significant privately funded transit project would be highly unusual. If such a project was being proposed and developed, staff from the jurisdiction(s) where it was located would inform the TPB. All jurisdictions within the MPA boundary are represented on the TPB and its committees. Currently, we believe no significant privately funded transit projects are planned in the region.

Q.12. How are multimodal planning activities, such as bicycle and pedestrian, being integrated in the transportation planning process?

The Bicycle and Pedestrian Subcommittee of the TPB Technical Committee advises the TPB, TPB Technical Committee, and other TPB committees on bicycle and pedestrian considerations in overall regional transportation planning. Data relevant to walking and bicycling are gathered as part of the regional household travel survey, and are incorporated into regional transportation modeling and forecasting.

Bicycle and pedestrian projects, and transportation projects that include bicycle and pedestrian accommodation, are tracked in the regional Transportation Improvement Program. In addition, the TPB's

Transportation/Land-Use Connections Program has funded many planning projects related to bicycle and pedestrian facilities and accommodation.

Q.13. Does the MPO have a bicycle and pedestrian plan? Is it a stand alone plan? Discuss the selection and prioritization process for bicycle and pedestrian projects. Does the MPO partner with Bike/Ped safety programs on a local level? Otherwise?

The region has a stand-alone Regional Bicycle and Pedestrian Plan, which was adopted by the TPB in FY2007, and provides guidance for continued regional planning activities. A major update to this plan is in process.

The plan incorporates all bicycle and pedestrian projects which are in an approved jurisdiction or agency plan, and which are judged large enough to be regionally significant. Any project greater than one mile in length and/or greater than $300,000 in cost is considered regionally significant. Projects can be stand-alone bicycle or pedestrian projects, or be incorporated into a larger transportation project. The plan is fiscally unconstrained; projects need not have funding identified. The only requirement for inclusion is that the project be part of an approved jurisdiction or agency plan, and that it be large enough. The list of projects is available to the public in an on-line searchable database, which is updated annually.

The Bicycle and Pedestrian Subcommittee annually compiles a short list of bicycle and pedestrian project recommendations for the Transportation Improvement Program (TIP). The list is a statement of priorities among the *unfunded* or *partially funded* bicycle and pedestrian projects from local, state, agency, and regional plans. The project should be achievable within the six-year time frame of the TIP.

The Subcommittee develops the priority list using a number of criteria, including local support, whether a project will enhance the connectivity of existing facilities in the regional bicycle network, and whether it will address a pedestrian safety problem. The most recent list was presented to the Transportation Planning Board in December 2009, with the recommendation of the Subcommittee that these projects should be funded in the FY 2011-16 Transportation Improvement Program.

The MPO partners with State and local bicycle and pedestrian safety programs through the annual Street Smart Pedestrian and Bicycle Safety program, which features two month-long waves of mass media and law enforcement aimed at drivers, pedestrians, and bicyclists.

State and local pedestrian and bicycle staff serve on the advisory group, which works with a consultant and TPB staff to develop the campaign strategy and materials. For each campaign wave a press event is hosted by a different jurisdiction. TPB staff works with the COG Police Chiefs Committee, the Street Smart Advisory Group, with the various participating police agencies to coordinate concurrent law enforcement, distribute collateral materials, host a seminar on best practices in pedestrian safety enforcement, and collect data on enforcement during the campaign waves.

The Street Smart radio, television, transit, and internet advertising supports and enhances local pedestrian and bicycle safety efforts such as engineering and design, classroom-based education and community outreach and law enforcement. The State highway safety offices provide extensive financial support for the program, participate in its development and use the materials developed for safety campaigns outside the Washington region.

Q.14. Does the MPO have specific programs that encourage commuters to use any other mode of transportation other than the automobile?

The Washington metropolitan region has a nationally recognized commuter assistance program called Commuter Connections. Commuter Connections encourages commuters to use alternatives to driving alone to and from work in a private automobile, and includes the promotion and, in some cases, the operation of transportation demand management strategies such as ridesharing, transit, telecommuting, bicycling, and walking. Commuter Connections is a network of organizations which consists of local government rideshare programs, transportation management associations, and federal government agencies, and is coordinated and administered through the TPB to provide commuter assistance services and programs for commuters and employers. The program covers an area larger than the designated MSA, and serves commuters in the District of Columbia, Maryland, and the Commonwealth of Virginia. Commuters traveling from West Virginia, Pennsylvania, and Delaware into the MSA are also eligible to use the services.

The program is cost effective and has had had a measurable impact on congestion and air quality in the region. Commuter Connections has evolved and expanded considerably since its inception in 1974, and has grown to include additional activities such as the coordination of a regional Bike to Work Day event, Car Free Day event, mass marketing, a regional Live Near Your Work program, and a regional Guaranteed Ride Home program. Commuter Connections' efforts and results are detailed in the regional Congestion Management Process (CMP).

An annual work program is produced and approved by the TPB which can be found at the following web link: http://www.mwcog.org/commuter2/pdf/FY2010%20CCWP%20FINAL%20031809.pdf

Q.15. Does the MPO coordinate with other Federal agencies such as HUD and EPA to address livable and sustainable community initiatives?

The TPB coordinates with other Federal agencies, including HUD and EPA, through a variety of measures to address the Administration's livable and sustainable communities initiatives. Such coordination occurs at the staff level, and on the programmatic level. From a staff perspective, TPB staff works jointly with Metropolitan Washington Council of Governments staff who specialize in regional implementation of HUD and EPA programs on an interdepartmental working group on sustainable communities. This working group was created for subject matter experts in federal transportation, housing, and environmental policy to collaborate on initiatives that promote livability by coordinating transportation, housing, and environmental planning across the region. For instance in March 2010, TPB staff, as part of this working group, collaborated internally and with industry stakeholders to provide comments to HUD on the Sustainable Communities Planning Grant Program (Docket No. FR-5396-N-01). See http://www.mwcog.org/uploads/committee-documents/al5ZXVZd20100312153547.pdf for more information.

From a programmatic perspective, the TPB has conducted a variety of livability initiatives that require coordination with other federal agencies. For example, in submitting an application to the DOT TIGER program, the TPB collaborated regionally to develop a project that met the sustainability and livability criteria set forth by the DOT-HUD-EPA interagency partnership, and was thus awarded funding to implement the project. The TPB has begun coordinating with FTA on the implementation of this regional project. (See http://www.mwcog.org/uploads/committee-documents/aV5bV1ld20090916141103.pdf for

more information on the TPB's TIGER application; see http://www.mwcog.org/news/press/detail.asp?NEWS_ID=429 for more information on the TPB's TIGER award). Additionally, in collaborating with the Washington Metropolitan Area Transportation Authority on an application under FTA's Livability Bus Program, TPB staff coordinated with HUD to analyze Neighborhood Stabilization Program data, a component of the HUD Community Development Block Grant, as a way to extend the livability benefits of the grant application to middle- and low-income households throughout the region (see http://www.mwcog.org/transportation/documents/BusLivApp_WMATA.pdf.)

Q.16. Does the MPO encourage green/LEED certified construction? If so, how?

The TPB encourages green/LEED certified construction in a variety of ways, including funding related technical assistance projects through the Transportation/Land-Use Connections (TLC) Program, hosting and participating in related symposia, and participating in an Intergovernmental Green Building Group.

