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## PROGRAM HIGHLIGHTS

### I. PLANS, PROGRAMS & COORDINATION

#### A. Unified Planning Work Program

Work continued on monitoring the FY 2005 Unified Planning Work Program (UPWP). At the December 3 meeting, the Steering Committee approved an amendment to the FY 2005 UPWP to include two State Planning and Research (SPE) funded projects as requested by VDOT.

Staff began reviewing the current program to identify if certain activities need to be modified or carried over to FY 2006.

Staff prepared the preliminary budget and outline of work activities for the FY 2006 UPWP. The draft outline and budget will be reviewed at the January Technical Committee and TPB meetings. The draft FY 2006 UPWP will be presented to the Technical Committee and TPB for review in February, and the final version will be presented to the TPB for approval at the March 16 meeting.

#### B. Transportation Improvement Program

At the December 3 meeting, the Steering Committee approved an amendment to the FY 2004-2009 TIP as requested by VDOT.

The TPB and Technical Committee was briefed on the proposed schedule and draft solicitation document for the 2005 CLRP and FY 2006-2011 TIP and the air quality conformity analysis. The TPB will be asked to approve the final solicitation document at its January 19, 2005 meeting.

#### C. Constrained Long-Range Transportation Plan (CLRP)

Staff presented the draft Solicitation Document for the 2005 CLRP and the FY2006-2011 TIP at the Technical Committee meeting. The document was revised based on comments from the Technical Committee and then mailed-out to the TPB. The Solicitation Document was further edited and priority areas for project submissions were added to the document at the request of the TPB.

Further work on an accessibility analysis of the 2004 CLRP continued in the month of December. The 2000 Census data by transportation analysis zone (TAZ) data was obtained for the demographic analysis. Accessibility to retail employment and hybrid

accessibility analyses were also reviewed. The analysis is being refined for a presentation to the AFA committee in January.

The 2003 CLRP brochure was mailed to approximately 1,700 people during the month of December.

D. Operations, Coordination/Emergency Preparedness

*Management and operations activities*

The Management, Operations, and Intelligent Transportation Systems (MOITS) Policy and Technical Task Forces held a joint meeting on December 14, 2004. The Task Forces were briefed on, and staff continued work on, coordination with the Virginia Department of Transportation and its contractor PBS&J Inc. on "511" traveler information issues. The Task Forces were also briefed on the results of the November 30 Regional ITS Architecture Stakeholders Workshop.

Staff attended the Baltimore-Washington Regional Traffic Signals Forum, co-sponsored by the Maryland State Highway Administration and the Baltimore Metropolitan Council, December 8 in Columbia, Maryland. Staff also participated in a conference call of the National Transportation Operations Committee on December 20.

*Emergency Transportation Coordination Planning Activities*

Staff continued work, begun in FY2004, to support stakeholder discussion of options for strengthening regional emergency communications and coordination in the transportation sector. These follow the recommendations of the revised Regional Emergency Evacuation Transportation Coordination (REETC) Annex of the Regional Emergency Coordination Plan<sup>SM</sup>. This was a major focus of discussions at the December 14, 2004 MOITS Policy and Technical Task Forces joint meeting.

The Task Forces were briefed on a proposed work plan and schedule developed by the University of Maryland Center for Advanced Transportation Technology (CATT), and on Resolution R7-2005 passed by TPB on November 17 endorsing the concept of using the existing Capital Wireless Integrated Network (CapWIN) program associated with the CATT as a basis for a regional transportation operations coordination program. Work continued on developing a work plan to be presented to the TPB on January 19, 2005.

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Also at the December 14 meeting, the MOITS Task Forces were briefed and provided comments on the George Mason University National Capital Region Critical Infrastructure Vulnerability Assessment Project, which was in its beginning stages.

