

**TRANSPORTATION PLANNING BOARD
TECHNICAL COMMITTEE MINUTES**

1. Welcome and Approval of Minutes from the September 2 Technical Committee Meeting

Minutes were approved as written.

2. Update on the Draft Air Quality Conformity Assessment for the 2005 Financially Constrained Long Range Transportation Plan (CLRP) and FY2006-2011 Transportation Improvement Program (TIP)

Mr. Clifford spoke to the mailout item; a memorandum from Mr. Clifford to the Transportation Planning Board, dated September 12, 2005, with a subject of "Air Quality Conformity Assessment for the 2005 Update of the Constrained Long Range Plan (CLRP) and the FY2006-2011 Transportation Improvement Program (TIP)". Mr. Clifford noted that the current draft included a paragraph regarding emissions that had been added to last month's draft per the Technical Committee's request.

Mr. Clifford also distributed a letter dated September 28, 2005, from the Metropolitan Washington Air Quality Committee (MWAQC) to the Transportation Planning Board (TPB). The letter offered comments on the draft conformity analysis and reiterated MWACQ's support of TERMS.

Mr. Clifford stated that MWACQ's letter is the only public comment that DTP staff has received at this time. This letter and any other public comments received regarding the draft will be presented to TPB at next month's scheduled meeting.

3. Report on How the Draft 2005 CLRP and FY 2006-2011 TIP Address the 2005 Priority Areas for Project Submissions

In the January 2005 project solicitation document, the TPB highlighted three priority areas related to the TPB vision for consideration by the implementing agencies when submitting projects for the 2005 CLRP and FY 2006-2011 TIP. The priority areas are to implement more traffic signal optimization, improve regional transportation coordination for incident management, and identify how projects support the regional core and regional activity centers.

Mr. Meese discussed how the draft CLRP and TIP address priority area 1, implement more traffic signal optimization. In 2002, the TPB adopted a traffic signal optimization "Transportation Emissions Reduction Measure" (TERM), with the dual objectives of air quality benefits and congestion reduction. The goal for the period 2002-2005 was to increase the number of retimed traffic signals regionally by approximately 900 (out of about 4,700 total signals). Reports by the transportation agencies indicated that the region exceeded this goal, increasing the number of optimized traffic signals regionally by 1,100 as of mid-2005. The agencies report general satisfaction with the computerized tools now available to retime signals, and hope to maintain and increase their optimization efforts in the future.

Mr. Kirby discussed how the draft CLRP and TIP address priority area 2, improve regional transportation coordination for incident management. In November 2004 and January 2005, the TPB endorsed actions to improve regional transportation communications and coordination during incidents and declared the creation of a regional transportation coordination program as a top priority. The University of Maryland Center for Advanced Transportation Technology, in conjunction with DDOT, MDOT, VDOT, and WMATA, received a \$1 million U.S. Department of Homeland Security Urban Area Security Initiative (UASI) grant to begin development of the program. Through Congressman Jim Moran's efforts, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) authorized an additional \$2 million (\$1.6 million in federal funds) for the program. At the October 19, 2005 meeting, the TPB is scheduled to approve amendments to the FY 2005-2010 TIP and draft FY 2006-2011 TIP to include this funding. Additionally, on behalf of the region DDOT engaged the Volpe National Transportation Systems Center to undertake an expert study on how best to implement a regional coordination program.

Ms. Locantore presented an analysis of how the draft CLRP and tip address priority area 3, identify how projects support the regional core and regional activity centers. Staff used round 7.0 cooperative forecasts and trip attraction data from the air quality conformity analysis of the 2005 CLRP to examine the relationship between the activity centers, planned transportation improvements, land use, and travel patterns. For the analysis, activity centers were grouped into clusters along major transportation corridors. Between 2002 and 2030, the number of activity clusters with Metrorail or light rail stations will increase from 11 to 14 out of a total of 24 activity clusters. In both 2002 and 2030, 19 Metrorail stations are located outside of activity clusters, primarily along the green line in Prince George's County. During this same time period households, but not jobs, will become more concentrated in activity clusters. The percent of all auto and transit commute trips that go to activity clusters will decrease slightly. The vast majority of transit commute trips, however, go to activity clusters, and transit commute mode share is high in activity clusters, particularly core clusters.

