

ITEM 8 - Action

March 20, 2013

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

Staff

Recommendation: Adopt Resolution R12-2013 to amend the FY 2013 UPWP.

Adopt Resolution R13-2013 to approve the FY 2013 carryover funding to FY 2014.

Issues: None

Background: The Technical Committee at its March 1 meeting reviewed and approved the proposed carryover activities and budgets from the FY 2013 UPWP to the FY 2014 UPWP.

The final version of the FY 2014 UPWP will incorporate this carryover funding into the final work program to be submitted to the state departments of transportation and the Federal Highway and Transit Administrations.

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

**RESOLUTION TO AMEND THE FY 2013 UNIFIED PLANNING WORK PROGRAM
(UPWP) TO INCLUDE REVISED WORK STATEMENTS AND THE BUDGETS**

WHEREAS, the Joint Planning Regulations issued in February 2007 by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) require a Unified Planning Work Program for Transportation Planning (UPWP); and

WHEREAS, the UPWP is required as a basis and condition for all funding assistance for transportation planning to state, local, and regional agencies by the FHWA and FTA; and

WHEREAS, the FY 2013 UPWP for the Washington Metropolitan Area was approved by the TPB on March 21, 2012; and

WHEREAS, revised work statements and budgets for projects in the FY 2013 UPWP have been developed by staff, the Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT) to modify projects and identify funding which will be carried over into FY 2014, as described in the attached materials;

WHEREAS, at its March 1, 2013 meeting, the TPB Technical Committee was briefed on the proposed revised work statements and budgets for projects in the FY 2013 UPWP and recommended approval by the TPB;

NOW, THEREFORE, BE IT RESOLVED THAT the NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD amends the FY 2013 UPWP to include revised work statements and budgets, as described in the attached Memorandum of March 13, 2013 entitled: "FY 2013 UPWP Amendments to Include Revised Work Statements and Budgets" (pages A-1 through A-11).

National Capital Region Transportation Planning Board

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MEMORANDUM

March 13, 2013

TO: Transportation Planning Board

FROM: Gerald Miller
Director, Program Coordination
Department of Transportation Planning

SUBJECT: FY 2013 UPWP Amendments to Include Revised Work Statements and Budgets

Attached are pages excerpted from the current FY 2013 UPWP indicating changes to the work statements and/or budgets for the following:

- **4.B. GIS Technical Support:** Carryover \$100,000, which is available due to the unavailability of technical staff to work on the enhancement of the GIS-based transportation network management editing tools in FY 2013. Consultant assistance will be sought to help carry out and complete this task in FY 2014.
- **5.B. Congestion Monitoring and Analysis:** Carryover \$90,000, which is available due to changes in methods for monitoring arterial highway congestion, from field data collection to use of probe-based data (currently available free of charge from the I-95 Corridor Coalition Vehicle Probe Project). This will help support the funding of complementary aerial-photography-based freeway data collection in FY2014, undertaken on a three-year cycle since 1993, and last undertaken in FY2011. This will also enhance the ability of regional congestion monitoring to be responsive in FY2014 to new MAP-21 performance measurement requirements as relevant federal regulations and guidance are issued.
- **5.C. Travel Surveys and Analysis:** Carryover \$430,000, which will be used to collect household travel survey data from 2,400 households in six specified geographic subareas in the fall of 2013 rather than in the spring.

6. Technical Assistance

- Maryland: Reduce budgets for seven projects, and carry over \$300,024 for eight projects to FY 2014.
- Virginia: Reduce three project budgets, and carry over \$238,518 for two projects to FY 2014.

The total FY 2013 funding to be carried over is \$1,158,000

Deletions are shown in ~~strikeout~~ and additions in **bold**.

PROPOSED AMENDMENTS TO THE FY 2013 UPWP

4. B. GIS TECHNICAL SUPPORT

Under this work activity staff will provide Geographic Information System (GIS) data and technical support to users of the COG/TPB GIS for many important TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.