E. Financial Plan

In preparation for developing the new financial analysis for the 2006 update of the CLRP, staff reviewed the 2003 report: *Analysis of Resources for the Financially Constrained Long Range Transportation Plan for the Washington Area*, which developed estimates of the capital and operating costs to build, operate, and maintain the facilities in the 2003 CLRP. An RFP will be prepared in the spring to obtain consultant assistance to conduct this analysis in FY 2006.

F. Private Enterprise Participation

No work activities to report during the period.

G. Bicycle and Pedestrian Program

Staff performed the following in December:

- Attended a meeting at the American Lung Association
- Attended a meeting of the bike parking management work group.
- Assisted in the preparation and release of the RFP for the Street Smart program.

H. Access to Jobs Planning

COG/HSPPS staff performed the following tasks in December 2004:

- Staff continued looking for exemplary JARC programs in other parts of the nation to develop a list of best practices to present to the AFA committee in January.
- Staff continued to compile a draft list of potential invitees for the JARC forum that is tentatively scheduled for February or March 2005.

I. Public Participation

The TPB's Citizens Advisory Committee met on December 9. The committee discussed an analysis of travel characteristics of minority, low-income and disabled populations from the 2000 Census. It also discussed the Solicitation Document for next year's amendments to the Constrained Long-Range Plan and the Transportation Improvement

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Program. The committee finalized its end-of-the-year report which provided the TPB with an overview of committee activities and observations from 2004.

The CAC held two outreach meetings in December on the Regional Mobility and Accessibility Study on December 7 in Fair Lakes, Virginia, and on December 8 in Gaithersburg, Maryland. Both sessions were well attended and provided useful feedback on the issues laid out in the study and the direction it is taking.

The "TPB News" newsletter was written and distributed.

### *Access for All Advisory Committee*

A presentation was given at the TPB December 16 meeting on an analysis of 2000 Census data on locations and travel patterns of low-income populations, minority populations and people with disabilities. A presentation on this Census analysis was also given to the Citizens Advisory Committee.

#### J. Annual Report

No activity during this reporting period.

#### K. DTP Management

In addition to the provision of staff support to meetings of the TPB, the Steering Committee, and the Technical Committee, the following activities were undertaken:

- The DTP Director met with staff of the Transportation Research Board to discuss a new synthesis study of travel demand modeling getting underway in January 2005.
- The DTP Director participated in a conference call with staff of the USDOT/Volpe Center to discuss high-occupancy toll lanes and other pricing projects.
- DTP staff met with VDOT staff and consultants to discuss new projects under consideration for the 2005 CLRP update and the FY2006-2011 TIP.

## II. FORECASTING APPLICATIONS

### A. Air Quality Conformity

Staff transmitted copies of the air quality conformity report for the 2004 CLRP and FY2005-10 TIP to reviewing federal agencies. Staff also prepared the final report in pdf format and placed it on COG's website. Staff continued to prepare documentation of the travel demand and emissions modeling work performed for the assessment.

Regarding work tasks for the 8-hour conformity assessment of the 2004 CLRP and FY2005-10 TIP, staff presented the findings and draft report to the TPB, the TPB Technical Committee, and MWAQC's Technical Advisory Committee (TAC). The report was released on December 9, 2004 for 30 day public comment and interagency consultation. Staff also discussed the report at a subsequent TAC conference call on December 21, 2004. An electronic version of the report was placed on the COG website at the beginning of the public comment period. Staff also participated in an AMPO meeting in Houston to discuss ongoing experiences with the 8-hour ozone conformity assessment and anticipated future work under the new particulate matter (PM2.5) requirements.

Staff prepared 2020 volatile organic compound (VOC) and nitrogen oxides (NOx) emissions factors for inclusion in the draft solicitation document of the 2005 CLRP and FY 2006- FY 2011 TIP. Staff also met with VDOT staff and their consultants to discuss project inputs and conformity requirements for the next plan and program cycle.

Staff reviewed the new PM 2.5 nonattainment designations for the Washington area, and considered the implications for upcoming conformity assessments.