Since its inception in 2007, The TPB Transportation/Land-Use Connections (TLC) Program provides focused consultant assistance to local jurisdictions on creative, forward-thinking and sustainable plans and projects. One chief strategy of the TLC program is to "Improve the Health of Communities and the Environment through Development." The premise of this strategy is that a green approach to planning and development that links transportation and land use also benefits environmental quality and public health. New streets and development can also be designed to reduce their environmental impact through the use of sustainable building materials, energy efficient design, and stormwater management techniques. Projects large and small can utilize sustainable design techniques to realize these benefits. As part of the FY 2010 TLC technical assistance program, the TPB funded a project sponsored by the Golden Triangle Business Improvement District (BID) with the purpose of developing streetscape design standards for the BID. The project evaluated and refined previously-developed draft streetscape guidelines developed by the BID. Low Impact Development (LID) techniques were an integral part of this project. For more information about the TLC Program, see http://www.mwcog.org/transportation/activities/tlc/default.asp.

In addition to programmatic support, the TPB also encourages green construction through staff involvement in the field. For instance, in November of 2009, TPB participated in a Symposium on Innovative Stormwater Controls on Roads and Highways (for more information, see http://www.mwcog.org/environment/Roads_Highways/presentations.asp). Furthermore, TPB staff participates in the Metropolitan Washington Council of Governments Intergovernmental Green Building group, which meets regularly on Green Building issues. (More information can be found here: http://www.mwcog.org/environment/committee/committee/default.asp?COMMITTEE_ID=201)

Q.17. Describe how the MPO encourages local communities to make smart energy choices such as locally generated renewable energy.

The TPB member agencies participate in COG's efforts to encourage local jurisdictions to make smart energy choices through climate change and long-range visioning initiatives. COG's National Capital Region Climate Change Report, which was adopted in November 2008, includes twenty recommendations for the energy sector, including green power utilization goals, regional cooperative green power purchasing goals, and a 20% renewable portfolio standard for the region. Potential partners in achieving specific targets and goals have been identified as local jurisdictions, energy managers, utilities, procurement

officers, state energy offices, and the U.S. EPA. More information on this report is available here: http://www.mwcog.org/store/item.asp?PUBLICATION_ID=334.

COG has also completed an ambitious and forward-thinking visioning and planning initiative that outlines goals for the Washington region to achieve by 2050 and strategies by which to achieve those goals. The effort was stewarded by the Greater Washington 2050 Coalition, which is comprised of elected officials from COG's member jurisdictions, as well as representatives from the region's civic, philanthropic, business, and non-profit organizations. Goals, targets, and strategies for the energy sector are included, with specific reference to efficient and renewable energy. For instance, "efficient public and private use of energy region-wide, with reliance upon renewable energy and alternative fuels for buildings, vehicles, and public transportation" is a stated sustainability goal, derived from intensive stakeholder input. More information on this initiative can be found here: http://www.greaterwashington2050.org/.

R. PUBLIC INVOLVEMENT

The requirements for public involvement are set forth primarily in 23 CFR 450.316(a)(1)(2)(3) and (b) which address elements of the metropolitan planning process. Public involvement also is addressed specifically in connection with the Transportation Plan in 450.322(g)(1)(2), (i), and (j) and with the TIP in 450.324(b); participation and consultation requirements, which pertain to the Transportation Plan and the TIP, also are included in 450.322 (f)(7) and (g)(1)(2), (i), and (j) and in 450.324(b).

R.1. What opportunities are provided for public participation at key decision points in the planning, programming, and project development phases of transportation decision making? Is public involvement in the metropolitan transportation process coordinated with the district and or statewide public involvement process as much as possible to enhance public consideration of issues, plans, and programs?

The regional transportation process provides numerous opportunities for public input into the decision making process, from the identification of needs to the final construction of projects. Because the TPB coordinates among planning in two states plus the District of Columbia, the points of entré for citizen involvement in project development are different in each jurisdiction. These different processes are described extensively in the TPB Citizens Guide, which can be found at http://www.mwcog.org/uploads/pub-documents/zldaWw20080717100247.pdf .

As a coordinating agency, the TPB provides an extensive additional layer of public involvement opportunities and activities in the development of plans and projects. On an informal and ongoing basis, needs and proposed solutions are extensively discussed and examined during TPB meetings, at meetings of the TPB's Access for All Advisory Committee and the Citizens Advisory Committee, and in numerous other venues. Public comment sessions are held at the beginning of every TPB meeting, and the roster of speakers at these sessions is often quite long. As official TPB policy, plans, plan amendments and other documents are always released for public comment periods lasting at least 30 days, but usually longer. During these periods (but also at times other than official comment periods), the TPB receives and reviews written public comment submitted through the Internet and by mail.

R.2. How does the public participation process demonstrate explicit consideration and responsiveness to public input received during the planning and program development process? Specifically, in what instances have comments raised through public participation resulted in changes to policy, plans, programs or projects?

The TPB and its member jurisdictions follow rigorous policies to show that public comments have been understood and considered. At the regional level, the TPB develops a summary of comments received during public comment periods and provides written responses to those comments. The planning and decision-making processes, at the regional, state and local levels, provide ample opportunities for dialogue with citizens to ensure that all voices are heard, that proposed changes or enhancements are fully considered, and that the citizens and stakeholders are informed of the ways in which their comments have been received.

Projects are frequently changed based upon comments received through public involvement. For example, citizens recently raised concerns, in comments to the TPB and at the project planning level, regarding the impacts that the Purple Line light rail project in Maryland will have on an adjacent trail. Accommodations in the project design have been made in response to those comments. As another example, citizens expressed concern in 2007 and 2008 regarding the perception that bus services would not be adequately accommodated on Virginia's HOT lanes project on the Capital Beltway. These concerns were expressed in numerous local and state meetings, to the TPB directly, and at a special meeting on HOT lanes in Fairfax County organized by the TPB Citizens Advisory Committee. As a result, before the HOT lanes project was approved by the TPB, its ramp configurations were enhanced in response to comments.

R.3. The 2002 and 2005 Certification Reviews both recommended that the TPB should evaluate the effectiveness of its regional public involvement outreach efforts. Describe how this has been addressed and how the effectiveness of the public involvement process is evaluated and how often is it evaluated.

In 2006, The TPB procured the services of a professional firm to conduct a review of public involvement activities and offer recommendations for updating the TPB's official public participation policies to meet the new federal guidelines under SAFETEA-LU. This was the second time the TPB has contracted with a consultant to evaluate its public involvement activities; an independent review in 1998 informed the amendments to the Public Involvement Process in 1999.

The report, "Evaluation of the National Capital Region Transportation Planning Board Public Involvement Activities," contains an overview of best practices in participation from Metropolitan Planning Organizations (MPOs) across the country, synthesizes TPB stakeholder interviews on public involvement activities, and provides recommendations for improving many of the current TPB outreach activities and refining TPB materials in order to inspire participation from stakeholders. Among the many comments found in the report, TPB staff identified several key recommendations, which were addressed in the Participation Plan that was approved in 2007:

- Strategically plan outreach activities.
- Improve integration of public involvement activities.
- Move beyond a "one size fits all" approach.
- Work toward developing an integrated regional transportation "story" that is clear and compelling.

In addition, the report encouraged the TPB to conduct more frequent evaluations of its public involvement activities. The TPB has responded to this suggestion by periodically using focused, smaller-scale assessment methods, such as a recent survey of Citizens Advisory Committee members which asked for feedback on committee operations and goals. Another example of a recent focused, smaller-scale assessment was an outreach session that occurred on October 15, 2009, in which the TPB brought together stakeholders to evaluate gaps in its outreach activities and generate suggestions for improvement.

R.4. How does the MPO's public involvement process identify and address the needs of those who have been traditionally underserved, including low-income and minority households? How does the MPO engage in public education efforts designed to make the transportation planning process and decisions it produces easier to understand in laypersons' terms?