The following work activities are proposed for FY 2013:

- Provide data and technical support to staff using the COG/TPB GIS for development and distribution of data and information developed by the TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.
- Provide ongoing maintenance and support of enhanced GIS-based transportation network management and editing tools and TPBMAN geodatabase.
- ~~Enhance GIS-based transportation network management and editing tools based on user experience.~~
- Enhance the COG/TPB GIS Spatial Data Library with updated transportation and non-transportation features as these data become available.
- Add additional transportation attribute data, land use features and imagery data to the COG/TPB GIS Spatial Data Library.
- Update GIS Spatial Data Library documentation, GIS User Guides and technical documentation of various GIS software applications as required.
- Maintain and update an intranet-based GIS Project Information Center that lists and describes DTP GIS databases and applications currently being developed, as well as those that are currently available.
- Train staff on use of GIS databases for transportation planning.
- Continue to coordinate the regional GIS activities with state DOTs, WMATA, and the local governments through COG's GIS Committee and subcommittees.
- Maintain and update COG/TPB's GIS-related hardware and software.
- Respond to request for COG/TPB GIS metadata, databases, and applications.

Oversight: Technical Committee

Estimated Cost: \$548,800 **448,800**

Products: Updated GIS software, databases, User Documentation, Training materials, Support and enhancement of GIS procedures to develop and manage transportation networks.

Schedule: June 2013

5. B. CONGESTION MONITORING AND ANALYSIS

Congestion Monitoring supplies data for the Congestion Management Process (Item 2A) and Models Development (Item 4C). The program monitors congestion on both the freeway and the arterial highway systems, to understand both recurring and non-recurring congestion. ~~Data collection methods include a combination of aerial surveys, field data collection, and/or data procured~~ **are obtained** from private sources. Examples of emerging technologies include probe-based data and Bluetooth-based data. In FY2012, an analysis of data collection methods was undertaken in light of evolving technologies and needs. ~~The combination of data collection and analysis~~ to be undertaken in FY2013 will be in accordance with the results of the FY2012 methods study.

Oversight: MOITS Technical Subcommittee

Cost Estimate: ~~\$350,000~~ **\$260,000**

Products: Transportation systems monitoring data sets and analysis reports

Schedule: June 2013

5. C. TRAVEL SURVEYS AND ANALYSIS

Household Travel Survey

In FY 2012, the 2007/2008 Regional Household Travel Survey data was supplemented with collection of household travel survey data from 4800 households in 14 focused geographic subareas of the region. This additional household travel survey data collection was in response to the need expressed by local jurisdiction users of the household travel survey to have additional household samples in smaller geographic subareas to analyze specific aspects of daily travel behavior in these smaller geographic areas. In FY 2013, addition household travel survey data will be collected from 2,400 households in 7 additional geographic subareas of the region. Staff a will continue to support users of TPB household travel survey data, update user documentation and provide technical assistance to the users of these survey data as required.

The following work activities are proposed for FY 2013:

- Provide data, documentation, and technical support to users of 2007/2008 Regional Household Travel Survey and the Geographically-Focused Household Surveys conducted in 2011/2012. Update of survey data files and user documentation as required.

- Continue to mine data collected in the 2007/2008 Regional Household Travel Survey the Geographically-Focused Household Surveys conducted in 2011/2012 support analysis of regional growth and transportation issues of topical interest to the members of the TPB. Prepare information reports on various aspects of daily household and vehicle travel in the TPB modeled area.
- ~~Collect household travel survey data for 2,400 households in six focused geographic subareas of the region for more intensive analysis of specific growth and transportation issues. Examples of focused geographic subarea could include Metrorail station areas of a specific type, highway corridors with recent or planned major improvements, proposed light rail study area, or regional activity centers of with specific characteristics. Proposed focused geographic subareas for FY 2013 include: (1) Federal Center/Southwest/Navy Yard in DC (2) H Street Corridor NE in DC (3) Silver Spring in Montgomery County (4) US 1/Green Line in Prince George's County (6) City of Fairfax and (6) City of Manassas. The proposed geographic subareas will be reviewed and subject to refinement by the TPB Technical Committee and local jurisdiction planning staff.~~

Oversight: Travel Forecasting Subcommittee

Estimated Cost: ~~\$706,300~~ **276,300**

Product: Household Travel Survey Data Collection and Processing, Household Travel Survey Analyses, Information Reports and Technical Memorandum, Maintenance of Travel Survey Data and Documentation

Schedule: June 2013

6. TECHNICAL ASSISTANCE

B. MARYLAND

1. Program Development Management

This work task will account for DTP staff time associated with the administration of this Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time needed for the development of the annual planning work program.

Cost Estimate: ~~\$30,000~~ **15,000**
 \$10,000 carryover from FY 2012
~~\$40,000~~ **25,000** total

Schedule: On-going activity

2. Project Planning Studies

This work task will account for DTP staff time associated with the development of scopes of work for requested projects. The work scopes will account for technical support in travel demand modeling and alternative evaluations of ongoing and upcoming project planning studies. Work activities will also involve meeting with requesting agencies to discuss proposed projects, drafting and finalizing work statements and tasks, creating projects when authorized, attending project team meetings and progress reporting.