Questions and comments from the committee included the following: 1) Where are commuter rail stations located relative to the activity clusters? 2) Can the analysis be done for activity centers instead of clusters? 3) Where are planned BRT projects located relative to the activity clusters?

Staff provided the following responses: 1) Most commuter rail stations are located outside of the activity clusters. This information will be added to the presentation before it is given to the TPB. 2) The activity centers do not align well with the TPB's transportation analysis zones (TAZs). The Planning Directors Technical Advisory Committee will be updating the activity centers and clusters based on the round 7.0 forecasts in the coming months. Transportation staff will work with the planning directors to better align activity centers and TAZs. 3) The analysis only included transportation projects that are currently in the CLRP.

4. Review of Draft 2005 CLRP and FY 2006-2011 TIP

Mr. Pfoutz distributed the draft FY 2006-2011 TIP telling the Committee that this draft was scheduled for approval by the TPB at the October 19 meeting. He asked for comments by October 11. Mr. Miller distributed a draft list of projects from the FY 2005-2011 TIP on project status showing what projects were new, completed, delayed/reprogrammed and withdrawn. He said that next year the list would be included at the beginning of each section of the TIP. Mr. Austin explained that these were only the major projects and asked for comments from the Committee. Mr. Sirkanth suggested that the title of the list should say that it was only the major projects.

5. Briefing on Future TPB Planning and Programming Activities and the Safe, Accountable, Flexible, and Efficient Transportation Equity Act-Legacy for Users (SAFETEA-LU)

Ms. Klancher briefed the Committee on follow-up questions from the TPB meeting in September on SAFETEA-LU provisions, including additional planning funds and potential changes to the TPB work program. Committee members asked how the process for CMAQ project selection may be impacted by the priorities set in SAFETEA-LU, which are for diesel retrofit technologies and cost-effective congestion mitigation measures. Mr. Kirby stated that the priorities will likely add some new things to the list of possible CMAQ projects but the process for choosing the projects would not change. It is unclear how the priorities may affect the SIP development and mobile budgets, specifically if credit would be given for CMAQ diesel retrofit technologies in the mobile budget.

6. Status Report on Fine Particles (PM_{2.5}) Conformity Analysis of the 2005 CLRP and FY 2006-2011 TIP

Mr. Clifford spoke to the mail out item; Informational Item #12, from the September 21, 2005 Transportation Planning Board meeting, entitled "Status Report on the Fine Particles (PM_{2.5}) Conformity Analysis for the 2005 CLRP and FY 2006-2011 TIP". Mr. Clifford also distributed a handout item; a memorandum from Mr. Clifford to TPB Technical Committee, dated October 7, 2005, and entitled "Status of 2005 CLRP / FY2006 TIP Conformity Assessment with Respect to Fine Particles (PM_{2.5})".

Mr. Clifford noted that in the upcoming weeks, staff plans to finalize the technical approach with regards to seasonal or monthly emission factors. Staff will then proceed with production runs and prepare mobile source emissions inventories. The draft results will be presented at next month's Technical Committee meeting and the November TPB meeting.

The Committee then discussed the topic including: What is the difference in computing times between the seasonal vs. monthly technical approaches? (For each analysis year, computing time for seasonal should be about 8 hours, compared to about 30 hours to complete the monthly factors).

7. Briefing on a Regional Traffic Analysis of the I-95/I-395 HOT Lane Proposals

Mr. Kirby presented an analysis of the proposed high-occupancy toll (HOT) lanes along I-95/395 in Virginia. The analysis was conducted at the request of VDOT and presented to the Public-Private Transportation Act Advisory Panel in September, 2005. The private firms Fluor-Transurban and Clark/Shirley have submitted two separate HOT lanes proposals to VDOT. Both proposals would widen the existing reversible HOV from the 14th Street Bridge to Dumfries from 2 to 3 lanes, and would extend 2 reversible HOT lanes from Dumfries to the Fredricksburg area. The lanes would be free for HOV3+; all other drivers would have to pay a toll that varies by time of day. The proposed tolls range from \$0.10 to \$0.30 per mile. TPB staff used the 2010 network from the 2005 CLRP, including the Beltway HOT lanes, and round 7.0 forecasts to analyze the proposals.