As a matter of long-standing TPB policy and a requirement of federal law, the regional transportation planning process must make special efforts to consider the concerns of traditionally underserved communities, including low-income and minority communities and people with disabilities. To ensure these concerns are heard, the TPB established the Access for All Advisory Committee in 2001. Additionally, a recent application to the FTA Livability Bus Program aims to make improvements to bus stops throughout the region as a way to promote and enhance access for persons with disabilities to the public transit system. The TPB's Participation Plan also seeks to maintain and enhance the TPB's outreach to these communities.

Furthermore, the TPB continually strives to make its process understandable to laypersons, using a variety of methods including the Internet, publications, public meeting and workshops. Several activities from recent years are worth highlighting:

- TPB staff conducted approximately 40 interactive public forums in 2006-2008 called "What If the Region Grew Differently?" based on the work of the TPB's scenario study. Using poster-size maps in small groups, participants at the forums were asked to construct their own scenarios to address regional land use and transportation challenges. These outreach forums have proven successful in providing feedback on TPB programs and projects, as well as educating the public about regional transportation planning.
- The TPB's Community Leadership Institute (CLI) is a two-day training workshop designed to help local leaders understand the connection between their local interests and the regional context. The sessions, which are conducted by former TPB chairs who are also expert facilitators, help community leaders understand how transportation decisions are made, the relationship between land use and transportation, and the region's pressing transportation problems, including the ongoing revenue shortfall. For more information about the TPB CLI, please see: http://www.mwcog.org/transportation/activities/cli/
- The TPB *Citizens Guide*, updated in 2008, provides the residents of the region with an all-encompassing overview of the TPB's role in regional transportation planning. This tool has been instrumental in providing new committee members, informed constituencies, and TPB members with a thorough overview of the TPB process. For more information on the TPB Citizen's Guide, please see: http://www.mwcog.org/transportation/involved/

R.5. What visualization techniques have been used to aid the public in understanding the transportation planning process including the UPWP, LRTP, TIP, and supporting studies?

Specific visualization techniques have been employed in the TPB planning process and in planning documents to aid in the public understanding of the regional transportation planning process. This includes the use of flowcharts, maps, graphs, pictures and renderings. One recent effort of note was the mapping of CLRP projects using Google Earth in 2007, which will be updated shortly to include a mapping of the projects approved for the 2009 CLRP. For more information, please visit the following:

- CLRP-TIP Summary Brochure: http://www.mwcog.org/clrp/resources/
- Mapping of Projects: http://www.mwcog.org/clrp/projects/highway.asp
- Graphs: http://www.mwcog.org/clrp/performance/metropolitan_growth.asp
- Google Earth: http://www.mwcog.org/clrp/projects/current/ge_intro.asp

R6. What public involvement procedures are used by the transit operator(s)? Describe any coordination of public involvement that occurs between the MPO and transit operator?

The 17 Transit operating agencies in the Washington region use a variety of public involvement procedures including, but not limited to: town hall meetings, public comment periods at board meetings, on-line comment forms, and a Riders' Advisory Council. The TPB has also coordinated with the Washington Metropolitan Area Transit Authority (WMATA), Virginia Railway Express (VRE), and Potomac and Rappahannock Transportation Commission (PRTC) to include language in public notices that advertise the TIP public comment period as a way to obtain comments on the region's FTA-funded Program of Projects.

R7. How is public involvement incorporated in the TIP development process, and how has this involvement affected the content of the TIP? Is the disposition of comments and changes in the final Transportation Plan or TIP documented, analyzed, and reported when significant oral and written comments are submitted? Is additional time provided for public review if the "final" document is significantly different from the draft originally made available for public review?

At the beginning of each TIP cycle, the TPB hosts a Fall Forum to give the public information describing opportunities to get involved at the state and local level during the project prioritization process. Representatives from state and local transportation agencies explain their public involvement processes and share their schedules of upcoming events. Two 30-day public comment periods, including one leading up to the approval of the TIP, provide additional opportunities for public involvement. All comments submitted during the TPB's public comment periods on the TIP are reviewed, grouped and tallied according to position. Any substantive arguments or questions are summarized and compiled in a list. The TPB works with the implementing agencies to draft responses to these comments, which are then approved by the Board and included in the final TIP document. If any significant changes are introduced to the plan after the public comment period, an additional 30-day comment period would be provided. For more information on public involvement as it relates to the TIP, please see: http://www.mwcog.org/clrp/resources/.

R8. Are there opportunities for participation by traffic, ridesharing, parking, transportation safety, and enforcement agencies; commuter rail operators; airport and port authorities; appropriate private transportation providers; and city officials? Are there opportunities for participation by local, State, and Federal environmental resource and permit agencies where appropriate?

The TPB process provides numerous opportunities for all these stakeholders to participate in its process. These categories of stakeholders are all represented either directly on the TPB, on the TPB's Technical Committee, or on numerous other committees and working groups.

Environmental resource agencies are invited to comment on the CLRP as part of the environmental consultation process, initiated in 2007 and continued through 2008 and 2009. The comment process and summary of replies is available here:
http://www.mwcog.org/clrp/elements/environment/envconsult2007.asp

In subsequent years, environmental resource agencies have been invited to participate in crafting a process that would best foster their ongoing engagement. These agencies include state resource agencies from DC, Maryland and Virginia, such as Departments of Environment, Conservation, Natural Resources, Game, Historic Preservation, and Planning. Additional information on the involvement of environmental resource agencies in TPB's planning activities is provided in responses to questions U.3. and U.4.

R9. How was the public involvement program developed (who participated in its development)? What are the public involvement program's goals? What is the strategy for achieving these goals?

In developing the 2007 Participation Plan, as required by SAFETEA-LU, the TPB received input and guidance from committees representing a myriad of subjects, which were comprised of agency stakeholders, jurisdiction staff, interest groups, and the general public. During the development of this Participation Plan, TPB staff met with some of the committees to brief them on the Participation Plan and to gather their input on the contents of the Plan and the impact it will have on future outreach and education efforts. TPB staff met with the TPB Technical Committee, the TPB Citizens Advisory Committee, the Access for All Advisory Committee, the Regional Bus Subcommittee, the Bicycle and Pedestrian Subcommittee, and consultants hired to focus the development of the Ad Hoc Freight Subcommittee. Input from these committees was vital in shaping the Participation Plan into a document that provides the highest level of participation opportunities to the citizens of the region. In addition, staff conducted a focus group session with alumni of the TPB's Community Leadership Institute. The purpose of this session was not only to inform the development of this Participation Plan, but also to gain insight to how the TPB can most effectively use its limited resources. TPB staff uses the information gathered during this focus group session to contribute to the development of the annual participation program.

The TPB Participation Plan is designed to be goal-oriented. The Policy Statement provides a philosophy around which to build a regional transportation participation program that will accomplish the following goals:

- Effective communication and messaging of information leading to knowledgeable, informed constituencies.
- Involvement from diverse participants and opportunities for constituency building.
- Open access to information and participation.
- Receipt of public comment and provision of meaningful feedback to constituencies.

- Development of a "regional story" that is clear and compelling.

The Plan's strategy directs the TPB to target its outreach activities to different constituencies with different levels of interest and knowledge in regional transportation. The TPB has defined the following three broad constituencies around which to develop participation activities:

- The **Involved Public** is both knowledgeable about transportation policy issues in general, as well as the TPB's role in the regional transportation planning process and the regional challenges raised by the TPB. These individuals and organizations already participate in the regional transportation planning dialogue.
- The **Informed Public** has some knowledge of transportation policy issues, but is not familiar with the TPB's role in the regional transportation planning process. They also may not be fully aware of the regional context underlying the transportation challenges experienced throughout the region.
- The **Interested Public** has an inherent interest in transportation challenges, but possesses little direct knowledge of transportation policy issues.