Cost Estimate: ~~\$400,000~~ **20,000**
 \$90,000 carryover from FY 2012
 ~~\$190,000~~ **110,000** total

Schedule: On-going activity

3. Feasibility/Special Studies

This work task will provide funding to support technical support on feasibility/special studies as requested by MDOT, SHA and other agencies. Work may include but not be limited to technical support in ongoing corridor/subarea studies, and initiation of new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities and scenario analyses. Project authorizations may occur throughout the fiscal year as priorities dictate to address transportation planning initiatives and strategic goals of MDOT, SHA and other agencies.

Cost Estimate: ~~\$460,000~~ **90,000**
 \$70,000 carryover from FY 2012
 ~~\$230,000~~ **160,000** total

Schedule: On-going activity

4. Transportation Performance Measures

Project Level Evaluation: SHA requires measurable results on system performance benefits in order to compare the relative merits of individual projects proposed for implementation or for use in refining the Maryland Highway Needs Inventory. Such results will assist in determining priorities among the projects to maximize the benefits of the transportation planning and programming process. The results could be expressed in terms of Levels of Service, Travel Delay and mobility criteria, which will be defined and estimated at the appropriate local, subarea, corridor and / or regional levels to enable a consistent assessment of specified projects.

Sub-Item Cost Estimate: \$10,000
 \$38,000 carryover from FY 2012
 \$48,000 total

Schedule: On-going activity

System Wide Evaluation: This work effort is designed: (1) to provide MDOT and SHA staff with information relating to the effectiveness of ongoing and planned regional congestion monitoring activities in the Maryland portion of the region, (2) to examine the effectiveness of such programs, including the use of before and after studies (primarily through literature reviews and analysis of existing data rather than through new collection of primary data), and (3) to evaluate the environmental impacts of projects in terms of GHG and possibly other pollutants. TPB staff will periodically brief MDOT and SHA staff to keep them informed of regional congestion monitoring activities and to discuss possible new initiatives.

Sub-Item Cost Estimate: \$13,000
 \$82,000 carryover from FY 2012
 \$95,000 total

Schedule: On-going activity

Traffic Impacts Evaluation: This work effort is designed to assess on a comprehensive scale the transportation impacts of development, through the analysis of such development at the local, subarea, corridor and regional levels. Different methods and evaluation criteria will be assessed for a variety of projects to appropriately consider their impacts, ranging from delay at intersections for localized studies, to travel modeling and aggregate systems level impacts for larger projects.

Sub-Item Cost Estimate: \$10,000
 \$20,000 carryover from FY 2012
 \$30,000 total

Schedule: On-going activity

Cost Estimate: \$33,000
 \$140,000 carryover from FY 2012
 \$173,000 total

Schedule: On-going activity

5. Training /Miscellaneous Technical Support

This work task will account for coordination on periodic updates of the transportation networks, land use files, and the model itself with MDOT, SHA and other modals. This task will also account for various presentations and training activities for MDOT, SHA and other modal staff on the latest regional data and modeling procedures. Staff will continue to coordinate with MDOT, SHA and other modal staff on applications of modeling procedures on projects carried at the state level.

Cost Estimate: ~~\$40,000~~
 \$20,000 carryover from FY 2012
 ~~\$30,000~~ **20,000** total

Schedule: On-going activity

6. Statewide Transportation Model Support

This project is designed to assist SHA in the development of, and the evaluation of results from the Maryland Statewide Transportation Travel Model. The model is being developed in order to analyze travel at a macroscopic level, i.e., statewide / multiple states, with a view to assessing impacts in Maryland of alternative growth scenarios and other forecast assumptions.

Cost Estimate: \$60,000 0
Product: Technical Memoranda
Schedule: June 2013

7. Transportation / Land Use Connections Program

The Transportation / Land Use Connections (TLC) program is an effort to provide technical assistance to local governments in the Washington region in order to facilitate integrating land use and transportation planning at the community level. Begun as a 6 month regional pilot program in January 2007, the project was very well received. It was not only continued in subsequent years, but Maryland supplemented the regional effort with additional funds. This project continues those efforts by similarly reserving such supplemental funds to be distributed in fiscal year 2012.