The analysis indicates that tolls will have to be significantly higher than proposed along certain segments in order to maintain a high level of service. A chokepoint just south of the Beltway is particularly problematic, and reduces the capacity for toll-paying vehicles. The HOT lanes would also add to existing north-bound congestion on the 14th Bridge center span. Microsimulation modeling may be necessary to examine capacity at such entry and exit points. TPB staff developed an alternative toll scenario to examine travel patterns when a high level of service is maintained, and found that HOV volumes would increase on certain segments, relative to the 2010 baseline. The revenue implications of alternative toll scenarios should be studied for 2010 and future years. Mr. Kirby noted that increased transit, including both bus service on the HOT lanes and commuter rail, could improve service for all users along the corridor and should be included as an integral part of the analysis. Mr. Kirby further noted that, based on California's experience, drivers will pay an additional premium for the reliability of HOT lanes, and some will pay to use HOT lanes even when conventional lanes are not congested.

Questions and comments from the Committee included the following: 1) Could toll revenues be used to pay for transit outside of the I-95/395 corridor? 2) How much would it cost to travel the entire length of the HOT lane facility? 3) How much revenue would the tolls generate? 4) How often would the tolls change?

Mr. Kirby provided the following responses: 1) It is unclear whether the HOT lanes would count as fixed guideway miles under the federal transit funding formula, although the FTA allowed HOT lanes in California to count as fixed guideway miles as long as a high level of service is maintained and the toll revenues are used for transit. It is unclear whether the revenues could be used for transit outside of the HOT lane corridor. 2) Under the alternative toll scenario developed by TPB staff, it would cost approximately \$30 to travel from north to the south along the entire facility during the pm peak period. 3) TPB staff did not estimate toll revenues. 4) The tolls would probably change every eight minutes or so.

8. Status Report on 2006 CLRP Financial Plan Update

Mr. Bhatt, representing Cambridge Systematics Inc., gave a status report on the financial plan update for the 2006 CLRP. He reviewed his memorandum to the Committee

reporting on the September 27 meeting of the financial analysis working group. He summarized the consultant activities to date and the status of the implementing agencies efforts to update their revenue forecasts through 2030.

Mr. Bhatt said that staff from each DOT reported on their efforts to identify and incorporate the implications of SAFETEA_LU and other potential new sources of revenues (e.g., the proposed Davis Bill for WMATA funding, possible new toll/HOT Lane facilities in MD and VA, and other revenue sources under consideration at DDOT).

The consensus at the working group meeting was that new funding for WMATA in the Davis Bill will be identified in the analysis, but that the Transportation Planning Board (TPB) will decide in March or April whether the additional \$3 billion would be "reasonably assumed to be available" for inclusion in the expected new revenues.

He reported that the working group also requested the DOTs and WMATA to review and update all of the 2005 CLRP and TIP project cost data that is in the current TPB database. The working group also discussed the financial "big picture" to be presented in the solicitation document for the 2006 CLRP. It was agreed that the vast majority of future transportation revenues will be devoted to the maintenance and operations of the current transit and highway systems. The group also concluded that for this update no significant sources of new revenues would be anticipated. This means that if a new project is considered for inclusion in the CLRP, a project specific funding plan with identified revenue sources will be required.

Mr. Bhatt said that similar to the 2003 Update, the anticipated products of the financial analysis of the plan will be the following:

- Projections in constant 2005 dollars (uninflated dollars) of revenues and expenditures through 2030 for the total region, Suburban Maryland, Northern Virginia and the District of Columbia by mode and category;
- A discussion of issues faced by agencies in terms of the timing of revenues;
- A discussion of newly emerging issues such as the implications of future downward trends in fuel tax yields and other shifts in historical experience, expected imbalances in out years of the SAFETEA_LU; and
- Potential new sources of revenues such as tolls and HOT lanes.