Each of these different types of constituencies includes a wide spectrum of members, including individuals, interest groups, community leaders, and elected officials. This strategy recognizes that transportation planning can be very complex and technical, and many individuals will never have enough time to develop a full understanding of the TPB process. Therefore, the strategy seeks to identify tools that will be appropriate for people with limited time whose input and opinions are valuable nonetheless.

The Participation Plan can be found at:
http://www.mwcog.org/transportation/involved/documents/ParticipationPlan-2007.pdf.

R10. Who is responsible for public involvement? How do public involvement activities conducted throughout the metropolitan planning process influence transportation investment decisions and policies of the State and public transit agency?

A Senior Transportation Planner has the primary responsibility for coordinating TPB's public involvement process, with overall guidance for the Director of Program Coordination. Transportation decision-making at the regional level can be described as a combination of "top-down" influence and direction from the regional level, and "bottom-up" planning and project development from the TPB's member jurisdictions. The responsibility for public involvement must be assumed by agencies and leaders at all levels of this multi-faceted process. The TPB provides a constant feedback loop to its member jurisdictions, providing comment from citizens and raising awareness on a regional basis about the impacts of decisions that are made at the local and state levels, and by the regional transit agency. This public process influences decisions on an ongoing basis. When it comes time for decisions to be made and for plans to be approved, the influence of regional-level public involvement can sometimes be directly linked to decisions regarding controversial projects. But just as importantly, the TPB's open and engaging public comment process has a profound, but indirect, impact on the decisions made, or sometimes deferred, by the region's transportation implementing agencies.

S. TITLE VI AND RELATED REQUIREMENTS

S1. Who is your Title VI Officer? Do you have a Title VI policy? What goals, policies, approaches, procedures, and measurements has the MPO adopted / undertaken for ensuring, demonstrating, and substantiating that the planning process complies with Title VI/EJ/LEP and related requirements?

The Director of Program Coordination and a Principal Transportation Planner oversee the TPB's Title VI, Environmental Justice (EJ) and Limited English Proficiency (LEP) compliance and work elements.
The TPB became associated with the Metropolitan Washington Council of Governments (COG) in 1966. COG was established in 1957 by local cities and counties to deal with regional concerns including growth, housing, environment, public health and safety—as well as transportation. COG is an independent, nonprofit association. It is supported by financial contributions from its participating local governments, federal and state grants and contracts, and donations from foundations and the private sector. COG is committed to ensuring that all of its planning and other activities are conducted in an open and fair way without regard to race, color or national origin.

The TPB, as part of the Metropolitan Washington Council of Governments, follows COG Title VI policies related to Disadvantaged Business Enterprise (DBE) and Equal Opportunity. The TPB has been very proactive in ensuring that the planning process complies with Title VI laws, Environmental Justice (EJ) and Limited English Proficiency (LEP) guidance by adopting/undertaking the following goals, policies, approaches, procedures and measurements:

1) The TPB created the Access for All (AFA) Advisory Committee on November 15, 2000 to advise the TPB on issues and concerns of low-income and minority communities, persons with disabilities and persons with limited English proficiency (LEP). The committee is very active and is comprised of approximately 15 community leaders and also has ex-officio representation from the major transportation agencies in the region. The AFA is chaired by a TPB member (currently Supervisor Catherine Hudgins, Fairfax County) who makes reports to the TPB on AFA issues and concerns. More information is available about the AFA at: www.mwcog.org/transportation/committee/afa;

2) The TPB also complies with the Environmental Justice guidance by regularly conducting an analysis of how the long-range plan impacts low-income, minority and disabled populations that is documented on the CLRP webpage at: www.mwcog.org/clrp/performance/EJ/EJintro.asp; and

3) The TPB follows the COG accommodations policy for people with disabilities and those with limited English proficiency (LEP) to ensure access to documents and meetings: www.mwcog.org/accommodations. COG's DBE policy has been filed with the FTA and is at: www.mwcog.org/doingbusiness/dbe .

S2. Describe the MPO's process for handling Title VI (and other) complaints. Please provide detail of any active or previously resolved Title VI complaints regarding the MPO or the transportation planning process. What tracking mechanism does the MPO have regarding Title VI complaints?

Title VI complaints are handled differently depending on the nature of the complaint. Complaints related to transportation services, programs or construction would be forwarded to the agency directly responsible for the service, program or project. Title VI complaints related to the TPB planning process, the CLRP or TIP would be addressed by senior staff and/or COG's legal counsel. The TPB has no active or previously resolved complaints. Title VI complaints would be tracked by the Director of Program Coordination and a Principal Transportation Planner.

S3. Describe the planning process used to develop a demographic profile of the metropolitan planning area that includes identification of the locations of socioeconomic groups, including low-income, disabled, LEP, and minority populations as covered by Title VI provisions.

Data from the US Census and coordination with the TPB Access for All (AFA) Advisory Committee is used to develop a demographic profile of the metropolitan planning area and identify the locations and needs of socioeconomic groups, including low-income, disabled, limited-English proficiency, and minority populations.

More Information
CLRP Environmental Justice Analysis: http://www.mwcog.org/clrp/performance/EJ/EJintro.asp
TPB Access for All Advisory Committee: http://www.mwcog.org/transportation/committee/afa

S4. How does the MPO determine the need to have documents available in alternative formats? (e.g., Braille, large print, tape cassette, other languages)?

TPB offers to provide any materials in alternative formats upon request. Materials are most commonly provided for people with visual impairments in large print or on CD in formats that are compatible with screen readers. Documents and meeting materials distributed by TPB include a contact phone number and email address for requests of documents in alternative formats. The notice on accommodation requests is most commonly stated as follows and included in the footer of documents:

Alternative formats of this agenda and all other meeting materials can be made available for persons with disabilities. Phone: 202.962.3300 or 202-962.3213 (TDD) Email: accommodations@mwcog.org. Allow 7 working days for preparation of the material. Electronic versions are available at: www.mwcog.org.

More Information
MWCOG Accommodations Policy: http://www.mwcog.org/accommodations/default.asp

S5. To what extent in the planning process are data collected and analyzed by the MPO in assessing potential benefits and impacts of transportation system investments, particularly related to low-income and minority populations, LEP populations, the elderly and disabled, and ethic or religious groups?

The performance analysis for the CLRP includes an analysis of the accessibility gains and losses across minority, low-income and disabled population groups. The analysis utilizes the demographic profile described under question S.3. above. Accessibility is measured in terms of the number of jobs accessible within 45 minutes by auto, transit, and transit specifically accessible by walking. This analysis specifically looks at how accessibility will change between the current condition and the planning horizon year as a result of the implementation of the CLRP. Accessibility to retail jobs is also examined, because these jobs are correlated with shopping opportunities and entry level employment, the latter of which may be of particular interest to the low-income population.

The TPB's Access for All Advisory Committee reviews the analysis and provides comments. The AFA has recommended that the region improve bus stops in low-income communities and make more stops fully accessible to people with disabilities. The AFA has also stated that many people with limited incomes, people with disabilities, and those with limited English skills rely solely on bus service to meet their daily travel needs. In response to this identified need, the TPB collaborated with WMATA to submit an application for grant funding from the FTA Section 5309 Bus and Bus Facilities Livability Initiative Program in February 2010 to implement a regional bus stop improvement program. The program identified site improvements at approximately 2,800 bus stops by using the demographic maps showing the locations of economically disadvantaged people, older adults, people with disabilities, limited English speaking persons and those with limited access to vehicles.