In December COG/DEP held two conference calls with the TAC conformity subcommittee to discuss the Low NOx Rebuild consent decree and its effect on MOBILE6.2 estimates. Staff met with DTP staff to discuss the 8-hour conformity schedule. Staff prepared draft comments on TPB's 8-hour conformity assessment to be approved by the MWAQC Executive Committee on January 12, 2005, for the TPB 8-hour conformity determination on January 19, 2005. Staff attended the TPB Technical Committee meeting and TPB meeting in December.

In accordance with TPB consultation procedures, staff also forwarded to the consultation agencies and public advisory committees the meeting agenda and a summary memo regarding the December TPB meeting and air quality conformity consultation elements.

#### B. Mobile Emissions Analysis

COG/DTP staff continued technical work activities and coordination with DEP staff relating to requirements for the 8-hour ozone standards. Staff participated in meetings of MWAQC, its Executive Committee and its Technical Advisory Committee (TAC), and in the follow-up TAC conference call discussed above to discuss the 8-hour conformity

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report. Staff researched the impacts of a 'chip reflash' issue discussed during the call (slower than expected industry corrections to illegal heavy duty diesel truck engine controls). Staff continued work to revisit the technical procedures developed and applied in preparing the 2002 Periodic Emissions Inventory, redistributing 2002 emissions and VMT into EPA's NEI format including the 28 vehicle types used in Mobile6. Staff also continued work on longer term research into refinements to inputs to Mobile6.

Staff updated the TERM Tracking Sheet and estimated 2010 emissions benefits for all the projects in the TERM Tracking Sheet and will present the results at the January TPB Technical Committee meeting. Staff completed a comparative analysis of VMT at the MSA level estimated by the travel demand model, and VMT from the HPMS data set provided by the Maryland, Virginia, and the District of Columbia departments of transportation. The Travel Management Subcommittee meeting scheduled for December 2004 was cancelled since there was no need for additional emission reduction measures in the 2004 CLRP and FY 2005- FY 2010 TIP to meet conformity under the 8-hour ozone standard.

#### C. Regional Studies

Staff continued to work with WMATA, local jurisdiction state DOT staff to obtain the detailed network coding assumptions for the Transit-Oriented Development transportation scenario.

Staff began coding the Transit-Oriented Development transportation scenario network.

Staff presented the "citizen friendly" version the Regional Mobility and Accessibility Study at two TPB Citizen Advisory Committee outreach meetings.

#### D. Coordination of Cooperative Forecasting & Transportation Planning

Staff responded to questions on the Round 6.4a land activity forecasts and TAZ-level data file.

Staff began coordination with the Planning Directors and the Cooperative Forecasting Subcommittee on the schedule for the review and approval of the Round 7 Cooperative Forecasts.

### III. DEVELOPMENT OF NETWORKS AND MODELS

#### A. Network Development

During December, network maintenance activities continued with the update of transit line files with current information depicting transit service during the fall and winter of 2004. Highway network maintenance continued with an examination of aerial photographs of freeway lanes developed by Skycomp, Inc. to update information in the coded highway networks for 2000. Staff began coordination with GIS staff to update the GIS-based highway database.

B. GIS Technical Support

Staff continued to monitor the performance of ArcGIS and Oracle 9i databases.

Staff continued testing the ArcGIS 9.0 beta-installation and new functionality provided in this new release.

Staff downloaded the latest Oracle 10g and ArcGIS 9.0 software patches in preparation for the upgrade of the COG/TPB GIS database server.

Staff re-configured COG/TPB GIS database back-up procedures and updated the Disaster Recovery Procedures Guide.

Staff installed GIS software on user workstations.

Staff continued refinement of the roll-out plan to assist GIS users in the migration of all GIS data to the Windows 2000 GIS Server.