Mr. Kirby explained that the 2005 CLRP conformity analysis accounts for the funding uncertainties affecting the Metrorail system capacity and levels of service beyond 2010 by constraining transit ridership to or through the core area to 2010 levels. He said that in March if the TPB decides that the new federal and state and local funding for WMATA in the Davis Bill could be "reasonably assumed to be available" for inclusion in the expected new revenues then the transit ridership constraint in the conformity analysis would be removed.

Mr. Srikanth asked about the summit on the Davis Bill dedicated funding which was held by WMATA on October 3. Mr. Kirby said that the summit produced a resolution which was positive and supportive of more funding for WMATA. He commented that some challenging issues were identified, including addressing funding equity and defining

dedicated funding. Mr. Kirby said that securing this \$3 billion is vital now, however, in 10-15 years the region and states may have to address the same issues as today.

9. Briefing on 2004 Performance of Regional HOV Facilities on Freeways in the Washington Region

Mr. Zilliagus presented an overview of the draft report entitled: "2004 Performance of Regional HOV Facilities on Freeways in the Washington Region." Copies of the document were made available at the meeting and a handout of his presentation was distributed. He summarized the major observed data and findings, including the average A.M. restricted-period occupancies and travel time savings. The poor performance of the concurrent-flow HOV lanes on I-66 in the A.M. HOV-restricted period was highlighted - it was pointed out that there is almost no travel time savings for HOV users in the A.M. in this corridor. He asked for comments in writing by e-mail or FAX not later than Friday, October 21.

Ms. Erickson asked when the final version of this report will be out. Mr. Kirby said that after the Committee's comments are addressed a Final Draft report will be available for technical transportation planning work. He pointed out that it has been very difficult to place such technical report on the agenda of the Transportation Planning Board for their review.

Mr. Owolabi asked about the low observed average auto occupancy on the I-270 Spur in Montgomery County. Mr. Zilliagus responded that this may be due to a large interchange reconstruction project that was being done at the I-270 Spur and Democracy Boulevard when the counts were taken, so this may be an outlier. He also noted that this location is at the "bottom" of the I-270 HOV corridor. He commented that there is enforcement by state police in both states, as the troopers doing enforcement work have been observed by staff at many locations, including the I-270 Spur.

Mr. Rybeck asked about HOV violators using dummies or mannequins. Mr. Zilliagus responded that this is rare - one such violator was caught by the Maryland State Police a few years ago, and the dummy was confiscated as evidence.

Mr. Sivasailam asked about hybrid vehicle exemptions on the HOV lanes. Mr. Zilliagus said that such exemptions are allowed in Virginia (but are due to end on 30 June 2006) but are not permitted in Maryland. Mr. Kirby added that according to the new SAFETEA-LU, states are required to maintain a 45 MPH speed in the HOV lanes, and must permit motorcycles and bicycles unless there are safety problems with those. Mr. Zilliagus said that the speed limit on the Shirley Highway HOV lanes is (mostly) 65 MPH today, and some of the buses operate at higher speeds.

10. Status Report on Review of State of the Practice in Metropolitan Area Travel Forecasting

Mr. Milone reported to the Committee that a national study is currently underway with the intention of determining the state of travel forecasting practice at MPOs across the country. The study is being conducted by the Transportation Research Board of the National Academies with the support of the FHWA and FTA. The study commenced last

fall and has a planned duration of 18 months. The intention of the study is to gather information to determine the state of the practice, and then to investigate in-depth modeling issues regarding the specific uses of models, the variation of modeling practice, and the appropriateness of model usage. The study oversight committee is chaired by Martin Wachs of the University of California at Berkeley, and is comprised of experienced consultants, academicians, and MPO staff members.