More Information
CLRP Environmental Justice Analysis: http://www.mwcog.org/clrp/performance/EJ/EJintro.asp
TPB Access for All Advisory Committee: http://www.mwcog.org/transportation/committee/afa
Regional Bus Stop Improvement Program Proposal:
http://www.mwcog.org/transportation/documents/BusLivApp_WMATA.pdf

S6. Discuss the number and nature of consultant contracts used by the MPO. Are there contracting opportunities for planning studies, corridor studies, or other work to include minorities, women, and Minority Institutions of Higher Education (MIHE) and Historically Black Colleges and Universities (HBCUs)?

The TPB offers a number of contracting opportunities for studies and consulting services to support its planning efforts. COG, as the administrative agent for the TPB, through its Purchasing Office maintains a list of DBEs that receive all notifications when it releases solicitations. The solicitation notifications are also published in a national publication and posted on the COG website. The DBE list does not currently include MIHE and HBUC but will correct this prior to the next solicitation.

S7. Does the MPO track DBE participation through the use of the Bid Opportunity List and DBE Participation Statement? Does the MPO report actual payments to DBEs? What methods are used? How is data collected? Who is responsible for this data? How is it reported to FHWA and FTA?

COG does have a DBE Participation Statement and does report actual payments to DBEs for TPB-related contracts. The Purchasing Office is responsible for maintaining all records for each procurement that indicate the names of all firms who received IFBs or RFPs or informal solicitation requests, the bids or proposals received, the ranking of the bids or proposals received, and the name(s) of the firm(s) awarded the contract. COG is instituting a new Electronic Content Management System which will provide data on all contract awards to DBE. Currently the information is tracked by contract award by the Purchasing Office. TPB submits a bi-annual Uniform Report of DBE Commitments/Awards and Payments to FTA and FHWA for all USDOT-assisted contracts. Additional information about COG's DBE policies can be found at http://www.mwcog.org/doingbusiness/dbe/.

S8. Does the MPO have the "DBE Assurance" language in all of its contracts? "The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate."

All contracts include language covering federal civil rights requirements, including compliance with Title VI.

T. CLIMATE CHANGE

The federal team is interested in exploring TPB's planning activities related to consideration of climate change both through reduction of greenhouse gas (GHG) emissions and adaptation of transportation networks to extreme weather, including possible regional evacuation planning. Although SAFETEA-LU requirements do not directly address climate change, there are relevant broad references in the planning factors to "protect and enhance the environment, promote energy conservation," and to increase the safety and security of the transportation system.

T.1. What activities does TPB have underway to incorporate climate change considerations in the its transportation planning process? Are you addressing both mitigation and adaptation -- greenhouse gas (GHG) reductions as well as adaptation of transportation networks? And how?

TPB has been addressing climate change and transportation planning since 2007 through involvement in the development of a large multi-sector climate report, leadership on the study of climate change mitigation potential of specific transportation strategies, and by building the foundation for ongoing mitigation and adaptation analysis and planning.

In November 2008, COG adopted the National Capital Region Climate Change Report, available here: http://www.mwcog.org/store/item.asp?PUBLICATION_ID=334. The report was completed through an ad hoc Climate Change Steering Committee made up of elected officials and transportation, land use planning, and environmental officials. The report provides a comprehensive, multi-sector framing of climate change issues in the region, including a discussion of both mitigation and also adaptation issues. It also includes significant regional greenhouse gas reduction goals, as well as recommendations for achieving those goals for all sectors.

The TPB is completing a study to examine the mobile emissions reduction potential of a variety of transportation strategies through its "What Would it Take?" scenario. As part of this scenario, TPB has developed a mobile GHG inventory and forecast and built off of regional air quality work to analyze transportation demand strategies for GHG emissions. The results of this scenario are being used to inform local governments on cost-effective measures they can adopt to reduce mobile GHG emissions. TPB has a Scenario Study Task Force comprised of elected officials and transportation officials to oversee the climate change study. There is also COG-wide climate change stewardship through a Climate, Energy, Environment and Policy Committee, which has members of elected officials, land-use, transportation and environmental planners and interest groups.

Climate change has also emerged as a factor in evaluating TPB planning activities, such as the Metropolitan Area Transportation Operations Coordination (MATOC) Program. TPB is currently completing a cost-benefit analysis of the MATOC program, which explicitly includes GHG emissions reduction as a monetized regional benefit.

Finally, the climate change goals adopted by COG have been included in the TPB's current Call for Projects as an item for consideration in the submission of projects for inclusion in the 2010 CLRP and FY2011-2016 TIP.

T.2. How is climate change addressed in long-range planning, including work on vision or scenario plans or in updating the CLRP? Has it affected TIP development, including project screening or selection?

As described under T.1. above, the TPB has addressed climate change in long-range planning through the setting of regional GHG emissions reduction goals, extensive scenario planning, and including climate change in the policy context for submitting projects for inclusion in the CLRP and TIP.

First, COG has adopted a long-range climate vision, most notably manifest through GHG emissions goals for 2012, 2020 and 2050. This is part of a comprehensive climate change report, described more thoroughly in the answer to T.1. above.

Second, in 2007 the TPB began its "What Would it Take?" scenario, which examines the scales and combinations of interventions that will be necessary to meet COG's climate change goals in the transportation sector. Within this scenario, TPB has developed mobile GHG inventories and forecasts, based on adopted long-range plans. These inventories/forecasts also incorporate current federal legislation to better benchmark the region's progress toward meeting climate mitigation goals. TPB has also used modeling and sketch planning techniques to determine the reduction potential of individual strategies that achieve improved vehicle fuel efficiency, increased alternative fuel use, improved operational efficiency, and transportation demand management. Cost-effectiveness analysis was completed on individual strategies to assist local governments and states in prioritizing strategies for adoption. Under the scenario different groupings of these individual strategies were analyzed to see how their combinations would perform against the regional GHG emissions benchmark and goals. TPB used this scenario to determine local strategies that are effective and cost-effective, some of which can then be poised for adoption.

TPB is also completing a regional transportation and land-use scenario that was developed in close collaboration with all of COG's member jurisdictions, including the planning directors and key transportation planners. The scenario includes an alternative land-use growth scenario in which growth is concentrated in COG "Regional Activity Centers" and around transit stations, as well as an extensive variably priced lane and bus rapid transit network. More information on this scenario is provided in the answer to question W.3. This scenario has been modeled to determine key impacts on travel demand, and also has been analyzed for GHG and criteria air pollutants.

Third, the scenario studies have been used to provide a policy context for project screening/selection via the TPB's current Call for Projects, which now includes language to consider the regional climate change goals, as well as broader sustainability and livability goals through other visioning efforts, such as the Greater Washington 2050 Coalition's Region Forward report and regional compact, when submitting projects for inclusion in the CLRP and TIP. This language can be found on page 14 of the Call for Projects, available here: http://www.mwcog.org/clrp/resources/2010/2010_Call_for_Projects-Final.pdf.

T.3. How have regional transportation planning activities changed as a result of adding greenhouse gas emissions reductions as a stated goal? Are there any funding implications (new sources, emphasis of different types of investments, or changes in allocation procedures)?

Regional transportation planning activities have included climate change as a major effort in response to the addition of GHG emissions reductions as a stated regional goal. This goal made further study necessary in order to determine how regional/state/local transportation planning may need to change to

achieve it. In order to begin to answer this question, the TPB initiated the "What Would it Take?" scenario, described in more detail in the answer to question T.2. above.

TPB's climate change activities began before a clear environmental sustainability goal was espoused on the federal level; however, with the availability of new funding that directly considers and rewards GHG reduction, the TPB has been able to take a leading role in the region. For instance, through the TPB's scenario study, the TPB identified several effective strategies for climate change mitigation that are poised for adoption should additional money become available. Specifically, in the TPB's transportation and land-use scenario, a regional bus rapid transit system was developed, modeled, and shown to increase transit use significantly throughout the region, thereby reducing projected GHG emissions. With the availability of TIGER funding, the TPB received $58.8 million in federal funding for a priority bus corridor network based on that scenario in order to respond to the grant's sustainability and livability criteria.