Staff provided technical assistance to the model development team in the export and loading of VDOT and DDOT traffic count data by vehicle class for use in the development of commercial vehicle survey sample frame.

Staff provided technical assistance to network development team in the coding of the Transit-Oriented Development Scenario for the Regional Mobility and Accessibility Study.

Staff identified and geo-located proposed traffic counting location by HPMS segments for the DC Machine Traffic Counts technical assistance project.

Staff continued update of the Regional Street Centerline GIS layer.

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C. Models Development

During December, Staff completed development of a sampling plan for a commercial vehicle survey in the spring of 2005. This plan, developed in accordance with guidance furnished by COG's consultant, Bill Allen, reflects locations representative of the distribution of facility type and area type categories. Staff spent considerable time in relating each candidate traffic count in the COG regional transportation data clearinghouse to the 2000 highway network.

Staff met with Jeff Bruggeman of AECOM, under contract to TPB to advise on nested logit model development and SUMMIT modeling issues, to review transit modeling progress and results of local study application of these models.

Staff has undertaken an analysis of 2000 Census (CTPP) worker flows at county level, with TAZ-level worker flow data by mode of travel expected to arrive in January. An in-house staff training session on applying the Version 2.1D #50 model was conducted on December 10<sup>th</sup>.

D. Software Support

Staff continued work on the updating of Version 2 travel demand model flowcharts to reflect the current operation and updates of the COG/TPB Version 2.1D # 50 Travel Demand Model. Investigation of the feasibility of a less-detailed chart of the application process and other types of illustration of the process continues.

Staff, in coordination with the COG Information Technology System, continues the investigation of current direct access device technology. The investigation continues to focus on USB 2.0 DVD's. As new microcomputers are acquired they are being equipped with dual drives enabling the reading of DVD and CD's, and the writing of CD-R/RW's and DVD+/-RW's. The capability to write DVD's is also being incorporated in selected microcomputers currently in service which do not now have that capability. Staff also continues to evaluate portable hard drives as potential back-up devices, with one currently in service in that capacity. Exploration of server-based system-wide backup procedures is also underway.

IV. TRAVEL MONITORING

A. Cordon Counts

Staff has continued working with the models development unit to review available traffic count data locations suitable for drawing a sample as part of a proposed spring 2005 count of trucks and commercial vehicles, to be used in the development of a new set of

truck and commercial vehicle forecasting models. A data collection budget and draft scope of work have been prepared to conduct this count in the Spring with added resources obtained from another part of the DTP FY2005 UPWP.

B. Congestion Monitoring and Analysis

Staff completed the preliminary field work as part of the FY 2005 arterial travel time project. Training materials such as maps, information sheets, etc., for data collection personnel have been prepared. Recruitment of data collection personnel is underway and the data collection activities will begin in January 2005.

Staff completed literature review of new data collection techniques such as tracking cellular phone movements to obtain speeds, radar and loop detector technology for obtaining vehicle volume, speed and classification data. A technical memorandum on the findings is under preparation.

C. Travel Surveys and Analysis

1. Household Travel Survey

Staff responded to questions on the available of Household Travel Survey databases.

2. 2000 Census Journey to Work Analysis

Staff continued tabulations of the CTPP Part 3 worker flow data by jurisdiction of residence and jurisdiction of work.

Staff continued to respond to questions on the Census Journey to Work data from the 2000 Census.

3. Regional Travel Trends Report

Staff continued analysis of new Census, WMATA, and other survey data for Regional Travel Trends report.

D. Regional Transportation Data Clearinghouse

Staff completed duplication of 2004 version of the Data Clearinghouse on CDs and distributed these CDs to members of the TPB Technical Committee.

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V. TECHNICAL ASSISTANCE

A. District of Columbia

Program Development

Staff attended and participated in DDOT HPMS meetings.

Miscellaneous Services and Data Requests

No staff activities.

Database Automation and Application Development

No staff activities.

