

**TPB TECHNICAL COMMITTEE MEMBERS AND ALTERNATES
ATTENDANCE - January 9, 2004**

TPB Technical Committee
Item #1

DISTRICT OF COLUMBIA

DDOT Rick Rybeck

WMATA

MARYLAND

WMATA Lora Byala

Frederick Co. James Gugel
Gaithersburg -----
Montgomery Co. David Moss
Prince George's Co. -----
Rockville -----
M-NCPPC
 Montgomery Co. -----
 Prince George's Co. Faramarz Mokhtari

MDOT Fatimah Hasan
 Mike Haley
 BJ Berhanu

FEDERAL/OTHER

FHWA-DC -----

FTA -----

NCPC -----

NPS -----

MWAQC -----

VIRGINIA

Alexandria Jim Maslanka
Arlington Co. Harriett Dietz
City of Fairfax -----
Fairfax Co. Tom Biesiadny
 Mike Lake
Falls Church -----
Loudoun Co. -----
Manassas -----
Prince William Co. Rick Canizales
NVTC -----
PRTC -----
VRE -----
VDOT -----
VDRPT -----
NVPDC -----
VDOA -----

COG Staff and Others

Ronald Kirby, COG/DTP
Gerald Miller, COG/DTP
Jim Hogan, COG/DTP
Joan Rohlfs, COG/DEP
Beth Lowe, COG/DEP
Robert Griffiths, COG/DTP
Mark Pfoutz, COG/DTP
Mark Moran, COG/DTP
Andrew Meese, COG/DTP
Andrew Austin, COG/DTP
Daivamani Sivasailam, COG/DTP
Michael Freeman, COG/DTP
Randy Carroll, MDE
Jeff Stehr, University of Maryland
Arlee Reno, Cambridge Systematics
Kiran Bhatt, Cambridge Systematics
Tim Nutter, NVTA
Kenneth Todd, NCBW
James Wamsly, FCSG
Harry Sanders

TRANSPORTATION PLANNING BOARD

TECHNICAL COMMITTEE MINUTES

1. Welcome and Approval of Minutes from December 5 Technical Committee Meeting

Minutes were approved as written.

2. Update on the Region's State Implementation Plan (SIP) Submissions to the Environmental Protection Agency (EPA)

Ms. Rohlfs informed the Committee that the updated SIP had been submitted to EPA for review and is out for public comment. She spoke from two handouts: a list of public hearing meetings and a December 16, 2003, Federal Register notice stating EPA's adequacy determination of the motor vehicle emission budgets. MWAQC is expected to approve the SIP at its February 19, 2004, meeting and forward it to EPA for its approval.

The Committee then discussed the topic, including the following: Maryland's public comment period extends through close of its scheduled public hearings.

Mr. Clifford noted that the TPB had waited for the Federal Register notice to be released before it approved the conformity assessment at its December 17, 2003, meeting, with its finding to be effective as of December 31, 2003, consistent with EPA's notice.

3. Ozone Transport in the Washington Region

Dr. Stehr from University of Maryland presented a slide show to the Committee describing the role of ozone transport in the Washington area.

The Committee then discussed the topic, including the following: Can local control effects be measured (not at this time); How are airplanes contributing? (aircraft emit high emission levels, but they are located at high altitude and emissions are widely dispersed; California is placing controls on aircraft and ships); How is the new 8 hour standard different for ozone? (more violations, transport becomes more significant).

4. Draft Solicitation Document and Schedule for the Air Quality Conformity Assessment for the 2004 Constrained Long Range Plan (CLRP) and FY 2005-2010 Transportation Improvement Program (TIP)

Mr. Miller said that the Committee had reviewed the draft solicitation document for the 2004 CLRP and the FY2005-2010 TIP at its December meeting. He reported that the document was an updated version of the previous year's and noted the proposed schedule of activities on page v. He announced that Mr. Austin on the DTP staff had made available the eTIP database application to the implementing agency staff that prepares TIP and CLRP inputs. The Committee agreed that the solicitation document be approved at the January 21 TPB meeting for distribution to the state, regional and local transportation agencies.

5. Review of Draft FY 2005 Unified Planning Work Program (UPWP) Budget and Outline

Mr. Miller reviewed the information in the mailout on the preliminary budget levels and outline of the work activities for the FY 2005 UPWP, which begins July 1, 2004. He reviewed the estimated funding totals and noted that the budget level was based upon preliminary information from the DOTs. The preliminary FY 2005 budget shows a 2.9 percent decrease from the current FY 2004 budget level. He explained that it assumes no change in new FTA Section 5303 funding from all of the DOTs, no change in new FHWA PL funding from DDOT and MDOT, and a 4 percent increase in new PL funding from VDOT due a revision to the statewide PL allocation formula. He noted that the overall decrease was due to having less unspent funds from FY 2003 than the unspent funds from FY 2002 in the current budget. He said that because the pending federal appropriations levels for FY 2004, which are expected to be finalized by Congress late in January, determine the FY 2005 UPWP budget levels from the DOTs. The FY2005 budget estimate could be revised in February.