T.4. Has there been an additional/different emphasis or policies regarding promoting transit related to GHG emission reductions? How have you communicated your efforts and changes in policy/approach to key stakeholders and the public, and involved them in the process? How have they responded?

In the scenario analysis done to date by the TPB, even small transit projects have been shown to reduce emissions. Therefore, when opportunities have arisen that include climate change mitigation as a criterion, the TPB has placed additional emphasis on transit. TPB demonstrated this transit emphasis in its regional TIGER grant submission, for which the region was awarded $58.8 million to complete a first-stage regional bus priority network. Although the grant program was multimodal in nature, the TPB took the opportunity to promote transit because of the primary sustainability and livability criteria.

This transit emphasis was developed in collaboration with key stakeholders, such as member local governments and interest groups, through their participation in developing the TPB Scenario Study, and their subsequent role in developing the regional TIGER submission. In anticipation of a regional grant submission, the TPB provided key stakeholders with regionally specific grant criteria that were developed based on the federal criteria, but with regional goals also reflected. The regionally specific criteria focused wholly on sustainable transportation projects, as well as other goals. Stakeholders responded positively, resulting in widespread regional interest and cooperation.

T.5. What technical methods, including modeling, does the MPO or other partner agencies use to analyze and forecast greenhouse gas emissions? What challenges have you encountered?

For GHG emissions inventories, forecasts, and strategy analysis, the TPB has used the regional travel demand model and the Mobile 6.2 emissions model to produce carbon-dioxide (CO_2) rates. These rates are used to forecast the CO_2 portion of the greenhouse gas emissions inventories. The Mobile 6.2 model does not vary the CO_2 rates by speed nor does it address other greenhouse gas pollutants, such as methane. The model is also not capable of addressing the effects of the new CAFE standards.

In order to analyze the benefits of recently adopted CAFE standards, off-model analyses were used with consultant assistance. In order to model individual transportation strategies, including alternative fuel use, fuel efficient car purchase incentives, and demand management, sketch planning techniques were used.

These techniques were developed based on methodology used for transportation emission reduction measure analysis for criteria pollutants.

Several challenges have been encountered because climate change analysis is a relatively new practice. First, many strategies analyzed depend on the analysis CO_2 by speed; however, since the CO_2 rates in the Mobile 6.2 model do not vary by speed, analysis of measures that improve traffic flow and reduce congestion was difficult and relied on off-model calculations. Additionally, there is not sufficient regional data on alternative fuel use to produce regionally-specific forecasts. Therefore, TPB analysis has relied on national-level data. Estimating emissions reductions from specific technologies was also difficult in the absence of official EPA emissions rates for the variety of fuels and technologies projected to be in use by DOE.

T.6. Is the MPO involved with encouraging use of more efficient and alternative fuel vehicles? Are there any related policies and practices regarding road management directed to VMT reduction? What types of related changes have been made in activities or policies related to freight movement and GHG emissions?

As part of the TPB scenario study, described in question T.2. above, the TPB has studied the benefits of alternative fuel use through its climate change scenario. This analysis has been disseminated to member local governments and the public via the COG website, demonstrating the GHG emissions reductions that can be achieved through wider adoption of technologies, such as ethanol, electric vehicles and CNG, among others. Additionally, staff has completed analysis for member jurisdictions on the emissions impacts from public use of alternative fuel technology, such as CNG buses, to assist in the decision-making process.

COG coordinates the Metropolitan Washington Alternative Fuels Clean Cities Partnership, which encourages and accelerates the use of alternative-fueled vehicles in the metropolitan Washington region specifically for the purposes of improving energy security and environmental quality. The partnership consists of local government and private fleet managers; area utilities and other alternative fuel interests; non-profit environmental and advocacy organizations; federal and state governments; and academia. Through this partnership, COG provides members with best practices and forum for regional cooperation on further developing alternative fuel use in the region. Activities include a regional ethanol impacts workshop, hydrogen seminar, and a clean transportation fuel fleet seminar. The partnership also conducts a regional fleet survey to gain an understanding of the fuel use and alternative fuel infrastructure for public fleets in the region.

U. LINKING NEPA AND TRANSPORTATION/ENVIRONMENT

U.1. Does the LRTP provide specific project-level information from the planning process, such as clear project descriptions, purpose and need statements for each project, anticipated project milestones for each phase, and funding source information? To what extent does the MPO participate in defining a project's Purpose and Need that is used to determine the range of reasonable alternatives to be considered in the environmental process?

Each project in the CLRP includes a complete description including cost, funding sources and completion dates. While procedures vary within the District, Maryland and Virginia for major projects, the State DOTs generally invite MPO review and comment on Purpose and Need reports during the course of the NEPA process. Additionally, for all major projects, the CLRP project description forms include a list of check boxes that correspond to the TPB's Vision and the eight federal planning factors. Each agency is required to indicate which of the goals in the TPB Vision are supported by their projects.

U.2. Are sub area or corridor studies undertaken in the MPO planning area? If so, what organizations are involved and what are their roles? Are these studies conducted so that planning decisions and analyses may be carried through to the project development and environmental review processes?

The TPB routinely conducts subarea / corridor studies throughout the region as part of its technical assistance program. Primarily, studies are performed in response to requests from the State DOTs, however, a number of regionally significant activities have also been conducted in response to requests from FHWA, e.g., the Wilson Bridge and 14th Street Bridge studies. The studies performed as technical assistance projects for the State DOTs may be carried out as either general planning studies or as specific elements of NEPA analyses. DOTs may request basic feasibility studies, i.e., general planning efforts to ascertain travel demand forecasts in specified areas, in order to determine order of magnitude travel estimates and long term planning needs; recent examples include Virginia HOT Lane and Maryland Managed Lane assessments. In such cases the TPB engages in a client / consultant arrangement with the DOT and / or one of its modal administrations.

In other instances systems level planning efforts are requested and are conducted to specifically address NEPA requirements for a project. Recent examples include the Intercounty Connector and I-270 studies in Maryland. In such studies, the TPB's preparation of systems level forecasts represents only one component of a much larger planning process in which the implementing agency has the lead role in an inclusive, multi-disciplinary project team effort.

U.3. To what extent are potential environmental mitigation activities discussed in the MTP?

Potential environmental mitigation activities are discussed through the TPB's environmental consultation process, which is documented on the CLRP website here:
http://www.mwcog.org/clrp/elements/environment/default.asp.

In 2007, the TPB initiated the regional environmental mitigation discussion by documenting the key mitigation issues regarding connections between environmental quality and transportation development.

The discussion also included an overview of mitigation strategies already employed in the region and the identification of elements to explore through the environmental consultation process. This discussion document is available here: http://www.mwcog.org/clrp/elements/environment/envmitigation.asp.

In 2008, the TPB held an in-person meeting with environmental and transportation planners from across the region, where potential mitigation activities were discussed. Following specific feedback from meeting attendees, the TPB collected GIS information and developed a working map of potential restoration areas and areas for "meaningful mitigation", as identified at the 2008 meeting. An overview of the 2008 meeting and the next steps identified are available here: http://www.mwcog.org/clrp/elements/environment/envconsult2008.asp.

In 2009, the TPB further built upon stakeholder feedback and held a workshop in partnership with FHWA called "Exploring Opportunities and Challenges for Advanced Mitigation." The workshop facilitated a discussion with state and local transportation and environmental resource agencies on ways to better coordinate transportation and conservation planning, in order to streamline the delivery of transportation programs and promote meaningful environmental mitigation. The workshop specifically enabled participants to discuss and prioritize opportunities and strategies in support of advanced mitigation in the region, which formed a set of next steps for future environmental consultation efforts. This workshop is discussed in greater detail here: **http://www.mwcog.org/clrp/elements/environment/envconsult2009.asp.**

U.4. What role do the resource agencies serve in the discussion of environmental activities in the MTP?