Machine Traffic Counts

Staff has reviewed the list of HPMS sites recommended for data collection in Spring 2005, and discussions are underway with District of Columbia staff to finalize the list and issue an RFP for seven day counts.

B. Maryland

Program Development

Staff coordinated with MDOT and MD SHA staff regarding ongoing FY2005 work program activities and proposed activities for the FY2006 UPWP.

Miscellaneous Services

Staff provided highway and transit networks and other input files to run the COG/TPB Travel Demand Forecasting Model Version 2.1D # 50 for the 2004 CLRP/FY2005-2010 TIP Air Quality Conformity regional modeling process as approved on November 17, 2004, to the Maryland State Highway Administration.

MD SHA / MTA Technical Support

Staff participated in a travel demand modeling work session held at COG to discuss ongoing work activities being performed at COG and by consultants to refine the Version 2.1D model, particularly the mode choice model components. Staff also reviewed documentation reports, e.g., draft environmental impact study, alternatives retained for detailed study, for various project planning studies in Maryland.

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### Subregional Studies

#### Capital Beltway Corridor Transportation Study

Staff began coordinating work for another set of alternatives based on different weaving assumptions between managed lanes and general use lanes.

#### I-270 & US 15 Multi-Modal Corridor Study

As follow-up to travel demand forecasts performed for I-270 'managed' Electronic Toll Lane scenarios, staff transmitted electronic copies of transit output files to MD SHA for use in post-processing. Staff attended a team meeting at Maryland State Highway Administration at which new modeling methods for express toll lanes were discussed.

#### Intercounty Connector Study

Staff performed follow-up select link analysis to research trip table and loaded links impacts of volume averaging in the TP+3.2 platform.

### C. Virginia Technical Assistance

#### Program Development

There was no activity to report in December.

#### Miscellaneous Services

Staff processed a data request from VDOT for products from the Round 6.4A COG Cooperative Forecast of population, households, and employment by TAZ.

#### Northern Virginia HOV Facilities Monitoring and Data Collection

Data collection was completed in December. Most of the count data has been furnished to VDOT. The remaining count data and the travel time data will be transmitted to VDOT in January.

#### Springfield Interchange Data Collection

There was no activity to report in December.

D. WMATA

Program Development

No activity during the reporting period.

Miscellaneous Services

No activity during the reporting period.

Parking Usage at Metrorail Stations

No activity during the reporting period.

Transit Modeling Enhancements and Validation

No activity during the reporting period.

VII. CONTINUOUS AIRPORT SYSTEM PLANNING (CASP) PROGRAM

A. CASP 19

1) Regional Air Passenger Origin/Destination Forecast Update

There was no staff activity during this reporting period.

2) Ground Access Forecast Update

Staff efforts during this reporting period focused primarily on analyzing recent air passenger survey data and aviation analysis zone structure for use in developing methods to increase the precision in estimating future ground access travel of air passengers in the region.

B. CASP 20

1) Process 2002 Air Passenger Survey

Staff completed the final draft report summarizing the findings of 2002 Regional Air Passenger Survey.

2) Ground Access Travel Time Study

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There was no staff activity during this reporting period.

The **Aviation Technical Subcommittee** did not meet in December 2004.

#### VI. OTHER TRANSPORTATION PROJECT

##### Advanced Technology Vehicle Project

The program oversight committee met on December 16<sup>th</sup> 2004. The current project manager at E&K Mr. Andrew Parker informed the group that he will be retiring from E&K on January 17<sup>th</sup> but will continue as a contractor and be involved in the project until the end of June 30, 2005. The committee approved the following two projects: COG will enter into contracts with the city of Baltimore for the purchase of 4 hybrid electric vehicles (\$ 20,000 subsidy) and Montgomery County (\$ 250,000 subsidy) for the purchase of 6 compressed natural gas buses. The next meeting of the oversight committee is scheduled for March 17, 2005.