Mr. Miller pointed out that the only proposed major work program funding change from FY 2004 involved the household travel survey work activity. The outline, which contains summary descriptions for each work activity, will be the basis for the narrative in the draft of the full document.

Mr. Griffiths gave the rationale for the proposed budget decrease for the Household Travel Survey work activity. He explained the need to design a new survey approach to address the challenge of increasing the sample rate across the region and the declining response rates for telephone surveys. A new survey approach is needed to address these challenges. New surveys will cost millions of dollars more than past surveys. He said that he hoped for higher funding levels in the federal reauthorization and that the survey could be split funded in FY 2006 and 07. He described the different uses of the travel survey results and concerns that past surveys have under reported some trips and VMT. He said that under reporting of trips can be investigated with new tracking technology. In response to Mr. Biesiadny, Mr. Griffiths explained that travel survey data with adjustment factors for under reporting were used for the travel demand model calibration and the model results were adjusted to match the observed VMT data for use in air quality conformity analysis. Chairman Rybeck commented that it is good to invest the time and money now to develop a good survey design.

Ms. Byala asked about when WMATA's Technical Assistance projects need to be submitted.

Mr. Miller replied that they are needed by January 26 for the mail out for the February 6 Technical Committee meeting.

Mr. Clifford explained that the specific EPA requirements for the 8-hour standard are not final so that the new work activities for air quality conformity in the outline are not specific yet. Mr. Hogan reported that the specifics in the travel demand model work activity will be informed by the on-going Transportation Research Board (TRB) review panel report which may not be completed until April or May.

Mr. Miller noted that a complete draft of the FY 2005 UPWP will be presented at the February 6 Technical Committee meeting and released for public comment at the February 18 TPB meeting. A final version will be reviewed at the Technical Committee at the March 5 meeting and presented for TPB approval at the March 17 meeting.

6. Briefing on the Draft Study of Near Term Regional Transportation Funding Needs, Funding Availability, and Project/Program Priorities

Mr. Reno of Cambridge Systematics Inc. (CSI) distributed a set of revised draft tables to the Committee which presented the compilation of the six year highway and transit needs and the unfunded portion of needs for the District of Columbia, Suburban Maryland, Northern Virginia, WMATA, and the entire region. He asked the implementing agencies and local governments to review them quickly so revised tables could be mailed to the TPB for its January 21 meeting. For each jurisdiction, he reviewed the methodologies and assumptions used to identify the needs. He thanked the staffs of all the agencies for their efforts in providing the needs and revenue data.

Ms. Byala said that it was important that no double counting of transit needs occur and that the different ways that needs were identified must be comparable. She said that the year by year funding needs should be shown in all tables. Mr. Reno explained that the methodologies were different but the needs estimates include only capital program needs that each agency could and would implement if the next six years if sufficient resources were available.

Mr. Kirby commented that it is desirable to show annual figures for WMATA and when there are important differences in year to year needs, however, the six year totals may be sufficient for the other tables. He suggested that more specific projects be identified to show what is included in the numbers in the tables so people could have an idea of what is lost unless new funds are available. Mr. Reno said that he would prepare descriptions of projects or types of projects included in each table and asked for help in identifying which projects would be highlighted.

Mr. Biesiadny said it was important to explain the different assumptions used to develop the needs estimates and said that for Fairfax County the total over six years was important not the year by year break down. He said that the Virginia jurisdictions could select some good example projects. Ms. Hassan said that MDOT would look into identifying projects in addition to the Intercounty Connector.

Chair Rybeck commented that the District's total was more important and than year by year information. He said that DDOT will identify specify projects for its table and that a case for the projects should be made so that the public understands their quality of life benefits.

Mr. Kirby suggested that the WMATA table show year by year needs and the other tables present the totals for the six years and, if appropriate, comment on critical timing or phasing for specific projects in certain years. Chair Rybeck suggested that the WMATA total needs be included in each table. Ms. Byala agreed and suggested that a work session should be held soon to review and finalize this information.

Ms. Byala said that it is important to show how the funding shortfall will change under the different levels of federal funding currently being considered in Congress. Mr. Kirby suggested that the Administration level be the base and then show how much of the needs are funded by the House bill and the Senate bill. Chair Rybeck suggested that the case be made for the highest level and show what is not funded if it is not passed. Mr. Reno pointed out that a significant state or local funding match will required for all levels of new federal funds.

Chair Rybeck thanked the Committee for the guidance on the organization and content of tables and brochure.

7. Briefing on Qualitative Analysis of the Potential Regional Air Quality Impacts of HOT Lanes on the Capital Beltway in Virginia

Mr. Moran, of COG/TPB staff, presented this item and distributed 12-page handout, which he spoke from. He mentioned that the engineering firm Fluor Daniel had hired COG/TPB to perform a study of the air quality impacts of adding a new high-occupancy toll (HOT) lane facility to the Capital Beltway in Virginia. The study, which was performed in about two weeks time and was delivered to Fluor Daniel on March 20, 2003, was initially confidential, but was later released to the public by Fluor. The study was divided into two parts: 1) a review of U.S. experience with HOT lanes, and 2) a qualitative, sketch-planning level, analysis of the emissions impact of HOT lanes on the Beltway.