As part of the environmental consultation process, the TPB has conducted three major outreach efforts in 2007, 2008 and 2009 (described in U.3. above). The initial effort was conducted via mail in order to solicit comments on the plan and also to gain feedback on future consultation direction. Two meetings have been held to date in 2008 and 2009. Both meetings were structured in order to get feedback from environmental and transportation agencies on how the consultation process and the TPB specifically can provide useful assistance in linking environmental and transportation planning. Feedback from the 2008 meeting was used directly in shaping the 2009 consultation effort. Similarly, the meeting held in 2009 culminated in the creation of an environmental consultation action plan at the meeting itself. This action plan will continue to drive TPB's environmental activities.

Further information on this process can be found in the answer to question U.3.

U.5. What strategies are used to consult with state and local resource agencies in the development of the MTP?

A variety of strategies are used to consult with state and local resource agencies. The TPB has solicited comments on the CLRP by sending request letters and information on the plan via regular mail and email to a wide distribution list of resource agencies. A focused and interested group of resource agency staff was identified for specific email comment on TPB products, such as environmental resource and transportation plan maps, available here: http://www.mwcog.org/clrp/elements/environment/envmapping.asp.

In developing these maps, resource agencies were regularly consulted for data collection and sharing purposes, as well as to receive guidance on the proper use and display of their information.
Finally, in-person meetings with resource and transportation agencies were used and have proven to be the most successful in generating interest and engagement. Meetings have been used to provide information to environmental planners about the transportation planning process and vice versa, and to highlight potential linkages between the two disciplines. In-person meetings have also included subject-specific workshops, allowing stakeholders and the TPB to delve into subjects of interest more deeply, such as advanced mitigation.

V. OPTIONAL ADDITIONAL COMMENTS

V.1. Please provide any additional comments for consideration during the Planning Review.

The TPB demonstrated successful regional coordination by achieving consensus and buy-in among the three Departments of Transportation, WMATA and local jurisdictions for submitting a $270 million TIGER grant application for a regional bus priority system and regional bike sharing. TPB submitted the application in one of the largest regional transportation efforts since the launch of Metrorail. As a result, COG/TPB received a $58.8 million TIGER grant for a regional bus priority system and transit center. This new planning activity will usher in a new era for the TPB in directly managing and administering TIGER funds to build and operate a major regional transit project. The figure below shows the components of the Regional Priority Bus Network that were funded by TIGER.

More than $26 million of the funding will go to improving bus transportation along priority corridors in the District of Columbia, Maryland and Virginia. Improvements to these corridors include dedicated bus lanes, transit signal priority, limited-stop service, enhanced pedestrian access, real-time passenger information and enhanced bus stops to increase bus ridership and reliability in these busy corridors.
More than $19.9 million will fund multimodal improvements for priority bus transit connecting portions of Northern Virginia with the District of Columbia. These improvements will provide high quality transit options for commuters and relieve pressure on the regional Metrorail system.

Finally, more than $12.3 million will be used for a new multimodal transit center in Prince George's County, Maryland, to improve safety and intermodal access to priority bus corridors. In addition to providing connections to several highly-used bus routes, the center will serve the planned Purple Line, a 16-mile intra-suburban light rail line connecting Bethesda in Montgomery County to New Carrollton in Prince George's County in Suburban Maryland.

The U.S. Department of Transportation received 1,400 applications totaling nearly $60 billion. Only 51 awards were made, however, totaling the available funding amount of $1.5 billion. The extreme level of competition demonstrated nationwide for these TIGER funds further underscores the significance of the Washington region's success in this effort.


The Regional Priority Bus Network
Completion, February 2012
Takoma/
Langley
Laurel
Muirkirk
Wheaton
Forest Glen
Shady Grove
Rockville
Greenbelt
College Park
Riverdale
Medical
Center
Montgomery Mall
Bethesda
Friendship Heights
Tenleytown
Rhode Island Ave.
Shaw
Mt. Vernon Sq.
Union Station
Minnesota Ave
Gallery Place
Archives
Tysons Corner
Rosslyn
Foggy
Bottom
Ballston
Potomac Ave
Addison Rd.
Pentagon
Southern Ave
Suitland
Crystal City
Braddock Road
King Street
Van Dorn St.
Springfield
Lorton
Dale City
Priority Arterial Corridors
DC
1 16th St, Downtown to Wheaton
2 Georgia Ave from Archives to Silver Spring
3 H St / Benning Road, Minn. Ave to Franklin Sq.
4 Wisconsin Ave, Naylor Rd to Friendship Heights
MD
5 Addison Rd, Southern Ave to Addison Rd station
6 University Blvd, Bethesda to College Park
7 US 1, Laurel to Rhode Island Ave. station
8 Veirs Mill Rd, Shady Grove to Silver Spring
VA
9 US 1 Transitway, Potomac Yard
10 VA 7, Alexandria to Tysons Corner
11 Van Dorn-Pentagon, via Shirlington
Express Bus on Bridges and Arterials
12 Theodore Roosevelt Bridge, I-66 to K Street
13 14th St Bridge, I-395 to K Street
Express Bus on Freeways
14 I-95/395, Pentagon to Dale City
Transit Center Projects
Existing Metrorail
Bus/Rail Transfers

W. LIVABILITY

W.1. What type of regional goals and policies has the MPO developed to reflect quality of life and livability in the MTP?

The TPB Vision, adopted in 1998, sets several goals and policies aimed at maintaining and improving the quality of life in the Washington Region. It is a policy document that lays out eight broad goals to guide the region's transportation investments into the 21st century. Goals Two and Five both speak directly to regional quality of life, including walkability, environmental quality, and preservation of cultural and historic resources as elements of livability.

In addition, the TPB and MWCOG have cooperated on development of the Greater Washington 2050 initiative and the Region Forward report, which outlines a multi-faceted approach to improving quality of life in the Washington Region. The document includes goals for transportation as well as the environment, affordable housing, education, and public health. It also provides targets and indicators that provide a clear roadmap for the region and its individual jurisdictions to follow in improving the region's livability in the next few decades.

The TPB and MWCOG are also collaborating on the pursuit of regional planning grants through the HUD Sustainable Communities Planning Grant Program**.** Past collaboration between the region's planners and officials in various topic areas related to quality of life make the region well-positioned to capitalize on new opportunities arising from a renewed federal focus on livability.

The TPB has also developed information and resources regarding combined transportation and housing costs as a major livability factor. Through the Transportation/Land-Use Connections (TLC) Program, the TPB is currently developing maps and case studies demonstrating the relative affordability of various parts of the region, and the importance of transit accessibility and jobs-housing balance to overall livability.

W.2. What type of initiatives to reach beyond the usual stakeholders and interest groups through the public participation plan, including seeking the involvement of groups or agencies that are concerned with housing, public health and fitness, water resources, or other "non-traditional"

The TPB Participation Plan, adopted in 2007, emphasizes that all residents of the Washington Region, along with those who travel or ship goods through it, are "interested parties" in that they have an interest in the efficient functioning of the region's transportation networks. As such, the TPB has sought to inform and involve groups and agencies that have not traditionally been a part of the transportation decision-making process.