Cost Estimate: \$160,000
Product: Grant awards, technical reports from contractors
Schedule: June 2013

8. Human Services Transportation Study

Pursuant to the National Capital Region's Human Service Transportation Coordination Plan, we propose an in-depth study of existing and forecast unmet need for specialized transportation in the region for the purpose of identifying alternate service delivery models and funding mechanisms. With the substantial shift of these services from being provided by human service agencies to the public transit industry, gaps have been observed in the level of service provided by ADA paratransit and the level of service required by human service agency constituents. The proposed study would include (1) a gap analysis between the two levels of service and an inventory of unmet need for the higher level of service; (2) research, perhaps in the form of case studies, on the specific needs of human service agencies and an assessment of their existing and potential ability to provide transportation services at the desired service level; and (3) an examination of the resources and funding mechanisms available from public transit and human service agencies and their funding jurisdictions to empower human service agencies to become self-sufficient in addressing their constituents' transportation needs.

The total project budget is \$90,000. Funding will include \$60,000 from WMATA and \$30,000 from the MDOT Technical Assistance Program.

Cost Estimate: \$30,000

Schedule: June 2013

9. Other Tasks yet to be defined

Other tasks are anticipated but not yet defined. This project is established to account for TPB staff time spent in responding to requests for technical assistance by MDOT, SHA, other modals and jurisdictions whose scope of work or characteristics do not conform to the other work tasks of the Maryland Technical Assistance Program. Work under this project will be performed upon authorization by MDOT, SHA and/or other modals and jurisdictions.

Cost Estimate: \$15,024
\$50,000 carryover from FY 2012
~~\$65,024~~ **0** total

TOTAL MARYLAND COST ESTIMATE: ~~\$598,024~~ **348,000**
~~\$380,000~~ **330,000** carryover from FY 2012
~~\$978,024~~ **678,000** total

C. VIRGINIA

1. Data/Documentation Processing

This work element accounts for DTP staff time associated with the administration of this Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time to process requests for data/documents from Northern Virginia as advised by VDOT throughout the year.

Cost Estimate: ~~\$25,000~~ **13,000**

Product: Data, documentation, scopes of work, progress reports

2. Travel Monitoring and Survey

This program will establish a continuous travel monitoring program for major commuting routes in Northern Virginia, with a goal of sampling each route on a 2-3 year cycle. Collected data and analysis may include volume and occupancy data, travel time data, and other information. The program will also include collection of bicycle and pedestrian data at various locations throughout Northern Virginia, as identified by VDOT.

Cost Estimate: ~~\$125,000~~ **180,354**
\$75,000 carryover from FY 2012
~~\$200,000~~ **255,354** total

Products: Program management plan, data and analysis,

technical memorandum

Schedule: On-going activity

3. Travel Demand Modeling

This project is designed to assist VDOT in the development of, and the evaluation of results from the regional transportation travel demand model, as adapted for its use by VDOT. Specific tasks undertaken will be identified throughout the year and are likely to include: developing forecasts and/or extracting specific information from the regional model forecasts for specific scenarios/options evolving out of ongoing studies and/or project planning efforts; and assistance with documentation, training and customization of the regional travel demand forecasting model for the Northern Virginia sub-area per VDOT's requirements.

Cost Estimate: ~~\$86,048~~ **10,694**

Products: Customized travel demand model, technical memoranda.

Schedule: On-going activity

4. Regional and Sub-regional Studies

This project provides support for technical analysis for planning studies throughout the year as identified and requested by VDOT and/or VDRPT. Work may include but not be limited to technical support in ongoing corridor/subarea studies, and initiation of new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities. The Commonwealth requires VDOT to review and comment on the technical reports for a variety of local development proposals. Such reports are referred to as "Section 527 reports." Tasks undertaken under this work element could involve staff assisting VDOT in the review and/or analysis of such Section 527 reports. Staff may also assist VDOT in its work on a system-wide evaluation designed to provide information relating to the effectiveness of ongoing and planned projects and programs aimed at addressing the congestion and mobility challenges in Northern Virginia. This evaluation could be examined in terms of level of service, delay, and other mobility criteria, which will be defined and estimated at the appropriate local, subarea, corridor and / or regional levels to enable a consistent assessment of specified projects/programs.

Cost Estimate: ~~\$368,173~~ **161,655**
\$194,489 carryover from FY 2012
~~\$562,662~~ **356,144** total

Products: Travel demand modeling and technical analysis in support of Northern Virginia regional and sub-regional planning studies

Schedule: On-going activity

5. Other Tasks to be Defined

Other tasks are anticipated but not yet defined.