To date, a comprehensive survey on travel modeling practices at MPOs has been conducted. The survey instrument consisted of 91 questions relating to various aspects of modeling practice. The survey response rate was 57% (219 out of 381 agencies contacted), and of the large MPO's, the response rate was 84% (36 out of 43). The survey database is now being 'cleaned' and the oversight committee is deliberating on whether or not non-respondents should be revisited.

The oversight committee recently met with a small number of MPO's to discuss draft survey results on September 9 (Mr. Milone was in attendance at the meeting). The results indicate that the four-step modeling approach remains the dominant forecasting technique used by the MPOs, although substantial variations exist in many facets of modeling practice. The applicators of models vary as well. Whereas, MPO staff members more typically execute models at the large MPOs, smaller MPO's appear to have a heavier reliance on the state DOT's and/or consultants to execute the travel models. The principal motivation for model development work appears to be driven by local conditions and policy priorities, for example, whether or not a region is in non-attainment or whether a 'New-Starts' project is being contemplated.

The next phase of the project to investigate more in-depth modeling issues will involve detailed interviews with a limited number of agencies. The selection and number of agencies has not yet been determined. A final report documenting the project activities is anticipated by the spring or summer of 2006. It is not yet known if the study will lead to a 'handbook' of practice as some observers speculate. The oversight committee has discussed concern about whether the survey results will be construed as an overly minimal standard that could hinder progress in travel modeling practice.

Questions and Comments

Mr. Biesiadny asked if the survey results had any implications with respect to the TPB's travel modeling practices. Mr. Kirby responded that the TPB's forecasting practices are consistent with those at most of the large MPOs. The survey results suggest that a few minor improvements should be considered, but the TPB model is generally well aligned with conventional methods across the country.

Mr. Foster asked if best practices in travel modeling can accurately and comprehensively be developed in the context of a handbook. Mr. Kirby responded that the MPO survey is really a 'snapshot' of how modeling is being undertaken. There is a great deal of variability in modeling practice because the issues and policy priorities differ from one area to another. Mr. Kirby suggested that the study should ultimately identify innovative and practical methods that should be considered by the profession at large.

11. Other Business

None.

12. Adjourn

**TPB TECHNICAL COMMITTEE MEMBERS AND ALTERNATES
ATTENDANCE - October 7, 2005**

DISTRICT OF COLUMBIA

DDOT Rick Rybeck

MARYLAND

Frederick Co. Denis Superczynski
Gaithersburg -----

Montgomery Co. David Moss
Prince George's Co. Aaron Overman
Rockville -----

M-NCPPC
 Montgomery Co. Alexander Hekimian
 Prince George's Co. Faramarz Mokhtari
 Harold Foster

MDOT Lyn Erickson
 Glen Smith
 BJ Berhanu

VIRGINIA

Alexandria Maria White
Arlington Co. Nicole Lewis
City of Fairfax Alexis Verzosa
Fairfax Co. Tom Biesiadny
 Robert Owolabi

Falls Church -----
Loudoun Co. -----
Manassas -----
Prince William Co. -----
NVTC -----
PRTC Karen Waterman
VRE -----
VDOT Kanathur Srikanth
VDRPT -----
NVPDC -----
VDOA -----

WMATA

WMATA Scott Kubly

FEDERAL/OTHER

FHWA-DC -----
FHWA-VA -----

FTA -----

NCPC -----

NPS -----

MWAQC -----

COG Staff and Others

Ronald Kirby, COG/DTP
Mike Clifford, COG/DTP
Gerald Miller, COG/DTP
Mark Pfoutz, COG/DTP
Andrew Meese, COG/DTP
Andrew Austin, COG/DTP
Dusan Vuksan, COG/DTP
Daivamani Sivasailam, COG/DTP
Jim Hogan, COG/DTP
G Toni Giardini, COG/DTP
Bill Bacon, COG/DTP
Jinchul Park, COG/DTP
Jill Locantore, COG/DTP
Paul DesJardin, COG/HSPPS
Jeff King, COG/DEP
John Swanson COG/DTP
Wendy Klancher, COG/DTP
Ed Zolnik, George Mason University
Kenneth Todd, NCBW