Fluor is proposing a 14-mile HOT lane facility, in the median of the Capital Beltway in Virginia, from Georgetown Pike to I-395. The barrier-separated project would add two HOT lanes in each direction, with tolls varying throughout the day. HOV3+ vehicles and buses could use the facility for free, but other vehicles would have to pay the time-of-day-varying toll. The project is proposed to open in 2009 and would have five intermediate access points in addition to the two ends of the facility. Based on experience from the four existing HOT lane facilities operating in the U.S., one can expect two main responses from travelers in response to a new HOT lane facility. The first-order effect is that traffic is diverted from the general purpose (GP) lanes to the adjacent HOT lanes. The second-order effect is that, after this initial diversion to the HOT lanes, the GP lanes will again begin to fill up with new traffic that is diverted from neighboring arterial roads in the corridor of the HOT lane facility.

The COG/TPB study included both a demand forecast and an emissions forecast. For the demand forecast, COG/TPB staff chose a sketch-planning technique, which has also been used by the San Diego Association of Governments (SANDAG). The technique takes into account both the first- and second-order effects mentioned above, and involves post-processing the results from an existing traffic assignment output from the regional four-step travel model. The emissions estimate relied on using the volume-delay functions from the COG post-processor model and the Mobile6 emissions curves for VOC and NO_x for Fairfax County freeways. The analysis year was 2015, the first air quality conformity year following the proposed 2009 opening date. The baseline facility was from the CLRP for 2015: 4 lanes general purpose in each direction and 1 lane HOV3+ in each direction. The "build" alternative was 4 lanes general purpose in each direction and 2 lanes HOT in each direction (a 20% increase in total lane capacity). The basic finding was that the proposed HOT lane project would result in a slight increase in both VOC (+0.05% at the daily regional level) and NO_x (+0.6% at the daily regional level). It was noted that technique used by COG/TPB was likely to overestimate running emissions for the following reason: After the initial diversion of traffic from the GP lanes to the HOT lanes, the subsequent addition of more traffic on the GP lanes would be a combination of induced traffic and traffic diverted from neighboring arterial roads. Any induced traffic would result in a net increase in running emissions, because it simply did not exist on the network in the base case. By contrast, any diverted traffic (from the arterials to the freeway), should have its emissions added to the freeway and subtracted from the arterial system. For the COG/TPB

analysis, we assumed all of the new traffic on the GP lanes was induced traffic, so the running emissions from that traffic was never “netted out” or subtracted from the arterial roads.

Mr. Biesiadny asked what would it take to re-do the analysis such that any traffic that is diverted, and not induced, would have its emissions netted out or subtracted from the total running emissions. Mr. Moran indicated that this would best be performed with a new regional HOT lane model that is being developed at COG and that would be incorporated into the four-step travel model. Mr. Biesiadny asked when the new regional HOT lanes model would be ready. COG/TPB staff indicated that it would likely be ready in the next couple of months. Mr. Mokhtari asked whether the proposed HOT lane facility would operate 24 hours a day. Mr. Moran indicated that it would and that the toll would vary by time of day. Fluor has proposed tolls varying from \$1 to \$5 for 2009. Ms. Byala asked whether this presentation would be made to the Value Pricing task force meeting next week. COG/TPB staff indicated that it would not, since that meeting had been cancelled.

8. Briefing on Upcoming Research Activities to Refine Inputs to Mobile6 Emissions Model

Mr. Sivasailam distributed a memorandum outlining the research tasks that staff will undertake to refine mobile source inputs to the Mobile6 model. The two areas where staff will work with department of motor vehicles and air management agencies to upgrade Mobile6 input will be vehicle registration data and vehicle miles of travel (vmt) data. Any refinements that are recommended as a result of the research would be incorporated as part of the SIP update for the 8 hour standard and conformity analysis in calendar year 2005. Mr. Biesiadny suggested staff pay close attention to the increased sale of hybrid vehicles in the region. Staff agreed to discuss with DMV staff a method to extract hybrid vehicles if they are registered as light duty only. Staff mentioned they will discuss with EPA the dynamic registration utility which will be useful to age the registration data over time.

9. Update on Regional Mobility and Accessibility Study

Mr. Griffiths reported that the TPB Technical Committee Transportation Scenarios subgroup had met on January 6th to finalize the transit facility assumptions for “More Household Growth in the Region” alternative land use scenario. He further reported that MDOT and VDOT staff were working with local jurisdiction staff to finalize the highway and /HOV/HOT/Express Bus facility assumptions for this land use scenario. Mr. Griffiths also reported that Transportation Scenarios subgroup had also reviewed some initial travel demand modeling runs and screen line analyses for the “More Jobs in the Outer Areas” land use scenario.

Mr. Griffiths concluded his report by stating that the next meeting of the Joint Technical Working Group was scheduled for Friday, January 16th at 12:15PM and the next meeting of the Transportation Scenarios subgroup was scheduled for February 3rd at 12:00 noon.

10. Other Business

None.

11. Adjourn