TOTAL VIRGINIA COST ESTIMATE: ~~\$529,221~~ **290,703**
 \$344,489 carryover from FY 2012
 ~~\$873,710~~ **635,192** total

**TPB R13-2013
March 20, 2013**

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

**RESOLUTION TO APPROVE
CARRYOVER FUNDING FROM FY 2013 TO THE FY 2014
UNIFIED PLANNING WORK PROGRAM (UPWP)**

WHEREAS, the Joint Planning Regulations issued February 14, 2007 by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) require a Unified Planning Work Program for Transportation Planning (UPWP); and

WHEREAS, the UPWP is required as a basis and condition for all funding assistance for transportation planning to state, local, and regional agencies by the FHWA and FTA; and

WHEREAS, the FY 2013 UPWP for the Washington Metropolitan Area was adopted by the TPB on March 21, 2012; and

WHEREAS, project work statements and budgets for carryover from FY 2013 to FY 2014 have been developed for three projects in the core program and the Technical Assistance Programs of the Maryland Department of Transportation (MDOT) and the Virginia Department of Transportation (VDOT);

NOW, THEREFORE, BE IT RESOLVED THAT: THE NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD approves the work statements and budgets for carryover funding from FY 2013 to FY 2014 as described in the attached Memorandum of March 13, 2013 entitled "FY 2013 Carryover Work Statements and Budgets for the FY 2014 UPWP" (pages B-1 through B-12).

National Capital Region Transportation Planning Board

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

M E M O R A N D U M

March 13, 2013

TO: Technical Committee

FROM: Gerald Miller
Director, Program Coordination
Department of Transportation Planning

SUBJECT: FY 2013 Carryover Work Statements and Budgets for the FY 2014 UPWP

Attached are pages excerpted from the draft FY 2014 UPWP with changes and additions shown in **bold** to reflect the carryover funding from FY 2013 to FY 2014. The FY 2014 work elements affected by the FY 2013 carryover funding are as follows:

- **4.B. GIS Technical Support:** Carryover of \$100,000 which will be used for consultant support in the migration and enhancement of GIS-based TPB transportation network management editing tools in a new ArcGIS 10 .NET framework.
- **5.B. Congestion Monitoring and Analysis:** Carryover \$90,000, which is available due to changes in methods for monitoring arterial highway congestion from field data collection to use of probe-based data (currently available free of charge from the I-95 Corridor Coalition Vehicle Probe Project). This will help support the funding of complementary aerial-photography-based freeway data collection in FY2014, undertaken on a three-year cycle since 1993, and last undertaken in FY2011. This will also enhance the ability of regional congestion monitoring to be responsive in FY2014 to new MAP-21 performance measurement requirements as relevant federal regulations and guidance are issued.
- **5.C. Travel Surveys and Analysis:** Carryover \$430,000, which will be used to collect household travel survey data from 2,400 households in six specified geographic subareas in the fall of 2013 rather than in the spring.
- **6. Technical Assistance**
 - Maryland: Carryover \$300,024 for eight projects
 - Virginia: Carryover \$238,518 for two projects

The total FY 2013 funding to be carried over is \$1,158,542

The final version of the FY 2014 UPWP will combine the carryover funding and new funding into one work program for submission to FTA and FHWA. The proposed budget levels for these carryover projects are shown in Table A.

Deletions are shown in strikeout and additions in **bold**.

PROJECT CARRYOVER FROM FY2013 TO FY2014 BY FUNDING SOURCE

WORK ACTIVITY	FY2013 FUNDS	FTA/STATE/ LOCAL	FHWA/STATE/ LOCAL
4. DEVELOPMENT OF NETWORKS AND MODELS			
B. GIS Technical Support	100,000	23,743	76,257
5. TRAVEL MONITORING			
B. Congestion Monitoring and Analysis	90,000	21,369	68,631
C. TRAVEL SURVEYS & ANALYSIS	430,000	102,095	327,905
Core ProgramTotal	620,000	147,207	472,793
6. TECHNICAL ASSISTANCE			
B. Maryland	300,024	76,831	223,193
C. Virginia	238,518	55,504	183,014
Subtotal	538,542	132,335	406,207
Grand Total	1,158,542	279,543	878,999
TOTAL	1,158,542	279,543	878,999

CARRYOVER WORK STATEMENTS AND FUNDING FOR THE FY 2014 UPWP

4. B. GIS TECHNICAL SUPPORT

Under this work activity staff will provide Geographic Information System (GIS) data and technical support to users of the COG/TPB GIS for many important TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.