The TPB's Community Leadership Institute, a workshop designed to help community activists learn how to get involved more effectively in transportation decision-making in the Washington Region, has also helped the TPB reach out to communities and groups that typically have not been involved in the TPB process. The first CLI was held in 2006, and subsequent workshops have been tailored to advocates for seniors (in cooperation with local AARP chapters) and to advocates for limited-English proficiency (LEP) communities. Other participants have included affordable housing advocates, community association leaders, and business organization leaders. Several alumni of the CLI now participate in the TPB's Citizens Advisory Committee.

The TPB has also extended its consultation process for development of the regional Constrained Long-Range Transportation Plan to affected land use management, natural resources, environmental protection, conservation and historic preservation state and local agencies. In November 2009, the TPB held a consultation workshop with environmental resource and transportation agencies from around the region.

In addition, the TPB has long been recognized for its efforts to involve minority and low-income communities and persons with disabilities in the transportation planning process through the Access For All Advisory Committee. This committee regularly provides input to the TPB and the region's transportation implementing agencies and transit operators on issues of importance to those constituencies.

The TPB has also recently developed a presence on Facebook, taking advantage of the possibilities of social networking to reach non-traditional audiences.

W.3. What level of coordination is done between the transportation planning agencies and local, regional, or state land use planning, development, and/or management agencies

There is significant coordination done between transportation and land use planning agencies at the planning and policy levels. The TPB is currently completing its second major transportation and land-use scenario study, which examines alternative land-use growth and transportation investments. The scenario was developed with a high level of stakeholder outreach. Meetings in each jurisdiction were held with both planning and transportation staff together in order to encourage collaboration within the jurisdiction, as well as regionally. More information on the scenario study can be found in the answer to the question Q.5.

Additionally, COG produces the Cooperative Forecast, which provides regularly updated population, household, and employment forecasts based on specific transportation analysis zone-level inputs by all of the COG member local jurisdictions. This forecast serves as a significant input into much of the TPB's work, including the regional travel demand model and regional scenario studies. This coordination allows for the increased ability for the TPB to examine land use directly, primarily through the aforementioned scenarios. COG has also identified Regional Activity Centers and Clusters as a tool to help guide land use and transportation planning decisions. This land use effort has become a part of the region's transportation policy vision and has thus served as a growth management criterion in the TPB scenario study. More information on the COG Regional Activity Centers and Clusters is available here: http://www.mwcog.org/planning/planning/activitycenters/.

The TPB also administers its Transportation/Land Use Connections Program (TLC), which provides a regional information clearinghouse on linking transportation and land use, as well as a technical assistance program for member local jurisdictions. A primary objective of the TLC program is to increase coordination between transportation and land use planners locally and regionally. TLC technical assistance projects have been found to increasingly encourage this type of coordination. More information on the TLC program is available here: http://www.mwcog.org/transportation/activities/tlc/ and in the answer to question Q.1.

W.4. How are issues related to "smart growth", context-sensitive solutions, "complete streets", transit-oriented development, etc. considered, advanced, or supported through the MPO, State DOT, transit operator(s), local jurisdictions, or other organizations in the region?

The TPB Vision continues to guide TPB initiatives that seek to enhance regional livability, most notably the Transportation/Land-Use Connections (TLC) Program. This program provides support to local governments in the Metropolitan Washington region as they work to improve transportation/land-use coordination. Through the program, the TPB provides communities with technical assistance to catalyze or enhance planning efforts that are focused on smart growth, transit-oriented development, complete streets, and related concepts.

The Bicycle and Pedestrian Subcommittee sponsors regional bicycle and pedestrian planning and design training, outreach, and professional development opportunities for member agency staffs or other stakeholders. Topics have included Advanced Bicycle Facility Design, Trails as Transportation Facilities, and Safe Routes to School. The goal is to integrate walking and bicycling into transportation facilities, and to provide for all users of the transportation system.

Although the TLC Program has helped catalyze cutting-edge planning in the Washington Region's jurisdictions, the region was already at the forefront of such efforts. The region's primary transit provider, WMATA, has a history of promoting transit-oriented development through its Joint Development Program, and recently has revised its joint development guidelines to emphasize local participation and context-sensitivity. The Maryland Department of Transportation has a Transit-Oriented Development Strategy that promotes surrounding transit stations with vibrant, walkable neighborhoods. MDOT has also provided funding for TLC technical assistance projects in Maryland. The State of Virginia has sought to promote TOD and context-sensitive solutions through a statewide Multimodal Planning Grant program that funded several of the TLC technical assistance projects in Northern Virginia, along with other projects in the region. The District of Columbia has several programs in place through its Office of Planning and Department of Transportation that encourage innovative transportation planning, including the Great Streets Program, which takes a multidisciplinary approach to corridor improvement comprising public realm investments, strategic land use plans, public safety strategies, and economic development assistance.

APPENDICES

APPENDIX 1: GLOSSARY OF COG AND TPB TERMS

CAAA	Clean Air Act Amendments of 1990
CAC	Citizens Advisory Committee
CLRP	Constrained Long Range Plan
CMAQ	Congestion Mitigation & Air Quality
COG	Metropolitan Washington Council of Governments
DDOT	District Department of Transportation
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HOV	High Occupancy Vehicle
JARC	Job Access Reverse Commute Program (Section 5316)
MARC	Maryland Rail Commuter trains
MDOT	Maryland Department of Transportation
MPO	Metropolitan Planning Organization
MTA	Maryland Transit Administration
MWAA	Metropolitan Washington Airports Authority
MWAQC	Metropolitan Washington Air Quality Committee
NCPC	National Capital Planning Commission
NEPA	National Environmental Policy Act
NVTA	Northern Virginia Transportation Authority
NVTC	Northern Virginia Transportation Commission
New Freedom	New Freedom Program (Section 5317)
PRTC	Potomac and Rappahannock Transportation Commission
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act; a Legacy for Users
SIP	State Implementation Plan (air quality)
TAZ	Transportation Analysis Zone
TEA-21	Transportation Equity Act for the 21st Century
TERMs	Transportation Emissions Reductions Measures
TIP	Transportation Improvement Program
TLC	Transportation/Land-Use Connections Program
TPB	National Capital Region Transportation Planning Board
US DOT	U.S. Department of Transportation
US EPA	U.S. Environmental Protection Agency
VDOT	Virginia Department of Transportation
VDRPT	Virginia Department of Rail and Public Transportation
VRE	Virginia Railway Express
WMATA	Washington Metropolitan Area Transit Authority

APPENDIX 2: LINKS TO KEY TPB DOCUMENTS ON THE WEB

Document	Link
2009 CLRP	www.mwcog.org/clrp
2009 CLRP and FY2010-2015 TIP Brochure	http://www.mwcog.org/store/item.asp?PUBLICATION_ID=369
FY2010-2015 TIP	http://www.mwcog.org/clrp/projects/tip/fy1015.asp
Air Quality Conformity Analysis of the 2009 Plan and FY2010-2015 TIP	http://www.mwcog.org/transportation/activities/quality/
Call for Projects for 2010 CLRP and FY2011-2016 TIP	http://www.mwcog.org/clrp/resources/2010/2010_Call_for_Projects-Final.pdf
Financial Plan	http://www.mwcog.org/clrp/elements/financial.asp
Participation Plan	http://www.mwcog.org/uploads/pub-documents/yVhWWQ20080107103512.pdf
FY2010 UPWP	http://www.mwcog.org/uploads/pub-documents/z1ZeWQ20090504162521.pdf
Coordinated Human Service Transportation Plan	http://www.mwcog.org/tpbcoordination/documents/Updated_Coordinated_Human_Service_Transportation_Plan.pdf
A Citizen's Guide to Transportation Planning in the Metropolitan Washington Region	http://www.mwcog.org/uploads/pub-documents/zldaWw20080717100247.pdf
Bicycle and Pedestrian Plan	http://www.mwcog.org/transportation/activities/planning/