The following work activities are proposed for FY 2014:

- Provide data and technical support to staff using the COG/TPB GIS for development and distribution of data and information developed by the TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.
- **Convert and enhance GIS-based TPB transportation network management editing tools in a ArcGIS 10 .NET framework.**
- Provide ongoing maintenance and support of GIS-based transportation network management and editing tools.
- Enhance GIS-based transportation network management and editing tools based on user experience.
- Enhance the COG/TPB GIS Spatial Data Library with updated transportation and non-transportation features as these data become available.
- Add additional transportation attribute data, land use features and imagery data to the COG/TPB GIS Spatial Data Library.
- Update GIS Spatial Data Library documentation, GIS User Guides and technical documentation of various GIS software applications as required.
- Maintain and update an intranet-based GIS Project Information Center that lists and describes DTP GIS databases and applications currently being developed, as well as those that are currently available.
- Train staff on use of GIS databases for transportation planning.
- Continue to coordinate the regional GIS activities with state DOTs, WMATA, and the local governments through COG's GIS Committee and subcommittees.
- Maintain and update COG/TPB's GIS-related hardware and software.

- Respond to request for COG/TPB GIS metadata, databases, and applications.

Oversight:	Technical Committee
Estimated Cost:	\$548,800 \$100,000 carryover from FY 2013 \$648,800 total
Products:	Updated GIS software, Databases, User Documentation and Training materials; Enhancement and support of GIS transportation network management.
Schedule:	June 2014

5. B. CONGESTION MONITORING AND ANALYSIS

Congestion Monitoring supplies data for the Congestion Management Process (CMP - Item 2A) and Models Development (Item 4C). The program monitors congestion on both the freeway and the arterial highway systems, to understand both recurring and non-recurring congestion. Data collection methods include a combination of aerial surveys, field data collection, and/or data procured from private sources. Examples of emerging technologies include probe-based data and Bluetooth-based data. As part of three-year cycles since 1993, in spring 2014 an aerial survey of the region's freeway system will be conducted, results to be coordinated with other data sources under this task as well as the Congestion Management Process. Data collection methods and sources for both freeways and arterials will also be examined from the perspective of MAP-21 requirements, especially as related to the CMP.

Oversight:	MOITS Technical Subcommittee
Cost Estimate:	\$350,000 \$90,000 carryover from FY 2013 \$440,000 total
Products:	Transportation systems monitoring data sets and analysis reports from the aerial survey of the region's freeways; documentation as necessary supporting MAP-21 requirements of congestion monitoring and analysis
Schedule:	June 2014

5. C. TRAVEL SURVEYS AND ANALYSIS

In FY 2012-2013, the 2007/2008 Regional Household Travel Survey data was supplemented with collection of household travel survey data from 4800 households in 14 focused geographic subareas of the region. This additional household travel survey data collection was in response to the need expressed by local jurisdiction users of the

household travel survey to have additional household samples in smaller geographic subareas to analyze specific aspects of daily travel behavior in these smaller geographic areas. In FY 2014, staff will continue to support users of TPB household travel survey data, update user documentation and provide technical assistance to the users of these survey data and collect additional household travel survey data.

The following work activities are proposed for FY 2014:

- Provide data, documentation, and technical support to users of 2007/2008 Regional Household Travel Survey and the Geographically-Focused Household Surveys conducted in 2011-2013. Update of survey data files and user documentation as required.
- Continue to mine data collected in the 2007/2008 Regional Household Travel Survey the Geographically-Focused Household Surveys conducted in 2011-2013 support analysis of regional growth and transportation issues of topical interest to the members of the TPB. Prepare information reports on various aspects of daily household and vehicle travel in the TPB modeled area.
- **Collect household travel survey data for 2,400 households in six focused geographic subareas of the region for more intensive analysis of specific growth and transportation issues. Examples of focused geographic subareas could include Metrorail station areas of a specific type, highway corridors with recent or planned major improvements, proposed light rail study areas, or regional activity centers with specific characteristics. *Proposed focused geographic subareas for FY 2014 include: (1) St Elizabeths/Anacostia (2) Fort Totten (3) Greenbelt (4) Kentlands (5) Tysons (6) Leesburg. The proposed geographic subareas will be reviewed and subject to refinement by the TPB Technical Committee and local jurisdiction planning staff.***

Oversight: Travel Forecasting Subcommittee

Estimated Cost: \$706,300
\$430,000 carryover from FY 2013
 \$1,136,300 total

Product: Household Travel Survey Data Collection and Processing, Household Travel Survey Analyses, Information Reports and Technical Memorandum, Maintenance of Travel Survey Data and Documentation

Schedule: June 2014

6. TECHNICAL ASSISTANCE

B. MARYLAND

1. Program Development Management

This work task will account for DTP staff time associated with the administration of this Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time needed for the development of the annual planning work program.

Cost Estimate: \$15,000
 \$15,000 carryover from FY 2013
 \$30,000 total

Schedule: On-going activity

2. Project Planning Studies

This work task will account for DTP staff time associated with the development of scopes of work for requested project. The work scope will account for technical support in travel demand modeling and alternative evaluations of ongoing and upcoming project planning studies. Work activities will also involve meeting with requesting agencies to discuss proposed projects, drafting and finalizing work statements and tasks, creating projects when authorized, attending project team meetings and progress reporting

Cost Estimate: \$100,000
 \$80,000 carryover from FY 2013
 \$180,000 total

Schedule: On-going activity

3. Feasibility/Special Studies

This work task will provide funding to support technical support on feasibility/special studies as requested by MDOT, SHA and other agencies. Work may include but not limited to technical support in ongoing corridor/subarea studies, initiation of new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities and scenario analyses. Project authorizations may occur throughout the fiscal year as priorities dictate to address transportation planning initiatives and strategic goals of MDOT, SHA and other agencies.

Cost Estimate: \$200,000
 \$70,000 carryover from FY 2013
 \$270,000 total

Schedule: On-going activity

4. Transportation Performance Measures

Project Level Evaluation: SHA requires measurable results on system performance benefits in order to compare the relative merits of individual projects proposed for implementation or for use in refining the Maryland Highway Needs Inventory. Such results will assist in determining priorities among the projects to maximize the benefits of the transportation planning and programming process. The results could be expressed in terms of Levels of Service, Travel Delay and mobility criteria, which will be defined and estimated at the appropriate local, subarea, corridor and / or regional levels to enable a consistent assessment of specified projects.

Sub-Item Cost Estimate: \$15,000
 \$30,000 carryover from FY 2013
 \$45,000 total

Schedule: On-going activity

System Wide Evaluation: This work effort is designed: (1) to provide MDOT and SHA staff with information relating to the effectiveness of ongoing and planned regional congestion monitoring activities in the Maryland portion of the region, (2) to examine the effectiveness of such programs, including the use of before and after studies (primarily through literature reviews and analysis of existing data rather than through new collection of primary data), and (3) to evaluate the environmental impacts of projects in terms of GHG and possibly other pollutants. TPB staff will periodically brief MDOT and SHA staff to keep them informed of regional congestion monitoring activities and to discuss possible new initiatives.

Sub-Item Cost Estimate: \$30,000
 \$45,000 carryover from FY 2013
 \$75,000 total

Schedule: On-going activity

Traffic Impacts Evaluation: This work effort is designed to assess on a comprehensive scale the transportation impacts of development, through the analysis of such development at the local, subarea, corridor and regional levels. Different methods and evaluation criteria will be assessed for a variety of projects to appropriately consider their impacts, ranging from delay at intersections for localized studies, to travel modeling and aggregate systems level impacts for larger projects.

Sub-Item Cost Estimate: \$18,000
 \$30,000 carryover from FY 2013
 \$48,000 total

Schedule: On-going activity

Cost Estimate: \$63,000
\$105,000 carryover from FY 2013
\$168,000 total

Schedule: On-going activity

5. Training /Miscellaneous Technical Support

For training purposes, this work task will account for presentations and other forms of updating for MDOT, SHA and other modal staff on the latest regional data, modeling procedures, interagency coordination on periodic updates of the transportation networks, land use files, and the model itself. This task will also account for miscellaneous other tasks ranging for non motorized data collection activities, organization and mapping of data, and other forms of database building in support of ongoing and upcoming planning activities of MDOT, SHA and other model staff.

Cost Estimate: \$20,000
\$10,000 carryover from FY 2013
\$30,000 total

Schedule: On-going activity

6. Transportation / Land Use Connections Program

The Transportation / Land Use Connections (TLC) program is an effort to provide technical assistance to local governments in the Washington region in order to facilitate integrating land use and transportation planning at the community level. Begun as a 6 month regional pilot program in January 2007, the project was very well received. It was not only continued in subsequent years, but Maryland supplemented the regional effort with additional funds.

Cost Estimate: \$160,000

Product: Grant awards, technical reports from contractors

Schedule: June 2014

7. Human Services Transportation Study Follow-on and Support

In FY2013 a human service transportation coordination study identified alternate service delivery models and funding mechanisms for the regional MetroAccess paratransit service, with a focus on Suburban Maryland. The study identified potential human service transportation coordination models and recommended an action plan for a pilot project with non-profit agencies serving people with developmental disabilities in Suburban Maryland. The study was jointly funded under the FY2013 UPWP Maryland and WMATA Technical Assistance work elements and was facilitated by the TPB staff. In FY2014, TPB staff will provide follow-up to the study, including additional work with MDOT, MTA, non-profit agencies, and private transportation providers to assist with implementation of the action plan. Additional work could include research, data collection, and stakeholder meetings to

advance the action plan, and assessing existing MetroAccess alternatives in Suburban Maryland to support high quality and cost efficient transportation for people with disabilities.

Cost Estimate: \$40,000

Schedule: June 2014

8. Other Tasks yet to be defined

Other tasks are anticipated but not yet defined. This project is established to account for TPB staff time spent in responding to requests for technical assistance by MDOT, SHA, other modal agencies and jurisdictions whose scope of work or characteristics do not conform to the other work tasks of the Maryland Technical Assistance Program. Work under this project will be performed upon authorization by MDOT, SHA and/or other modal agencies and jurisdictions.

Cost Estimate: **\$20,024 carryover from FY 2013**
\$20,024 total

TOTAL MARYLAND COST ESTIMATE: \$598,000
\$300,024 carryover from FY 2013
\$898,024 total

C. VIRGINIA

1. Data/Documentation Processing

This work element accounts for DTP staff time associated with the administration of this Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time to process requests for data/documents from Northern Virginia as advised by VDOT throughout the year.

Cost Estimate: \$15,000

Product: Data, documentation, scopes of work, progress reports

2. Travel Monitoring and Survey

This program will establish a continuous travel monitoring program for major commuting routes in Northern Virginia, with a goal of sampling each route on a 2-3 year cycle. Collected data and analysis may include volume and occupancy data, travel time data, and other information. The program will also include collection of bicycle and pedestrian data at various locations throughout Northern Virginia, as identified by VDOT.

Cost Estimate: \$150,000

Products: Program management plan, data and analysis, technical

memorandum

Schedule: On-going activity

3. Travel Demand Modeling

This project is designed to assist VDOT in the development of, and the evaluation of results from the regional transportation travel demand model, as adapted for its use by VDOT. Specific tasks undertaken will be identified throughout the year and are likely to include: developing forecasts and/or extracting specific information from the regional model forecasts for specific scenarios/options evolving out of ongoing studies and/or project planning efforts; and assistance with documentation, training and customization of the regional travel demand forecasting model for the Northern Virginia sub-area per VDOT's requirements.

Cost Estimate: \$50,000

Products: Customized travel demand model, technical memoranda.

Schedule: On-going activity

4. Regional and Sub-regional Studies

This project provides support for technical analysis for planning studies throughout the year as identified and requested VDOT and/or VDRPT. Work may include but not be limited to technical support in ongoing corridor/subarea studies, and initiation of new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities. The Commonwealth requires VDOT to review and comment on the technical reports for a variety of local development proposals. Such reports are referred to as "Section 527 reports." Tasks undertaken under this work element could involve staff assisting VDOT in the review and/or analysis of such Section 527 reports. Staff may also assist VDOT in its work on a system-wide evaluation designed to provide information relating to the effectiveness of ongoing and planned projects and programs aimed at addressing the congestion and mobility challenges in Northern Virginia. This evaluation could be examined in terms of level of service, delay, and other mobility criteria, which will be defined and estimated at the appropriate local, subarea, corridor and / or regional levels to enable a consistent assessment of specified projects/programs.

Cost Estimate: \$314,200
\$238,518 carryover from FY 2013
\$552,718 total

Products: Travel demand modeling and technical analysis in support of Northern Virginia regional and sub-regional planning studies

Schedule: On-going activity

5. Other Tasks to be Defined

Other tasks anticipated but not yet defined.

TOTAL VIRGINIA COST ESTIMATE: \$529,200
\$238,518 carryover from FY 2013
\$767,718 total